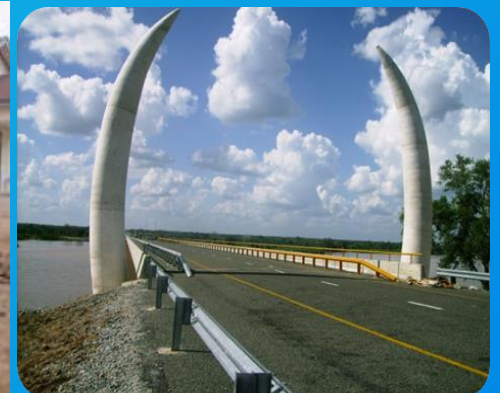




United Republic of Tanzania

NANYUMBU DISTRICT COUNCIL SOCIO-ECONOMIC PROFILE, 2015



March, 2019



United Republic of Tanzania

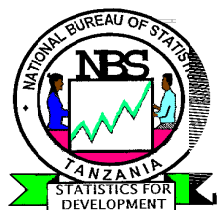
**NANYUMBU DISTRICT COUNCIL
SOCIO-ECONOMIC PROFILE, 2015**

Jointly prepared by

National Bureau of Statistics

and

Nanyumbu District Council



National Bureau of Statistics
Dodoma



Nanyumbu District Council
Mtwara Region

March, 2019

Foreword



Nanyumbu District Council, right from its inception, has tenaciously endeavored to provide quality services to its community through participatory and democratic approaches geared to sustainably improve people's socio-economic lives by capitalizing on available resources. However, despite difficulty pathways it has charted through since establishment, the District Council is relentlessly dedicated to not only bringing out the best in all its members but also to provide the best possible environment for viable achievement of economic growth, provision of quality and equitable social services to the community and promote technological development consistent with Tanzania's Development Vision 2030 and the United Nation's Sustainable Development Goals (SDGs).

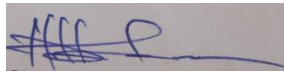
Though still grappling with numerous social economic challenges, we have unanimously vowed to top rise every challenge. These challenges range from massive school drop outs assorted with high primary school enrolment levels which are not proportionate to the available resources in the education sector, low income per capita, infant to maternal mortality rates, unemployment to poor academic performance and food insecurity especially in certain months of the year. In the same vein, we still face an uphill task in combating HIV/AIDS pandemic which is basically factored by the deep rooted cultural and traditional malpractices among the indigenous tribes and these further supports the spread of the pandemic and breaking of marriages.

It is indisputable that our tireless efforts to mitigate these challenges have often suffered many bottlenecks which include but not limited to poor policy implementation, lack of project identification, design due to the lack of reliable and adequate data and information on the rural development process. This is the point where reliable, adequate and relevant qualitative and quantitative data and information at district level becomes paramount. All in all, with the District Council Socio Economic Profile in place, we aspire to make a total economic and technological turn around in the midst of the prevailing circumstances as the maxim goes that in every challenge there is always an underlying opportunity.

We strongly, therefore, believe that, for any meaningful achievement to be realized, there has to be impeccable statistical information on ground to back up our endeavors and for this reason we hope that a major part of this document will provide our stakeholders such as researchers, planners, donors and potential investors with keen interest to invest in our district with essential and handy statistical and other related information on geography, population, social-economic

factors, social services, economic infrastructure, productive sectors and a myriad of other issues about us.

I am highly indebted to Nanyumbu District Executive Director's Office working as a team, National Bureau of Statistics and all who took part in this noble task whose huge support and invaluable contribution to make this write up a success cannot be downplayed.

A rectangular box containing a handwritten signature in blue ink. The signature appears to be 'HCC P' followed by a flourish.

Hamisi H. Dambaya

March, 2019

Acronyms

ADO	Assistant Dental Officers
AIDS	Acquired Immune deficiency Syndrome
AMOs	Assistant Medical Officers
ARI	Acute Respiratory
ARV	Antiretroviral
BCG	Bacillus Calmet Guerin (TB-Vaccine)
CBO	Community Based Organization
CBPP	Contagious Bovine Plural Pneumonia
CFR	Crude Fertility Rate
CO	Clinical Officer
CPR	Classroom Pupil Ratio
CHF	Community Health Fund
CSO	Civil Society Organization
DC	District Council
DDS	Doctor of Dental Surgery
DPR	Desk Pupil Ratio
DPT3/HB3	Diphtheria Pertusis Tetanus 3 rd Doze/Hemoglobin Level 3 rd Doze
ECF	East Coast Fever
FBO	Faith Based Organization
GDP	Gross Domestic Product
Ha	Hectares
HIV	Human Immune Virus
HTR	House Teacher Ratio
IGAs	Income Generating Activities
IMR	Infant Mortality Rate
MDGs	Millennium Development Goals
MMR	Maternal Mortality Rate
MOs	Medical Officers
MVC	Most Vulnerable Children
NGO	Non –Governmental Organization

NBS	National Bureau of statistics
NCD	New Castle Disease
NMB	National Micro-Finance Bank
OPD	Out Patient Department
OPV3	Oral Polio Vaccine 3 rd Doze
PHC	Population and Housing Census
PHCDP	Primary Health Care Development Programme
PITC	Provider Initiative Testing and Counselling
PLWHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission
PPR	Pestedespetits Ruminants
PR	Pass Rate
PRA	Participatory Rapid Appraisal
RCH	Reproductive Child Health
SACCOS	Saving and Credit Cooperative Societies
SEDP	Secondary Education Development Programme
Sq. Km	Square Kilometres
STD VII	Standard Seven
STIs	Sexually Transmitted Infections
TANESCO	Tanzania Electricity Supply Company
TASAF	Tanzania Social Action Fund
TBAs	Traditional Birth Attendants
TPR	Teacher Pupil Ratio/Toilet Pupil Ratio
TT2	Tetanus Toxoid 2 nd Doze
TZS	Tanzanian Shillings
U5MR	Under Five Mortality Rate
VCT	Voluntary Counselling & Testing
VHCs	Village Health Workers
VWF	Village Water Fund
WDC	Ward Development Committee
WUG	Water User Group

Table of Contents

Foreword	i
Acronyms	iii
List of Tables	viii
CHAPTER ONE	1
Overview	1
1.0 Introduction	1
1.1 Geographical Location	1
1.2 Administrative Units and Land Area.....	2
1.3 Climate, Soil and Topography.....	3
1.3.1 Climate	3
1.3.2 Soils	4
1.4 Population.....	5
1.4.1 Ethnic Groups.....	6
1.4.2 Population Size and Growth.....	6
1.4.3 Population Density	8
1.4.4 Dependency Ratio	9
1.4.5 Population Distribution by Age and Sex Ratio	10
CHAPTER TWO	12
District Economy	12
2.0 Introduction	12
2.1 Gross Domestic Product and Per Capita GDP	12
2.1.1 Sector Contribution to the District GDP	14
2.1.2 Council Contribution to the Region GDP	16
2.1.3 Regional Per Capita GDP.....	17
2.1.4 District Per capita GDP	17
2.2 Non-Income Indicators.....	18
2.2.1 Main Sources of Cash Income.....	18
2.2.2 Literacy Level.....	19
2.2.3 Adult Literacy Level	20
2.2.4 Roofing Materials.....	21
2.2.5 Wall Materials	21
2.2.6 Flooring Material.....	22
2.2.7 Source of Drinking Water	23
2.2.8 Types of Toilets.....	24
CHAPTER THREE	25
Production Sectors	25
3.0 Introduction	25
3.1 Agriculture.....	25
3.1.1 Introduction	25

3.1.2	Distribution of Arable Land	25
3.1.3	Area under Food Crops Cultivation	26
3.2.1	Area under Major Cash Crop Production	31
3.2.2	Food Sufficiency	35
3.2.3	Crop Marketing	36
3.3	Potential Irrigation Area	36
3.4	Farm inputs	37
3.4.1	Introduction	37
3.4.2	Chemical Fertilizers	37
3.4.3	Insecticides/Pesticides	38
3.4.4	Improved Seeds	39
3.4.4	Agro Mechanization	39
3.4.5	Policy implication in Agriculture Sector	40
3.4.6	Investment Opportunities in Agriculture Sector	40
3.5	Livestock	41
3.5.1	Grazing Area	44
3.5.2	Livestock Infrastructure	44
3.5.3	Livestock Morbidity and Mortality	45
3.5.4	Marketing Livestock and by Products	49
3.5.5	Establishment and Personnel	50
3.6	Policy Implication	51
3.7	Investment Opportunities in Livestock Subsector	51
3.8	Natural Resources	52
3.8.1	Forestry	52
3.8.2	Environmental Conservation	53
3.8.3	Forest Products, Logs and Charcoal	53
3.8.4	Fisheries	56
3.9	Historical Site Viewing Tourism	57
3.10	Eco Tourism	58
3.11	Industrial Production	58
3.11.1	Commerce and Manufacturing Industries	59
CHAPTER FOUR.....		60
Economic Infrastructure		60
4.0	Introduction	60
4.1	Road Network	60
4.1.1	Road Network Condition and Accessibility	60
4.1.2	Road Network Classification	61
4.1.3	Agricultural Productivity Road Network	61
4.2	Telecommunication Services	62
4.3	Energy Sector Development	62
4.3.1	Electricity	62

4.3.2	Source of Energy for Cooking.....	63
CHAPTER FIVE		64
Social Services		64
5.0	Introduction	64
5.1	Health Sector.....	64
5.1.1	Health Facilities.....	64
5.1.2	Population per Health Facility.....	66
5.1.3	Morbidity.....	68
5.1.4	Out-patients	68
5.1.5	In-patients	69
5.1.6	Mortality	70
5.1.7	HIV/AIDS Infections	70
5.1.9	Immunization Program.....	73
5.2	Education Sector.....	78
5.2.0	Introduction	78
5.2.1	Pre-Primary Education	78
5.2.2	Primary Education.....	83
5.2.3	Distribution of Primary School Education System	85
5.2.4	Standard One Enrolment	87
5.2.5	Primary School Completion Rate.....	89
5.2.6	Transition to Secondary Education	99
5.2.7	Primary schools Facilities	99
5.2.8	Adult Education.....	105
5.2.9	Secondary Education.....	106
5.3	WATER SUPPLY AND SANITATION	125
5.3.1	Overview.....	125
5.3.2	Water Supply.....	126
5.3.1	Rural Water Supply.....	129
5.3.2	Sanitation.....	132
5.3.3	Investment Opportunities in Water Supply	133
CHAPTER SIX		134
Other Development Issues.....		134
6.1	Introduction	134
6.2	Child Protection.....	134
6.2.2	Day Care Centers.....	136
6.3	Gender Empowerment.....	136
6.3.1	Women Economic Groups	137
6.3.2	Women participation in Decision Making	138
6.4	Youth in Development	138
6.4.1	Motorcycle (BodaBoda) Operators	139
6.5	Cooperative Development.....	140

6.5.1	Savings and Credit Cooperative Societies.....	140
6.5.2	Village Community Banks	141
6.6	Financial Institutions	142
6.7	Civil Society Participation in Development.....	142

List of Tables

Table 1. 1:	Distribution of Land Area and Administrative Units by Division, Nanyumbu District, 2015	2
Table 1. 2:	Distribution of Land Area, Villages and Hamlets by Ward; Nanyumbu District, 2015	3
Table 1. 3:	Major Ethnic Group of Residents by Division, Nanyumbu District Council; 2015.....	6
Table 1. 4:	Population Size and Growth Rate by District, Mtwara Region; 2002 and 2012 Censuses	7
Table 1. 5:	Population Density by Council, Mtwara Region; 2002 and 2012 Censuses	8
Table 1. 6:	Population Density by Ward, Nanyumbu District Council; 2002 and 2012 Censuses .	9
Table 1. 7:	The Dependency Ratios by Council, Mtwara Region; 2012 Census.....	10
Table 1. 8:	Population Distribution and Sex Ratio by Division, Nanyumbu District; 2002 and 2012 Censuses	10
Table 1. 9:	Population Distribution by Sex Ratio and Ward, Nanyumbu District; 2002 and 2012 Censuses	11
Table 2. 1:	GDP and Per Capita GDP at Current Prices, Tanzania Mainland; 2011 – 2015.....	13
Table 2. 2:	Sector GDP Estimates Contribution (Mill. TZS), Nanyumbu District Council; 2013, 2014 and 2015	15
Table 2. 3:	GDP Estimates Contribution (Mill. TZS) by Council, Mtwara Region; 2013, 2014 and 2015	16
Table 2. 4:	Per Capita GDP at Current Prices by Region, Tanzania Mainland; 2012 and 2015 ...	17
Table 2. 5:	Per Capita GDP Estimates by Council, Mtwara Region; 2013, 2014 and 2015	18
Table 2. 6:	Agricultural Output (Physical and Value) for the year 2015.....	19
Table 3. 1:	Distribution of Arable Land (ha) by Ward Nanyumbu District Council; 2015.....	26
Table 3. 2:	Estimated Land Area (ha) under Major Food Crops, Nanyumbu District Council; 2010/11 – 2014/15.....	27
Table 3. 3:	Estimated Area (Ha) Under Major Food Crops (Maize) by Ward; Nanyumbu District Council, 2010/11– 2014/15	28
Table 3. 4:	Estimated Area (Ha) Under Major Food Crops (Sorghum) by Ward; Nanyumbu District Council, 2010/11– 2014/15	29
Table 3. 5:	Estimated Area (Ha) Under Major Food Crop (Cassava) by Ward; Nanyumbu District Council, 2010/11– 2014/15	30
Table 3. 6:	Estimated Area (Ha) Under Major Food Crops (Paddy) by Ward; Nanyumbu District Council, 2010/11– 2014/15	31

Table 3. 7: Major Cash Crops, Nanyumbu District Council; 2010/11 – 2014/15	32
Table 3. 8: Estimated area under cultivation (Ha) of major cash crops (Cashew nuts) by Ward Nanyumbu District Council; 2010/11 – 2014/15	32
Table 3. 9: Estimated Area Under Cultivation (Ha) Major Cash Crops (Green grams) by Ward, Nanyumbu District Council; 2010/11 – 2014/15	33
Table 3. 10: Estimated Area Under Cultivation (Ha) Major Cash Crops (Pigeon Peas) by Ward, Nanyumbu District Council; 2010/11 – 2014/15	34
Table 3. 11: Estimated Area Under Cultivation (Ha) of Cash Crops (Ground nuts) by Ward, Nanyumbu District Council; 2011 – 2015	35
Table 3. 12: Estimated Amount and Earnings of Cash Crops Sold by Crop, Nanyumbu District Council; 2015	36
Table 3. 13: Irrigation Prospects by Ward, Nanyumbu District Council; 2014/15	37
Table 3. 14: Type and Quantity of Chemical Fertilizers (tons) Distributed to Farmers; Nanyumbu District Council; 2010/11-2014/15.....	38
Table 3. 15: Type and Quantity of Fungicides (in Liters) Distributed to Farmers; Nanyumbu District Council; 2010/11-2014/15.....	38
Table 3. 16: Type and Quantity of Improved seeds (Kgs) Distributed to Farmers; Nanyumbu District Council; 2010/11-2014/15.....	39
Table 3. 17: Availability of Agriculture Implements, Nanyumbu District Council; 2014/15	40
Table 3. 18: Estimated Livestock Population by ward, Nanyumbu District Council; 2015.....	41
Table 3. 19: Population Distribution of Goats by Type and by Ward, Nanyumbu District Council; 2015	42
Table 3. 20: Population Distribution of Cattle by Type and by Ward, Nanyumbu District Council; 2015	43
Table 3. 21: Distribution of Livestock Infrastructure by Ward; Nanyumbu District Council, 2015	44
Table 3. 22: Distribution of Livestock Infrastructure by Ward; Nanyumbu District Council, 2015	45
Table 3. 23: Five Common Cattle Diseases Causes Morbidity, Nanyumbu District Council; 2013 and 2015	46
Table 3. 24: Four Common Cattle Diseases Causes Mortality, Nanyumbu District Council; 2013 and 2015	47
Table 3. 25: Four Common Disease Causes of Goat Morbidity, Nanyumbu District Council; 2013 and 2015	47
Table 3. 26: Four Common Goat Diseases Causes Mortality, Nanyumbu District Council; 2013 and 2015	48
Table 3. 27: Three Common Poultry Diseases Causes Morbidity, Nanyumbu District Council; 2013 and 2015	48
Table 3. 28: Three Common Poultry Diseases Causes Mortality Nanyumbu District Council; 2013 and 2015	49
Table 3. 29: Production of Milk; Nanyumbu Council; 2013 and 2015	50
Table 3. 30: Availability of Livestock Personnel by Ward, Nanyumbu Council; 2015.....	51
Table 3. 31: Status of Forest Cover by Ward Nanyumbu District Council; 2015	52

Table 3. 32: Number of NGOs and Number Development Partners Involved in Environmental Conservation by ward, Nanyumbu District Council; 2015	53
Table 3. 33: Revenue collected from Charcoal Nanyumbu Council, 2011-2015.....	54
Table 3. 34: Number of Traditional Beehives by Ward, Nanyumbu District Council; 2011 -2015	55
Table 3. 35: Number of Modern Beehives by Ward, Nanyumbu District Council; 2011 -2015..	56
Table 3. 36: Available fishing Resources available by ward, Nanyumbu District Council, 2015	57
Table 3. 37: Historical sites potential/attractive for Tourism Nanyumbu Council; 2015.....	57
Table 3. 38: Accommodation facilities by Ward Nanyumbu Council; 2015	58
Table 4. 1: Length of Road Network by Type (in km), Nanyumbu District Council, 2015.....	60
Table 4. 2: Passability Condition of Road Network, Nanyumbu District Council; 2015.....	61
Table 4. 3: Length of Road Network by Type of Road Surface; Nanyumbu District; 2015	61
Table 4. 4: Agricultural Productivity of the Road Network, Nanyumbu Council; 2014/15.....	62
Table 4. 5: Number of Customers using/connected to Electricity, Nanyumbu District Council; 2011 – 2015	63
Table 5. 1: Availability of Health Facilities by Type and Division, Nanyumbu District, 2002, 2009 and 2015	66
Table 5. 2: Distribution of Health Facilities by Division, Nanyumbu District, 2015.....	66
Table 5. 3: Relating Health Facilities to the Population by Division, Nanyumbu District; 2002 and 2012	67
Table 5. 4: Distribution of Doctors among Population by Division, Nanyumbu District; 2002 and 2012.....	67
Table 5. 5: Distribution of Complementary Rural Health Service Providers by ward, Nanyumbu Council; 2015	68
Table 5. 6: Ten Most Commonly Reported Causes of Morbidity (Out Patients), Nanyumbu District 2011 and 2015	69
Table 5. 7: Ten Most Commonly Reported Causes of Morbidity (In Patients), Nanyumbu District council, 2011 and 2015	69
Table 5. 8: Most Commonly Reported Causes of Mortality (In Patients), Nanyumbu District Council 2011 and 2015.....	70
Table 5. 9: HIV Prevalence Rates of VCT Volunteers Who Screened for HIV by Sex, Nanyumbu District, 2011, 2013 and 2015	71
Table 5. 10: HIV Infections among Family Blood Donors and New AIDS Cases, Nanyumbu District Council; 2011 - 2015.....	71
Table 5. 11: Expectant Mothers who participated in the PMTCT Service, Nanyumbu DC, 2015	72
Table 5. 12: Number of Expectant Mothers Who Were Screened for HIV and Those Who Received ARVs by Ward, Nanyumbu District Council; 2015.....	73
Table 5. 13: Percentage of Expectant Mothers Vaccinated TT2 by Ward, Nanyumbu District; 2011, 2013 and 2015	74

