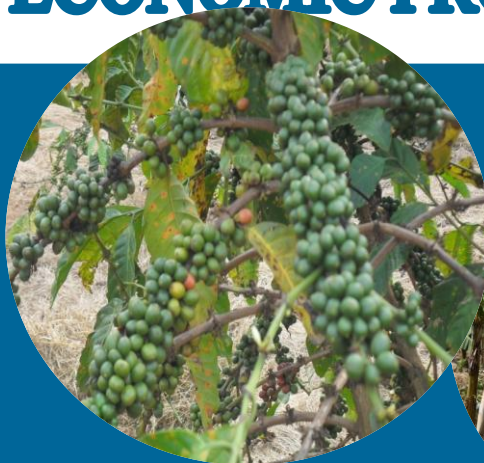




**United Republic of Tanzania**

# **NGARA DISTRICT COUNCIL SOCIO-ECONOMIC PROFILE 2015**





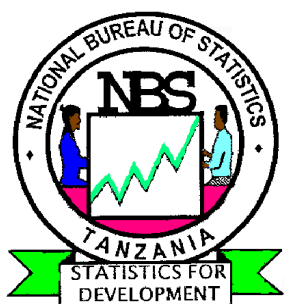


# The United Republic of Tanzania

## NGARA DISTRICT COUNCIL SOCIO-ECONOMIC PROFILE 2015

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

Ngara District Council



National Bureau of Statistics  
Dar es Salaam



Ngara District Council  
Kagera

**September, 2017**

## Foreword



The goals of Tanzania's Development 2030 are in line with United Nation's Sustainable Development Goals (SDGs). The major goals are to achieve a high-quality livelihood for the people; achieve food security, develop a strong and competitive economy; and to ensure equality and empower all women, girls and youth. Monitoring the progress in achieving these goals needs for timely and accurate statistical information at all levels for development.

Problems both in urban and rural areas are many and demanding; Social and economic services require sustainable improvement. The high primary school enrolment rates recently attained have to be maintained and so is the policy of making sure that all pupils who pass standard seven examinations join Form One. The food situation, clean and safe water availability is still insecure; infant and maternal mortality rates continue to be high and unemployment triggers mass migration of youths from rural areas to the already overcrowded urban centres.

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


Efforts to meet both the new and old challenges are hindered by many factors including scantily prepared rural development programs as well as weak implementation, monitoring and supervision of these programs. The shortcomings in policy formulation, project identification, design and implementation due to lack of reliable and adequate data and information on urban development process have to be addressed to. The availability of reliable, adequate and relevant qualitative and quantitative data and information at town council level is a prerequisite for the success of the formulating, planning, implementation, monitoring and evaluation of town councils' development programs.

Ngara District Council prepares this Socio-Economic profile by using its own funds and development funds from central government. The publication of the Ngara District Council Social-Economic Profile series by the Ministry of Finance in collaboration with the National Bureau of Statistics, Kagera Regional Administration Secretary, Regional Bureau of Statistics and the District Council Management Team should be viewed as a modest attempt towards finding solutions to the existing problem of data and information gap at district level.

The District Council Profile covers a wide range of statistics and information on geography, population, social-economic parameters, social services, economic infrastructure, productive sectors and cross cutting issues. Such data have proved vital to many policy makers, planners, researchers, donors and functional managers.

Ngara District Council Socio Economic Profile has taken advantage of the experience gained in production of various Regional and District Socio Economic Profiles in Tanzania Mainland. It provides valuable information to our clients. Constructive views and criticisms are invited from readers to enable a profile like this become a better tool in the implementation of the country's policies.

I would like to take this opportunity to acknowledge with thanks, the contribution made by the Ngara Director's Office, National Bureau of Statistics, Regional Bureau of Statistics and other staff of the District Council who dedicated their time to make certain the successful completion of this obligation.



Aidan J. Bahama  
DISTRICT EXECUTIVE DIRECTOR  
NGARA  
DISTRICT EXECUTIVE DIRECTOR  
NGARA DISTRICT COUNCIL

## Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infections
BCG	Bacillus Calmet Guerin (TB Vaccine)
CBO	Community Based Organization
CBPP	Contagious Bovine Pleural Pneumonia
CPP	
CPR	Classroom Pupil Ratio
DPR	Desk Pupil Ratio
DC	District Council
DPT3/HB3	Diphtheria Pertusis Tetanus 3 rd doze/ Haemoglobin Level
ECF	East Cost Fever
FMD	Foot and Mouth Disease
Govt.	Government
Ha	Hectare
HIV	Human Immune Virus
IGAs	Income Generating Activities
IMR	Infant Mortality Rate
MCHA	Mother and Child Health Attendant
MMR	Maternal Mortality Rate
NCD	New Castle Disease
OPV3	Oral Polio Vaccine 3rd Doze
PLHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission
PR	Pass Rate
SACCOS	Savings and Credit Cooperative Societies
Sq. Km.	Square Kilometre
STD VII	Standard Seven
TB	Tuberculosis
TBAs	Traditional Birth Attendants
TPR	Toilet Pupil Ratio /Teacher Pupil Ratio
TTCL	Tanzania Telecommunication Company Limited
TT2	Tetanus Toxoid 2 nd doze
U5MR	Under Five Mortality Rate
VCT	Voluntary Counselling and Testing
VHC	Village Health Committee
VHWs	Village Health Workers

VWC	Village Water Committee
VWF	Village Water Fund
WUG	Water User Group
FMD	Foot and Mouth Diseases
WHO	World Health Organisation
FAO	Food and Agriculture Organisation
H.f.S	Health Facilities
NGOs	Non Government Organisation
UTI	Urinary Tract Infection
CCPP	Contagious Caprine Pleuro Pneumonia
HTR	House Teachers Ration
VICOBA	Village Community Bank
GDP	Gross Domestic Product
MC	Municipal Council
RTAs	Road Traffic Accidents
DALYs.	Disability Adjusted Life Years
UN	United Nations
NBS	National Bureau of Statistics
HEP	Hydro Electrical Power



## Contents

<b>Foreword .....</b>	<b>i</b>
<b>Acronyms .....</b>	<b>iii</b>
<b>Contents .....</b>	<b>v</b>
<b>List of Table.....</b>	<b>x</b>
<b>List of Figure .....</b>	<b>xviii</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>Land, Climate, Agro – Ecological Zones and People.....</b>	<b>1</b>
1.0 An Overview .....	1
1.1 Geographical Location .....	1
1.2 Land Area, Land Use Pattern and Administrative Units .....	3
1.3 Climate and Soil.....	6
1.3.1 Soil.....	6
1.4 Agro – Ecological Zones (AEZ) .....	6
1.4.1 Zone I- The Highlands .....	6
1.4.2 Zone II- Lowlands.....	7
1.4.3 Drainage System .....	7
1.5. Population .....	7
1.5.1 Ethnic Groups .....	7
1.5.2 Population Size and Growth. ....	8
1.5.3 Population Density .....	11
1.5.4 Dependency Ratio .....	12
1.5.4.1 Population Distribution and Sex Ratio .....	13
1.5.5 Population Distribution by Age and Sex.....	14
1.5.6 Population and Household Size .....	16
1.5.7 Doubling Time (Years) by Council, Kagera Region, 2015 .....	16
<b>CHAPTER TWO .....</b>	<b>18</b>
<b>The Economy of the Council.....</b>	<b>18</b>
2.0 Introduction .....	18
2.1 GDP and Per Capita GDP .....	18
2.1.1 Council Contribution to the Region GDP .....	18
2.1.2 Council Per Capita GDP .....	19

2.2	Non - Income Indicators .....	20
2.2.1	Main Sources of Cash Income .....	20
2.2.2	Food Security and Food Poverty.....	21
2.2.3	Food Consumption Patterns .....	22
2.2.4	Number of Meals per Day.....	22
2.2.5	Protein (Meat and Fish) Intake.....	23
2.2.6	Health Indicators .....	24
2.2.7	Literacy Rate and Understanding Different Languages.....	25
2.2.8	Housing Conditions.....	25
2.2.9	Ownership of Assets .....	32
2.2.10	Land Development.....	33
<b>CHAPTER THREE .....</b>		<b>35</b>
<b>Productive Sectors .....</b>		<b>35</b>
3.0	Overview .....	35
3.1	Agriculture.....	35
3.1.1	Distribution of Arable Land.....	35
3.1.2	Land under Cultivation .....	36
3.1.2.1	Area under Major Food Crops Cultivation.....	36
3.1.3	Crops Production.....	38
3.1.3.1	Major Food Crops Production.....	38
3.1.3.2	Major Cash Crops Production.....	41
3.1.4	Agricultural Inputs .....	44
3.1.4.1	Introduction .....	44
3.1.4.2	Inorganic Fertilizers.....	44
3.1.4.3:	Agriculture Implements .....	46
3.1.4.4	Irrigation Prospects.....	46
3.1.4.5	Policy Implication in Agriculture Sector .....	47
3.2	Livestock.....	48
3.2.1	Introduction .....	48
3.2.2	Grazing Area .....	54
3.2.3	Livestock Infrastructure .....	55
3.2.4	Causes of Livestock Morbidity and Mortality .....	56
3.2.5	Marketing of Livestock and their Products.....	59
3.2.6	The Status of Livestock Staff.....	60

3.2.7:	Policy Implication .....	61
3.2.8	Investment Opportunities in Livestock Subsector .....	62
3.3.	Natural Resources .....	62
3.3.1	Tree Plantation .....	62
3.3.2	Environmental Conservation.....	63
3.3.3	Beekeeping .....	64
3.3.5	Fishery.....	66
3.3.5	Tourism .....	66
3.3.5.1	Wildlife .....	67
3.4	Industrial Sector .....	67
3.3.9	Policy Implication on the Industrial Sector.....	68
3.3.10	Investment in the Industrial Sector .....	68
<b>CHAPTER FOUR.....</b>		<b>69</b>
<b>Economic Infrastructure .....</b>		<b>69</b>
4.0	Introduction .....	69
4.1	Road network .....	69
4.1.1	Road Passability .....	71
4.1.2	Road Network Classification .....	72
4.2	Railway Transport .....	74
4.3	Air Services .....	74
4.4	Telecommunication Services .....	74
4.5	Energy .....	74
4.6	Electricity .....	74
<b>CHAPTER FIVE.....</b>		<b>76</b>
<b>Social Services .....</b>		<b>76</b>
5.0	An Overview .....	76
5.1	Health Sector .....	76
5.1.1	Health Facilities. ....	77
5.1.1.1	Health Facility Ratios.....	80
5.1.1.2	Population per Doctor Ratio.....	80
5.1.1.3	Status of Health Personnel.....	81
5.1.2	Morbidity .....	82

5.1.3	Mortality.....	84
5.1.4	HIV/AIDS Infections .....	85
5.1.4.1	The Impact of HIV/AIDS .....	89
5.1.4.2	Child Nutrition .....	90
5.1.5.1	Mother and Child Health Care .....	91
5.1.6	Policy Implication on Health sector .....	100
5.1.7	Investment Opportunities in the Health Sector .....	100
5.2	The Education Sector .....	100
5.2.0	An Overview .....	100
5.2.1	Pre-Primary Education.....	100
5.2.2	Enrolment in Pre-Primary Schools .....	102
5.2.3	Primary Education.....	103
5.2.4	Coverage of Primary School Education System .....	105
5.2.4.1	Standard One Enrolment.....	106
5.2.4.2	Completion Rate of Primary School .....	109
5.2.4.3	Drop- out Rate in Primary Schools .....	112
5.2.4.5	Transition to Secondary Education .....	118
5.2.5	Primary schools Facilities .....	119
5.2.4.6	Adult Education .....	124
5.2.4.7	Special Education .....	125
5.2.6	Secondary Education.....	125
5.2.5.1	Secondary School Enrolment.....	128
5.2.5.2	Completion Rate .....	130
5.2.5.3	Pass Rates .....	132
5.2.5.4	High School (Form V) Enrolment.....	134
5.2.3.5	Secondary School Facilities .....	134
5.2.6	Policy Implication on Education Sector .....	147
5.2.7	Investment Opportunities in Education .....	148
5.3	WATER SUPPLY AND SANITATION.....	149
5.3.0	Water Supply.....	149
5.3.1	Rural Water Supply.....	149
5.3.2	Urban Water Supply.....	154
5.3.3	Sanitation .....	157
5.3.4	Water Supply Personnel.....	158
5.3.5	Policy Implication on Water sector.....	158

5.3.6	Investment Opportunities in Water Supply.....	158
<b>CHAPTER SIX.....</b>		<b>159</b>
<b>Other Development Issues.....</b>		<b>159</b>
6.0	Introduction .....	159
6.1	Gender Empowerment .....	159
6.2	Day Care Centres .....	159
6.3.	Vulnerability.....	160
6.4:	Women and Youth Groups .....	162
6.4.1	Women Economic Groups .....	162
6.4.2:	Women Participation in Decision Making.....	163
6.4.3:	Youth Economic Groups.....	165
6.5	Savings and Credit Cooperative Societies (SACCOS).....	166
6.6	VICOBA .....	167
6.7	Financial Institutions .....	168
6.8.	Crime Statistics .....	168
6.8.0	Introduction.....	168
6.8.2	Crime Statistics .....	168
6.8.3	Accidents.....	169
6.8.4	Theft Cases.....	171
6.9	Motorcycle Operators (BodaBoda). .....	171
<b>References .....</b>		<b>173</b>

## List of Table

Table 1. 1:	Land Area in Sq kms by Ward, Ngara DC, Tanzania Mainland, 2015 .....	3
Table 1. 2:	Land Area and Administrative Units by Division, Ngara DC, 2015 .....	4
Table 1. 3:	Population Size and Growth by District council, Kagera Region, 2002 and 2012 Censuses .....	8
Table 1. 4:	Population Distribution and Change by Ward; Ngara DC, 2002 and 2012.....	9
Table 1. 5:	Population Density by Council, Kagera Region, Tanzania Mainland, 2002 and 2012 .....	11
Table 1. 6:	Population Density and Percentage Change by Ward, Ngara District, 2002 and 2012 .....	12
Table 1. 7:	The Dependency Ratios by Council, Kagera Region, 2002 and 2012 .....	13
Table 1. 8:	Population Distribution by Sex and Sex Ratio by Ward, Ngara District, 2002 and 2012 .....	14
Table 1. 9:	Population Distribution by Broad Age Groups and by Sex, Ngara District Council, 2012. ....	15
Table 1. 10:	Distribution of Households Size by council, Kagera Region, 2012. ....	16
Table 1. 11:	Population Distribution by Council, Kagera Region, 2013, 2014 and 2015 .....	17
Table 2. 1:	GDP Estimates Contribution by Council, 2013, 2014 and 2015 (Mill. Tsh), Kagera Region.....	18
Table 2. 2:	Per Capita GDP Estimates by Council, 2013, 2014 and 2015, Kagera Region .....	20
Table 2. 3:	Percentage Distribution of Households by Type of Toilet Facility, Ngara District Council, Census 2012.....	31
Table 2. 4:	Number of Plots Surveyed, Allocated and Offered Title Deed by Division, Ngara District Council; 2013 and 2015.....	34
Table 2. 5:	Village Land Use Planning in Rural Areas by Division, Ngara DC, 2015.....	34
Table 3. 1:	Distribution of Land Area by Ward, Ngara District Council, Kagera Region, 2015 .....	35
Table 3. 2:	Estimated land Area (ha) under Major Food Crops; Ngara District Council; 2011 -2015.....	37

Table 3. 3:	Estimated Production in Tonnes of Major Food Crops, Ngara DC; 2011 – 2015 .....	38
Table 3. 4:	Estimated Production in Tonnes of Major Cash Crops, Ngara DC, 2011 – 2015 .....	41
Table 3. 5:	Type and Quantity of Inorganic Fertilizers (tonnes) Distributed to Farmers, Ngara DC, 2011-2015 .....	45
Table 3. 6:	Type and Quantity of Insecticides (Litres) Distributed to Farmers, Ngara DC, 2011-2015 .....	45
Table 3. 7:	Type and Quantity of Improved seeds (Kgs) Distributed to Farmers, Ngara DC, 2011-2015 .....	46
Table 3. 8:	Availability of Agriculture Implements, Ngara DC, 2015 .....	46
Table 3. 9:	Estimated Irrigation Prospects by Ward, Ngara District Council, 2013/14.....	47
Table 3. 10:	Estimated Livestock Population by Ward, Ngara DC, 2015 .....	49
Table 3. 11:	Population Distribution of Cattle by Type and Ward, Ngara DC, 2015 .....	51
Table 3. 12:	Population Distribution of Goats by Type and Ward, Ngara DC, 2015 .....	53
Table 3. 13:	Estimated Area for Grazing by Ward, Ngara District Council, 2015 .....	54
Table 3. 14:	Distribution of Livestock Infrastructure by Ward, Ngara DC, 2015 .....	55
Table 3. 15:	Five Common Cattle Diseases Causes Morbidity, Ngara DC, 2013 and 2015 .....	57
Table 3.15 a:	Five Common Cattle Diseases Causes Mortality, Ngara DC, 2013 and 2015 .....	57
Table 3. 16:	Three Common Goat Diseases Causes Morbidity, Ngara DC, 2013 and 2015 .....	58
Table 3.16 a:	Three Common Goat Diseases Causes Mortality, Ngara DC, 2013 and 2015 .....	58
Table 3. 17:	Three Common Poultry Diseases Causes Morbidity, Ngara DC; 2013 and 2015 .....	59
Table 3. 18:	Three Common Poultry Diseases Causes Mortality, Ngara DC, 2013 and 2015 .....	59
Table 3. 19:	Number and Value of Livestock Hides and Skins Marketed, Ngara District Council, 2013 and 2015 .....	60

Table 3. 20: Availability of Livestock Personnel by Ward, Ngara DC, 2015 .....	61
Table 3. 21: Number of Tree Seedlings Raised by Ward, Ngara DC, 2011 – 2015 .....	63
Table 3. 22: Number of Traditional and Modern Beehives by Ward, Ngara District Council; 2011 -2015.....	65
Table 3.16 a: Three Common Goat Diseases Causes Mortality, Ngara DC, 2013 and 2015 .....	58
Table 4. 1: Length of Road Network by Ward (km), Ngara District Council, 2015 .....	69
Figure 4.2: Type of Road Network by Ward (km), Ngara District Council, 2015 .....	70
Table 4. 3: Condition of Road Network by Ward, Ngara District Council, 2015 .....	72
Table 4. 4: Length of Road Network by Type of Road Surface by Ward, Ngara District Council, 2015 .....	73
Table 4. 5: Number of Customers Using/Connected to Electricity; Ngara DC; 2011 – 2015.....	75
Table 5. 1: Availability of Health Facilities by Type and Division, Ngara District, 2011, 2013 and 2015 .....	77
Table 5. 2: Availability of Health Facilities by Type, Ownership and Division, Ngara District, 2015.....	78
Table 5. 3: Distribution of Health Facilities and Their Ratios by Division, Ngara District 2015.....	78
Table 5. 4: Relating Health Facilities to the Population by Division, Ngara District 2002 and 2012 .....	80
Table 5. 5: Distribution of Doctors Among Population by Division, Ngara District; 2002 and 2012 .....	81
Table 5. 6: Availability of Medical Personnel by Profession and Sex, Ngara DC, 2015 .....	82
Table 5. 7: Ten Most Commonly Reported Causes of Morbidity (Out Patients), Ngara District; 2013 and 2015 .....	83
Table 5. 8: Ten Most Commonly Reported Causes of Morbidity (In Patients), Ngara District; 2013 and 2015 .....	84
Table 5. 9: Most Commonly Reported Causes of Mortality (In Patients), Ngara District; 2011 and 2015 .....	84
Table 5. 10: HIV Prevalence Rates of VCT Volunteers who screened for HIV by Sex, Ngara District, 2013 and 2015 .....	85



Table 5. 11: HIV Infections among Family Blood Donors and New AIDS Cases, Ngara District; 2013 – 2015 .....	86
Table 5. 12: Number of Expectant Mothers Who were Screened for HIV Through PMTCT Service and Those Receiving ARVs by Division, Ngara District, 2015 .....	86
Table 5.12 a: Number of Expectant Mothers Who were Screened for HIV and Those Who Received ARVs by Ward, Nyamiaga Division, 2015 .....	87
Table 5.12 b: Number of Expectant Mothers Who were screened for HIV and Those Who Received ARVs by Ward, Rulenge Division, 2015 .....	87
Table 5.12 c: Number of Expectant Mothers Who Were Screened for HIV and Those Who Received ARVs by Ward, Kanazi Division, 2015 .....	88
Table 5.12 d: Number of Expectant Mothers Who Were Screened for HIV and Those Who Received ARVs by Ward, Murusagamba Division, 2015.....	88
Table 5. 13: Percentage of Expectant Mothers Vaccinated TT2 by Division, Ngara District, 2011, 2013 and 2015 .....	92
Table 5. 14: Percentage of Expectant Mothers Vaccinated with TT2 by Ward, Ngara DC, 2011, 2013 and 2015 .....	92
Table 5. 15: Percentage of Children Under One Year Vaccinated with BCG by Ward, Ngara DC, 2011, 2013 and 2015.....	94
Table 5. 16: Number and Percentage of Children Under One Year Vaccinated with BCG by Division, Ngara DC, 2011, 2013 and 2015 .....	<b>Error! Bookmark not defined.</b>
Table 5. 17: Percentage of Children under One Year Vaccinated OPV3 by Ward, Ngara District, 2011, 2013 and 2015 .....	97
Table 5. 18: Percentage of Children under One Year Vaccinated Measles by Ward, Ngara District, 2011, 2013 and 2015 .....	99
Table 5. 19: Number of Pre-Primary School by Ownership and by Division, Ngara District Council, 2011, 2013 and 2015. ....	101
Table 5. 20 Number of Pre-Primary School by Ownership and Ward, Ngara District Council, 2011, 2013 and 2015 .....	101
Table 5. 21: Availability of Pre-Primary Schools per Ward and Village, Ngara District Council, 2015 .....	102

Table 5.22: Pre-Primary Schools Enrolment by Division, Ngara District Council; 2011, 2013 and 2015 .....	103
Table 5. 23: Number of Primary Schools by Division and Ownership, Ngara DC, 2011, 2013 and 2015 .....	103
Table 5. 24: Number of Primary Schools and Average Number of Schools per Ward/Village by Division, Ngara DC, 2015 .....	105
Table 5. 25: Number of Primary Schools by Ownership and Ward, Ngara District Council, 2011, 2013 and 2015 .....	105
Table 5. 26: Standard I Enrolment in Public Primary Schools by Ward, Ngara District, 2011, 2013 and 2015 .....	106
Table 5. 27: Number and Percentage of Standard I Enrolment by Age Group, Ngara Council, 2011 - 2015 .....	107
Table 5. 28: Total (STD I – VII) Enrolment of Public Primary Schools by Ward and Sex; Ngara District Council, 2011, 2013 and 2015 .....	109
Table 5. 29: Number of Pupils Enrolled in STD I in 2008 and Completed STD VII in 2014 and those Enrolled in 2009 and Completed STD VII in 2015, Ngara DC .....	110
Table 5. 30: Number of Pupils Enrolled in STD I in 2008 and Completed STD VII in 2014 by Ward and Sex, Ngara DC .....	110
Table 5. 31: Number of Pupils Enrolled in STD I in 2009 and Completed STD VII in 2015 by Ward and Sex, Ngara DC .....	111
Table 5. 32: Primary School Drop Outs by Reasons and by Sex, Ngara District Council, 2015 .....	113
Table 5. 33: Number of Pupils Who Sat and Passed STD VII Examinations, Ngara DC, 2011 .....	114
Table 5. 34: Number of Pupils Who Sat and Passed STD VII Examinations, Ngara District Council, 2013 .....	115
Table 5. 35: Number of Pupils Who Sat and Passed STD VII Examinations, Ngara District Council, 2015 .....	116
Table 5. 36: Number of Pupils Selected and Those Who Joined Form I in Public Secondary Schools by Sex, Ngara DC, 2011, 2013 and 2015 .....	117

Table 5. 37: Number of Pupils Who Were Selected and Joined Form I in Public Secondary Schools by Ward, Ngara DC, 2011, 2013 and 2015 .....	118
Table 5. 38: Number of Pupils Who Completed Primary Education and Joined Secondary Education in Public Secondary Schools by Sex, Ngara, 2011, 2013 and 2015 .....	119
Table 5. 39: Availability of Classrooms in Public Primary Schools by Ward, Ngara District, 2015.....	120
Table 5. 40: Availability of Pit Latrine in Public Primary Schools by Ward, Ngara Council, 2015 .....	121
Table 5. 41: Requirement of Teachers Houses in Primary Schools, Ngara DC, 2015 .....	122
Table 5. 42: Availability of Desks in Public Primary Schools Ward, Ngara District, 2015.....	123
Table 5. 43: Accessibility of Water in Public Primary Schools by Ward, Ngara Council, 2013 and 2015 .....	124
Table 5. 44: Number of Pupils enrolled with their Type of Impairment, Ngara District, 2013 and 2015 .....	125
Table 5. 45: Distribution of Secondary Schools by Ward and Ownership, Ngara DC, 2011, 2013 and 2015 .....	127
Table 5. 46: Distribution of Secondary schools by Division, Ngara DC, 2015 .....	128
Table 5. 47: Total Form 1 Enrolment in Public Secondary Schools by Ward and Sex, Ngara DC, 2011 and 2015.....	128
Table 5. 48: Number of Students Enrolled in 2011 and Completed Form IV in 2014 by Ward and Sex in Public Secondary Schools, Ngara District Council.....	131
Table 5. 49: Number of Students Registered in 2012 and Completed Form IV in 2015 by Ward and Sex in Public Secondary Schools, Ngara District.....	132
Table 5. 50: Availability of Public Secondary School's Teachers by Ward, Ngara Council; 2015 .....	135
Table 5. 51: Availability of Administration Blocks in Public Secondary Schools by Ward, Ngara DC 2015.....	138
Table 5. 52: Availability of Teachers Houses in Public Secondary Schools by Ward, Ngara District 2015 .....	139

Table 5. 53: Availability of Classrooms in Public Secondary Schools by Ward; Ngara District; 2015.....	140
Table 5. 54: Availability of Pit Latrines in Public Secondary Schools by Sex and Ward, Ngara DC, 2015.....	141
Table 5. 55: Availability of Dormitories/Hostels in Public Secondary Schools by Ward, Ngara District, 2015 .....	142
Table 5. 56: Availability of Tables and chairs in Public Secondary Schools by Ward, Ngara District, 2015 .....	143
Table 5. 57: Availability of Laboratories in Public Secondary Schools by Ward, Ngara District, 2015 .....	145
Table 5. 58: Availability of Electricity Power in Secondary Schools by Ward, Ngara Council; 2015 .....	146
Table 5. 59: Accessibility of Water in Public Secondary Schools by Ward, Ngara Council, 2013 and 2015 .....	147
Table 5. 60: Number and Type of Rural Water Sources by Ward, Ngara DC, 2015.....	149
Table 5. 61: Number and Type of Water Delivery Technology Used in Rural Water Schemes, Ngara DC, 2015 .....	150
Table 5. 62: Rural Population Served with Clean Water by Ward, Ngara DC, 2015.....	152
Table 5. 63: Number of Water User Groups (WUGs) and Operation and Maintenance Accounts (O&M) by Ward, Ngara District Council, 2015 .....	153
Table 5. 64: Number of Rural Village Water Committees, Village Water Funds and Funds in the VWCs by Ward and Village, Ngara DC, 2015 .....	154
Table 5. 65: Number and Type of Urban Water Sources by Ward, Ngara DC; 2015 .....	155
Table 5. 66: Number and Type of Water Delivery Technology Used in Urban Water Schemes, Ngara DC, 2015 .....	155
Table 5. 67: Estimated Demand and Actual Supply of Water (cu. Metres per day) and the Urban Population Served with Clean Water by Ward, Ngara DC, 2015 .....	156
Table 5. 68: Number and Percentage of Households with and Without Toilet Facilities by Ward, Ngara DC, 2015.....	157
Table 5. 69: Type and Number of Water Supply Personnel, Ngara DC; 2015.....	158
Table 6. 1: Distribution of Day Care Centers by Ward, Ngara Council, 2013 and 2015 .....	160

Table 6. 2:	Number and Percentage of Most Vulnerable Children by Ward, Ngara DC, 2015 .....	161
Table 6. 3:	Number of Women Economic Groups by Ward, NgaraDC, 2013 and 2015 .....	163
Table 6. 4:	Number of Managerial, Political, Professional and Technical Personnel by Sex and Council, Ngara DCouncil, 2015 .....	164
Table 6. 5:	Youth Economic Groups and Total Money Loaned by Ward, Ngara Council; 2013 and 2015 .....	165
Table 6. 6:	Savings and Credit Cooperative Societies (SACCOS), Ngara DC, 2015.....	167
Table 6. 7:	Number of Crimes and People Jailed by Type of Crime, Ngara DC, January to December 2015, .....	168
Table 6. 8:	Total number of Accidents Reported in the Police Station and Number of People Injured/died from January to December 2015, Ngara Council. ....	170
Table 6. 9:	Number of Theft Cases Reported and People Jailed by Type of Theft, Ngara DC, January to December 2015.....	171
Figure 6. 6:	Number of Theft Cases and People Jailed due to Stealing, Ngara DC, 2015.....	171
Table 6. 10:	Number of Motor Cycle Operators (BodaBoda) and Estimated Income Earned per Month by Ward, Ngara DC, 2015.....	172

## List of Figure

Figure 1. 1: Land use Pattern Ngara District Council 2015 .....	3
Figure 1. 2: Population Pyramid by Age and Sex, Ngara District Council, 2012 Census. ....	15
Figure 1. 3: Estimated Doubling Time (Years) by Council, Kagera Region, 2015.....	17
Figure 2. 1: GDP and Per Capita GDP of Ngara DC 2013, 2014 and 201.....	19
Figure 2. 2: Percentage of Households Reporting the Main Source of Income, Ngara DC, 2007/08 .....	21
Figure 2. 3: Percentage Distribution of Rural Agricultural Households by Status of Food Satisfaction, Ngara District Council, 2007/2008 .....	22
Figure 2. 4: Percentage Distribution of Rural Agricultural Households by Meals Taken per Day, Ngara District Council; 2007/2008. ....	23
Figure 2. 5: Percentage Distribution of Rural Agricultural Households by Frequency of Meat and fish Consumption per Week, Ngara DC, 2007/2008 .....	24
Figure 2. 6: Percentage Distribution of Orphans by Sex, Ngara DC, 2012 Census. ....	24
Figure 2. 7: Percentage Distribution of Population by Understanding Different Languages, Ngara District Council, 2012 Census.....	25
Figure 2. 8: Percentage Distribution of Households by District and Type of Materials Used for Roofing, Ngara District, 2012 Census. ....	26
Figure 2. 9: Percentage Distribution of Households by Type of Materials Used for Flooring, Ngara DC, 2012 Census. ....	27
Figure 2. 10: Percentage of Households by Type of Wall Materials, Ngara DC, 2012 .....	27
Figure 2. 11: Percentage Distribution of Households by Number of Rooms for Sleeping, Ngara District Council, 2012 Census. ....	28
Figure 2. 12: Percentage of Households by Type of Water Source, Ngara District Council, 2012 Census. ....	29
Figure 2. 13: Percentage of Households by Main Source of Energy for Lighting, Ngara District Council, 2012 Census.....	29
Figure 2. 14: Percentage of Households by Main Source of Energy for Cooking, Ngara District Council, 2012 Census.....	30
Figure 2. 15: Percentage Distribution of Households by Type of Toilet Facility, Ngara District Council, Census 2012.....	31
Figure 2.15 a: Percentage Distribution of Households by Type of Toilet Facility, Ngara District Council, Census 2012.....	32

Figure 2. 16: Percentage of Households Owned Communication Facilities by Type, Ngara District Council, 2012 Census .....	32
Figure 2. 17: Percentage of Households Owned Modern Home Appliances by Type, Ngara District Council, 2012 Census .....	33
Figure 3. 1: Distribution of Land Area by Type, Ngara District Council; 2015 .....	36
Figure 3. 2: Number of Small Scale Industries, Ngara DC, 2015 .....	68
Figure 5. 1: Availability and Growth of Health Facilities by Type, Ngara District, 2011, 2013 and 2015 .....	77
Figure 5. 2: Availability of Village Health Workers by Division, Ngara District, 2015 .....	81
Figure 5. 3: Percent Distribution of Orphans by Sex, Ngara District Council, 2012 Census .....	90
Figure 5. 4: Percentages of Standard I Enrolment by Sex, Ngara District Council, 2011 – 2015 .....	108
Figure 5. 5: Percentage Drop Outs by Sex; Ngara District Council; 2014 and 2015.....	112
Figure 5. 6: Pass rates of Pupils Who Sat for STD VII Examinations by Sex, Ngara DC, 2011, 2013 and 2015 .....	114
Figure 5. 7: Distribution of Secondary Schools by Ownership, Ngara District, 2015 .....	126
Figure 5. 8: Form 1 Enrolment in Public Secondary Schools by Sex, Ngara District, 2011, 2013 and 2015 .....	129
Figure 5. 9: Completion Rates of 1st Cohort (2011 – 2014) and 2nd Cohort (2012 – 2015) by Sex, Ngara District.....	130
Figure 5. 10: Students Performance in Form IV Examinations in Public Secondary Schools, Ngara DC, 2011 - 2015.....	133
Figure 5. 11: Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Ngara District, 2011-2015 .....	133
Figure 6. 1: Number of Day Care Centers and Pupils in Ngara DC, 2013 and 2015	160
Figure 6. 2: Percentage of Vulnerable Children, Ngara DC, 2015	162
Figure 6. 3: Number of Crimes and People Jailed by Type of Crime, Ngara DC, 2015	169
Figure 6. 4: Number of People Injured/Who Died by Source of Accidents	170
Figure 6. 5: Number of accidents versus type of vehicles	170





## CHAPTER ONE

### Land, Climate, Agro – Ecological Zones and People

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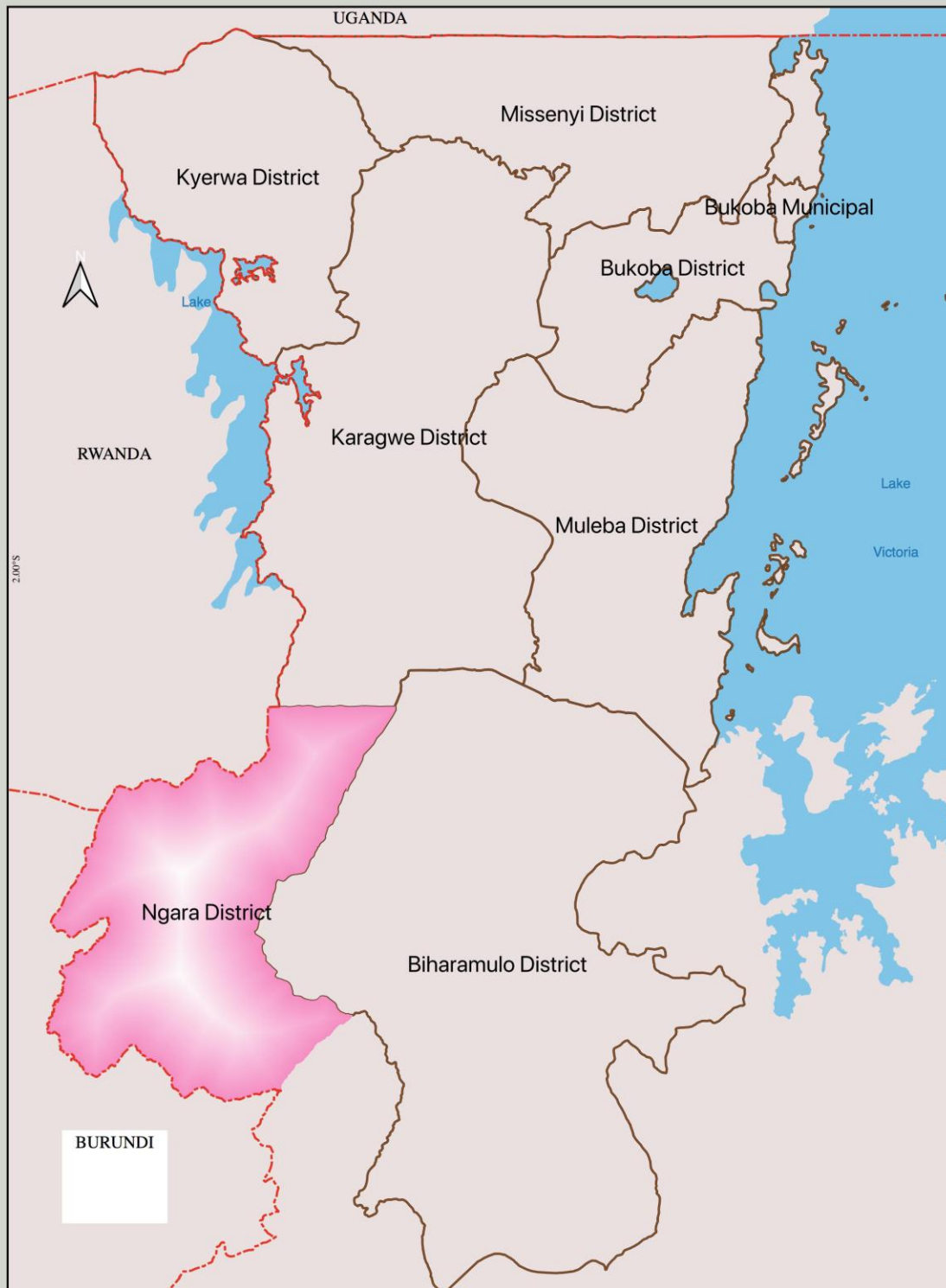
#### 1.0 An Overview

Chapter one gives information on the geographical location, land area, administrative units, climate and agro-ecological zones of Ngara District Council. Information about ethnic groups, population distribution, size and other demographic characteristics are also briefly explained. Housing conditions in terms of building materials, occupancy as well as availability of water and sanitation have also been discussed in this chapter.

#### 1.1 Geographical Location

Ngara District Council is one of the eight councils in Kagera Region. It was established on 1st January 1984 under the Local Government Act No. 7 of 1982, with Local Government Notice No. 87 after having being separated from Biharamulo Council. The name Ngara originated from a Hangaza word “Mnyinya wingara” which is a tree with mushrooms. These trees when old enough are characterized by hosting mushrooms on their stems. These mushrooms, in Hangaza language, are known as ‘ingara’ so it leads to the words ‘Mnyinya Wingara’ meaning the tree with mushrooms. This tree was used by the chiefs as their meeting place and the Germans failed to pronounce the words Mnyinya Wingara, and pronounced the named as Ngara, hence the name Ngara. Ngara DC is located in the South West of Kagera Regional Headquarter (Bukoba). Its elevation is approximately 6,000 feet (1,800 M) above sea level and is considered to be in the highlands of Tanzania. The total area for Ngara is 3,744 km<sup>2</sup>. Ngara DC lies on the very west of the Mainland Tanzania between Latitudes 2° 45” S and Longitudes 30° 64” E. It borders the Republics of Rwanda in the Northwest and Burundi in the Southwest. Ngara DC also borders Kakonko Council in the South, Biharamulo Council in the East while Karagwe Council in the North.

Map 1: Geographical Location of Ngara District Council; 2015



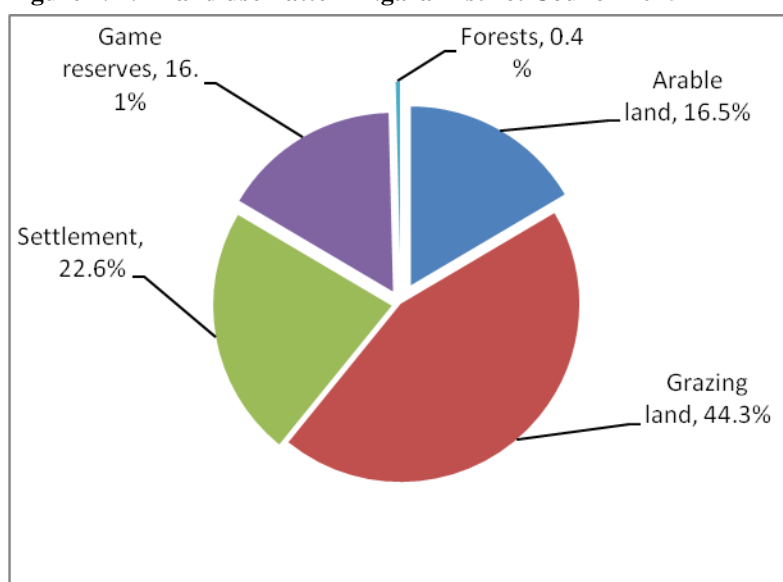
**Source:** National Bureau of Statistics (GIS Section) 2015.

## 1.2 Land Area, Land Use Pattern and Administrative Units

Ngara District Council has a total area of 3,744 sq km. which is one hundred percent land. In regard to land area, Ngara DC ranks third after Biharamulo and Karagwe DCs for having a large land area.

The land is loamly, clay, stretched with some hills, divided into arable land which is suitable for crop production, forest reserves while normal forests are used for grazing. Some areas are game reserves and the remaining area is highlands with rocks, stones and gravels which is not fertile for crops production.

**Figure 1. 1: Land use Pattern Ngara District Council 2015**



**Source:** DED Ngara District Council Land Department 2015

At ward level; Kasulo Ward has the largest area in the council (272.2sq. km) followed by Ntobeye (241.7 sq km) and Nyakisasa (237.0 sq km) while Ngara Town Urban Authority has the smallest land area (98.0 sq km) and Rulenge Township has an area of 133.1 sq km.

**Table 1. 1: Land Area in Sq kms by Ward, Ngara DC, Tanzania Mainland, 2015**

Ward	Land Area	
	Sq. km	Percent
Rusumo	147.0	3.9
Kasulo	272.2	7.3
Nyamiaga	186.0	5.0
Murukulazo	126.0	3.4
Ntobeye	241.7	6.5

**Table 1.1 ctd: Land Area in Sq kms by Ward, Ngara DC, Tanzania Mainland, 2015**

Ward	Land Area	
	Sq. km	Percent
Kibimba	128.3	3.4
Kanazi	154.5	4.1
Mugoma	221.7	5.9
Kirushya	218.0	5.8
Mabawe	131.1	3.5
Kabanga	170.2	4.5
Murusagamba	194.0	5.2
Muganza	195.0	5.2
Nyakisasa	237.0	6.3
Mbuba	126.0	3.4
Bukiro	162.6	4.3
Bugarama	152.7	4.1
Keza	223.2	6.0
Kibogora	108.6	2.9
Nyamagoma	117.1	3.1
Ngara Township	98.0	2.6
Rulenge Township	133.1	3.6
<b>Total</b>	<b>3,744.0</b>	<b>100.0</b>

**Source:** DED Ngara District Council Land Department 2015

Administratively, Ngara DC is divided into four divisions and 22 wards sub-divided into 75 villages and 389 hamlets (Table 1.2). In regard to land area, Nyamiaga Division covers the largest land area of the Council with 1199.2 sq.km, (32.0 percent) followed by Rulenge Division with 1143sq.km, (30.5 percent). Murusagamba Division has the smallest land area with 506.1 sq.km, (13.5 percent) in the Council.

**Table 1. 2: Land Area and Administrative Units by Division, Ngara DC, 2015**

Division	Land Area (Sq. km)	No. of Ward	No. of Villages	No. of hamlets	Percent of land area
Nyamiaga	1199.2	7	21	125	32.0
Murusagamba	506.1	3	9	63	13.5
Kanazi	895.5	5	26	114	23.9
Rulenge	1143.2	7	19	87	30.5
<b>Total</b>	<b>3,744.0</b>	<b>22</b>	<b>75</b>	<b>389</b>	<b>100.0</b>

**Source:** District Executive Director's Offices, (Administration Department), Ngara DC, 2015

Map 2: Ngara District showing ward administrative boundary; 2015



### **1.3 Climate and Soil**

Ngara DC normally receives adequate annual rainfall. The rainfall pattern is bi-modal, occurring in September to October and March to May. The quantity of rainfall received tends to differ from place to place, depending on the altitude of the locality, with lowlands recording relatively less rainfall than the highlands. According to records, the annual rainfall averages between 800 mm in Bushubi (in Rulenge and Murusagamba Divisions) and 1,400 mm in Bugufi (Nyamiaga and Kanazi Divisions).

The mean and maximum temperature ranges from 170 to 280 Celsius during the hot season. The district council is situated between 1,200 metres and 1,800 metres above sea level. The council's landscape comprises hills, ridges, scarps, dissected pen plain, plateaus, swamps, flood plains, river terraces and minor valleys.

#### **1.3.1 Soil**

The soils range from shallow (less than 50 cm) to very deep (more than 120 cm) clay soils. Most of them have either dark red to red or brown to yellowish red clay sub soil, and deeply weathered, medium to strongly acid and have a low natural reserve of nutrients. Their capacity of retaining nutrients is also low. In most areas deep soils which are good or productive are found in the low lands where most of the crops are grown.

### **1.4 Agro – Ecological Zones (AEZ)**

An agro-ecological zone is defined as an area in which agricultural conditions are sufficiently homogeneous to warrant the adoption of a single agricultural policy. Ngara District Council has two broad Agro-ecological zones. The division is based on topography, altitude, climate, vegetation, agricultural activities practiced and similar issues as discussed herewith:

#### **1.4.1 Zone I- The Highlands**

The main land use types are upland agriculture, wetland agriculture, silviculture, game reserve and livestock keeping. The main food crops grown include banana, beans and maize. Cash crops are coffee and cassava. This zone includes Kanazi, Nyamiaga, Rulenge and Murusagamba Divisions.

Land is intensively used in the northern part of the council, with smaller land parcels than in the southern part and it is owned by village authorities. In permanent settlements, land has been passed from one generation to another, creating a defacto family ownership. In general there is a

customary land use. Women do have access to land but do not own it. The village authorities have reserved some land for communal use and for investment.

### **1.4.2 Zone II- Lowlands**

In the lower level there are some crops grown in relation to soil type and climate. Crops grown in the lowland area and in less rainfall areas of Murusagamba are bananas, beans, maize and cassava. Normally cassava and maize are intercropped with beans and can also be grown as a pure stand. This intercropping is highly compatible as cassava and maize provide shade to beans plants while the beans fix nitrogen in the soil. The production of other cereals and legume crops are at a subsistence level. Efforts to raise the production of these crops are done by educating farmers on best practices of producing such crops.

### **1.4.3 Drainage System**

Ngara DC forms part of the most northernwest highlands of Kagera Region, an area which is highly with clay and red loam soils. Most parts of the Council lie between 1,200 meters up to 1,850 meters above sea level and form the main watershed rivers of Ruvuvu and Kagera flowing from Burundi and Rwanda towards Lake Victoria. These two river tributaries are characterized by two different colours before they meet. The water of River Ruvuvu is redish in colour while the water of River Kagera is clear, but when they met and form river Kagera, its water is redish in colour. The two rivers (Ruvuvu and Kagera) when they meet at Rusumo border, they form a very big water falls known as Rusumo falls. Currently there is a project going on, aimed at producing electricity (HEP) that will be used by Tanzania, Burundi and Rwanda.

## **1.5. Population**

Population is a source of labour for the production of goods and services and is responsible for the consumption of various products. The size, structure, distribution and quality of a population are among the important parameters for economic development. The growth and distribution of the population also 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. This part of the report asses the population size, growth, structure, distribution and quality of people residing in different wards in Ngara DC.

### **1.5.1 Ethnic Groups**

Ngara DC is one of the eight councils in Kagera Region; experiencing slow population growth (natural growth and moderate population growth by migration). As a result, there are different



ethnic groups found in the Council. However, the Council has three main ethnic groups namely Hangaza, Shubi and Haya. Hangaza being the main ethnic group are found in almost all wards of the Council, while Shubi occupy most of Rulenge Division and Haya are found mostly in Bugufi (ie. Kanazi and Nyamiaga Divisions) especially in the high altitudes.

### 1.5.2 Population Size and Growth.

The population of Ngara District Council has experienced significant growth in the last decade. Table 1.3 shows that Ngara District Council's population decreased by 4.3 from 334,409 people in 2002 to 320,056 people in 2012. This is a decrease of 14,353 people during the inter-censal period.

The 2012 population and housing census showed that the council's population was 320,056 of which 167,613 were females (52.4 percent) and 152,443 people were males (47.6 percent). Table 1.3 presents the population size and its increase for Kagera Region and its councils for the 2002 and 2012 Censuses. Compared to other councils of Kagera region, Ngara DC is the third council in in terms of land area and is the fifth in terms of population size. According to the 2012 Population and Housing Census results, the council contributed 13.0 percent of the Regional total population of 1,777,823.

**Table 1. 3: Population Size and Growth by District council, Kagera Region, 2002 and 2012 Censuses**

Council	Land Area (sq. kms.)	2002 Pop. Census		2012 Pop. Census		Growth Rate	
		Number	Percent	Number	Percent	1988 - 2002	2002 - 2012
Kyerwa DC	2,783.4.	222,841	12.5	321,026	13.1	n.a	3.7
Biharamulo DC	5,617.0	159,055	8.9	323,486	13.2	-2.0	7.1
Muleba DC	3,444.0	385,184	21.7	540,310	22.0	2.5	3.4
Bukoba DC	2,595.5	241,234	13.6	289,697	11.8	-2.5	1.8
Bukoba MC	83.0	80,868	4.5	128,796	5.2	n.a	4.7
Karagwe DC	4,342.0	201,446	11.3	332,020	13.5	-2.5	5.0
Missenyi MC	2,000.0	152,786	8.6	202,632	8.2	n.a	2.8
<b>Ngara DC</b>	<b>3,744.0</b>	<b>334,409</b>	<b>18.8</b>	<b>320,056</b>	<b>13.0</b>	<b>5.3</b>	<b>-0.4</b>
<b>Total</b>	<b>24,608.9</b>	<b>1,777,823</b>	<b>100.0</b>	<b>2,458,023</b>	<b>100.0</b>	<b>2.2</b>	<b>3.2</b>

**Source:** National Bureau of Statistics, Computed Data from 2002 and 2012 Population Censuses Reports

At ward level, Table 1.4 shows that Bugarama Ward had the highest population increase of 57.0 percent, followed by Keza (52.6 percent) and Bukiro (52.2 percent). The smallest population increase of 14.4 percent was recorded in Mabawe Ward. On the other hand, the largest population decrease was recorded in Kasulo (84.0 percent), and Nyamiaga Wards (52.2 percent) which may have been caused by the closing of refugee camps which were been used by refugees



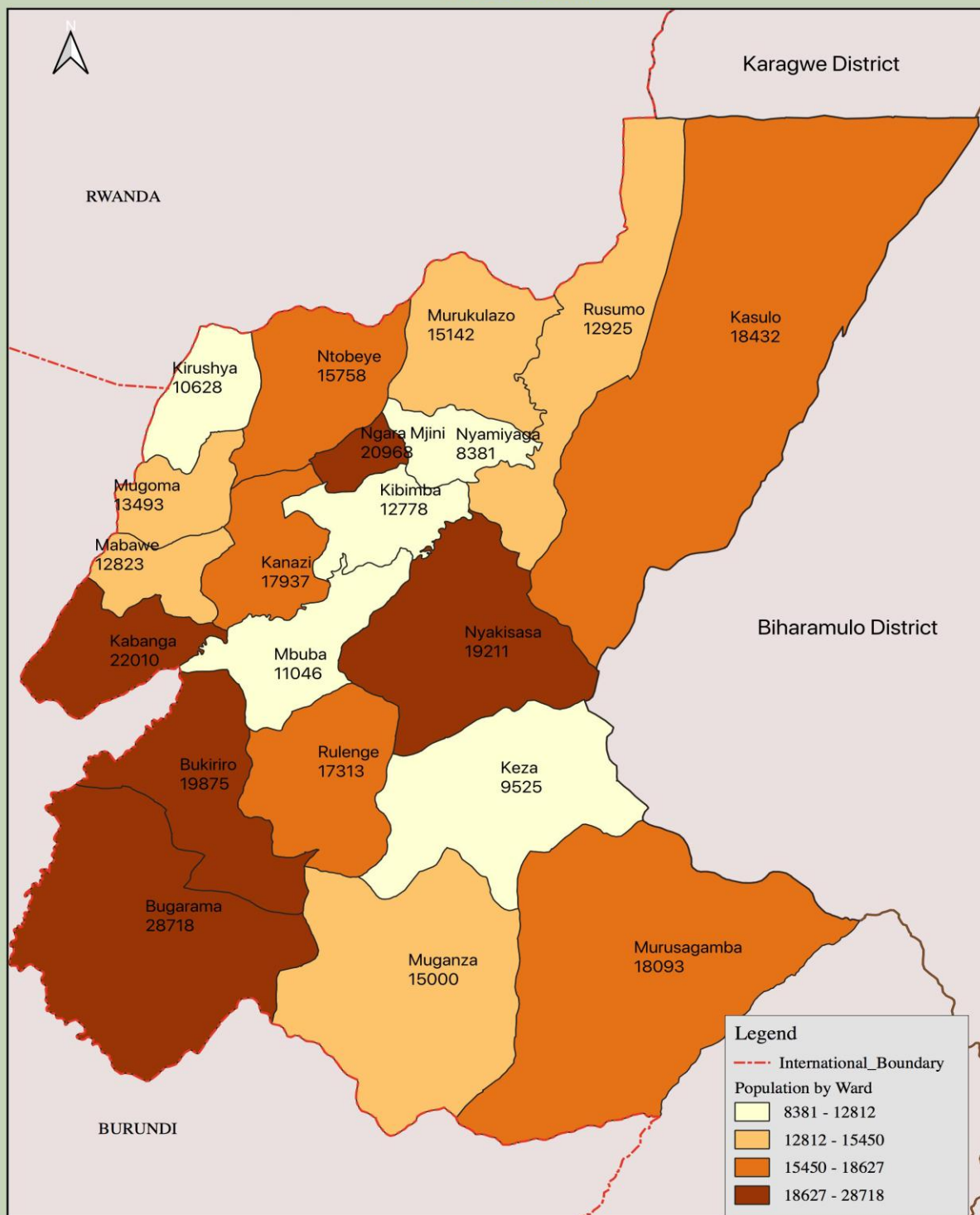
from Rwanda, Burundi and DRC as well as the departure of the workers who were under UN organizations, NGOs and CBOs.

**Table 1. 4: Population Distribution and Change by Ward; Ngara DC, 2002 and 2012**

Ward	Population Census		Population Change	
	2002	2012	Number	Percent
Rusumo	0	12,925	12,925	-
Kasulo	115,941	18,432	-97,509	-84.1
Nyamiaga	16,838	8,381	-8,457	-50.2
Murukulazo	11,152	15,142	3,990	35.8
Ntobeye	12,225	15,758	3,533	28.9
Kibimba	9,594	12,778	3,184	33.2
Kanazi	13,820	17,937	4,117	29.8
Mugoma	10,762	13,493	2,731	25.4
Kirushya	8,567	10,628	2,061	24.1
Mabawe	11,205	12,823	1,618	14.4
Kabanga	17,990	22,010	4,020	22.3
Murusagamba	8,435	18,093	9,658	114.5
Muganza	10,927	15,000	4,073	37.3
Nyakisasa	13,279	19,211	5,932	44.7
Mbuba	8,568	11,046	2,478	28.9
Bukiro	13,056	19,875	6,819	52.2
Bugarama	18,286	28,718	10,432	57.0
Keza	6,240	9,525	3,285	52.6
Kibogora	0	0	0	0.0
Nyamagoma	0	0	0	0.0
Ngara Township	15,637	20,968	5,331	34.1
Rulenge Township	11,887	17,313	5,426	45.6
<b>Total</b>	<b>334,409</b>	<b>311,675</b>	<b>-22,734</b>	<b>-6.8</b>

**Source:** NBS Compiled Data from the 2012 Population Censuses Reports, 2015.

Map 3: Population Distribution by Ward, Ngara District Council, 2012 Census



### 1.5.3 Population Density

Population Density is the number of people per square kilometre or square mile of land. Ngara District Council, with an average population density of 89 persons per sq. km in 2002 was considered to be the fourth most densely populated Council in Kagera Region after Bukoba MC, Bukoba DC and Muleba DC. In 2012 the population density of Ngara DC decrease to 85 persons per sq. km, and it was the sixth most densely populated council after Bukoba MC, Muleba DC, Kyerwa DC, Bukoba DC and Misenyi DC.