Table 5. 14: Percentage of Children Under-One Year Vaccinated BCG by Ward, Nanyumbu District; 2013 and 2015	75
Table 5. 15: Percentage of Children under One Year Vaccinated DPT3 by Ward, Nanyumbu DC, 2013 and 2015	76
Table 5. 16: Percentage of Children under One Year Vaccinated OPV3 by Ward, Nanyumbu District; 2011, 2013 and 2015	77
Table 5. 17: Percentage of Children under One Year Vaccinated Measles by ward, Nanyumbu District; 2011, 2013 and 2015	78
Table 5. 18: Number of Pre-Primary School by Ownership and ward, Nanyumbu District Council; 2011-2015.....	79
Table 5. 19:Pre-Primary Schools Total Enrolment by Ownership and by Ward, Nanyumbu Council; 2011 – 2015	80
Table 5. 20: Availability of Pre-Primary School by Ward and Village, Nanyumbu District; 2015	81
Table 5. 21: Pre-Primary Schools Enrolment by Division, Nanyumbu District Council; 2011, 2013 and 2015	81
Table 5. 22: Pre-Primary Schools Enrolment by Ward, Nanyumbu District Council; 2011, 2013 and 2015	83
Table 5. 23: Number of Primary Schools by Ownership and by Division; Nanyumbu District Council; 2011 – 2015	84
Table 5. 24: Number of Primary Schools by Ownership and by ward; Nanyumbu District Council; 2011 – 2015	84
Table 5. 25: Distribution of Primary Schools by Division and Its Accessibility at Ward and Village Level, Nanyumbu District Council; 2015.....	87
Table 5. 26: Standard I Enrolment by School Ownership and by Ward; Nanyumbu Council; 2011- 2015.....	88
Table 5. 27: Standard I Registered by Age Group in Public Primary Schools, Nanyumbu Council; 2011-2015.....	88
Table 5. 28: Total (Std I-VII) Enrolment by Sex and Ward in Public Primary Schools; Nanyumbu District Council; 2011 – 2015	89
Table 5. 29: Number of Pupils Enrolled Std I in 2007 and 2008 and Completed Std VII in 2013 and 2014 Nanyumbu District Council.....	90
Table 5. 30: Number of Pupils Who Enrolled in STD I in 2009 and Completed STD VII in 2015 by Ward and by Sex, Nanyumbu District Council.....	90
Table 5. 31: Number of Pupils Who Enrolled in STD I in 2008 and Completed STD VII in 2014 by Ward and by Sex, Nanyumbu District Council.....	91
Table 5. 32: Number of Drop Outs by Sex; Nanyumbu District Council; 2012 – 2015	92
Table 5. 33: Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2012.....	92
Table 5. 34:Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2013.....	93

Table 5. 35: Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2014	93
Table 5. 36: Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2015	94
Table 5. 37: Number of Pupils Who Sat and Passed STD VII Examinations, Nanyumbu District Council; 2011	95
Table 5. 38: Number of Pupils Who Sat and Passed STD VII Examinations, Nanyumbu District Council; 2013	96
Table 5. 39: Number of Pupils Who Sat and Passed STD VII Examinations, Nanyumbu District Council; 2015	97
Table 5. 40: Number of Pupils Who Selected and Joined Form I in Public Secondary Schools by Sex, Nanyumbu District Council; 2011, 2013 and 2015.....	98
Table 5. 41: Number of Pupils who were Selected and Joined Form I in Public Secondary Schools by Ward, Nanyumbu District Council, 2011, 2013 and 2015	98
Table 5. 42: Number of Pupils Who Completed Primary Education and Joined Secondary Education in Public Secondary Schools by Sex, Nanyumbu District Council; 2011, 2013 and 2015	99
Table 5. 43: Availability of Classrooms in Public Primary Schools by Ward, Nanyumbu District Council; 2015	100
Table 5. 44: Availability of Pit Latrine in Public Primary Schools by Ward, Nanyumbu Council, 2015	101
Table 5. 45: Availability of Primary School Teachers' Houses by Ward, Nanyumbu Council; 2015.....	102
Table 5. 46: Availability of Desks in Public Primary Schools Ward, Nanyumbu District Council; 2015	103
Table 5. 47: Accessibility of Water in Public Primary Schools by Ward, Nanyumbu Council, 2013 and 2015	104
Table 5. 48: Availability of Public Primary School's Teachers by ward, Nanyumbu District Council; 2015	105
Table 5. 49: Number of Adult Education Centers and Enrolments by Ward, Nanyumbu Council; 2013 and 2015	106
Table 5. 50: Number of Secondary Schools by Ownership and Ward, Nanyumbu District Council; 2011, 2013 and 2015	108
Table 5. 51: Distribution of Secondary schools by Division, Nanyumbu District Council; 2015	108
Table 5. 52: Total Form 1 Enrolment in Public Secondary Schools by Ward and Sex, Nanyumbu District Council; 2011 and 2015	109
Table 5. 53: Number of Students Registered in 2011 and Completed Form IV in 2014 by Ward and Sex in Public Secondary Schools, Nanyumbu District Council.....	110
Table 5. 54: Number of Students Registered in 2012 and Completed Form IV in 2015 by Ward and Sex in Public Secondary Schools, Nanyumbu District Council.....	111

Table 5. 55: Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Nanyumbu District Council; 2011, 2013 and 2015.....	112
Table 5. 56: Availability of Public Secondary School’s Teachers by Ward, Nanyumbu Council; 2015.....	113
Table 5. 57: Availability of Public Secondary School’s Teachers by Qualification and Ward, Nanyumbu Council; 2015	114
Table 5. 58: Number of Science and Arts Teachers in Public Secondary Schools by Ward, Nanyumbu Council; 2015	115
Table 5. 59: Availability of Administration blocks in Public Secondary Schools by Ward, Nanyumbu Council; 2015	116
Table 5. 60: Availability of Classrooms in Public Secondary Schools by Ward; Nanyumbu District Council; 2015	117
Table 5. 61: Availability of Teachers Houses in Public Secondary Schools by Ward, Nanyumbu District Council; 2015	118
Table 5. 62: Availability of Pit Latrine in Public Secondary Schools by Sex and Ward; Nanyumbu District Council 2015.....	119
Table 5. 63: Availability of dormitories/hostels in Public Secondary Schools by Ward, Nanyumbu District Council; 2015	120
Table 5. 64: Availability of Libraries in Public Secondary Schools by Ward; Nanyumbu District Council; 2015	121
Table 5. 65: Availability of Tables and chairs in Public Secondary Schools by Ward, Nanyumbu District Council; 2015	122
Table 5. 66: Availability of Laboratories in Public Secondary Schools by Ward; Nanyumbu District Council; 2015	123
Table 5. 67: Availability of Electricity Power in Secondary Schools by Ward, Nanyumbu District Council; 2015	124
Table 5. 68: Accessibility of Water in Public Secondary Schools by Ward, Nanyumbu District Council; 2013 and 2015	125
Table 5. 69: Number and Type of Rural Water Sources by Ward, Nanyumbu District Council, 2015.....	127
Table 5. 70: Number and Type of Technology Used in Rural Water Schemes by Ward, Nanyumbu District Council, 2015.....	129
Table 5. 71: Rural Population Served with Clean Water by Ward, Nanyumbu District Council; 2015.....	130
Table 5. 72: Number of Water User Groups (WUGs) and Operation and Maintenance Accounts (O&M) by Ward, Nanyumbu District Council; 2015	131
Table 5. 73: Number of Rural Village Water Committees, Village Water Funds and Funds in the VWCs by Ward; Nanyumbu District Council as at 31.12 2015	132
Table 5. 74: Total Number of Households with Toilet Facilities by Ward; Nanyumbu District Council; 2015	133

Table 6. 1: Number of Most Vulnerable Children by Ward, Nanyumbu District Council; 2015	135
Table 6. 2: Distribution of Day Care Centers by Ward; Nanyumbu Council; 2013 and 2015	136
Table 6. 3: Number of Women Economic Groups by Ward; Nanyumbu District Council; 2013 and 2015	137
Table 6. 4: Participation in Managerial, Political, Professional and Technical Personnel by gender and by Ward; Nanyumbu District Council; 2015	138
Table 6. 5: Youth Economic Groups and Total Money Loaned by Ward, Nanyumbu District Council; 2013 and 2015	139
Table 6. 6: Number of Motorcycle Operators (BodaBoda) by Ward/Business center, Nanyumbu District Council; 2015	140
Table 6. 7: Number of SACCOS by Status by Ward, Nanyumbu District Council; 2015	141
Table 6. 8: Village Community Bank (VICOBA) by Ward, Nanyumbu District Council, 2015	142

List of Figures

Figure 1. 1: Estimated Doubling Time (Years) by Council, Mtwara Region; 2015	7
Figure 1. 2: Population Pyramid for Nanyumbu District Council; 2012 Census	11
Figure 2. 1: Regional Gross Domestic Product at Current Prices (TZS Billion), Mtwara Region; 2007 - 2015	13
Figure 2. 2: Percent Regional Shares of GDP at Current Market Prices, Tanzania Mainland, 2015	14
Figure 2. 3: Share of Gross Domestic Product at Basic Current Prices by Economic Activity, Nanyumbu DC; 2015	16
Figure 2. 4: Percent Literacy Rate by Sex and District, Mtwara Region; 2015	20
Figure 2. 5: Percent of Households by Type of Roofing Materials, Nanyumbu District Council, 2015	21
Figure 2. 6: Percent of Households by Type of Roofing Materials, Nanyumbu District Council, 2015	22
Figure 2. 7: Percent of Households by Type of Flooring Materials, Nanyumbu District Council, 2015	22
Figure 2. 8: Percent of Households by Main Source of Drinking Water, Nanyumbu District Council, 2015	23
Figure 2. 9: Percent of Households by Main Source of Drinking Water, Nanyumbu District: 2015	24
Figure 2. 10: Percent of Households by Type of Toilet Facility, Nanyumbu District Council, 2015	24
Figure 3. 1: Volume and Revenue (TZS) Collected from logs Nanyumbu District Council 2011-2015	54
Figure 3. 2: Number of Industries and Staff by Type, Nanyumbu DC, 2015	59
Figure 4. 1: Sources of Energy for Cooking, Nanyumbu District Council 2015	63

Figure 5. 1: Pre-Primary Schools Enrolment by Division, Nanyumbu Council; 2011, 2013 and 2015	82
Figure 5. 2: Pass rates of Pupils Who Sat for STD VII Examinations, Nanyumbu District Council; 2011, 2013 and 2015	94
Figure 5. 3: Number of Working/Operating Main Rural Water Sources by Type, Nanyumbu District Council, 2015	128

CHAPTER ONE

Overview

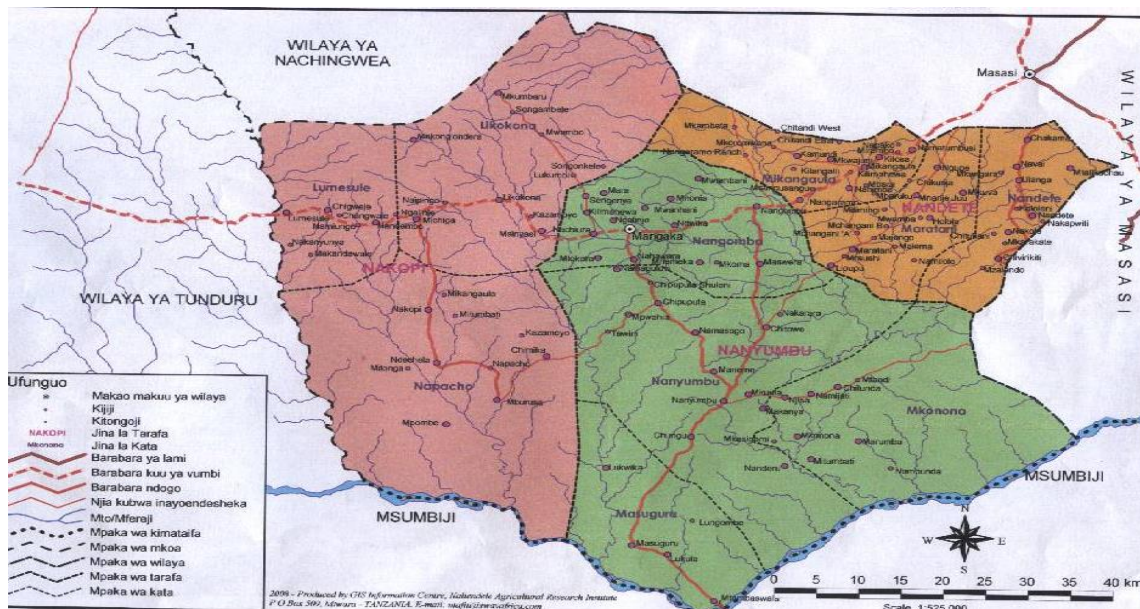
1.0 Introduction

Chapter One gives background information about Nanyumbu District Council, its geographical location, land area, administrative units, climate as well as agro-ecological zones. Issues pertaining to ethnic groups, population distribution, size and other demographic characteristics are also briefly explained.

1.1 Geographical Location

Nanyumbu District Council is one among nine districts in Mtwara Region. The District Council was established under Local Government Act and officially announced on 29th July 2005 by the former President of United Republic of Tanzania Benjamin William Mkapa. The District Council started operating in July 2007. Mangaka, an emerging urban centre located about 54 kilometer from Masasi Town along Mtwara – Songea Road is the head quarter of the Nanyumbu District Council.

Map 1: Showing Location of Nanyumbu District Council, 2015



Source: District Executive Director's Office, Nanyumbu District, 2017

1.2 Administrative Units and Land Area

Nanyumbu District Council is composed of four divisions and one constituency namely Nanyumbu constituency. The District Council is further sub divided into 17 wards, 93 registered villages and 526 hamlets (Table 1.1). With a total area of 5,071.5 sq.km, Nanyumbu is the largest District Council in Mtwara Region. Its land area is 30 percent of the Regions' land area of 16,720 sq. km. The District Council is situated between latitudes 360 and 380 East of Greenwich and latitudes 100 and 120 south of Equator. It shares borders with Nachingwea District Council to the north, Masasi District Council to the east, Tunduru District Council to the west and the Democratic Republic of Mozambique to the south.

At division level, distribution of land area shows that Nakopi Division has the largest land area of 1,665.7 sq.km followed by Nanyumbu Division (1,628 sq.km) and Mangaka Division (1,040.4 sq.km). Maratani Division has the least area of 737.4 sq.km (Table 1.1).

Table 1. 1: Distribution of Land Area and Administrative Units by Division, Nanyumbu District, 2015

Division	Land Area(Sq. Km)	Wards	Villages	Hamlets	Percent of Land Area
Nanyumbu	1628	3	17	95	32.1
Nakopi	1665.7	4	19	113	32.8
Maratani	737.4	5	26	153	14.5
Mangaka	1040.4	5	31	165	20.5
Total District	5071.5	17	93	526	100.0

Source: District Executive Director's Office, Nanyumbu District, 2016

At ward level, Table 1.2 shows that Napacho Ward has the largest land area (854.6 sq.km) which is 16.9 percent of the District's land area of 5,071.5 sq.km. It is followed by Mkonona Ward (653.1 sq.km, 12.9 percent), Nanyumbu Ward (547.2 sq.km, 10.8 percent) and Likokona (465.7 sq.km, 9.2 percent).

Table 1. 2: Distribution of Land Area, Villages and Hamlets by Ward; Nanyumbu District, 2015

Ward	Land Area (Sq. Km)	No. of Villages	No. of Hamlets	Percent of Land Area
Mangaka	151.3	14	78	3.0
Nanyumbu	547.2	3	17	10.8
Napacho	854.6	4	21	16.9
Sengenya	370.2	4	26	7.3
Lumesule	350.1	11	64	6.9
Mnanje	118.3	5	35	2.3
Mikangaula	214.5	4	24	4.2
Maratani	171.7	6	33	3.4
Chipuputa	249.9	6	32	4.9
Masuguru	432.4	5	30	8.5
Nandete	228.5	4	28	4.5
Nangomba	264.6	11	62	5.2
Mkonona	653.1	11	51	12.9
Likokona	465.7	5	25	9.2
Total	5071.5	93	526	100.0

Source: District Executive Director's Office, Administration Department, Nanyumbu District, 2016

1.3 Climate, Soil and Topography

1.3.1 Climate

Nanyumbu District Council experiences dominant winds which are a major determinant factor for change of climate in the District Council. During the period between months of December and April, the dominant moisture laden winds move from north - east towards south west and bring a hot humid precipitation season to the District Council. During months of May to November when the winds blow from south - east the District Council becomes dry, cooler and less humid. The rainy seasons which start from December to April is single peaked. The peak is usually reached in January, but occasionally in March or April. The total amount of annual rainfall tends to vary with altitude. The average annual rainfall of the District Council is 832 mm. However, there are wide variations in rainfall from year to year, which is sometimes evidenced by the low rainfall and consequent dry spells or irregular rainfalls which has often affected the District Council in terms of crop production. Annual average temperature observed to be 25 °C while the highest and the lowest temperatures being 32 °C and 22 °C respectively.

1.3.2 Soils

There are three dominant soil types in Nanyumbu District Council namely, Lacoste soil (Red earth), clay and alluvial soils and coarse sands.

1.3.2.1 Lacoste soil

These are well drained moderately permeable soils formed in loamy sediments. These soils are on nearly level to undulating uplands and are found lying on coarse grained basement rocks and quartzite's areas of the District Council. These soils are relatively fertile and support food crops cultivation like legumes.

1.3.2.2 Clay and Alluvial Soil

These are dark-coloured clays found in River Valley floors of Ruvuma, Mbangala and Lumesule. These soils are highly fertile and favorable for paddy growing and horticultural practice. These soils are characterized with water logging which inhibits the growth of other species of crops. Areas like Nangaramo in Nangomba Ward have such kind of soil which is also suitable for animal grazing though easily susceptible to soil erosion.

1.3.2.3 Coarse Sands

These soils cover the rest of the District Council to a large extent. Coarse sands are a product of underlying rocks and are usually poor, subject to leaching, inorganic and are easily eroded and saline. The soil types determine the soil water holding capacity and the quantity available for plants. As already mentioned, the coarse sands are excessively leached. The soils with finer texture especially the alluvial ones have a higher water holding capacity that enable them to store most of the rainwater. On the other hand, soil erosion is one of the factors limiting cultivation in most parts of the District Council. Its effects is influenced by soil type, slope inclination and farming methods in most parts of the District Council.

1.3.2.4 Topography

Nanyumbu District Council has an undulating topography with many scattered rocky hills which start a few kilometers away from Mangaka Town and continue towards the south to Ruvuma River and westwards to Tunduru District Council.

1.3.2.5 Agro – Ecological Zones (AEZ)

The District Council falls into two major Agro- Ecological zones namely Ruvuma River and East Nanyumbu zones. These two agricultural zones offer good chunk of arable land for crop production and provide reliable pasture land for livestock places such as Nangaramo, Nangomba in this zone.

(i) Ruvuma River Zone

This zone is composed of Nakopi and Nanyumbu divisions which are separated from the Republic of Mozambique by Ruvuma River. Soil types of this zone are mostly sandy soils, sandy loam soils, gravel covered areas and clay soils along Ruvuma River valley. Major food crops grown in this zone are cassava, sorghum, pigeon peas, cowpeas, and rice. Cash crops include cashew nuts, sesame and vegetables.

(ii) East Nanyumbu Zone

This zone comprises some parts of Maratani and Mangaka divisions which are largely flat marked with scanty depressions and isolated rock hills. The nature and soil types in this zone include sandy loamy, gritty soils and some few areas of brownish soils which favor the growing of maize, cassava, sorghum, pigeon peas, cowpeas which serve as the major food crops. Rice is also grown on very small scale in few areas of this zone mainly for subsistence. Major cash crops include cashew nuts and sesame.

1.4 Population

Population in this context refers to the number of human species living in a particular geographical area. The population structure, distribution and quality is the ideal gauge for

economic development which influences the demand for essential basic social and economic services such as food, education, health, water and energy.

1.4.1 Ethnic Groups

Nanyumbu District Council is predominantly inhabited by indigenous Makua, Yao, Tambwe ethnic groups (Table 1.3). However, there are other tribes who form significant minorities which includes, Ngoni, Makonde just to mention a few. All of these ethnic groups speak their native languages along with Swahili language. Majority of Nanyumbu the residents are engaged in small scale farming for subsistence as well as artisanal fishing in Ruvuma River.

Table 1. 3: Major Ethnic Group of Residents by Division, Nanyumbu District Council; 2015

Division	Number of Ethic Group	List of Ethnic Groups
Nanyumbu	3	Makua, Tambwe, Yao
Nakopi	3	Makua, Tambwe, Yao
Maratani	3	Makua, Tambwe, Yao
Mangaka	3	Makua, Tambwe, Yao
District	3	Makua, Tambwe, Yao

Source: District Executive Director’s Office, Administration Department, Nanyumbu District, 2016

1.4.2 Population Size and Growth

Nanyumbu District Council has experienced a substantial population growth in the last decade (Table1.4). As the Table shows, the District Council had a population of 150,857 in 2012 compared to 131,612 inhabitants counted in the 2002 Population Census. This resulting an increase of 19,245 people (12.8 percent). Likewise, Nanyumbu District Council accounts for 14.6 percent of the population of Mtwara Region. When compared with other districts in the Region, the 2012 population census shows that Nanyumbu is the fourth District Council in population growth rate (1.4 percent) after Mtwara Urban (2.4 percent), Mtwara Municipal Council (1.6 percent) and Masasi Town (1.5 percent).

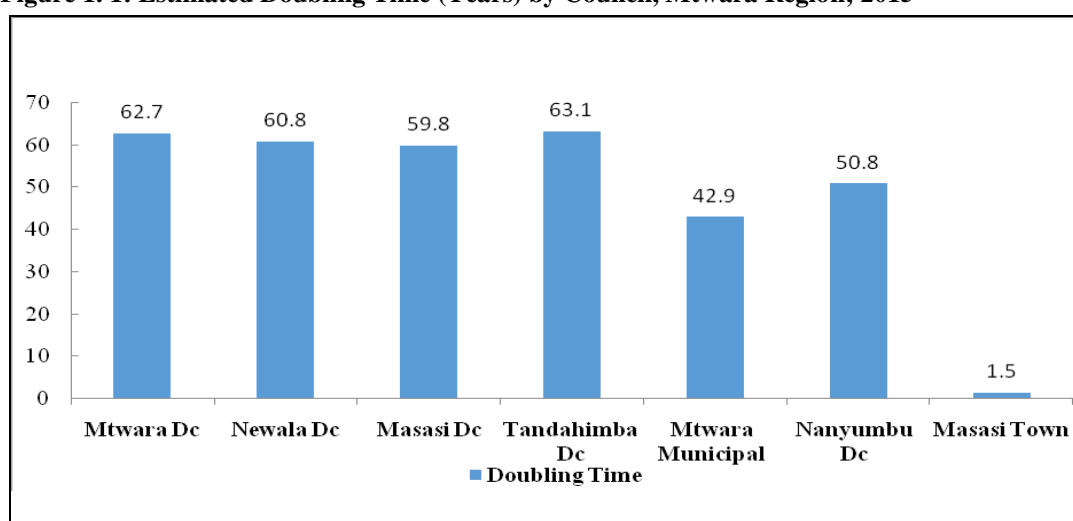
Table 1. 4: Population Size and Growth Rate by District, Mtwara Region; 2002 and 2012 Censuses

District/Council	Population Size		Percentage Change	Growth Rate per annum	Doubling Time (years)
	2002	2012	2002-2012	2002-2012	2002-2012
Mtwara Region	1,124,481	1,270,854	13.0	1.2	56.6
Rural	895,942	979,350	9.3	0.9	77.9
Urban	228,539	291,504	27.6	2.4	28.5
Mtwara District	204,157	228,003	11.7	1.1	62.7
Newala	183,344	205,492	12.1	1.1	60.8
Masasi	220,852	247,993	12.3	1.2	59.8
Tandahimba	203,837	227,514	11.6	1.1	63.1
Mtwara Municipal	92,156	108,299	17.5	1.6	42.9
Nanyumbu	131,612	150,857	14.6	1.4	50.8
Masasi Town	88,523	102,696	16.0	1.5	46.7

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

Another key population indicator is the Doubling Time which shows how many years the region or a council would double its population. This indicator alerts the decision makers to review their socio-economic goals and targets taking into consideration of expected socio-economic pressures caused by the resulting demands. Figure 1.1 shows that the population of Nanyumbu District Council will double after 50.8 years. Doubling time vary across the councils, ranging from 42.9 years (Mtwara Municipal) to 63.1 years in Tandahimba District Council.

Figure 1. 1: Estimated Doubling Time (Years) by Council, Mtwara Region; 2015



Source: National Population and Housing Census Report, 2012

1.4.3 Population Density

Population Density is the number of people per square kilometer or square mile. Table 1.4 shows that Mtwara Mikindani with a population density of 565 persons per sq.km was the most densely populated Council in the Region followed by Masasi Town Council (234 persons per sq.km). In 2002, Nanyumbu with 26 persons per sq. km was the least densely populated District Council in Mtwara Region. It was followed by Mtwara District Council (57 persons per sq.km) and Masasi District Council (63 persons per sq.km). In 2012, Nanyumbu (30 persons per sq.km) remained the least densely populated District Council. Mtwara-Mikindani and Masasi Town councils continued to be the most densely populated councils with population density of 664 and 271 persons per sq.km respectively.

Table 1. 5: Population Density by Council, Mtwara Region; 2002 and 2012 Censuses

District/Council	Land Area (Sq.km)	Population Size		Population Density		Percent Change of Pop. Density
		2002	2012	2002	2012	
Mtwara District	3,597	204,157	228,003	57	63	11.7
Newala DC	2,126	183,344	205,492	86	97	12.1
Masasi District	3,490	220,852	247,993	63	71	12.3
Tandahimba DC	1,894	203,837	227,514	108	120	11.6
Mtwara-Mikindani	163	92,156	108,299	565	664	17.5
Nanyumbu DC	5,071	131,612	150,857	26	30	14.6
Masasi TC	379	88,523	102,696	234	271	16.0
Total	16,720	1,124,481	1,270,854	67	76	13.0

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

Table 1.6 shows the population density at ward level for the 2002 and 2012 censuses. In 2002, Mnanje with a population density of 70.8 persons per sq.km was the most densely populated Ward, followed by Mikangaula and Mangaka wards with 69.5 and 50.8 persons per sq.km respectively.

In 2012, Mangaka which had a population density of 109 persons per sq.km was the most populated Ward followed by Mikangaula, Mnanje, and Nandete wards with 78.6, 66.9, and 44.1 persons per sq.km respectively. Napacho and Mkonona wards had the smallest population densities.

Table 1. 6: Population Density by Ward, Nanyumbu District Council; 2002 and 2012 Censuses

Ward	Land Area (ha)	Population(Censuses)		Population Density		Percent Change of Pop. Density
		2002	2012	2002	2012	
Mangaka	151.3	8,783	16,494	58.1	109.0	53.2
Nangomba	264.6	3,867	8,178	14.6	30.9	47.3
Lumesule	350.1	7,163	7,656	20.5	21.9	93.6
Likokona	465.7	16,079	18,629	34.5	40.0	86.3
Sengenya	370.2	11,261	13,479	30.4	36.4	83.5
Mnanje	118.3	8,378	7,912	70.8	66.9	105.9
Mikangaula	214.5	14,914	16,848	69.5	78.6	88.5
Maratani	171.7	5,593	6,668	32.6	38.8	83.9
Nandete	228.5	8,793	10,067	38.5	44.1	87.3
Mkonona	653.1	5,929	8,137	9.1	12.5	72.9
Nanyumbu	547.2	8,840	10,826	16.2	19.8	81.7
Masuguru	432.4	3,809	5,945	8.8	13.8	64.1
Chipuputa	249.9	9,434	9,926	37.8	39.7	95.0
Napacho	854.6	8,270	10,092	9.7	11.8	81.9
Total	5071.5	131,612	150,857	23.9	29.7	80.3

Source: NBS, Compiled Data from the 2002 and 2012 Population Censuses Reports, 2016

1.4.4 Dependency Ratio

Dependency Ratio is a measure to the load the economically active population has in supporting the young and the old population who are termed as dependents. The Age Dependency Ratio therefore gives the number of persons of age 0 – 14 years and those of age 65 years and above who are the dependents for every 100 persons of age 15 – 64 years.

Table 1.7 shows that during the 2012 Census, economically active population in Nanyumbu District Council had a burden of supporting 72,370 dependents of ages between 0 – 14 years and those of age 65 years and above. This made the District Council had the highest dependency ratio of 92.2 followed by Mtwara District Council (89.2).

Table 1. 7: The Dependency Ratios by Council, Mtwara Region; 2012 Census

District/Council	Dependant Population			Economically Active	Dependency Ratio
	0 - 14 Years	65+ Years	Total		
Mtwara DC	92,268	14,851	107,119	120,119	89.2
Newala DC	75,661	17,109	92,770	112,722	82.3
Masasi District	97,842	17,009	114,851	133,142	86.3
Tandahimba DC	86,122	16,600	102,722	124,792	82.3
Mtwara-Mc	35,440	4,439	39,879	68,420	58.3
Nanyumbu DC	63,690	8,680	72,370	78,487	92.2
Masasi TC	38,452	6,098	44,550	58,146	76.6
Total	489,475	84,786	574,261	695,828	82.5
Percent	38.5	6.7	45.2	54.8	

Source: NBS, Computed Data from 2012 Population Censuses Report.

1.4.5 Population Distribution by Age and Sex Ratio

According to the 2002 Population census, Nanyumbu District Council had a sex ratio of 94 males for every 100 females which dropped to 93 in 2012. At division level, Nanyumbu Division had the highest sex ratio of 96 in 2002 while Maratani and Mangaka divisions (each with 94 sex ratio) had the highest in 2012 (Table 1.8).

Table 1. 8: Population Distribution and Sex Ratio by Division, Nanyumbu District; 2002 and 2012 Censuses

Division	2002 Pop. Census			2012 Pop. Census		
	Male	Female	Sex Ratio	Male	Female	Sex Ratio
Nanyumbu	10,890	11,400	96	12,736	13,904	91
Nakopi	14,944	15,928	94	17,392	18,985	92
Maratani	19,870	21,520	92	19,662	20,833	94
Mangaka	17,942	19,116	94	23,011	24,334	94
Total District	63,647	67,965	94	72801	78056	93

Source: NBS, Compiled Data from the 2002 and 2012 Population Censuses Reports, 2016

Table 1.9 shows distribution of sex ratio among 14 wards in Nanyumbu District Council. Generally, Nanyumbu District Council had a better sex ratio in 2002 census (94) than of 2012 census (93). The same replicate at ward level as all wards during the 2002 census had a sex ratio above 90. Contrary to the situation observed in 2002 census, three wards, Maratani, Mnanje and Nanyumbu (each with a sex ratio below 90) were observed during the 2012 census.

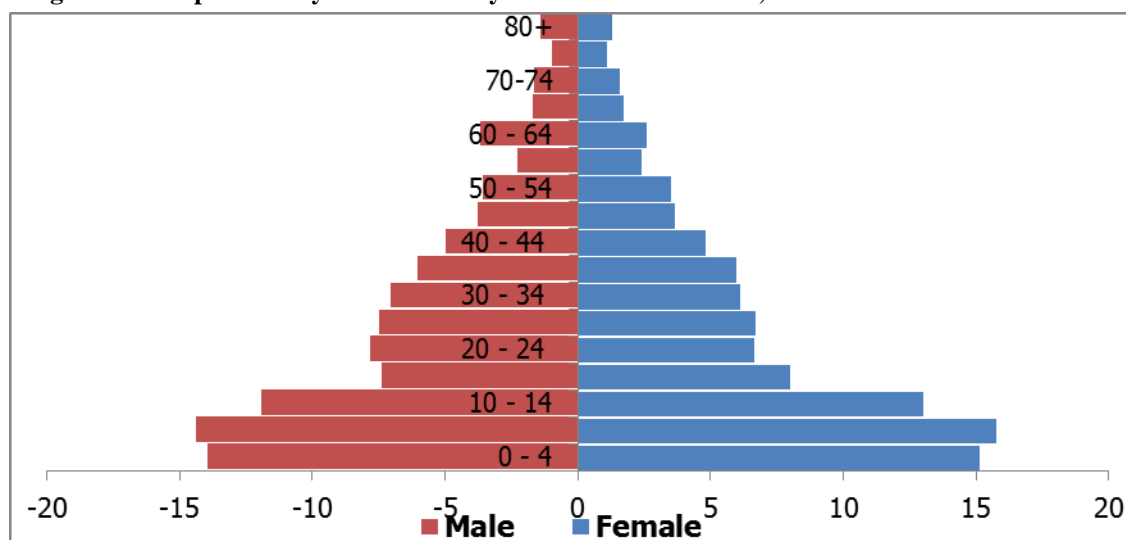
Table 1. 9: Population Distribution by Sex Ratio and Ward, Nanyumbu District; 2002 and 2012 Censuses

Ward	2002 Pop. Census			2012 Pop. Census		
	Male	Female	Sex Ratio	Male	Female	Sex Ratio
Mangaka	4,879	4,965	98	7,817	8,677	90
Nangomba	2,383	2,544	94	3,955	4,223	94
Lumesule	1,888	1,983	95	3,684	3,972	93
Likokona	8,177	8,962	91	8,846	9,783	90
Sengenya	5,961	6,360	94	6,491	6,988	92
Mnanje	4,477	4,961	90	3,738	4,174	89
Mikangaula	7,609	8,365	91	7,997	8,851	90
Maratani	3,216	3,437	94	3,109	3,559	87
Nandete	4,832	5,021	96	4,818	5,249	91
Mkonona	3,470	3,519	99	4,034	4,103	98
Nanyumbu	4,798	5,102	94	5,127	5,699	89
Masuguru	2,356	2,513	94	3,011	2,934	102
Chipuputa	4,983	5,511	90	4,748	5,178	91
Napacho	4,613	4,717	98	4,862	5,230	92
Total District	63,647	67,965	94	72801	78056	93

Source: NBS, Compiled Data from the 2002 and 2012 Population Censuses Reports, 2016

The population distribution of Nanyumbu District Council, like other rural districts in Tanzania Mainland, it is characterized by broad based population structure like pyramid. The population based on five years age group and by sex is formed by having more persons at the age below 19 years with more so on for girls than boys and declines as you increase ages (Figure 1.2).

Figure 1. 2: Population Pyramid for Nanyumbu District Council; 2012 Census



Source: NBS, Computed Data from 2012 Population Censuses Report.

CHAPTER TWO

District Economy

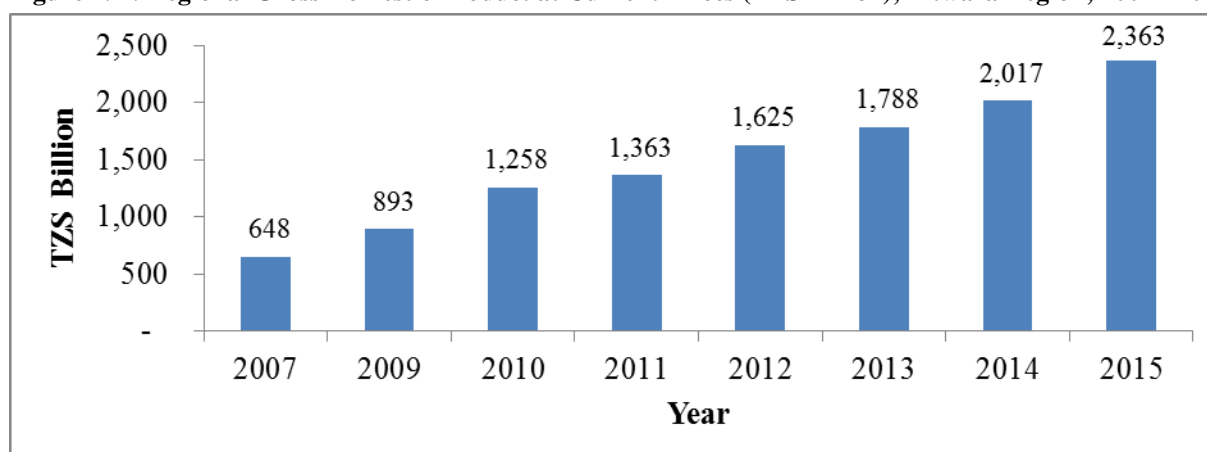
2.0 Introduction

This Chapter focuses on the economic activities undertaken by a huge segment of the population in Nanyumbu District Council and their impact on the people's living standards. Agricultural economy which is the mainstay and the source of income for most residents of the District, assorted with Gross Domestic Product (GDP), Per Capita Gross Domestic Product have been employed as the main pointers of economic level. Non-income indicators ranging from accessibility to clean water, literacy level, type of toilet facilities and housing conditions are also highlighted to show poverty status of the Nanyumbu residents.