The Population density of Ngara DC was above the Regional average population density of 72 persons per sq. km in 2002 and below the regional average population density of 100 persons per sq. km in 2012. However, Ngara DC was not the most densely populated council in the Region in all the two censuses. The relatively large population density of Ngara DC was probably due to the presence of refugees from Rwanda, Burundi and DRC as well as migrants from other councils in the Region and the country as a whole. Favourable weather conditions, grazing land and availability of mines are some of other reasons which attract migrants to the council (Table 1.5).

**Table 1. 5: Population Density by Council, Kagera Region, Tanzania Mainland, 2002 and 2012**

Council	Land Area (sq. kms).	2002 Population	2012 Population	Population Density (Persons per Sq. Km.)	
				2002	2012
Karagwe District Council	4,342.0	201,446	332,020	46	76
Bukoba District Council	2,595.5	241,234	289,697	93	112
Muleba District Council	3,444.0	385,184	540,310	112	157
Biharamulo District Council	5,617.0	159,055	323,486	28	58
<b>Ngara District Council</b>	<b>3,744.0</b>	<b>334,409</b>	<b>320,056</b>	<b>89</b>	<b>85</b>
Bukoba Municipal Council	83.0	80,868	128,796	974	1,552
Misenyi District Council	2,000.0	152,786	202,632	76	101
Kyerwa District Council	2,783.4	222,841	321,026	80	115
<b>Total</b>	<b>24,608.9</b>	<b>1,777,823</b>	<b>2,458,023</b>	<b>72</b>	<b>100</b>

**Source:** NBS, the 2002 and 2012 Population and Housing Census Report

Table 1.6 gives the population density at the ward level in Ngara DC for the 2002 and 2012 censuses and the percentage change during the inter-censal periods. In 2002, Kasulo Ward with a population density of 426 persons per sq. km was the most densely populated ward in the Council, followed by Ngara Ward (160 persons per sq. km), Bugarama Ward (120 persons per sq. km), Kabanga Ward (106 persons per sq. km) and Nyamiaga Ward with 91 person per sq. km. Keza Ward with a population density of 28 persons per sq. km was the least populated Ward in the Council (Table 1.6).

In 2012, Ngara Ward was the mostly densely populated ward with a population density of 214 persons per sq. km followed by Bugarama (188 persons per sq. km), Rulenge (130 persons per sq. km), Kabanga (129 persons per sq. km), Bukiriro (122 persons per sq. km) and Murukulazo (120 persons per sq. km). Keza and Nyamiaga Wards with population densities of 43 and 45 persons per sq. km respectively were the least populated wards in the Council (Table 1.5).

**Table 1. 6: Population Density and Percentage Change by Ward, Ngara District, 2002 and 2012**

Ward	Land Area (Sq. Km)	Population Census		Population Density		Change of Pop. Density	
		2002	2012	2002	2012	Number	Percent
Rusumo	146.7	n.a	12,925	n.a	88	88	-
Kasulo	272.2	115,941	18,432	426	68	-358	-84.0
Nyamiaga	186.0	16,838	8,381	91	45	46	-50.5
Murukurazo	126.0	11,152	15,142	89	120	32	35.9
Ntobeye	241.7	12,225	15,758	51	65	15	29.4
Kibimba	128.3	9,594	12,778	75	100	25	33.3
Kanazi	154.5	13,820	17,937	89	116	27	30.3
Mugoma	221.7	10,762	13,493	49	61	12	24.5
Kirushya	218.0	8,567	10,628	39	49	10	25.6
Mabawe	131.1	11,205	12,823	85	98	12	12.2
Kabanga	170.2	17,990	22,010	106	129	24	22.6
Murusagamba	194.0	8,435	18,093	43	93	50	116.3
Muganza	195.0	10,927	15,000	56	77	21	37.5
Nyakisasa	237.0	13,279	19,211	56	81	25	44.6
Mbuba	126.0	8,568	11,046	68	88	20	29.4
Bukiriro	162.6	13,056	19,875	80	122	42	52.5
Bugarama	152.7	18,286	28,718	120	188	68	56.7
Keza	223.2	6,240	9,525	28	43	15	53.6
Kibogora	108.6	n.a	n.a	n.a	n.a	n.a	n.a
Nyamagoma	117.1	n.a	n.a	n.a	n.a	n.a	n.a
Ngara Township	98.0	15,637	20,968	160	214	54	33.8
Rulenge Township	133.1	11,887	17,313	89	130	41	46.1
<b>Total</b>	<b>3,744.0</b>	<b>334,409</b>	<b>320,056</b>	<b>89</b>	<b>85</b>	<b>-4</b>	<b>-4.5</b>

Source: NBS, Compiled Data from the 2002 and 2012 Population Censuses Reports, 2015

#### 1.5.4 Dependency Ratio

Dependants are persons aged 0–14 years and those aged 65 years and above. Economically active age group includes persons aged 15-64 years. Table 1.7 indicates the number of dependants and economically active persons in Kagera Region according to the 2002 and 2012 censuses. The table shows that in 2002, Ngara DC had 171,753 dependants and 162,656 economically active persons resulting in a dependency ration of 106. In 2012, the Council had

168,469 dependants and 151,587 economically active persons, resulting in a dependency ratio of 111. This means that the number of dependants for every 100 economically active persons increased from 106 in 2002 to 111 in 2012. A high dependency ratio is detrimental to economic development as most goods and services produced by economically active persons are consumed by the dependants instead of been used for economic development of the council. The highest dependency ratio in Kagera Region in 2002 and 2012 was recorded in Biharamulo DC (113 and 123 respectively) while the lowest was recorded in Bukoba MC (65 and 68 respectively).

**Table 1. 7: The Dependency Ratios by Council, Kagera Region, 2002 and 2012**

Council	2002 Population			2012 Population		
	Number of		Dependency Ratio	Number of		Dependency Ratio
	Dependants	Economically Active		Dependants	Economically Active	
Karagwe District Council	101,433	100,013	101	167,198	164,822	101
Bukoba District Council	124,965	116,269	107	148,390	141,307	105
Muleba District Council	193,794	191,390	101	275,585	264,752	104
Biharamulo District Council	84,415	74,640	113	178,207	145,279	123
Ngara District Council	171,753	162,656	106	168,469	151,587	111
Bukoba Municipal Council	31,727	49,141	65	51,929	76,867	68
Missenyi District Council	78,464	74,322	106	100,263	102,369	98
Kyerwa District Council	116,603	106,238	110	168,724	152,302	111
<b>Total</b>	<b>903,154</b>	<b>874,669</b>	<b>103</b>	<b>1,258,765</b>	<b>1,199,285</b>	<b>105</b>

**Source:** National Bureau of Statistics, Computed Data from 2002 and 2012 Population Censuses Reports.

#### 1.5.4.1 Population Distribution and Sex Ratio

Sex ratio is the number of males per 100 females in a population. At ward level, Murukurazo Ward had the highest sex ratio of 113 males for every 100 females followed by Kasulo Ward with a sex ratio of 102 while Kirushya Ward had lowest sex ratio of 85 males for every 100 females. This means that in 2002, there were more males than females in Murukurazo and Kasulo Wards. In 2012, the highest sex ratio of 99 males for every 100 females was observed in Rusumo Ward while the lowest was observed in Kirushya Ward. (Table 1.8).

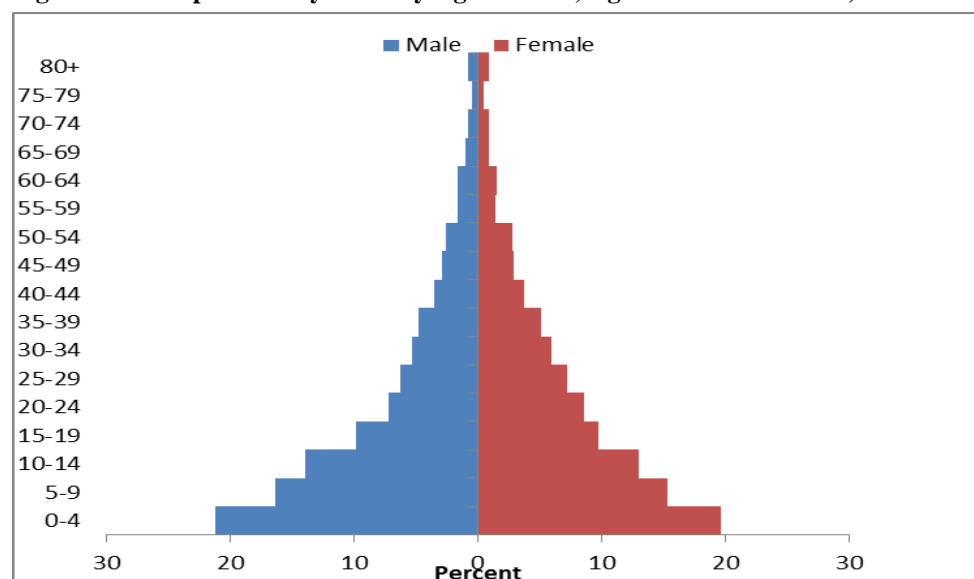
**Table 1. 8: Population Distribution by Sex and Sex Ratio by Ward, Ngara District, 2002 and 2012**

Ward	2002			2012		
	Male	Female	Sex Ratio	Male	Female	Sex Ratio
Rusumo	3,527	3,614	97	6,428	6,497	99
Kasulo	58,414	57,527	102	9,064	9,368	97
Nyamiaga	3,139	3,408	92	4,042	4,339	93
Murukulazo	5,942	5,249	113	7,410	7,732	96
Ntobeye	5,832	6,393	91	7,548	8,210	92
Kibimba	4,564	5,030	91	6,094	6,684	91
Kanazi	6,500	7,320	89	8,513	9,424	90
Mugoma	5,045	5,717	88	6,342	7,151	89
Kirushya	3,923	4,644	85	4,874	5,754	85
Mabawe	5,316	5,889	90	6,049	6,774	89
Kabanga	8,490	9,500	89	10,441	11,569	90
Murusagamba	5,858	6,588	89	8,613	9,480	91
Muganza	5,064	5,863	86	7,035	7,965	88
Nyakisasa	6,334	6,945	91	9,270	9,941	93
Mbuba	4,104	4,464	91	5,240	5,806	90
Bukiriro	6,160	6,896	89	9,440	10,435	90
Bugarama	4,719	5,370	88	8,212	8,352	98
Keza	2,947	3,293	90	4,586	4,939	93
Kibogora	3,861	4,336	89	5,957	6,197	88
Nyamagoma	1,888	2,123	89	3,566	3,673	97
Ngara Township	7,791	7,846	99	9,804	11,164	88
Mamlaka ya Mji Mdogo wa Rulenge.	5,684	6,203	92	8,252	9,061	91
<b>Total</b>	<b>162,314</b>	<b>172,095</b>	<b>94</b>	<b>152,443</b>	<b>167,613</b>	<b>91</b>

**Source:** NBS, Computed Data from 2002 and 2012 Population Censuses Reports, Kagera Region, 2015.

### 1.5.5 Population Distribution by Age and Sex

The population of Ngara DC, like other rural councils in Tanzania Mainland, is characterized by a young population. Figure 1.2 shows the Council's 2012 Population Pyramid with its broad base indicating high fertility and a declining mortality and a youthful aged structure of the Council's population.

**Figure 1. 2: Population Pyramid by Age and Sex, Ngara District Council, 2012 Census.**

**Source:** NBS, the 2012 Population Distribution by Age and Sex Vol. II, 2013

Furthermore, the 2012 population of Ngara District Council as depicted by its pyramid above, is considered as young population, and made up of children less than 15 years (0-14) who were 78,448 males and 80,084 females or 49.5 percent of the total population, followed by the youth population aged between 15-24 years estimated to be 56,758 persons with 25,996 males and 30,762 females or 17.7 percent of total population. Persons aged 60 years and above were 15,048 with 7,039 males and 8,009 females or 4.7 percent of the Council's population (Table 1.9).

**Table 1. 9: Population Distribution by Broad Age Groups and by Sex, Ngara District Council, 2012.**

Age Group	Sex				Total	Percent of Total
	Male	Percent	Female	Percent		
0-4	32,314	21.2	32,799	19.6	65,113	20.3
5-9	24,891	16.3	25,548	15.2	50,439	15.8
10-14	21,243	13.9	21,737	13.0	42,980	13.4
15-19	15,038	9.9	16,349	9.8	31,387	9.8
20-24	10,958	7.2	14,413	8.6	25,371	7.9
25-29	9,466	6.2	12,132	7.2	21,598	6.7
30-34	8,066	5.3	9,873	5.9	17,939	5.6
35-39	7,247	4.8	8,589	5.1	15,836	4.9
40-44	5,398	3.5	6,177	3.7	11,575	3.6
45-49	4,335	2.8	4,868	2.9	9,203	2.9
50-54	3,942	2.6	4,660	2.8	8,602	2.7
55-59	2,506	1.6	2,459	1.5	4,965	1.6
60-64	2,500	1.6	2,611	1.6	5,111	1.6

**Table 1.9ctd: Population Distribution by Broad Age Groups and by Sex, Ngara District Council, 2012.**

65-69	1,485	1.0	1,477	0.9	2,962	0.9
70-74	1,132	0.7	1,542	0.9	2,674	0.8
75-79	718	0.5	804	0.5	1,522	0.5
80+	1,204	0.8	1,575	0.9	2,779	0.9
<b>Total</b>	<b>152,443</b>	<b>100</b>	<b>167,613</b>	<b>100</b>	<b>320,056</b>	<b>100.0</b>

**Source:** The 2012 Population and Housing Census Report Volume II.

### 1.5.6 Population and Household Size

Household size is another key indicator used to measure the welfare of households and examine the burden experienced by bread winners in their households. The total number of households in Ngara DC was 67,477. Regional wise Muleba being the district with the largest population had 21.8 percent of the total number of private households in Kagera Region while Bukoba MC had the smallest percentage of private households (6.2 percent). The council with the largest number of private households in rural areas was Kyerwa (100.0 percent) followed by Muleba (97.0 percent), while Bukoba Municipal had the largest proportion of private households (100.0 percent) in urban area.

**Table 1. 10: Distribution of Households Size by council, Kagera Region, 2012.**

Region/council	Total		Rural		Urban		Total Population	Average Household Size
	Number	Percentage	Number	Percentage	Number	Percentage		
<b>Kagera Region</b>	<b>521,028</b>	<b>100</b>	<b>465,595</b>	<b>89.4</b>	<b>55,433</b>	<b>10.6</b>	<b>2,458,023</b>	<b>4.7</b>
Karagwe DC	72,339	13.9	66,302	91.7	6,037	8.3	332,020	4.6
Bukoba DC	65,375	12.5	63,909	97.8	2,466	2.2	289,697	4.4
Muleba DC	113,380	21.8	110,028	97.0	3,352	3.0	540,310	4.8
Biharamulo	55,674	10.7	53,183	95.5	2,491	4.5	323,486	5.8
<b>Ngara DC</b>	<b>67,477</b>	<b>13.0</b>	<b>62,686</b>	<b>92.9</b>	<b>4,791</b>	<b>7.1</b>	<b>320,056</b>	<b>4.7</b>
Bukoba MC	32,296	6.2	N/A	N/A	32,296	100.0	128,796	4.0
Misenyi DC	48,104	9.2	44,104	91.7	4,000	8.3	202,632	4.2
Kyerwa DC	66,383	12.7	66,383	100.0	N/A	N/A	321,026	4.8

**Source:** National Bureau of Statistics, Computed Data from 2012 Population Censuses Reports.

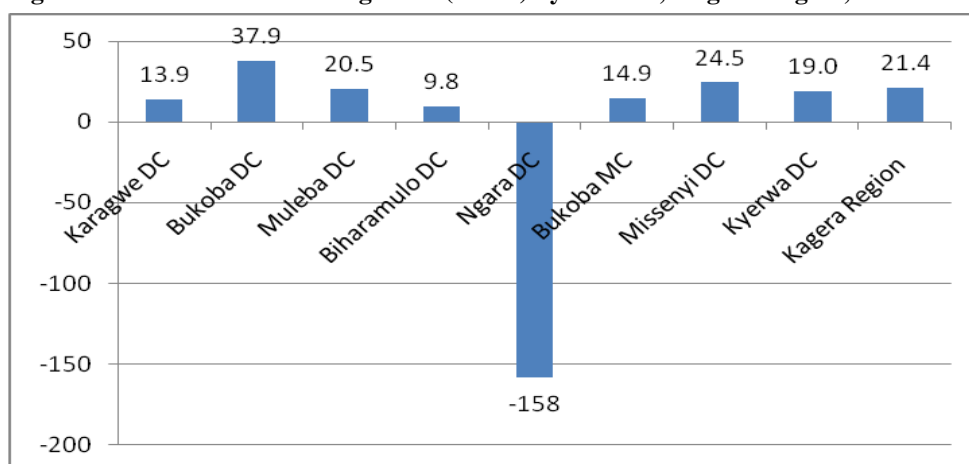
### 1.5.7 Doubling Time (Years) by Council, Kagera Region, 2015

Doubling time is another key population indicator which shows how many years it would take for the Region or Council to double its population. This indicator alerts the decision makers to review their socio-economic goals and targets by taking into consideration of expected socio-economic pressures that will be caused by increased population. The socio-economic demands of the population include land, water supply, education and health facilities, employment



opportunities, housing and other social facilities. The 2012 Population and Housing Census shows that the population of Kagera Region will almost double after 21 years. At council level, Biharamulo DC have the shortest doubling period of almost ten years (9.8 years) followed by Karagwe DC (13.9 years), Bukoba MC (14.9 years), Kyerwa DC (19.0 years) and Muleba DC (20.5 years). Missenyi and Bukoba District Councils will take more time, (almost 25 and 38 years respectively) to double their population (Figure 1.2). One observation from these data is that Ngara District Council has a negative doubling time. The reason behind this is that, the council had two wards (Kasulo and Rusumo) which were occupied by refugees from Rwanda since late nineties. As a result of stabilization of the political conditions in their country, almost all the refugees had gone back to Rwanda and so the camps were almost closed in 2015. This resulted in the reduced population at the wards as well as in the Council. This is evidenced in the drop in the percentage change of the population density from 46.7 percent between 1988 and 2002 to -3.8 percent between 2002 and 2012.

**Figure 1. 3: Estimated Doubling Time (Years) by Council, Kagera Region, 2015.**



**Source:** NBS, the 2012 Population and Housing Census Report (Kagera Region Profile), 2017.

**Table 1. 11: Population Distribution by Council, Kagera Region, 2013, 2014 and 2015**

District	2013	2014	2015
Karagwe DC	342,691	353,704	365,072
Bukoba DC	299,008	308,617	318,536
Muleba DC	557,675	575,598	594,097
Biharamulo DC	333,882	344,613	355,688
Ngara DC	330,342	340,959	351,917
Bukoba MC	132,935	137,208	141,617
Misenyi DC	209,144	215,866	222,804
Kyerwa DC	331,343	341,992	352,984
<b>Total</b>	<b>2,537,020</b>	<b>2,618,557</b>	<b>2,702,715</b>

**Source:** NBS Compiled Reports, 2017

## CHAPTER TWO

### The Economy of the Council

#### 2.0 Introduction

This chapter highlights the socio-economic performance of Ngara DC and its poverty status. The economic indicators used include the Gross Domestic Product (GDP), Per Capita Gross Domestic Product and the main industrial activities as sources of income for residents of Ngara DC. Other non-income poverty indices discussed in this chapter include the status of residents in terms of their health and education status, housing conditions and availability of social amenities inside and outside dwellings, such as access to drinking water, sources of energy for cooking and lighting and toilet facilities.

#### 2.1 GDP and Per Capita GDP

##### 2.1.1 Council Contribution to the Region GDP

Ngara DC, like other councils of Kagera Region, computed its GDP and Per capita GDP for 2015 which was TZS 333,023 million and TZS 946,312 respectively.

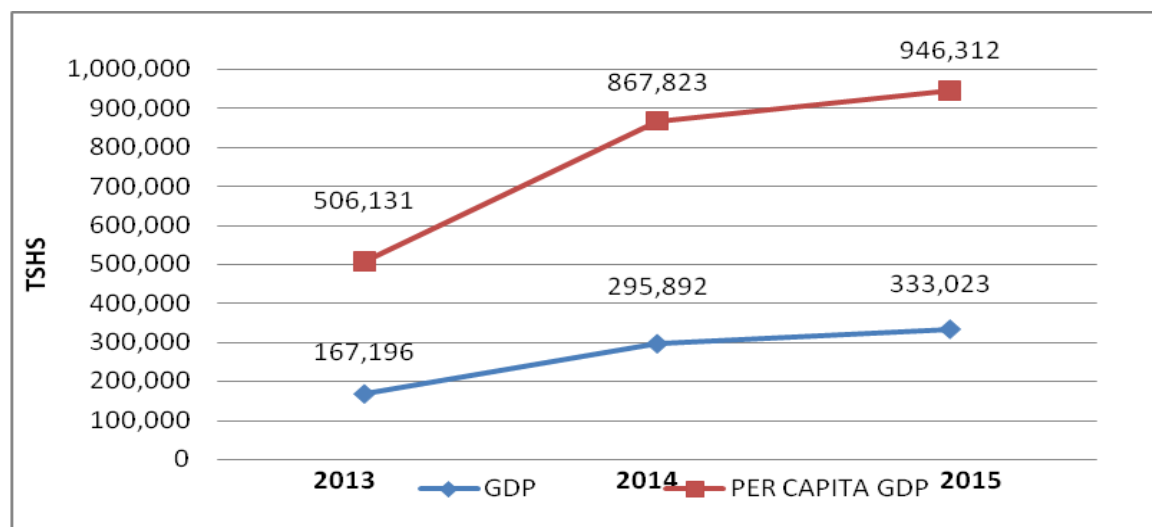
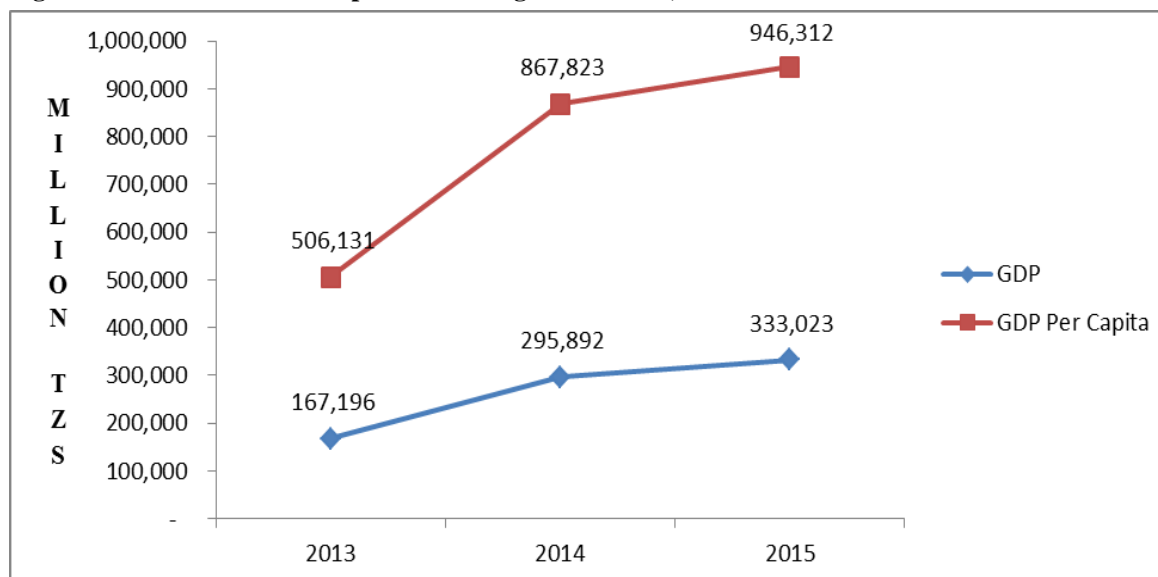
Table 2.1 shows the computed GDP estimates by council in Kagera Region for 2013, 2014 and 2015 years. Ngara District Council contributed 6.7 percent to the Region's GDP in 2013 equivalent to TZS 167,196 million. The largest contribution in that year was from Muleba DC (TZS 723,634 million, 29.1 percent) followed by Misenyi (578,785 million, 23.3 percent). The trend changed in the year 2014 the council was the fourth, while in the year 2015 was the fifth. On the other hand, Kyerwa DC share in the GDP was very little in 2013 while Bukoba DC its share was very low in 2014 years and Bukoba DC share was very low in the year 2015 (Table 2.1).

**Table 2. 1: GDP Estimates Contribution by Council, 2013, 2014 and 2015 (Mill. Tsh), Kagera Region**

Council	2013		2014		2015	
	Amount	Percent	Amount	Percent	Amount	Percent
Karagwe DC	523,163	21.1	528,036	17.1	652,493	18.7
Bukoba DC	149,125	6.0	176,221	5.7	195,565	5.6
Muleba DC	723,634	29.1	765,450	24.9	682,194	19.6
Biharamulo DC	178,899	7.2	201,923	6.5	299,686	8.6
<b>Ngara DC</b>	<b>167,196</b>	<b>6.7</b>	<b>295,892</b>	<b>9.6</b>	<b>333,023</b>	<b>9.5</b>
Bukoba MC	160,314	6.4	173,893	5.6	222,565	6.4
Misenyi DC	578,785	23.3	662,288	21.5	595,429	17.1
Kyerwa DC	1,894	0.07	269,455	8.7	493,301	14.1
<b>Total</b>	<b>2,483,011</b>	<b>100.0</b>	<b>3,073,157</b>	<b>100.0</b>	<b>3,474,256</b>	<b>100.0</b>

**Source:** National Bureau of Statistics, National Accounts Data, 2017.

**Figure 2. 1: GDP and Per Capita GDP of Ngara DC 2013, 2014 and 2015**



Source: NBS, Kagera Region GDP Report, 2017

### 2.1.2 Council Per Capita GDP

Looking at the distribution of the regional economy, Misenyi DC had highest per capita GDP in the region, TZS 2,767,397 in 2013, TZS 3,068,050 in 2014 and TZS 2,672,439 in 2015 followed by Karagwe DC where in 2013 had TZS 1,526,634, TZS 1,492,873 in 2014 and TZS 1,787,299 in 2015 (Table 2.2). The least council was Kyerwa DC in the year 2013 had 5,717 while Bukoba DC had least per capita in the region with 571,002 in the year 2014 and 613,949 in the year 2015.

**Table 2. 2: Per Capita GDP Estimates by Council, 2013, 2014 and 2015, Kagera Region**

Council	2013		2014		2015	
	Amount	Rank	Amount	Rank	Amount	Rank
Karagwe DC	1,526,634	2	1,492,873	2	1,787,299	2
Bukoba DC	498,734	7	571,002	8	613,949	8
Muleba DC	1,297,590	3	1,329,834	3	1,148,287	5
Biharamulo DC	535,815	5	585,942	7	842,551	7
<b>Ngara DC</b>	<b>506,131</b>	<b>6</b>	<b>867,823</b>	<b>5</b>	<b>946,312</b>	<b>6</b>
Bukoba MC	1,205,952	4	1,267,369	4	1,571,591	3
Missenyi DC	2,767,397	1	3,068,050	1	2,672,439	1
Kyerwa DC	5,717	8	787,897	6	1,397,519	4
<b>Total</b>	<b>978,711</b>		<b>1,173,607</b>		<b>1,285,469</b>	

Source: National Bureau of Statistics, National Accounts Data, 2017

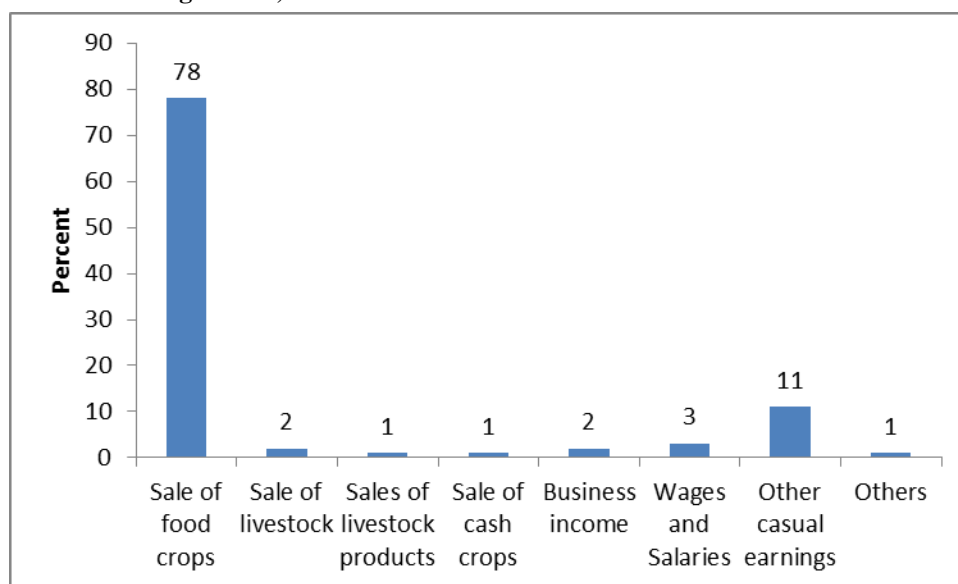
## 2.2 Non - Income Indicators

As stated earlier, besides income poverty in terms of GDP and per capita GDP, there are other non - income indicators that portray the poverty level. These indicators include main source of cash income, food poverty in terms of food security and protein intake, net enrolment, adult literacy rate, health indicators, housing conditions in terms of amenities inside and outside dwellings, including the use of modern and durable building materials, access to safe drinking water, types of toilets, household's assets, and sources of energy for lighting and cooking.

### 2.2.1 Main Sources of Cash Income

The 2007/08 National Sample Census of Agriculture revealed that, most of households in Ngara DC (about 78 percent) obtained their income by selling food crops. Other sources of household income include: sales of livestock (2 percent), sales of livestock products (1 percent), sales of cash crops (1 percent), business income (2 percent), wages and salaries (3 percent), other cash earnings (11 percent) and others (1 percent).

**Figure 2. 2: Percentage of Households Reporting the Main Source of Income, Ngara DC, 2007/08**



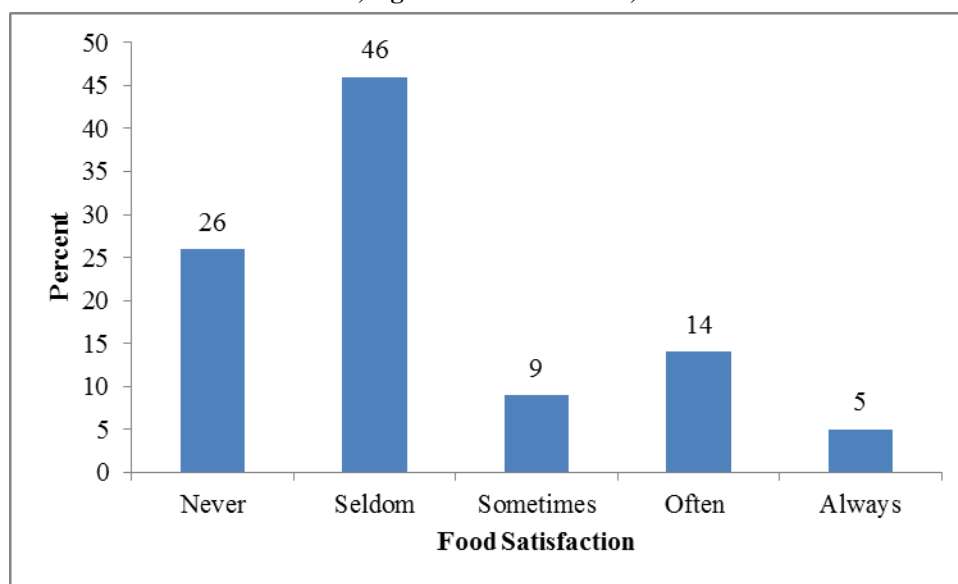
**Source:** NBS, Kagera Region Agriculture Sample Census Report, Kagera Region, 2007/08

The 2012 Population and Housing Census results showed that Ngara DC had minimum number of economic opportunities due to lack of industries in the council. Commercial agriculture and food crops were reported to be the main sources of income in the council, engaging 82.4 percent of the residents. These were followed by trade and commerce with 4.2 percent, domestic services (3.2 percent) and mining and quarrying activities (2.9 percent).

### **2.2.2 Food Security and Food Poverty.**

According to the 2007/2008 National Sample Census of Agriculture, 26 percent of the households in Ngara DC had never experienced any food insufficiency, 46 percent of the household seldom experienced problems in satisfying the household food requirements, while 9 percent of households sometimes experienced problems. However, 14 percent often experienced food insufficiency problems and five percent always had problems of satisfying the household food requirements (Figure 2.3).

**Figure 2. 3: Percentage Distribution of Rural Agricultural Households by Status of Food Satisfaction, Ngara District Council, 2007/2008**



**Source:** NBS, National Sample Census of Agriculture, Kagera region, 2007/2008.

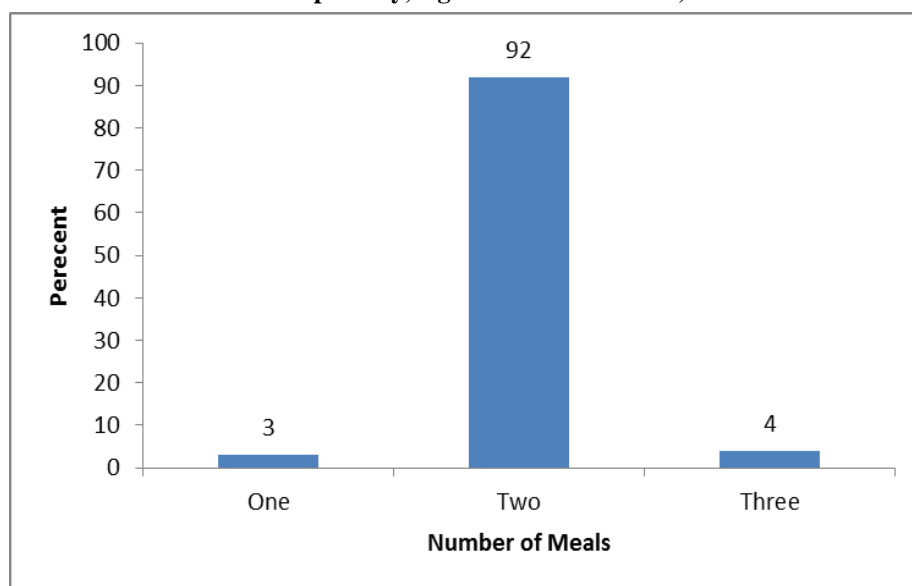
### 2.2.3 Food Consumption Patterns

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

### 2.2.4 Number of Meals per Day

The National Sample Census of Agriculture 2007/08 revealed that the majority of households in Ngara DC (92.0 percent) normally have two meals per day while 4 percent of households have three meals per day. Very few households in the council (3.0 percent) take one meal per day. These results indicate that food insufficiency affects a very small proportion of households in the council (Figure 2.4).

**Figure 2. 4: Percentage Distribution of Rural Agricultural Households by Meals Taken per Day, Ngara District Council; 2007/2008.**



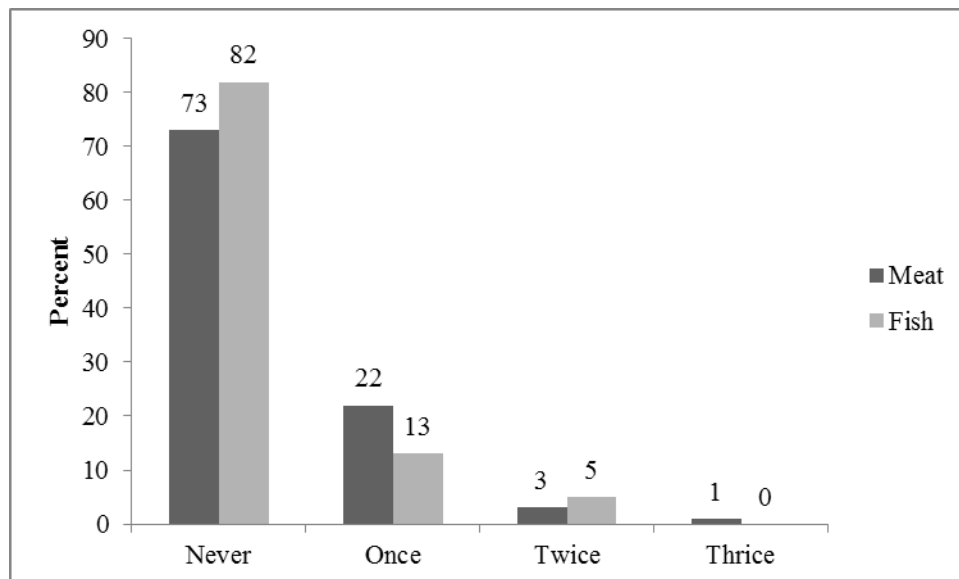
**Source:** NBS, National Sample Census of Agriculture, Kagera region, 2007/08

### **2.2.5 Protein (Meat and Fish) Intake**

Protein intake among people in Ngara DC showed meat preference over fish. The results of the 2007/08 National Sample Census of Agriculture showed that 26 percent of households in the council consumed meat atleast once during the week preceding the census while 18 percent of households consumed fish once during the week preceding the census . This implies that 73 percent of households in Ngara DC never consumed meat during the week preceding the census.

A similar pattern was observed for fish consumption, whereby the majority of households (82 percent) in Ngara DC did not consume fish during the week preceding the census while 18 percent of households consumed fish atleast once during the week preceding the census. Few households (13 percent) consumed fish once during the week preceding the census (Figure 2.5).

**Figure 2. 5: Percentage Distribution of Rural Agricultural Households by Frequency of Meat and fish Consumption per Week, Ngara DC, 2007/2008**

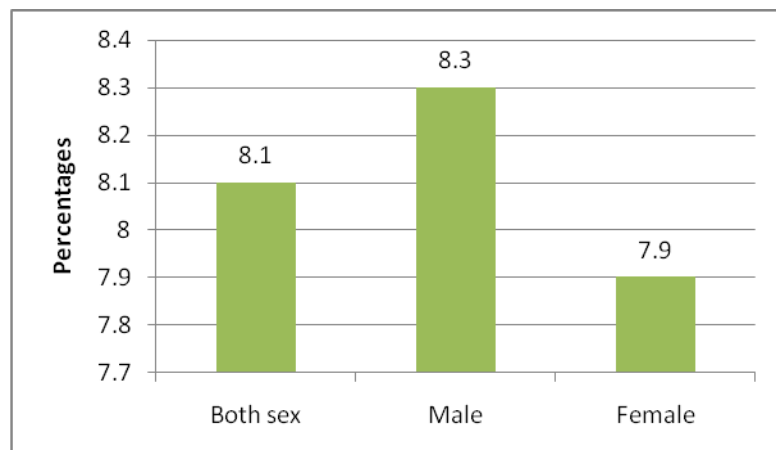


**Source:** NBS, National Sample Census of Agriculture, Kagera Region, 2007/08.

## 2.2.6 Health Indicators

The impact of HIV/AIDS pandemic have replicated to the high rates of orphans observed in the 2012 population census. Ngara DC was among councils in Kagera Region with average rates of orphanhood of 8.1 percent. Orphan males (8.3 percent) were more than orphan females 7.9 percent (Figure 2.6). There is a need for the council management to conduct a survey in order to know the current status of orphan hood and factors contributing to have higher rates of orphans and come up with solutions.

**Figure 2. 6: Percentage Distribution of Orphans by Sex, Ngara DC, 2012 Census.**



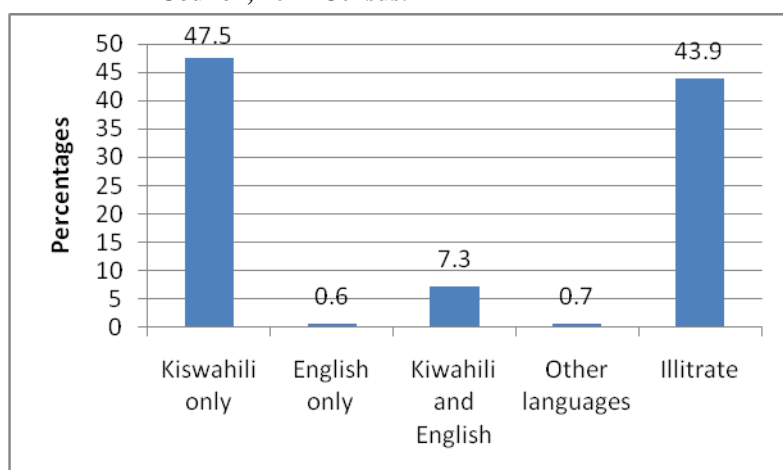
**Source:** NBS, Population and Housing Census, Kagera Region, 2012.



## 2.2.7 Literacy Rate and Understanding Different Languages

Literacy rate is another quality aspect of population in any country and gauge the ability of understanding various issues of the populations' socio-economic development and environment. Figure 2.7 shows that literacy rate in Ngara DC has improved from 56.3 percent in 2002 to 64.6 percent in 2012. Furthermore, Figure 2.5 revealed that there was a great achievement on percentages of understanding different languages in Ngara District Council, particularly the national language and official language of Tanzania. The table shows that the literacy rate in Kiswahili in 2012 was 47.5 percent and English was 7.3 percent. There was an insignificant percentage of people who understood English only (0.6 percent) and other languages (0.7 percent).

**Figure 2. 7: Percentage Distribution of Population by Understanding Different Languages, Ngara District Council, 2012 Census.**



**Source:** NBS, Population and Housing Census, Kagera region, 2012.

## 2.2.8 Housing Conditions

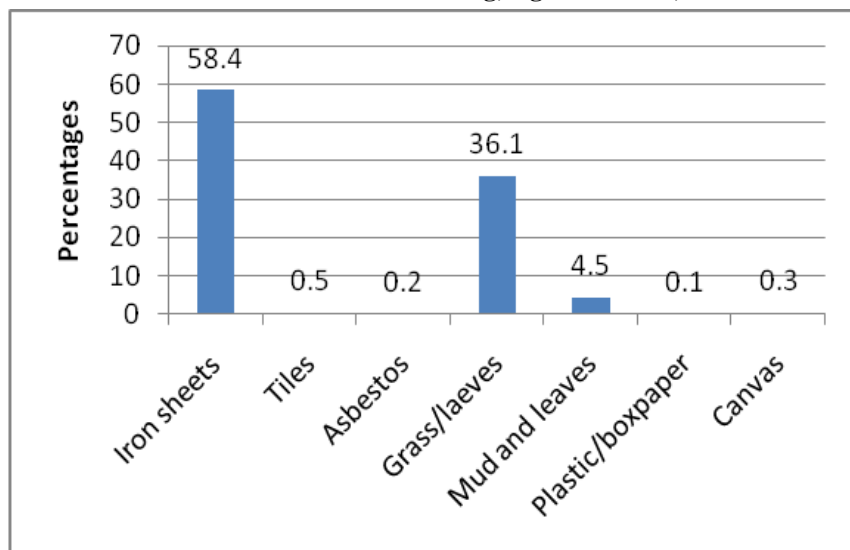
Housing condition is another non income poverty indicator that shows the poverty status of a household and can be easily used to judge whether a household is of low, medium or high income level. Three aspects of a dwelling are observed; whether they have used modern and durable materials for roofing, flooring and walls.

### (i) Roofing Materials

The 2012 Population and Housing Census Report shows that corrugated iron sheets were the most common roofing materials used in different areas of the country. In Ngara DC 58.4 percent of households have iron sheets as roofing material, followed by grass or leaves (36.1 percent),

grass and mud (4.5 percent) while 0.5 percent used tiles. Other materials were used by 0.6 percent of households in the council (Figure 2.8).

**Figure 2. 8: Percentage Distribution of Households by District and Type of Materials Used for Roofing, Ngara District, 2012 Cencus.**



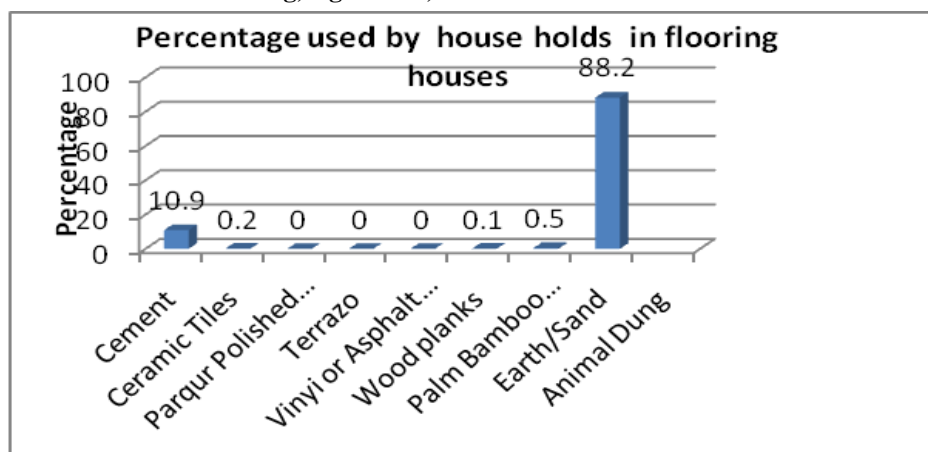
**Source:** NBS, Population and Housing Census Report, Kagera Region, 2012

## (ii) Flooring Materials

Flooring is also an important indicator of the quality of dwellings and this is important in measuring poverty of private households. Figure 2.9 reveals that the majority of households in Ngara DC (88.2 percent) used earth or sand as flooring materials, followed by cement (10.9 percent) and palm bamboo (0.5 percent). Only 0.3 percent of the households used other flooring materials in their dwellings in 2012 in Ngara DC.

Although the Council has not yet done any survey to evaluate the current status, few households in Ngara DC have used modern flooring materials (11.1 percent) such as cement and ceramic tiles. This implies that there is a need for encouraging Ngara DC residents on the use of modern materials for flooring to improve the quality of their houses.

**Figure 2. 9: Percentage Distribution of Households by Type of Materials Used for Flooring, Ngara DC, 2012 Census.**

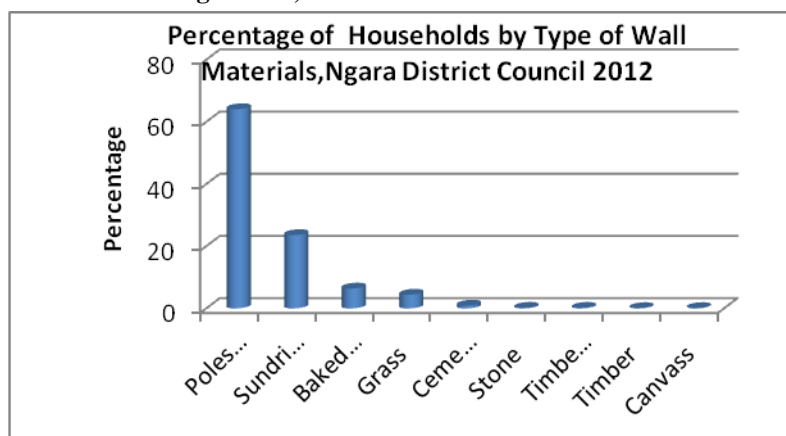


**Figure 2.7:** Percentage of Households by Type of Flooring Materials, Ngara District Council,

### (iii) Wall Materials

The use of modern and durable wall materials is another notable feature in the measurement of poverty in any country or region. Figure 2.10 shows that the majority of households in Ngara DC (92 percent) had their house walls built of baked bricks, 3.8 percent built by sundried bricks, 2.4 percent built of poles and mud, 0.9 percent built of grass and 0.6 percent built of cement bricks. Stones and timber materials were used by only 0.3 percent of households in the council.

**Figure 2. 10: Percentage of Households by Type of Wall Materials, Ngara DC, 2012**



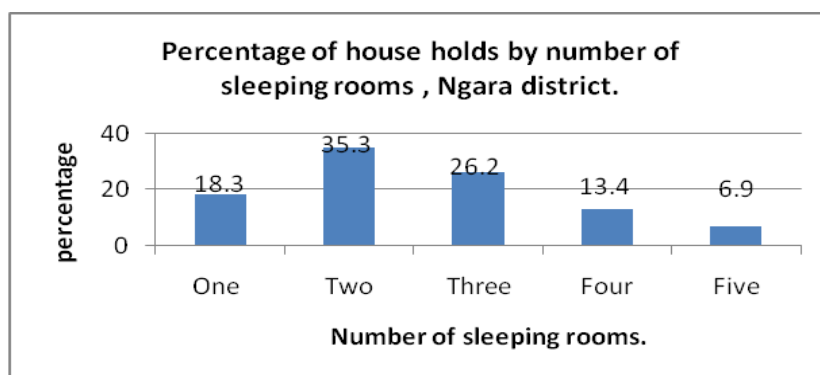
**Source:** NBS, Population and Housing Census Report, Kagera region, 2015

#### (iv) Number of Rooms for Sleeping.

Room occupancy is vital information in estimating and understanding the status of accommodation against the recommended Room Persons Ratio that provides hygienic condition of each person in that household. A room for sleeping, according to the population census definition, is defined as any space within the household which is currently used by household members for sleeping. By this definition, it means any space used for other purposes like a sitting room, a dining room or even a stores can be termed as a room for sleeping if it is used for that purpose.

The 2012 population census results showed that Ngara DC had an average household size of 4.7 persons and an average of 2.6 rooms for sleeping. Figure 2.11 shows that in Ngara DC, 26.2 percent of households had an average of 3 rooms for sleeping, 35.3 percent had two rooms, 13.4 percent had four rooms, 6.9 percent had five rooms, and households with one room for sleeping were 18.3 percent.

**Figure 2. 11: Percentage Distribution of Households by Number of Rooms for Sleeping, Ngara District Council, 2012 Census.**

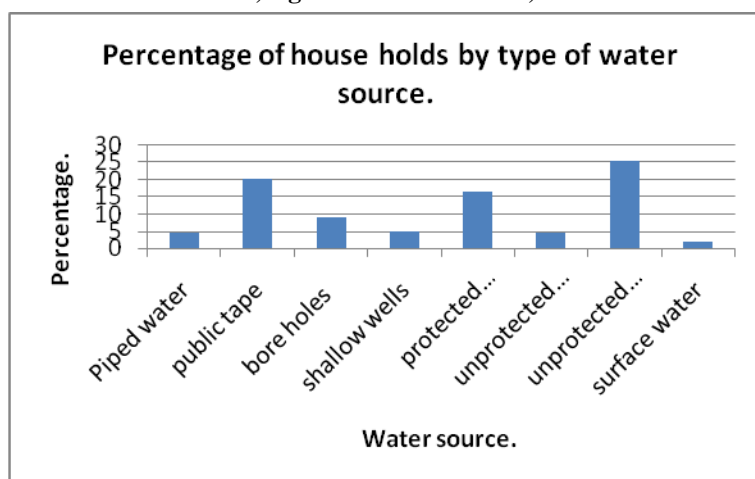


**Source:** NBS, Population and Housing Census Report, Kagera region, 2015.

#### (v) Access to Clean Drinking Water

The 2012 Population and Housing Census results showed that 58.9 percent of households in Ngara DC had access to improved drinking water sources and 41.1 percent of households had access to unimproved water sources. The main source of clean drinking water used by households in the council include public tap or standpipe (20.4 percent), protected spring (16.4 percent), Tube well/bore hole (8.9 percent), piped water into dwelling (4.5 percent) and piped water to yard/plot (3.8 percent). However, the Council had households which depended on unimproved sources of water for drinking including unprotected dug wells (4.6 percent) and unprotected springs (25.6 percent). Figure 2.12

**Figure 2. 12: Percentage of Households by Type of Water Source, Ngara District Council, 2012 Census.**

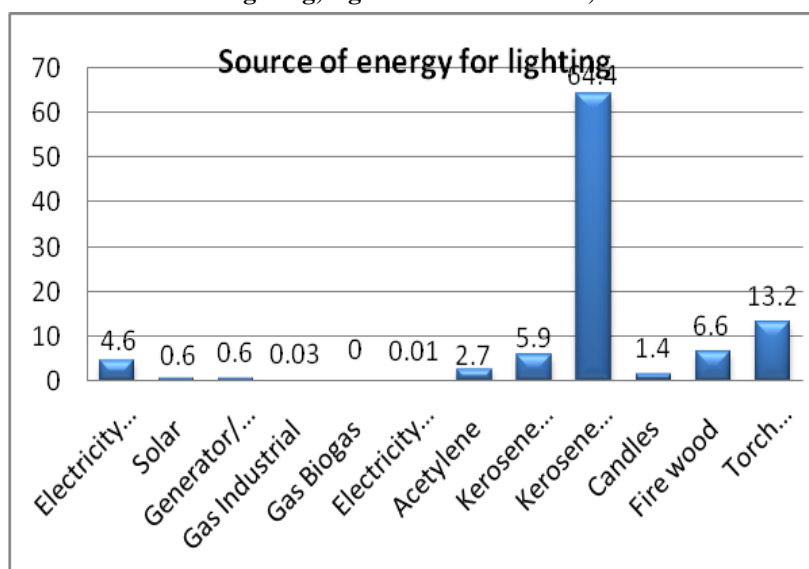


**Source:** NBS, Population and Housing Census Kagera Region, 2015.

#### (vi) Source of Energy for Lighting.

The 2012 Population and Housing Census results revealed that the main sources of energy for lighting for households in Ngara DC were kerosene or weak lamps (64.4 percent) and kerosene or lantern chimney ( 5.9 percent) which adda up to a total of 70.3 percent. The second main source of lighting energy in Ngara DC was torch or re-chargeable lamp (13.2 percent). However, the use of electricity as a source of energy for lighting in the Council was only 4.6 percent of the households. Other sources of energy for lighting in the council were acetylene, solar energy, firewood, candles, generator or private source and gas (Figure 2.13).

**Figure 2. 13: Percentage of Households by Main Source of Energy for Lighting, Ngara District Council, 2012 Census.**

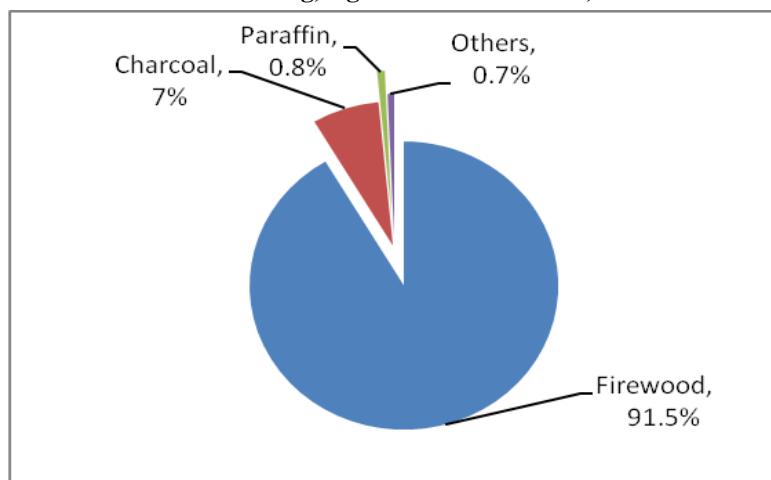


**Source:** NBS, Population and Housing Census Report, Kagera Region, 2012

### (vii) Source of Energy for Cooking.

The 2012 Population and Housing Census Report shows that firewood remains the most prevalent source of energy for cooking in Kagera Region used by 80.3 percent of total households. The same situation is observed in Ngara DC whereby the 2012 Population and housing Census revealed that 91.5 percent of the households in the council used firewood as the main source of energy for cooking followed by charcoal (7.0 percent) and paraffin (0.8 percent) while other sources accounted for 0.7 percent. The current practice of using firewood as a source of energy for cooking in the council continues, deforestation and depletion of natural vegetation will destroy the nature and ecology of Ngara DC and Kagera Region as a whole. Hence, measures should be taken to ensure that natural vegetation and ecology of the Council are restored and protected.