2.1 Gross Domestic Product and Per Capita GDP

Nanyumbu District Council is not exempted from other Districts in Mtwara Region when it comes to the issue of determining the Gross Domestic Product. Regarding to this, and, with the inclusion of data from Nanyumbu District Council, NBS in collaboration with the Mtwara Region managed to compute the Regional GDP and per Capita income. The Regional GDP estimates cover all goods and services produced in a Region. The estimates also include goods and services imported into and exported from the Region. Nevertheless, Nanyumbu District Council makes significant contribution to the Regional GDP. National Accounts of Tanzania Mainland, 2007 – 2015 Report shows that Mtwara Region's share of the national GDP for the year 2015 was only 2.6 percent equivalent to TZS2, 362, 928 million while per capita income of regional residents was estimated to be TZS. 1,792,305, (equivalent to US\$ 814.7 at a rate of TZS 2,200 per USD).The regional GDP was TZS1,258,435 million in 2010 and TZS1,788,397 million in 2013 (Figure 2.1).

Figure 2. 1: Regional Gross Domestic Product at Current Prices (TZS Billion), Mtwara Region; 2007 - 2015



Source: NBS, Computed Data from 2012 Population Censuses Report.

Table 2.1 shows the trend of GDP and Per Capital GDP at Current Prices in Million (TZS), Tanzania Mainland, from 2011 – 2015. The trend shows that GDP at current prices increased from TZS 52,762,581 in 2011 to TZS 90,863,681 in 2015. From 2012 to 2015 Per Capita GDP at current prices increased from TZS 1,408,223 in 2012 to TZS 1,918,928, the average contribution to National GDP increased from 1.1 percent in 2013 to 1.6 percent in 2015.

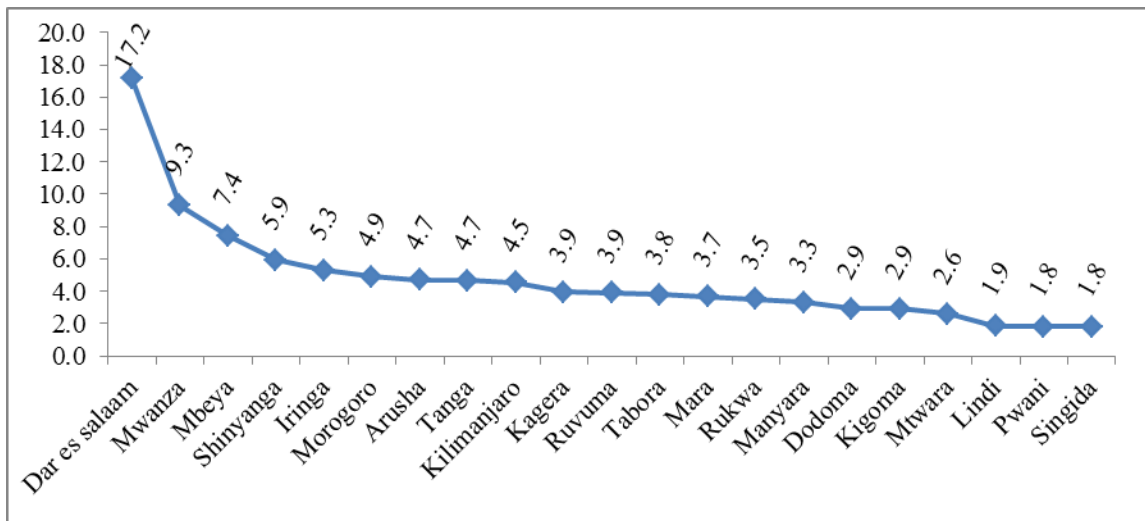
Table 2. 1: GDP and Per Capita GDP at Current Prices, Tanzania Mainland; 2011 – 2015

Year	GDP at Current Prices (TZS Million)	Per Capita GDP at Current Prices				Regional Contribution to National GDP
		GDP Percent Change	Exchange Rate (TZS/US \$)	TZS	US\$	
2011	52,762,581	0	1,557.4	0	0	0
2012	61,434,214	16.4	1,571.7	1,408,223	896.0	0
2013	70,953,227	15.5	1,598.7	1,582,797	990.1	1.1
2014	79,718,416	12.4	1,652.5	1,730,405	1,047.1	1.4
2015	90,863,681	14	1,985.4	1,918,928	966.5	1.6

Source: National Accounts of Tanzania, National Bureau of Statistics

Figure 2.2 Shows trend of regional share of GDP at current market prices, its contribution to nation GDP in 2015. In 2015, the data revealed that per Capita GDP of Mtwara Region was TZS 1,792,305. This suggests the regional contribution to the national GDP ranked 18th position.

Figure 2. 2: Percent Regional Shares of GDP at Current Market Prices, Tanzania Mainland, 2015



Source: National Accounts of Tanzania, National Bureau of Statistics

2.1.1 Sector Contribution to the District GDP

Table 2.2 illustrates the overall of contribution estimates of Nanyumbu District Council to the GDP of which Agriculture sector ranked first in its contribution that claimed 74.9 percent of the total GDP in 2015 followed by the services while the industry and construction sector had only. However, the Agriculture sector experienced a declining trend from 87 percent in 2013 to 72 percent in 2014 which declined further to 74.9. The general observation drawn from the data reveal that as opposed to Agriculture, Services sector had a growing trend for the last two years whereby the Services sector grew from 13 percent in 2013 to 28 percent in 2014 then dropped to 24.7 percent as shown in Table 2.2. Industry and Construction sector had a totally negligible contribution except in 2015 when the sector contributed 0.4 percent to the District GDP.

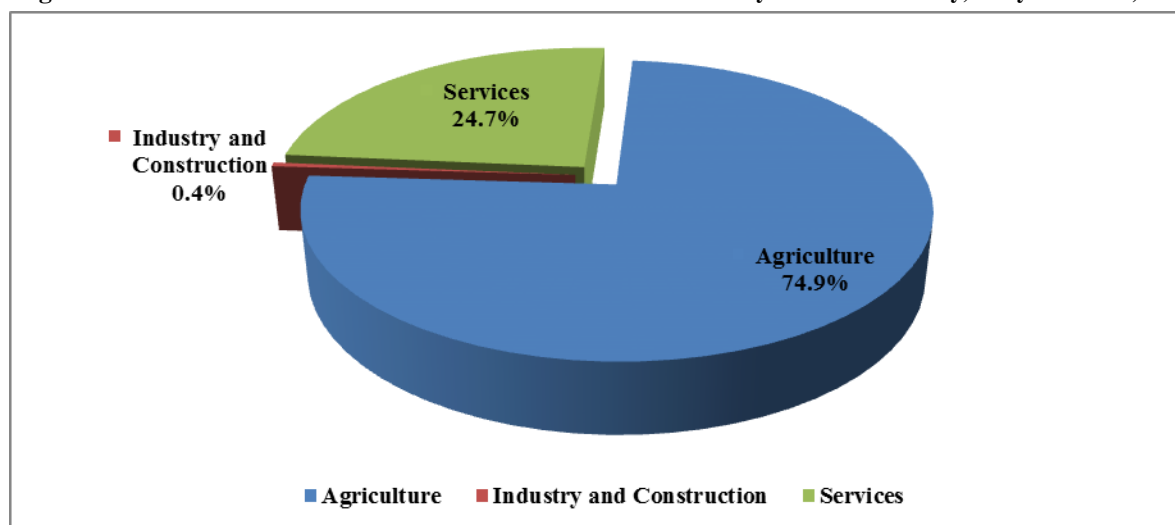
Table 2. 2: Sector GDP Estimates Contribution (Mill. TZS), Nanyumbu District Council; 2013, 2014 and 2015

Sector	2013		2014		2015	
	Amount	Percent	Amount	Percent	Amount	Percent
Agriculture	101,085	87	34,068	72	66,656	74.9
Crops	13,473	12	16,069	34	35,260	39.6
Livestock	87,596	75	17,967	38	30,397	34.1
Forestry and Hunting	17	0	33	0	999	1.1
Fishing	0	0	0	0	0	0.0
Industry and Construction	196	0	95	0	393	0.4
Mining and Quarrying	20	0	46	0	30	0.0
Manufacturing	0	0	0	0	23	0.0
Electricity	163	0	48	0	314	0.4
Water	13	0	0	0	26	0.0
Construction	0	0	0	0	0	0.0
Services	15,435	13	13,217	28	21,975	24.7
Trade, Hotels and Restaurants	3	0	7	0	263	0.3
Transport and Communication	-	0	-	0	-	0.0
Finance and Insurance	0	0	0	0	0	0.0
Real Estate	12,911	11	13,210	28	16,145	18.1
Business Services	0	0	0	0	0	0.0
Public Administration	435	0	0	0	750	0.8
Education	1,721	1	0	0	3,877	4.4
Health	365	0	0	0	940	1.1
Other services	0	0	0	0	0	0.0
TOTAL GDP	116,716	100	47,380	100	89,024	100.0

Source: National Bureau of Statistics, National Accounts Data, 2016

Figure 2.3: shows that Agriculture sector had the most contribution not only to the GDP of the Mtwara Region but also of the nation at large. The District Council has to go an extra to ensure that the agricultural sector is well equipped and peasants supported in order to productively promote the sector and ultimately to the GDP growth. On the other hand, Industry and construction sector in Nanyumbu had an insignificant contribution of 0.5 percent to the Regional GDP.

Figure 2. 3: Share of Gross Domestic Product at Basic Current Prices by Economic Activity, Nanyumbu DC; 2015



Source: NBS, Compiled Data from the 2002 and 2012 Population Censuses Reports, 2016

2.1.2 Council Contribution to the Region GDP

Table 2.3 shows the computed GDP estimates by council in Mtwara Region for 2013, 2014 and 2015. Among the councils in the Region, Nanyumbu had the the least contribution to the Regional GDP of 4.0 percent in 2015. Looking on the trend of the contributions of the Nanyumbu District Council to the Region’s GDP, in 2013, the District Council had the highest contribution of 11.0 percent which went to down to 3.6 percent in 2014 and 4.0 percent in 2015. Likewise, in 2015, Newala District Council had the highest contribution to the Region’s GDP (39.4 percent) followed by Mtwara District Council (19.7 percent), Masasi District Council (11.8 percent) and Tandahimba District Council (10.3 percent).

Table 2. 3: GDP Estimates Contribution (Mill. TZS) by Council, Mtwara Region; 2013, 2014 and 2015

Council	2013		2014		2015	
	Amount	Percent	Amount	Percent	Amount	Percent
Mtwara DC	162,634	15.3	192,166	14.5	436,697	19.7
Newala DC	289,545	27.2	474,303	35.8	871,277	39.4
Masasi DC	152,406	14.3	203,046	15.3	260,904	11.8
Tandahimba	107,891	10.1	151,470	11.4	227,581	10.3
Mtwara MC	147,143	13.8	144,650	10.9	193,963	8.8
Nanyumbu DC	116,716	11.0	47,380	3.6	89,024	4.0
Masasi TC	88,264	8.3	112,453	8.5	133,078	6.0
Total	1,064,598	100	1,325,467	100	2,212,525	100

Source: National Bureau of Statistics, National Accounts Data, 2016

2.1.3 Regional Per Capita GDP

Regional Per Capita Gross Domestic Product is obtained by dividing the Total Gross Domestic Product by the total population of a region in a given year. It shows how much of the region's total income each person would get if this was distributed equally. As Table 2.4 shows, in the Tanzania Mainland economy, Mtwara Region ranked 18th after Kigoma with higher GDP per capita at current prices in both years.

Table 2. 4: Per Capita GDP at Current Prices by Region, Tanzania Mainland; 2012 and 2015

Region	Per Capita Income (TZS) 2012	Rank	Per Capita Income (TZS) 2015	Rank
Dar -es salaam	10,402,309	1	15,631,679	1
Mwanza	5,619,758	2	8,452,013	2
Mbeya	4,500,842	3	6,761,610	3
Shinyanga	3,693,951	4	5,389,294	4
Iringa	3,224,478	5	4,816,738	5
Morogoro	3,001,144	6	4,453,211	6
Arusha	2,929,003	7	4,271,447	7
Tanga	2,884,020	8	4,235,095	8
Kilimanjaro	2,788,912	9	4,126,036	9
Tabora	2,426,906	10	3,453,511	12
Kagera	2,418,560	11	3,580,745	10
Ruvuma	2,341,755	12	3,544,392	11
Mara	2,266,604	13	3,335,364	13
Rukwa	2,100,974	14	3,180,865	14
Manyara	2,052,714	15	3,026,366	15
Dodoma	1,904,068	16	2,635,574	16
Kigoma	1,779,335	17	2,635,574	17
Mtwara	1,625,221	18	2,362,928	18
Singida	1,178,718	19	1,635,873	21
Lindi	1,159,599	20	1,690,403	19
Pwani	1,135,341	21	1,644,962	20
Tanzania Mainland	12,935,971		18,812,544	

Source: National Bureau of Statistics, National Accounts Data, 2015

2.1.4 District Per capita GDP

Focusing on distribution of Region economy, Newala District Council had highest per capita GDP in the Region in all three years (Table 2.5). It was followed by Mtwara MC in two years (2013 and 2014). Moreover, in 2014 and 2015 Nanyumbu District Council had the least per capita GDP in the Region.

Table 2. 5: Per Capita GDP Estimates by Council, Mtwara Region; 2013, 2014 and 2015

Council	2013		2014		2015	
	Amount	Rank	Amount	Rank	Amount	Rank
Mtwara DC	701,629	5	818,951	4	1,838,430	2
Newala DC	1,385,980	1	2,242,758	1	4,069,771	1
Masasi DC	604,505	6	795,569	5	1,009,831	5
Tandahimba DC	466,459	7	646,904	6	960,144	6
Mtwara MC	1,336,449	2	1,297,822	2	1,719,103	3
Nanyumbu DC	761,029	4	305,177	7	564,637	7
Masasi TC	845,408	3	1,063,999	3	1,243,824	4

Source: National Bureau of Statistics, National Accounts Data, 2016

2.2 Non-Income Indicators

Apart from 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 and their amenities inside and outside dwellings, including the use of modern and durable building materials, access to safe drinking water, type of toilets, household's assets, and sources of energy for lighting and cooking.

2.2.1 Main Sources of Cash Income

Agriculture is the major economic activity of the people of Nanyumbu District Council. More than 90 percent of Nanyumbu residents live in rural areas where their livelihood depends mainly on subsistence farming and livestock keeping. The agricultural sector in the District Council provides employment to over 90 percent of the available workforce. Crops produced for food include maize, cassava, rice, cowpeas, sorghum and leguminous plants. Cashew nuts, groundnuts, pigeon peas and sesame are essentially grown as cash crops. Furthermore, some peasants are involved in animal husbandry by keeping cattle, goats and sheep. Likewise, Table 2.6 shows the physical output from agriculture and its value in the year 2015.

Cassava crop had the largest annual output in the 2015 with total production of 34,318 tonnes sold for TZS 6,962,800 followed by maize 8,984 that fetched sum total of TZS 2,695,200,000 whereas paddy had 8,420 tones with total earnings of 5,052,000,000. Sweet potatoes recorded

the lowest output and earnings amongst all the food crops. On the other hand, cashew nuts, ground nuts and sesame had a total output amounting to 8,000, 8,984 and 6,716 tonnes respectively. Of the mentioned crops production, cashew nuts alone earned TZS 4,880,000,000 for the residents of Nanyumbu District Council. Therefore, cashew nuts was a major contributor to the GDP and per capita GDP.

Table 2. 6: Agricultural Output (Physical and Value) for the year 2015

AGRICULTURAL OUTPUTS	PHYSICAL OUTPUT (TONNES)	VALUE OF OUTPUT (TZS)
Food crops		
1. Cassava (Tons)	34,814	6,962,800
2. Maize “	8,984	2,695,200,000
3. Paddy “	8,420	5,052,000,000
4. Millet	724	362,000,000
	20	20,000,000
5. Sweet potatoes “	5	2,500,000
Cash Crops		
1. Cashew nuts (Tons)	8,000	4,880,000,000
2. Groundnuts “	8,296	
3. Simsim “	6,716	
Livestock products		
1. Meat	6,920	24,220,000
2. Milk	204,000	102,000,000

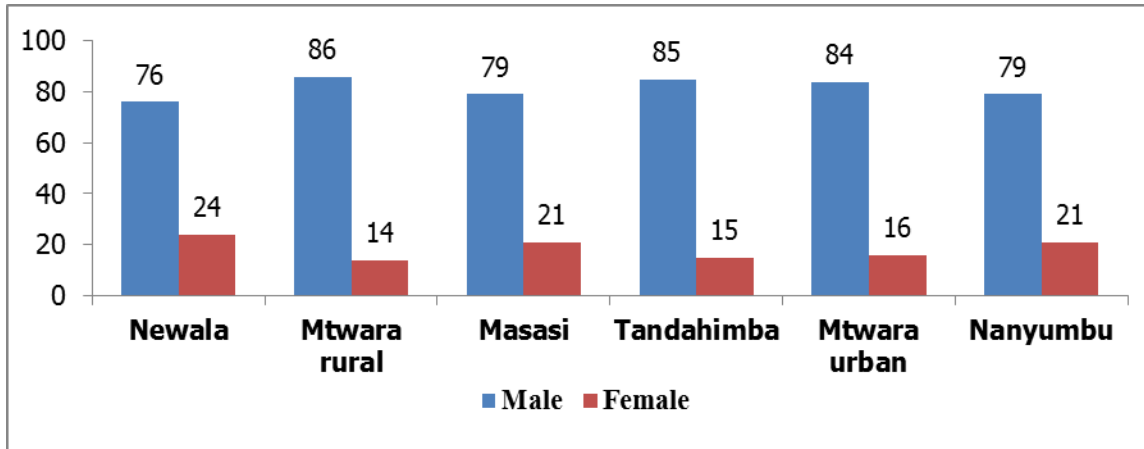
Source: District Agricultural and Livestock Department, 2016

2.2.2 Literacy Level

Literacy is the ability to read and write with an understanding of short simple sentences on everyday life. It excludes the ability to only write or sign one’s own name or write memorized phrases.

According to Mtwara Region National Sample Census of Agriculture 2007/08 Report, Nanyumbu District Council ranked second with the highest literacy rate of 74 percent after Masasi with 80 percent. Nanyumbu was followed by Newala 66 percent, Mtwara rural 64 percent, Mtwara Urban 64 percent and lastly Tandahimba (Figure 2.4). However, literacy rate in urban areas of Mtwara (78.4 percent) was significantly higher than in rural areas (62.3 percent).