**Figure 2. 14: Percentage of Households by Main Source of Energy for Cooking, Ngara District Council, 2012 Census.**



**Source:** NBS, Population and Housing Census Report, Kagera Region, 2012

### (viii) Types of Toilet Facility

The 2012 PHC results shows that 9.9 percent of households in Ngara District were using improved toilet facilities ( i.e flush/pour water to specific tank (0.2 percent), flush/pour water to covered pit (0.4 percent), flush/pour water to somewhere else (1.6 percent), pit latrine with washable slab without lid (1.5 percent), pit latrine with washable slab with lid (4.7 percent), ventilated improved pit latrine (1.2 percent) and Composting/Ecoson latrine (0.3 percent).

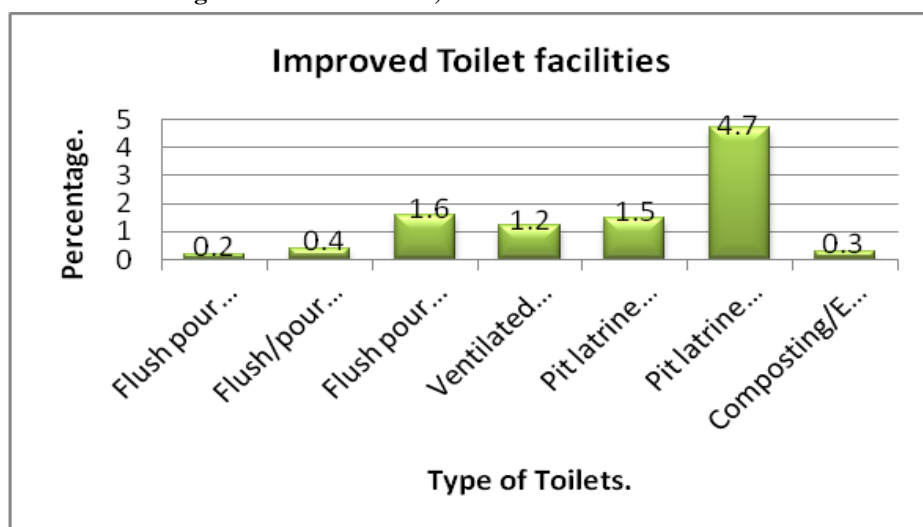
The results also show that 87.6 percent of households in Ngara DC were using non- improved toilet facilities (i.e pit latrine without slab or open pit (37.3 percent), pit latrine without washable/soil slab (49.9 percent). However, few households in the Ngara DC had no toilet facilities (2.5 percent). The results show that 9.9 percent of the households were using improved

toilet facilities, categorised as pit latrine with washable slab without lid (0.3 percent), pit latrine with washable slab with lid (4.7 percent) and flush or pour water to covered pit (1.6 percent) (Figure 2.15a).

**Table 2. 3: Percentage Distribution of Households by Type of Toilet Facility, Ngara District Council, Census 2012.**

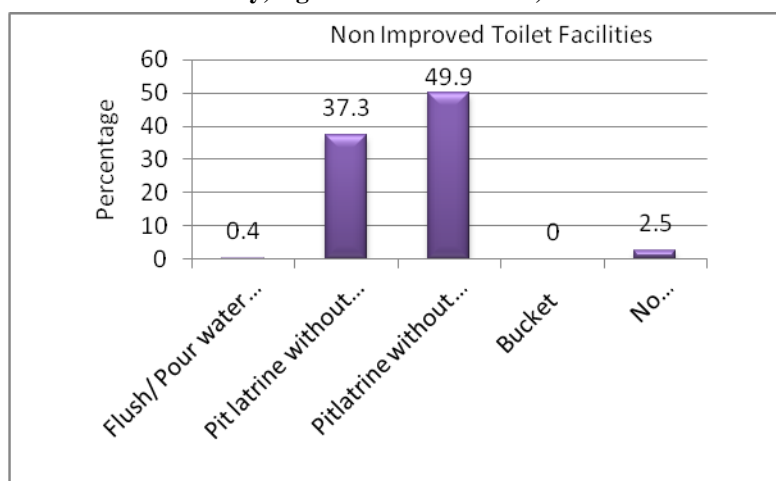
	Type of Toilet Facility	Percent
	<b>Improved Facilities</b>	<b>9.9</b>
i	flush/pour water to specific tank	0.2
ii	flush/pour water to covered pit	0.4
iii	flush/pour water to somewhere else	1.6
iv	pit latrine with washable slab without lid	1.5
v	pit latrine with washable slab with lid	4.7
vi	ventilated improved pit latrine	1.2
vii	Composting/Ecoson latrine	0.3
	<b>Non improved facilities</b>	<b>87.6</b>
i	Pit latrine without slab or open pit	37.3
ii	Pit latrine without washable/soil slab	49.9
	<b>No toilet facility</b>	<b>2.5</b>

**Figure 2. 15: Percentage Distribution of Households by Type of Toilet Facility, Ngara District Council, Census 2012.**



Source: NBS, Population and Housing Census Report, Kagera region.

**Figure 2.15 a: Percentage Distribution of Households by Type of Toilet Facility, Ngara District Council, Census 2012.**

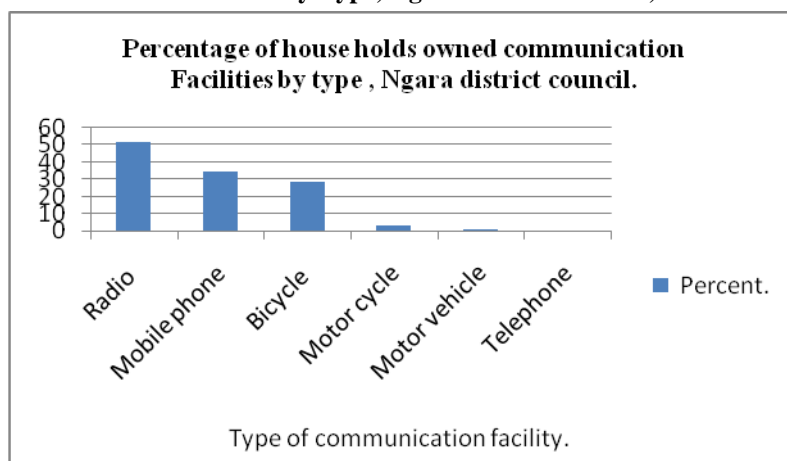


**Source:** NBS, Population and Housing Census Report, Kagera region, 2015

## 2.2.9 Ownership of Assets

The economic development of Ngara District Council can also be accessed through ownership of modern communication and transport facilities, home appliances and other household assets. Figure 2.16 shows that in 2012, 52.1 percent of private households in Ngara DC owned radios, 34.5 percent owned mobile phones, 28.5 percent owned bicycle, 3.6 percent owned motor cycle, 1.0 percent owned motor vehicle and 0.5 percent owned telephone land line. It is important to note that mobile phones and radios were the most owned assets that were used as a means of communication for private households in Ngara District Council in 2012.

**Figure 2. 16: Percentage of Households Owned Communication Facilities by Type, Ngara District Council, 2012 Census**

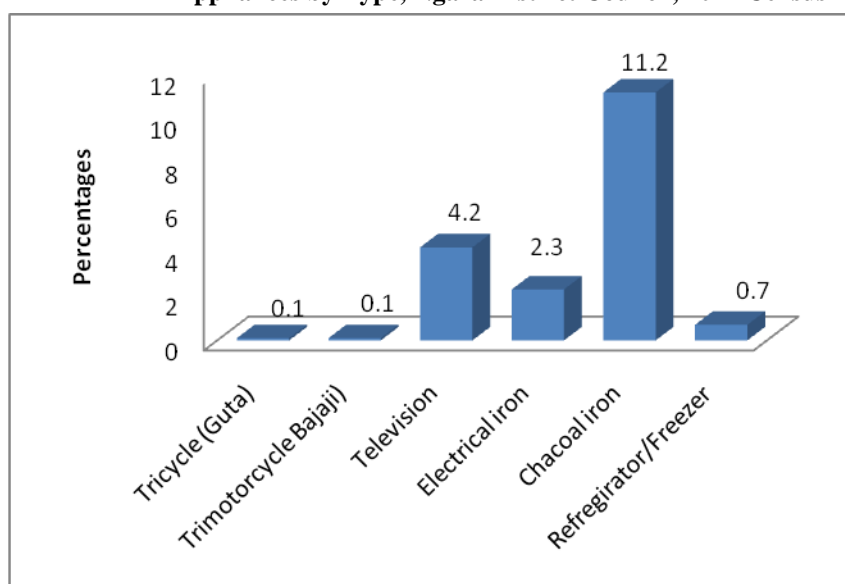


**Source:** NBS, Population and Housing Census Report, Kagera Region, 2015



Ownership of specified assets is a good indicator that can be used to evaluate the household economic status of any council. Great achievement on ownership of modern home appliances have been observed in 2012 than it was in 2002. We can also observe from the 2012 population census results shifting of ownership of assets towards modern home appliances such as an electric or gas cooker (0.1 percent of households owned), fridge or refrigerators (0.7 percent) and television (4.2 percent) (Figure 2.17). However, 92.4 percent of the households owned land, 91.8 percent of households owned a house and 91.2 percent of the households owned a hand hoe in the Council.

**Figure 2. 17: Percentage of Households Owned Modern Home Appliances by Type, Ngara District Council, 2012 Census**



**Source:** NBS, Population and Housing Census Report, Kagera region, 2015

## 2.2.10 Land Development

Land use planning is a key aspect of development for both urban and rural areas of any council in the country. The land needs in urban areas are dominated by the demand for building plots for residential, commercial, institutional or industrial purposes. In rural areas agriculture, livestock keeping, forestry and other social and production activities are the important aspects for land needs.

Table 2.4 shows that Ngara DC in 2013, 1,830 plots were surveyed whereby 1,469 (80.3 percent) of them were allocated and 467 plots (31.8 percent) were given title deeds. In 2015, 339 plots were surveyed but only 192 plots (56.6 percent) were allocated and 101 plots (52.6 percent) were offered title deeds. Nyamiaga Division had the largest number of plots surveyed, allocated and

offered title deeds both in 2013 and 2015. However, on the other hand Murusagamba Division had the smallest number of plots surveyed, allocated and offered title deeds in both years.

It is obvious that lack of surveyed building plots in most cases create a problem of crowded environment and mushrooming of slums or shanty town at the end.

**Table 2. 4: Number of Plots Surveyed, Allocated and Offered Title Deed by Division, Ngara District Council; 2013 and 2015**

Division	No. of Wards	2013				2015			
		No. of Plots Surveyed up to 2013	No. of Plots Allocated up to 2013	No. of Plots Offered Title Deed up to 2013	Percent of Plots with Title Deed by 2013	No. of Plots Surveyed from 2014 to 2015	No. of Plots Allocated from 2014 to 2015	No. of Plots Offered Title Deed from 2014 – 2015	Percent of Plots with Title Deed from 2014 to 2015
Nyamiaga	7	1,156	1,006	319	31.7	150	131	69	52.7
Kanazi	5	476	376	97	25.8	100	20	15	75.0
Rulenge	7	194	83	47	56.6	89	41	17	41.5
Murusagamba.	3	4	4	4	100.0	0	0	0	0.0
<b>Total</b>	<b>22</b>	<b>1,830</b>	<b>1,469</b>	<b>467</b>	<b>31.8</b>	<b>339</b>	<b>192</b>	<b>101</b>	<b>52.6</b>

**Source:** DED's Office, Land, Natural Resources and Environment Department, Ngara District Council; 2015

Table 2.5 Shows that out of 75 villages in Ngara District Council only 17 villages (22.7 percent) had land use planning. Four villages have been surveyed and demarcated but have not been offered with certificates until the end of 2015. 10 new villages have not been surveyed and demarcated and hence not provided with certificate and have not prepared the land use plan. This is a very serious case since it invites conflicts between farmers, herders and other land users. The Council Authority should look into this matter with urgency.

**Table 2. 5: Village Land Use Planning in Rural Areas by Division, Ngara DC, 2015**

Division	No. of Wards	No. of Villages	Villages Surveyed and Demarcated		Villages Offered Certificates		Villages With Land Use Planning	
			Number	Percent	Number	Percent	Number	Percent
Nyamiaga.	7	21	15	71.4	15	71.4	5	23.8
Kanazi	5	26	23	88.5	23	88.5	4	15.4
Rulenge	7	19	15	78.9	15	78.9	6	31.6
Murusagamba	3	9	8	88.9	8	88.9	2	22.2
<b>Total</b>	<b>22</b>	<b>75</b>	<b>61</b>	<b>81.3</b>	<b>61</b>	<b>81.3</b>	<b>17</b>	<b>22.7</b>

**Source:** DED's Office, Land, Natural Resources and Environment Department, Ngara District Council, 2015

## CHAPTER THREE

### Productive Sectors

#### 3.0 Overview

Chapter three describes the performance of main productive sectors in Ngara District Council. The productive sectors include crop production, livestock keeping, natural resources, tourism, manufacturing, fishing and mining. The chapter also highlights on possible investment opportunities existing in these sectors.

#### 3.1 Agriculture

Agriculture is the backbone of Ngara District Council economy and most of its residents depend on it as their main source of livelihood. Agriculture is carried out in all Wards of Ngara District Council. According to UN classifications, agriculture comprises of crop production, livestock, forestry and hunting sub sectors. Other sectors are fishing, bee keeping and tourism.

##### 3.1.1 Distribution of Arable Land

Figure 3.1 and Table 3.1 show that Ngara District Council has a total land area of 374,400 ha of which 104,550 ha (27.9 percent) are classified as arable land. Arable land planted with crops was 61,957 ha which is equivalent to 59.3 percent of the total arable land of the council. Wards with large percentage of arable land are Nyakisasa (6,857ha, 6.6 percent), Muganza (6,560ha, 6.3 percent), Keza (6,425ha, 6.2 percent), Mirusagamba (6,363ha, 6.1 percent), Kasulo (6,096ha, 5.8 percent) and Kabanga (5,871ha, 5.6 percent).

**Table 3. 1: Distribution of Land Area by Ward, Ngara District Council, Kagera Region, 2015**

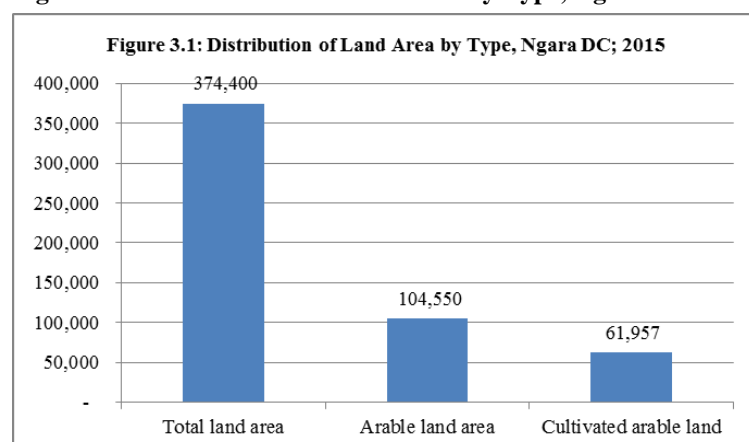
Ward	Total land Area (ha)	Total Arable Land (ha)	Percent of Ward Arable Land	Arable Land Under Cultivation (ha)	Percent of Arable Land Under Cultivation
Rusumo	14,696	2,107	2.0	1,374.9	65.3
Kasulo	27,222	6,096	5.8	3,167.2	52.0
Nyamiaga	18,600	4,200	4.0	2,740.0	65.2
Murukulazo	12,600	3,250	3.1	2,175.0	66.9
Ntobeye	24,172	5,335	5.1	1,754.5	32.9
Kibimba	12,830	3,804	3.6	2,552.8	67.1
Kanazi	15,450	4,206	4.0	2,744.2	65.2
Mugoma	22,170	4,115	3.9	2,680.5	65.1
Kirushya	21,800	5,590	5.4	3,713.0	66.4
Mabawe	13,110	4,185	4.0	2,729.5	65.2

**Table 3.1ctd: Distribution of Land Area by Ward, Ngara District Council, Kagera Region, 2015**

Kabanga	17,019	5,871	5.6	3,009.7	51.3
Murusagamba	19,402	6,363	6.1	3,254.1	51.1
Muganza	19,500	6,560	6.3	3,574.0	54.5
Nyakisasa	23,700	6,857	6.6	3,479.9	50.7
Mbuba	12,600	4,789	4.6	3,152.3	65.8
Bukiro	16,260	5,248	5.0	3,473.6	66.2
Bugarama	15,270	5,383	5.2	3,568.1	66.3
Keza	22,320	6,425	6.2	3,397.5	52.9
Kibogora	10,862	3,684	3.5	2,478.8	67.3
Nyamagoma	11,707	4,339	4.2	2,937.3	67.7
Ngara Township	9,800	2,024	1.9	1,316.8	65.1
Rulenge Township	13,310	4,119	3.9	2,683.3	65.1
<b>Total</b>	<b>374,400</b>	<b>104,550</b>	<b>100.0</b>	<b>61,957.0</b>	<b>59.3</b>

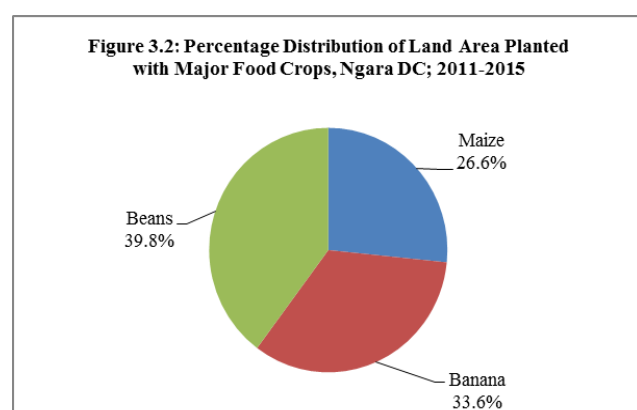
**Source:** Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015

**Figure 3. 1: Distribution of Land Area by Type, Ngara District Council; 2015**



### 3.1.2 Land under Cultivation

#### 3.1.2.1 Area under Major Food Crops Cultivation



Ngara DC has three major food crops namely, maize, banana and beans. Ngara DC had an average annual land area of 37,095.6ha planted with major food crops, this is equivalent to 35.5 percent of the council's total arable land area of 104,550 ha. Figure 3.2 also shows that beans with average annual planted area of 18,458.9ha was the leading

food crop that accounted for 49.7 percent of the total average annual area planted with all major food crops. This was followed by banana (42.0 percent) and maize (26.6 percent). Table 3.2 further shows that in 2015 the District cultivated the largest land area planted with major food crops (65,458 ha, 35.3 percent of the estimated land area cultivated with major food crops). The district council recorded the smallest land area of 7,732 ha planted with major food crops in 2011.

**Table 3. 2: Estimated land Area (ha) under Major Food Crops; Ngara District Council; 2011 -2015**

Crop	Estimated Land Area (ha)					Total Area	Annual Average	Percentage
	2011	2012	2013	2014	2015			
Maize	7,732.0	9980.0	7812.0	9,000.0	14768.0	49,292.0	9858.4	26.6
Banana	n/a	8212.0	11769.0	10180.6	32190.0	62,351.6	12,470.3	33.6
Beans	n/a	20737.0	9889.0	24708.3	18500.0	73,834.3	14,766.9	39.8
<b>Total</b>	<b>7,732.0</b>	<b>38,929.0</b>	<b>29,470.0</b>	<b>43,888.9</b>	<b>65,458.0</b>	<b>185,477.9</b>	<b>37095.6</b>	<b>100.0</b>
<b>Percent</b>	<b>4.2</b>	<b>21.0</b>	<b>15.9</b>	<b>23.7</b>	<b>35.3</b>	<b>100.0</b>		

Source: Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015

## Maize

Like other councils in Kagera Region, maize is also the staple food for Ngara DC. Maize is grown in most wards of the council although in some areas the comparative advantage may be greater than in other parts of the council depending on variation on climatic condition and soil fertility.

Table 3.2 above shows that from 2011–2015 maize was planted on annual average land area of 9,858.4 ha. This was equivalent to 26.6 percent of the annual average land area of 37,095.6 ha under major food crops cultivation. In terms of land area planted with major food crops, maize ranked third in Ngara District Council. The largest land area planted with maize was in 2015 whereby maize was cultivated on annual average land area of 14,768 ha. The smallest area was in 2011 when only 7,732 ha were planted with maize.

## Beans

It is a crop which plays a big role in maintaining food security in Ngara DC. In terms of planted land area with major food crops, beans ranked first. Table 3.2 shows that 39.8 percent of the councils' annual average land area (18458.6 ha) was planted with beans in the five year period (2011-2015). The largest area (24,708.3 ha) planted with beans was recorded in 2014 while the smallest area (9,889 ha) was recorded in 2013.

## Banana

Banana is another staple food in Ngara DC which is grown in high wet areas of the council. In terms of land area planted with major food crops, banana ranked second, with an average annual land area of 15, 587.9 ha, accounting for 42.0 percent of the average annual land area planted with major food crops. Over the 2011-2015 period, the largest average annual land area of 32,190 ha planted with banana was observed in 2015 whilst the smallest area of 8,212 ha was observed in 2012 (Table 3.2).

### 3.1.3 Crops Production

#### 3.1.3.1 Major Food Crops Production

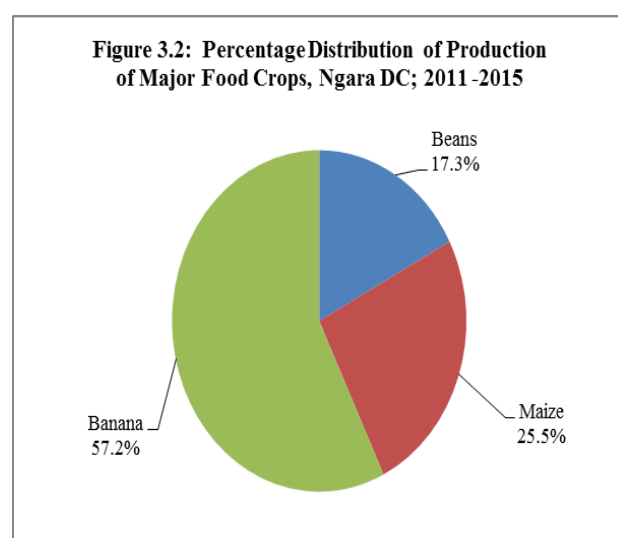


Table 3.3 shows that over the 2011 – 2015 periods, a total of 523,519 tonnes of major food crops, averaged annually at 174,506.3 tonnes was harvested in Ngara DC. Banana was the leading crop with an average annual production of 99,816.7, equivalent to 57.2 percent of the average annual tonnage of 174,506.3 of the harvested food crops. Maize ranked second, with an average annual production of (44,428.3 tonnes, 25.5 percent) followed by beans (30,261.3 tonnes, 17.3 percent).

**Table 3.3: Estimated Production in Tonnes of Major Food Crops, Ngara DC; 2011 – 2015**

Crop	Estimated Production in Tonnes					Total Production	Annual Average	Percent
	2011	2012	2013	2014	2015			
Beans	n/a	n/a	23,381	35,759	31,644	90,784	30,261.3	17.3
Maize	n/a	n/a	47,796	36,954	48,535	133,285	44,428.3	25.5
Banana	n/a	n/a	115,546	108,562	75,342	299,450	99,816.7	57.2
<b>Total</b>	<b>n/a</b>	<b>n/a</b>	<b>186,723</b>	<b>181,275</b>	<b>155,521</b>	<b>523,519</b>	174,506.3	100.0
<b>Percent</b>	<b>n/a</b>	<b>n/a</b>	<b>35.7</b>	<b>34.6</b>	<b>29.7</b>	<b>100.0</b>		

**Source:** Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015.

## Banana

In terms of production, banana ranked first in major food crops produced in Ngara DC in 2011-2015. Over the reference period, the council harvested a total of 299,450 tonnes of banana at an average annual production of 99,816.7 (57.2 percent). The district council recorded bumper



harvests of banana of 115,546 tonnes in 2013 whilst the smallest harvest of 75,342 tonnes was observed in 2015.

#### Banana crop in Ngara as the major food crop



**Source:** Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2017

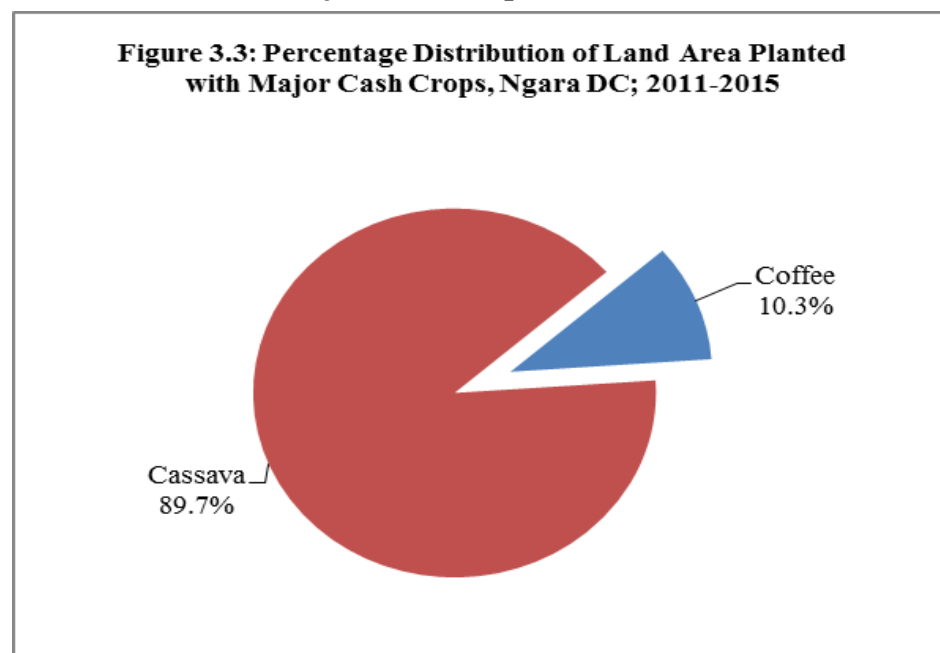
#### **Maize**

Maize is the second major food crop in Ngara DC. According to Table 3.3 maize contributed 25.5 percent of the Ngara DC's total food crop production of 174,506.3 tonnes. Over the 2011 - 2015 period, Ngara DC managed to harvest a total of 133,285 tonnes of maize averaged at 44,428.3 tonnes of maize per annum.

#### **Beans**

Beans was the third staple food in Ngara DC with an average annual production of 30,261.3 tonnes equivalent to 17.3 percent of the councils' average annual production of major food crops (Table 3.3).

### 3.1.2.2 Area Under Major Cash Crops Cultivation



Cassava and coffee are traditional cash crops which for a long time have been the centre of the economy of Ngara District Council. Apart from these two cash crops, peasant farmers in the council also sell surplus food crops grown in the council specifically maize and beans for their livelihood.

Table 3.3a shows that the total average annual land area planted with cash crops in Ngara DC was 20,839.8 ha equivalent to 19.9 percent of the councils' total arable land area of 104,550 ha. Cassava with 89.7 percent (18,702.5 ha) of the average annual land area planted with cash crops was the major cash crop in the council, followed by coffee (2137.3 ha, 10.3 percent). The largest land area planted with cash crops was 31,692 ha recorded in 2014 while smallest area of 11,411 ha was recorded in 2012.

**Table 3.3 a: Estimated Land Area (ha) Under Major Cash Crops, Ngara District Council, 2011 - 2015**

Crop	Estimated Land Area (ha)					Total Area(ha)	Average Annual (ha)	Percentage
	2011	2012	2013	2014	2015			
Coffee	n/a	1,471	1,287	3,267	2,524	8,549.0	2,137.3	10.3
Cassava	n/a	9,940	11,845	28,425	24,600	74,810.0	18,702.5	89.7
<b>Total</b>	<b>n/a</b>	<b>11,411</b>	<b>13,132</b>	<b>31,692</b>	<b>27,124</b>	<b>83,359.0</b>	20,839.8	<b>100.0</b>
<b>Percent</b>	n/a	13.7	15.8	38.0	32.5	100.0		

**Source:** Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015



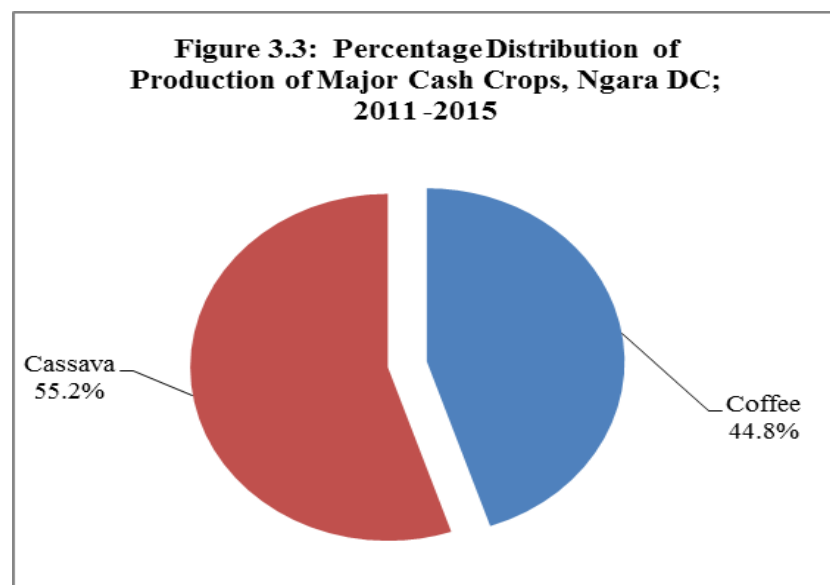
## Cassava

Cassava is one of the cash crops grown in Ngara DC ranking first in terms of planted area with major cash crops. More than three quarter (89.7 percent) of the land area planted with cash crops in the Council was under cassava cultivation.

## Coffee

Coffee is the second traditional major cash crop in Ngara District Council. Over the 2011 - 2015 period shown in Table 3.2a, coffee was grown on an average annual area of 2,137.3 ha, equivalent to 10.3 percent of the councils' average annual land area of 20,839.8 ha.

### 3.1.3.2 Major Cash Crops Production



Over the 2011-2015 period, Ngara District Council harvested an average annual of 15,931.6 tonnes of all major cash crops. Cassava was the leading cash crop with an average annual production of 8,773.6 tonnes equivalent to 55.1 percent (Table 3.4). Coffee was the second major cash crop produced with an average annual of 7,157.8 tonnes (44.9 percent).

**Table 3. 4: Estimated Production in Tonnes of Major Cash Crops, Ngara DC, 2011 – 2015**

Crop	Estimated Production in Tonnes					Total Production	Annual Average	Percent
	2011	2012	2013	2014	2015			
Coffee	n/a	n/a	7,372.9	6,754.9	7,345.6	21,473.4	7,158	44.8
Cassava	n/a	n/a	9,069.0	8,410.6	8,841.3	26,320.9	8,773.6	55.2
<b>Total</b>	<b>n/a</b>	<b>n/a</b>	<b>16,441.9</b>	<b>15,165.5</b>	<b>16,186.9</b>	<b>47,794.3</b>	<b>15,931.6</b>	<b>100.0</b>
<b>Percent</b>	<b>n/a</b>	<b>n/a</b>	<b>34.4</b>	<b>31.7</b>	<b>33.9</b>	<b>100</b>		

**Source:** Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015

## Cassava Production

Cassava is one of major cash crops produced in Ngara DC. Tonnage of cassava harvested in the district council was estimated at 2,592.4 per annum (Table 3.4a). Of the six wards producing cassava shown in Table 3.4a, Mbuba ward accounted for 36.2 percent of the cumulative average tonnage of 2,592.4 per annum and was the leading ward in cassava production. Kirushya accounted for 23.5 percent and ranked second ward in cassava production. Table 3.4a also confirms Muganza to be the last ward in cassava production (2.9 percent).

**Table 3.4 a: Estimated Production (Tonnes) of Major Cash Crops (Cassava) by Ward, Ngara DC; 2011 – 2015**

Ward	2011	2012	2013	2014	2015	Total production	Annual Average Production (Tonnes)	Percent
Rulenge	n/a	n/a	792.0	802.0	802.0	2,396.0	798.7	18.5
Mbuba	n/a	n/a	1,400.0	1,670.0	1,620.0	4,690.0	1,563.3	36.2
Muganza	n/a	n/a	19.1	121.0	241.0	381.1	127.0	2.9
Murusagamba	n/a	n/a	201.0	106.0	104.0	411.0	137.0	3.2
Kirushya	n/a	n/a	1,002.0	906.0	1,140.0	3,048.0	1,016.0	23.5
Mugoma	n/a	n/a	545.0	603.0	888.0	2,036.0	678.7	15.7
<b>Total</b>	<b>n/a</b>	<b>n/a</b>	<b>3,959.1</b>	<b>4,208.0</b>	<b>4,795.0</b>	<b>12,962.1</b>	<b>4,320.7</b>	<b>100.0</b>

Source: Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015

## Cassava production in Ngara, DC.



Source: Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2017.

## Production of Coffee

Coffee is the second major cash crop in Ngara District Council and as Table 3.4b shows, cumulatively, 42,075.3 tonnes produced averaged annually at 8,415.1 tonnes. Kirushya observed to be the giant producer of coffee as more the half (51.0 percent of the total production) of coffee was produced in this ward. Mugoma ward the second producer (19.1 percent) and Mbuba ward the third (16.3 percent). Six wards, Murukurazo, Nyamiaga, Keza, Kibogora, Nyakisasa and Bukiriro produced the least tonnage of coffee of less than one percent to the total tonnage of coffee produced in the entire district council.

**Table 3.4 b: Estimated Production (Tonnes) of Major Cash Crops (Coffee) by Ward, Ngara DC, 2011 – 2015**

Ward	2011	2012	2013	2014	2015	Total Production	Annual Average Production (Tonnes)
Rusumo	n/a	n/a	326.0	324.0	877.0	1,527.0	309.0
Kanazi	n/a	n/a	400.0	300.0	360.0	1,060.0	353.3
Murukulazo	n/a	n/a	10.5	10.5	10.5	31.5	10.5
Nyamiaga	n/a	n/a	5.7	9.7	8.2	23.6	7.9
Keza	n/a	n/a	5.0	5.0	5.0	15.0	5.0
Kibogora	n/a	n/a	0.2	1.5	1.2	2.7	0.9
Mugoma	n/a	n/a	2,676.7	2,681.8	2,685.8	8,044.3	2,681.4
Kirushya	n/a	n/a	7,372.9	6,754.9	7,345.6	21,473.3	7,157.8
Mabawe	n/a	n/a	241.0	239.0	235.0	715.0	238.3
Kabanga	n/a	n/a	167.5	169.5	173.0	510.0	170.0
Nyakisasa	n/a	n/a	3.0	2.0	2.0	7.0	2.3
Mbuba	n/a	n/a	2,210.0	2,070.0	2,560.0	6,840.0	2,280.0
Bukiriro	n/a	n/a	22.0	24.0	28.0	74.0	24.7
Bugarama	n/a	n/a	606.0	616.0	530.0	1,752.0	584.0
<b>Total</b>	<b>n/a</b>	<b>n/a</b>	<b>14,046.3</b>	<b>13,207.9</b>	<b>14,821.3</b>	<b>42,075.5</b>	<b>14,025.2</b>

**Source:** Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015.

## Coffee Production in Ngara DC.



**Source:** Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015

### 3.1.4 Agricultural Inputs

#### 3.1.4.1 Introduction

Reducing rural poverty by delivering appropriate agricultural inputs and improving output markets for Tanzanian farmers are among the objectives of Agriculture First Policy in Tanzania. Priority is given in transforming traditional agriculture, which depends on a hand hoe, to mechanised agriculture and improving agriculture extension services through employing more extension officers. Distribution of chemical fertilizers including establishing credit facilities for farmers will also help in increasing crops production. Ngara District Council like other councils in Kagera Region, is striving to increase the availability of agricultural inputs especially chemical fertilizers and improved seeds to small scale farmers, in order to improve agricultural production.

#### 3.1.4.2 Inorganic Fertilizers

Soil infertility, plant pests and diseases are among factors which limit agricultural production in Ngara District Council. The councils' soils have for many years depended on application of inorganic fertilizers for optimum crop harvests. Crops such as maize demand the use of chemical fertilizers for optimum harvests. Likewise, horticultural crops such as tomatoes require the use of pesticides for control of insect infestation and plant diseases.

Table 3.5 shows the distribution of inorganic fertilizers to farmers for the years 2011/12 to 2014/2015 in Ngara district Council. The total chemical fertilizers distributed to farmers in the five year period were 1,032.4 tonnes. In all agriculture seasons, under supply of inorganic fertilizers was a big problem which resulted to poor harvests in the council. There is a need, therefore, of reviewing the distribution system used for the benefit of, not only the farmers in Ngara District Council, but also farmers in the whole Kagera Region.

**Table 3. 5: Type and Quantity of Inorganic Fertilizers (tonnes) Distributed to Farmers, Ngara DC, 2011-2015**

Type of Fertilizers	Quantity Distributed (tonnes)					Total Distribution	Average Annual
	2011	2012	2013	2014	2015		
Urea	4.5	3.8	100.0	1.8	31.5	141.6	28.3
CAN	4.4	210.0	150.0	1.0	1.0	366.4	73.3
DAP	3.8	1.0	250.0	0.0	36.5	291.3	58.3
NPK	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Minjingu	0.0	233.0	0.0	0.0	0.0	233	46.6
<b>Total</b>	<b>12.7</b>	<b>447.8</b>	<b>500.0</b>	<b>2.8</b>	<b>69.1</b>	<b>1,032.4</b>	<b>206.5</b>

Source: Ngara Executive Director's Office (Agriculture Department), Ngara DC, 2015

## Insecticides

Table 3.6 shows the distribution of insecticides in Ngara District Council from 2013 to 2015. The low use of insecticides may probably be due to low distribution of the chemicals. Of the listed insecticides, Duduba was distributed most accounting for 63.3 percent of the distributed insecticides followed by Dimethioate (23.3 percent) and banofos (13.5 percent).

**Table 3. 6: Type and Quantity of Insecticides (Litres) Distributed to Farmers, Ngara DC, 2011-2015**

Type of Insecticides	Quantity Distributed (in Litters)					Total Distribution	Average Annual	Percent
	2011	2012	2013	2014	2015			
Dimethioate	4.9	6.3	8.7	10.0	11.4	41.3	8.3	23.2
Duduba	15.8	18.7	23.4	26.5	28.0	112.4	22.5	63.3
Banofos	2.9	4.3	5.1	5.7	6.0	24.0	4.8	13.5
<b>Total</b>	<b>23.6</b>	<b>29.3</b>	<b>37.2</b>	<b>42.2</b>	<b>45.4</b>	<b>177.7</b>	<b>35.5</b>	<b>100.0</b>

Source: District Executive Director's Office (Agriculture Department), Ngara DC, 2015

## Improved Seeds

Use of improved seeds is one of the important factors for increasing agricultural productivity (output per unit of land). Maize is the leading crop whereby the use of a variety of improved seeds has been widely practiced in the council. Table 3.7 shows that Kilima and Hybrid are improved seeds for maize which were mostly distributed in the district council during the 2011-



2015 period. Other improved seeds for cabbage, tomatoes and onion were distributed in minimum quantities.

**Table 3. 7: Type and Quantity of Improved seeds (Kgs) Distributed to Farmers, Ngara DC, 2011-2015.**

Type of Improved Seeds	Quantity Distributed (in kgs)					Total Distribution	Average Annual	Percent
	2011	2012	2013	2014	2015			
Hybrid (Pannar)	0.0	0.0	0.0	0.0	20.0	20.0	4.0	0.1
(Hybrid) Seedco	120.0	156.0	6,102.0	152.0	8,122.0	14,652.0	2,930.4	69.0
(Opv) Kilima	0.0	1,300.0	3,000.0	26.0	2,248.0	6,574.0	1,314.8	30.0
(Opv) Dk	0.0	100.0	0.0	0.0	0.0	100.0	20.0	0.5
<b>Total</b>	<b>120.0</b>	<b>1,556.0</b>	<b>9,102.0</b>	<b>178.0</b>	<b>10,390.0</b>	<b>21,346.0</b>	<b>4,269.2</b>	<b>100.0</b>

Source: District Executive Director's Office (Agriculture Department), Ngara DC, 2015

### 3.1.4.3: Agriculture Implements

The use of agriculture implements depend on the size of farms owned by households or investors. The Ngara DC is one of councils in Kagera Region with a large population, most of them being peasant farmers, owning 4 to 5 hectares of farm land. Table 3.8 shows that the traditional implements were highly demanded compared with modern and sophisticated implements in the district. In 2015, a total of four tractors were distributed in the district against a demand of 22 tractors and 31 Power tillers. One general observation from these data is that local authorities in Ngara district council should educate their farmers on the need of changing farming system from tradition to modernized agriculture in order to increase their productivities.

**Table 3. 8: Availability of Agriculture Implements, Ngara DC, 2015**

No.	Implements			Shortfall/Excess
	Type	Demand	Supplied	
1.	Ox plough	150	54	96
2.	Ox harrow	150	0	150
3.	Oxridger	150	0	150
4.	Oxcart	75	3	72
5.	Ox cultivator	150	0	150
6.	Ox chain	150	54	96
7.	Power tiller	31	31	0
8.	Tractors	22	4	18
	<b>TOTAL.</b>	<b>878</b>	<b>146</b>	<b>732</b>

Source: District Executive Director's Office (Agriculture Department), Ngara DC, 2015

### 3.1.4.4 Irrigation Prospects.

Irrigation farming in Ngara DC is feasible due to availability of water bodies especially rivers. Ngara District Council is endowed with a potential area for irrigation prospects of about 2,900

hectares due to its geographical location, topography and ecological conditions. However, in 2013/14 the council managed to irrigate 698 hectares, equivalent to 24.1 percent of the estimated potential irrigation area. The largest potential irrigation area was in Rulenge ward (13.3 percent), followed by Bukiriro (9.5 per cent) and Nyakisara (9.4 percent). Major crops irrigated were maize, beans, paddy and horticultural crops. Irrigation is usually done locally but is expected to expand when big projects will be initiated through construction of irrigation schemes Rulenge (Bigombo), Mpanyura and River mwiruzi (Table 3.9).

**Table 3. 9: Estimated Irrigation Prospects by Ward, Ngara District Council, 2013/14**

Ward	Potential Area (Ha) for Irrigation	Percent	Irrigation Area		Area under irrigation	Major crops
			Hectares	Percent		
Rusumo	46	1.6	8	1.1	8	Tomatoes, onions, potatoes, cabbages
Kasulo	34	1.2	7	1.0	7	Tomatoes, onions, cabbages
Nyamiaga	39	1.3	28.4	4.1	28.4	Tomatoes, onions, cabbages and other horticultural/crops
Murukulazo	55	1.9	9	1.3	9	Maize, beans, Sweet potatoes
Ntobeye	128	4.4	46	6.6	46	Maize, tomatoes, cabbages and other Vegetables.
Kibimba	58	2.0	23	3.3	23	Beans, irish potatoes, sweet potatoes, cabbage, vegetable

**Table 3.9 ctd: Estimated Irrigation Prospects by Ward, Ngara District Council, 2013/14**

Kanazi	55	1.9	15	2.1	15	Onions , cabbages, tomatoes
Mugoma	118	4.1	38	5.4	38	Vegetables, sweet potatoes, maize and beans.
Kirushya	254	8.8	87	12.5	87	Maize, beans, rice, irish potatoes, sweet potatoes, cabbage, vegetable
Mabawe	182	6.3	26	3.7	26	Rice, cabbage, onions.
Kabanga	98	3.4	8	1.1	8	Rice , tomatoes and cabbages
Murusagamba	126	4.3	53	7.6	53	Rice , onions and cabbages
Muganza	125	4.3	7	1.0	7	Peas, cabbages, potatoes.
Nyakisasa	274	9.4	27	3.9	27	Peas, cabbages, potatoes.
Mbuba	116	4.0	25	3.6	25	Maize, tomatoes and cabbages
Bukiriro	275	9.5	80	11.5	80	Maize & beans
Bugarama	87	3.0	23.6	33.8	23.6	Cabbage, onions.
Keza	206	7.1	12	1.7	12	Peas, cabbages, potatoes.
Kibogora	98	3.4	35	5.0	35	Maize, onions & beans
Nyamagoma	91	3.1	15	2.1	15	Maize, beans, sweet potatoes
Ngara Township	49	1.7	5	0.7	5	Peas, beans, sweet potatoes
Rulenge Township	386	13.3	120	17.2	120	Maize, beans, puddy, horticultural
<b>Total</b>	<b>2,900</b>	<b>100.0</b>	<b>698</b>	<b>100.0</b>	<b>698</b>	

**Source:** District Executive Director's Office (Agriculture Department), Ngara DC, 2015.

### 3.1.4.5 Policy Implication in Agriculture Sector

Agriculture sector performance in terms of food and cash crop production does not give a bright future on the status of food security as well as to the economy of Ngara DC which largely

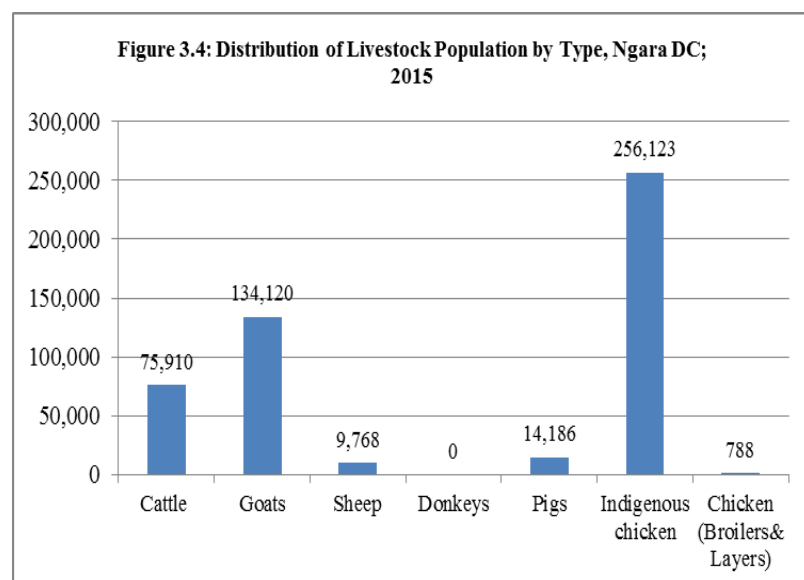
depends on agriculture. Limited access of agricultural inputs, especially for peasant farmers, low price of agricultural produces against production costs, poor agricultural practices as well as adverse weather condition are the cause of the districts' poor performance in agriculture. To revive the sector, the district council need to stick on Agriculture First Policy by improving extension services, ensure reliable supply of agricultural inputs through improving implementation procedures of National Agricultural Input Voucher Scheme (NAIVS) policy.

## Investment Opportunities in Agriculture Sector

Potential areas for investment in Agriculture include crop production, supply of agriculture inputs such as fertilizer, insecticides and seeds at affordable prices; supply of farm implements such as power tillers, tractors and ox-cats at affordable prices; Agro-processing industries especially sorting and packaging industry for vegetables and fruits; and Irrigation farming through construction of irrigation schemes.

## 3.2 Livestock

### 3.2.1 Introduction



Livestock keeping is the second most important economic activity after agriculture. Figure 3.4 presents the overall estimated livestock population by type in Ngara DC in 2015 while Table 3.10 presents details on the estimated livestock population by type in each ward of Ngara District Council in 2015. Goats (134,120) were the leading in numbers for the large and medium size livestock, followed by cattle (75,910) and pigs (14,186). The table further shows that there was a large population of poultry (256,911), (256,123 indigenous chickens and 788 improved chickens). Kasulo Ward was leading in cattle population (18,500 cattle) while Nyamiaga Ward



had the smallest number of cattle (378). Kibogora Ward had the largest number of goats (16,963) while Kasulo ward had the smallest number (610). Further observation on the table shows that sheep were mostly found in Keza Ward (1,226) while Kibimba Ward had the smallest number. Pigs were mostly found in Kibogora Ward (5,963). In regard to poultry population which comprises of indigenous and improved chicken (broilers and layers), Kasulo Ward was had the largest number of indigenous chicken (51,096), while Ngara ward had the largest number (350) of improved chicken (broilers and layers) The smallest number (1945) of indigeneous chicken was found in Murukulazo Ward.

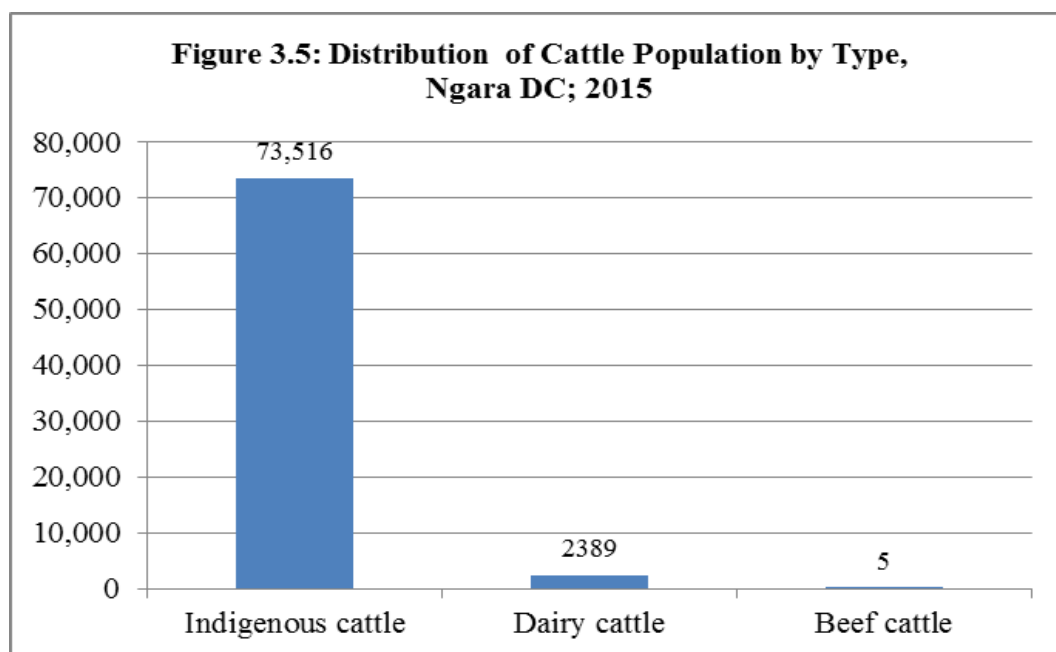
**Table 3. 10: Estimated Livestock Population by Ward, Ngara DC, 2015**

Ward	Cattle	Goats	Sheep	Pigs	Indigenous chicken	Chicken (Broilers& Layers)
Rusumo	2,000	2,744	436	220	12,317	170
Kasulo	18,500	610	315	205	51,096	0
Nyamiaga	378	4,920	723	312	4,097	0
Murukulazo	1,328	6,236	407	227	1,945	0
Ntobeye	1,933	7,321	681	663	17,349	0
Kibimba	1,283	705	27	156	0	0
Kanazi	3,299	10,355	876	704	21,760	0
Mugoma	1,658	5,835	114	154	7,583	68
Kirushya	1,000	3,674	232	396	4,935	0
Mabawe	1,437	4,262	78	167	3,875	0
Kabanga	3,630	6,231	678	346	12,421	0
Murusagamba	5,983	6,241	187	184	12,820	0
Muganza	3,640	5,322	296	201	8,917	0
Nyakisasa	4,664	6,689	356	183	11,285	0
Mbuba	1,317	8,915	620	403	9,242	0
Bukiriro	3,561	2,100	42	1,400	6,201	0
Bugarama	3,019	12,702	552	510	10,382	0
Keza	4,860	10,875	1,226	930	21,750	0
Kibogora	4,549	16,963	789	5,963	22,051	0
Nyamagoma	0	0	0	0	0	0
Ngara Township	871	3,920	623	212	4,097	350
Rulenge Township	7,000	7,500	510	650	12,000	200
<b>Total</b>	<b>75,910</b>	<b>134,120</b>	<b>9,768</b>	<b>14,186</b>	<b>256,123</b>	<b>788</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

## Cattle Population

Table 3.11 shows that indigenous cattle (73,516) were dominant type of livestock found in Ngara District Council, followed by dairy cattle (2,389) and beef cattle (5). At ward level, Kasulo ward had the largest number of cattle population (18,500 cattle, 24.4 percent) followed by Rulenge (7,000 cattle, 9.2 percent) and Murusagamba (5,983 cattle, 7.9 percent). Nyamiaga Ward had the smallest number of cattle population (378 cattle, 0.5 percent).



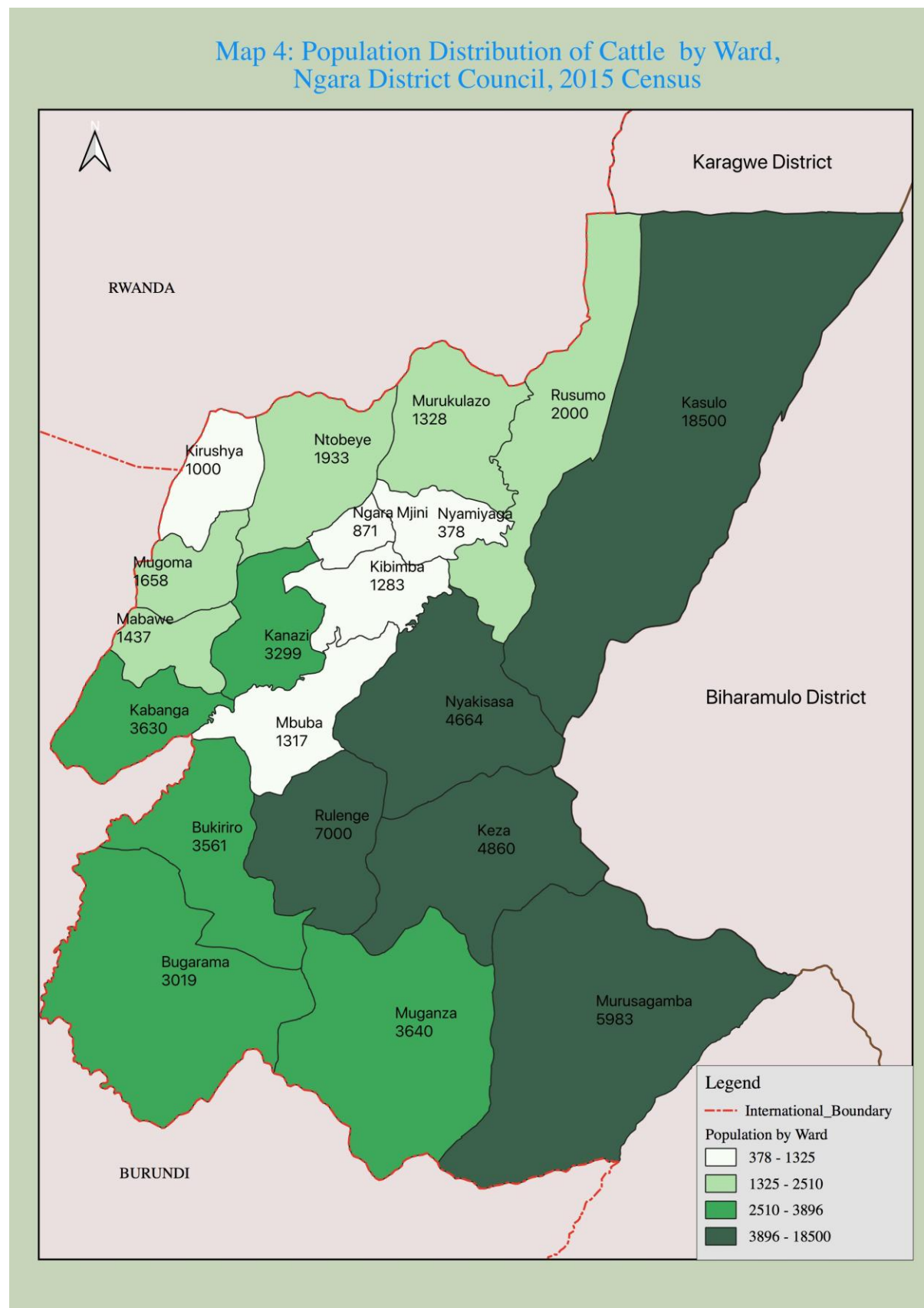
In the case of dairy cattle, most of them were found in Kabanga Ward (733 cattle, 30.7 percent) followed by Kasulo ward (495 cattle, 20.7 percent). Beef cattle were very insignificant (5 beef cattle) in Ngara District Council and they were only found in Kasulo Ward.

**Table 3. 11: Population Distribution of Cattle by Type and Ward, Ngara DC, 2015**

Ward	Indigenous Cattle	Percent	Dairy Cattle	Percent	Beef Cattle	Percent	Total	Percent
Rusumo	1,976	2.7	24	1.0	0		2,000	2.6
Kasulo	18,000	24.5	495	20.7	5	100.0	18,500	24.4
Nyamiaga	230	0.3	148	6.2	0		378	0.5
Murukulazo	1,305	1.8	23	1.0	0		1,328	1.7
Ntobeye	1,915	2.6	18	0.8	0		1,933	2.5
Kibimba	1,170	1.6	113	4.7	0		1,283	1.7
Kanazi	3,203	4.4	96	4.0	0		3,299	4.3
Mugoma	1,490	2.0	168	7.0	0		1,658	2.2
Kirushya	948	1.3	52	2.2	0		1,000	1.3
Mabawe	1,280	1.7	157	6.6	0		1,437	1.9
Kabanga	2,897	3.9	733	30.7	0		3,630	4.8
Murusagamba	5,960	8.1	23	1.0	0		5,983	7.9
Muganza	3,636	4.9	4	0.2	0		3,640	4.8
Nyakisasa	4,664	6.3	0	0.0	0		4,664	6.1
Mbuba	1,302	1.8	15	0.6	0		1,317	1.7
Bukiro	3,555	4.8	6	0.3	0		3,561	4.7
Bugarama	3,016	4.1	3	0.1	0		3,019	4.0
Keza	4,860	6.6	0	0.0	0		4,860	6.4
Kibogora	4,548	6.2	1	0.0	0		4,549	6.0
Nyamagoma	0	0.0	0	0.0	0		0	0.0
Ngara Township	711	1.0	160	6.7	0		871	1.1
Rulenge Township	6,850	9.3	150	6.3	0		7,000	9.2
<b>Total</b>	<b>73,516</b>	<b>100.0</b>	<b>2,389</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>75,910</b>	<b>100.0</b>

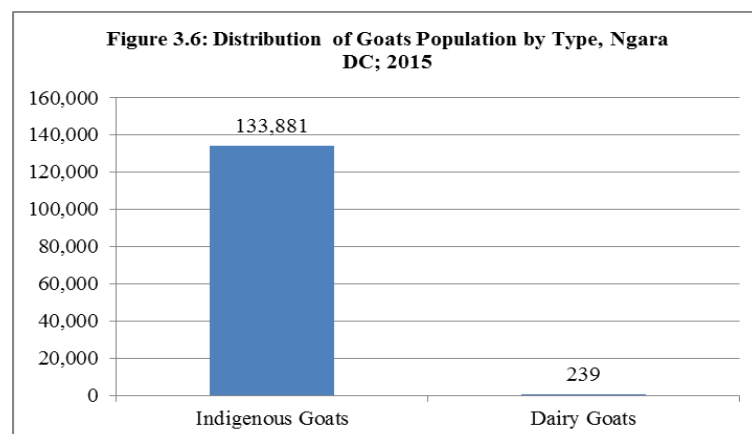
Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015.

Map 4: Population Distribution of Cattle by Ward,  
Ngara District Council, 2015 Census



## Goats Population

Table 3.12 shows that indigenous goats were the dominant type of goats (133,881) in Ngara



District Council. Dairy goats are not common in the council and their population was estimated at 239. At ward level, Kibogora Ward had the largest number of goats' population (16,963 goats, 12.6 percent) followed by Bugarama (12,702 goats, 9.5 percent), Keza ward (10,875 goats, 8.1 percent) and Kanazi ward (10,355, 7.7 percent).

**Table 3. 12: Population Distribution of Goats by Type and Ward, Ngara DC, 2015**

Ward	Population of goats by Type			Percentage	Total	Percentage
	Indigenous Goats	Percentage	Dairy Goats			
Rusumo	2,740	2.0	2	0.8	2,742	2.0
Kasulo	610	0.5	0	0	610	0.5
Nyamiaga	4,780	3.8	140	58.6	4,920	3.7
Murukulazo	6,236	4.7	0	0	6,236	4.6
Ntobeye	7,316	5.5	7	2.9	7,323	5.5
Kibimba	705	0.5	0	0	705	0.5
Kanazi	10,355	7.7	0	0	10,355	7.7
Mugoma	5,827	4.4	8	3.3	5,835	4.4
Kirushya	3,674	2.7	0	0	3,674	2.7
Mabawe	4,262	3.2	0	0	4,262	3.2
Kabanga	6,231	4.7	0	0	6,231	4.6
Murusagamba	6,218	4.6	23	9.6	6,241	4.7
Muganza	5,322	4.0	0	0	5,322	4.0
Nyakisasa	6,689	5.0	0	0	6,689	5.0
Mbuba	8,915	6.7	0	0	8,915	6.6
Bukiri	2,092	1.7	8	3.3	2,100	1.6
Bugarama	12,690	9.5	12	5.0	12,702	9.5
Keza	10,875	8.1	0	0	10,875	8.1
Kibogora	16,963	12.8	0	0	16,963	12.6
Nyamagoma	0	0	0	0	0	0.0
Ngara Township	3,881	2.9	39	16.3	3,920	2.9
Mamlaka ya Mji						
Mdogo wa Rulenge	7,500	5.6	0	0	7,500	5.6
<b>Total</b>	<b>133,881</b>	<b>100</b>	<b>239</b>	<b>100.0</b>	<b>134,120</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### 3.2.2 Grazing Area

Grazing land is defined as the land that is available for grazing needs of livestock. It excludes all tsetse fly area, all wildlife and forest reserves also tree plantations, but it includes game controlled areas. Table 3.13 shows that in 2015, the estimated land fit for grazing in Ngara DC was 165,933.1 hectares while the land used for grazing was 163,933.1 hectares which was equivalent to 98.8 percent of the estimated land area fit for grazing. However, since the land used for grazing is very close to 100 percent this signifies presence of grazing land pressure in Ngara DC. The council has 73.5 ha infected by tsetse flies.

**Table 3. 13: Estimated Area for Grazing by Ward, Ngara District Council, 2015**

Ward	Land fit for Grazing (Ha)	Land used for Grazing (Ha)	Percentage of land used.	Tsetse Fly infected Area (Ha)
Rusumo	1,500.0	1,500.0	98.5	-
Kasulo	27,250.0	27,250.0	98.5	32.0
Nyamiaga	95.0	95.0	88.7	0.0
Murukulazo	23.0	23.0	95.8	0.0
Ntobeye	34.0	34.0	92.7	0.0
Kibimba	332.1	332.1	97.5	0.0
Kanazi	143.0	143.0	95.6	0.0
Mugoma	534.0	534.0	94.6	0.0
Kirushya	1,890.0	1,890.0	93.6	0.0
Mabawe	0.0	0.0	0.0	0.0
Kabanga	13.0	13.0	96.5	0.0
Murusagamba	28,250.0	28,250.0	97.2	0.0
Muganza	26,400.0	26,400.0	98.5	0.0
Nyakisasa	11,342.0	11,342.0	94.5	0.0
Mbuba	16.0	16.0	93.5	0.0
Bukiriro	1,590.0	1,590.0	92.6	4.0
Bugarama	9,800.0	9,800.0	91.7	41.5
Keza	28,250.0	28,250.0	98.6	0.0
Kibogora	7,690.0	7,690.0	100.0	0.0
Nyamagoma	9,776.0	9,776.0	100.0	0.0
Ngara Township	5.0	5.0	100.0	0.0
Rulenge Township	11,000.0	9,000.0	81.8	0.0
<b>Total</b>	<b>165,933.1</b>	<b>163,933.1</b>	<b>98.8</b>	<b>73.5</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### 3.2.3 Livestock Infrastructure

Livestock quality improvement is limited by access to preventive and curative facilities capable of controlling or preventing their morbidity and mortality. Diseases affect animals' health and reduce both meat and milk production in terms of quality and quantity. These can be prevented by ensuring availability of livestock infrastructure including dips and veterinary centres. These together with medicines, while crushes, abattoirs, hides and skin sheds, slaughter slabs, livestock market or auctions and accessibility of water are important in improving the quality of livestock products. Table 3.14 indicates that out of 22 dips available in the Council, 9 dips, equivalent to 40.0 percent are working. Likewise, as the quality of livestock products such as meat, milk, hide and skins and other related products mostly depend on availability, status and quality of infrastructure. Since Ngara District Council had limited number of these facilities the quality of the livestock products in the district is jeopardised.

**Table 3. 14: Distribution of Livestock Infrastructure by Ward, Ngara DC, 2015**

Ward	Dips			Veterinary Centres			Crushes	Hides/Skin Sheds	Abattoirs	Slaughter Slab	Livestock Market/Auction	Charco Dams
	W	NW	Total	W	NW	Total						
Rusumo	1	1	2	0	0	0	0	0	0	1	0	0
Kasulo	1	0	1	0	0	0	1	0	0	1	1	0
Nyamiaga	1	0	1	0	0	0	1	0	0	0	0	0
Murukulazo	0	0	0	0	0	0	2	0	0	0	0	0
Ntobeye	0	1	1	0	0	0	1	0	0	0	0	0
Kibimba	1	0	1	0	0	0	1	0	0	0	0	0
Kanazi	0	1	1	0	0	0	1	0	0	1	0	0
Mugoma	0	1	1	0	0	0	2	0	0	1	0	0
Kirushya	1	0	1	0	0	0	1	0	0	0	0	0
Mabawe	1	0	1	1	0	1	1	0	0	0	0	0
Kabanga	1	0	1	0	0	0	1	0	0	1	0	0
Murusagamba	0	1	1	0	0	0	4	0	0	1	1	0
Muganza	0	2	2	0	0	0	2	0	0	0	0	0
Nyakisasa	0	2	2	0	0	0	2	0	0	0	0	0
Mbuba	0	1	1	0	0	0	1	0	0	0	0	0
Bukiro	0	1	1	0	0	0	1	0	0	1	0	0
Bugarama	0	1	1	1	0	1	1	0	0	0	0	0
Keza	1	0	1	0	0	0	1	0	0	0	0	0
Kibogora	0	0	0	0	1	1	0	0	0	0	0	0
Nyamagoma	0	0	0	0	0	0	0	0	0	0	0	0
Ngara Township	0	1	1	1	1	2	1	0	0	1	0	0
Mamlaka ya Mji Mdogo wa Rulenge	1	0	1	2	0	2	1	0	0	1	1	0
<b>Total</b>	<b>9</b>	<b>13</b>	<b>22</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>3</b>	<b>0</b>

W= Working NW=Not working

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

A cattle dip in Ngara DC.



Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### **3.2.4 Causes of Livestock Morbidity and Mortality**

Diseases, among other reasons, were the main causes of livestock morbidity and mortality in Ngara District Council. Data provided by local authorities of Ngara District Council shows different types of diseases for big, medium and small animals. The common livestock diseases in Ngara District Council are east coast fever, anaplasmosis, babesiosis, worms and mastitis.

#### **i) Causes of Cattle Morbidity and Mortality** **Morbidity**

Table 3.15 shows a list of common diseases which caused cattle morbidity in Ngara District Council in 2013 and 2015. In 2013, foot and mouth disease was the most common cause of cattle morbidity (56 percent of reported 12,296 disease cases) in the Council. Followed by worm infestations (35.5 percent) and anaplasmosis diseases (4.9 percent). A similar pattern was observed in 2015, with foot and mouth diseases accounting for 58.5 percent and worm infestations (32.9).



**Table 3.15: Five Common Cattle Diseases Causes Morbidity, Ngara DC, 2013 and 2015**

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
East coast fever (ECF)	349	2.8	East coast fever (ECF)	260	2.2
Anaplasimosis	607	4.9	Anaplasimosis	579	4.9
Worm infestation	4,361	35.5	Worm infestation	3,902	32.9
Foot and mouth diseases (F.M.D)	6,886	56.0	Foot and mouth diseases (F.M.D)	6,935	58.5
Babesiosis	93	0.8	Babesiosis	182	1.5
<b>Total</b>	<b>12,296</b>	<b>100.0</b>		<b>11,858</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara Dc. 2015

## Mortality

Table 3.15a shows deaths of cattle caused by different types of diseases in 2013 and 2015. In 2013, a large number of cattle deaths (11,403 deaths, 97.8 percent) were caused by foot and mouth diseases followed by anaplasimosis (137 deaths, 1.1 percent). In 2015 foot and mouth diseases accounted for 99.7 percent of cattle mortality cases.

**Table 3.15 a: Five Common Cattle Diseases Causes Mortality, Ngara DC, 2013 and 2015**

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
East coast fever	36	0.3	East coast fever	56	0.1
Anaplasimosis	137	1.2	Anaplasimosis	89	0.1
Worm infestation	80	0.7	Worm infestation	85	0.1
Foot and mouth diseases	11,403	97.8	Foot and mouth diseases.	81,203	99.7
Babesiosis	8	0.1	Babesiosis	9	0.0
<b>Total</b>	<b>11,664</b>	<b>100.0</b>		<b>81,442</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

## ii) Causes of Goat Morbidity and Mortality

### Morbidity

Table 3.16 shows the three common diseases that contributed to poor health of goats in Ngara District Council in 2013 and 2015. The diseases were worm infestation, Skin mange and CCPP. Observations on the table show that, skin mange accounted for 54.0 and 53.1 percent of all reported goat morbidity cases in 2013 and 2015 respectively. Worm infestation was second with 33.3 percent of goat morbidity cases in 2013 and 35.1 percent in 2015.

**Table 3. 16: Three Common Goat Diseases Causes Morbidity, Ngara DC, 2013 and 2015**

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
Worm infestation	7,452	33.3	Worm infestation	9,225	35.1
Skin mange	12,073	54.0	Skin mange	13,944	53.1
CPPP	2,827	12.6	CPPP	3,102	11.8
<b>Total</b>	<b>22,352</b>	<b>100.0</b>	<b>Total</b>	<b>26,271</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### Mortality

According to Table 3.16a, more than 55 percent of goats' deaths in 2013 and 60 percent in 2015 were caused by CPPP. The table further shows that worm infestation was the second goat killer disease accounting for 21.0 percent of deaths in 2013 and 17.4 percent in 2015.

**Table 3.16 a: Three Common Goat Diseases Causes Mortality, Ngara DC, 2013 and 2015**

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
Worm infestation	113	21.0	Worm infestation	113	17.8
Skin mange	102	19.0	Skin mange	108	17.1
CPPP	323	60.0	CPPP	412	65.1
<b>Total</b>	<b>538</b>	<b>100.0</b>	<b>Total</b>	<b>633</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### iii) Causes of Poultry Morbidity and Mortality

#### Morbidity

Poultry keeping is another main economic activity done by residents of Ngara District Council. Unfortunately, diseases associated with poultry are among the leading factors that affect poultry industry in the Council. The common poultry diseases include new castle, fowl cholera and coccidiosis. Out of 275,809 reported cases of poultry illnesses, new castle was the leading disease for both years accounting for 40.7 percent of cases in 2013 and 40.8 percent of cases in 2015, followed by fowl cholera that accounted for 38.1 percent of cases in 2013 and 39.4 percent of cases in 2015. Coccidiosis accounted for 21.2 percent of the reported cases of poultry illnesses in 2013 and 19.8 percent of cases in 2015 (Table 3.17).

**Table 3. 17: Three Common Poultry Diseases Causes Morbidity, Ngara DC; 2013 and 2015**

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
New Casttle diseases (NCD)	112,215	40.7	New Casttle diseases (NCD)	130,862	40.8
Fowl cholera	105,167	38.1	Fowl cholera	126,544	39.4
Coccidiosis	58,427	21.2	Coccidiosis	63,467	19.8
<b>Total</b>	<b>275,809</b>	<b>100.0</b>	<b>Total</b>	<b>320,873</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### Mortality

Table 3.17a, shows new castle was the main source of poultry deaths in Ngara DC accounting for 82.3 percent of poultry deaths in 2013 and 84.5 percent in 2015. Fowly cholera caused the smallest number of poultry deaths both in 2013 and 2015.

**Table 3.17 a Three Common Poultry Diseases Causes Mortality, Ngara DC, 2013 and 2015**

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
New Castle	51,535	82.3	New Castle	49,457	84.5
Fowl cholera	3,352	5.4	Fowl cholera	2,357	4.0
Coccidiosis	7,744	12.4	Coccidiosis	6,744	11.5
<b>Total</b>	<b>62,631</b>	<b>100.0</b>	<b>Total</b>	<b>58,558</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### 3.2.5 Marketing of Livestock and their Products

With economic growth, consumption patterns tend to change towards high value and high protein foods, such as those derived from livestock. This implies that, given the economic growth in Tanzania, the market demand for livestock and livestock products is likely to continue to increase in future. The government of Tanzania, recognizing the importance of livestock in poverty alleviation, has increased its emphasis on modernizing and commercializing the livestock sub-sector in recent years. However, data unreliability on the marketed livestock and their products from grass roots to councils as well as to the regional level is still a challenge in the country including Ngara District Council. Nevertheless, data collection on the marketed livestock and their products can be improved by having reliable sources of livestock data. Marketed livestock information can well be captured if livestock markets or auctions are well monitored and supervised by government officials. For the case of livestock products specifically hides and skins, abattoirs are reliable sources of marketed units of hides and skins. Establishing

milk collection centres is a good strategy towards having reliable information on the quantity and price per litre of the marketed milk.

### (i) Hides and Skins

Marketing hides and skins of livestock have been facing a number of problems in Ngara District Council as well as the Region at large. Among others, participation of the private sector due to free market, lack of official markets, lack of public hides and skin sheds, lack of veterinary officers and falling of prices of livestock products has an adverse impact on the flow of reliable data from the grassroots to the ward and district levels. Nevertheless, Table 3.18 shows an indicative number of livestock hides and skins marketed by council in Ngara District Council between 2013 and 2015.

Generally, there was an increasing trend of both units marketed and the revenue obtained. The number of cattle marketed increased from 1,588 in 2013 to 1,750 in 2015. Also the value obtained increased from Tshs. 9,528,000 in 2013 to Tshs. 10,500,000 in 2015. Number of goats units marketed were also increased from 3,969 in 2013 to 4,378 in 2015 as well as its value increased from Tsh. 19,845,000 in 2013 to 21,890,000 in 2015. Average price per unit of cattle hide was TZS 6,000 compared to TZS 5,000 per unit of goats skins both in 2013 and 2015.

**Table 3. 18: Number and Value of Livestock Hides and Skins Marketed, Ngara District Council, 2013 and 2015**

Category	Total Number of Units Marketed		Total Value in TZS		
	2013	2015	2013	2015	2015 Average price (TZS)
Cattle Hides	1,588	1,750	9,528,000	10,500,000	6,000
Goat Skins	3,969	4,378	19,845,000	21,890,000	5,000
<b>Total</b>	<b>5,557</b>	<b>6,128</b>	<b>29,373,000</b>	<b>32,390,000</b>	

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### 3.2.6 The Status of Livestock Staff

Table 3.19 presents the situation of the capacity of human resource in the livestock sub sector in Ngara District Council. More than half (19 staff, 79.2 percent) of the total staff (24) in the livestock sub sector were livestock field officers, followed by veterinary officers (2 staff, 8.3 percent). There was only 1 livestock officer, 1 pest and tsetse field officer and 1 fisheries field officer.

**Table 3. 19: Availability of Livestock Personnel by Ward, Ngara DC, 2015**

Ward	Veterinary Officers	Livestock Officers	Livestock Field Officers	Pests and Tsetse Field Officers	Fisheries field officers	Livestock Auxiliary	Total
Rusumo	0	0	1	0	0	0	1
Kasulo	0	0	1	0	0	0	1
Nyamiaga	0	0	1	0	0	0	1
Murukulazo	0	0	0	0	0	0	0
Ntobeye	0	0	0	0	0	0	0
Kibimba	0	0	0	0	0	0	0
Kanazi	0	0	1	0	0	0	1
Mugoma	0	0	1	0	0	0	1
Kirushya	0	0	1	0	0	0	1
Mabawe	0	0	1	0	0	0	1
Kabanga	0	0	1	0	0	0	1
Murusagamba	0	0	1	0	0	0	1
Muganza	0	0	1	0	0	0	1
Nyakisasa	0	0	1	0	0	0	1
Mbuba	0	0	1	0	0	0	1
Bukiro	0	0	1	0	0	0	1
Bugarama	0	0	0	1	0	0	1
Keza	0	0	1	0	0	0	1
Kibogora	0	0	0	0	0	0	0
Nyamagoma	0	0	0	0	0	0	0
Ngara Township	2	1	4	0	0	0	7
RulengeTownship	0	0	1	0	1	0	1
<b>Total</b>	<b>2</b>	<b>1</b>	<b>19</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>24</b>
<b>Percent</b>	<b>8.3</b>	<b>4.2</b>	<b>79.2</b>	<b>4.2</b>	<b>4.2</b>	<b>0.0</b>	<b>100.0</b>

Source: District Executive Director's Office (Livestock Department), Ngara DC, 2015

### 3.2.7: Policy Implication

The Ngara District Council, like other districts in Kagera region has moderate livestock population, including cattle, goats, sheep and poultry. Livestock keeping is the second economic activity that employs a significant number of people and contributes greatly to the GDP of the Council and Region at large. Main reason for poor performance of this sector has been influenced by poor or traditional practice of livestock keeping with no regular treatment, absence of livestock infrastructure and medicine.

### **3.2.8 Investment Opportunities in Livestock Subsector**

The Ngara District Council has inadequate livestock infrastructure such as dips, veterinary centres, water points and abattoirs. Therefore, construction of livestock infrastructures might be a priority area for investment in the livestock sub sector. Other areas which highly need investors are dairy farming and livestock processing industries such as milk processing, leather tanning and meat canning. There is a need for building a milk processing plant in the council which could process and add value to milk and milk products. This will also serve as a local market for livestock products.

There is also a need of constructing tanneries that will add value to hides and skins either by fully processing them or semi process them (wet blue) before export. Other areas of investment include fodder planting for hay or seeds that can improve range land in the council; provision of livestock services and pharmaceuticals through establishment of livestock pharmaceutical shops and veterinary clinics where qualified veterinary and livestock officers can offer consultancy services especially in remote areas; and improvement of available livestock markets by putting all necessary facilities such as dips, slaughter slabs, crushers, skin and hide sheds as well as necessary offices and equipment related to the sector.

## **3.3. Natural Resources**

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

### **3.3.1 Tree Plantation**

Table 3.20 indicates that in the five year period (2011 to 2015) Ngara District Council raised a total of 5,824,197 tree seedlings at an average of 1,164,839 seedlings per annum. The largest number of tree seedlings (1,382,436) were raised in 2011 while the smallest number of tree seedlings (786,811) was raised in 2015. At ward level, Ngara Township raised the largest number of tree seedlings (2,503,000) which was equivalent to 43.0 percent of the average annual number of tree seedlings raised in the Council. Kibogora ward raised the smallest number of tree seedlings (5,000, 0.4 percent).

**Table 3. 20: Number of Tree Seedlings Raised by Ward, Ngara DC, 2011 – 2015**

Ward	Number of Tree Seedlings Raised					Total	Average Annual	Percent
	2011	2012	2013	2014	2015			
Rusumo	188,000	200,000	159,000	47,000	21,000	615,000	123,000.0	10.6
Kasulo	40,000	27,000	17,000	12,000	5,000	101,000	20,200.0	1.7
Nyamiaga	6,000	56,000	48,000	55,000	30,000	195,000	39,000.0	3.3
Murukulazo	8,000	10,000	12,000	5,000	6,000	41,000	8,200.0	0.7
Ntobeye	0	0	0	0	0	0	0	0.0
Kibimba	0	0	0	0	0	0	0	0.0
Kanazi	0	0	0	0	0	0	0	0.0
Mugoma	5,000	5,721	6,237	6,951	7,021	30,930	6,186.0	0.5
Kirushya	5,562	8,021	9,821	11,321	1,234	35,959	7,191.8	0.6
Mabawe	0	0	0	0	0	0	0	0.0
Kabanga	0	0	0	0	0	0	0	0.0
Murusagamba	0	0	0	0	0	0	0	0.0
Muganza	20,000	10,000	19,000	22,000	7,000	78,000	15,600.0	1.3
Nyakisasa	0	0	0	0	0	0	0	0.0
Mbuba	3,600	3,900	4,200	4,600	5,100	21,400	4,280.0	0.4
Bukiriro	468,000	420,000	389,000	320,000	299,000	1,896,000	379,200.0	32.6
Bugarama	19,274	10,738	49,521	39,419	79,456	198,408	39,681.6	3.4
Keza	0	0	0	0	0	0	0	0.0
Kibogora	0	0	0	0	5,000	5,000	5,000.0	0.4
Nyamagoma	0	0	0	0	0	0	0	0.0
Ngara Township	600,000	550,000	466,000	587,000	300,000	2,503,000	500,600.0	43.0
Rulenge Township	19,000	22,500	17,000	24,000	21,000	103,500	20,700.0	1.8
<b>Total</b>	<b>1,382,436</b>	<b>1,323,880</b>	<b>1,196,779</b>	<b>1,134,291</b>	<b>786,811</b>	<b>5,824,197</b>	<b>1,164,839.4</b>	<b>100.0</b>
<b>Percent</b>	<b>23.7</b>	<b>22.7</b>	<b>20.5</b>	<b>19.5</b>	<b>13.5</b>	<b>100.0</b>		

Source: District Executive Director's Office (Natural Resource Department), Ngara DC, 2015

### 3.3.2 Environmental Conservation

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

### **3.3.3 Beekeeping**

Table 3.21 shows that from 2011 – 2015, Ngara District Council had a total of 13,101 traditional and 1,259 modern beehives. Although, both traditional and modern beehives were on the increase during the reference periods, traditional beehives increased from 1,655 in 2011 to 3,906 in 2015. Modern beehives increased from 305 in 2014 to 954 in 2015. At ward level, Rulenge Township had largest average annual number of both traditional beehives (374.4, 14.3 percent) and modern beehives (200, 31.8 percent).



**Table 3. 21: Number of Traditional and Modern Beehives by Ward, Ngara District Council; 2011 -2015**

Ward	Traditional Beehives							Modern beehives						
	2011	2012	2013	2014	2015	Total	Percentage	2011	2012	2013	2014	2015	Total	Percentage
Rusumo	202	232	262	292	303	1291	9.9				50	50	100	7.9
Kasulo	200	250	295	305	350	1400	10.7				50	80	130	10.3
Nyamiaga	200	250	220	295	320	1285	9.8				70	70	140	11.1
Murukulazo	60	90	115	125	125	515	3.9	-	-	-	0	10	10	1.6
Ntobeye	120	80	100	50	200	550	4.2	-	-	-	0	10	10	1.6
Kibimba	40	70	96	108	116	430	3.3				40	40	80	6.4
Kanazi	77	97	123	133	151	581	4.4				10	10	20	1.6
Mugoma	65	85	95	110	145	500	3.8				0	15	15	2.4
Kirushya	70	80	135	55	65	405	3.1	-	-	-	15	43	58	4.6
Mabawe	50	70	98	140	155	513	3.9	-	-	-	0	15	15	2.4
Kabanga	50	70	98	118	120	456	3.5	-	-	-	0	15	15	2.4
Murusagamba	80	96	127	132	157	592	4.5	-	-	-	0	30	30	4.8
Muganza	70	95	133	154	164	616	4.7	-	-	-	0	32	32	5.1
Nyakisasa	60	73	81	75	130	419	3.2	0	0	0	0	135	135	21.4
Mbuba	28	37	42	55	80	242	1.8	-	-	-	20	40	60	4.8
Bukiro	52	95	125	130	165	567	4.3	-	-	-	0	19	19	3.0
Bugarama	0	0	0	0	150	150	1.1	-	-	-	0	24	24	3.8
Keza	35	42	48	74	98	297	2.3	-	-	-	0	0	0	0.0
Kibogora	0	0	0	0	290	290	2.2	-	-	-	0	21	21	3.3
Nyamagoma	0	0	0	0	0	0	0.0	-	-	-	0	15	15	2.4
Ngara Township	0	0	0	0	130	130	1.0	-	-	-	50	80	130	10.3
Mamlaka ya Mji														
Mdogo wa	256	306	320	410	580	1872	14.3	0	0	0	0	200	200	31.8
Rulenge														
Total	<b>1,655</b>	<b>2,118</b>	<b>2,573</b>	<b>2,761</b>	<b>3,906</b>	<b>13,101</b>	<b>100.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>305</b>	<b>954</b>	<b>1,259</b>	<b>100.0</b>

Source: District Executive Director's Office (Natural Resource Department), Ngara DC, 2015

### **3.3.5 Fishery**

Tanzania is one of the largest fishing Country in Africa. According to FAO; it is ranked in the top ten countries in terms of total capture of fishery production. Inland production is from water bodies of Lake Victoria which is the largest in Africa and the major source of fishing in Kagera Region. Basing on the fact that Ngara District Council is not endowed with Lake Victoria water area, fishing is carried out in Kagera and Ruvuvu rivers. The most common fish cathes in the two rivers are African catfish and tilapia. Apart from the two rivers, the district has potential areas for aquaculture whereby small fish ponds have been constructed in Kirushya, Mugoma, Bugarama, Bukiriro, Rulenge, Kanazi and Murukurazo wards. There are about 56 ponds. Fish farming can be done in Ngara due to availability of water bodies' areas which are potential for fish farming investment.

### **3.3.5 Tourism**

The Ngara District Council is one of unique tourist destinations in Kagera Region that has not yet been discovered by many. It is a land of much wonder holding an unparalleled diversity of fauna, flora and many natural features. The wonders of “Mafiga Matatu” hills where you can see three countries Tanzania, Burundi and Rwanda at once as well as river Kagera mianders and Rusumo falls which is in the boundary between Tanzania and Rwanda are some of tourists attractions. Other historical sites are like Chiefdom home (house for the chief) at Kanazi and Keza where one can get a good history of the Hangaza tribe which is the dominant tribe in the Council. The Ngara District Authority through Public Private Partnership (PPP) has the responsibility of advertising these tourism potentials available in the council. Television, radios and even organizing investors' forums promote the Councils economic development. Moreover, initiatives taken to promote tourism in Ngara District Council should go hand in hand with improvement of the road infrastructures as well as financial and accomodation services.

Rusumo falls in the boulder between Tanzania and Rwanda



*Source: District Executive Director's Office, (District Natural Resources Department), 2015.*

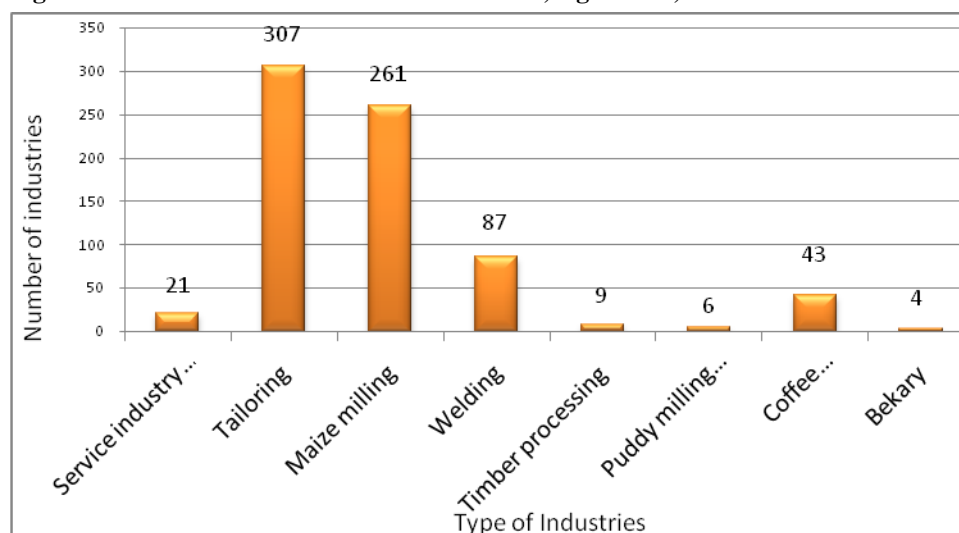
### 3.3.5.1 Wildlife

Some parts of Burigi and Kimisi Game Reserves are located in Ngara District Council. There are varieties of animals like impala, elephants, buffalo, waterbuck, zebra, giraffe, leopards, hippos and crocodiles. Kimisi Game Reserve which was established in 2003, is the potential tourist and game hunting area if well protected, promoted and basic infrastructure are being established.

## 3.4 Industrial Sector

Figure 3.7 shows that Ngara District Council had a total of 738 small scale and medium industries in 2015. The figure further reveals that there were about 307 small industries that were dealing with tailoring followed by agro-based industries especially maize milling machines with 261 and paddy milling 6 industries. There were 87 industries dealing with welding while coffee processing industries were 43.

**Figure 3. 7: Number of Small Scale Industries, Ngara DC, 2015**



Source: Ngara, Compiled Data from Councils (Trade and Industry Departments), 2015

### 3.3.9 Policy Implication on the Industrial Sector

It has been observed that the agriculture sector is the main economic base and also the source of establishment of many industries in Ngara DC. This means that improvement of the agriculture sector through ‘Agriculture First Policy’ will have a direct impact on the industrial sector development in Ngara DC.

### 3.3.10 Investment in the Industrial Sector

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

## CHAPTER FOUR

### Economic Infrastructure

#### 4.0 Introduction

This chapter describes the existing economic infrastructure in Ngara District Council. It covers the road network development in terms of road classification, type of road surface and passability for each ward in the council. It also covers marine, postal services and other means of telecommunications such as mobile phones. In the energy sector, developments with regard to electricity are also discussed brief.

#### 4.1 Road network

Table 4.1 reveals that the total road network for Ngara District Council in 2015 was 966 kilometres. Out of the total road network in the council, 87.4 kms (8.63 percent) were Trunk roads, 246.4 kms (24.32 percent) were Regional roads, 185 kms (18.26 percent) were district roads, and 446.8 kms (46.25 percent) were feeder roads. This implies that the large part of the road network in Ngara District Council is composed of feeder roads. Table 4.1 shows the lengths in km. of the road network in each ward within the council by type of road. Muganza Ward with 80.8 kms (8.4 percent of the total road network) had the longest road network in the council, followed by Nyakisasa Ward with 68.1 kms (7.0 percent) and Kabaya ward (60.6 km, 6.3 percent).

**Table 4.1: Length of Road Network by Ward (km), Ngara District Council, 2015**

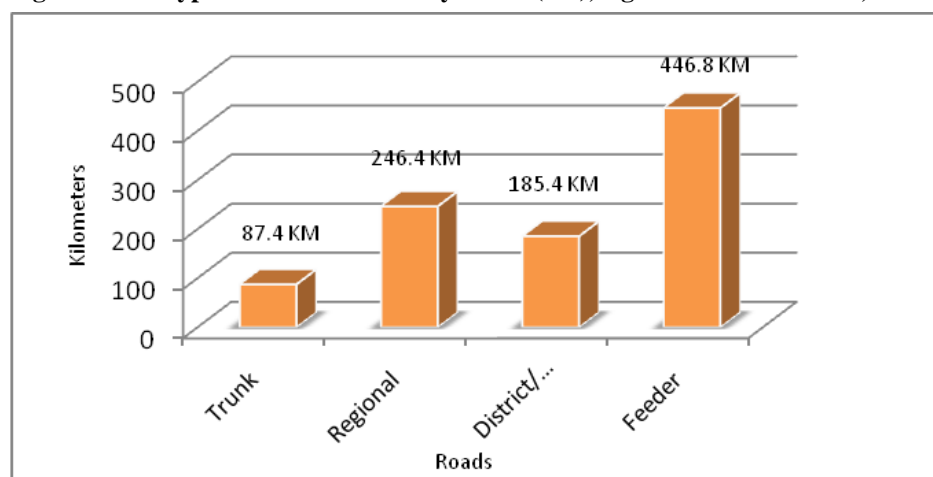
Ward	Type (in km)				
	Trunk	Regional	District/Urban	Feeder	Total
Rusumo	16.0	0.0	0.0	19.0	35.0
Kasulo	28.0	9.0	0.0	18.6	55.6
Nyamiaga	4.0	6.0	0.0	10.8	20.8
Murukulazo	0.0	12.0	5.0	23.0	40.0
Ntobeye	0.0	0.0	9.0	17.0	26.0
Kibimba	16.0	0.0	3.8	32.2	52.0
Kanazi	4.4	0.0	12.7	20.7	37.8
Mugoma	0.0	0.0	14.0	31.2	45.2
Kirushya	0.0	0.0	26.7	0.0	26.7
Mabawe	5.0	0.0	10.0	11.6	26.6
Kabanga	10.0	14.0	15.0	21.6	60.6

**Table 4.1 ctd: Length of Road Network by Ward (km), Ngara District Council, 2015**

Ward	Type (in km)				
	Trunk	Regional	District/Urban	Feeder	Total
Murusagamba	0.0	26.0	0.0	24.0	50.0
Muganza	0.0	38.0	12.0	30.8	80.8
Nyakisasa	0.0	31.0	12.9	24.2	68.1
Mbuba	0.0	16.0	5.5	20.5	42.0
Bukiro	0.0	19.0	10.0	30.2	59.2
Bugarama	0.0	14.4	0.0	24.9	39.3
Keza	0.0	27.0	5.0	20.9	52.9
Kibogora	0.0	13.0	0.0	37.2	50.2
Nyamagoma	0.0	15.0	0.0	12.2	27.2
Ngara Township	4.0	0.0	36.0	7.0	47.0
Rulenge Township	0.0	6.0	7.8	9.3	23.1
<b>Total</b>	<b>87.4</b>	<b>246.4</b>	<b>185.4</b>	<b>446.8</b>	<b>966.0</b>

*Source: Compiled data from District Executive Director's Office, 2015*

**Figure 4.1: Type of Road Network by Ward (km), Ngara District Council, 2015**



*Source: Compiled data from District Executive Director's Office, 2015*

***River Ruvuvu Bridge on the main road to Ngara***



***Source:*** District Executive Director's Office, (Works Department), 2015

#### **4.1.1 Road Passability**

Table 4.2 reveals that out of the total road network of 966.0 km in Ngara District Council in 2015, 136.5 km were passable during the greater part of the year, 768.5 km were passable throughout the year and 61.0 km were not passable most of the year. In general, the total road networks passable throughout the year in Ngara District Council were 905 km equivalent to 93.7 percent. In regard to wards in Ngara District Council, observation shows that many roads in the wards are passable (over 80.0 percent) indicating that the council has a good road network. Table 4.2 indicates that many wards are passable above 80 percent, indicating that those wards with passability below 90 percent per year, the council should put more efforts to ensure that the roads are passable so as to enable people to do their social economic activities on time.



**Table 4. 2: Condition of Road Network by Ward, Ngara District Council, 2015**

Ward/District	Condition of Road Network Throughout the Year in km				Percentage Passable (columns 2+3)/5
	Passable Throughout the Year(2)	Passable a Greater Part of the Year (3)	Not Passable most of the year (4)	Total Road Network(5)	
Rusumo	28.0	7.0	0.0	35.0	100.0
Kasulo	48.6	0.0	4.0	52.6	92.4
Nyamiaga	13.8	3.0	0.0	16.8	100.0
Murukurazo	14.0	24.0	2.0	40.0	95.0
Ntobeye	8.0	13.0	5.0	26.0	80.8
Kibimba	40.0	4.0	8.0	52.0	84.6
Kanazi	20.8	15.0	4.0	39.8	89.9
Mugoma	41.2	2.0	2.0	45.2	95.6
Kirushya	16.7	7.0	3.0	26.7	88.8
Mabawe	22.6	5.0	1.0	28.6	96.5
Kabanga	57.6	2.5	0.5	60.6	99.2
Murusagamba	40.0	7.0	3.0	50.0	94.0
Muganza	58.8	18.0	4.0	80.8	95.0
Nyakisasa	69.1	0.0	2.0	71.1	97.2
Mbuba	40.0	0.0	2.0	42.0	95.2
Bukiro	49.2	6.0	4.0	59.2	93.2
Bugarama	31.9	4.0	3.4	39.3	91.3
Keza	38.9	9.0	5.0	52.9	90.5
Kibogora	44.6	4.0	1.6	50.2	96.8
Nyamagoma	19.2	6.0	2.0	27.2	92.6
Ngara Township	46.0	0.0	1.0	47.0	97.9
Rulenge Township	19.6	0.0	3.5	23.1	84.8
<b>Total</b>	<b>768.6</b>	<b>136.5</b>	<b>61.0</b>	<b>966.1</b>	<b>93.7</b>
<b>Percentage</b>	<b>79.6</b>	<b>14.1</b>	<b>6.3</b>		

*Source: District Executive Director's Office, (District Engering Deartment), 2015*

#### 4.1.2 Road Network Classification

The results in Table 4.3 reveals that out of the total road network of 966.0 km in Ngara District Council in 2015, greater parts of the road network were gravel roads (499.9 km , 51.7 percent), followed by earth roads (370.0 km , 38.3 percent). Generally, in 2015 Ngara District Council had tarmac roads in nine wards only covering 96.1 km (9.9 percent) Most of these roads are trunk roads while few of them are under District roads.



## Gravel road in rural areas in Ngara DC.



*Source: District Executive Director's Office, (Works Deartment), 2015*

**Table 4. 2: Length of Road Network by Type of Road Surface by Ward, Ngara District Council, 2015**

Ward	Tarmac	Gravel	Earth	Total
Rusumo	9.0	13.0	22.0	44.0
Kasulo	30.7	32.0	8.9	71.6
Nyamiaga	5.0	12.0	5.7	22.7
Murukulazo	0.0	12.0	26.0	38.0
Ntobeye	0.0	18.0	22.0	40.0
Kibimba	16.0	23.0	13.0	52.0
Kanazi	4.4	27.0	8.0	39.4
Mugoma	0.0	23.0	7.0	30.0
Kirushya	0.0	9.0	17.0	26.0
Mabawe	5.0	7.0	9.0	21.0
Kabanga	10.0	15.0	4.0	29.0
Murusagamba	0.0	36.0	18.0	54.0
Muganza	0.0	38.0	23.0	61.0
Nyakisasa	0.0	39.0	15.0	54.0
Mbuba	0.0	16.0	20.0	36.0
Bukiro	0.0	23.5	18.0	41.5
Bugarama	0.0	30.0	24.4	54.4
Keza	0.0	36.0	34.0	70.0
Kibogora	0.0	8.9	25.0	33.9
Nyamagoma	0.0	18.0	32.0	50.0
Ngara Township	8.0	23.0	5.0	36.0
Rulenge Township	8.0	40.5	13.0	61.5
<b>Total</b>	<b>96.1</b>	<b>499.9</b>	<b>370.0</b>	<b>966.0</b>

*Source: District Executive Director's Office, (District Engering Deartment), 2015*

## **4.2 Railway Transport**

Ngara District Council did not have railway transport services by 2015. Although the railway transport service is needed by people in the area in order to simplify the transportation of goods and services within and outside the council the service was not available in the council. The most common type of transport in Ngara District Council was the road transport. If the plan to extend the railway line from Isaka to Burundi and Rwanda will succeed it will definitely pass through Ngara in Keza ward and this will be beneficial to the Ngara DC residents.

## **4.3 Air Services**

Although air transport service is needed by people in the area in order to speed up and simplify transportation of goods and services but up to 2015 the service was not available in Ngara District Council. Ngara District Council has one airstrip in Ruganzo village and in 2015, a total of ten passengers used the air strip and the quantity of cargo was 12 tons.

## **4.4 Telecommunication Services**

In Ngara District Council there is a moderate availability of internet services, telephone services (both cellular and land line) as well as postal services. In 2015, the council had one radio stations but the Council was having four internet cafes, one post office and one sub post office. Moreover, in 2015 the Council had access to mobile phones which include Tigo, Vodacom, Airtel, Halotel and TTCL Land line.

## **4.5 Energy**

Energy is a prerequisite for proper functioning of nearly all sectors in the economy. It is an essential service whose availability and quality determines success or failure of development projects. As such, the importance of energy as a sector in the Councils' economy cannot be over-emphasized. The main sources of energy for cooking and lighting in Ngara District Council were firewood, charcoal, electricity, paraffin and solar energy. Firewood is the main source of energy for cooking in rural areas of the Council.

## **4.6 Electricity**

Electricity supply stimulates both social and economic development; generally, electricity improves the quality of life. Like other parts of the country, TANESCO is the sole supplier of electricity in Ngara DC and the Region as whole. Electricity supply in the Council is not yet stable and faces a number of problems such as intermittent power supply, low voltage, rationing, and outages. In one

way or another, these problems affect production of goods and services in the Council. Table 4.5 shows different types of customers supplied with electricity by TANESCO in the 2011 to 2015 period. In 2015, the number of institutions connected to electricity in the Council was 14, while domestic installations were 720 and commercial customers were 135.

**Table 4. 3: Number of Customers Using/Connected to Electricity; Ngara DC; 2011 – 2015**

Year	No. of Customers		
	Institution	Domestic	Commercial
2011	23	216	4
2012	0	224	0
2013	27	549	10
2014	0	536	0
2015	14	720	135

Source: TANESCO District Manager, Ngara DC, 2016

## CHAPTER FIVE

### Social Services

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#### 5.0 An Overview

Chapter Five discusses development status of social services in Ngara District Council, covering the health sector, education sector, water and sanitation. In the health sector, the discussion covers improvement of health facilities and staff, morbidity and mortality status and immunization of mothers and children. It also covers the prevalence of HIV/AIDS and related diseases as well as its impact on the community.

The education sector examines the improvement of education both quantitative and qualitative, in terms of availability of facilities, performance, retention and transition from one level to another within the Council. The report also discusses the outcome and impact of education by looking at the quality of Ngara residents in terms of literacy and levels of education attainment.

Water and sanitation is also discussed with respect to sources and technology used in the supply of water in both rural and urban locations of the Council. Issues such as accessibility and availability of clean and safe drinking water for the Councils' residents are clearly examined in the report. Sanitation facilities and other hygienic issues are also covered.

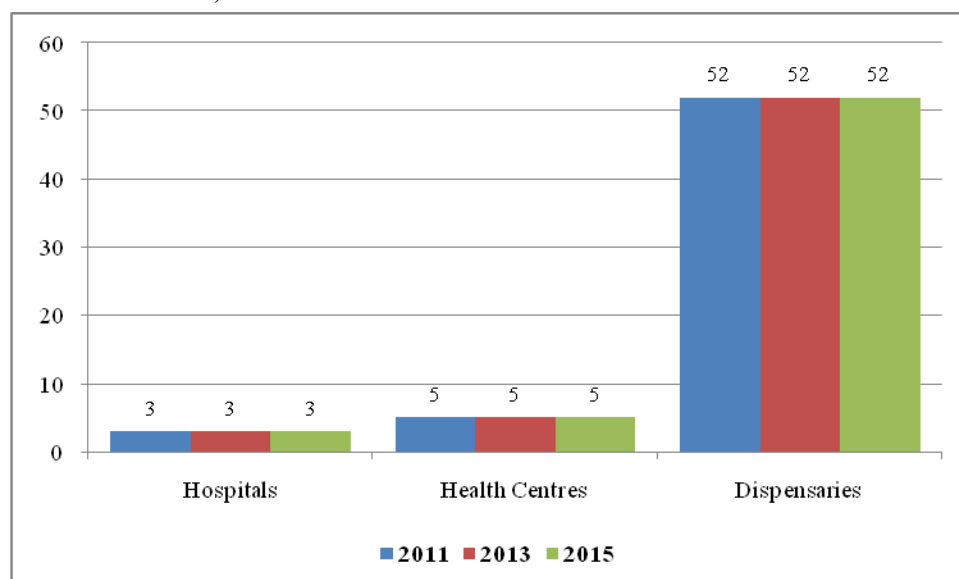
#### 5.1 Health Sector

The Ngara DC, like other rural councils in the region, experiences shortages of health facilities, practitioners such as medical officers, assistant medical officers (AMOs), nursing officers, pharmaceutical technologists, laboratory technologists, nutritionists, assistant laboratory technologists, pharmaceutical technologist assistants, clinical officers (COs), dental surgeons, dentists, nurses, physiotherapists, environmental health officers, assistant environmental health officers, health assistants, medical attendants, radiologists and radiographic assistants. These shortages cause unnecessary loss of people's lives due to incomplete treatment of preventable diseases. The main diseases in Ngara DC are Acute Respiratory Infections, malaria, diarrhea, pneumonia, intestinal worms, skin disease, eye condition, emergency surgical condition and ear condition.

### 5.1.1 Health Facilities.

Figure 5.1 shows that Ngara district had remained with only 60 health facilities in the 2011-2015 period; 3 hospital, 5 health centres and 52 dispensaries. The available facilities cannot serve the ever increasing population of the Council. The council authority should put more effort in constructing new facilities and continue to motivate the community to participate in the current Government initiative of constructing more health facilities in order to meet health strategies as stipulated in the Policy.

**Figure 5. 1: Availability and Growth of Health Facilities by Type, Ngara District, 2011, 2013 and 2015**



*Source: District Executive Director's Office (District Medical Office), Ngara District, 2015*

At division level, health facilities were unevenly distributed with Nyamiaga. (Where the district headquarters is located) having 2 hospitals, 1 health centre and 17 dispensaries while Rulenge Division had 1 hospital, 2 health centres and 14 dispensaries. Murusagamba division had the smallest number of health facilities (1 health centre and 7 dispensaries) (Table 5.1).

**Table 5. 1: Availability of Health Facilities by Type and Division, Ngara District, 2011, 2013 and 2015**

Division	Hospital			Health Centres			Dispensaries		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Kanazi	0	0	0	1	1	1	14	14	14
Murusagamba	0	0	0	1	1	1	7	7	7
Nyamiaga	2	2	2	1	1	1	17	17	17
Rulenge	1	1	1	2	2	2	14	14	14
<b>Total</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>52</b>	<b>52</b>	<b>52</b>

*Source: District Executive Director's Office (District Medical Office), Ngara District, 2017*

In regard to ownership, private participation in the provision of health care services as stipulated by the health policy is significant in the Council. Out of 60 health facilities available in the Council in 2015, 2 hospitals, 1 health centre and 5 dispensaries were owned by private sector, while the public sector owned 1 hospital, 4 health centres and 47 dispensaries (Table 5.2). There is a need for the council to establish and improve the dialog with private sector through the existing Public Private Partnership to encourage the private sector and the community to increase their participation in the establishment and management of social services in the Council.

**Table 5. 2: Availability of Health Facilities by Type, Ownership and Division, Ngara District, 2015**

Division	Hospitals		Health Centers		Dispensaries		Total Facilities	
	Public	Private	Public	Private	Public	Private	Number.	Percent
Nyamiaga	1	1	1	0	13	4	20	33.3
Rulenge	0	1	1	1	14	0	17	28.3
Kanazi	0	0	1	0	13	1	15	25.0
Murusagamba	0	0	1	0	7	0	8	13.3
<b>Total</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>47</b>	<b>5</b>	<b>60</b>	<b>100.0</b>
<b>Percent</b>	<b>33.3</b>	<b>66.7</b>	<b>80.0</b>	<b>20.0</b>	<b>90.4</b>	<b>9.6</b>	<b>100.0</b>	

Source: District Executive Director's Office (District Medical Office), Ngara District, 2015

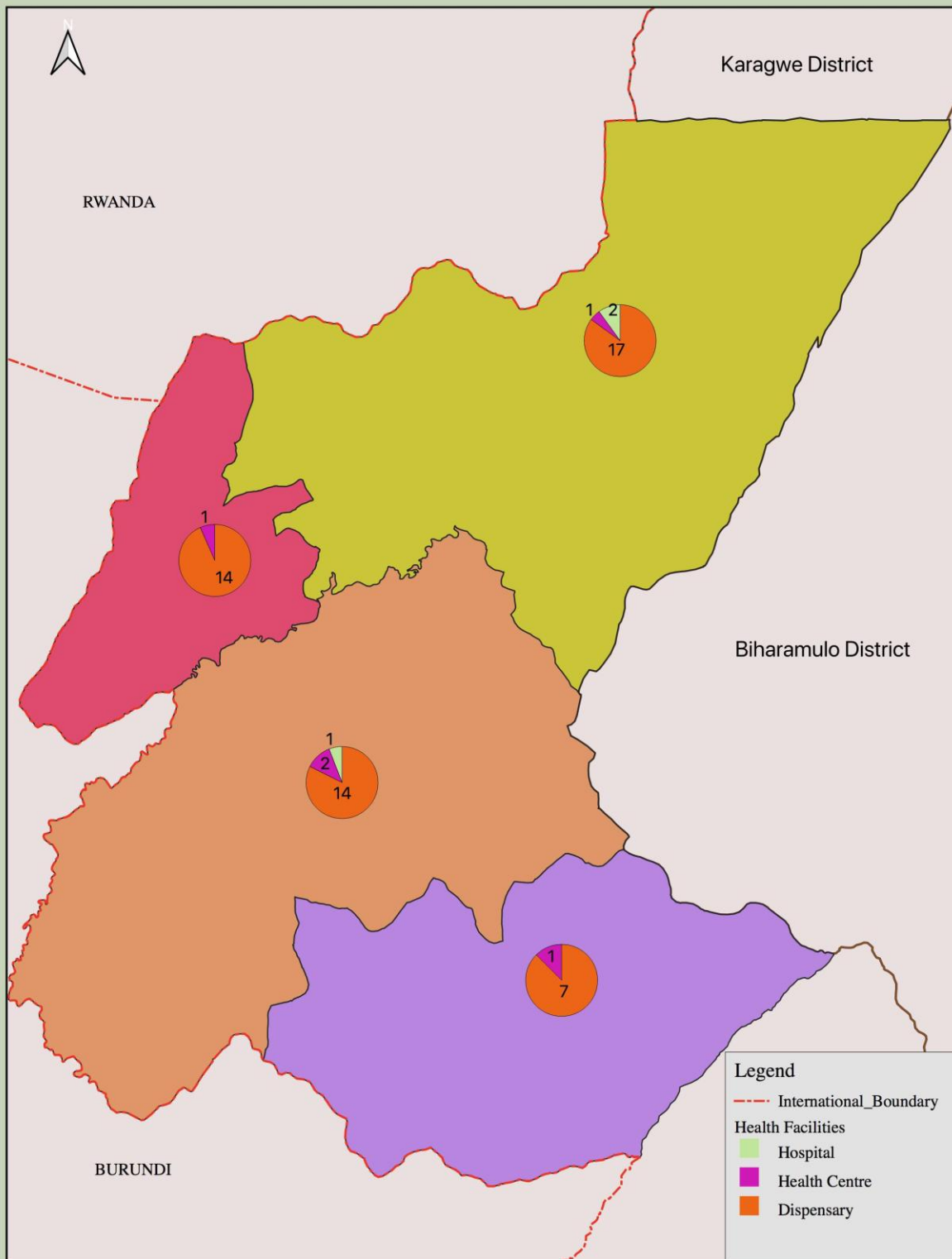
Ngara DC, like other councils in Kagera Region, is still lagging behind in the implementation of health policy which requires each ward to have a health center and each village to have a dispensary. Table 5.3 shows that on average, in 2015 one health centre serviced 4 wards and each dispensary was used by 1 village. At division level, Nyamiaga division had a critical shortage of health centres because the available health centre was being used by 7 wards and 1 dispensary serviced at least 1 village while in Kanazi 5 wards were serviced by health centre and 2 villages by 1 dispensary. Murusagamba Division had better ratios of an health centre per 3 wards and a village per dispensary (Table 5.3).