Figure 2. 4: Percent Literacy Rate by Sex and District, Mtwara Region; 2015

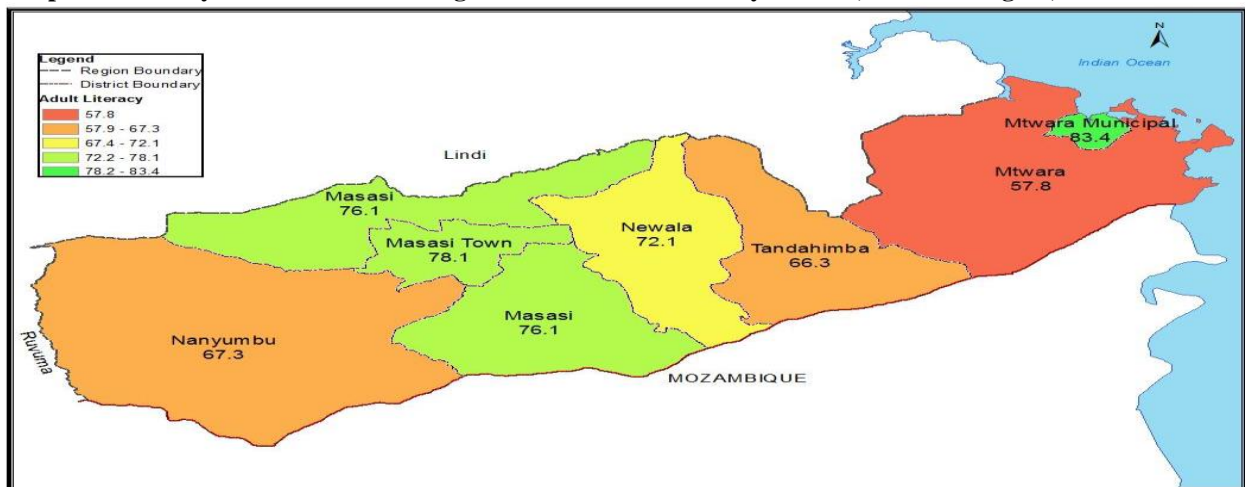


Source: National Bureau of Statistics, National Accounts Data, 2016

2.2.3 Adult Literacy Level

Adult literacy rates vary across the districts in Mtwara Region. It was the highest of 83.4 percent in Mtwara Municipal Council and the lowest of 57.8 percent in Mtwara District Council (Map 2.1). Districts with literacy rate above 70 percent were Masasi Town Council (78.1 percent), Masasi District Council (76.1 percent) and Newwala District Council (72.1 percent). These results indicate that adult literacy level was higher in urban areas (82.1 percent) than in rural areas (67.3 percent).

Map 2.1: Literacy Status for Persons Aged 15 Years and Above by District; Mtwara Region, 2012 Census

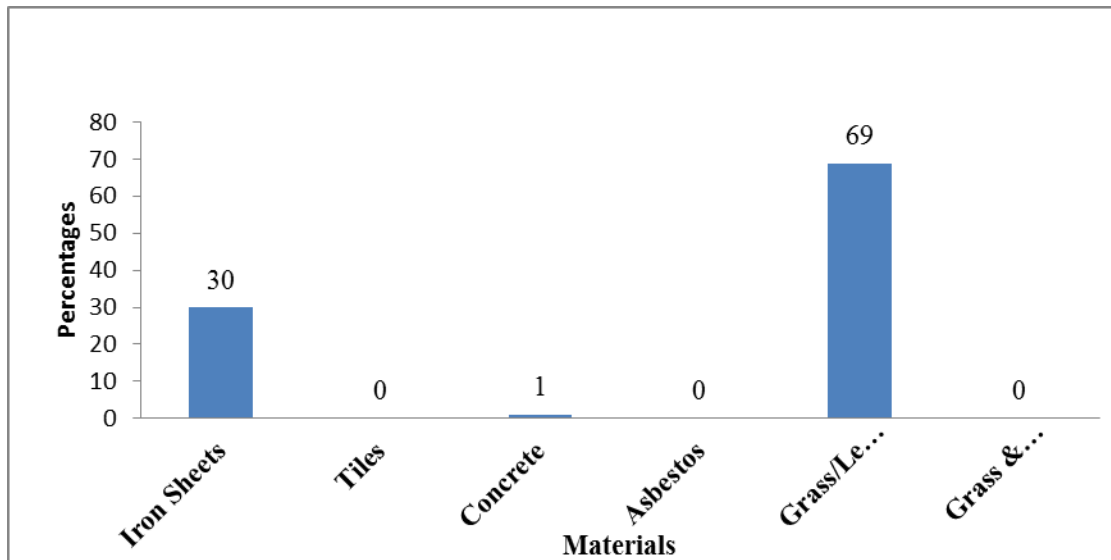


Source: National Bureau of Statistics, National Accounts Data, 2016

2.2.4 Roofing Materials

Figure 2.5 shows that 69 percent of private households in Nanyumbu District Council used grass or leaves as their main roofing material, followed by iron sheets (30 percent). Small proportion of the households used concrete (1 percent).

Figure 2. 5: Percent of Households by Type of Roofing Materials, Nanyumbu District Council, 2015

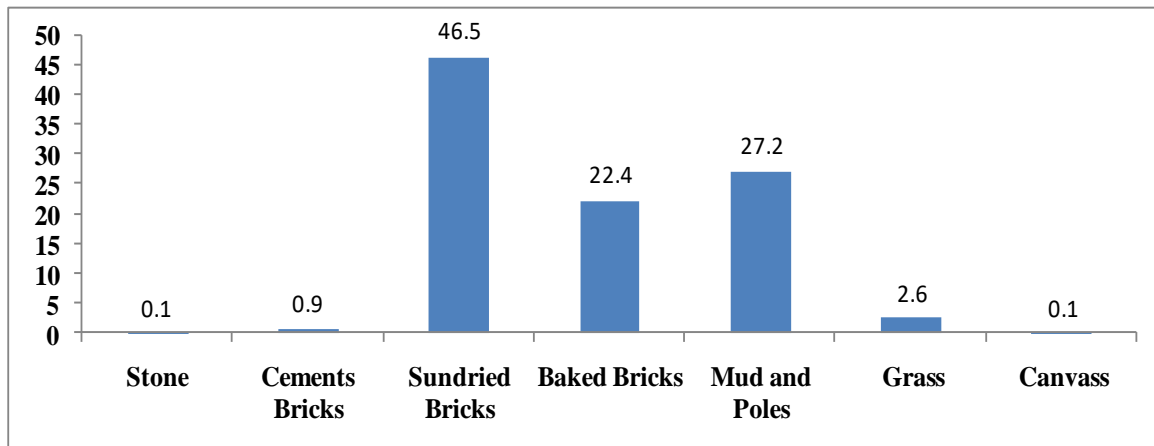


Source: NBS, Computed Data from 2012 Population Censuses Report.

2.2.5 Wall Materials

Figure 2.6 shows that 46.5 percent of all private households in Nanyumbu District Council had their house walls built of sundried bricks. Other materials commonly used for building walls were mud and poles (27.2 percent) and baked bricks (22.4 percent). The table also shows that most of the households in the District (2.6 percent) used grass while cement bricks and canvass (0.9 and 0.1 percent) as wall materials.

Figure 2. 6: Percent of Households by Type of Roofing Materials, Nanyumbu District Council, 2015

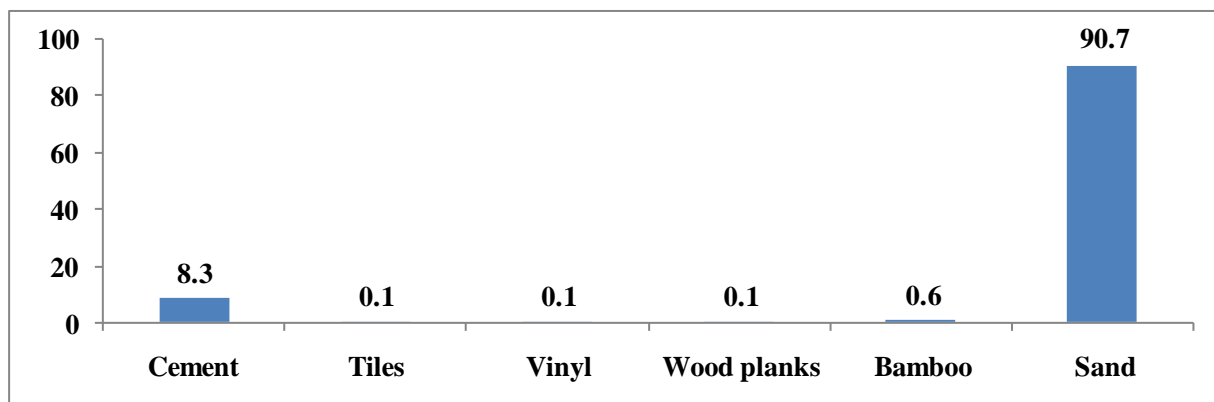


Source: NBS, Computed Data from 2012 Population Censuses Report.

2.2.6 Flooring Material

Fig 2.7 presents the percentage distribution of households by type of flooring materials used for the main dwelling in Nanyumbu District Council. As the figure shows, 90.7 percent of the total private households used earth or sand as the main flooring materials, followed by cement which accounted for 8.3 percent. Bamboo materials were not commonly used hence claimed only 0.6 percent.

Figure 2. 7: Percent of Households by Type of Flooring Materials, Nanyumbu District Council, 2015

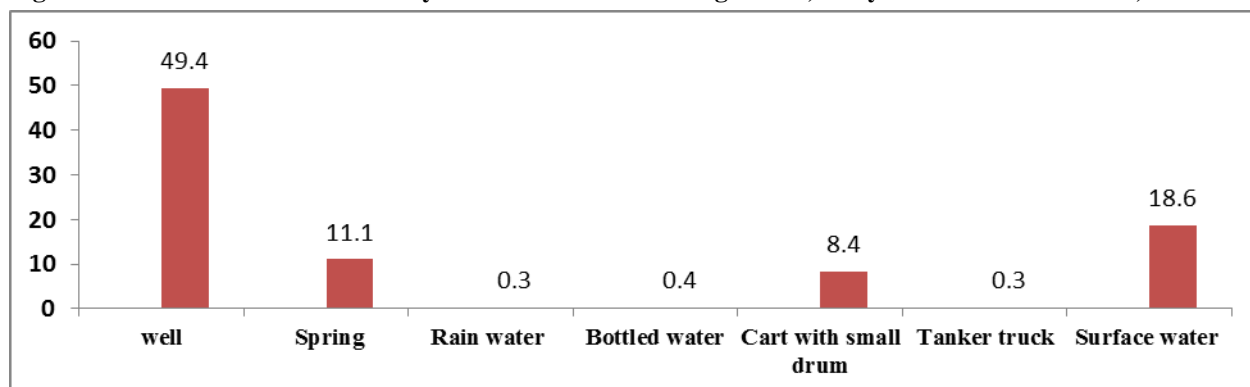


Source: NBS, Computed Data from 2012 Population Censuses Report.

2.2.7 Source of Drinking Water

Accessibility to clean and safe water for drinking is another important non-income indicator portraying poverty level of the Nanyumbu residents. During the 2012 Population and Housing Census, households were asked to mention their main source of drinking water. Figure 2.8 shows that households who drinking water from wells accounted for 49.4 percent; surface water (18.6 percent), unprotected springs (11.1 percent), cart with small drum (8.4 percent), bottled water (0.4 percent) and tank water (0.3 percent).

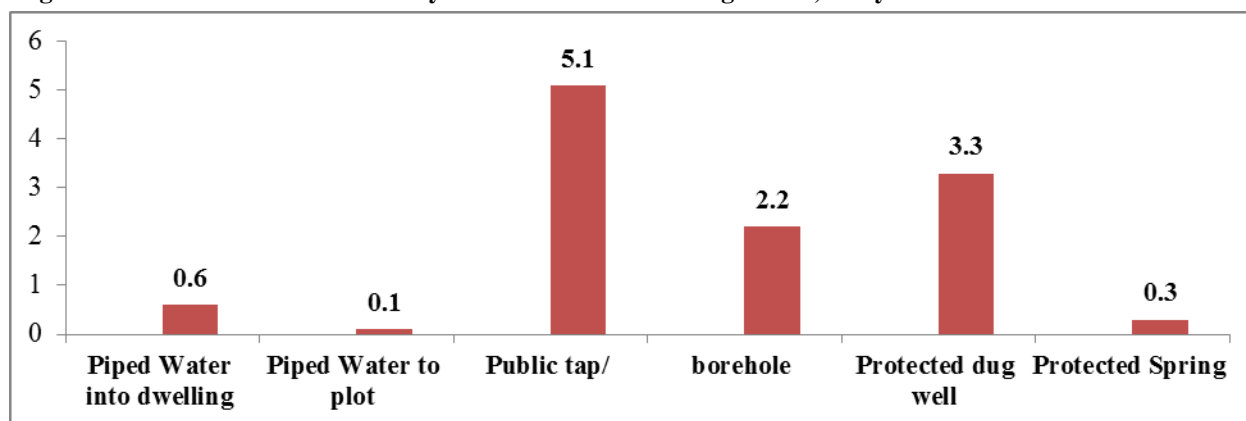
Figure 2. 8: Percent of Households by Main Source of Drinking Water, Nanyumbu District Council, 2015



Source: NBS, Computed Data from 2012 Population Censuses Report.

On the other hand, figure 2.9 shows that only a small proportion of the Nanyumbu District Councils' households used water from improved sources such as public taps (5.1 percent), protected dug wells (3.3 percent), boreholes (2.2 percent), piped water into dwelling (0.6 percent) and water piped into plots (0.1 percent).

Figure 2. 9: Percent of Households by Main Source of Drinking Water, Nanyumbu District: 2015

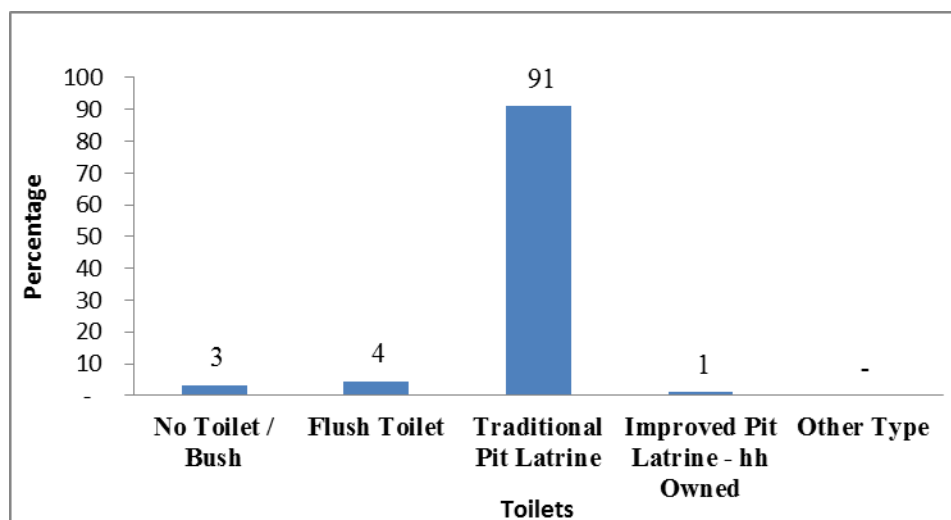


Source: National Bureau of Statistics, National Accounts Data, 2016

2.2.8 Types of Toilets

According to Mtwara Region 2007/08 National Sample Census of Agriculture Report, pit latrines were widely used by large proportion (91 percent) of the households in Nanyumbu District Council (Fig 2.10). This was followed by flush toilets (4 percent) and households with no toilets or use bush (3 percent).

Figure 2. 10: Percent of Households by Type of Toilet Facility, Nanyumbu District Council, 2015



Source: NBS, Computed Data from 2012 Population Censuses Report.

CHAPTER THREE

Production Sectors

3.0 Introduction

This chapter sheds light on the performance of key production activities in Nanyumbu District Council and their impacts on the population's social economical statuses. Apart from agricultural which is ideally supported by plenty arable land, there are also other sectors such as livestock, natural resources and industrial development.

3.1 Agriculture

3.1.1 Introduction

Nanyumbu is predominantly agricultural with its major sources of family income derived from agricultural production practiced in the area by an integral part of the population. Agricultural activities include Livestock, Horticulture, and Fishing along Ruvuma River and Small scale business activities, Crops grown include Cashewnuts, Groundnuts, Cowpeas, and Pigeon peas, Greengram, Simsim, Sorghum and Maize. Livestock includes Cow, Goat, Sheep, Donkey, Pigs and Poultry especially Chicken, Ducks and Guinea-fowls.

The average family income of Nanyumbu residents varies from one area to another depending on the type of crops grown and activities conducted by people of that particular area. The main income source is cashewnuts to those who own and maintain cashewnut farms and groundnuts farmers. At present, green gram and pigeon peas which fall under food crops have become another major source of income.

3.1.2 Distribution of Arable Land

Nanyumbu District Council has a total area of 5,071.5 sq.km which accounts for 30 percent of the whole Mtwara Region with a total area of 16,720 sq. km. The total area of the District Council is 507,150 ha of which 34,037 ha is arable land for agricultural activities. Of the arable land, 11,192 ha is under cultivation and the remaining (30,000 ha) is under forest reserve and game, settlements, mountains and water bodies. Napacho Ward had the largest land area of 85,460 ha under cultivation

which is equivalent to 16.9 percent of the district’s total land area. Mnanje Ward had the smallest land area (11,830 ha) which accounted for 2.3 percent. Scramble for arable land in Nanyumbu District Council is not high basing on the fact that only 11,192 ha is a planted area with remaining part still uncultivated. However, speculatively it is expected to rise in the near future due to the opening of the Southern corridor which is well served with good infrastructure and other pull factors such as availability of social services and arable land for both farming and settlement (Table 3.1)

Table 3. 1: Distribution of Arable Land (ha) by Ward Nanyumbu District Council; 2015

Ward	Total land Area (ha)	Total Arable land (ha)	Percent of Council Arable land	Arable land Under Cultivation (ha)	Percent of Arable land under cultivation	Percent of Land Area to the Total Land Area
Napacho	85,460	5,735	16.9	1,886	16.85	16.9
Mkonona	65,310	4,383	12.9	1,441	12.88	12.9
Nanyumbu	54,720	3,672	10.8	1,208	10.79	10.8
Likokona	46,570	3,125	9.2	1,028	9.18	9.2
Masuguru	43,240	2,902	8.5	954	8.53	8.5
Sengenya	37,020	2,484	7.3	817	7.30	7.3
Lumesule	35,010	2,350	6.9	773	6.90	6.9
Nangomba	26,460	1,776	5.2	584	5.22	5.2
Chipuputa	24,990	1,677	4.9	551	4.93	4.9
Nandete	22,850	1,534	4.5	504	4.51	4.5
Mikangaula	21,450	1,440	4.2	473	4.23	4.2
Maratani	17,170	1,152	3.4	379	3.39	3.4
Mangaka	15,130	1,015	3.0	334	2.98	3.0
Mnanje	11,830	794	2.3	261	2.33	2.3
Total	50,750	34,036	100.0	11,192	100.00	100.0

Source: District Executive Director’s Office (Agriculture Department), Nanyumbu DC, 2016

3.1.3 Area under Food Crops Cultivation

Land area refers to the physical area of land and is the same regardless of the number of crops planted on it in one year. Planted area is the total area of crops planted in a year and the area is summed if there were more than one crop on the same land per year.

Table 3.2 shows that the dominant food crops in Nanyumbu District Council as from 2010 /2011 to namely Maize, Cassava, Sorghum, and Paddy. The total annual average area under this major food crops cultivation in the referred years was 36,519.86 hectares of land. The year 2014/2015

was the year with largest area under crop cultivation in all years whereby a total 42,682 hectares were cultivated whereas the least cultivated area was experienced in 2010/2011 with a total of 32,707.5 hectares under cultivation. Maize was relatively the leading crop under planted area in all years which accounted with annual coverage of 26,980.2 hectares of land followed by Cassava, Sorghum and paddy in that order. Paddy was the least crop under cultivation in all the referred years.

Table 3. 2: Estimated Land Area (ha) under Major Food Crops, Nanyumbu District Council; 2010/11 – 2014/15

Crop	Estimated Land Area (Ha)					Annual Average	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15		
Maize	24,781.5	24,841.5	24,891.0	29,619.0	30,768.0	26,980.2	73.9
Cassava	12,047.3	15,093.3	21,983.3	18,835.3	15,038.7	16,599.6	45.5
Sorghum	6,566.0	6,808.0	6,978.9	8,683.5	8,560.0	7,519.3	20.6
Paddy	1,360.0	1,415.0	1,428.9	2,544.0	3,354.0	2,020.4	5.5
District Total	32,707.5	33,064.5	33,298.8	40,846.5	42,682.0	36,519.9	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(i) Maize

As already pointed out, maize was the leading food crop in terms of area under crop cultivation for the period between 2010/11 and 2014/15 in which the crop occupied 73.9 percent of the planted area as shown in Table 3.3. Nandete ward had the largest total cumulative annual average of 3,305.4 hectares under maize crop cultivation. Other wards that did well include Mkonona ward occupied 9.94 percent; Likokona ward had 9.74 percent whereas Masuguru ward had the smallest area under maize crop cultivation which accounted for only 4.08 percent of the total area.

Table 3. 3: Estimated Area (Ha) Under Major Food Crops (Maize) by Ward; Nanyumbu District Council, 2010/11– 2014/15

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Annual Average Area (ha)	Annual Percent
Nandete	3,150	3,189	3,189	3,249	3,750	3,305.4	12.3
Mkonona	2,667	2,670	2,670	2,700	2,700	2,681.4	9.9
Likokona	2,610	2,610	2,613	2,613	2,724	2,634.0	9.8
Chipuputa	1,530	1,530	15,34.5	3,617	3,662	2,374.5	8.8
Mangaka	2,250	22,55	22,54.5	2,319	2,556	2,326.8	8.6
Mikangaula	2,250	2,253	2,280	2,424	2,424	2,326.2	8.6
Sengenya	18,16.5	18,28.5	1,830	1,830	1,836	1,828.2	6.9
Napacho	1,335	1,344	13,45.5	2,055	2,063	1,628.4	6.0
Maratani	1,200	1,200	12,10.5	2,184	2,184	1,595.7	5.9
Nanyumbu	14,29.5	14,29.5	14,29.5	1,437	1,497	1,444.5	5.4
Nangomba	1,335	13,06.5	13,06.5	1,346	1,346	1,327.8	4.9
Lumesule	1,155	1,164	1,164	1,496	1,496	1,294.8	4.8
Mnanje	10,51.5	1,059	1,059	1,197	1,197	1,112.7	4.1
Masuguru	1,002	10,03.5	1,005	1,154	1,335	1,099.8	4.1
Total	24,782	24,842	24,891	29,619	30,768	26,980.0	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(ii) Sorghum

Sorghum was one of the major food crops in terms of the area under main food crops cultivation. Table 3.4 indicates that a total area of 7,519.3 ha was under sorghum crop cultivation in the referred years. At ward level, Nandete ward with cumulative annual average area of 1,064.8 hectares (14.2 percent) was the leading ward with the largest area under sorghum cultivation in the district council. The second ward was Likokona with cumulated annual average area of 817.4 hectares (10.9 percent) as shown in Table 3.4. Masuguru ward had the least annual average area of only 78.1 hectares equivalent to 1.0 percent of the total area under sorghum crop cultivation. However, sorghum cultivation ought to be encouraged as an ideal strategy to ensure food security in this area because the crop is drought resistant.

Table 3. 4: Estimated Area (Ha) Under Major Food Crops (Sorghum) by Ward; Nanyumbu District Council, 2010/11– 2014/15

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Annual Average	
						Area (ha)	Percent
Nandete	999	1,114	1,117	1,117	978	1,064.8	14.2
Likokona	770	829	829	829	830	817.4	10.9
Napacho	420	427	427	1375	1375	804.8	10.7
Mikangaula	601	632	632	769	769	680.6	9.1
Sengenya	550	558	581	541	544	554.8	7.4
Mangaka	500	501	581	560	560	540.4	7.2
Maratani	328	334	384	726	726	499.6	6.6
Nangomba	409	407	407	627	630	496	6.6
Chipuputa	486	486	486	490	490	487.6	6.5
Nanyumbu	450	456	456	456	460	455.6	6.1
Lumesule	355	355	369	369	370	363.6	4.8
Mkonona	300	306	306	407	407	345.2	4.6
Mnanje	321	326	326	340	341	330.8	4.4
Masuguru	77	77	78.4	78	80	78.1	1.0
TOTAL	6,566.00	6,808.00	6,978.90	8,683.50	8,560	7,519.3	100

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(iii) Cassava

Table 3.5 shows that for the five seasons a total area of 82,998 hectares was planted with cassava which is used as a food crop. The best crop practice was experienced in the 2012/13 season out of five seasons whereby 21,983.3 hectares of arable land were put under cultivation of cassava compared to other seasons though 2014/15 the crop diminished to 15,039 hectares in terms of the planted area. The smallest amount of 12,047 hectares of arable land was cultivated in 2010/11. This could be attributable to poor climate with low average rainfalls together with low prices as the major contributing factors with low acreages used in the specified seasons. At ward level, Mangaka was the leading ward cassava cultivation with annual average area 1,500 equivalent to 9.0 percent under cassava cultivation. The second ward was Likokona (8.2 percent) and Sengenya (8.2 percent). The wards with the least planted area were Mnanje (6.1 percent), Masuguru (6.3 percent) Maratani (6.4 percent). Cassava by virtue of being drought resistant, more cultivation needs to be encouraged in Nanyumbu District in order to curb the likely food insecurity.

Table 3. 5: Estimated Area (Ha) Under Major Food Crop (Cassava) by Ward; Nanyumbu District Council, 2010/11– 2014/15

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total Area (ha)	Annual Average Area (ha)	Annual Percent
Mangaka	1,180	1,514	1,847	1,498	1,459	7,498	1,500	9.0
Likokona	1,011	1,440	1,633	1,300	1,440	6,825	1,365	8.2
Sengenya	1,214	1,213	1,736	1,400	1,213	6,776	1,355	8.2
Nangomba	737	1,203	1,500	1,433	1,203	6,077	1,215	7.3
Nanyumbu	975	975	1,500	1,600	975	6,026	1,205	7.3
Mikangaula	1,144	1,144	1,467	1,100	1,144	6,000	1,200	7.2
Lumesule	672	1,167	1,630	1,297	1,167	5,932	1,186	7.2
Nandete	695	1,029	1,633	1,300	1,029	5,686	1,137	6.9
Chipuputa	871	871	1,500	1,500	871	5,612	1,122	6.8
Napacho	909	909	1,557	1,260	909	5,545	1,109	6.7
Mkonona	714	1,004	1,507	1,260	1,004	5,488	1,098	6.6
Maratani	635	968	1,510	1,187	968	5,268	1,054	6.4
Masuguru	536	902	1,440	1,440	902	5,221	1,044	6.3
Mnanje	754	754	1,523	1,260	754	5,044	1,009	6.1
Total	12,047	15,093	21,983	18,835	15,039	82,998	16,600	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(iii) Paddy

During the period of 2010/11– 2014/15, paddy became the fourth food crop to be planted in Nanyumbu District after maize, cassava and sorghum covering a total of 10,102 hectares of land under cultivation as indicated in table 3.2d. Table 3.2d also indicates that paddy is grown in all wards of the district council but at different production levels. Napacho with total planted area of 2,035 hectares and an average annual average area of 407 hectares of land under paddy cultivation was the leading ward in Paddy production. It accounted for 20.1 percent of the district's Paddy production. Mkonona ward had the least annual average area of only 31 hectares equivalent to 1.5 percent of the total area under paddy crop cultivation.

Table 3. 6: Estimated Area (Ha) Under Major Food Crops (Paddy) by Ward; Nanyumbu District Council, 2010/11– 2014/15

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total Area (ha)	Annual Average Area (ha)	Percent
Napacho	100	108	108	829	890	2,035	407	20.1
Likokona	199	209	209	209	670	1,496	299	14.8
Maratani	90	90	98	363	363	1,004	201	9.9
Mikangaula	160	155	155	194	194	858	172	8.5
Mangaka	139	147	147	159	187	779	156	7.7
Sengenya	136	136	137	145	147	701	140	6.9
Nanyumbu	110	115	115	115	158	613	123	6.1
Chipuputa	107	122	122	122	130	603	121	6
Lumesule	90	93	93	117	182	575	115	5.7
Nangomba	89	97	97	108	99	490	98	4.9
Mnanje	80	80	84	90	90	424	85	4.2
Masuguru	20	20	20	25	109	194	39	1.9
Nandete	20	20	21	45	69	175	35	1.7
Mkonona	20	23	23	23	66	155	31	1.5
Total	1,360	1,415	1,429	2,544	3,354	10,102	2,020	100

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

3.2.1 Area under Major Cash Crop Production

Table 3.7 shows that cashew nuts, green gram, pigeon peas and groundnuts were the predominant cash crops in Nanyumbu district council as from 2010 /2011to 2014/15. The total annual average planted area under cash crops cultivation in the referred years was 485,126 hectares of land. The year 2014/2015 was the year with largest area under crop cultivation in all years whereby a total 118,038 hectares were cultivated whereas the least cultivated area was experienced in 2010/2011 with a total of 107,908 hectares under cultivation. Cashew nuts ranked the first crop under planted area in all the referred years which accounted with annual coverage of 313,962 hectares of land which was equivalent to (64.7 percent) of the total planted area followed by pigeon peas 16.7 percent, green grams (11.4 percent) and ground nuts was the least cultivated cash crop with 7.1 percent.

Table 3. 7: Major Cash Crops, Nanyumbu District Council; 2010/11 – 2014/15

Crop	Estimated Land Area (Ha)					Annual Average	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15		
Cashew nuts	74,729	74,744	74,756	74,758	74,758	313,962	64.7
Pigeon peas	16,561	16,594	19,746	20,512	20,973	81,137	16.7
Green gram	9,810	15,068	12,878	12,228	13,319	55,455	11.4
Ground nuts	6,808	6,979	8,684	8,560	8,988	34,572	7.1
District Total	107,908	113,385	116,063	116,059	118,038	485,126	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(i) Cashew nuts

Table 3.8 shows that cashew nuts was the leading cash crop under cultivation for the period between 2010/11 and 2014/15 covering an annual average area of 313,962 hectares of the planted area as shown in Lumesule ward had the largest total annual average of 13,489 hectares under cashew nuts crop cultivation which accounted for 18.0 percent of the planted area. The second ward was Napacho Ward did well with a total of 58,240 hectares of the planted area (15.6 percent) followed by Likokona Ward had 10.7 percent whereas Masuguru ward had the smallest area under cashew nut cultivation which accounted for only 0.7 percent of the total planted area.

Table 3. 8: Estimated area under cultivation (Ha) of major cash crops (Cashew nuts) by Ward Nanyumbu District Council; 2010/11 – 2014/15

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total Area (ha)	Annual Average Area (ha)	Percent
Lumesule	13,488	13,489	13,489	13,489	13,489	67,444	13,489	18.0
Napacho	11,644	11,648	11,649	11,649	11,649	58,240	11,648	15.6
Likokona	7,972	7,973	7,976	7,976	7,976	39,873	7,975	10.7
Mikangaula	7,072	7,073	7,073	7,073	7,073	35,366	7,073	9.5
Sengenya	6,839	6,840	6,841	6,841	6,841	34,202	6,840	9.2
Maratani	5,210	5,210	5,210	5,210	5,210	26,050	5,210	7.0
Chipuputa	5,102	5,104	5,105	5,105	5,105	25,521	5,104	6.8
Nandete	3,912	3,912	3,912	3,912	3,912	19,559	3,912	5.2
Mnanje	3,654	3,657	3,659	3,659	3,659	18,289	3,658	4.9
Nanyumbu	3,620	3,620	3,620	3,620	3,620	18,100	3,620	4.8
Nangomba	2,520	2,521	2,524	2,524	2,524	12,612	2,522	3.4
Mangaka	1,600	1,600	1,600	1,600	1,600	8,001	1,600	2.1
Mkonona	1,600	1,600	1,600	1,600	1,600	8,002	1,600	2.1
Masuguru	496	496	499	499	499	2,489	498	0.7
Total	74,729	74,744	74,756	74,758	74,758	373,745	74,749	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(ii) Green grams

Table 3.9 shows that during the period of 2010/11 to 2014/15, green gram was the third cash crop to put under cultivation in Nanyumbu district after cashew nuts and pigeon peas covering a total of 63,303 hectares of land under cultivation. Table 3.9 also indicates that green gram was cultivated in all wards of the district council at different production levels. Likokona with a total planted area of 8,856 hectares and an average annual average area of 1,771 hectares of land under green gram cultivation was the leading ward in the district. It accounted for 14.0 percent of the district's green gram annual average production. The least production level was recorded in Masuguru and the worst years were 2010/2011 and 2011/2012. One general observation drawn from the data is that there was a gradual increase in acreages of land under the crop cultivation throughout the referred years.

Table 3. 9: Estimated Area Under Cultivation (Ha) Major Cash Crops (Green grams) by Ward, Nanyumbu District Council; 2010/11 – 2014/15

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total Area (ha)	Annual Average Area (ha)	Percent
Likokona	967	2,000	2,955	1,600	1,335	8,856	1,771	14.0
Mikangaula	905	1,655	1,241	1,127	1,320	6,248	1,250	9.9
Nandete	950	1,598	1,199	1,271	1,172	6,191	1,238	9.8
Mangaka	867	1,117	960	957	1,063	4,963	993	7.8
Sengenya	1,023	1,250	937	924	799	4,933	987	7.8
Chipuputa	578	1,070	803	917	1,040	4,408	882	7.0
Nanyumbu	647	980	735	840	1,160	4,362	872	6.9
Maratani	665	992	619	814	1,176	4,266	853	6.7
Lumesule	685	967	850	829	526	3,856	771	6.1
Napacho	535	975	731	836	660	3,737	747	5.9
Nangomba	567	745	684	639	736	3,370	674	5.3
Mnanje	719	719	539	616	681	3,273	655	5.2
Mkonona	498	797	473	683	543	2,993	599	4.7
Masuguru	205	205	154	176	1,109	1,849	370	2.9
Total	9,810	15,068	12,878	12,229	13,319	63,303	12,661	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(iii) Pigeon peas

Table 3.10 shows the average annual total of 18,877 hectares was planted with pigeon as cash crop. The best crop practice was experienced in the 2014/15 season out of five seasons whereby 20,973 hectares of land were put under cultivation of pigeon peas compared to other seasons. The smallest amount of 16,561 hectares of land was cultivated in 2010/11. At ward level, Nandete was the leading ward in the cultivation pigeon peas with annual average area 2,209 equivalent to 11.7 percent under pigeon peas cultivation. The second ward was Mkonona (9.5 percent) and Likokona (9.3 percent). The wards with the least planted area were Mnanje (3.9 percent) and Masuguru (3.9 percent). Cultivation of pigeon peas needs to be encouraged in Nanyumbu district in order to increase crop production and ultimately raise the council's per capita income.

Table 3. 10: Estimated Area Under Cultivation (Ha) Major Cash Crops (Pigeon Peas) by Ward, Nanyumbu District Council; 2010/11 – 2014/15

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total Area (ha)	Annual Average Area (ha)	Percent
Nandete	2,126	2,126	2,126	2,166	2,500	11,044	2,209	11.7
Mkonona	1,780	1,780	1,780	1,800	1,800	8,940	1,788	9.5
Likokona	1,740	1,740	1,742	1,742	1,816	8,780	1,756	9.3
Chipuputa	1,020	1,020	1,023	2,411	2,441	7,915	1,583	8.4
Mangaka	1,503	1,503	1,503	1,546	1,704	7,759	1,552	8.2
Mikangaula	1,502	1,502	1,520	1,616	1,616	7,756	1,551	8.2
Sengenya	1,219	1,219	1,220	1,220	1,224	6,102	1,220	6.5
Napacho	896	896	897	1,370	1,375	5,434	1,087	5.8
Maratani	800	800	807	1,456	1,456	5,319	1,064	5.6
Nanyumbu	953	953	953	958	998	4,815	963	5.1
Nangomba	871	871	871	897	897	4,407	881	4.7
Lumesule	776	776	776	997	997	4,322	864	4.6
Mnanje	706	706	706	798	798	3,714	743	3.9
Masuguru	669	669	670	769	890	3,667	733	3.9
Total	16,561	16,594	19,746	20,512	20,973	94,386	18,877	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

(iii) Ground nuts

Table 3.11 shows that ground nut as another crop grown in Nanyumbu district council which is classified under major cash crops in the area irrespective of its low ranking in terms of the area under cultivation. It covers 40,018 hectares of the planted area. Table 3.3d shows that Nandete ward with cumulative annual average area of 1,061 hectares (13.3 percent) under groundnuts cultivation led other wards in the district council. Napacho was the second ward with cumulated annual average area of 996 hectares (12.4 percent). One general observation is that the crop did not do well which is mostly attributable to the failure of rainfalls, pests and diseases which previously attacked the crop before maturity hence discouraging cultivation of the crop in subsequent years.

Table 3. 11: Estimated Area Under Cultivation (Ha) of Cash Crops (Ground nuts) by Ward, Nanyumbu District Council; 2011 – 2015

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total Area (ha)	Annual Average Area (ha)	Percent
Nandete	1,114	1,117	1,117	978	978	5,303	1,061	13.3
Napacho	427	427	1,375	1,375	1,375	4,979	996	12.4
Likokona	829	829	829	830	830	4,147	829	10.4
Mikangaula	632	632	769	769	780	3,582	716	9.0
Maratani	334	384	726	726	726	2,896	579	7.2
Mangaka	501	581	560	560	568	2,770	554	6.9
Sengenya	558	581	541	544	544	2,768	554	6.9
Nangomba	407	407	627	630	630	2,701	540	6.7
Chipuputa	486	486	490	490	490	2,442	488	6.1
Nanyumbu	456	456	456	460	460	2,288	458	5.7
Mnanje	326	326	340	341	739	2,072	414	5.2
Lumesule	355	369	369	370	379	1,842	368	4.6
Mkonona	306	306	407	407	409	1,835	367	4.6
Masuguru	77	78	78	80	80	393	79	1.0
Total	6,808	6,979	8,684	8,560	8,988	40,018	8,004	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

3.2.2 Food Sufficiency

Nanyumbu district council is blessed with good soil that supports growth of a variety of crops such as cereals, tubers and leguminous plants which guarantee food adequacy in council.