**Table 5. 3: Distribution of Health Facilities and Their Ratios by Division, Ngara District 2015**

Division	No. of Wards	No. of Villages	Health Centers	Dispensaries	Average Wards per HC	Average Villages per Dispensary
Nyamiaga	7	21	1	17	7	1
Rulenge	7	19	2	14	4	1
Kanazi	5	26	1	14	5	2
Murusagamba	3	9	1	7	3	1
<b>Total</b>	<b>22</b>	<b>75</b>	<b>5</b>	<b>52</b>	<b>4</b>	<b>1</b>

Source: District Executive Director's Office (District Medical Office), Ngara District, 2017

Map 5: Distribution of health facilities by Division, Ngara District Council; 2015





### 5.1.1.1 Health Facility Ratios

The availability of health facilities in Ngara DC falls below WHO standards. The average coverage of the population by health facilities in Ngara DC has increased from 0.9 facilities per 10,000 persons in 2002 to 1.9 facilities per 10,000 persons in 2012. At divisional level, Table 5.4 shows that in 2002 Murusagamba Division had the best population coverage (2.1 facilities per 10,000 persons and a mean average population of 7924 persons per facility, followed by Rulenge (1.3 facility per 10,000 persons and mean average of 9,748 people per facility) while Nyamiaga Division had the least number of less than 1 facility for every 10,000 persons and mean average population of 18,3139 persons per facility. In 2012, a great improvement was observed, although there were differences in magnitude and proportions. Murusagamba continued to be the best served Division in the country with a mean average population per facility of 4137 persons and a 2.3 facilities per 10,000 persons. It was followed by Kawazi (1.9 facilities per persons and a mean average population of 5126 persons) and Nyamainga (1.9 facilities per 10,000 persons and mean average population of 5219 persons per 10,000 persons). Rulenge Division was the least served Division in Ngara DC in 2012.

**Table 5. 4: Relating Health Facilities to the Population by Division, Ngara District 2002 and 2012**

Division	2002				2012			
	Total Population	Total No. of h.f.s	Mean Average Population Per h.f.s	H.f.s per 10,000 people	Total Population	Total No. of h.f.s	Mean Average Population Per h.f.s	H.f.s per 10,000 people
Kanazi	62,344	6	10,391	1.0	76,891	15	5,126	1.9
Rulenge	71,316	9	7924	1.3	105,688	17	6,217	1.6
Murusagamba	19,362	4	4841	2.1	33,093	8	4,137	2.4
Nyamiaga.	181,387	10	18,139	0.5	104,384	20	5,219	1.9
<b>Total</b>	<b>334,409</b>	<b>29</b>	<b>11,531</b>	<b>0.9</b>	<b>320,056</b>	<b>60</b>	<b>5,334</b>	<b>1.9</b>

Source: District Executive Director's Office (District Medical's Office), Ngara District, 2017.

### 5.1.1.2 Population per Doctor Ratio.

Basing on the increase of the number of doctors from 2 in 2002 to 15 in 2012, the quality of health services delivered in Ngara DC may be regarded as improving. Table 5.5 shows that the distribution of doctors for 2012 was uneven and mostly favoured the Nyamiaga Division which is an urban Division, where the headquarters of Ngara District is located. Furthermore, the presence of a hospital in Division may have also contributed to the large Nyamiaga in number of doctors (13 doctors in 2012) 13 in 2012 (both medical officers and assistant medical officers). The council's average population per doctor was 167,205 in 2002 which improved to 21,334 in 2012 (Table 5.5).



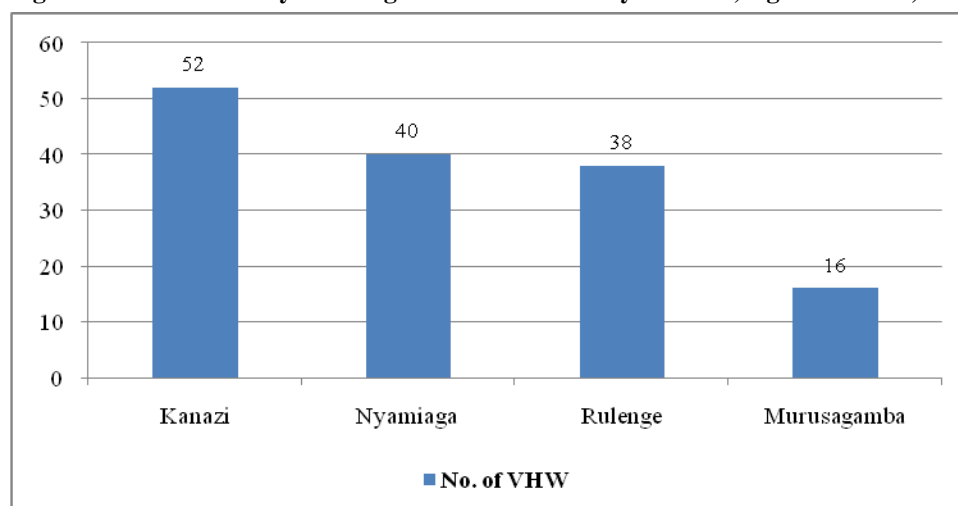
**Table 5. 5: Distribution of Doctors Among Population by Division, Ngara District; 2002 and 2012**

Division	2002			2012		
	Total Population	Total Doctors	Average Population Per Doctor	Total Population	Total Doctors	Average Population Per Doctor
Kanazi	62,344	-	-	76,891	-	-
Rulenge	71,316	-	-	105,688	2	52,844
Murusagamba	19,362	-	-	33,093	-	-
Nyamiaga	181,387	2	90694	104,384	13	8030
<b>Total</b>	<b>334,409</b>	<b>2</b>	<b>167,205</b>	<b>320,056</b>	<b>15</b>	<b>21,337</b>

Source: District Executive Director's Office (District Medical Office), Ngara District; 2017.

Although the available official health facilities were not enough to serve the ever growing population of Ngara district, the authority had made effort of employing 146 village health workers (VHW) and distributed to Kanazi division having (52) VHW, Nyamiaga Rulenge Division having 38 VHW and Murusagamba Division having 16 village health workers (Figure 5.2).

**Figure 5. 2: Availability of Village Health Workers by Division, Ngara District, 2015**



Source: District Executive Director's Office (District Medical's Office), Ngara District 2017

### 5.1.1.3 Status of Health Personnel.

Table 5.6 shows that in 2015, the council had a big shortage of health personnel with respect to specialized doctors, radiologists, dental surgeons and pharmacists, nursing officers, assistant nursing officers, clinical officers as well as pharmaceutical and laboratory technologists, the table further shows that the Council had a total of 162 medical personnel most of whom were trained nurses (50.0 percent) followed by medical attendant (23.5 percent) and medical attendants (23.5 percent). clinical officers (3.7 percent), laboratory attendants (2.5 percent) majority of medical

personnel in Ngara DC Medical officers, Assistant Medical Officers and Radiographic assistants accounted for 1.2 percent each. In 2015 were males 54.3 percent) (Table 5.6).

**Table 5. 6: Availability of Medical Personnel by Profession and Sex, Ngara DC, 2015**

Medical Personnel	Male	Percent.	Female	Percent.	Total	Percent
Specialist Doctors	0	0.0	0	0.0	0	0.0
Medical doctors	2	100.0	0	0.0	2	1.2
Ass. Medical Officers	2	100.0	0	0.0	2	1.2
Clinical Officers	5	83.3	1	16.7	6	3.7
Ass. Clinical Officers	0	0.0	0	0.0	0	0.0
Dental Surgeon	0	0.0	0	0.0	0	0.0
Ass. Dental Officer	0	0.0	0	0.0	0	0.0
Dental Therapist	0	0.0	0	0.0	0	0.0
Pharmacists	1	100.0	0	0.0	1	0.6
Pharmaceutical Technicians	0	0.0	0	0.0	0	0.0
Pharmaceutical Assistant	0	0.0	0	0.0	0	0.0
Laboratory Technicians	1	100.0	0	0.0	1	0.6
Laboratory Assistant.	3	75.0	1	25.0	4	2.5
Radiologist	0	0.0	0	0.0	0	0.0
Radiographer	0	0.0	0	0.0	0	0.0
Radiographic Assistant	2	100.0	0	0.0	2	1.2
Nursing Officers	0	0.0	0	0.0	0	0.0
Nurses	36	44.4	45	55.6	81	50.0
Medical Attendants	20	52.6	18	47.4	38	23.5
Health Officers	0	0.0	0	0.0	0	0.0
Health Assistants	0	0.0	0	0.0	0	0.0
Health Secretaries	1	100.0	0	0.0	1	0.6
Other Medical Carders	14	63.6	8	36.4	22	13.6
<b>Total</b>	<b>88</b>	<b>54.3</b>	<b>74</b>	<b>45.7</b>	<b>162</b>	<b>100.0</b>

Source: District Executive Director's Office (District Medical's Office), Ngara District, 2017

### 5.1.2 Morbidity

Health services aim at solving problems of morbidity (sickness) and mortality. However, in order to take care of morbidity, the Government needs an inventory of health problems. The inventory shows that the most common causes of illness in 2015 were malaria, upper respiratory infection, urinary track infection, intestinal worms, diarrhea with no dehydration, pneumonia, GIT diseases, defined symptoms and diarrhea with some dehydration.

### Out-patients

Inventory of health problem of Ngara district shows that out of 297,454 out-patients cases of morbidity recorded in 2015, 83.8 percent of them were suffering from malaria, upper respiratory infection, urinary track infection, intestinal worms, diarrhea with no dehydration. Malaria ranked first with 42.3 percent of all reported outpatient cases followed by upper respiratory infection URI with 61,030 reported cases, (21 percent) urinary tract infection (9.5 percent) intestinal worms (5.7 percent) and diarrhea with no dehydration (5.3 percent) (Table 5.7).

**Table 5. 7: Ten Most Commonly Reported Causes of Morbidity (Out Patients), Ngara District; 2013 and 2015**

S/No.	2011			2015		
	Disease	No. of Cases	Percent Cases	Disease	No. of Cases	Percent Cases
1	Malaria	3,786	39.8	Malaria	126,035	42.4
2	Pneumonia	2,910	30.6	Upper Respiratory Infection	61,030	20.5
3	ARI	1,978	20.8	Urinary Tract Infection	28,227	9.5
4	Diarrhoea	410	4.3	Intestinal Worms	16,888	5.7
5	Anaemia	186	2.0	Diarrhoea With No Dehydration	15,843	5.3
	<b>Sub Total</b>	<b>9,270</b>	<b>97.5</b>	<b>Sub Total</b>	<b>248,023</b>	<b>83.4</b>
6	Intestinal Worms	129	1.4	Pneumonia Non Severe	14,463	4.9
7	Dysentery	18	0.2	Diagnosis Others	12,524	4.2
8	Malnutrition	86	0.9	GIT Diseases Other Non Infection	8,911	3.0
9	Cardiovascular disorders	5	0.1	Defined Symptoms No Diagnosis	8,344	2.8
10	Tuberculosis	4	0.0	Diarrhoea with some Dehydration	5189	1.7
	<b>Total</b>	<b>9,512</b>	<b>100.0</b>	<b>Total</b>	<b>297,454</b>	<b>100.0</b>

*Source: District Executive Director's Office (District Medical Office), Ngara District, 2017.*

## In-patients

In Ngara district, in 2015, out of 28,592 reported in patient morbidity cases, 22,729 cases (79.5 percent) were suffering from malaria, pneumonia, diagnosis of other diarrhea, acute and chronic and urinary track infection. Again, malaria was ranked the first cause of illness with 10,098 reported cases (35.3 percent) followed by pneumonia (13.7 percent), Diagnosis others (10.6 percent) , diarrhoea acute and chronic (10.4 percent) and Urinary tract infection (9.5 percent) (Table 5.8). The district authority should intensify with malaria campaign in order to reduce or eliminate malaria.

**Table 5. 8: Ten Most Commonly Reported Causes of Morbidity (In Patients), Ngara District; 2013 and 2015**

S/No.	2011			2015		
	Disease	No. of Cases	Percent Cases	Disease	No. of Cases	Percent Cases
1	Malaria	286	42.9	Malaria	10,098	35.3
2	Pneumonia	216	32.4	Pneumonia	3,906	13.7
3	Diarrhea	57	8.6	Diagnosis others	3,021	10.6
4	Dysentery	40	6.0	Diarrhoea acute and chronic	2,975	10.4
5	Malnutrition	26	3.9	Urinary tract infection	2,729	9.5
	<b>Sub Total</b>	<b>625</b>	<b>93.8</b>	<b>Sub Total</b>	<b>22,729</b>	<b>79.5</b>
6	Dysentery	13	2.0	Upper respiratory infection	2,204	7.7
7	Abortion	11	1.7	Gastro intestinal other non infectious	1,291	4.5
8	Tuberculosis	4	0.6	Dysentery	903	3.2
9	Abortion	8	1.2	Hypertension severe	780	2.7
10	Snake bite	5	0.8	Peptic ulcers	685	2.4
	<b>Total</b>	<b>666</b>	<b>100.0</b>	<b>Total</b>	<b>28,592</b>	<b>100.0</b>

*Source: District Executive Director's Office (District Medical's Office), Ngara District, 2017.*

### 5.1.3 Mortality

Medical records provided by the district medical office shows that 88.2 percent of mortality cases in Ngara DC in 2015 were caused by Pneumonia, Malaria, gastritis and head injuries the most reported cause of mortality for inpatients in 2015 .The second, third, by malaria (30.9 percent), other diagnosis (11.8 percent) gastritis (7.4 percent) and head injury (5.9 percent). One general observation from the 2011 and 2015 reported courses of mortality is the increase of malaria and pneumonia as courses of mortality in the council (Table 5.9).

**Table 5. 9: Most Commonly Reported Causes of Mortality (In Patients), Ngara District; 2011 and 2015**

S/No.	2011			2015		
	Disease	No. of Cases	Percent Cases	Disease	No. of Cases	Percent Cases
1	Malaria	10	8.6	Pneumonia	22	32.4
2	Anemia	87	75	Malaria	21	30.9
3	Pneumonia	5	4.3	Others diagnosis	8	11.8
4	Diarrhoea	3	2.6	Gastritis	5	7.4
5	Meningitis	3	2.6	Head injury	4	5.9
	<b>Sub Total</b>	<b>108</b>	<b>93.1</b>	<b>Sub Total</b>	<b>60</b>	<b>88.2</b>
6	Dysentery	2	1.7	Diarrhoea	3	4.4
7	Abortion	2	1.7	Cerebrovascular	2	2.9
8	Tuberculosis	2	1.7	Still birth	1	1.5
9	Snake bites	1	0.9	Neonatal septicemia	1	1.5
10	Malnutrition	1	0.9	Sudden infant death	1	1.5
	<b>Total</b>	<b>116</b>	<b>100</b>		<b>68</b>	<b>100</b>

*Source: District Executive Director's Office (District Medical Office), Ngara District, 2015*

### 5.1.4 HIV/AIDS Infections

Though there are a number of ways that can be used to measure the extent and trend of the HIV prevalence among the people, the ones used in Ngara district includes testing family blood donors, prevalence among VCT volunteers and expected mothers participating in the Prevention of Mother to Child Transmition (PMTCT) service.

Establishment of Voluntary Counselling and Testing (VCT) services in both rural and urban areas, to a great extent, have enabled the country to establish a reliable source of data for HIV prevalence by increasing coverage outside health facilities. Table 5.10 shows a slight increase of prevalence rate of HIV positive persons from 1.4 percent in 2013 to 1.7 percent in 2015. Looking at sex difference, General observation from the data is that though more males than females were screened the proportion of male volunteers who affected by HIV were fewer than female in 2013 and 2015 years (Table 5.10).

**Table 5. 10: HIV Prevalence Rates of VCT Volunteers who screened for HIV by Sex, Ngara District, 2013 and 2015**

Year	No. of Screened			No. of HIV+			Percent of HIV+		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2013	658	290	948	9	4	13	1.4	1.3	1.4
2015	1,011	422	1,433	13	11	24	1.3	2.6	1.7
<b>Total</b>	<b>1,669</b>	<b>712</b>	<b>2,381</b>	<b>22</b>	<b>15</b>	<b>37</b>	<b>1.3</b>	<b>2.1</b>	<b>1.6</b>

*Source: District Executive Director's Office (District Medical Office), Ngara District, 2017.*

Family blood donation is another useful source of information from medical records on HIV prevalence though is not a reliable source of the extent and the trend of the problem in the Council. Table 5.11 shows that out of 948 (658 males and 290 females) blood donors in 2013, 13 (9 males and 4 females) of them were identified to be HIV positive, but the number increased to 24 (13 males and 11 females) in 2015. However, the absence of enough blood banks in most parts of the district makes it difficult to make a firm conclusion on HIV/AIDS through the blood donors. One general observation from this source is the high HIV prevalence among males than females, although few females than males volunteers to be tested in all years.

**Table 5. 11: HIV Infections among Family Blood Donors and New AIDS Cases, Ngara District; 2013 – 2015**

Year	No. of Screened			No. of HIV+			Percent of HIV+		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2013	658	290	948	9	4	13	1.4	1.4	1.4
2014	889	340	1,229	14	10	24	1.6	2.9	2.0
2015	1,011	422	1,433	13	11	24	1.3	2.6	1.7
<b>Total</b>	<b>2558</b>	<b>1052</b>	<b>3610</b>	<b>36</b>	<b>25</b>	<b>61</b>	<b>1.4</b>	<b>2.4</b>	<b>1.7</b>

Source: District Executive Director's Office (District Medical Office), Ngara District, 2017.

The prevalence of HIV/AIDS can also be obtained from PMTCT service reports for 2015. The reports present the HIV prevalence for expectant mothers and their infants after delivering. Table 5.12 shows that 14,420 expectant mothers (98.0 percent) out of 14,710 expectant mothers who attended the PMCT service were screened. Out of the 14,420 expectant mothers screened in 2015, 140 of them (1.0 percent) were found to be HIV positive and 139 (99.3 percent) were given Niverapine.

At division level, observation on Table 5.12 shows that Nyamiaga was the most affected division with 1.7 percent of the screened expectant mothers founded being HIV positive. This was followed by Rulenge (0.5 percent), and Murusagamba Division only 0.4 percent However, It is important to note that when using the information provided by Table 5.11 precaution should be taken because it covers only expectant mothers who attended mother and child health clinic.

**Table 5. 12: Number of Expectant Mothers Who were Screened for HIV Through PMTCT Service and Those Receiving ARVs by Division, Ngara District, 2015**

Division	No. of Attendants	No. Screened	No. HIV+	Percent of HIV+	No. of given Niverapine	Percent of Given Niverapine
Kanazi	2,812	2,821	24	0.9	23	95.8
Rulenge	5,656	5,570	30	0.5	30	100.0
Murusagamba	1,359	1,440	6	0.4	6	100.0
Nyamiaga	4,883	4,589	80	1.7	80	100.0
<b>Total</b>	<b>14,710</b>	<b>14,420</b>	<b>140</b>	<b>1.0</b>	<b>139</b>	<b>99.3</b>

Source: District Executive Director's Office (District Medical Office), Ngara District, 2015

### (i) Nyamiaga Division

Medical record shows that Nyamiaga division was the most affected division with HIV for expectant mothers in Ngara DC (1.7 percent) of screened expectant mothers being HIV positive. Table 5.12a shows that Ngara Ward was the most affected with HIVinfection of 4.1 percent, followed by Kibimba (1.7 percent), Kasulo (1.3 percent) and Rusumo (1.2 percent). While,

Ntobeye and Murukulazo wards had HIV prevalence rate of 0.4 percent each. The table further shows that all expectant mothers who were HIV positive accepted to use ARVs in 2015.

**Table 5.12 a: Number of Expectant Mothers Who were Screened for HIV and Those Who Received ARVs by Ward, Nyamiaga Division, 2015**

Ward	No. of Attendants	No. Screened	No. HIV+	Percent of HIV+	No. of given Niverapine	Percent of Expectant Mothers Given Niverapine
Ngara	1,150	1,109	45	4.1	45	100.0
Ntobeye	770	789	3	0.3	3	100.0
Kibimba	626	467	8	1.7	8	100.0
Murukulazo	555	484	2	0.4	2	100.0
Rusumo	600	600	7	1.2	7	100.0
Kasulo	1,182	1,140	15	1.3	15	100.0
<b>Total.</b>	<b>4,883</b>	<b>4,589</b>	<b>80</b>	<b>1.7</b>	<b>80</b>	<b>100.0</b>

Source: District Executive Director's Office (District Medical Office), Ngara District, 2015

## (ii) Rulenge Division

The available data show that the HIV positive prevalence rate of expectant mothers among those who were screened differed across wards in Rulenge division. Table 5.12b data shows that Mbuba and Kibogora wards had the largest percentage of HIV positive expectant mothers (1.0 percent each), followed by Rulenge (0.7 percent), Bukiro (0.6 percent) and Keza (0.5 percent).

**Table 5.12 b: Number of Expectant Mothers Who were screened for HIV and Those Who Received ARVs by Ward, Rulenge Division, 2015**

Ward	No. of Attendants	No. Screened	No. HIV+	Percent of HIV+	No. of given Niverapine	Percent of Given Niverapine
Rulenge	848	839	6	0.7	6	100.0
Mbuba	523	479	5	1.0	5	100.0
Nyakisasa	1,519	1,519	0	0.0	0	0.0
Keza	574	575	3	0.5	3	100.0
Bukiro	720	720	4	0.6	4	100.0
Bugarama	727	729	5	0.7	5	100.0
Kibogora	745	709	7	1.0	7	100.0
<b>Total</b>	<b>5,656</b>	<b>5,570</b>	<b>30</b>	<b>0.5</b>	<b>30</b>	<b>100.0</b>

Source: District Executive Director's Office (District Medical's Office), Ngara District, 2017

## (iii) Kanazi Division

Table 5.12c shows that out of 2,821 expectant mothers who were screened for HIV in 2015 at Kanazi Division, 24 (0.9 percent) were found to be HIV positive. At ward level, Table 5.12c

shows that, Mabawe Ward had the highest HIV prevalent rate of 1.4 percent, followed by Mugoma (1.2 percent), Kabanga (0.8 percent) and Kiryusha (0.7 percent). Kabanga Ward had the lowest rate (0.7 percent) of HIV prevalence rate in the division. As observed in other divisions, almost all HIV positive expectant in Kanazi received ARVs. The table further shows in all wards in Kanazi Division except Kabanga, expectant mothers who were HIV positive accepted to use Niverapine in order to protect their children from being infected with HIV.

**Table 5.12 c: Number of Expectant Mothers Who Were Screened for HIV and Those Who Received ARVs by Ward, Kanazi Division, 2015**

Ward	No. of Attendants	No. Screened	No. HIV+	Percent of HIV+	No. of given Niverapine	Percent of Given Niverapine
Kanazi	476	619	3	0.5	3	100.0
Mugoma	516	427	5	1.2	5	100.0
Kirushya	455	429	3	0.7	3	100.0
Kabanga	903	912	7	0.8	6	85.7
Mabawe	462	434	6	1.4	6	100.0
<b>Total.</b>	<b>2,812</b>	<b>2,821</b>	<b>24</b>	<b>0.9</b>	<b>23</b>	<b>95.8</b>

*Source: District Executive Director's Office (District Medical Office), Ngara District, 2017*

#### (iv) Murusagamba Division

Table 5.12d shows that out of the 1,440 expectant mothers who were screened for HIV in 2015 at Murusagamba Division, only 6 (0.4 percent) were found to be HIV positive. At ward level, Nyamagoma Ward had the highest rate (0.6 percent) of HIV prevalence rate of expectant mothers in the Murusagamba Division, followed by Murusagamba ward (0.5 percent), and Muganza ward (0.2 percent). As was the case in other divisions, expectant mothers who were HIV positive in Murusagamba Division were willing to take ARVs. All of them accepted to use Niverapine in order to protect their children from being infected with HIV.

**Table 5.12 d: Number of Expectant Mothers Who Were Screened for HIV and Those Who Received ARVs by Ward, Murusagamba Division, 2015**

Ward	No. of Attendants	No. Screened	No. HIV+	Percent of HIV+	No. of given Niverapine	Percent of Given Niverapine
Muganza	430	538	1	0.2	1	100.0
Nyamagoma	312	311	2	0.6	2	100.0
Murusagamba	617	591	3	0.5	3	100.0
<b>Total</b>	<b>1,359</b>	<b>1,440</b>	<b>6</b>	<b>0.4</b>	<b>6</b>	<b>100.0</b>

*Source: District Executive Director's Office (District Medical Office), Ngara District, 2015*



#### **5.1.4.1 The Impact of HIV/AIDS**

The socio-economic assessment of Ngara DC will not be complete without addressing the extreme challenges caused by the HIV/AIDS and efforts made so far by various local and international organisations to combat the epidemic. HIV/AIDS is discussed in this document, because it has been one of the major health problems since its advent at the end of 1987. The other reason for addressing the epidemic stems from the role it plays in impoverishing families and generating widows, orphans and vulnerable children due to the loss of bread-winners in their families.

The report from the District Medical Office (DMO) qualifies Ngara DC as been among few Councils with ever increasing rates of HIV/AIDS prevalence in Kagera Region. Economically, Ngara people are migrant labours who migrate to various parts of the country, which creates a conducive environment for sexual relationships. Other reasons include the traditional practice of prolonged drinking and unsafe sexual practices, polygamy, poverty and refugee influx from neighbouring countries. The poor, especially young girls who migrate to urban centres end up being domestic workers for sometime before resorting to prostitution for survival.

##### **(i) The Increase of Widows**

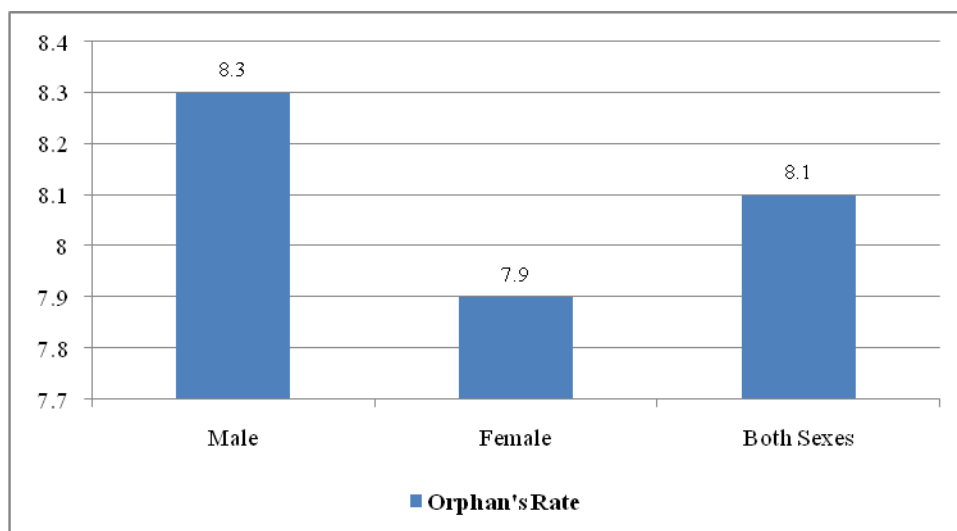
Understanding the status of HIV/AIDS prevalence in Ngara DC is very difficult since the Council has a shortage of health facilities especially health centres and practitioners. As a result, many people die at home without receiving medical care. Lack of awareness and knowledge on HIV as well as lack of VCT centres particularly in remote areas, where people could go and be tested in order to know their HIV status were some of the obstacles of understanding the actual situation of HIV prevalence in Ngara DC. This means, in Ngara DC therefore, there are people who live with the HIV/AIDS virus without knowing that they are infected.

One Proxy indicators of the high HIV prevalence rate in Ngara DC are the rates of widowhood and orphanhood. The data gathered in 2012 population and housing census show that the proportion of widowed persons was 2.7 percent of total population of the council. The proportion of the widows was higher for women than men in the 2002 and 2012 population and housing censuses. However, there is a need of conducting a research in the district that will gather information of widowed and vulnerable children in order to have the current data and their problems before coming up with appropriate measures and solutions.

## (ii) The Increase of Orphaned Children

Orphans are children under 18 years who have lost one or both parents. Data on survival of parents collected in the 2012 Population Census were used to determine the extent of orphanhood in Ngara DC. According to the census results, the incidence of orphanhood was the higher among boys (8.3 percent) than girls' children (7.9 percent). Currently, the council does not have data on orphanhood and vulnerability. Therefore there is a need of the Ngara DC authority to device a method of identifying the number and actual status of orphans and the most vulnerable children in the council as it has been done in some councils in the country. Understanding the status of orphans and most vulnerable children will enable the council authority to adopt policies and measures that will improve the welfare of the most vulnerable children including orphans.

**Figure 5. 3: Percent Distribution of Orphans by Sex, Ngara District Council, 2012 Census**



Source: NBS, Population and Housing Census, Kagera region, 2012

### 5.1.4.2 Child Nutrition

Children, from the stage of foetuses to under - five years and their mothers are the most vulnerable group in any society. Therefore, reproductive and child health services are the most vital services for the survival of this group. Besides vaccination programme, children are also weighed to reveal the prevalence of underweight or overweight among them in order to enable to understand the extent of child malnutrition in a society. Nutritional food intake is associated with child health and therefore, poor diet can result into severe malnutrition which may lead to high infant and child mortality rates. However, inadequate number of health facilities particularly

MCHA and lack of current data on malnutrition in the council make it difficult to quantify the extent of malnutrition.

#### **5.1.5.1 Mother and Child Health Care**

Protection of expectant/lactating mothers and children from measles, tuberculosis, etc. through the immunisation programme (CSPD) (which is supported by development partners) has, to a large extent, reduced the risk of children being infected by their mothers. This is evidenced by the decline of infant mortality and underfive mortality rates in Ngara DC. Medical records released by the district medical office shows that Infant Mortality Rate (IMR) has reached 35 infant deaths per 1,000 livebirths, under five years mortality rate was estimated at 27 child deaths per 1,000 livebirths. The estimated maternal mortality rate was 131 per 100,000 livebirths in 2015.

Reduction of deaths among children and their mothers is attributed to the wide coverage of immunisation campaigns in the district. Table 5.13 shows that the percent of expectant mothers vaccinated with TT2 increased from 25.7 percent in 2011 to 27.0 percent in 2013 and 88.5 percent of the targeted expectant mothers to be vaccinated with TT2 in 2015. This was a great achievement in the protection of the health of the mothers and their children in Ngara DC.

At division level, all divisions had poor performance of vaccination of TT2 in 2011 since none of them achieved 50 percent of expectant mothers vaccinated with TT2. In 2013, Kanazi Division had the best TT2 vaccination coverage (80.4 percent) in the council, followed by Nyamiaga (34.2 percent) and Rulenge Divisions had the smallest coverage of 21.6 percent (Table 5.13). In 2015, Rulenge division had exceeded the TT2 targeted coverage of 4,305 expectant mothers and become the best Division in the Council, vaccinating 104.5 percent (4,501) of expectant mothers, while Nyamiaga Division had the smallest (38.4 percent) coverage in the council (Table 5.13). However, this is not a very good achievement for the council as far as immunizing of pregnant women is concerned because most divisions could not vaccinate even half of their targeted expectant mothers.

**Table 5. 13: Percentage of Expectant Mothers Vaccinated TT2 by Division, Ngara District, 2011, 2013 and 2015**

Division	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Nyamiaga	893	194	21.7	926	317	34.2	956	367	38.4
Kanazi	1,107	160	14.5	1,135	913	80.4	913	593	65.0
Rulenge	11,677	3,160	27.1	12,683	2,745	21.6	4,305	4,501	104.6
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>13,677</b>	<b>3,514</b>	<b>25.7</b>	<b>14,744</b>	<b>3,975</b>	<b>27.0</b>	<b>6,174</b>	<b>5,461</b>	<b>88.5</b>

n.a= Not available.

Source: District Executive Director's Office (District Medical Office), Ngara district, 2017

At ward level, in 2011, Bugarama, Bukiriro and Mbuba wards had the best coverage of 225.0 percent, 137.9 percent and 94 percent respectively. In 2013, Bugarama, Bukiriro and Kanazi wards had the best vaccination coverage of 203.8 percent, 92.3 percent and 89.8 percent respectively. The vaccination for the 2015 was the best in the history of immunization in Ngara DC for the 2011-2015 period. The best immunization coverage in 2015 was recorded in Keza Ward (719.0 percent) followed by Rulenge (560.3 percent), Bugarama (380.8 percent), Bukiriro (101.5 percent), Mbuba (96.6 percent) and Mabawe (83.2 percent). Nyakisasa Ward recorded the smallest TT2 immunization coverage of 8.8 percent in 2011, 7.6 percent in 2013 and 23.3 percent in 2015 (Table 5.14). One observation from this analysis is that the council had critical shortage of child and mother clinics as 11 out of 23 wards could not provide data for expectant mothers vaccinated with TT2. This is a big challenge with respect to the health of both expectant mothers and their children.

**Table 5. 14: Percentage of Expectant Mothers Vaccinated with TT2 by Ward, Ngara DC, 2011, 2013 and 2015**

Ward.	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Ntobeye	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kibimba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murukulazo	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Nyamiaga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Rusumo	657	103	15.7	675	194	28.7	659	269	40.8
Kasulo	236	91	38.6	251	123	49.0	297	98	33.0
Ngara	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kanazi	445	60	13.5	451	405	89.8	329	107	32.5
Mugoma	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a

Ward.	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kirushya	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kabanga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mabawe	662	100	15.1	684	508	74.3	584	486	83.2
Rulenge	720	357	49.6	1,077	467	43.4	406	2275	560.3
Mbuba	548	515	94.0	564	460	81.6	470	454	96.6
Nyakisasa	9,297	817	8.8	9,867	745	7.6	2533	589	23.3
Keza	184	146	79.3	187	103	55.1	21	151	719.0
Bukiriro	876	1,208	137.9	936	864	92.3	823	834	101.5
Bugarama	52	117	225.0	52	106	203.8	52	198	280.8
Kibogora	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Muganza	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Nyamagoma	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>13,677</b>	<b>3,514</b>	<b>25.7</b>	<b>14,744</b>	<b>3975</b>	<b>27.0</b>	<b>6,174</b>	<b>5,461</b>	<b>88.5</b>

*Source: District Executive Director's Office (District Medical Office), Ngara District, 2017*

The BCG vaccination for children under one year shows a decrease in both the number and proportion of children vaccinated in 2011, 2013 and 2015. The overall percentages of targeted children under one year vaccinated decreased from 43.3 percent in 2011 to 39.0 percent in 2013 before increasing to 43.0 percent in 2015. At division level, Kanazi had the largest percentage children under one year vaccinated with BCG in 2011 (127.9 percent), in 2013 (78.0 percent) and in 2015 (80.3 percent) followed by Nyamiaga Division with 95.0 percent of children under one year vaccinated with BCG in 2011, 72.5 percent in 2013 and 77.9 percent in 2015. Rulenge Division had the smallest percentage in 2011 (35.6 percent) in 2014 (32.9 percent) and in 2015 (36.8 percent) (Table 5.15).

At ward level, the largest percentage of children under one year vaccinated with BCG in 2013 was recorded in Kanazi Ward (158.2 percent) while the smallest was recorded in Nyakisasa (11.9 percent). In 2015, Mugoma Ward recorded the largest percentage (149.8 percent) of children under one year vaccinated with BCG while Nyakisasa Ward again recorded the smallest (11.5 percent) (Table 5.15a).

**Table 5. 15: Number and Percentage of Children Under One Year Vaccinated with BCG by Division, Ngara DC, 2011, 2013 and 2015**

Division	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated
Nyamiaga	884	840	95.0	950	689	72.5	932	726	77.9
Kanazi	889	1,150	127.9	995	776	78.0	981	788	80.3
Rulenge	11,216	3,642	35.6	11,444	3,760	32.9	11,127	4,093	36.8
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Total	12,999	5,632	43.3	13,389	5,225	39.0	13,040	5,607	43.0

**Table 5. 15a: Percentage of Children Under One Year Vaccinated with BCG by Ward, Ngara DC, 2011, 2013 and 2015**

Wards	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Ntobeye	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kibimba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murukulazo	412	359	87.1	438	320	73.1	398	371	93.2
Nyamiaga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Rusumo	472	481	101.9	512	369	72.1	534	355	66.5
Kasulo	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Ngara	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kanazi	445	357	80.2	256	405	158.2	329	148	45.0
Mugoma	186	509	273.7	192	190	99.0	211	316	149.8
Kirushya	268	284	106.0	547	181	33.1	441	324	73.5
Kabanga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mabawe	662	425	64.2	684	479	70.0	584	486	83.2
Rulenge	720	647	89.9	750	706	94.1	762	878	115.2
Mbuba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Nyakisasa	8,298	1,003	12.1	8,414	1,000	11.9	8,298	958	11.5
Keza	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Bukiriro	876	988	112.8	936	939	100.3	823	1,023	124.3
Bugarama	660	579	87.7	660	636	96.4	660	748	113.3
Kibogora	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Muganza	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Nyamagoma	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>12,999</b>	<b>5,632</b>	<b>43.3</b>	<b>13,389</b>	<b>5,225</b>	<b>39.0</b>	<b>13,040</b>	<b>5,607</b>	<b>43.0</b>

*Source: District Executive Director's Office (District Medical's Office), Ngara District, 2017.*

In regard to DPT3, the coverage of immunisation in the Council was good, although there was a slight decrease in numbers and proportions. The percentage of vaccinated children under one

year decreased from 94.8 percent in 2011 to 94.5 percent in 2013 before increasing to 103.9 percent in 2015. At division level, Rulenge had the largest percentage of children under one year vaccinated with DPT3 in 2011 (106.7 percent) and in 2013 (102.5 percent). In 2015, the largest percentage of children under one year vaccinated with DPT3 was in Kanazi Division (118.4 percent), followed by Rulenge (100.7 percent) and Nyamiaga Division (96.6 percent).

At ward level, Table 5.16a shows that, Rulenge Ward had the highest percentage of DPT3 vaccinated children under one year (114.3 percent) in 2011 followed by Bukiriro (111.9 percent) and Nyakisasa (108.9 percent). In 2013, Keza Ward had the largest percentage (115.2 percent) followed by Rulenge (114.4 percent), and Bukiriro (102.9 percent). Mugoma Ward was the best ward in 2015, vaccinating 184.1 percent of targeted children under one year, followed by Kanazi Ward (123.1 percent) and Rulenge Ward (115.2 percent). The table also reveals that Rusumo Ward had the smallest percentage (51.3 percent) of children under one year vaccinated with DPT3 in 2011, while Mabawe Ward had the smallest percentage (69.8 percent) of DPT3 vaccinated children under one year in 2013 and Rusumo Ward with 90.4 percent of DPT3 vaccinated children under one year had the smallest percentage in 2015.

**Table 5.16 a: Percentage of Children Under One Year Vaccinated with DPT3 by Ward, Ngara DC, 2011, 2013 and 2015**

Ward	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Ntobeye	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kibimba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murukulazo	412	387	93.9	438	379	86.5	398	371	93.2
Nyamiaga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Rusumo	503	258	51.3	512	400	78.1	534	483	90.4
Kasulo	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Ngara	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kanazi	445	362	81.3	385	339	88.1	329	405	123.1
Mugoma	120	113	94.2	348	341	98.0	289	532	184.1
Kirushya	268	197	73.5	547	508	92.9	441	456	103.4
Kabanga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mabawe	662	522	78.9	682	476	69.8	584	553	94.7
Rulenge	720	823	114.3	654	748	114.4	762	878	115.2
Mbuba	548	533	97.3	n.a	n.a	n.a	n.a	n.a	n.a
Nyakisasa	941	1,025	108.9	1,094	1,029	94.1	996	917	92.1
Keza	n.a	n.a	n.a	538	620	115.2	634	622	98.1
Bukiriro	876	980	111.9	936	963	102.9	823	824	100.1
Bugarama	660	635	96.2	660	620	93.9	660	661	100.2

Ward	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kibogora	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Muganza	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Nyamagoma	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Total	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>6,155</b>	<b>5,835</b>	<b>94.8</b>	<b>6,794</b>	<b>6,423</b>	<b>94.5</b>	<b>6,450</b>	<b>6,702</b>	<b>103.9</b>

Source: District Executive Director's Office (District Medical's Office), Ngara District, 2017.

**Table 5.16 b: Number and Percentage of Children Under One Year Vaccinated with DPT3 by Division, Ngara DC, 2011, 2013 and 2015**

Division	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated
Nyamiaga	915	645	70.5	950	779	82.0	932	854	91.6
Kanazi	1,495	1,194	79.9	1,962	1,664	84.8	1,643	1,946	118.4
Rulenge	3,745	3,996	106.7	3,882	3,980	102.5	3,875	3,902	100.7
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>6,155</b>	<b>5,835</b>	<b>94.8</b>	<b>6,794</b>	<b>6,423</b>	<b>94.5</b>	<b>6,450</b>	<b>6,702</b>	<b>103.9</b>

Coverage of OPV3 vaccination for children under one year in Ngara DC decreased from 109.6 percent in 2011 to 104.4 percent in 2013 before increasing to 117.2 percent in 2015.

At division level, in 2011 Kanazi had the largest percentage of OPV3 vaccination for children under one year (123.7 percent), followed by Rulenge (107.7 percent) and Nyamiaga (93.9 percent). In 2013, Rulenge Division had the largest percentage of 109.0 percent followed by Kanazi Division (93.5 percent) and Nyamiaga Division (86.5 percent). The largest percentage of OPV3 vaccination coverage for children under one year in 2015 was recorded in Rulenge Division (120.1), followed by Kanazi Division (117.0 percent) and Nyamiaga (93.2 percent).

At ward level, Mugoma Ward had the best OPV3 vaccination coverage in 2011, by vaccinating 355.8 percent of children under one year, followed by Rulenge (114.3 percent), Nyakisasa (114.2 percent) and Bukiro (111.9 percent). In 2013, Keza was the best Ward (189.7 percent) in the Council followed by Mabawe Ward (131.4 percent), Bukiro Ward (102.9 percent) and Mbuba Ward (100.4 percent). In 2015, Rulenge and Nyakisasa were the best wards vaccinating 189.9



percent each of their targeted children under one year, followed by Mugoma (183.0 percent), and Kirushya (103.4 percent). Kirushya Ward had the smallest OPV3 vaccination coverage of children under one year both in 2011 (73.5 percent) and 2013 (66.4 percent). Murukurazo had the smallest OPV3 vaccination of only 93.2 percent of its targeted children under one year in 2015 (Table 5.17).

**Table 5. 16: Percentage of Children under One Year Vaccinated OPV3 by Ward, Ngara District, 2011, 2013 and 2015**

Wards.	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Ntobeye	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kibimba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murukulazo	412	387	93.9	438	379	86.5	398	371	93.2
Nyamiaga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Rusumo	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kasulo	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Ngara	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kanazi	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mugoma	120	427	355.8	348	341	98.0	289	529	183.0
Kirushya	268	197	73.5	547	363	66.4	441	456	103.4
Kabanga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mabawe	550	536	97.5	350	460	131.4	584	553	94.7
Rulenge	720	823	114.3	750	748	99.7	406	771	189.9
Mbuba	548	532	97.1	564	566	100.4	470	507	107.9
Nyakisasa	749	855	114.2	1,094	984	89.9	406	771	189.9
Keza	n.a	n.a	n.a	601	1,140	189.7	638	553	86.7
Bukiriro	876	980	111.9	936	963	102.9	823	824	100.1
Bugarama	660	635	96.2	660	620	93.9	660	661	100.2
Kibogora	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Muganza	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Nyamagoma	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>4,903</b>	<b>5,372</b>	<b>109.6</b>	<b>6,288</b>	<b>6,564</b>	<b>104.4</b>	<b>5,115</b>	<b>5,996</b>	<b>117.2</b>

Source: District Executive Director's Office (District Medical Office), Ngara District, 2017.

**Table 5,17 a: Number and Percentage of Children Under One Year Vaccinated with OPV3 by Division, Ngara DC, 2011, 2013 and 2015**

Division	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated
Nyamiaga	412	387	93.9	438	379	86.5	398	371	93.2
Kanazi	938	1,160	123.7	1,245	1,164	93.5	1,314	1,538	117.0
Rulenge	3,553	3,825	107.7	4,605	5,021	109.0	3,403	4,087	120.1
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Total	4,903	5,372	109.6	6,288	6,564	104.4	5,115	5,996	117.2

Measles vaccination is performed to protect children against measles. In Ngara DC, measles vaccination coverage for children under one year decreased from 101.4 percent in 2011 to 88.9 percent in 2013 before increasing to 104.0 percent in 2015. At division level, Kanazi recorded the largest percentage (105.8 percent) of measles vaccination coverage for children under one year in 2011, followed by Rulenge (101.1 percent) and Nyamiaga (92.0 percent). In 2013, Rulenge had the largest measles vaccination coverage (101.3 percent) followed by Nyamiaga (81.6 percent) and Kanazi (81.6 percent). The largest measles vaccination coverage in 2015 was recorded again in Rulenge (112.7 percent) followed by Nyamiaga (103.0 percent) and Kanazi (98.0 percent).

At ward level in 2011 Mugoma had the best measles vaccination coverage (350.8 percent) for children under one year, followed by Bukiriro (112.2 percent). In 2013, the largest measles vaccination coverage was in Bukiriro Ward (105.0 percent) followed by Mugoma Ward (99.7 percent). The largest measles vaccination coverage in 2015 was recorded in Kirushya Ward (120.9 percent) followed by Bukiriro Ward (114.5 percent), Rulenge Ward (110.6 percent), Murukulazo Ward (109.3 percent) and Mugoma Ward (102.6 percent).

**Table 5.17: Percentage of Children under One Year Vaccinated Measles by Ward, Ngara District, 2011, 2013 and 2015**

Wards	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Ntobeye	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kibimba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murukulazo	412	371	90.0	438	363	82.9	398	435	109.3
Nyamiaga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Rusumo	236	225	95.3	512	414	80.9	534	525	98.3
Kasulo	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Ngara	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kanazi	445	395	88.8	385	355	92.2	658	547	83.1
Mugoma	120	421	350.8	349	348	99.7	340	349	102.6
Kirushya	268	197	73.5	547	404	73.9	441	533	120.9
Kabanga	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mabawe	660	566	85.8	640	460	71.9	584	553	94.7
Rulenge	720	630	87.5	750	725	96.7	679	751	110.6
Nyakisasa	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Keza	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Bukiriro	876	983	112.2	936	983	105.0	823	942	114.5
Bugarama	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kibogora	n.a	n.a	n.a	n.a	na	n.a	n.a	n.a	n.a
Muganza	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Nyamagoma	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>3,737</b>	<b>3,788</b>	<b>101.4</b>	<b>4,557</b>	<b>4,052</b>	<b>88.9</b>	<b>4,457</b>	<b>4,635</b>	<b>104.0</b>

Source: District Executive Director's Office (District Medical's Office), Ngara District, 2015.

**Table 5.18 a: Number and Percentage of Children Under One Year Vaccinated with Measles by Division, Ngara DC, 2011, 2013 and 2015**

Division	2011			2013			2015		
	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated	Total Targeted	Total Vaccinated	Percent Vaccinated
Nyamiaga	648	596	92.0	950	777	81.8	932	960	103.0
Kanazi	1,493	1,579	105.8	1,921	1,567	81.6	2,023	1,982	98.0
Rulenge	1,596	1,613	101.1	1,686	1,708	101.3	1,502	1,693	112.7
Murusagamba	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
<b>Total</b>	<b>3,737</b>	<b>3,788</b>	<b>101.4</b>	<b>4,557</b>	<b>4,052</b>	<b>88.9</b>	<b>4,457</b>	<b>4,635</b>	<b>104.0</b>

### **5.1.6 Policy Implication on Health sector**

The provision of health service in Ngara DC is still inadequate due to shortage of facilities, practitioners, medical equipment and medicine. Moreover, inadequate number of specialised doctors limits the provision of health services such as canceling, examination of complicated illnesses, PMCT, etc. However, health services can be improved through adoption and implementation of the health policy and strategies that will motivate doctors and other health workers to work in rural areas. Likewise, the policy of constructing dispensaries in every village and one health sector in every ward should be adhered to for increasing accessibility of health services to the population, particularly in rural areas.

### **5.1.7 Investment Opportunities in the Health Sector**

This sub-sector faces many problems including prevalence of diseases such as malaria, ARI, pneumonia, diarrhea, clinical AIDS, etc; shortage of workers especially nurses and medicines. Investment is needed in regards to the construction of new health facilities (e.g. health centres, hospitals, dispensaries) provision of medical equipments, medicines and training of medical personnel.

## **5.2 The Education Sector**

### **5.2.0 An Overview**

Development of the education sector examines the quantitative and qualitative aspects of the entire education system covering pre-primary, primary, secondary, tertiary education which includes vocational education, colleges, and higher learning institutions as well as adult education. Therefore, the development of the sector in Ngara District Council involves improving all the above mentioned areas. This understanding has been evidenced by steps so far taken by individuals and the local government authorities to increase the intake of children to pre-primary, primary, secondary and tertiary schools in recent years.

### **5.2.1 Pre-Primary Education**

The condition set by the Ministry of Education and Vocational Training requiring all children who start Standard One to have attended pre-primary education has accelerated the establishment of pre-primary schools all over the country including Ngara District Council. Pre-schools are meant for children of ages 3 to 6 years.

Table 5.19 shows that the number of pre-primary schools in Ngara District Council has increased from 118 schools in 2011 to 119 in 2015 with most of them been annexed to government primary school compounds. Pre-primary schools were unevenly distributed in the council, with Rulenge Division having the biggest number of schools, followed by Nyamiaga and Kanazi

divisions, Murusagamba Division had the smallest number of pre-primary schools in the council (Table 5.19).

**Table 5. 18: Number of Pre-Primary School by Ownership and by Division, Ngara District Council, 2011,2013 and 2015.**

Division	2011			2013			2015		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Nyamiaga	32	5	37	35	1	36	34	2	36
Rulenge	36	1	37	36	1	37	36	1	37
Murusagamba	12	0	12	12	0	12	13	0	13
Kanazi	30	2	32	31	2	33	31	2	33
<b>Total</b>	<b>110</b>	<b>8</b>	<b>118</b>	<b>114</b>	<b>4</b>	<b>118</b>	<b>114</b>	<b>5</b>	<b>119</b>
<b>Percent</b>	<b>93.2</b>	<b>6.8</b>	<b>100.0</b>	<b>96.6</b>	<b>3.4</b>	<b>100.0</b>	<b>95.8</b>	<b>4.2</b>	<b>100</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2015.

At ward level, Observations show that all wards had pre-primary school facilities in 2015. The ward with the largest number of pre-primary school facility was Kabanga with 9 schools, followed by Kanazi and Nyakisasa (8 schools each), Ngara Town, Rulenge, Muganza, Bukiro and Kasulo 7 pre-primary schools each. Wards with the smallest number of pre-primary schools were Murusagamba, Nyamiaga, Kibogora and Nyamagoma with 3 pre-primary school each (Table 5.20). It is important to note that for the 2011 – 2015 period, the number of pre-primary schools in Ngara DC remained almost the same.

**Table 5. 19 Number of Pre-Primary School by Ownership and Ward, Ngara District Council, 2011, 2013 and 2015**

Ward	2011			2013			2015		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Ngara	6	1	7	6	1	7	6	1	7
Mabawe	6	0	6	6	0	6	6	0	6
Kabanga	7	2	9	7	2	9	7	2	9
Murusagamba	5	0	5	5	0	5	3	0	3
Keza	4	0	4	4	0	4	4	0	4
Muganza	7	0	7	7	0	7	7	0	7
Kibimba	4	4	8	5	0	5	4	0	4
Kanazi	8	0	8	8	0	8	8	0	8
Kirushya	4	0	4	5	0	5	5	0	5
Mugoma	5	0	5	5	0	5	5	0	5
Bukiro	7	0	7	7	0	7	7	0	7
Nyakisasa	8	0	8	8	0	8	8	0	8
Murukulazo	4	0	4	5	0	5	5	0	5
Nyamiaga	3	0	3	3	0	3	3	0	3

Ward	2011			2013			2015		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Ntobeye	5	0	5	5	0	5	5	0	5
Rusumo	4	0	4	4	0	4	4	1	5
Kasulo	6	0	6	7	0	7	7	0	7
Mbuba	4	0	4	4	0	4	4	0	4
Rulenge	6	1	7	6	1	7	6	1	7
Bugarama	7	0	7	7	0	7	4	0	4
Kibogora	0	0	0	0	0	0	3	0	3
Nyamagoma	0	0	0	0	0	0	3	0	3
<b>Total</b>	<b>110</b>	<b>8</b>	<b>118</b>	<b>114</b>	<b>4</b>	<b>118</b>	<b>114</b>	<b>5</b>	<b>119</b>

Source: District Executive Director's Office (Education Department), 'Ngara DC, 2017.

Table 5.21 shows the performance so far reached by the Ngara DC in establishing pre-primary schools according to the Education Policy of having this facility in each government primary school. In 2015 the Council had on average, 5 pre-primary schools per ward and about 2 schools per village. At Division level, Rulenge and Nyamiaga had on average, 2 pre-primary school per village while Murusagamba and Kanazi divisions had an average of 1 pre-primary school per village (Table 5.21).

**Table 5. 20: Availability of Pre-Primary Schools per Ward and Village, Ngara District Council, 2015**

Division	No. of Wards	No. of Villages	No. of Schools	Average Schools per Ward	Average Villages per School
Nyamiaga	7	21	36	5.1	1.7
Rulenge	7	19	37	5.3	1.9
Murusagamba	3	9	13	4.3	1.4
Kanazi	5	26	33	6.6	1.3
<b>Total</b>	<b>22</b>	<b>75</b>	<b>119</b>	<b>5.4</b>	<b>1.6</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2015

### 5.2.2 Enrolment in Pre-Primary Schools

The motive behind introducing pre-primary schools classes in government primary schools all over the country was to increase enrolment of children aged 5 and 6 years and enable them to read, write and count numbers before joining primary schools. Enrolment of pre-primary school pupils in Ngara District Council increased from 13,544 in 2011 to 16,156 pupils in 2013 reaching 16,570 in 2015 indicating an increase in enrolment in the Council. This is attributed to the increase in awareness of education among parents and accessibility of pre-primary schools.

**Table 5.21: Pre-Primary Schools Enrolment by Division, Ngara District Council; 2011, 2013 and 2015**

Division	2011			2013			2015		
	No. of Pupils	No. of Schools	School Pupils Ratio	No. of Pupils	No. of Schools	School Pupils Ratio	No. of Pupils	No. of Schools	School Pupils Ratio
Nyamiaga	5,853	37	158	6,749	36	187	7,174	36	199
Rulenge	3,144	37	85	3,703	37	100	3,973	37	107
Murusagamba	1,299	12	108	1,435	12	120	1,297	13	100
Kanazi	3,248	32	102	4,269	33	129	4,126	33	125
<b>Total</b>	<b>13,544</b>	<b>118</b>	<b>115</b>	<b>16,156</b>	<b>118</b>	<b>140</b>	<b>16,570</b>	<b>119</b>	<b>139</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017.

### 5.2.3 Primary Education

Education is a basic right of every Tanzanian child of school going age (7-13). To achieve this, the Government of Tanzania put in place the policy of Universal Primary Education (UPE) in 1974, making primary education compulsory to every child. The first task was to have enough number of primary schools which would be able to accommodate all school going age children in the Council.

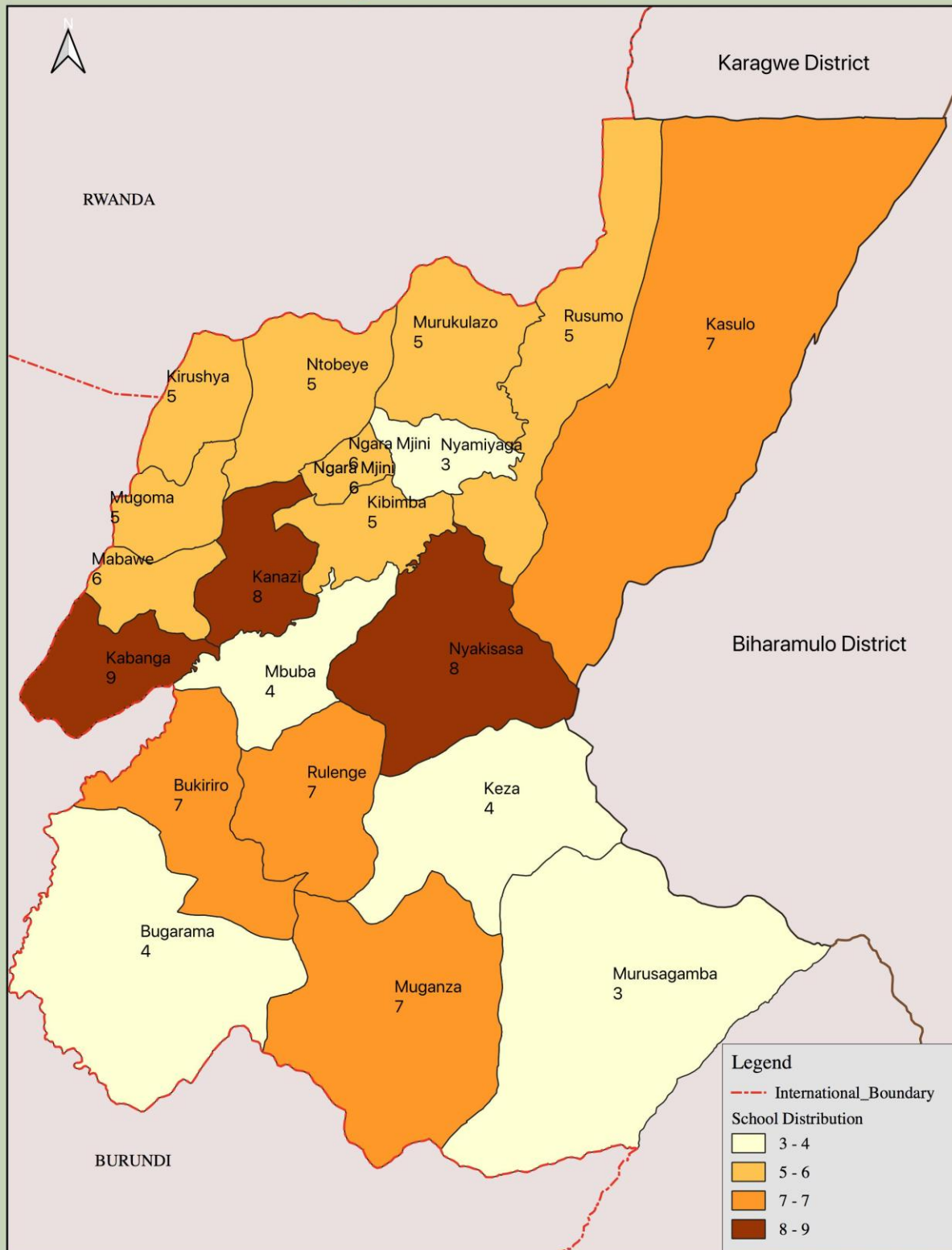
According to Table 5.23, all primary schools in the district council were publically owned with no private contribution in the provision of primary education. The number of primary schools in the district has increased from 115 in 2011 to 119 in 2015, but they were unevenly distributed within the Council. The table further shows that in 2015, Rulenge Division had the largest number of primary schools ( 37 schools, 31.1 percent) in Ngara district, followed by Nyamiaga Division ( 36 schools, 30.7 percent). Murusagamba Division had the smallest number of primary schools in the Council (Table 5.29).

**Table 5. 22: Number of Primary Schools by Division and Ownership, Ngara DC, 2011, 2013 and 2015**

Division	2011			2013			2015			Percent Share
	Public	Private	Total	Public	Private	Total	Public	Private	Total	
Nyamiaga	33	1	34	35	1	36	35	1	36	30.2
Rulenge	39	1	40	36	1	37	36	1	37	31.1
Murusagamba	13	0	13	13	0	13	13	0	13	10.9
Kanazi	30	2	32	31	2	33	31	2	33	27.7
<b>Total</b>	<b>115</b>	<b>4</b>	<b>119</b>	<b>115</b>	<b>4</b>	<b>119</b>	<b>115</b>	<b>4</b>	<b>119</b>	<b>100.0</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2015.

Map 6: Number of Primary school Private and Public by Ward, Ngara District Council;2015





### 5.2.4 Coverage of Primary School Education System

Ngara District Council has successfully complied with the Education Policy of having a primary school at each village or street. Table 5.24 shows that on average, each village in the Council had a primary school in 2015. At division level, observations show that each of the four divisions had at least one primary school per village in 2015. At ward level, availability of primary schools in the council ranged from 4 schools in Murusagamba to 7 schools in Kanazi (Table 5.24).

**Table 5. 23: Number of Primary Schools and Average Number of Schools per Ward/Village by Division, Ngara DC, 2015**

Division	No. of Wards	No. of Villages	No. of Schools	Average No. of Schools per Ward	Average No. of Schools per Village
Nyamiaga	7	21	36	5.1	1.7
Rulenge	7	19	37	5.3	1.9
Murusagamba	3	9	13	4.3	1.4
Kanazi	5	26	33	6.6	1.3
<b>Total</b>	<b>22</b>	<b>75</b>	<b>119</b>	<b>5.4</b>	<b>1.6</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017.

In 2015, Ngara District Council had only 115 public primary schools with the largest number of schools located in Kanazi and Nyakisasa ( 8 schools each) followed by Kabanga, Kasulo, Muganza and Bukiriro (7 schools each). Murusagamba, Nyamiaga and Kibogora wards had the smallest number (3 schools each) of public primary schools in the Council. Observation on the table further shows poor private sector participation in the provision of primary education in Ngara District Council. (Table 5.25).

**Table 5. 24: Number of Primary Schools by Ownership and Ward, Ngara District Council, 2011, 2013 and 2015**

Ward	2011			2013			2015			Percent Share
	Public	Private	Total	Public	Private	Total	Public	Private	Total	
Ngara	6	1	7	6	1	7	6	0	6	5.2
Mabawe	6	0	6	6	0	6	6	0	6	5.2
Kabanga	7	2	9	7	2	9	7	2	9	7.8
Murusagamba	6	0	6	6	0	6	3	0	3	2.6
Keza	4	0	4	4	0	4	4	0	4	3.4
Muganza	7	0	7	7	0	7	7	0	7	6.0
Kibimba	4	0	4	5	0	5	5	0	5	4.3
Kanazi	8	0	8	8	0	8	8	0	8	6.9
Kirushya	4	0	4	5	0	5	5	0	5	4.3
Mugoma	5	0	5	5	0	5	5	0	5	4.3
Bukiriro	7	0	7	7	0	7	7	0	7	6.0

Ward	2011			2013			2015			Percent Share
	Public	Private	Total	Public	Private	Total	Public	Private	Total	
Nyakisasa	8	0	8	8	0	8	8	0	8	6.9
Murukulazo	5	0	5	5	0	5	5	0	5	4.3
Nyamiaga	3	0	3	3	0	3	3	0	3	2.6
Ntobeye	5	0	5	5	0	5	5	0	5	4.3
Rusumo	4	0	4	4	0	4	4	1	5	4.3
Kasulo	6	0	6	7	0	7	7	0	7	6.0
Mbuba	4	0	4	4	0	4	4	0	4	3.4
Rulenge	6	1	7	6	1	7	6	1	7	6.0
Bugarama	7	0	7	7	0	7	4	0	4	3.4
Kibogora	3	0	3	3	0	3	3	0	3	2.6
<b>Total</b>	<b>115</b>	<b>4</b>	<b>119</b>	<b>118</b>	<b>4</b>	<b>122</b>	<b>112</b>	<b>4</b>	<b>116</b>	<b>100.0</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2015.

#### 5.2.4.1 Standard One Enrolment

Over the period of five years (2011 to 2015) Ngara District Council implemented successfully the call of the Government to increase enrolment in primary schools. Table 5.26 shows that, standard one enrolment in the district increased from 8,924 pupils in 2011 to 9,719 pupils in 2013, reaching 10,214 in 2015. This showed from 2011 to 2013 there was an overall increase in enrolment of 795 pupils, equivalent to 8.9 percent while from 2013 to 2015 enrolment increased by 495 pupils (5.1 percent increase). In total there was an increase of 1,290 standard one pupils, equivalent to 14.5 percent from 2011 to 2015 (Table 5.26). The table further shows that not all wards had an increased standard one enrolment. Eight out of 22 wards in the Council had a decline in Standard One enrolment with the largest decline been observed in Ngara Ward (42.4 percent), Mbuba Ward (23.5 percent) and Murusagamba Ward (17.5 percent).

**Table 5. 25: Standard I Enrolment in Public Primary Schools by Ward, Ngara District, 2011, 2013 and 2015**

Ward	Number of Pupils			Enrolment Change btn 2011 and 2013		Enrolment Change btn 2013 and 2015		Enrolment Change btn 2011 and 2015	
	2011	2013	2015	Number	Percent	Number	Percent	Number	Percent
Ngara	816	800	470	-16	-2.0	-330	-41.3	-346	-42.4
Mabawe	570	670	470	100	17.5	-200	-29.9	-100	-17.5
Kabanga	521	523	623	2	0.4	100	19.1	102	19.6
Murusagamba	496	518	439	22	4.4	-79	-15.3	-57	-11.5
Keza	241	275	282	34	14.1	7	2.5	41	17.0
Muganza	405	558	404	153	37.8	-154	-27.6	-1	-0.2
Kibimba	390	480	427	90	23.1	-53	-11.0	37	9.5
Kanazi	472	582	578	110	23.3	-4	-0.7	106	22.5
Kirushya	263	321	295	58	22.1	-26	-8.1	32	12.2

Ward	Number of Pupils			Enrolment Change btn 2011 and 2013		Enrolment Change btn 2013 and 2015		Enrolment Change btn 2011 and 2015	
	2011	2013	2015	Number	Percent	Number	Percent	Number	Percent
Mugoma	310	350	295	40	12.9	-55	-15.7	-15	-4.8
Bukiriro	550	780	1234	230	41.8	454	58.2	684	124.4
Nyakisasa	483	589	706	106	21.9	117	19.9	223	46.2
Murukulazo	365	365	390	0	0.0	25	6.8	25	6.8
Nyamiaga	220	302	250	82	37.3	-52	-17.2	30	13.6
Ntobeye	412	346	390	-66	-16.0	44	12.7	-22	-5.3
Rusumo	615	292	815	-323	-52.5	523	179.1	200	32.5
Kasulo	523	755	827	232	44.4	72	9.5	304	58.1
Mbuba	565	389	432	-176	-31.2	43	11.1	-133	-23.5
Rulenge	432	410	423	-22	-5.1	13	3.2	-9	-2.1
Bugarama	54	41	73	-13	-24.1	32	78.0	19	35.2
Kibogora	221	373	391	152	68.8	18	4.8	170	76.9
Nyamagoma	0	0	0	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>8,924</b>	<b>9,719</b>	<b>10,214</b>	<b>795</b>	<b>8.9</b>	<b>495</b>	<b>5.1</b>	<b>1,290</b>	<b>14.5</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

The enrolment into standard one, according to the Education Policy, though is for children aged seven years, it has been extended to also cover children of age 8 to 13 years to ensure that all children of school going age are enrolled in schools. Table 5.27 shows that the percentage of children enrolled in Standard One at the age of 7 years in the five years period (2011 - 2015) was 83.4 and 16.6 percent for those aged 8 to 10 years. In the 2011 – 2015 period, enrolment of children of age seven varies from 75.2 percent in 2014 to 89.1 percent in 2013, while for pupils aged 8 – 10 years enrolment ranged from 10.9 percent in 2013 to 24.8 percent in 2014. The achievement so far reached in Standard One enrolment at age seven years was the result of community participation in school committees and through MEMM and MEMKWA which motivate parents in the Council to enroll their children as per education policy instructions.

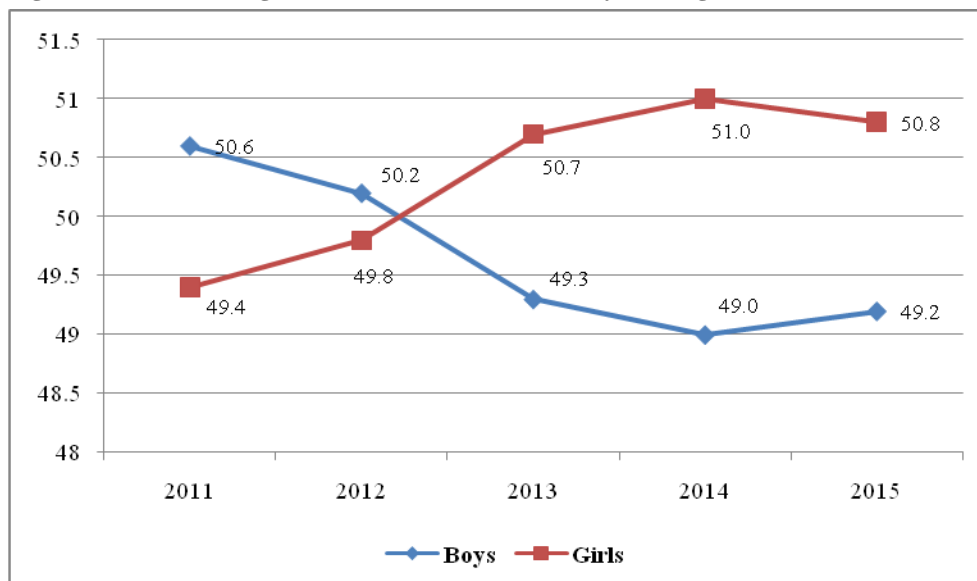
**Table 5. 26: Number and Percentage of Standard I Enrolment by Age Group, Ngara Council, 2011 - 2015**

Years	7		8 - 10		Total Enrolment	Enrolment Change	
	Number	Percent	Number	Percent		Number	Percent
2011	7,910	88.6	1,014	11.4	8,924		
2012	8,031	88.9	1,004	11.1	9,035	111	1.2
2013	8,662	89.1	1,057	10.9	9,719	684	7.6
2014	7,885	75.2	2,605	24.8	10,490	771	7.9
2015	7,848	76.8	2,366	23.2	10,214	-276	-2.6
<b>Total</b>	<b>40,336</b>	<b>83.4</b>	<b>8,046</b>	<b>16.6</b>	<b>48,382</b>	<b>1,290</b>	

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

Figure 5.4 shows that in 2011 – 2015 period, Ngara DC complied with the national objective of ensuring girls get equal opportunity as boys in Standard One enrolment. This is evident from the figure whereby 51.9 percent of girls were enrolled in 2011 against 48.1 percent of boys, where as in 2013, enrolment of girls was 49.7 percent against 50.3 percent of boys and in 2015, 56.8 percent of girls were enrolled against 43.2 percent of boys.

**Figure 5. 4: Percentages of Standard I Enrolment by Sex, Ngara District Council, 2011 – 2015**



Source: District Executive Director's Office (Education Department), Ngara DC, 2017

Over the period of 2011 to 2015, Ngara District Council managed to implement successfully the call of the Government to increase enrolment in primary schools. Table 5.28 indicate that enrolment in public primary schools increased from 62,864 pupils in 2011 to 66,692 pupils in 2013 reaching 67,717 pupils in 2015. In regard to sex differences, the Council complied with the national strategy of giving equal rights to both boys and girls in schooling as evidenced in the enrolment rates for girls and boys in all three referred years. Girls enrolment stood at 51.9 percent in 2011, 49.7 percent in 2013 and 56.8 percent in 2015 (Table 5.28).

At ward level, variations of enrolments across wards were recorded in 2011, 2013 and in 2015. In 2011, with exception of Keza and Murukulazo, the rest of wards had higher enrolment rates for girls than boys ranging from 50.1 percent in Kibogora Ward to 55.0 percent in Nyakisasa Ward. In 2013, 10 out of the 23 wards in the Council had lower enrolment rates for girls than that of boys, resulting in an overall lower enrolment rates for girls compared to that of boys. Muganza Ward (32.7 percent), Kibimba Ward (43.6 percent) and Ngara Ward (46.7 percent) had

the lower enrolment rates for girls in 2013. In 2015, number of wards that had lower girls enrolment rates than that of boys were 8 with Nyamiaga and Murukulazo wards having smallest rates of enrolment for girls (35.6 and 45.2 percent respectively) (Table 5.28).

**Table 5. 27: Total (STD I – VII) Enrolment of Public Primary Schools by Ward and Sex; Ngara District Council, 2011, 2013 and 2015**

Ward	2011			2013			2015		
	Boys	Percent Girls	Total	Boys	Percent Girls	Total	Boys	Percent Girls	Total
Ngara	2,046	52.4	4,300	3,377	46.7	6,339	1,902	56.0	4,323
Mabawe	1,592	51.2	3,261	1,753	53.2	3,743	1,448	56.0	3,292
Kabanga	1,675	50.6	3,388	1,448	51.5	2,986	1,702	50.4	3,428
Murusagamba	1,939	52.2	4,056	1,337	53.2	2,854	1,162	56.0	2,642
Keza	494	47.8	947	619	49.3	1,220	566	49.1	1,112
Muganza	1,629	51.3	3,344	2,691	32.7	3,996	1,485	56.0	3,375
Kibimba	1,595	51.2	3,267	2,259	43.6	4,002	1,451	56.0	3,298
Kanazi	2,228	52.6	4,705	1,796	58.0	4,272	2,084	56.0	4,736
Kirushya	948	52.6	2,002	975	52.7	2,063	868	51.6	1,794
Mugoma	1,299	50.7	2,635	1,668	48.4	3,230	1,187	56.0	2,698
Bukiriro	1,452	54.6	3,200	1,846	49.2	3,634	2,523	49.1	4,958
Nyakisasa	1,389	55.0	3,087	1,609	49.0	3,152	1,954	47.7	3,737
Murukulazo	1,815	48.0	3,490	1,805	48.9	3,530	1,205	45.2	2,200
Nyamiaga	2,086	52.5	4,391	946	50.0	1,892	1,771	35.6	2,752
Ntobeye	1,640	51.3	3,370	1,167	60.5	2,955	1,496	56.0	3,401
Rusumo	0	0.0	0	1,277	52.2	2,671	1,102	56.0	2,504
Kasulo	1,882	51.2	3,853	2,228	50.5	4,497	1,996	49.9	3,987
Mbuba	894	50.7	1,815	1,260	50.1	2,526	381	53.0	811
Rulenge	2,819	53.5	6,056	1,619	53.2	3,458	1,444	49.9	2,882
Bugarama	184	53.7	397	159	49.4	314	145	52.0	302
Kibogora	649	50.1	1,300	754	50.4	1,520	599	48.8	1,170
Nyamagoma	0	0.0	0	951	48.3	1,838	776	56.0	1,764
<b>Total</b>	<b>30,252</b>	<b>51.9</b>	<b>62,864</b>	<b>33,544</b>	<b>49.7</b>	<b>66,692</b>	<b>29,247</b>	<b>56.8</b>	<b>67,717</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

#### 5.2.4.2 Completion Rate of Primary School

The completion rate is an indicator of the efficiency of the school system that shows the extent to which a legion of pupils admitted in class one completes the primary education cycle irrespective of whether they sit for the final examination or not.

Table 5.29 shows the performance of two cohorts of pupils in primary schools in Ngara DC. Observations on the table show that the average completion rate for the 2008 - 2014 cohort was

46.9 percent (42.3 percent boys and 51.8 percent girls). This cohort was enrolled in 2008 and finished in 2014. The average completion for the 2009 - 2015 cohort was 64.4 percent (64.1 percent boys and 64.7 percent girls) and this cohort was enrolled in 2009 and finished in 2015. In regard to sex differences, both sexes had improved in the retention of pupils with greater improvement in retention been among boys than girls, whereby the completion rate for boys increased from 42.3 percent in the 2008 – 2014 cohort to 64.1 percent in 2009 – 2015 cohort, while the girls' retention improved from 51.8 percent in the 2008 – 2014 cohort to 64.7 percent in the 2009 – 2015 cohort.

**Table 5. 28: Number of Pupils Enrolled in STD I in 2008 and Completed STD VII in 2014 and those Enrolled in 2009 and Completed STD VII in 2015, Ngara DC**

Sex	2008 to 2014			2009 to 2015		
	Enrolled in 2008	Completed in 2014	Completion Rate	Enrolled in 2009	Completed in 2015	Completion Rate
Boys	4,022	1,700	42.3	2,895	1,857	64.1
Girls	3,711	1,923	51.8	3,020	1,954	64.7
<b>Both Sexes</b>	<b>7,733</b>	<b>3,623</b>	<b>46.9</b>	5,915	3,811	64.4

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

At ward level, there were significant differences in the percentages of boys and girls who were enrolled in primary schools in 2008 and completed primary education in 2014 in Ngara DC. Kasulo Ward had the highest completion rate of 92.9 percent (91.6 for boys and 94.3 percent for girls), followed by Murukulazo Ward with 77.1 percent (81.5 for boys and 71.4 for girls) and Bugarama with 73.7 percent (66.2 percent for boys and 82.8 for girls). The smallest completion rates for the 2008 – 2014 cohort were recorded in Murusagamba (23.6 percent) and Bukiriro (27.8 percent) wards. It is important to note that all wards, except Kasulo, Murukulazo, Bugarama, Ngara and Kabanga, had completion rates of less than 50.0 percent (Table 5.30).

**Table 5. 29: Number of Pupils Enrolled in STD I in 2008 and Completed STD VII in 2014 by Ward and Sex, Ngara DC**

Ward	Enrolled 2008			Completed 2014			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bugarama	260	215	475	172	178	350	66.2	82.8	73.7
Bukiriro	345	274	619	74	98	172	21.4	35.8	27.8
Kabanga	232	244	476	151	151	302	65.1	61.9	63.4
Kanazi	379	213	592	104	124	228	27.4	58.2	38.5
Kasulo	143	140	283	131	132	263	91.6	94.3	92.9
Keza	81	81	162	33	33	66	40.7	40.7	40.7
Kibimba	143	126	269	59	71	130	41.3	56.3	48.3
Kirushya	124	122	246	43	64	107	34.7	52.5	43.5

Ward	Enrolled 2008			Completed 2014			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Mabawe	247	273	520	77	87	164	31.2	31.9	31.5
Mbuba	100	100	200	42	55	97	42.0	55.0	48.5
Muganza	259	188	447	71	80	151	27.4	42.6	33.8
Mugoma	205	173	378	75	86	161	36.6	49.7	42.6
Murukulazo	135	105	240	110	75	185	81.5	71.4	77.1
Murusagamba	198	184	382	46	44	90	23.2	23.9	23.6
Ngara Town	281	290	571	158	227	385	56.2	78.3	67.4
Ntobeye	167	223	390	63	72	135	37.7	32.3	34.6
Nyakisasa	178	178	356	73	101	174	41.0	56.7	48.9
Nyamiaga	138	127	265	68	58	126	49.3	45.7	47.5
Rulenge	251	278	529	94	116	210	37.5	41.7	39.7
Rusumo	156	177	333	56	71	127	35.9	40.1	38.1
Kibogora	0	0	0	0	0	0	0.0	0.0	0.0
Nyamagoma	0	0	0	0	0	0	0.0	0.0	0.0
<b>Total</b>	<b>4,022</b>	<b>3,711</b>	<b>7,733</b>	<b>1,700</b>	<b>1,923</b>	<b>3,623</b>	<b>42.3</b>	<b>51.8</b>	<b>46.9</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

Primary schools completion rate was higher in 2015 (3,811 pupils, 64.4 percent) than it was in 2014 (3,623 pupils, 46.9 percent). As was the case with the 2008 – 2014 cohort, the performance of girls in the 2009 – 2015 cohort was slightly better (64.7 percent) than that of boys (64.1 percent) At ward level, except for Kirushya, Mursagamba, Murukulazo, Keza and Nyakisasa, all the other wards had completion rates of above 50 percent with the highest rates in the council been recorded in Bugrama (94.0 percent), Kasulo (92.6 percent) and Bukiriro (80.8 percent) (Table 5.31).

**Table 5. 30: Number of Pupils Enrolled in STD I in 2009 and Completed STD VII in 2015 by Ward and Sex, Ngara DC**

Ward	Enrolled 2009			Completed 2015			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bugarama	220	231	451	210	214	424	95.5	92.6	94.0
Bukiriro	201	158	359	169	121	290	84.1	76.6	80.8
Kabanga	224	241	465	126	161	287	56.3	66.8	61.7
Kanazi	168	180	348	101	106	207	60.1	58.9	59.5
Kasulo	165	147	312	153	136	289	92.7	92.5	92.6
Keza	89	78	167	41	37	78	46.1	47.4	46.7
Kibimba	107	98	205	66	57	123	61.7	58.2	60.0
Kirushya	104	124	228	50	56	106	48.1	45.2	46.5
Mabawe	118	146	264	75	94	169	63.6	64.4	64.0
Mbuba	117	118	235	54	68	122	46.2	57.6	51.9

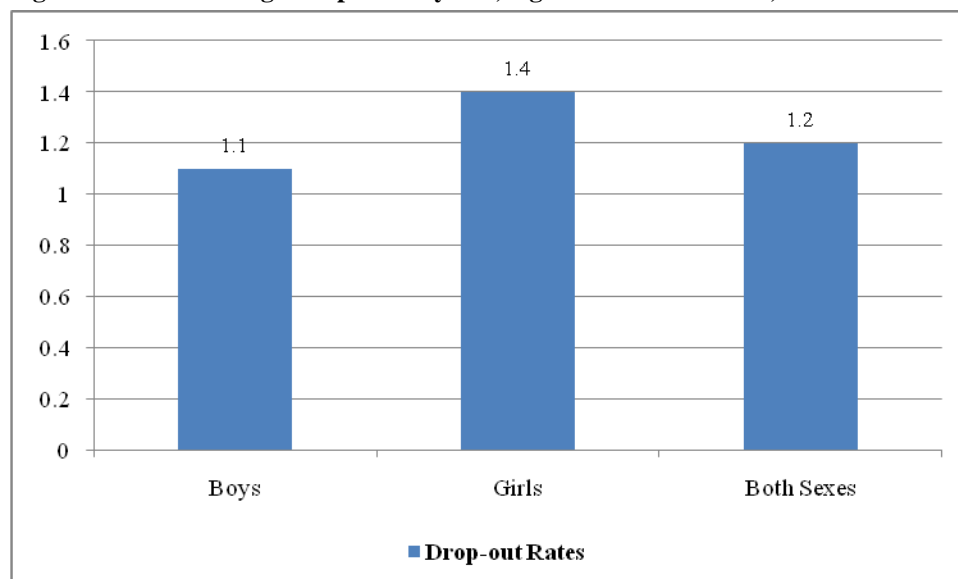
Ward	Enrolled 2009			Completed 2015			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Muganza	127	133	260	71	65	136	55.9	48.9	52.3
Mugoma	174	171	345	78	95	173	44.8	55.6	50.1
Murukulazo	100	115	215	50	50	100	50.0	43.5	46.5
Murusagamba	75	84	159	33	41	74	44.0	48.8	46.5
Ngara Town	263	293	556	192	218	410	73.0	74.4	73.7
Ntobeye	115	106	221	69	55	124	60.0	51.9	56.1
Nyakisasa	167	174	341	79	91	170	47.3	52.3	49.9
Nyamiaga	90	107	197	63	77	140	70.0	72.0	71.1
Rulenge	181	181	362	118	115	233	65.2	63.5	64.4
Rusumo	90	135	225	59	97	156	65.6	71.9	69.3
Kibogora	0	0	0	0	0	0	0.0	0.0	0.0
Nyamagoma	0	0	0	0	0	0	0.0	0.0	0.0
<b>Total</b>	<b>2,895</b>	<b>3,020</b>	<b>5,915</b>	<b>1,857</b>	<b>1,954</b>	<b>3,811</b>	<b>64.1</b>	<b>64.7</b>	<b>64.4</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

### 5.2.4.3 Drop- out Rate in Primary Schools

Figure 5.5 portrays the primary school pupil's dropout situation in 2015 in Ngara DC. Observation on the figure shows that girls were more likely (1.4 percent) to drop out of school than boys (1.2 percent).

**Figure 5. 5: Percentage Drop Outs by Sex; Ngara District Council; 2014 and 2015**



Source: District Executive Director's Office (Education Department), Ngara DC, 2017.

Table 5.32 shows the out of the 69,742 pupils enrolled into primary school education in Ngara DC in early 2015, 863 pupils (1.2 percent) failed to complete Standard Seven due to truancy and



death. The table further shows that 99.4 percent of dropouts in 2015 was caused by truancy and only 0.6 percent was caused by deaths of pupils. In regard to sex differences, Observations on the table show that girls were the more affected (59.4 percent) than boys (40.6 percent). This implies that, dropout due to truancy was a serious problem in the Council and therefore appropriate measures should be taken by the District authority to reduce, if not finish the truancy challenge in primary schools.

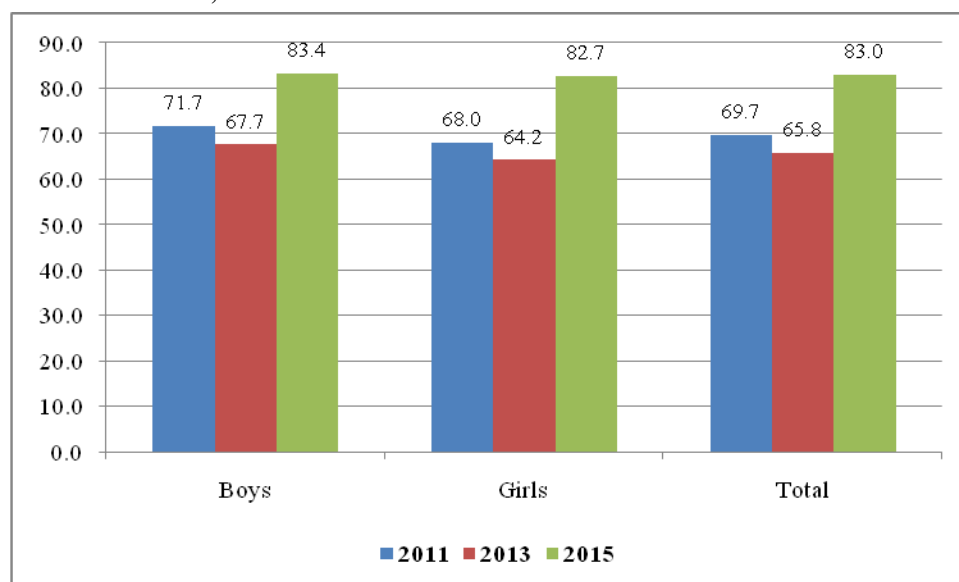
**Table 5. 31: Primary School Drop Outs by Reasons and by Sex, Ngara District Council, 2015**

Reason	Boys		Girls		Both Sexes	
	Number	Percent	Number	Percent	Number	Percent
Truancy	347	40.4	511	59.6	858	99.4
Pregnancy			0	0.0	0	0.0
Death	3	60.0	2	40.0	5	0.6
Other	0	0.0	0	0.0	0	0.0
Total dropouts	<b>350</b>	<b>40.6</b>	<b>513</b>	<b>59.4</b>	<b>863</b>	<b>100.0</b>
Total Enrolment	<b>32,984</b>	<b>1.1</b>	<b>36,758</b>	<b>1.4</b>	<b>69,742</b>	<b>1.2</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

### Rate in Primary schools

Pass rate in primary schools is the percentage of pupils who pass Standard Seven examinations out of the total pupils who sat for the examinations. Figure 5.6 shows that pass rates for Standard Seven pupils had almost remained the same in 2011, 2013 and 2015. Figure 5.6 shows that pass rate decreased from 69.7 percent in 2011 to 65.8 percent in 2013 before increasing to 83.0 percent in 2015. In regard to sex differences, the figure shows that boy's performance was higher than that of girls in all three years. One general observation from these data is that girls had lower pass rates than boys in all three years. Lower pass rates for girls are probably associated with the tendency of girls spending most of their time doing house chores rather than engaging more in self studying.

**Figure 5. 6: Pass rates of Pupils Who Sat for STD VII Examinations by Sex, Ngara DC, 2011, 2013 and 2015**

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

At ward level, in 2011, Ngara Town had the highest pass rate (95.8 percent) in the Council, followed by Mabawe (93.5 percent), Mugoma (84.2 percent), Kanazi (83.1 percent) and Rusumo (83.0 percent). The lowest pass rate was recorded at Mbuba Ward (31.9 percent), followed by Bukiriro Ward (44.4 percent) and Kirushya Ward (52.1 percent). In regard to sex differences, observations show that boys had higher pass rate (71.7 percent) than girls (68.0 percent) with Mbuba Ward recording the lowest pass rate for girls (18.9 percent), followed by Bukiriro (45.0 percent), and Murusagamba (48.3 percent). Bukiriro and Mbuba wards also recorded the lowest pass rates for boys in the Council (43.9 and 47.4 percent respectively)

**Table 5. 32: Number of Pupils Who Sat and Passed STD VII Examinations, Ngara DC, 2011**

Ward	Pupils sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percent Passed STD VII Examinations		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bugarama	266	294	560	188	173	361	70.7	58.8	64.5
Bukiriro	123	111	234	54	50	104	43.9	45.0	44.4
Kabanga	128	157	285	96	121	217	75.0	77.1	76.1
Kanazi	143	165	308	114	142	256	79.7	86.1	83.1
Kasulo	137	167	304	94	89	183	68.6	53.3	60.2
Keza	208	124	332	128	68	196	61.5	54.8	59.0
Kibimba	60	63	123	40	37	77	66.7	58.7	62.6
Kirushya	80	85	165	44	42	86	55.0	49.4	52.1
Mabawe	110	135	245	101	128	229	91.8	94.8	93.5
Mbuba	76	90	166	36	17	53	47.4	18.9	31.9

Ward	Pupils sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percent Passed STD VII Examinations		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Muganza	81	107	188	58	81	139	71.6	75.7	73.9
Mugoma	97	112	209	73	103	176	75.3	92.0	84.2
Murukulazo	120	140	260	100	80	180	83.3	57.1	69.2
Murusagamba	70	87	157	58	42	100	82.9	48.3	63.7
Ngara Town	183	225	408	175	216	391	95.6	96.0	95.8
Ntobeye	101	106	207	54	68	122	53.5	64.2	58.9
Nyakisasa	111	147	258	60	81	141	54.1	55.1	54.7
Nyamiaga	47	84	131	30	73	103	63.8	86.9	78.6
Rulenge	148	168	316	123	128	251	83.1	76.2	79.4
Rusumo	73	92	165	67	70	137	91.8	76.1	83.0
Kibogora	0	0	0	0	0	0	0.0	0.0	0.0
Nyamagoma	0	0	0	0	0	0	0.0	0.0	0.0
<b>Total</b>	<b>2,362</b>	<b>2,659</b>	<b>5,021</b>	<b>1,693</b>	<b>1,809</b>	<b>3,502</b>	<b>71.7</b>	<b>68.0</b>	<b>69.7</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

Table 5.34 presents the performance of primary schools examination in Ngara DC in 2013. The overall performance in Standard Seven examinations for 2013 was relatively lower than that of 2011. The table shows that, Ngara Town had the highest pass rate in the Council (98.2 percent), followed by Mabawe (89.3 percent) and Kabanga (85.5 percent). On the other hand, Murusagamba Ward recorded the lowest pass rate (38.8 percent), followed by Mbuba (40.3 percent) and Bukiriro (40.7 percent). Again, the boys' performance was higher (67.7 percent) than that of girls 64.2 percent. These observations indicate the need of launching a massive campaign on raising public awareness on the importance of educating for girls in the Council in order to improve their performances.

**Table 5. 33: Number of Pupils Who Sat and Passed STD VII Examinations, Ngara District Council, 2013**

Ward	Pupils sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percent of Pupils Passed STD VII Examinations		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bugarama	13	19	32	13	4	17	100.0	21.1	53.1
Bukiriro	93	89	182	43	31	74	46.2	34.8	40.7
Kabanga	87	113	200	78	93	171	89.7	82.3	85.5
Kanazi	132	163	295	89	112	201	67.4	68.7	68.1
Kasulo	180	164	344	95	80	175	52.8	48.8	50.9
Keza	40	34	74	22	23	45	55.0	67.6	60.8
Kibimba	39	61	100	19	25	44	48.7	41.0	44.0
Kirushya	56	83	139	37	41	78	66.1	49.4	56.1
Mabawe	95	111	206	84	100	184	88.4	90.1	89.3
Mbuba	62	77	139	28	28	56	45.2	36.4	40.3

Ward	Pupils sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percent of Pupils Passed STD VII Examinations		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Muganza	91	84	175	69	45	114	75.8	53.6	65.1
Mugoma	115	96	211	59	81	140	51.3	84.4	66.4
Murukulazo	140	180	320	88	120	208	62.9	66.7	65.0
Murusagamba	82	106	188	42	31	73	51.2	29.2	38.8
Ngara Town	133	192	325	131	188	319	98.5	97.9	98.2
Ntobeye	89	83	172	58	41	99	65.2	49.4	57.6
Nyakisasa	113	116	229	79	75	154	69.9	64.7	67.2
Nyamiaga	39	83	122	27	64	91	69.2	77.1	74.6
Rulenge	101	115	216	86	88	174	85.1	76.5	80.6
Rusumo	51	79	130	38	45	83	74.5	57.0	63.8
Kibogora	0	0	0	0	0	0	0.0	0.0	0.0
Nyamagoma	0	0	0	0	0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,751</b>	<b>2,048</b>	<b>3,799</b>	<b>1,185</b>	<b>1,315</b>	<b>2500</b>	<b>67.7</b>	<b>64.2</b>	<b>65.8</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

Table 5.35 shows the overall pass rate for Standard Seven pupils in Ngara DC in 2015. It also shows that the pass rate for boys (83.4 percent) was slightly higher than that of girls (82.7 percent). In 2015, Bukiriro Ward had the lowest pass rate (39.9 percent) in the Council. It was the only ward with a pass rate of less than 50 percent in 2015. There is therefore a need for all primary school education stakeholders (i.e parents, council authorities, politicians, Education Officers, primary school teachers etc) to come up with a strategy that will help in improving the performance of the ward in future.

**Table 5. 34: Number of Pupils Who Sat and Passed STD VII Examinations, Ngara District Council, 2015**

Ward	Pupils sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percent of Pupils Passed STD VII Examinations		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bugarama	128	144	272	121	139	260	94.5	96.5	95.6
Bukiriro	69	84	153	33	28	61	47.8	33.3	39.9
Kabanga	96	105	201	83	103	186	86.5	98.1	92.5
Kanazi	101	106	207	76	79	155	75.2	74.5	74.9
Kasulo	117	130	247	70	70	140	59.8	53.8	56.7
Keza	41	37	78	30	19	49	73.2	51.4	62.8
Kibimba	35	42	77	32	24	56	91.4	57.1	72.7
Kirushya	49	56	105	42	33	75	85.7	58.9	71.4
Mabawe	75	94	169	70	93	163	93.3	98.9	96.4
Mbuba	32	23	55	28	18	46	87.5	78.3	83.6
Muganza	71	65	136	69	60	129	97.2	92.3	94.9
Mugoma	102	86	188	79	85	164	77.5	98.8	87.2

Ward	Pupils sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percent of Pupils Passed STD VII Examinations		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Murukulazo	72	88	160	68	83	151	94.4	94.3	94.4
Murusagamba	33	41	74	27	35	62	81.8	85.4	83.8
Ngara Town	192	218	410	189	216	405	98.4	99.1	98.8
Ntobeye	69	55	124	54	34	88	78.3	61.8	71.0
Nyakisasa	83	99	182	72	85	157	86.7	85.9	86.3
Nyamiaga	63	77	140	40	62	102	63.5	80.5	72.9
Rulenge	118	115	233	103	100	203	87.3	87.0	87.1
Rusumo	59	97	156	52	92	144	88.1	94.8	92.3
Kibogora	0	0	0	0	0	0	0.0	0.0	0.0
Nyamagoma	0	0	0	0	0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,605</b>	<b>1,762</b>	<b>3,367</b>	<b>1,338</b>	<b>1,458</b>	<b>2,796</b>	<b>83.4</b>	<b>82.7</b>	<b>83.0</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

Table 5.36 shows the extent to which the Ngara DC was able to provide secondary education to all pupils who passed Standard VII examinations. It also reflects the available capacity of Council in providing secondary education to the pupils who passed the standard VII examinations. In a period of three years, 2011, 2013 and 2015, a total of 8,561 pupils in Ngara DC were selected to join Form One, out of which 8,288 pupils (96.8 percent) joined form one. Of those who joined Form One 3,937 pupils (47.5 percent) were boys and 4,351 pupils were (52.5 percent) were girls. The percentage of pupils who joined Form One increased from 95.5 percent in 2011 to 95.9 percent in 2013, reaching to 99.3 percent in 2015. One important observation from these data is the number of pupils that joined form one which was less than the number of selected pupils. Among factors that contributed to this is income poverty whereby parents/guardians forced selected pupils to participate in income generating activities in order to raise income for their families, while few others joined private secondary schools.

**Table 5. 35: Number of Pupils Selected and Those Who Joined Form I in Public Secondary Schools by Sex, Ngara DC, 2011, 2013 and 2015**

Years	Pupils Selected to Join Form I			Pupils Joined Form I			Percent of Pupils Joined Form I		
	Boys	Girls	Both Sexes	Boys	Girls	Both Sexes	Boys	Girls	Both Sexes
2011	1,487	1,667	3,154	1427	1584	3,011	96.0	95.0	95.5
2013	1288	1427	2,715	1234	1371	2,605	95.8	96.1	95.9
2015	1,287	1,405	2,692	1,276	1396	2,672	99.1	99.4	99.3
<b>Total</b>	<b>4,062</b>	<b>4,499</b>	<b>8,561</b>	<b>3,937</b>	<b>4,351</b>	<b>8,288</b>	<b>96.9</b>	<b>96.7</b>	<b>96.8</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

At ward level, with exception of Bukiriro, Kabanga, Kasulo, Kirusya, Mugoma, Murukurazo and Nyakisasa wards, all other wards successfully managed to accommodate all pupils who were selected to join Form One in 2011, 2013 and 2015. Bukiriro Ward had the lowest percentage of selected pupils who joined Form One in 2011 (75.9 percent) in 2013 (72.5 percent) and in 2015 (64.9 percent). Initiatives are however needed to ensure that all pupils selected to join Form One are accommodated so as to raise the percentage of pupils joining Form One in Bukiriro Ward.

**Table 5. 36: Number of Pupils Who Were Selected and Joined Form I in Public Secondary Schools by Ward, Ngara DC, 2011, 2013 and 2015**

Ward	Selected to Join Form I			Pupils Joined Form I			Percent Joined Form I		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Bugarama	22	17	24	22	17	24	100.0	100.0	100.0
Bukiriro	137	102	94	104	74	61	75.9	72.5	64.9
Kabanga	544	456	472	473	407	424	86.9	89.3	89.8
Kanazi	256	201	155	256	201	155	100.0	100.0	100.0
Kasulo	315	364	406	300	346	395	95.2	95.1	97.3
Keza	64	45	49	64	45	49	100.0	100.0	100.0
Kibimba	135	117	112	135	117	112	100.0	100.0	100.0
Kirushya	184	192	224	170	180	212	92.4	93.8	94.6
Mabawe	229	184	163	229	184	163	100.0	100.0	100.0
Mbuba	65	90	92	65	90	92	100.0	100.0	100.0
Muganza	139	114	129	139	114	129	100.0	100.0	100.0
Mugoma	168	175	151	157	149	139	93.5	85.1	92.1
Murukulazo	180	208	151	176	198	143	97.8	95.2	94.7
Murusagamba	100	73	62	100	73	62	100.0	100.0	100.0
Ngara Town	391	319	405	391	319	405	100.0	100.0	100.0
Ntobeye	122	99	88	122	99	88	100.0	100.0	100.0
Nyakisasa	211	233	188	129	153	160	61.1	65.7	85.1
Nyamiaga	103	91	102	103	91	102	100.0	100.0	100.0
Rulenge	251	174	203	251	174	203	100.0	100.0	100.0
Rusumo	137	83	144	137	83	144	100.0	100.0	100.0
Nyamagoma	0	0	0	0	0	0	0.0	0.0	0.0
Kibogora	0	0	0	0	0	0	0.0	0.0	0.0
<b>Total</b>	<b>3,753</b>	<b>3,337</b>	<b>3,414</b>	<b>3,523</b>	<b>3,114</b>	<b>3,262</b>	<b>93.9</b>	<b>93.3</b>	<b>95.5</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

#### 5.2.4.5 Transition to Secondary Education

Transition rate refers to the percentage of pupils who graduated primary education and joined secondary education. It also reflects the available capacity of secondary education provided in the Council. In 2011, 2013 and 2015, out of 11,156 pupils who completed primary education, 8,288 (80.1 percent) joined public secondary schools. The transition rate decreased from 71.0

percent in 2011 to 68.6 percent in 2013 before increasing to 85.7 percent in 2015. In regard to sex differences, observations show that, the transition rate was higher for boys (76.0 percent) than for girls (72.8 percent).

**Table 5.37: Number of Pupils Who Completed Primary Education and Joined Secondary Education in Public Secondary Schools by Sex, Ngara, 2011, 2013 and 2015**

Years	Pupils Who Completed Primary Education			Pupils Who Joined Secondary Education			Transition Rates		
	Boys	Girls	Both Sex	Boys	Girls	Both Sex	Boys	Girls	Both Sex
2011	1,940	2,298	4,238	1,427	1,584	3,011	73.5	68.9	71.0
2013	1,751	2,048	3,799	1,234	1,371	2,605	70.5	66.9	68.6
2015	1,487	1,632	3,119	1,276	1,396	2,672	85.8	85.5	85.7
<b>Cumulative Total</b>	<b>5,178</b>	<b>5,978</b>	<b>11,156</b>	<b>3,939</b>	<b>4,351</b>	<b>8,288</b>	<b>76.0</b>	<b>72.8</b>	<b>74.3</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

## 5.2.5 Primary schools Facilities

A teacher may be a single most important factor in the development of primary education, but after the teacher, primary school facilities are the next most important factor. School facilities include classrooms, toilet facilities, teachers' houses, desks, teachers' offices, and school furniture and water sources.

### (i) Classrooms

According to the education Policy, each classroom in primary or secondary schools should accommodate a maximum of 45 pupils/students. A classroom to accommodate more than 45 pupils is an indication of a shortage of classrooms in a school.

Table 5.39 shows that in 2015 Ngara DC had inadequate classrooms since all wards failed to meet the recommended pupils classroom ratio of one classroom per 45 pupils (CPR 1:45). Observation on the table shows that council had 931 classrooms used by 64,779 pupils which gives a classroom pupils ratio of 70 (CPR 1:70) which is above the recommended standard of CPR 1:45. As a result, the Council had a shortage of 150 classrooms (35.4 percent) in primary schools in 2015.

At ward level, Mbuba ward had the largest percentage of classroom shortage (68.7 percent) in the council, followed by Murukulazo (63.6 percent) and Kasulo (59.1 percent). There is a need to

improve learning environment in primary schools by increasing the number of classrooms in order to accommodate pupils based on recommended standard.

**Table 5. 38: Availability of Classrooms in Public Primary Schools by Ward, Ngara District, 2015.**

Ward	No. of Schools	Total Pupils	Available Classrooms	Classroom Pupils Ratio	Required Classrooms	Deficit of Classrooms	
						No.	Percent
Ngara	6	4,323	79	55	96	17	17.7
Mabawe	6	3,292	70	47	73	3	4.1
Kabanga	7	3,741	56	67	83	27	32.5
Murusagamba	3	2,642	52	51	59	7	11.9
Keza	4	1,481	27	54	35	8	22.9
Muganza	7	3,375	41	82	75	34	45.3
Kibimba	5	3,298	56	59	73	17	23.3
Kanazi	8	4,736	75	63	105	30	28.6
Kirushya	5	1,794	38	47	40	2	5.0
Mugoma	5	2,700	39	65	57	18	31.6
Bukiriro	7	4,955	88	56	110	22	20.0
Nyakisasa	8	3,375	54	72	86	32	37.2
Murukulazo	5	2,960	24	123	66	42	63.6
Nyamiaga	3	1,752	25	70	39	14	35.9
Ntobeye	5	3,401	35	97	76	41	53.9
Rusumo	4	2,504	28	89	56	28	50.0
Kasulo	7	3,952	36	110	88	52	59.1
Mbuba	4	3,019	21	144	67	46	68.7
Rulenge	6	3,282	42	78	73	31	42.5
Bugarama	4	485	6	81	11	5	45.5
Kibogora	3	1,526	22	69	34	12	35.3
Nyamagoma	3	1,764	17	104	39	22	56.4
<b>Total</b>	<b>112</b>	<b>64,779</b>	<b>931</b>	<b>70</b>	<b>1,441</b>	<b>510</b>	<b>35.4</b>

*District Executive Director's Office (Education Department), Ngara DC, 2017*

## (ii) Pit Latrine

Table 4.40 shows that all primary schools in Ngara District Council had 476 pit-latrine for boys and 491 for girls in 2015. Basing on the standard set by the Government of Tanzania, the standard pupils' pit-latrine ratio is a hole per 20 girls and a hole per 25 boys. The table indicates that there was a serious shortage of pit-latrine in primary schools in Ngara DC in 2015 as one pit-latrine was been used by 130 boys and 132 girls' pupils respectively.

At ward level, Table 5.40 shows that, Nyamiaga Ward had the largest shortage of pit latrines in 2015 one pit-latrine was been used by 148 boys and 70 girls. It was followed by Kobogora with



an HPR of 1:78 for boys and 1:68 for girls and Rusumo with an HPR of 1:65 for boys and 1:82 for girls. Keza Ward with an HPR of 1:27 for boys and HPR of 1:23 for girls had the smallest shortage of pit latrines. The Council should continue advocating for community participation in construction of more toilets in order to achieve the national ratios of one Pit-latrine per 20 girls or 25 boys in order to protect the pupils from communicable diseases such as UTI, diarrhoea and cholera.

**Table 5. 39: Availability of Pit Latrine in Public Primary Schools by Ward, Ngara Council, 2015**

Ward	Total Pupils		Available Pit Latrine		Hole Pupils Ratio (HPR)		Required Pit Latrines		Deficit of Latrine	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Ngara	1,902	2,421	31	37	61	65	76	121	45	84
Mabawe	1,448	1,844	22	24	66	77	58	92	36	68
Kabanga	1,817	1,924	56	52	32	37	73	96	17	44
Murusagamba	1,162	1,480	18	19	65	78	46	74	28	55
Keza	744	737	28	32	27	23	30	37	2	5
Muganza	1,485	1,890	23	24	65	79	59	95	36	71
Kibimba	1,451	1,847	23	23	63	80	58	92	35	69
Kanazi	2,084	2,652	33	36	63	74	83	133	50	97
Kirushya	868	926	20	20	43	46	35	46	15	26
Mugoma	1,265	1,435	23	21	55	68	51	72	28	51
Bukiriro	2,523	2,432	60	75	42	32	101	122	41	47
Nyakisasa	1,485	1,890	23	24	65	79	59	95	36	71
Murukulazo	1,468	1,492	25	25	59	60	59	75	34	50
Nyamiaga	1,771	981	12	14	148	70	71	49	59	35
Ntobeye	1,496	1,905	23	24	65	79	60	95	37	71
Rusumo	1,102	1,402	17	17	65	82	44	70	27	53
Kasulo	1,892	2,060	25	33	76	62	76	103	51	70
Mbuba	295	302	10	10	30	30	12	15	2	5
Rulenge	1,444	1,838	22	23	66	80	58	92	36	69
Bugarama	1,468	1,492	25	25	59	60	59	75	34	50
Kibogora	781	745	10	11	78	68	31	37	21	26
Nyamagoma	776	988	14	12	55	82	31	49	17	37
<b>Total</b>	<b>29,795</b>	<b>37,922</b>	<b>543</b>	<b>581</b>	<b>63</b>	<b>77</b>	<b>1,230</b>	<b>1,735</b>	<b>687</b>	<b>1,154</b>

*District Executive Director's Office (Education Department), Ngara DC, 2017*

### (iii) Teachers Houses

Provision of staff quarters, among other teaching incentive, is very crucial as it facilitates the retention of teachers and also promotes teaching morale. Table 5.41 shows that in 2015 Ngara DC had a total of 253 teachers' houses for the 1,652 teachers located in all wards in the Council. According to national standard, the recommended House Teacher Ratio (HTR) is of 1:1. In 2015 the Council had a HTR of 1:7 implying a shortage of 1,399 houses, equivalent to 84.7 percent.

Table 5.41 also shows that no ward which had achieved the national standard of house teacher ratio of one house per one teacher (HTR 1:1). All wards had a critical shortage of houses ranging from a 75.8 percent deficit in Mugoma Ward to 90.4 percent deficit in Mabawe Ward.