However, there are experiences of acute food shortages in months of January and February for the inhabitants of Nanyumbu which can be addressed through mass education by local government authorities to advise community members to put more weight on the cultivation of drought resistant and short term crops in mitigating challenges of food insecurity in those months.

3.2.3 Crop Marketing

Table 3.12 shows the volume and value of marketed dominant Cash crops in the district for the year 2014/15. Cashew nuts were the leading Crop in terms of the volume sold and the amount of cash earned with a total of 8,582,229 kilograms sold at TZS 10, 298,674,800. The second crop was green grams in which a total of 3,656,625 kgs were sold valuing at TZS 4,387,950,000. The least crop was cowpeas which however fetched TZS 7, 600, 000 of the total earnings in the council compared to other crops.

Table 3. 12: Estimated Amount and Earnings of Cash Crops Sold by Crop, Nanyumbu District Council; 2015

Crop	Amount Sold (Kgs)	Average Price per Kg (TZS)	Total Earnings in (TZS)	Percent Earnings
Cashew nut	8,582,229	1,200	10,298,674,800	52.3
Green gram	3,656,625	1,200	4,387,950,000	22.3
Pigeon pea	1,832,191	1,700	3,114,724,700	15.8
Sesame	666,104	2,050	1,365,513,200	6.9
Groundnut	134,186	3,000	402,558,000	2.0
Bambara nut	108,710	1,200	130,452,000	0.7
Cowpeas	9,500	800	7,600,000	0.0
Total	14,989,545		19,707,472,700	100.0

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

3.3 Potential Irrigation Area

Irrigation of field crops in Nanyumbu district is a possibility that can be harnessed by using permanent surface water. Suitable water sources for all season irrigation are found in Ruvuma River Basin within Masuguru ward. Table 3.13 presents areas endowed with very fertile soil and are therefore foremost potential for irrigated Agriculture. Another water source potentially ideal for livestock and crop production under irrigation scheme is the Nangaramo valley in Nangomba ward.

However, total areas of 1,475 hectares of potential land that can be utilized for irrigation has not been exploited due to a myriad of challenges such as lack of investment in Agro mechanization that is likely speed up the agricultural economy and enable the population to achieve self sufficiency in food production.

Table 3. 13: Irrigation Prospects by Ward, Nanyumbu District Council; 2014/15

Ward	Potential Area		Irrigated Area	
	Area (Hectares)	Percent	Hectares	Major crops
Masuguru	1,475	33.3	0	Paddy and Maize
Total District	1,475	100	0	

Source: District Executive Director’s Office (Agriculture Department), Nanyumbu DC, 2016

3.4 Farm inputs

3.4.1 Introduction

Farm Inputs like Agro Mechanization and use of fertilization in crop production is a very crucial aspect in promoting high yields and quality Agricultural practice. More weight is put in revolutionizing traditional agriculture which largely depend simple tools rather than mechanised agriculture and improving agriculture extension services through employing more extension officers as stipulated under Kilimo Kwanza guidelines. Timely distribution of chemical fertilizers including establishing credit facilities for farmers, and setting up storage through a warehouse receipt system was introduced to reinforce crops production.

3.4.2 Chemical Fertilizers

A total of 10,159 tonnes of three different types of Chemical Fertilizers namely SA, UREA and CAN were distributed in Nanyumbu district council during the period of 2010/11-2014/15. From the general outlook, consumption of Chemical fertilizers in the district largely depends on affordability, type of crops grown and the soil fertility of a particular area. Whereas UREA and SA were the most distributed chemical fertilizers with total distribution of 4,500 tones and 3,739 tonnes respectively which was equivalent to (44.3 percent), and 36.8 followed by CAN 1,920 Kilograms (18.9 percent) as the least important Chemical Fertilizers distributed in the district council over the specified seasons as shown in (Table 3.14) below.

Table 3. 14: Type and Quantity of Chemical Fertilizers (tons) Distributed to Farmers; Nanyumbu District Council; 2010/11-2014/15

Type of Fertilizers	Quantity Distributed (in tons)					Total Distribution	Annual Average	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15			
SA	649	500	800	790	1,000	3,739	747.8	36.8
UREA	800	750	950	1,000	1,000	4,500	900.0	44.3
CAN	345	450	200	425	500	1,920	384.0	18.9
TOTAL	1,794	1,700	1,950	2,215	2,500	10,159	2031.8	100.00

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

3.4.3 Insecticides/Pesticides

Table 3.6b indicates that the distribution of insecticides in Nanyumbu district council for the year 2010/11 to 2014/15. Most insecticides such as transmute, kumululus, sulfex, devisulphur, triadmenol, mupaval, bayfidan, mupavidan were the least distributed basically because of their little importance. Incidentally, Sulphur dust was highly distributed accounting for 94.3 percent of the listed insecticides in Table 3.6b. The distribution of Sulfex, Bayfidan was equivalent to 1.5 percent and 1.0 percent respectively and for that matter they were the least distributed insecticides in the entire list of insecticides in the district (Table 3.15).

Table 3. 15: Type and Quantity of Fungicides (in Liters) Distributed to Farmers; Nanyumbu District Council; 2010/11-2014/15

Type of Fungicides	Quantity Distributed (in Liters)					Total Distribution	Annual Average	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15			
Sulphur Dust	0	40,000	188,100	159,154	319,841	707,095	141,419.0	94.3
Sulfex	0	0	5,659	5,708	0	11,367	2,273.4	1.5
Bayfidan	4,000	3,787	0	0	0	7,787	1,557.4	1.0
Transmute	0	0	1,432	2,838	1,988	6,258	1,251.6	0.8
Mupafidan	6,000	0	0	0	0	6,000	1,200.0	0.8
Mupavil	0	0	2,128	1,608	2,180	5,916	1,183.2	0.8
Devisulphur	0	0	3,072	0	0	3,072	614.4	0.4
Triadmenol	0	0	0	1,327	0	1,327	265.4	0.2
Kumululus	0	0	575	456	0	1,031	206.2	0.1

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

3.4.4 Improved Seeds

One of the most important factors for increasing agricultural productivity (output per unit of land) is the use of improved seeds. Maize was the leading crop in having a wide range of improved seeds in the district council whereby total distribution was 10676 kgs (56.3 percent) of the total annual average followed by Sorghum (33.1 percent) as indicated in Table 3.8 shows that OPV and SARO 5 are improved seeds for maize which were mostly distributed in the district council during the referred seasons. Other improved seeds for groundnuts and Paddy were distributed in minimum quantities (Table 3.16).

Table 3. 16: Type and Quantity of Improved seeds (Kgs) Distributed to Farmers; Nanyumbu District Council; 2010/11-2014/15

Type of Improved Seeds	Quantity Distributed (in kgs)					Total Distribution	Average Annual	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15			
Saha	1,500	1,876	1,800	2,000	3,500	10,676	2,135.20	56.3
Sorghum	3,500	1,500	578	600	100	6,278	1,255.60	33.1
Groundnut	0	0	0	0	1,500	1,500	300	7.9
Paddy	0	90	200	100	115	505	101	2.7

Source: District Executive Director's Office (Agriculture Department), Nanyumbu DC, 2016

3.4.4 Agro Mechanization

Table 3.17 shows that Agro Mechanization is practiced at a very low level in Nanyumbu District whereby cultivation is predominantly done by hand hoes. Also other farming activities like sowing; weeding, harvesting, threshing and milling are manually done.

Only a small segment of the district population used implements such as power tillers 25 and 15 tractors for cultivation of Maize and Paddy or both Crops. Investment in Agro mechanization is likely to speed up the agricultural economy and would enable the population to achieve self sufficiency in food production and earn more cash income by selling cash crops and thereby be able to alleviate poverty if not to completely get rid of it. Currently efforts are being made to promote the use of power tiller and tractors by group farmers or individuals to increase the production of food and cash crops. Promotion of Oxidization and the use of ploughs should also be envisaged to be another priority in increasing agricultural production in the district.

Table 3. 17: Availability of Agriculture Implements, Nanyumbu District Council; 2014/15

Type of Implements	Demand	Supplied	Deficit
Tractors	30	15	15
Power tillers	30	25	05
Total	60	40	20

Source: District Executive Director's Office (Agriculture Department), Nanyumbu District, 2016

3.4.5 Policy implication in Agriculture Sector

Limited access to agricultural inputs especially to peasant farmers, poor methods used in agricultural practices, low prices in the crop market assorted with unpredictable climatic changes marked with irregular rainfalls, flooding river basins, all do not portend well for the Agricultural sector in Nanyumbu district. However, much is desired to address this anomaly through dissemination of Kilimo Kwanza guidelines geared to step up the improvement of extension services to majority peasants and farmers in the district and ensure timely and reliable supply of agricultural inputs through improving implementation procedures of National Agricultural Input Voucher Scheme (NAIVS) policy.

3.4.6 Investment Opportunities in Agriculture Sector

Nanyumbu District is endowed with adequate opportunities in Agricultural sector. The land is arable, fertile and suitable for production of various crops including Cereals', leguminous and horticulture. Potential irrigation fields found in Masuguru Ward along Ruvuma River are another attractive aspect of irrigation farming whereby production of these crops can be carried out throughout the year. Incidentally, supply of farm inputs and implements such as fertilizer, insecticides, seeds, power tillers, tractors to peasants and farmers at affordable prices is a viable investment in Nanyumbu. Agro- processing industries especially sorting and packaging industry for cashewnuts creates yet another opportunity area of investment in Nanyumbu district.

3.5 Livestock

Table 3.18 shows the distribution of estimated livestock by species in each ward of Nanyumbu District Council in 2015. Goats were the leading in numbers for large and medium size livestock followed by cattle and sheep, while pig and donkeys are not commonly domesticated in the district council (Table 3.18) also shows that there was a large population of poultry especially indigenous chicken while there were no improved chicken reared for both broilers and layers in the district. Rearing of poultry especially improved breed could be encouraged in order to increase poultry products.

Table 3. 18: Estimated Livestock Population by ward, Nanyumbu District Council; 2015

Ward	Cattle	Goats	Sheep	Donkeys	Pigs	Indigenous chicken
Mangaka	243	607	70	0	40	10,808
Masuguru	2172	468	27	5	0	4,028
Maratani	116	535	31	0	33	5278
Mikangaula	1091	630	63	0	11	26,759
Mnanje	287	1020	50	0	37	8,520
Nandete	192	629	37	0	75	6,569
Nanyumbu	640	479	4	0	13	7,359
Napacho	6	398	18	0	10	8,599
Nangomba	172	402	30	0	14	5,371
Chipuputa	22	646	29	0	5	4,832
Lumesule	6	592	48	0	8	4,519
Sengenya	236	619	66	0	87	2,160
Mkonona	1370	869	49	4	0	15,776
Likokona	197	703	206	0	63	7,128
Total	6,750	8,597	728	9	396	117,706

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

Table 3.19 reveals Goats were the leading in numbers for large and medium size livestock followed by cattle and sheep as indicated in There were 8,597 goats in Nanyumbu District which accounted for 98.22 percent of the district's total goat population while indigenous goats contributed 1.8 percent in 2015.

At ward level, Mnanje ward had largest number (11.9 percent) of the District's total goat population followed by Mkonona Ward with 9.9 percent, Likokona (8.0 percent), and Mikangaula with 7.8 percent to mention few and Nangomba Ward had the least number (4.6 percent) of goat population in Nanyumbu District Council (Table 3.19).

In the case of improved dairy goats, they were not common in Nanyumbu District Council as they only constituted 1.8 percent of the District's total goat population. Majority of dairy goats were kept in seven wards with only 156 dairy goats and Mikangaula Ward had the highest number of goats which accounted for mere 30.8percent as shown in Table 3.19.

Table 3. 19: Population Distribution of Goats by Type and by Ward, Nanyumbu District Council; 2015

Ward	Indigenous Goats	Percent	Dairy Goats	Percent	Total	Percent
Mnanje	1,020	11.9	20	12.8	1,040	11.9
Mkonona	869	10.1	0	0.0	869	9.9
Likokona	703	8.2	0	0.0	703	8.0
Chipuputa	646	7.5	25	16.0	671	7.7
Mikangaula	630	7.3	48	30.8	678	7.8
Nandete	629	7.3	0	0.0	629	7.2
Sengenya	619	7.2	0	0.0	619	7.1
Mangaka	607	7.1	6	3.9	613	7.0
Lumesule	592	6.9	0	0.0	592	6.8
Maratani	535	6.2	0	0.0	535	6.1
Nanyumbu	479	5.6	38	24.4	517	5.9
Masuguru	468	5.4	4	2.6	472	5.4
Nangomba	402	4.7	0	0.0	402	4.6
Napacho	398	4.6	15	9.6	413	4.7
Total	8,597	100.0	156	100.0	8,753	100.0
Percent	98.2		1.8		100	

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

(i) Cattle

Nanyumbu is one of the District with comparatively smaller number of livestock in Mtwara Region especially cattle and therefore the production and consumption of meat are also insignificant. The consumption of meat on the average ranges between 1 to 1.5 kg per annum per head in the District. This is a very low rate of meat consumption compared to the national average of 8 to 9 kg per annum per head.

In 2015, the indigenous breed was the dominant type of livestock found in Nanyumbu District Council which accounted for 91.2 percent of the district's total cattle population whereas the improved dairy cattle contributed 8.8 percent as shown in Table 3.19.

Masuguru Ward had largest proportion of 29.3 percent of the District's total cattle population followed by Mikangaula Ward with 21.5 percent, Mkonona (18.5 percent) and Nanyumbu (8.6 percent) just to mention few and Napacho Ward had the least number which constituted 0.1 percent of the total cattle population in Nanyumbu District Council as shown in Table 3.19.

Most of the improved dairy cattle were recorded in Mikangaula Ward (76.1 percent) followed by Mangaka (7.5 percent), Nangomba (5.2 percent), Likokona (2.4 percent), Nandete (2.3 percent), Lumesule (1.7 percent), Chipuputa (1.5 percent), Sengenya (1.4 percent), Mnanje (1.2 percent) and Maratani (0.6 percent) while the remaining four wards were recorded to have no improved dairy cattle in 2015. Improved beef cattle were non-existent in Nanyumbu District Council.

Table 3. 20: Population Distribution of Cattle by Type and by Ward, Nanyumbu District Council; 2015

Ward	Indigenous Cattle	Percent of Indigenous Cattle	Dairy Cattle	Percent of Dairy Cattle	District Total	Percent of District
Masuguru	2,172	32.2	0	0.0	2,172	29.3
Mikangaula	1,091	16.2	498	76.1	1,589	21.5
Mkonona	1,370	20.3	0	0.0	1,370	18.5
Nanyumbu	640	9.5	0	0.0	640	8.6
Mnanje	287	4.3	8	1.2	295	4.0
Mangaka	243	3.6	49	7.5	292	3.9
Sengenya	236	3.5	9	1.4	245	3.3
Likokona	197	2.9	16	2.4	213	2.9
Nandete	192	2.8	15	2.3	207	2.8
Nangomba	172	2.5	34	5.2	206	2.8
Maratani	116	1.7	4	0.6	120	1.6
Chipuputa	22	0.3	10	1.5	32	0.4
Lumesule	6	0.1	11	1.7	17	0.2
Napacho	6	0.1	0	0.0	6	0.1
Total	6,750	100	654	100	7,404	100
Percent	91.2		8.8		100	

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016.

3.5.1 Grazing Area

Nanyumbu District faces the challenge of scarcity of land for cattle grazing as most of the land is for settlement and agriculture. Grazing land available is 1,690 hectares which accommodates 6,760 cattle at a ratio of 2 ha/LV/ year, currently total number of cattle in the District is 7,646 and therefore measures are being taken to avoid soil and environmental destruction.

3.5.2 Livestock Infrastructure

In order to improve the quality of animal productivity and curbing diseases through preventive strategies, livestock infrastructure is a necessity that cannot by any means be sidelined in livestock husbandry. Availability of livestock infrastructure including dips and veterinaries centres together with medicines, while crushes, abattoirs, hides and skin sheds, slaughter slabs, livestock market or auctions and accessibility of water improve the quality of livestock products are of paramount importance.

However, Nanyumbu District Council faces a critical shortage of Livestock Infrastructure in terms of cattle dips and veterinary centers whereby at the ward level, there are only 2 cattle dips and 1 veterinary center working in Mikangaula and Nanyumbu wards respectively as indicated in Table 3.21.

Table 3. 21: Distribution of Livestock Infrastructure by Ward; Nanyumbu District Council, 2015

Ward	Dips				Veterinary Centers			
	Working	Not Working	Total	Percent	Working	Not Working	Total	Percent
Mangaka	0	0	0	0	0	0	0	0
Masuguru	0	0	0	0	0	0	0	0
Maratani	0	0	0	0	0	0	0	0
Mikangaula	2	0	2	0	0	0	0	0
Mnanje	0	0	0	0	0	0	0	0
Nandete	0	0	0	0	0	0	0	0
Nanyumbu	0	0	0	0	1	0	1	0
Napacho	0	0	0	0	0	0	0	0
Nangomba	0	0	0	0	0	0	0	0
Chipuputa	0	0	0	0	0	0	0	0
Lumesule	0	0	0	0	0	0	0	0
Sengenya	0	0	0	0	0	0	0	0
Mkonona	0	0	0	0	0	0	0	0
Likokona	0	0	0	0	0	0	0	0
Total	2	0	2	0	1	0	1	0

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

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 such as crushes, abattoirs, hides and skin sheds, slaughter slabs, livestock market, charco dams and availability of water. Table 3.22 shows that most parts of Nanyumbu district council do not have these facilities in place to the detriment of the quality of the livestock sector in the district. The entire District has only 3 crushes in Mikangaula Ward had 1 hide shed, 1 abattoir, 1 slaughter slab, 1 Charco dam all found in Mangaka and only a single charco dam in Mkonona Ward as shown in Table 3.22

Table 3. 22: Distribution of Livestock Infrastructure by Ward; Nanyumbu District Council, 2015

Ward	Crushes	Hides/Skin Sheds	Abattoirs	Slaughter Slab	Livestock Market/Auction	Charco Dams
Mangaka	0	1	1	1	0	1
Masuguru	0	0	0	0	0	0
Maratani	0	0	0	0	0	0
Mikangaula	3	0	0	0	0	0
Mnanje	0	0	0	0	0	0
Nandete	0	0	0	0	0	0
Nanyumbu	0	0	0	0	0	0
Napacho	0	0	0	0	0	0
Nangomba	0	0	0	0	0	0
Chipuputa	0	0	0	0	0	0
Lumesule	0	0	0	0	0	0
Sengenya	0	0	0	0	0	0
Mkonona	0	0	0	0	0	1
Likokona	0	0	0	0	0	0
Mangaka	0	0	0	0	0	0
Total	3	1	1	1	0	2

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

3.5.3 Livestock Morbidity and Mortality

Data generated from Nanyumbu District Council revealed that diseases were the major causes of livestock mortality and morbidity in the district amongst other factors. The notable diseases in the District were east coast fever, anaplasmosis, babesiosis, heart water and helminthiasis.