**Table 5. 40: Requirement of Teachers Houses in Primary Schools, Ngara DC, 2015**

Ward	No. of Available Teachers	Available Houses	Average Teachers per House	Required Houses	Deficit of Houses	
					No.	Percent
Ngara	154	17	9	154	137	89.0
Mabawe	198	19	10	198	179	90.4
Kabanga	84	14	6	84	70	83.3
Murusagamba	45	10	5	45	35	77.8
Keza	43	6	7	43	37	86.0
Muganza	198	20	10	198	178	89.9
Kibimba	53	9	6	53	44	83.0
Kanazi	142	21	7	142	121	85.2
Kirushya	43	9	5	43	34	79.1
Mugoma	62	15	4	62	47	75.8
Bukiriro	99	14	7	99	85	85.9
Nyakisasa	55	9	6	55	46	83.6
Murukulazo	54	13	4	54	41	75.9
Nyamiaga	41	8	5	41	33	80.5
Ntobeye	53	9	6	53	44	83.0
Rusumo	81	11	7	81	70	86.4
Kasulo	69	12	6	69	57	82.6
Mbuba	34	6	6	34	28	82.4
Rulenge	53	12	4	53	41	77.4
Bugarama	12	2	6	12	10	83.3
Kibogora	36	7	5	36	29	80.6
Nyamagoma	43	10	4	43	33	76.7
<b>Total</b>	<b>1,652</b>	<b>253</b>	<b>7</b>	<b>1,652</b>	<b>1,399</b>	<b>84.7</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

#### (iv) Furniture (Desks)

The average number of pupils per desk is an important indicator of the provision of favourable and conducive learning environment for pupils. For the 67,717 pupils registered in 2015, Ngara DC needed 21,584 desks so as to comply with the official Desk Pupils Ratio of 1:3. The Council, therefore, had deficit of 5,959, equivalent to 27.6 percent based on the total enrolment of pupils in 2015. At ward level, in 2015 the biggest shortage of desks, was recorded in Nyamagoma (79.1 percent), followed by Murusagamba (45.6 percent), Nyakisasa (44.7 percent) and Kibimba (41.0 percent). Kirushya was the only ward in the Council with an excess of desks (28.9 percent) in 2015 (173 desks, 28.9 percent) (Table 5.42).

**Table 5. 41: Availability of Desks in Public Primary Schools Ward, Ngara District, 2015.**

Ward	No. of Schools.	Total Pupils	Available Desks	Desk Pupils Ratio	Required Desks	Deficit of Desks	
						No.	Percent
Ngara	6	4,323	1,115	4	1,441	326	22.6
Mabawe	6	3,292	789	4	1,097	308	28.1
Kabanga	7	3,741	1,139	3	1,247	108	8.7
Murusagamba	3	2,642	479	6	881	402	45.6
Keza	4	1,481	471	3	521	50	9.6
Muganza	7	3,375	895	4	1,125	230	20.4
Kibimba	5	3,298	648	5	1,099	451	41.0
Kanazi	8	4,736	1,048	5	1,579	531	33.6
Kirushya	5	1,794	771	2	598	-173	-28.9
Mugoma	5	2,700	548	5	850	302	35.5
Bukiro	7	4,955	1,100	5	1,652	552	33.4
Nyakisasa	8	3,375	712	5	1,287	575	44.7
Murukulazo	5	2,960	750	4	987	237	24.0
Nyamiaga	3	1,753	513	3	584	71	12.2
Ntobeye	5	3,407	970	4	1,136	166	14.6
Rusumo	4	2,504	699	4	835	136	16.3
Kasulo	7	3,952	1,110	4	1,317	207	15.7
Mbuba	4	2,984	607	5	995	388	39.0
Rulenge	6	3,282	684	5	1,094	410	37.5
Bugarama	4	485	131	4	162	31	19.1
Kibogora	3	1,526	323	5	509	186	36.5
Nyamagoma	3	1,764	123	14	588	465	79.1
<b>Total</b>	<b>115</b>	<b>64,750</b>	<b>15,625</b>	<b>4.1</b>	<b>21,584</b>	<b>5,959</b>	<b>27.6</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

#### (v) Accessibility of Water

Water supply is an essential facility for every school to protect pupils from water-borne diseases, including diarrhoea, cholera, UTI and other related illnesses. Ngara DC has successfully managed to supply water to most of its primary schools using water tanks, water wells and tap water. Table 5.43 shows that in 2013 and 2015 water tanks were the main source of water supply in 44 schools in Ngara DC, followed by tape water (18 schools), and well water (17 schools). However, primary schools in Nyakisasa, Kibogora, Kasulo, Rulenge and Nyamagoma wards had no water sources in their compounds. These wards should consider provision of water supply in their primary schools as a way of protecting pupils from water-borne diseases.

**Table 5. 42: Accessibility of Water in Public Primary Schools by Ward, Ngara Council, 2013 and 2015**

Ward	2013				2015			
	Total Schools	Schools with Working			Total Schools	Schools with Working		
		Water Tanks	Water wells	Tape water		Water Tanks	Water wells	Tape water
Ngara	6	2	0	7	6	2	0	7
Mabawe	6	3	1	0	6	3	1	0
Kabanga	7	12	0	1	7	12	0	1
Murusagamba	3	2	1	1	3	2	1	1
Keza	4	0	0	1	4	0	0	1
Muganza	7	1	1	0	7	1	1	0
Kibimba	5	1	0	0	5	1	0	0
Kanazi	8	2	1	0	8	2	1	0
Kirushya	5	2	0	2	5	2	0	2
Mugoma	5	5	0	0	5	5	0	0
Bukiro	7	7	0	0	7	7	0	0
Nyakisasa	8	0	0	0	8	0	0	0
Murukulazo	5	2	0	5	5	2	0	5
Nyamiaga	3	1	0	0	3	1	0	0
Ntobeye	5	1	1	0	5	1	1	0
Rusumo	4	1	1	1	4	1	1	1
Kasulo	7	0	0	0	7	0	0	0
Mbuba	4	1	1	0	4	1	1	0
Rulenge	6	0	0	0	6	0	0	0
Bugarama	4	1	0	0	4	1	0	0
Kibogora	3	0	0	0	3	0	0	0
Nyamagoma	3	0	0	0	3	0	0	0
<b>Total</b>	<b>115</b>	<b>44</b>	<b>7</b>	<b>18</b>	<b>115</b>	<b>4</b>	<b>7</b>	<b>18</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

#### 5.2.4.6 Adult Education

Along with the expansion of primary and secondary education, the Ngara DC has also expanded adult education using primary schools as centres with head teachers being in charge of adult education campaigns through MUKEJA and MEMKWA programs. Ngara DC realising the importance of Adult Education in a society, managed to have 9 centres with 483 learners in 2013 and 678 learners in 2015 through MUKEJA program. On other hand the Council had 950 learners in 2013 and 1,004 learners in 2015 in 12 MEMKWA program centres. These centers were of great help to people who did not get formal education. In that case, the Council and other education development partners should continue to support these two programmes to enable more people who did not get formal education at the right age, to get it for their own benefit and the benefit of the whole nation.

### 5.2.4.7 Special Education

The issue of disability has of late gained recognition worldwide. This is due to the fact that the level of disability appears to be on the increase in most societies. Hence, it is important to prepare a programme for pupils with disability to enable them to get special education according to their type of impairment. Ngara DC had not yet established special schools for pupils with disabilities. Table 5.44 shows that in 2013 and 2015 the Council had 49 disabled children that were enrolled in schools. Out of them 29 pupils were visually impaired, 19 pupils were physically impaired and 1 pupil was deaf. Most of these children with disabilities were taken to MGEZA which was a special school for children with special needs located in Bukoba. The Council should take initiatives of establishing special schools for enrolling children with special needs as stipulated in the Education Policy. To help more children with special needs to get education, there should be a strategy to educate parents not to hide their children with disability, instead they should take them to special schools which provide education to children with special needs.

**Table 5. 43: Number of Pupils enrolled with their Type of Impairment, Ngara District, 2013 and 2015**

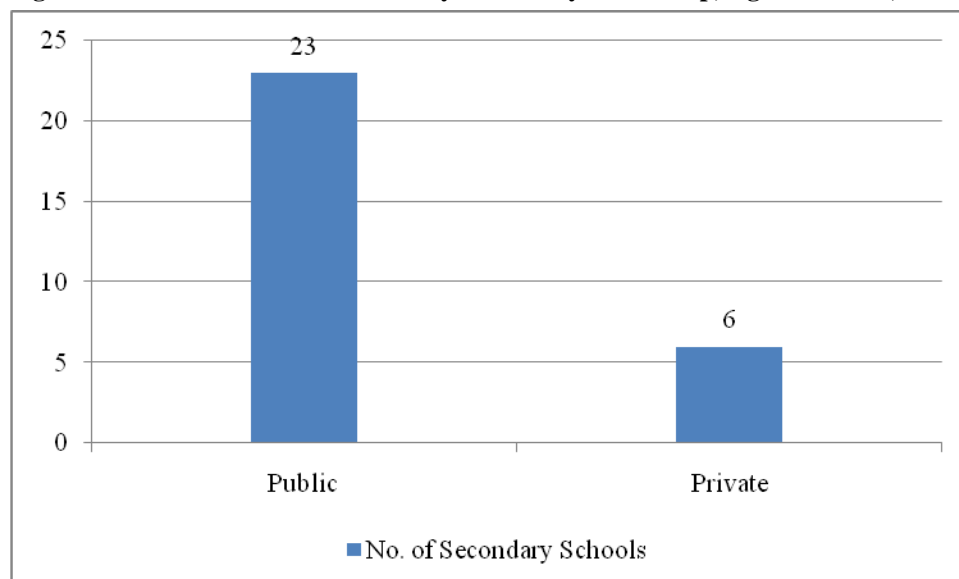
Type of Impairment	2013			2015		
	Male	Female	Total	Male	Female	Total
Visual Impairment	9	8	17	10	2	12
Deaf	1	0	1	0	0	0
Intellectual Impairment	0	0	0	0	0	0
Albinos	0	0	0	0	0	0
Physical Impairment	7	1	8	7	4	11
Other Impairment	0	0	0	0	0	0
<b>Total</b>	<b>17</b>	<b>9</b>	<b>26</b>	<b>17</b>	<b>6</b>	<b>23</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2015*

### 5.2.6 Secondary Education

The development of secondary education in Ngara DC has reached a very good stage by having at least one secondary school in all wards except Nyamiaga, Bugarama and Nyamagoma wards. This is inline with the Education Policy which states that all wards should have a secondary school and a primary school in each village. Information provided by the Department of Education (Secondary) shows that, the council had 29 secondary schools in 2011, 2013 and 2015. Out of 29 schools, 23 secondary schools were publically owned and 6 were owned by the private sector (Figure 5.7).

**Figure 5. 7: Distribution of Secondary Schools by Ownership, Ngara District, 2015**



*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

Observations show that, there were no developments made in the five years period (2011 – 2015) since the number of secondary schools in 2015 was exactly the same as it was in 2011. In regard to ownership, the private sector contribution in the provision of secondary education in the Ngara DC in 2011–2015 period was small (20.7 percent). The Council should therefore, continue to encourage the private sector to invest in the Education sector through the existing public private partnership platform. At ward level, except for Nyamagoma, Nyamiaga and Bugarama wards, all other wards had at least one public secondary school. Private secondary schools were located in Ngara and Rulenge Towns as well as in Murusagamba, Mbuba and Rusumo wards (Table 5.45). Therefore, more efforts should be directed towards construction of secondary schools in Nyamagoma, Nyamiaga and Bugarama wards in order to increase number of pupils who join secondary schools in the council.

**Table 5. 44: Distribution of Secondary Schools by Ward and Ownership, Ngara DC, 2011, 2013 and 2015**

Ward	2011			2013			2015		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Rusumo	1	1	2	1	1	2	1	1	2
Kasulo	2	0	2	2	0	2	2	0	2
Nyamiaga	0	0	0	0	0	0	0	0	0
Murukurazo	1	0	1	1	0	1	1	0	1
Ntobeye	1	0	1	1	0	1	1	0	1
Kibimba	1	0	1	1	0	1	1	0	1
Kanazi	1	0	1	1	0	1	1	0	1
Mugoma	2	0	2	2	0	2	2	0	2
Kirushya	1	0	1	1	0	1	1	0	1
Mabawe	1	0	1	1	0	1	1	0	1
Kabanga	2	0	2	2	0	2	2	0	2
Murusagamba	1	1	2	1	1	2	1	1	2
Muganza	1	0	1	1	0	1	1	0	1
Nyakisasa	1	0	1	1	0	1	1	0	1
Mbuba	1	1	2	1	1	2	1	1	2
Bukiro	1	0	1	1	0	1	1	0	1
Bugarama	0	0	0	0	0	0	0	0	0
Keza	1	0	1	1	0	1	1	0	1
Kibogora	1	0	1	1	0	1	1	0	1
Nyamagoma	0	0	0	0	0	0	0	0	0
Ngara Town	2	1	3	2	1	3	2	1	3
Rulenge Town	1	2	3	1	2	3	1	2	3
<b>Total</b>	<b>23</b>	<b>6</b>	<b>29</b>	<b>23</b>	<b>6</b>	<b>29</b>	<b>23</b>	<b>6</b>	<b>29</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

Ngara District Council had made a remarkable progress on the construction of public secondary schools with 19 out of the 22 wards in the council (86.4 percent) having at least one secondary school. Table 5.46 shows that in 2015 the council had an average of one school per ward and one school was been used by an average of three villages. At division level, Kanazi and Nyamiaga divisions had successfully achieved the education policy target of having a secondary school per ward with one school servicing an average of 3 villages. Rulenge and Murusagamba divisions fall short of the education policy target by having less than a school per ward, although a school was servicing an average 3 villages. However, the achievement made by the Council so far was due to the Government's campaign of establishing at least one public secondary school in each ward and raising community awareness on the need of having secondary schools for their children's education (Table 5.46).

**Table 5. 45: Distribution of Secondary schools by Division, Ngara DC, 2015**

Division	No. of Ward	No. of Villages/ Mitaa	No. of Schools	School Ward Ratio	Average No. of Villages/ Mitaa per School
Nyamiaga.	7	21	8	1.1	2.6
Kanazi	5	26	7	1.4	3.7
Rulenge	7	19	6	1.2	3.2
Murusagamba	3	9	2	1.5	4.5
<b>Total</b>	<b>22</b>	<b>75</b>	<b>23</b>	<b>3.3</b>	<b>3.3</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

### 5.2.5.1 Secondary School Enrolment

Table 5.47 shows that over the 2011-2015 period, enrolments in secondary schools in Ngara DC decreased by 11.9 percent from 2,798 students in 2011 to 2,466 students in 2015. This decline in enrolment was experienced in all wards in the Council except in Murukulazo Ward which had an increase of 74.3 percent, Mbuba Ward (5.5 percent) and Ngara Town (3.1 percent). All other wards experienced a decrease in enrolment ranging from 1.0 percent in Kabanga Ward to 55.6 percent in Kasulo Ward. One of the possible reasons for such a decline was poverty of parents/guardians whereby pupils selected to join form one were forced by their parents/guardians to participate in income generating activities to support their families. This inturn, led to the decline of pupils who joined form one in 2015.

**Table 5. 46: Total Form 1 Enrolment in Public Secondary Schools by Ward and Sex, Ngara DC, 2011 and 2015**

Ward	2011			2015			Increase 2011 - 2015	
	Boys	Girls	Total	Boys	Girls	Total	Number	Percent
Rusumo	0	0	0	45	45	90	90	0.0
Kasulo	134	181	315	70	70	140	-175	-55.6
Nyamiaga	0	0	0	0	0	0	0	0.0
Murukurazo	58	55	113	105	92	197	84	74.3
Ntobeye	57	40	97	32	25	57	-40	-41.2
Kibimba	67	52	119	47	62	109	-10	-8.4
Kanazi	80	80	160	69	75	144	-16	-10.0
Mugoma	77	91	168	68	76	144	-24	-14.3
Kirushya	65	55	120	34	46	80	-40	-33.3
Mabawe	80	79	159	74	78	152	-7	-4.4
Kabanga	96	113	209	99	108	207	-2	-1.0
Murusagamba	75	60	135	51	37	88	-47	-34.8
Muganza	66	66	132	56	58	114	-18	-13.6
Nyakisasa	80	75	155	48	57	105	-50	-32.3
Mbuba	38	35	73	32	45	77	4	5.5

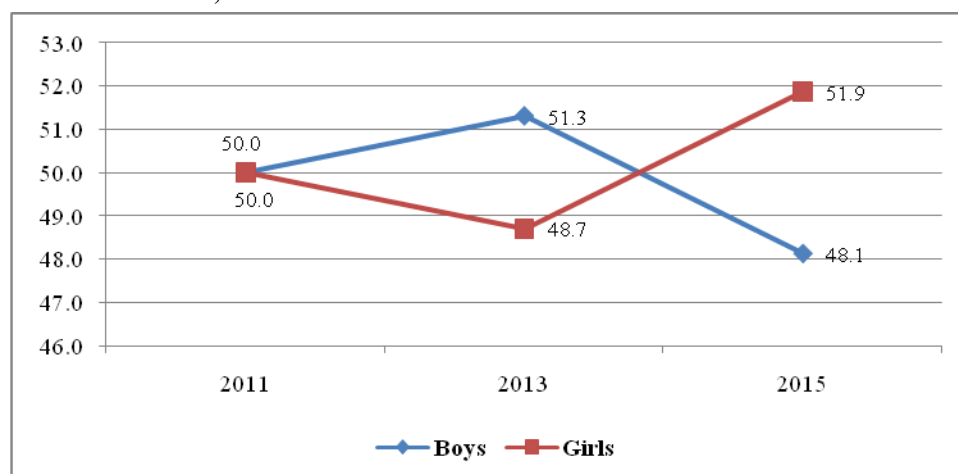


Ward	2011			2015			Increase 2011 - 2015	
	Boys	Girls	Total	Boys	Girls	Total	Number	Percent
Bukiriro	51	52	103	49	45	94	-9	-8.7
Bugarama	0	0	0	0	0	0	0	0.0
Keza	28	27	55	23	23	46	-9	-16.4
Kibogora	78	72	150	58	40	98	-52	-34.7
Nyamagoma	0	0	0	0	0	0	0	0.0
Ngara Town	176	181	357	152	216	368	11	3.1
Rulenge	93	85	178	75	81	156	-22	-12.4
<b>Total</b>	<b>1,399</b>	<b>1,399</b>	<b>2,798</b>	<b>1,187</b>	<b>1,279</b>	<b>2,466</b>	<b>-332</b>	<b>-11.9</b>

**Source:** District Executive Director's Office (Education Department), Ngara DC, 2017

In regard to sex difference, the Council has made a good progress in the implementation of the education policy of ensuring that both boys and girls get equal opportunities of being selected to join secondary education according to their performances. Figure 5.8 shows that in 2011, boys' enrolment in Ngara DC was the same (50.0 percent) as that of girls (50.0 percent). However, in 2013, enrolment of boys increased to 51.3 percent while that of girls decreased to 48.7 percent. In 2015, more girls (51.9 percent) than boys (48.1 percent) were enrolled in secondary schools (Figure 5.8). The Council should continue with the strategy of closing the gap between boys and girls on providing equal chances of joining into the education system and improving girls' examination performances. The Council should construct dormitories in all secondary schools to reduce walking distances and fatigue for students particularly girls.

**Figure 5. 8: Form 1 Enrolment in Public Secondary Schools by Sex, Ngara District, 2011, 2013 and 2015**

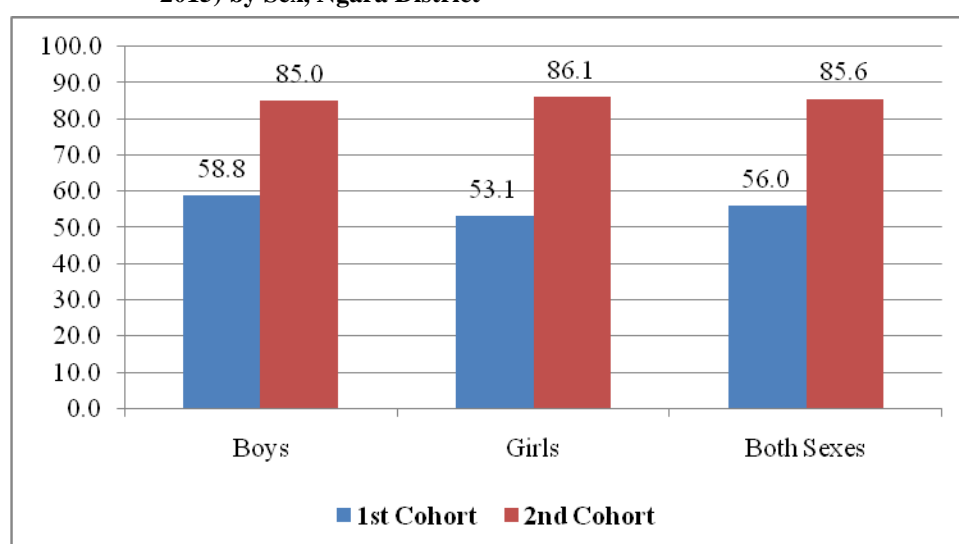


**Source:** District Executive Director's Office (Education Department), Ngara DC, 2017

### 5.2.5.2 Completion Rate

The completion rate is an indicator of the efficiency of the school system that shows the extent to which a group of students enrolled in Form One completes the secondary education cycle irrespective of whether they sit for the final examination or not. Fig 5.9 shows that the total completion rate for the 2011-2014 cohort was lower (56.0 percent) than that of the 2012-2015 cohort (85.6 percent). In regard to sex differences, boys had higher completion rates than girls for the 2011-2014 cohort, while the rate of completion for girls was higher than that of boys in the 2012 -2015 cohort.

**Figure 5. 9: Completion Rates of 1<sup>st</sup> Cohort (2011 – 2014) and 2<sup>nd</sup> Cohort (2012 – 2015) by Sex, Ngara District**



*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

Table 5.48 represents the number of students who were enrolled Form I in 2011 and completed secondary school education in 2014 by Ward and Sex in Ngara DC. The table shows that out of 2,798 secondary school students enrolled in 2011, only 1,566 students, equivalent to 56.0 percent completed form IV in 2014. At ward level, Mbuba had the highest completion rates (106.8 percent), followed by Murukulazo (97.3 percent) and Keza (94.5 percent). The table further shows that Rulenge Ward had the lowest completion rate of 16.3 percent, followed by Kirushya (26.7 percent), Kabanga (30.6 percent) and Murusagamba (31.9 percent).

**Table 5. 47 Number of Students Enrolled in 2011 and Completed Form IV in 2014 by Ward and Sex in Public Secondary Schools, Ngara District Council**

Ward	Enrolled 2011			Completed 2014			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Rusumo	0	0	0	0	0	0	0.0	0.0	0.0
Kasulo	134	181	315	55	56	111	41.0	30.9	35.2
Nyamiaga	0	0	0	0	0	0	0.0	0.0	0.0
Murukurazo	58	55	113	59	51	110	101.7	92.7	97.3
Ntobeye	57	40	97	53	31	84	93.0	77.5	86.6
Kibimba	67	52	119	40	46	86	59.7	88.5	72.3
Kanazi	80	80	160	59	56	115	73.8	70.0	71.9
Mugoma	77	91	168	57	67	124	74.0	73.6	73.8
Kirushya	65	55	120	22	10	32	33.8	18.2	26.7
Mabawe	80	79	159	64	66	130	80.0	83.5	81.8
Kabanga	96	113	209	48	16	64	50.0	14.2	30.6
Murusagamba	75	60	135	26	17	43	34.7	28.3	31.9
Muganza	66	66	132	35	25	60	53.0	37.9	45.5
Nyakisasa	80	75	155	32	20	52	40.0	26.7	33.5
Mbuba	38	35	73	35	43	78	92.1	122.9	106.8
Bukiriro	51	52	103	37	27	64	72.5	51.9	62.1
Bugarama	0	0	0	0	0	0	0.0	0.0	0.0
Keza	28	27	55	27	25	52	96.4	92.6	94.5
Kibogora	78	72	150	45	35	80	57.7	48.6	53.3
Nyamagoma	0	0	0	0	0	0	0.0	0.0	0.0
Ngara Town	176	181	357	112	140	252	63.6	77.3	70.6
Rulenge	93	85	178	17	12	29	18.3	14.1	16.3
<b>Total</b>	<b>1,399</b>	<b>1,399</b>	<b>2,798</b>	<b>823</b>	<b>743</b>	<b>1,566</b>	<b>58.8</b>	<b>53.1</b>	<b>56.0</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

Table 5.49 presents the number of students enrolled in secondary schools in 2012 and completed Form IV in 2015. Remarkable progress was made by the Local Government Authorities in improving the completion rate in the Ngara DC from 56.6 percent in 2014 for the 2011-2014 cohort to 85.6 percent in 2015 (for the 2012-2015 cohort). At ward Ntobeye, Mugoma, Kirushya, Mabawe and Mbuba wards had more students who completed Form IV in 2015 than those enrolled in Form One in 2012. Muganza ward had the lowest completion rate in the council with 17.3 percent of students who were enrolled in 2012 completing secondary education in 2015.

**Table 5. 48: Number of Students Registered in 2012 and Completed Form IV in 2015 by Ward and Sex in Public Secondary Schools, Ngara District.**

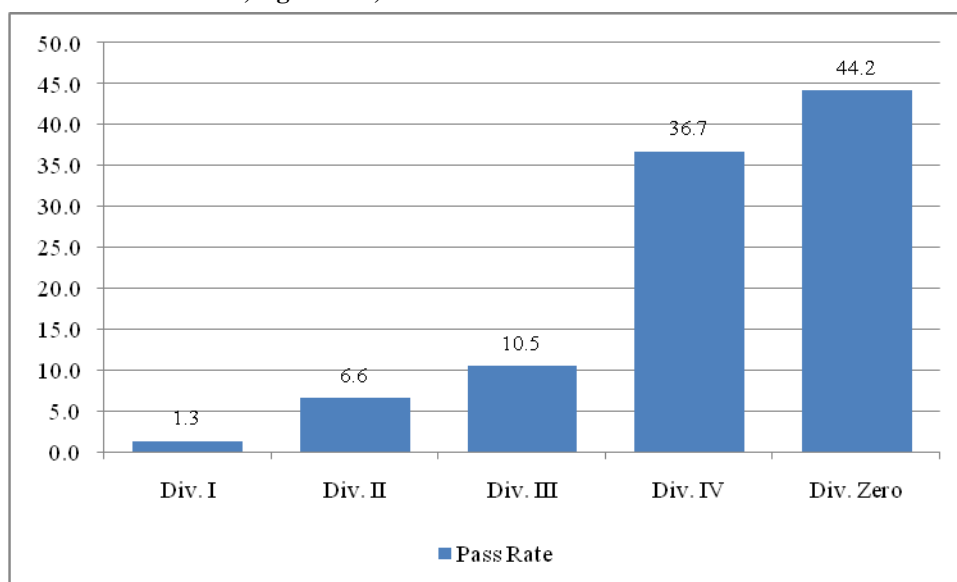
Ward	Enrolled 2012			Completed 2015			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Rusumo	0	0	0	0	0	0	0	0	0.0
Kasulo	45	32	77	27	40	67	60.0	125.0	87.0
Nyamiaga	0	0	0	0	0	0	0	0	0
Murukurazo	61	82	143	44	59	103	72.1	72.0	72.0
Ntobeye	50	68	118	65	78	143	130.0	114.7	121.2
Kibimba	47	61	108	42	42	84	89.4	68.9	77.8
Kanazi	67	59	126	52	58	110	77.6	98.3	87.3
Mugoma	44	96	140	78	78	156	177.3	81.3	111.4
Kirushya	38	34	72	39	34	73	102.6	100.0	101.4
Mabawe	45	54	99	58	60	118	128.9	111.1	119.2
Kabanga	83	95	178	77	101	178	92.8	106.3	100.0
Murusagamba	58	42	100	26	17	43	44.8	40.5	43.0
Muganza	57	80	137	20	22	42	35.1	27.5	30.7
Nyakisasa	28	24	52	10	14	24	35.7	58.3	46.2
Mbuba	35	27	62	42	28	70	120.0	103.7	112.9
Bukiriro	49	47	96	32	35	67	65.3	74.5	69.8
Bugarama	0	0	0	0	0	0	0	0	0.0
Keza	45	31	76	29	18	47	64.4	58.1	61.8
Kibogora	39	41	80	24	35	59	61.5	85.4	73.8
Nyamagoma	0	0	0	0	0	0	0	0	0.0
Ngara Town	163	169	332	137	184	321	84.0	108.9	96.7
Rulenge.	63	67	130	62	52	114	98.4	77.6	87.7
<b>Total</b>	<b>1,017</b>	<b>1,109</b>	<b>2,126</b>	<b>864</b>	<b>955</b>	<b>1,819</b>	<b>85.0</b>	<b>86.1</b>	<b>85.6</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

### 5.2.5.3 Pass Rates

Pass rate reflects the quality of secondary education provided in the Council. It is an outcome or impact indicator that shows performances of teachers and students based on the existing infrastructure and teaching environment of schools. The performance of Form IV examinations in Ngara DC for the 2011-2015 period was not good since more than 75 percent of students got divisions IV and zero. This is evident from Figure 5.16 which shows that out of 8,511 Form IV students who sat for Form IV examinations from 2011 to 2015 in the Council, only 1.3 percent attained Division One, 6.6 percent attained Division Two and 10.5 percent got Division Three, while 36.7 percent and 44.2 percent attained Division IV and Zero respectively. From this information it is obvious that the majority of the students (over 80 percent) either entered into the labour market or joined vocational training centres.

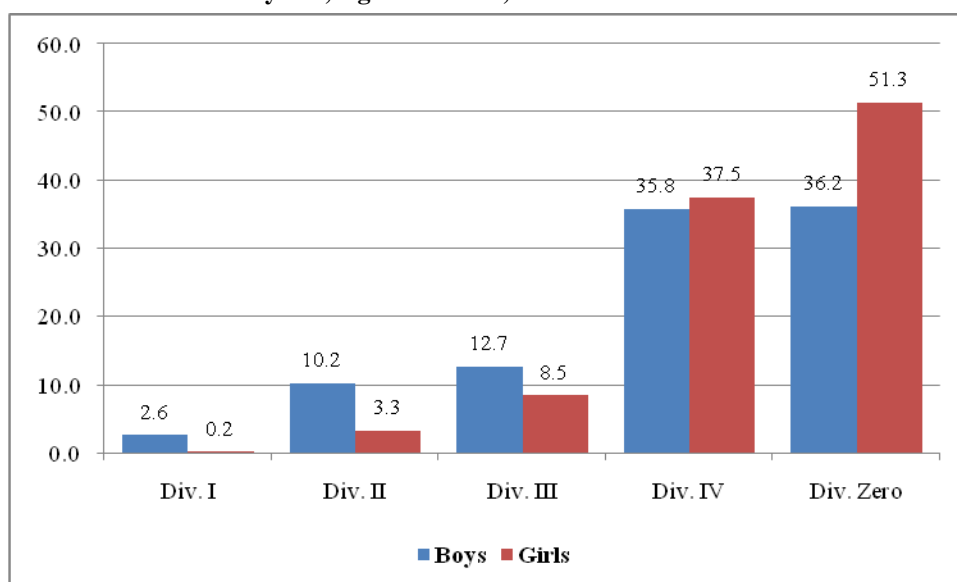
**Figure 5. 10: Students Performance in Form IV Examinations in Public Secondary Schools, Ngara DC, 2011 - 2015.**



*Source: District Executive Director's Office (Education Department), Ngara DC, 2015*

In regard to sex, Figure 5.11 shows that boys performed better than girls in the 2011-2015 period. Out of 8,511 examinees sat for form IV examinations, 4,039 were boys and 4,473 were girls. Observation on the figure show that girl's performance was lower than that of boys in Divisions I, II and III, but was higher in the lower grades (i.e Divisions IV and Zero) (Figure 5.17). The figure also shows that more girls (37.5 percent) than boys (35.8 percent) got division four and percentage of girls who failed the examinations was higher (51.3 percent) than that of boys (36.2 percent).

**Figure 5. 11: Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Ngara District, 2011-2015**



*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

#### **5.2.5.4 High School (Form V) Enrolment**

The enrolment of students in high schools in any council increased with the increase of school infrastructure constructed through people's participation due to parents' awareness on the importance of education to their children. Currently, Ngara DC has few high schools compared to other councils in Kagera Region. Information provided by the Education Department in the Council shows that up to 2015, Ngara DC had only three high schools located in Kabanga, Kasulo and Rulenge wards with a capacity of accommodating 920 students.

#### **5.2.3.5 Secondary School Facilities**

The quantity and quality of facilities for the secondary school system in Ngara DC are yet to attain the standards set by the educational authorities. Besides the capability of students themselves, availability of school facilities plays a significant role in improving the quality of education in the Council. The most common facilities that play an important role in improving the quality of education include availability of classrooms, toilets, staff quarters, libraries, laboratories, dormitories, desks and teachers, electricity, clean and safe water as well as playgrounds.

##### **(i) Teachers**

Expansion of secondary education is directly related to an increase in the number of teaching staff. This is very crucial for the sustainable improvement of education quality. In 2015, Ngara DC had a total of 474 teachers in 23 public secondary schools located in the Council. This gives an average School Teachers Ratio of 1:21 and a deficit of 119 teachers, equivalent to 20.8 percent of the required 593 teachers. At ward level, except for Kabanga, Kirushya and Bukiriro wards, the remaining wards had a shortage of teachers ranging from 4.5 percent in Ngara Town to 51.9 percent in Rusumo Ward. Kirushya and Bukiriro wards had adequate number of teachers in their respective secondary schools (Table 5.50).

**Table 5. 49: Availability of Public Secondary School's Teachers by Ward, Ngara Council; 2015**

Ward	No. of Schools	Available Teachers	School Teachers Ratio	Required Teachers	Deficit of Teachers	
					Number	Percent
Rusumo	1	13	13	27	14	51.9
Kasulo	2	48	24	56	8	14.3
Nyamiaga	1	0	0	14	14	100.0
Murukurazo	1	25	25	30	5	16.7
Ntobeye	1	18	18	20	2	10.0
Kibimba	1	20	20	24	4	16.7
Kanazi	1	24	24	30	6	20.0
Mugoma	2	25	19	44	7	15.9
Kirushya	1	10	10	9	-1	-11.1
Mabawe	1	24	24	30	6	20.0
Kabanga	2	55	28	70	15	21.4
Murusagamba	1	17	17	24	7	29.2
Muganza	1	14	14	20	6	30.0
Nyakisasa	1	16	16	24	8	33.3
Mbuba	1	22	22	40	18	45.0
Bukiro	1	30	30	21	-9	-42.9
Bugarama	0	0	0	0	0	0.0
Keza	1	12	12	16	4	25.0
Kibogora	1	12	12	19	7	36.8
Nyamagoma	0	0	0	0	0	0.0
Ngara Town	2	63	32	66	3	4.5
Rulenge	1	26	26	30	4	13.3
<b>Total</b>	<b>23</b>	<b>477</b>	<b>21</b>	<b>614</b>	<b>128</b>	<b>20.8</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

Table 5.50a shows that, out of 474 Public Secondary school teachers that were available in Ngara DC in 2015, 48.1 percent were diploma holders, 51.9 percent were degree/masters holders. At ward level, secondary schools in Murukulazo Ward werer the most privileged as out of 25 available teachers, 17 teachers (68.0 percent) were degree holders followed by Kibogora Ward with 12 teachers of which 8 (66.7 percentt) were degree holders, Kanazi Ward with 24 teachers of which 15 (62.5 percent) were degree holders and Rusumo Ward with 13 teachers of which 8 (61.5 percent) were degree holders. It is important to note that in 2015, Ngara DC had qualified teachers because over 51.9 percent were degree holders and 48.1 percent were diploma holders.

**Table 5.50 a: Availability of Public Secondary School's Teachers by Qualification and Ward, Ngara District, 2015**

Ward	Diploma			Degree/Masters			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Rusumo	3	2	5	7	1	8	10	3	13
Kasulo	15	9	24	18	6	24	33	15	48
Nyamiaga	0	0	0	0	0	0	0	0	0
Murukurazo	6	2	8	11	6	17	17	8	25
Ntobeye	5	2	7	7	4	11	12	6	18
Kibimba	8	4	12	6	2	8	14	6	20
Kanazi	7	2	9	5	10	15	12	12	24
Mugoma	14	4	18	4	3	7	18	7	25
Kirushya	8	1	9	1	0	1	9	1	10
Mabawe	7	3	10	11	3	14	18	6	24
Kabanga	14	8	22	24	9	33	38	17	55
Murusagamba	5	2	7	7	3	10	12	5	17
Muganza	7	1	8	6	0	6	13	1	14
Nyakisasa	9	2	11	4	1	5	13	3	16
Mbuba	8	4	12	7	3	10	15	7	22
Bukiriro	13	4	17	11	2	13	24	6	30
Bugarama	0	0	0	0	0	0	0	0	0
Keza	4	3	7	5	0	5	9	3	12
Kibogora	3	1	4	6	2	8	9	3	12
Nyamagoma	0	0	0	0	0	0	0	0	0
Ngara Town	16	10	26	18	19	37	34	29	63
Rulenge	10	2	12	12	2	14	22	4	26
<b>Total</b>	<b>162</b>	<b>66</b>	<b>228</b>	<b>170</b>	<b>76</b>	<b>246</b>	<b>332</b>	<b>142</b>	<b>474</b>
<b>Percent</b>	<b>71.1</b>	<b>28.9</b>	<b>48.1</b>	<b>69.1</b>	<b>30.9</b>	<b>51.9</b>	<b>70.0</b>	<b>30.0</b>	<b>100.0</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2015.*

Efforts to increase the number of Science Teachers in Ngara DC should be enhanced by the District Authority, since among the 474 available teachers in the Council only 59 (12.4 percent) are Science teachers and the rest of them (87.6 percent) are Arts' teachers. Rusumo Ward was the most affected as it did not have any teacher for science subjects, while the rest of wards had science teachers ranging from 2 to 7 teachers (Table 5.50b). This means that most of secondary schools in Ngara DC had shortages of science teachers making it difficult for students to major in science subjects.



**Table 5.50 b: Number of Science and Arts Teachers in Public Secondary Schools by Ward, Ngara DC 2015**

Ward	Available Science Teachers			Required Teachers	Available Arts Teachers			Required Teachers
	Male	Female	Total		Male	Female	Total	
Rusumo	0	0	0	6	10	3	13	0
Kasulo	4	1	5	9	28	15	43	1
Nyamiaga	0	0	0	0	0	0	0	0
Murukurazo	3	1	4	6	15	6	21	0
Ntobeye	1	1	2	3	11	5	16	0
Kibimba	2	0	2	4	14	4	18	0
Kanazi	2	0	2	4	13	9	22	0
Mugoma	3	0	3	6	14	8	22	0
Kirushya	4	0	4	2	4	2	6	0
Mabawe	2	0	2	4	15	7	22	0
Kabanga	5	3	8	5	29	18	47	0
Murusagamba	3	0	3	0	12	2	14	2
Muganza	2	0	2	4	10	2	12	0
Nyakisasa	2	0	2	2	11	3	14	0
Mbuba	2	0	2	4	14	6	20	0
Bukiro	3	0	3	3	18	9	27	0
Bugarama	0	0	0	0	0	0	0	0
Keza	3	0	3	1	7	2	9	0
Kibogora	2	0	2	4	7	3	10	0
Nyamagoma	0	0	0	0	0	0	0	0
Ngara Town	5	2	7	8	23	33	56	0
Rulenge	3	0	3	5	16	7	23	4
<b>Total</b>	<b>51</b>	<b>8</b>	<b>59</b>	<b>80</b>	<b>271</b>	<b>144</b>	<b>415</b>	<b>7</b>
<b>Percent</b>	<b>86.4</b>	<b>13.6</b>	<b>12.4</b>		<b>65.3</b>	<b>34.7</b>	<b>87.6</b>	

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

## (ii) Administration Blocks

Administration blocks are important facilities for provision of enabling environment to the teachers to deliver quality education. Therefore, lack of administration blocks in secondary schools is one of challenges that need to be resolved by the district authority. Table 5.51 shows that in 2015, Ngara DC had 12 public secondary schools with administration blocks, equivalent to 52.2 percent. The other 10 secondary schools (47.8 percent) did not have administration blocks.

**Table 5. 50: Availability of Administration Blocks in Public Secondary Schools by Ward, Ngara DC 2015**

Ward	No. of Schools	Available Admin. Block	Percent Schools with Admin. Block	Required No. of Admin. Blocks	Deficit of Admin. Blocks	
					No.	Percent
Rusumo	1	0	0	1	1	100.0
Kasulo	2	1	50.0	2	1	50.0
Nyamiaga	0	0	0.0	0	0	0.0
Murukurazo	1	1	100.0	1	0	0.0
Ntobeye	1	0	0.0	1	1	100.0
Kibimba	1	0	0.0	1	1	100.0
Kanazi	1	1	100.0	1	0	0.0
Mugoma	2	1	50.0	2	1	50.0
Kirushya	1	1	100.0	1	0	0.0
Mabawe	1	1	100.0	1	0	0.0
Kabanga	2	1	50.0	2	1	50.0
Murusagamba	1	1	100.0	1	0	100.0
Muganza	1	0	0.0	1	1	100.0
Nyakisasa	1	0	0.0	1	1	0.0
Mbuba	1	1	100.0	1	0	0.0
Bukiriro	1	0	100.0	1	1	100.0
Bugarama	0	0	0.0	0	0	0.0
Keza	1	0	0.0	1	1	100.0
Kibogora	1	1	100.0	1	0	0.0
Nyamagoma	0	0	0.0	0	0	0.0
Ngara Town	2	1	50.0	2	1	50.0
Rulenge	1	1	100.0	1	0	0.0
<b>Total</b>	<b>23</b>	<b>12</b>	<b>52.2</b>	<b>23</b>	<b>11</b>	<b>47.8</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017.*

### (iii) Teachers' Houses

Besides having shortages of teachers, the councils also have shortages of staff quarters in all wards in 2015. Table 5.52 shows that the district had a total of 474 teachers with only 74 staff quarters, implying a ratio of 6 teachers per a house (HTR of 1:6). The table further shows that the council had a shortage of 400 houses, equivalent to 85.4 percent of the required 474 staff quarters in 2015. At ward level, the table shows that, though all wards had shortages of staff quarters, Kabanga ward was the most affected (96.4 percent), followed by Ngara Town (93.7 percent), Bukiriro (93.3 percent), Rusumo (92.3 percent) and Murukulazo (92.0 percent). The remaining wards had shortages ranging from 60.0 percent in Kirushya to 86.4 percent in Mbuba ward. (Table 5.52). The District Authority together with community as a whole should take into account the fact that the provision of staff houses is a basic incentive for retention of teachers

and promoting conducive environment for effective teaching. Therefore, more effort should be directed towards building staff houses together with other facilities.

**Table 5. 51: Availability of Teachers Houses in Public Secondary Schools by Ward, Ngara District 2015**

Ward	No. of Schools	Available Teachers	Available Houses	House Teachers Ratio	Required Houses	Deficit of Teachers' Houses	
						No.	Percent
Rusumo	1	13	1	13	13	12	92.3
Kasulo	2	48	10	5	48	38	79.2
Nyamiaga	0	0	0	0	0	0	0.0
Murukurazo	1	25	2	13	25	23	92.0
Ntobeye	1	18	4	5	18	14	77.8
Kibimba	1	20	3	7	20	17	85.0
Kanazi	1	24	4	6	24	20	83.3
Mugoma	2	25	5	4	25	20	80.0
Kirushya	1	10	4	3	10	6	60.0
Mabawe	1	24	9	3	24	15	62.5
Kabanga	2	55	2	24	55	53	96.4
Murusagamba	1	17	3	6	17	14	82.4
Muganza	1	14	2	7	14	12	85.7
Nyakisasa	1	16	3	5	16	13	81.3
Mbuba	1	22	3	7	22	19	86.4
Bukiro	1	30	2	15	30	28	93.3
Bugarama	0	0	0	0	0	0	0.0
Keza	1	12	5	2	12	7	58.3
Kibogora	1	12	3	4	12	9	75.0
Nyamagoma	0	0	0	0	0	0	0.0
Ngara Town	2	63	4	16	63	59	93.7
Rulenge	1	26	5	5	26	21	80.8
<b>Total</b>	<b>23</b>	<b>474</b>	<b>74</b>	<b>6</b>	<b>474</b>	<b>400</b>	<b>84.6</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2017*

#### (iv) Classrooms

In 2015 Ngara DC, managed to achieve the standard set by the Ministry of Education and Vocational Training of 45 students per classroom in its public secondary schools. Table 5.53 shows that the Council had an overall class student ratio of 32 which was actually below the national standard of 45 students. Observations on the table shows that except for Kabanga, the other wards had an excess of classrooms ranging from one to 10 classrooms, resulting to a total of 75 excess classrooms or (31.0 percent) in the Council in 2015. Kabanga Ward had a deficit of 6 classrooms (18.8 percent) in 2015. (Table 5.53).

**Table 5. 52: Availability of Classrooms in Public Secondary Schools by Ward; Ngara District; 2015.**

Ward	No. of Schools	Total Pupils	Available Classes	Class Pupils Ratio	Required Classes	Deficit of Classrooms	
						Number	Percent
Rusumo	1	234	6	39	5	-1	-20.0
Kasulo	2	829	25	33	18	-7	-38.9
Nyamiaga	0	0	0	0	0	0	0.0
Murukurazo	1	446	16	28	10	-6	-60.0
Ntobeye	1	270	10	27	6	-4	-66.7
Kibimba	1	334	11	30	7	-4	-57.1
Kanazi	1	348	14	25	8	-6	-75.0
Mugoma	2	426	15	28	9	-6	-66.7
Kirushya	1	248	13	19	6	-7	-116.7
Mabawe	1	656	15	44	15	0	-0.0
Kabanga	2	1,440	26	55	32	6	18.8
Murusagamba	1	205	10	21	5	-5	-100.0
Muganza	1	203	11	18	5	-6	-120.0
Nyakisasa	1	231	9	26	5	-4	-80.0
Mbuba	1	277	8	35	6	-2	-33.3
Bukiriro	1	231	8	29	5	-3	-60.0
Bugarama	0	0	0	0	0	0	0.0
Keza	1	154	6	26	3	-3	-100.0
Kibogora	1	241	15	16	5	-10	-200.0
Nyamagoma	0	0	0	0	0	0	0.0
Ngara Town	2	1106	25	44	25	0	-0.0
Rulenge	1	467	17	27	10	-7	-70.0
<b>Total</b>	<b>23</b>	<b>8,346</b>	<b>260</b>	<b>32</b>	<b>185</b>	<b>-75</b>	<b>-31.0</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

## (V) Toilets

Table 5.54 shows that Ngara DC had a total of 271 pit latrines (123 for boys and 148 girls) utilized by 8,346 secondary school students in 2015. The standard ratios set by the Ministry of Education and Vocational Training requires each pit latrine to be used by 20 girls or 25 boys. However, the council had not achieved these ratios as a pit latrine was used by 32 boys or 30 girls in 2015. At ward level, Ngara Town had a critical shortage of 54 pit latrines (26 for both boys and 28 for girls), followed by Kabanga (5 pit latrines for boys and 14 for girls), Mabawe (8 and 6 pit latrines for boys and girls respectively), Mugoma (6 pit latrines for boys and 7 for girls) and Murukulazo (4 pit latrines for boys and 8 for girls). Muganza, Nyakisasa and Kibogora were the only wards with excess pit latrines in 2015. Shortage of pit latrine in secondary schools is a serious problem therefore the Council should work hard to solve the problem of toilets in all secondary schools to make the school environment conducive for students.

**Table 5. 53: Availability of Pit Latrines in Public Secondary Schools by Sex and Ward, Ngara DC, 2015**

Ward	Total Pupils		Available Pit Latrine		Hole Pupils Ratio		Required Pit Latrines		Deficit of Latrine	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Rusumo	105	129	3	3	35	43	6	6	3	3
Kasulo	513	316	13	12	39	26	20	16	7	4
Nyamiaga	0	0	0	0	0	0	0	0	0	0
Murukurazo	223	223	4	4	56	56	8	12	4	8
Ntobeye	145	125	6	4	24	31	9	9	3	5
Kibimba	152	182	4	8	38	23	7	9	3	1
Kanazi	164	184	4	4	41	46	7	10	3	6
Mugoma	191	235	8	14	24	17	14	21	6	7
Kirushya	134	114	2	4	67	29	6	6	4	2
Mabawe	308	348	4	4	77	87	12	10	8	6
Kabanga	471	969	13	22	36	44	14	28	1	6
Murusagamba	117	88	8	8	15	11	12	15	4	7
Muganza	107	96	10	10	11	10	4	4	-6	-6
Nyakisasa	120	111	10	10	12	10	5	6	-5	-4
Mbuba	145	132	3	2	48	66	8	7	5	5
Bukiriro	126	105	4	8	32	13	8	9	4	1
Bugarama	0	0	0	0	0	0	0	0	0	0
Keza	76	78	3	3	25	26	3	7	0	4
Kibogora	137	104	6	8	23	13	6	5	0	-3
Nyamagoma	0	0	0	0	0	0	0	0	0	0
Ngara Town	500	606	8	10	63	61	34	38	26	28
Rulenge	206	261	10	10	21	26	16	14	6	4
<b>Total</b>	<b>3,940</b>	<b>4,406</b>	<b>123</b>	<b>148</b>	<b>32</b>	<b>30</b>	<b>199</b>	<b>232</b>	<b>101</b>	<b>84</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

#### (vi) Dormitories

Construction of dormitories in schools in Ngara DC is essential, given the geographical location of wards and the distribution of human settlements in the Council. The availability of dormitories can help students solve the problem of walking long distances and reduce the rates of drop outs, pregnancies and truancy. Table 5.55 shows that, except for Kabanga, the rest of wards in Ngara DC had shortages of dormitories ranging from 50.0 percent to 100.0 percent. This implies that the district still had critical shortage of 35 dormitories, equivalent to 72.9 percent of the required 48 dormitories to accommodate secondary school students. Inadequate number of dormitories especially in rural areas has definitely contributed to the increase of dropouts and poor examination performances in the Council. The Council should work hand in hand with stakeholders in education and parents to strategize on construction of dormitories in secondary schools especially for girls who are the most affected by lack of dormitories in schools.

**Table 5. 54: Availability of Dormitories/Hostels in Public Secondary Schools by Ward, Ngara District, 2015**

Ward	No. of Schools	Available Dormitories	Percent of Dom per School	Required Dormitories	Deficit of Dormitory	
					Number	Percent
Rusumo	1	0	0.0	2	2	100.0
Kasulo	2	2	50.0	4	2	50.0
Nyamiaga	0	0	0.0	0	0	0.0
Murukurazo	1	0	0.0	2	2	100.0
Ntobeye	1	0	0.0	2	2	100.0
Kibimba	1	0	0.0	2	2	100.0
Kanazi	1	0	0.0	2	2	100.0
Mugoma	2	0	0.0	4	4	100.0
Kirushya	1	0	0.0	2	2	100.0
Mabawe	1	0	0.0	2	2	100.0
Kabanga	2	5	150.0	4	-1	-25.0
Murusagamba	1	1	50.0	2	1	50.0
Muganza	1	0	0.0	2	2	100.0
Nyakisasa	1	0	0.0	2	2	100.0
Mbuba	1	2	100.0	4	2	50.0
Bukiro	1	0	0.0	2	2	100.0
Bugarama	0	0	0.0	0	0	0.0
Keza	1	0	0.0	2	2	100.0
Kibogora	1	0	0.0	2	2	100.0
Nyamagoma	0	0	0.0	0	0	0.0
Ngara Town	2	1	25.0	4	3	75.0
Rulenge	1	2	100.0	2	0	0.0
<b>Total</b>	<b>23</b>	<b>13</b>	<b>56.5</b>	<b>48</b>	<b>35</b>	<b>72.9</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

A dormitory at Murusagamba Secondary School.



Source: District Executive Director's Office (Education Department), Ngara DC, 2017

**(vii) Libraries**

The library facility is considered an essential but not crucial for the development of knowledge and skills of a student. According to the standards set by the Ministry of Education and Vocation Training, every secondary school should have at least one library to enable students borrow and use supplementary books besides textbooks. Information from the education department shows that only 4 out of 23 public secondary schools in Ngara DC had a library facility in 2015. This implies that out of 8,346 secondary schools students in the council only students at Mugoma secondary, Rusumo A, Ngara secondary and Muyenzi secondary which are 2,828 they are capable to get chance to read supplementary books available for renting to students. Having a library is a prerequisite for establishing a secondary school education in the country, therefore, the Council should develop strategies of providing library services in secondary schools in the Council.

**(viii) Furniture (Tables and Chairs)**

Table 5.56 shows that the Ngara DC had 8,204 tables (98.3 percent) out of the 8,346 required for secondary school students in the council in the 2015; implying a deficit of 142 tables. On the other hand, the council had 8,414 chairs for secondary school students in 2015, which were more than the required number (8,346 chairs) by 68 chairs. Further observation on the table shows that most wards in Ngara DC had enough tables and chairs for secondary school students with the largest number of excess furniture been observed in Mugoma Ward (424 tables and 456 chairs), followed by Bukiro Ward (259 tables and 409 chairs) and Rulenge Ward (359 tables and 375 chairs). However in 2015, there were critical shortages of furniture in Kabanga (1,025 tables and 932 chairs), Ngara Town (606 tables and 621 chair), Mabawe (166 tables and 200 chairs), Kasulo (136 tables and 154 chairs), Rusumo (134 tables and 96 chairs), Mbuba (69 tables and 69 chairs) and Ntobeye (10 tables and 74 chairs).

**Table 5. 55: Availability of Tables and chairs in Public Secondary Schools by Ward, Ngara District, 2015**

Ward	Total Students	Available		Facility Pupils Ratio		Required		Deficit of	
		Tables	Chairs	Tables	Chairs	Tables	Chairs	Tables	Chairs
Rusumo	234	100	138	2	1	234	234	134	96
Kasulo	829	693	675	1	1	829	829	136	154
Nyamiaga	0	0	0	0	0	0	0	0	0
Murukurazo	446	680	684	1	1	446	446	-234	-238
Ntobeye	270	260	196	1	1	270	270	10	74
Kibimba	334	380	360	1	1	334	334	-46	-26
Kanazi	348	400	400	1	1	348	348	-52	-52
Mugoma	426	850	882	1	1	426	426	-424	-456
Kirushya	248	360	360	1	1	248	248	-112	-112

Ward	Total Students	Available		Facility Pupils Ratio		Required		Deficit of	
		Tables	Chairs	Tables	Chairs	Tables	Chairs	Tables	Chairs
Mabawe	656	490	456	1	1	656	656	166	200
Kabanga	1,440	415	508	3	1	1,440	1,440	1,025	932
Murusagamba	205	333	333	1	1	205	205	-128	-128
Muganza	203	315	345	1	1	203	203	-112	-142
Nyakisasa	231	348	352	1	1	231	231	-117	-121
Mbuba	277	208	208	1	1	277	277	69	69
Bikiriro	231	490	640	0	1	231	231	-259	-409
Bugarama	0	0	0	0	0	0	0	0	0
Keza	154	200	200	1	1	154	154	-46	-46
Kibogora	241	356	350	1	1	241	241	-115	-109
Nyamagoma	0	0	0	0	0	0	0	0	0
Ngara Town	1,106	500	485	2	1	1,106	1,106	606	621
Rulenge	467	826	842	1	1	467	467	-359	-375
<b>Total</b>	<b>8,346</b>	<b>8,204</b>	<b>8,414</b>	<b>1</b>	<b>1</b>	<b>8,346</b>	<b>8,346</b>	<b>142</b>	<b>-68</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

#### (ix) Laboratories

A laboratory is a necessary facility for students taking science subjects. Specifications set by the Government require each secondary school to have at least three laboratories for physics, chemistry and biology subjects. In 2015, Ngara DC had a total of 17 laboratories in the 23 public secondary schools in the Council compared to the required 69 laboratories indicating a shortage of 52 laboratories (75.4 percent). This implies that in 2015, very few practicals for science subjects were conducted in few secondary schools in the Council. At ward level, except for Murusagamba, the other wards had shortage of 2 to 3 laboratories (Table 5.57).

The shortage of laboratories in Ngara DC is critical. The Council, in collaboration with education sector stakeholders should have strategy of ensuring that secondary schools have enough laboratories so as to provide a conducive and enabling study environment for science students. Availability of laboratories is one of incentives for students to study science subjects.



**Table 5.56: Availability of Laboratories in Public Secondary Schools by Ward, Ngara District, 2015**

Ward	No. of Schools	Available Laboratories	Average Lab. Per School	Required Laboratories	Deficit of Laboratories	
					Number	Percent
Rusumo	1	0	0	3	3	100.0
Kasulo	2	2	1	6	4	66.7
Nyamiaga	0	0	0	0	0	0.0
Murukurazo	1	0	0	3	3	100.0
Ntobeye	1	0	0	3	3	100.0
Kibimba	1	1	1	3	2	66.7
Kanazi	1	0	0	3	3	100.0
Mugoma	2	2	1	6	4	66.7
Kirushya	1	0	0	3	3	100.0
Mabawe	1	1	1	3	2	66.7
Kabanga	2	3	1.5	6	3	50.0
Murusagamba	1	3	3	3	0	0.0
Muganza	1	1	1	3	2	66.7
Nyakisasa	1	0	0	3	3	100.0
Mbuba	1	0	0	3	3	100.0
Bukiro	1	0	0	3	3	100.0
Bugarama	0	0	0	0	0	0.0
Keza	1	0	0	3	3	100.0
Kibogora	1	1	1	3	2	66.7
Nyamagoma	0	0	0	0	0	0.0
Ngara Town	2	2	1	6	4	66.7
Rulenge	1	1	1	3	2	66.7
<b>Total</b>	<b>23</b>	<b>17</b>	<b>0.7</b>	<b>69</b>	<b>52</b>	<b>75.4</b>

*Source: District Executive Director's Office (Education Department), Ngara DC, 2015*

### (x) Electricity

Table 5.58 shows various sources of electricity that were used by secondary schools in Ngara DC in 2015. Observation on the tables shows that 91.3 percent of the 23 schools in the Council had electricity. Solar energy was the main source of electricity in 11 secondary school in the Council, followed by generator (10 schools). One general observation from the table is that the availability of solar energy has enabled a large number of public secondary schools to have electricity in most wards of Ngara DC.

**Table 5.57: Availability of Electricity Power in Secondary Schools by Ward, Ngara Council; 2015**

Ward	No. of Schools	Source of Electricity					Total Schools With Electricity	
		National Grid	Biogas	Solar	Generator	Others	No.	Percent
Rusumo	1	0	0	0	0	0	0	0.0
Kasulo	2	0	0	1	1	0	2	100.0
Nyamiaga	0	0	0	0	0	0	0	0.0
Murukurazo	1	0	0	0	1	0	1	100.0
Ntobeye	1	0	0	1	0	0	1	100.0
Kibimba	1	0	0	1	0	0	1	100.0
Kanazi	1	0	0	0	1	0	1	100.0
Mugoma	2	0	0	1	1	0	2	50.0
Kirushya	1	0	0	1	0	0	1	0.0
Mabawe	1	0	0	0	1	0	1	100.0
Kabanga	2	0	0	0	2	0	2	100.0
Murusagamba	1	0	0	1	0	0	1	100.0
Muganza	1	0	0	1	0	0	1	100.0
Nyakisasa	1	0	0	1	0	0	1	100.0
Mbuba	1	0	0	0	1	0	1	100.0
Bukiriro	1	0	0	1	0	0	1	100.0
Bugarama	0	0	0	0	0	0	0	0.0
Keza	1	0	0	0	0	0	0	0.0
Kibogora	1	0	0	1	0	0	1	100.0
Nyamagoma	0	0	0	0	0	0	0	0.0
Ngara Town	2	0	0	0	2	0	2	100.0
Rulenge	1	0	0	1	0	0	1	100.0
<b>Total</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>10</b>	<b>0</b>	<b>21</b>	<b>91.3</b>

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

#### (xi) Water and Sanitations

Availability of adequate supply of clean water for the secondary school students is of utmost importance for their health. Table 5.59 shows that, in 2013 in Ngara DC, 16 out of the 23 secondary schools had water in their premises. Out of the 16 schools with water sources, 14 were using water tanks and 2 were using tap water. In 2015, the number of schools with water sources in their premises increased slightly to 17 and the water tank continued to be the main source of water (13 schools) followed by tap water (Table 5.59). At ward level, variations observed in the availability of water in secondary schools. One critical observation is that some of the secondary schools had no water and this may compromise the health of the students. (Table 5.59).

**Table 5. 58: Accessibility of Water in Public Secondary Schools by Ward, Ngara Council, 2013 and 2015**

Ward	No. of Schools	2013			No. of Schools	2015		
		Schools with Working				Schools with Working		
		Water Tanks	Water Wells	Tape Water		Water Tanks	Water Wells	Tape Water
Rusumo	1	1	0	0	1	1	0	0
Kasulo	2	1	0	0	2	1	0	0
Nyamiaga	0	0	0	0	0	0	0	0
Murukurazo	1	1	0	0	1	1	0	0
Ntobeye	1	0	0	0	1	0	0	0
Kibimba	1	0	0	1	1	0	0	0
Kanazi	1	1	0	1	1	1	0	0
Mugoma	2	1	0	0	2	1	0	0
Kirushya	1	1	0	0	1	1	0	0
Mabawe	1	0	0	0	1	0	0	0
Kabanga	2	1	0	1	2	1	0	1
Murusagamba	1	1	0	1	1	1	0	1
Muganza	1	1	0	0	1	1	0	0
Nyakisasa	1	1	0	0	1	1	0	0
Mbuba	1	1	0	0	1	1	0	0
Bukiro	1	1	0	0	1	1	0	0
Bugarama	0	0	0	0	0	0	0	0
Keza	1	1	0	0	1	1	0	0
Kibogora	1	1	0	0	1	1	0	0
Nyamagoma	0	0	0	0	0	0	0	0
Ngara Town	2	0	0	0	2	0	0	1
Rulenge	1	0	0	0	1	0	0	0
Total	23	14	0	4	23	14	0	3

Source: District Executive Director's Office (Education Department), Ngara DC, 2017

### 5.2.6 Policy Implication on Education Sector

Although significant progress has been made in both primary and secondary education, policy interventions are needed to achieve the targets and standards set. The Council needs to put more effort in the construction of girls' dormitories which will help to prevent or reduce girls' dropout due to pregnancy and increase pass rate for girls. In addition to that, the on-going programme of constructing laboratories in secondary schools should be speeded up to enable science students to carry out practicals which are an important part of their study curriculum. The school feeding programme is another important aspect for learning improvement in primary schools. Since both primary and secondary schools in the Council have shortages of toilet holes, more toilet holes should be constructed to satisfy the education policy of one toilet hole for 20 girls or 25 boys. Likewise, the number of furniture such as desks, tables and chairs in some of primary and

secondary schools should be increased to meet education targets of one desk per three pupils and one table and chair per each secondary school student respectively.

Most of primary and secondary schools in Ngara DC have no access to clean and safe water. Therefore, initiatives should be taken to supply the schools with both clean water and electricity in order to improve learning environment and protecting the health of the pupils/students. Solar power and rain water harvest technology can also help to alleviate the problem of electricity and water shortage. Moreover, if not all, secondary schools especially in rural areas should be motivated to build at least two dormitories and supplied with electricity to enhance learning environment for girls in order to reduce if not end pregnancy problem in the Region. Construction of laboratories will greatly increase the number of students studying science subjects which is important for the council and the Region as a whole.

#### **5.2.7 Investment Opportunities in Education**

The challenges facing the development of the education sector include inadequacy of pre-primary schools, primary schools and secondary schools as well as school facilities like classrooms, textbooks, laboratories, toilets, learning and teaching materials and inadequacy of teachers. Therefore, investment in constructing more schools, supply of textbooks, teachers training colleges, laboratory equipment and materials and building materials should be welcomed by Ngara DC.

## 5.3 WATER SUPPLY AND SANITATION.

### 5.3.0 Water Supply.

Water Supply and Sanitation Sector covers rural supply in terms of water sources, schemes and technology used to supply water. Besides, staffing situation is highlighted especially the work of the Council water and sanitation engineers and technicians in providing sustainable water and sanitation services. Sustainable access to clean and safe water is essential for reducing poverty, prevention of water-borne diseases and control of other health problems. Water is largely used for domestic purposes. However, due to the increase of economic activities and delivery of social services, both of which utilize water in one way or another, supply of water has become a burden which the Government cannot meet without the participation of the private sector. Hence, the Government is encouraging private investment in improving the water sector particularly in rural communities where the scarcity of clean drinking water is common.

### 5.3.1 Rural Water Supply

The National Water Policy requires every person to get water from an improved source of water, such as piped water, protected boreholes, dug wells and springs within a short distance from their places of residence. Ngara DC mainly uses water from different types of water sources including shallow wells, bore holes, charcoal dams and surface water such as springs, lake, river and rain water harvesting.

Table 5.60 shows that in 2015, the main source of water for the rural population in Ngara DC was shallow wells (39.9 percent), followed by spring water (29.2 percent), rain water (11.7 percent), and river water (8.9 percent) and piped scheme (6.3 percent). Bore holes was the least used rural water source (3.9 percent) in Ngara DC.

**Table 5. 59: Number and Type of Rural Water Sources by Ward, Ngara DC, 2015**

Water Source	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
Charcoal	0	0	0	0	0	0
Spring	176	84.2	33	15.8	209	29.2
Shallow wells	236	82.5	50	17.5	286	39.9
Rain Water Harvesting	78	92.9	6	7.1	84	11.7
Bore Holes	24	85.7	4	14.3	28	3.9
Piped Scheme	38	84.4	7	15.6	45	6.3
	Permanent	Percent	Season	Percent		
River water	64	100.0	0	0.0	64	8.9
Lake	0	0.0	0	0.0	0	0.0
Dam	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>616</b>	<b>86.0</b>	<b>100</b>	<b>14.0</b>	<b>716</b>	<b>100.0</b>

Source: Compiled data from District Executive Director's Office, Water Supply and Sanitation Department, 2017

## Tank for reseving water at Munjebwe village Ngara DC



Source: District Executive Director's Office (Rural water Department), Ngara DC, 2017

In order to make sure that there is a fairly sufficient supply of water to rural residents of Ngara DC different types of water technologies are used. Table 5.61 shows that a hand pump is the leading technology used in the council (88.2 percent) followed by gravity piped (8.9 percent) and diesel pump (1.4 percent). The available data shows that the hand pump water delivery technology is the most common type of technology used in rural areas of Ngara DC.

**Table 5. 60: Number and Type of Water Delivery Technology Used in Rural Water Schemes, Ngara DC, 2015**

Technology	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
Wind Mill	0	0.0	0	0.0	0	0.0
Electrical Pump	3	100.0	0	0.0	3	0.9
Diesel Pump	3	60.0	2	40.0	5	1.4
Hand Pump	256	83.7	50	16.3	306	88.2
Gravity Piped	29	93.5	2	6.5	31	8.9
Solar energy	2	100.0	0	0.0	2	0.6
<b>Total</b>	<b>293</b>	<b>84.4</b>	<b>54</b>	<b>15.6</b>	<b>347</b>	<b>100.0</b>

Source: District Executive Director's Office, Water Supply and Sanitation Department, 2015



### Diesel Pump at Mukibogoye Village Ngara DC



*Source: District Executive Director's Office (Rural water Department), Ngara DC, 2017*

According to Table 5.62, only 54.0 percent of the rural population in Ngara DC was served with clean water in 2015. The percentage of people getting clean water differs from one ward to another ranging from 2.1 percent of Keza Ward to 90.5 percent in Ntobeye Ward. Wards which had less than 50 percent of their rural population been served with clean water in 2015 were Keza (2.1 percent), Nyakisasa (5.3 percent), Mbuba (29.9 percent), Mugoma (35.6 percent), Kabanga (39.7 percent), Kirushya (41.5 percent) and Nyamagoma (48.2 percent). Basing on this, initiatives to improve clean water accessibility should start with wards with less than 50 percent of their population accessing clean water.

**Table 5. 61: Rural Population Served with Clean Water by Ward, Ngara DC, 2015**

<b>Ward</b>	<b>Total Rural Population</b>	<b>Population Served with Clean Water</b>	<b>Percentage of Population Served with Clean Water</b>
Rusumo	14,378	8,892	61.8
Kasulo	17,032	13,626	80.0
Nyamiaga	9,323	6,219	66.7
Murukurazo	16,844	8,399	49.9
Ntobeye	17,530	15,856	90.5
Kibimba	14,215	11,628	81.8
Kanazi	17,852	10,711	60.0
Mugoma	15,010	5,344	35.6
Kirushya	12,804	5,310	41.5
Mabawe	14,061	8,035	57.1
Kabanga	24,543	9,741	39.7
Murusagamba	13,091	8,543	65.3
Muganza	16,687	8,435	50.5
Nyakisasa	23,537	1,250	5.3
Mbuba	12,288	3,676	29.9
Bukiro	22,723	14,720	64.8
Bugarama	17,393	8,940	51.4
Keza	8,944	184	2.1
Kibogora	15,447	7,558	48.9
Nyamagoma	7,037	3,391	48.2
Ngara Township	23,328	13,064	56.0
Rulenge Township	19,260	17,205	89.3
<b>Total</b>	<b>353,327</b>	<b>190,727</b>	<b>54.0</b>

*Source: Compiled data from District Executive Director's Office, Water Supply and Sanitation Department, 2015*

Table 5.63 shows that in 2015 Ngara DC had 76 water user groups. Among the groups, 18 were active and 58 inactive. Likewise, Kanazi Ward had the largest number of groups (12) (eight active and four inactive). Furthermore, the table shows that Ngara District Council had 42 functioning and 27 dormant Operation and Maintenance Accounts. Kasulo Ward had the largest amount of funds (TZS 4,080,000) compared to other wards in Ngara DC.



**Table 5. 62: Number of Water User Groups (WUGs) and Operation and Maintenance Accounts (O&M) by Ward, Ngara District Council, 2015**

Ward	Number of Groups	WUGs/COWSO		O&M		Total Funds (TShs) as per 31/12/2015
		Active	Inactive	Operate	Dormant	
Rusumo	0	0	0	0	0	0
Kasulo	1	1	0	1	0	4,080,000
Nyamiaga	0	0	0	0	0	0
Murukurazo	1	0	1	0	1	0
Ntobeye	0	0	0	0	0	0
Kibimba	0	0	0	0	0	0
Kanazi	12	8	4	0	8	0
Mugoma	1	1	0	0	0	0
Kirushya	0	0	0	0	0	0
Mabawe	6	1	5	1	5	1,600,000
Kabanga	0	0	0	0	0	0
Murusagamba	0	0	0	0	0	0
Muganza	0	0	0	0	0	0
Nyakisasa	0	0	0	0	0	0
Mbuba	2	2	0	0	0	1,100,000
Bukiro	0	0	0	0	0	0
Bugarama	49	1	48	36	13	50,000
Keza	4	4	0	4	0	66000
Kibogora	0	0	0	0	0	0
Nyamagoma	0	0	0	0	0	0
Ngara Township	0	0	0	0	0	0
Rulenge Township	0	0	0	0	0	0
<b>Total</b>	<b>76</b>	<b>18</b>	<b>58</b>	<b>42</b>	<b>27</b>	<b>6,896,000</b>

Source: District Executive Director's Office, Water Supply and Sanitation Department, 2017

Table 5.64 shows that in 2015 there were 525 members in the 49 Village Water Committees in Ngara DC, the majority of which were males (297) compared to female (228). Ntobeye Ward and Rulenge Township had the largest number of village water committees members (each had 60 members), followed by Bukiro (48 members) and Kanazi (41 members). Kasulo Ward collected largest amount of funds (TZS 4,080,000) while Bugarama ward collected the smallest amount (TZS 50,000).

**Table 5. 63: Number of Rural Village Water Committees, Village Water Funds and Funds in the VWCs by Ward and Village, Ngara DC, 2015**

Ward	Village	Village Water Committees Members			Village Water Fund (VWF)/Water Users Group (WUG/COWSO) (TZS)	Total funds (TZS)
		Male	Female	Total members		
Rusumo	3	18	14	32	0	0
Kasulo	3	16	8	24	4,080,000	4,080,000
Nyamiaga	1	7	5	12	0	0
Murukurazo	1	6	6	12	0	0
Ntobeye	5	32	28	60	0	0
Kibimba	4	10	15	25	0	0
Kanazi	6	35	6	41	0	0
Mugoma	1	6	6	12	0	0
Kirushya	2	18	6	24	0	0
Mabawe	1	6	6	12	1,900,000	1,900,000
Kabanga	2	12	12	24	0	0
Murusagamba	2	14	10	24	0	0
Muganza	1	6	6	12	0	0
Nyakisasa	4	19	19	38	0	0
Mbuba	1	10	6	16	110,000	110,000
Bukiro	4	24	24	48	0	0
Bugarama	3	12	13	25	50,000	50,000
Keza	2	6	6	12	-	-
Kibogora	0	0	0	0	0	0
Nyamagoma	1	6	6	12	0	0
Ngara Township	1	0	0	0	0	0
Rulenge Township	5	34	26	60	0	0
<b>Total</b>	<b>49</b>	<b>297</b>	<b>228</b>	<b>525</b>	<b>6,140,000</b>	<b>6,140,000</b>

\* VFWs = Village Water Funds, WUG = Water Users Groups.

Source: District Executive Director's Office, Water Supply and Sanitation Department, 2015.

### 5.3.2 Urban Water Supply

Urban water supply in Ngara DC is still under improvement. The 2012 Population and Housing Census shows that access to clean drinking water in Ngara DC was higher in urban areas than in rural areas.

Out of 22 wards of Ngara DC in 2015, two wards (Ngara and Rulenge wards) are in urban areas and benefits from the urban water supply. Most of the other people in the council use spring water as a source of drinking water (45.0 percent), followed by shallow wells (39.6 percent) and rain water tanks (14.4 percent). The least used water source in the Council was piped schemes (0.9 percent).

**Table 5. 64: Number and Type of Urban Water Sources by Ward, Ngara DC; 2015**

Water Source	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
Charcoal dams	0	0.0	0	0.0	0	0.0
Spring	49	98.0	1	2.0	50	45.0
Shallow wells	37	84.1	7	15.9	44	39.6
Bore Holes	0	0.0	0	0.0	0	0.0
Rain water tank	16	100.0	0	0.0	16	14.4
Piped Scheme	1	100.0	0	0.0	1	0.9
	Permanent		Seasonal			
River	0	0	0	0	0	0
Lake	0	0	0	0	0	0
Dam	0	0	0	0	0	0
<b>Total</b>	<b>103</b>	<b>92.8</b>	<b>8</b>	<b>7.2</b>	<b>111</b>	<b>100.0</b>

Source: Compiled Data from District Executive Director's Office, Water Supply and Sanitation Department, 2016

Looking at the technology used to ensure sufficient water supply in urban areas, the most used technology was gravity piped (53.8 percent), followed by hand pump (42.0 percent) and electrical pump (3.4 percent). The urban water scheme does not use the wind mill pump technology nor solar energy (Table 5.66).

**Table 5. 65: Number and Type of Water Delivery Technology Used in Urban Water Schemes, Ngara DC, 2015**

Technology	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
Wind Mill	0	0.0	0	0.0	0	0.0
Electrical Pump	4	100	0	0.0	4	3.4
Diesel Pump	0	0.0	1	100.0	1	0.8
Hand Pump	31	62.0	19	38.0	50	42.0
Gravity Piped	55	85.9	9	14.1	64	53.8
Solar energy	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>90</b>	<b>75.6</b>	<b>29</b>	<b>24.1</b>	<b>119</b>	<b>100.0</b>

Source: Compiled data from District Executive Director's Office, Water Supply and Sanitation Department, 2015

According to Table 5.67, 53.6 percent of Ngara DC Urban population was served with clean water in 2015. The percentage of urban population served with clean water differs from one

ward to another, with 56.0 percent of the urban population in Ngara Township and 55.0 percent of the population in Rulenge Township being served with clean water.

Pump house and a tank at Ngundusi village at Kabanga ward.



Source: District Executive Director's Office, Water Supply and Sanitation Department, 2017

**Table 5. 66: Estimated Demand and Actual Supply of Water (cu. Metres per day) and the Urban Population Served with Clean Water by Ward, Ngara DC, 2015**

Ward	Estimated Demand (cubic metres) per day.	Actual Supply (cubic Metres) per day.	Percentage of Population Served with Clean Water
Ngara Township	2,500	1,333	56.0
Bugarama	-	-	-
Mabawe	-	-	-
Bukiro	-	-	-
Keza	-	-	-
Rulenge Township	793.2	432.6	55.0
Kanazi	-	-	-
Nyakisasa	-	-	-
Kasulo	0	0	0.0
<b>Total</b>	<b>3,293.2</b>	<b>1,765.5</b>	<b>54.0</b>

Source: District Executive Director's Office, Water Supply and Sanitation Department, 2017

### 5.3.3 Sanitation

For good health and favourable living environment in any society, sanitation facilities are essential. In 2015, 98.7 percent of households had toilet facilities in Ngara DC, while 1.3 percent did not have toilet facilities. At ward level the percentage of households without toilet facilities in 2015 ranged from 0.7 percent in Bukiro Ward to 5.8 percent in Bugarama Ward. The presence of households without toilet facilities calls for Ngara District Authorities to advocate on the importance of toilet facilities so as to make sure that all households in the council have toilet facilities. This will help the council in controlling the spread of get rid of communicable diseases like diarrhoea and water borne diseases. (Table 5.68)

**Table 5. 67: Number and Percentage of Households with and Without Toilet Facilities by Ward, Ngara DC, 2015**

Ward	Total Number of Households	Total Number of Households with Toilets	Percentage of Households with Toilets	Total Number of Households Without Toilets	Percentage of Households Without Toilets
Rusumo	2,750	2,686	97.7	64	2.3
Kasulo	3,031	2,953	97.4	78	2.6
Nyamiaga	1,746	1,698	97.3	48	2.7
Murukulazo	3,155	3,115	98.7	40	1.3
Ntobeye	2,832	2,748	97.0	84	3.0
Kibimba	2,440	2,401	98.4	39	1.6
Kanazi	3,816	3,771	98.8	45	1.2
Mugoma	2,304	2,218	96.3	86	3.7
Kirushya	2,279	2,178	95.6	101	4.4
Mabawe	2,760	2,732	99.0	28	1.0
Kabanga	4,581	4,393	96.0	188	4.1
Murusagamba	2,271	2,232	98.3	39	1.7
Muganza	2,941	2,843	96.7	98	3.3
Nyakisasa	5,187	4,998	96.4	189	3.6
Mbuba	2,586	1,982	76.6	604	23.4
Bukiro	5,026	4,989	99.3	37	0.7
Bugarama	3,544	3,340	94.2	204	5.8
Keza	2,162	2,162	100.0	0	0.0
Kibogora	2,515	2,493	99.1	22	0.9
Nyamagoma	1,348	1,282	95.1	66	4.9
Ngara Township	4,765	4,721	99.1	44	0.9
Rulenge Township.	3,533	3,487	98.7	46	1.3

Source: District Executive Director's Office, Water Supply and Sanitation Department, 2017



### 5.3.4 Water Supply Personnel

For ensuring that water and sanitation services are accessible to the majority of Ngara residents, equipping water and sanitation department with required number of staff, and necessary working facilities, is important. Shortage of staff in the water and sanitation department (Table 5.69), will delay the council in achieving millenium development goals of supplying clean and safe water to the majority of her residents. Therefore, the district authority is called upon to undertake initiatives that will ensure availability of adequate number of water and sanitation staff for provision of good services in the Council.

**Table 5. 68: Type and Number of Water Supply Personnel, Ngara DC; 2015**

	Engineers	Technicians	Plumbers	Pump attendants	Pump mechanics	Total
	0	3	6	3	0	12
<b>Total</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>12</b>

### 5.3.5 Policy Implication on Water sector

Accessibility of clean and safe water in the District is still poor especially in rural areas where surface water is main sources of water. By increasing the budget and the number of staff in the water sector, the Council stands at a good chance of making use of the adequate surface water it has in improving accessibility of clean and safe water to her people and this inturn will protect them from waterborne diseases.

### 5.3.6 Investment Opportunities in Water Supply

Since there is a significant number of malfunctioning water delivery equipment such as gravity pipe as well as diesel and hand pump, immediate opportunity for investment is in the establishment of work shop for repairing and maintenance of these equipment. Shops for selling spare parts and even new equipment are also good areas for investment. Supply of water infrastructure like pipes, drilling machines as well as construction of clean /safe water and sewage system is of outmost important in Ngara DC.

## CHAPTER SIX

### Other Development Issues

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#### 6.0 Introduction

This chapter deals with other development issues including gender development such as day care centres, number of most vulnerable children, women and youth economic groups, co-operative development (SACCOS), other cooperative activities, women's participation in managerial, political, professional and technical fields as well as crime statistics.

#### 6.1 Gender Empowerment

Gender empowerment aims at ensuring that all sexes, particularly women, fully participate in policy and decision making processes and in all aspects of economic, socio-cultural and political life. Various measures had already been taken to minimize time spent by women and girls in attending to domestic activities and hence give them more time to do other socio economic activities. These measures include raising awareness on the use of family planning, opening and operating of day care centres, establishment of women economic groups, participation in SACCOS, CBOs and other cooperative activities. These measures have been also taken to empower women in Ngara DC.

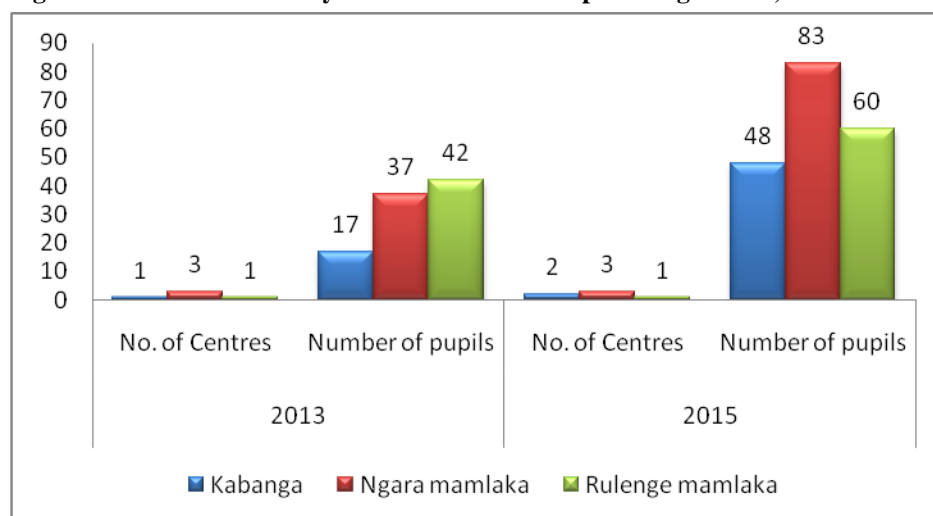
#### 6.2 Day Care Centres

Running of day care centres enables mothers to participate in various economic activities which contribute significantly to the socio economic growth of their families and the Council in general. Day care centres are meant for children of age three to four years. These are young children who are not yet qualified for pre-primary education. Table 6.1 shows that Ngara DC had five day care centres in 2013 with 96 pupils and in 2015 the number of pupils increased to 191 due to the society's awareness on the importance of these day care centres. In Ngara DC, day care centers are located in Ngara and Rulenge Towns as well as in Kabanga Ward.

**Table 6. 1: Distribution of Day Care Centers by Ward, Ngara Council, 2013 and 2015**

Ward	2013		2015		Change of pupils	
	No. of Centres	Number of pupils	No. of Centres	Number of pupils	Number	Percent
Kabanga	1	17	2	48	31	32.6
Ngara Town	3	37	3	83	46	48.4
Rulenge Town	1	42	1	60	18	18.9
<b>Total</b>	<b>5</b>	<b>96</b>	<b>6</b>	<b>191</b>	<b>95</b>	<b>100.0</b>

**Source:** District Executive Director's office, (Community Development Department), 2015

**Figure 6. 1: Number of Day Care Centers and Pupils in Ngara DC, 2013 and 2015**

**Source:** District Executive Director's office, (Community Development Department), 2015

### 6.3. Vulnerability

Vulnerability refers to the exposure of an individual to, stress and risks that lead to a situation that is too difficult for him/her to cope with. It is the result of not only individual misfortunes, but also the social conditions which emanate from limited resources and opportunities to lead a normal and decent life. Under normal circumstances, women and children are the most vulnerable groups in the society. Most children, especially young ones are vulnerable due to their young ages, which makes them dependants on others for provision of their basic needs such as food, shelter and clothing, among others.

Strengthening and maintaining physical and mental maturity usually leads to growing capability for self-reliance, but during the period of childhood and adolescence, children and young people continue to need special care and support. While most children in Tanzania are cared for and protected by their families and communities, many are not so fortunate. Manifestations and consequences of child vulnerability include exposure to both underlying and direct risk factors



such as illiteracy, poverty, malnutrition, ill-health, diseases, which ultimately lead to mortality. Furthermore, children raised in households headed by children or households with elderly adults only experience high risks caused by orphanhood, HIV and AIDS; lack of education, child labour and gender abuse as common characteristics of vulnerable children.

Various research results indicate that orphaned children are poorer than children who are not orphaned. Table 6.2 shows the situation of most vulnerable children categorized as orphans and non-orphans in Ngara DC. The table shows that there are large percentages of the most vulnerable children who are orphans in all wards compared to most vulnerable non-orphans children. In 2015, the Council had 5,039 non orphans compared to 1,981 orphans categorized as the most vulnerable children. The table also shows that out of 1,981 orphans, girls were slightly more (53.9 percent) than boys (46.1 percent). At ward level, Nyakisasa had the largest number of the most vulnerable orphan children (187 orphans, 99 girls and 88 boys), followed by Bukiriro (159 orphans, 86 girls and 73 boys) and Bugarama (154 orphans, 98 girls and 56 boys). Muganza Ward had the smallest number of the most vulnerable orphan children (20 orphans, 11 girls and 9 boys).

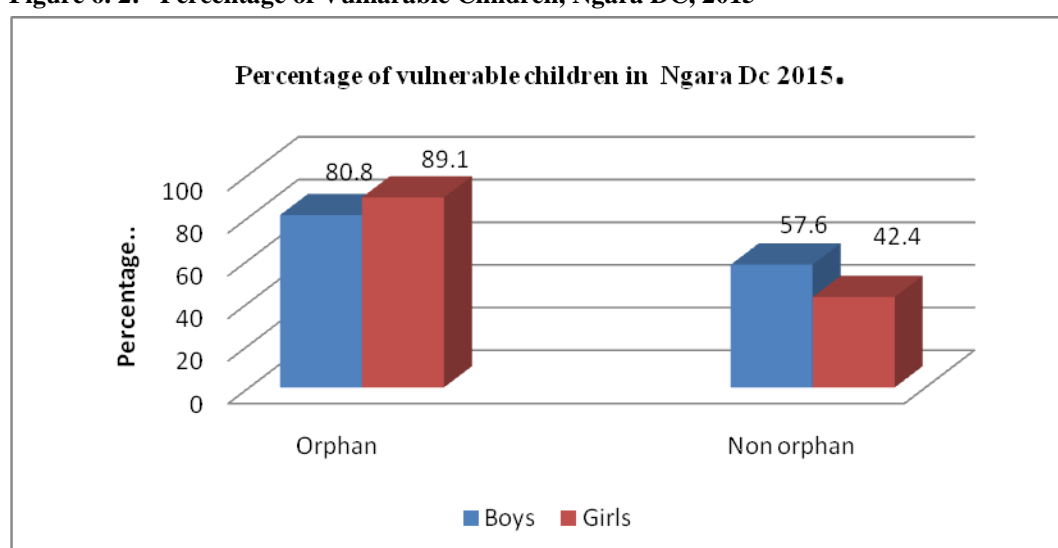
**Table 6. 2: Number and Percentage of Most Vulnerable Children by Ward, Ngara DC, 2015**

Ward	Total Children Aged 0-17	Most Vulnerable Children									
		Orphans					Non Orphans				
		No. of girls	Girls Percent	No. of boys	Boys Percent	Total	No. of girls	Girls Percent	No. of boys	Boys Percent	Total
Rusumo	244	42	53.8	36	46.2	78	93	56.0	73	44.0	166
Kasulo	206	48	44.4	60	55.6	108	44	44.9	54	55.1	98
Nyamiaga	131	38	48.7	40	51.3	78	22	41.5	31	58.5	53
Murukulazo.	1,289	22	56.4	17	43.6	39	713	57.0	537	43.0	1,250
Ntobeye	126	42	60.0	28	40.0	70	45	80.4	11	19.6	56
Kibimba	110	28	45.2	34	54.8	62	25	52.1	23	47.9	48
Kanazi	72	22	42.3	30	57.6	52	11	55.0	9	45.0	20
Mugoma	104	32	44.4	40	55.6	72	20	62.5	12	37.5	32
Kirushya	685	35	46.7	40	53.3	75	370	60.7	240	39.3	610
Mabawe	750	77	65.3	41	34.7	118	347	54.9	285	45.1	632
Kabanga	1,003	69	57.0	52	43.0	121	478	54.2	404	45.8	882
Murusagamba	85	28	46.7	32	53.3	60	12	48.0	13	52.0	25
Muganza	44	11	55.0	9	45.0	20	10	41.7	14	58.3	24
Nyakisasa	307	99	52.9	88	47.1	187	64	53.3	56	46.7	120
Mbuba	388	78	60.5	51	39.5	129	227	87.6	32	12.4	259
Bukiriro	229	86	54.1	73	45.9	159	36	51.4	34	48.6	70
Bugarama	582	98	63.6	56	36.4	154	260	60.7	168	39.3	428
Keza	137	68	49.6	69	50.4	137	-	-	-	-	-

Ward	Total Children Aged 0-17	Most Vulnerable Children									
		Orphans					Non Orphans				
		No. of girls	Girls Percent	No. of boys	Boys Percent	Total	No. of girls	Girls Percent	No. of boys	Boys Percent	Total
Kibogora	74	34	77.3	10	22.7	44	13	43.3	17	56.7	30
Nyamagoma	56	10	34.5	19	65.5	29	12	44.4	15	55.6	27
Rulenge	230	61	62.9	36	37.1	97	62	46.6	71	53.4	133
Ngara Township	168	40	43.5	52	56.5	92	37	48.7	39	51.3	76
<b>Total</b>	<b>7020</b>	<b>1,068</b>	<b>53.9</b>	<b>913</b>	<b>46.1</b>	<b>1,981</b>	<b>2,901</b>	<b>57.6</b>	<b>2,138</b>	<b>42.4</b>	<b>5,039</b>

Source: District Executive Director's office, 2015.

Figure 6. 2: Percentage of Vulnerable Children, Ngara DC, 2015



Source: District Executive Director's Office, 2015

## 6.4: Women and Youth Groups

### 6.4.1 Women Economic Groups

The establishment of women economic groups provides an opportunity for women to communicate in order to strengthen their solidarity and discussions of gender issues affecting their development. In the long run the society has to empower women to enable them to make significant contributions towards development initiatives as independent and equal decision makers.

In order to help the development of women, each Council in Kagera Region has established Women Loan Funds to assist their economic groups which act as a catalyst to the growth of economy in the respective councils. In 2013, Ngara DC had 15 registered economic groups with

98 members, These groups were registered in 5 wards and five groups were assisted with a loan of TZS 8,000,000 in 2015. Ngara Ward had the largest number of groups (five with 15 members) that received a loan of TZS. 3,000,000. (Table 6.3).

**Table 6. 3: Number of Women Economic Groups by Ward, NgaraDC, 2013 and 2015**

Ward	2013				2015			
	Total no. of Registered Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs.
Rusumo	2	20	-	-	4	57	-	0
Kasulo	1	15	-	-	3	45	-	-
Nyamiaga	8	96	-	-	9	102	-	-
Murukulazo	3	45	-	-	3	45	-	-
Ntobeye	2	24	-	-	0	0	-	-
Kibimba	3	45	-	-	4	60	1	1,000,000
Kanazi	11	132	-	-	12	116	0	0
Mugoma	14	130	-	-	13	162	1	1,500,000
Kirushya	51	45	0	-	2	42	-	-
Mabawe	0	0	-	-	0	0	-	-
Kabanga	4	58	-	-	5	75	-	-
Murusagamba	0	0	-	-	0	0	1	1,000,000
Muganza	0	0	-	-	1	20	-	-
Nyakisasa	12	108	0	0	16	210	-	-
Mbuba	8	2	0	0	1	15	-	-
Bukuriro	1	13	-	-	1	13	-	-
Bugarama	0	0	-	-	5	56	-	-
Keza	0	0	0	0	0	0	-	-
Kibogora	0	0	-	-	0	0	-	0
Nyamagoma	0	0	-	-	0	0	0	0
Ngara Township	58	870	-	-	66	990	2	3,000,000
Rulenge Township	1	15	-	-	1	15	1	1,500,000
<b>Total</b>	<b>179</b>	<b>1,618</b>	<b>0</b>	<b>0</b>	<b>146</b>	<b>2,023</b>	<b>6</b>	<b>8,000,000</b>

*Source: Compiled data from District Community Development Officer's office, 2017*

#### 6.4.2: Women Participation in Decision Making

Among the goals and targets of National Vision 2030 and Sustainable Development Goals (SDGs) is to empower women by involving them in decision making at various levels. This goal has not yet been reached in Ngara DC since men are still dominating at many levels of decision making. According to the analysis, statistics show that, 27 percent of 30 political posts, were held by women.

All eight councillors are for special seats. This indicates that most of the women in Ngara DC have not been empowered enough to contest for the political chances. Six percent of 16 managerial posts available in the council were held by women (Table 6.4). Consicuently, the council has not managed to close the gap between men and women in the managerial and political posts. Out of the existing 74 professional posts in the council level, 22 percent were held by women. More efforts are needed to motivate women and to empower them in education so that they can be able to join in the political, managerial and proffecional levels inorder to attain equal opportunities between men and women as stipulated in the SDGs.

**Table 6. 4: Number of Managerial, Political, Professional and Technical Personnel by Sex and Council, Ngara DCouncil, 2015**

Ward	Managerial		Professionals/ Technicians		Politicians (MPs, DC, Councillors)		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Rusumo	2	2	42	25	1	0	45	27
Kasulo	4	0	99	51	1	1	104	52
Nyamiaga	1	2	24	24	1	1	26	27
Murukurazo	5	0	57	28	1	0	63	28
Ntobeye	5	1	58	17	1	0	64	18
Kibimba	2	3	58	32	1	0	61	35
Kanazi	7	0	76	46	1	1	84	47
Mugoma	6	0	63	31	1	1	70	32
Kirushya	5	0	48	14	1	0	54	14
Mabawe	4	1	38	45	1	0	43	46
Kabanga	6	1	74	72	1	0	81	73
Murusagamba	4	0	37	22	1	2	42	24
Muganza	4	0	61	4	1	0	66	4
Nyakisasa	5	0	80	25	1	0	86	25
Mbuba	4	0	46	22	1	0	51	22
Bukiro	5	0	71	39	1	0	77	39
Bugarama	4	0	37	17	1	1	42	18
Keza	3	0	50	6	1	0	54	6
Kibogora	3	0	44	8	1	0	48	8
Nyamagoma	4	0	21	1	1	0	26	1
Ngara Township	2	0	175	181	3	1	180	182
Mamlaka ya Mji Mdogo wa Rulenge.	2	0	60	45	1	0	63	45
<b>Total</b>	<b>87</b>	<b>10</b>	<b>1,319</b>	<b>755</b>	<b>24</b>	<b>8</b>	<b>1,430</b>	<b>773</b>

*Source: Compiled data from District Executive Director's office, 2015*

### 6.4.3: Youth Economic Groups

Youth is an economic group which most communities pay attention to its needs. The youths in Ngara DC are mainly involved in small scale activities like, driving motor cycles or *bodabodas*, sand mining and bee keeping, stone quarrying and small businesses. Self-employment in these sectors needs some preparations and some capital input.

Table 6.5 presents the number of youth economic groups, membership and the amount of money loaned to these groups. The table shows that in 2013, the Council had 65 youth groups and decreased to 38 groups in 2015. There were 679 members in 2013 increasing to 715 in 2015. However, it is important for the Ngara DC to encourage formation of more youth economic groups so as to create employment and improve the socio and economic well being of the youth in the council.

**Table 6. 5: Youth Economic Groups and Total Money Loaned by Ward, Ngara Council; 2013 and 2015**

Ward	2013										2015	
	Total No. of Registered Groups	Total Members			No. of Groups Assisted	Total Amount of Funds Loaned (TZS)	Total No. of Groups	Total Members			No. of Groups Assisted	Total Amount of Funds Loaned (Tshs.)
		Male	Female	Total				Male	Female	Total		
Ngara Town	8	70	106	176	0	0	12	98	116	214	4	20,000,000
Kanazi	2	14	37	51	0	0	6	48	93	141	1	5,000,000
Mugoma	3	31	48	79	0	-	7	69	85	154	1	5,000,000
Bugarama	-	-	-	-	-	-	-	-	-	-	-	0
Bukiriro	44	120	90	210	1	-	1	8	6	14	1	1,000,000
Rulenge	8	96	67	163	-	-	12	111	81	192	-	-
<b>Total</b>	<b>65</b>	<b>331</b>	<b>348</b>	<b>679</b>	<b>1</b>	<b>0</b>	<b>38</b>	<b>334</b>	<b>381</b>	<b>715</b>	<b>7</b>	<b>31,000,000</b>

**Source:** District Executive Director's office, 2015.

## Bodaboda in Ngara Junction Area as a Part of Youth Self Employment



**Source:** District Executive Director's Office, 2016

### 6.5 Savings and Credit Cooperative Societies (SACCOS).

The existence of Savings and Credit Cooperative Societies (SACCOS) in the Council is among factors contributing to development especially for low income families and individuals. SACCO's members have access to financial resources because financial institutions in Tanzania prefer to channel loans through such groups or individuals through their SACCOS.

In Ngara DC, most of the wards had a number of SACCOS groups as people in the Council had positively responded to the call to form co-operative groups. Table 6.6 presents the distribution of SACCOS groups in Ngara DC by Ward. It also shows the number of active and dormant groups, funds, and the number of members in the wards by sex as well as the amount loaned to members.

In 2015 there were 28 SACCOS groups registered in Ngara DC (18 active, 10 dormant) with 2,759 (1,877 males, 882 females) members. The total value of shares owned by all members was TZS 91,742,223 while a total of TZS 626,168,923 were loaned to members in 2015. At ward level, Ngara Ward had the largest total value of shares (TZS. 63,407,823) compared to other wards in the Council. A total of TZS 22,263,000 were recovered (3.6 percent) by the end of 2015.

**Table 6. 6: Savings and Credit Cooperative Societies (SACCOS), Ngara DC, 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 (TZS).	Total Loans Recovered from Members Jan-Dec 2015 (TZS.)
	Active	Dormant	Male	Female			
Rusumo	0	1	36	12	245,000	0	22,263,000
Kasulo	1	0	30	39	3,000,000	185,000,200	
Nyamiaga	0	1	59	65	750,000	265,000,650	
Murukulazo	0	0	0	0	0	0	
Ntobeye	0	0	0	0	0	0	
Kibimba	1	0	67	17	11,489,000	604,750	
Kanazi	0	0	0	0	0	0	
Mugoma	0	2	77	21	816,400	5,080,000	
Kirushya	8	0	67	13	-	22,263,000	
Mabawe	0	1	56	12	570,000	0	
Kabanga	0	1	18	12	1,704,000	17,256,750	
Murusagamba	0	0	0	0	0	0	
Muganza	0	0	0	0	0	0	
Nyakisasa	0	1	48	14	431,000	25,760,000	
Mbuba	0	0	0	0	0	0	
Bukiro	0	0	0	0	0	0	
Bugarama	0	0	0	0	0	0	
Keza	0	0	0	0	0	0	
Kibogora	0	0	0	0	0	0	
Nyamagoma	0	0	0	0	0	0	
Ngara Township	5	3	1,157	599	63,407,823	63,407,823	
Mamlaka ya Mji Mdogo wa	3		262	78	9,329,000	41,795,750	
<b>Total</b>	<b>18</b>	<b>10</b>	<b>1,877</b>	<b>882</b>	<b>91,742,223</b>	<b>626,168,923</b>	<b>22,263,000</b>

Source: District Executive Director's office, 2015

## 6.6 VICوبا

VICOBA like any other micro-finance service is suitable and effective in stimulating developmental initiatives and that quite often they have proved to be sustainable when introduced into communities, for improving the well-being of low income earners. In Ngara DC, VICOBA were established in 2015 when the council started to encourage the Community Development Department, Trade Section and various NGOs, and CBOs to educate and

encourage women, youths and other groups to form VICOPA to help them to secure loans for different economic activities and projects, which inturn will help the people in the Council to alleviate poverty.

## 6.7 Financial Institutions

A number of financial institutions are operating in Ngara DC. There were four financial institutions that were providing financial services in the Council in 2015 which are NMB, CRDB and POSTAL BANK. This is an indication that the Council is in need of more financial institutions as there is an increase in the number of formal and informal small scale businesses.

## 6.8. Crime Statistics

### 6.8.0 Introduction

The growth of towns, population and the development of science and technology has led to the erosion of moral principles in the country. The statistics on the rate of crimes and the type of offences committed reveals that the erosion of morals within the society has been increasing day by day. Ngara DC, like other councils in the country, is also experiencing an increase in crime as well as in the erosion of moral principles.

### 6.8.2 Crime Statistics

A total of 70 crime cases were reported in Ngara DC at the end of 2015. The most common crime was related to violent crime with 40 reported cases (57.1 percent); crimes related to property were 12 (17.1 percent) and drug crimes with 18 of reported cases (25.7 percent). Also a total of 28 persons were jailed, five for property crimes, ten for violence crimes and 13 for drug crimes.

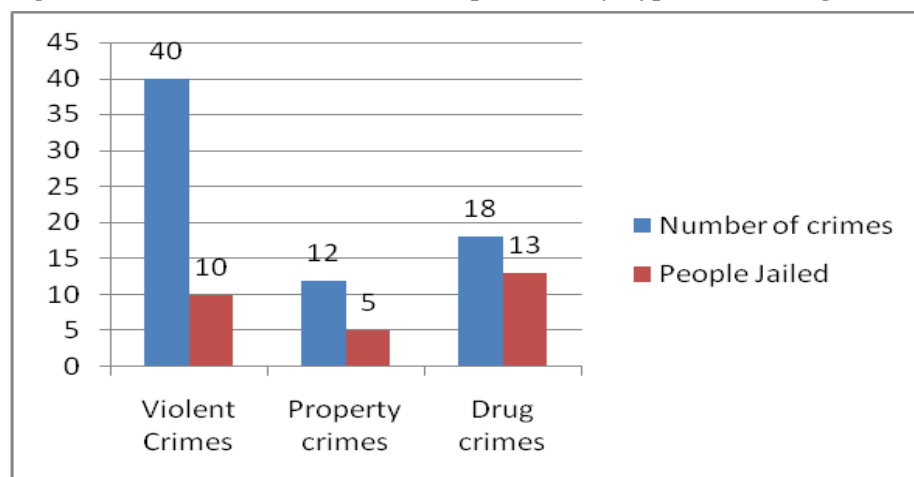
**Table 6. 7: Number of Crimes and People Jailed by Type of Crime, Ngara DC, January to December 2015,**

Total No. of Police in the Council	Number of			Number of People Jailed due to		
	Violent Crimes Reported	Property Crimes Reported	Drug Crimes Reported	Violent Crimes	Property Crimes	Drug Crimes
190	40	12	18	10	5	13

**Source:** Officer Commanding District, Ngara



**Figure 6. 3: Number of Crimes and People Jailed by Type of Crime, Ngara DC, 2015**



**Source:** Officer Commanding District (OCD), Ngara DC2015,

### 6.8.3 Accidents

Road traffic accidents (RTAs) are one of the major causes of injuries, deaths and disabilities. They have a great impact on the disability-adjusted life years (DALYS) and Disability has become a public health problem particularly in developing countries. Tanzania is one of the developing countries which is highly affected: the magnitude of RTAs suggests that this is a very serious problem in the country. Previously accidents were regarded as unavoidable events which resulted into injuries and deaths, but looking at the etiological related factors which include, carelessness of the drivers, conditions of the vehicle or motor bikes, poor condition of roads, misuse of roads by pedestrians and driving under the influence of alcohol or drug abuse, it is obvious that most of these factors can be prevented within the limit of the human error.

In Ngara DC the number of motor vehicle and motor cycle operators has increased to some extent while the condition of roads and numbers are still the same. Table 6.8 shows that, out of the 83 accidents which occurred in Ngara DC in 2015, (15 accidents, 18.1 percent) were caused by motor vehicles, causing injuries to 10 people and causing death to five people. This was followed by motor vehicles versus motorcycles accidents (35 accidents, 36.1 percent) whereby 21 victims were injured and 9 victims died, motor cycles only accidents (20 accidents, 24.1 percent) with six victims dead and 14 injured while motor vehicles and motor cycles versus pedestrian accidents ( 18 accidents, 21.7 percent) causing 15 injuries and three deaths.

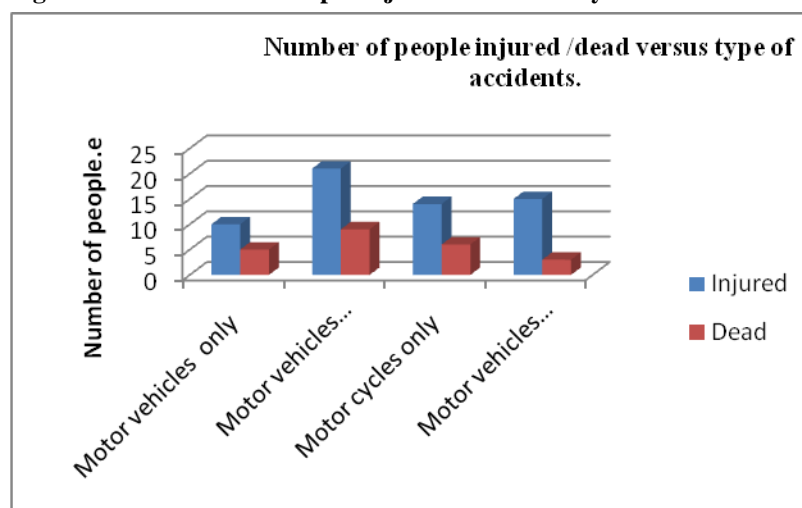
**Table 6. 8: Total number of Accidents Reported in the Police Station and Number of People Injured/died from January to December 2015, Ngara Council.**

Total number of Accidents involving								Number of People who Died/Injured from Accidents involving							
Motor Vehicles Only	Percent	Motor Vehicle Versus Motor Cycles	Percent	Motor Cycles Only	Percent	Motor Vehicles and Motor Cycles Versus Pedestrian	Percent	Motor Vehicles Only		Motor Vehicle Versus Motor Cycles		Motor cycles only		Motor Vehicles and Motor Cycles Versus Pedestrian	
								D	I	D	I	D	I	D	I
15	18.1	30	36.5	20	24.1	18	21.7	5	10	9	21	6	14	3	15

**Note:** D: Died, I: Injured

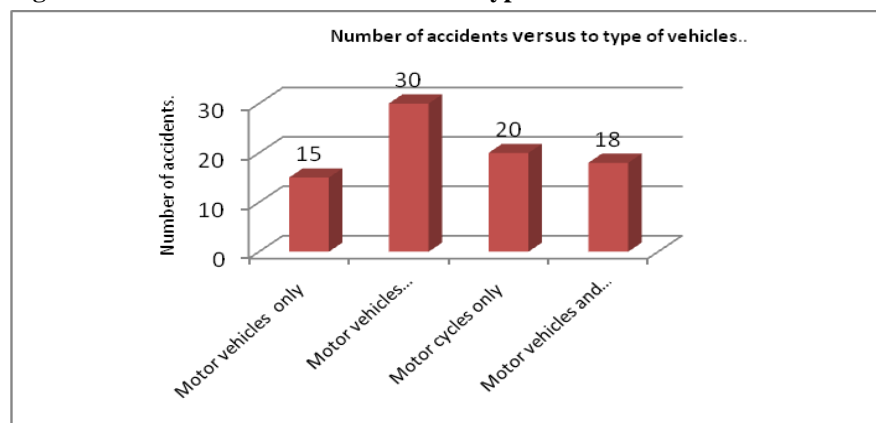
**Source:** Officer Commanding District (OCD), Ngara DC

**Figure 6. 4: Number of People Injured/Who Died by Source of Accidents**



**Source:** Officer Commanding District (OCD), Ngara DC

**Figure 6. 5: Number of accidents versus type of vehicles**



**Source:** Officer Commanding District (OCD), Ngara DC

### 6.8.4 Theft Cases

A total of 100 theft cases were reported in Ngara DC (Officer Commanding District) in 2015. Livestock stealing was the most common type of theft cases that occurred in 2015 having (82 cases, 82.0 percent), followed by motorcycle stealing with (18 cases, 18.0 percent). There were also 20 suspected thieves who were found guilty and jailed in various prisons of Ngara DC in 2015. These were found guilty of livestock stealing (15 thieves) and motor cycles stealing (5 thieves) (Table 6.9)

**Table 6. 9: Number of Theft Cases Reported and People Jailed by Type of Theft, Ngara DC, January to December 2015**

No. of Police Posts in the Council	Number of Stolen				Number of People Jailed due to Stealing of			
	Motor Vehicles	Motor Cycles	Bicycles	Livestock	Motor Vehicles	Motor Cycles	Bicycles	Livestock
8	0	18	0	82	0	5	0	15

*Source: Officer Commanding District (OCD), Ngara DC*

**Figure 6. 6: Number of Theft Cases and People Jailed due to Stealing, Ngara DC, 2015..**



*Source: Officer Commanding District (OCD), Ngara DC*

## 6.9 Motorcycle Operators (BodaBoda).

*BodaBoda* business like any other informal sector business, contributes in reducing youth unemployment as well as reducing income poverty. Visible on nearly every corner of the street/*mtaa* in Ngara DC, the number of *BodaBoda* operators has skyrocketed in recent years, making it one of the fastest growing businesses in Tanzania. This influx has caused some Ngara DC residents to wonder if the *Bodaboda* market has reached a saturation point in which the

supply of riders outpaces passenger demand. Despite the swelling number of operators, most people agree that the *Bodaboda* business is still fairly profitable.

Most *Bodaboda* operators in Ngara DC can take home at least TZS 5,000 per day and TZS 150,000 per month in profit, while ambitious, hardworking and lucky operators can earn even more. “It depends on how lucky the operator is because *bodaboda* business is all about hunting. Lucky operators that find passengers who pay more than they should, can earn up to TZS 50,000 per day. Table 6.10 shows the number of *bodaboda* operators in Ngara DC, with Ngara Ward having the largest numbers of *bodaboda* operators in 2015.

**Table 6. 10: Number of Motor Cycle Operators (BodaBoda) and Estimated Income Earned per Month by Ward, Ngara DC, 2015**

Ward	Number of Bodaboda Operators	Estimated Income Earned per Bodaboda Operator in a month (TZS).
Rusumo	12	150,000
Kasulo	53	130,000
Nyamiaga	24	170,000
Murukurazo	19	150,000
Ntobeye	18	170,000
Kibimba	19	120,000
Kanazi	54	120,000
Mugoma	30	150,000
Kirushya	40	130,000
Mabawe	32	120,000
Kabanga	57	150,000
Murusagamba	21	150,000
Muganza	9	100,000
Nyakisasa	20	150,000
Mbuba	2	100,000
Bukiro	10	200,000
Bugarama	5	100,000
Keza	3	100,000
Kibogora	6	100,000
Nyamagoma	5	100,000
Ngara Township	104	250,000
Rulenge Township	23	200,000
<b>Total</b>	<b>566</b>	<b>3,110,000</b>

**Source:** Compiled data from District Executive Director’s Office, 2015

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## **Ngara District Council**

### **Vision**

To have a community with improved livelihood by 2025.

### **Mission**

To provide high quality socio-economic services through using available resources for improve livelihood of Ngara community.