(i) Causes of Cattle Morbidity and Mortality

The commonest causality for cattle morbidity in Nanyumbu District Council between 2014 and 2015 was worms. As Table 3.23 shows, in 2013, worms contributed to 58.5 percent of total 393 reported cases of cattle morbidity in the District Council. The second cause for cattle morbidities was anaplasmosis 20.6 percent followed by Contagious Bovine Plural Pneumonia (CBPP) 12.47 percent, heart water 5.60 percent and Trips 2.80 percent.

In 2015, Worms were the leading causality for cattle diseases in the District Council cattle morbidity rate accounted 65.0 percent of reported 437 cases followed by CBPP 13.7 percent, Anaplasmosis 13.0 percent Heart water 6.4 percent and Trips 1.8 percent. The data reveal that there was an increase of cattle morbidity cases caused by Worms in 2015 than 2013 and this serves as wakeup call for the District council authority, therefore, to step up the fight against worms to completely rid the disease in the future.

Table 3. 23: Five Common Cattle Diseases Causes Morbidity, Nanyumbu District Council; 2013 and 2015

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
Worms	230	58.5	Worms	284	65.0
Anaplasmosis	81	20.6	Anaplasmosis	57	13.0
CBPP	49	12.5	CBPP	60	13.7
Heart water	22	5.6	Heart water	28	6.4
Trips	11	2.8	Trips	8	1.8
Total	393	100.0	Total	437	100.0

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

Table 3.24 indicates the number of cattle that were reported to have died of different types of diseases in 2013 and 2015. In 2013, out of 23 cattle deaths, 34.8 percent were caused by worms, anaplasmosis 26.1 percent, and CBPP 21.7 percent. Similarly in 2015, worms were observed to be the major killer disease claiming 48.2 percent followed by anaplasmoasis 18.5 percent. Trips which were the least killer disease in 2013 remained the least common disease killer with 3.7 percent of cattle deaths that occurred in 2015. One general observation drawn from these data is

that Worms was the most dangerous disease for two consecutive years which calls for the District Council authority to come up with control measures to address the situation (Table 3.24).

Table 3. 24: Four Common Cattle Diseases Causes Mortality, Nanyumbu District Council; 2013 and 2015

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
Anaplasmosis	6	26.1	Anaplasmosis	5	18.5
Heart water	3	13.0	Heart water	4	14.8
Trips	1	4.4	Trips	1	3.7
Worms	8	34.8	Worms	13	48.2
CBPP	5	21.7	CBPP	4	14.8
Total	23	100	Total	27	100

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

(i) Causes of Goat Morbidity and Mortality

Worms were the major disease causality that contributed to morbidity cases of goats in Nanyumbu District Council between 2013 and 2015. Goats were subjected morbidity caused by worms more than any other diseases in 2013 which accounted for 35.43 percent of 254 morbidity cases in 2013. Table 3.25 shows that in 2015 there was an increase in cases reported on morbidity for 200 goats in which Worms constituted 82.5 percent as causality for morbidity. One general observation drawn from these data is that the wards were unable to control the goats' morbidity caused by Worms and therefore leaving the situation unabated in subsequent years as evidenced in 2015.

Table 3. 25: Four Common Disease Causes of Goat Morbidity, Nanyumbu District Council; 2013 and 2015

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
CCPP	49	19.3	CCPP	6	3.0
Heart water	33	13.0	Heart water	29	14.5
PPR	82	32.3	PPR	0	0.0
Worms	90	35.4	Worms	165	82.5
Total	254	100.0	Total	200	100.0

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

Table 3.26 indicates the number of goats that were reported to have died of different types of diseases in 2013 and 2015. In 2013, out of 113 cattle deaths, 68.14 percent of goats died from Pestedesdespetits Ruminants (PPR), CCPP 23.01 percent, and Worms 6.19 percent. However, in 2015, Worms were observed to be the major killer disease claiming 68.18 percent of 22 reported cases of mortality followed by Heart water 18.18 percent and CCPP 13.64 percent. PPR which was the highest killer disease in 2013 on the contrary did cause any deaths in 2015. One general observation drawn from these data is that PPR which proved to be the most dangerous disease in 2013 was completely wiped from Nanyumbu District and therefore it is imperative for the same spirit to be replicated to other diseases.

Table 3. 26: Four Common Goat Diseases Causes Mortality, Nanyumbu District Council; 2013 and 2015

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
CCPP	26	23.01	CCPP	3	13.64
Heart water	3	2.65	Heart water	4	18.18
PPR	77	68.14	PPR	0	0
Worms	7	6.19	Worms	15	68.18
Total	113	100.00	Total	22	100.00

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

Table 3.27 indicates three major diseases namely Salmonellosis, New Castle Disease (NCD) and Coryza were major causes of morbidity in poultry in Nanyumbu District. NCD which claimed 64.8 percent of 8922 morbidity cases in poultry was the leading causality of morbidity in chickens in 2013 followed by Salmonellosis 31.7 percent and the least was Coryza 3.6 percent. In 2015 again NCD ranked first as major causality of morbidity which caused 83.23 percent of the 2439 deaths in that year followed by Salmonellosis 53.87 and coryza accounted for 1.19 percent of the total morbidity cases.

Table 3. 27: Three Common Poultry Diseases Causes Morbidity, Nanyumbu District Council; 2013 and 2015

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
NCD	5780	64.8	NCD	1096	44.9
Salmonellosis	2825	31.7	Salmonellosis	1314	53.9
Fowl Coryza	317	3.6	Coryza	29	1.2
Total	8922	100	Total	2439	100

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

Table 3.28 shows three common diseases namely Salmonellosis, NCD and Coryza that caused mortality in poultry in Nanyumbu District. NCD which claimed 92.34 percent of 6068 deaths in poultry was the highest killer disease in chickens in 2013 followed by Salmonellosis 6.74 percent and the least was Coryza 0.92 percent. In 2015 again, NCD ranked first as major killer disease which caused 83.23 percent of the 1181 deaths that occurred in 2015 followed by Salmonellosis 16.6 percent and Coryza accounted for 1.19 percent of the total mortality cases.

Table 3. 28: Three Common Poultry Diseases Causes Mortality Nanyumbu District Council; 2013 and 2015

Disease	2013		Disease	2015	
	No. of Cases	Percent		No. of Cases	Percent
New Castle	5603	92.34	NCD	983	83.23
Salmonellosis	409	6.74	Salmonellosis	196	16.60
Fowl Coryza	56	0.92	Coryza	2	0.17
Total	6068	100	Total	1181	100

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

3.5.4 Marketing Livestock and by Products

Dairy and indigenous cattle offered major contribution to the district's total revenue obtained from the marketing of milk in period between 2013 and 2015 (Table 3.17). However, lack of proper procedure of marketing livestock have created a big challenge of getting actual number of livestock marketed and the amount of revenue collected from each type of livestock in the district council and regional at large. One general observation from these data is that contribution of dairy cattle was significant in increasing the district GDP.

(i) Milk Production

A total of 7,500 litres of milk was produced in Nanyumbu District Council in 2013 as indicated in Table 3.29. The total revenue collected from milk production in 2013 was TZS. 7,500,000. An increase in the amount of milk produced was experienced in 2015 whereby 10980 litres were produced fetching a total revenue of TZS. 13,176,000. The increase of revenue was influenced by the number of litres produced which rose to 8820 litres in 2015 as shown in Table 3.29

Table 3. 29: Production of Milk; Nanyumbu Council; 2013 and 2015

Livestock	2013			2015		
	Number of Liters	Revenue (TZS)	Average price per liters	Number of Liters	Revenue (TZS)	Average Price per Liters
Indigenous Cattle	1,500	1,500,000	1,000	2,160	2,592,000	1,000
Dairy Cattle	6,000	6,000,000	1,000	8,820	10,584,000	1,000
Total	7,500	7,500,000		10,980	13,176,000	

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

3.5.5 Establishment and Personnel

Table 3.30 portrays an acute shortage of livestock personnel by Ward in Nanyumbu District Council. In Wards such as Mikangaula, Maratani, Nandete, Nanyumbu, Chipuputa, Napacho, Kilimanihewa to mention a few there were no livestock personnel. The district council had only 1 livestock officer with no veterinary officer, 2 Livestock field officers. The district had neither Pests and Tsetse fly field officer nor a livestock auxiliary officer in 2015. Mnanje, Mangaka and Likokona wards were privileged to have at least one livestock personnel each equivalent to an average 17.65 percent in 2015 as indicated in (Table 3.30).

It is undisputable that underperformance in this sub sector to a large extent is, amongst other factors, attributable to shortages of livestock personnel such as veterinary officers, livestock officers and pests and tsetse field officers in all wards of the District Council. It is therefore imperative to recruit more personnel in order to increase productivity of this essential sector whose contribution to the district GDP cannot be downplayed.

Table 3. 30: Availability of Livestock Personnel by Ward, Nanyumbu Council; 2015

Ward	Veterinary Officers	Livestock Officers	Livestock Field Officers	Pests and Tsetse Field Officers	Livestock Auxiliary	Total Number
Likokona	0	0	1	0	0	1
Mnanje	0	0	1	0	0	1
Mikangaula	0	0	0	0	0	0
Maratani	0	0	0	0	0	0
Nandete	0	0	0	0	0	0
Nanyumbu	0	0	0	0	0	0
Chipuputa	0	0	0	0	0	0
Napacho	0	0	0	0	0	0
Kilimanihewa	0	0	0	0	0	0
Mangaka	0	1	0	0	0	1
Michiga	0	0	0	0	0	0
Lumesule	0	0	0	0	0	0
Sengenya	0	0	0	0	0	0
Masuguru	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0
Nangomba	0	0	0	0	0	0
Mkonona	0	0	0	0	0	0
Total	0	1	2	0	0	3

Source: District Executive Director's Office (Livestock Department), Nanyumbu DC, 2016

3.6 Policy Implication

Nanyumbu District Council like other districts in Mtwara region has relatively small livestock population of cattle, goats, sheep and poultry which is emerging given the fact that prior to infrastructural reforms that occurred in the recent past some of these districts like Nanyumbu were typically traditional hamlets and villages. 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.

3.7 Investment Opportunities in Livestock Subsector

Nanyumbu District has critically insufficient livestock infrastructures and this necessitates an urgent redress of the situation through construction of livestock infrastructures that are working such as dips, veterinary centres, water points, abattoirs etc. Another area which highly needs investment is dairy farming and livestock processing industries such as milk processing and encouraging zero grazing practice to curb the scarcity of pastureland that proves to be a challenge to the livestock sector.

3.8 Natural Resources

Nanyumbu District is gifted with a large area of 164,772 hectares of natural vegetation covered with abundant forest. This portend good to the Natural resources sector which plays an important role in promoting climate stability, conservation of water sources, soil fertility, controlling soil erosion, and providing source of fuel and industrial materials. Natural resources sector comprises various sub-sectors including forestry, bee-keeping, fisheries and wildlife.

3.8.1 Forestry

Table 3.31 presents forest reserves by councils in Nanyumbu District Council in 2015. Seven wards in the District council had a total of 4,480 hectares of natural forest reserves under Game controlled area which is equivalent to 37.4 percent of the District council land area of 5,199 hectares. Mangaka Ward has the largest area, (904 hectares) of natural forest reserves followed by Napacho Ward with 50 hectares. Some residents of Nanyumbu District involve in harvesting of Timber as one of their economic activities.

Table 3. 31: Status of Forest Cover by Ward Nanyumbu District Council; 2015

Ward	Total Land Area (ha)	Natural forest reserve area (ha)	Forest plantation area (ha)	Game Controlled Area (ha)
Napacho	50.6	78.0	1.5	,4400.0
Masuguru	23.4	5.0	0.0	0.0
Sengenya	31.2	0.0	10.0	79.8
Mkonona	39.9	213.7	0.0	0.0
Mangaka	12.0	0.0	15.0	0.0
Chipuputa	21.0	0.0	1.0	0.0
Kilimanihewa	10.3	0.0	30.0	0.0
Total	188.4	296.0	58.0	4,,480.0

Source: District Executive Director's Office (Natural Resource Department), Nanyumbu DC, 2016

The district council is endowed with adequate forestry resources, however, due to increasing human activities such as cutting trees for fire wood, charcoal, timber poles and agriculture activities, this is sector is threatened to a great extent. Nevertheless, the District Council has taken necessary initiatives of tree planting in order to prevent critical deforestation that might happen in the near future.

3.8.2 Environmental Conservation

Environmental damages can be observed in different parts of the District and ranging from depletion of forests through increasing demand for poles, fuel and wood timber, reckless burning of forests to improper cultivation which ultimately lead to soil erosion and mining activities undertaken without taking care of the environment.

Table 3.32 shows that only 6 NGOs and development partners were operative in Nanyumbu District which covered 4 wards only namely Napacho accounting 33.3 percent, Likokona 33.3 percent, Masuguru 33.3 percent, Sengenya, 33.3 percent. Environmental protection through public awareness on environmental issues is therefore a necessity to the community and appropriate interventions need to be considered. Tree planting also ought to be given priority by the district authority in order to arrest the prevailing environmental damages.

Table 3. 32: Number of NGOs and Number Development Partners Involved in Environmental Conservation by ward, Nanyumbu District Council; 2015

Ward	Number of NGOs	Number of Development Partners	Percent NGOs
Napacho	1	1	33.3
Likokona	1	1	33.3
Masuguru, Sengenya	1	1	33.3
Total	3	3	100

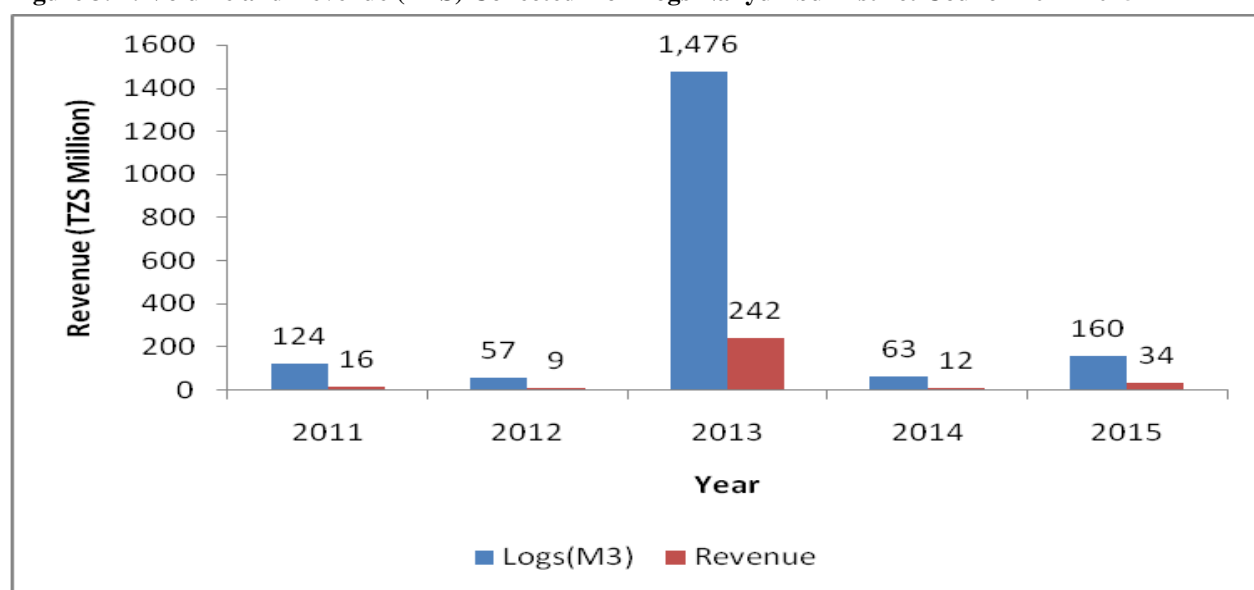
Source: District Executive Director's Office (Natural Resource Department), Nanyumbu DC, 2016

3.8.3 Forest Products, Logs and Charcoal

Nanyumbu district council is one of the districts in Mtwara Region where only a small portion of their forest resources was used to support the district economic development.

Data from Nanyumbu District executive director shows that for three recent years (2011 to 2015) the council collected a total sum of TZS.33848,628.0 from (number of bags 354 cubic metres) being an average of TZS 412,000 per year from charcoal as shown in Figure 3.1.

Figure 3. 1: Volume and Revenue (TZS) Collected from logs Nanyumbu District Council 2011-2015



Source: District Executive Director’s Office (Natural Resource Department), Nanyumbu DC, 2016

(i) Charcoal

The use of charcoal and firewood as the source of energy for cooking is very common to rural areas like Nanyumbu District Council. Protection of forest to be harvested has resulted to illegal business of harvesting logs and production of charcoal in the district. The District Council has formed a task force to deal with illegal business of harvesting logs and production of charcoal as a protection measure. Table 3.33 shows that a number of bags and total revenue amounting to 1,426,000 was collected from illegal dealers in 2015.

Table 3. 33: Revenue collected from Charcoal Nanyumbu Council, 2011-2015

Year	Number of bags and Revenue T.Zs Collected				
	2011	2012	2013	2014	2015
Bags	182	90	70	105	90
Revenue	728,000.00	350,000.00	400,000.00	600,000.00	1,426,000.00

Source: District Executive Director’s Office (Natural Resource Department), Nanyumbu DC, 2016

(ii) Beekeeping

To a large extent bee keeping is traditionally practiced in villages of Mtawatawa, Lipupu, Mkumbaru, Chigweje, Mpwahia, Chilunda and Makong’ondera. The residents mostly use the

traditional beehives and the sector is not so much developed and only few individuals are involved in Bee-keeping activities.

Table 3.34 shows that in 2014 and 2015 Maratani Ward had the leading cumulative number of 2901 traditional beehives which accounted for 27.2 percent in the district followed by Napacho 2727 beehives, 25.6 percent, and Likokona ward 1376 beehives (12.9 percent) to mention but a few. Lumesule ward had the least cumulative number of 291 traditional beehives constituted 2.7 percent.

Table 3. 34: Number of Traditional Beehives by Ward, Nanyumbu District Council; 2011 -2015

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total	Total Percent
Maratani	574	497	470	650	710	2901	27.2
Napacho	87	120	650	910	960	2727	25.6
Likokona	185	210	291	320	370	1376	12.9
Chipuputa	90	105	150	205	218	768	7.2
Sengenyua	142	149	140	190	130	751	7.1
Nangomba	48	70	82	110	120	430	4.0
Kamundi	42	60	75	89	150	416	3.9
Masuguru	46	62	78	80	98	364	3.4
Nanyumbu	37	58	72	87	91	345	3.2
Lumesule	35	42	58	70	86	291	2.7
Kilimanihewa	30	45	50	63	92	280	2.6
Total	1,316	1,418	2,116	2,774	3,025	10649	100.0

Source: District Executive Director's Office (Natural Resource Department), Nanyumbu DC, 2016

Modern beekeeping is yet to gain ground in Nanyumbu District Council due to shortages of using modern beehives. This is evidenced by the number of modern beehives found in the last four years as indicated in Table 3.35. There is a need for the district council management to raise awareness of this opportunity for Nanyumbu residents in order to alleviate poverty levels for those living along these forests.

Table 3.35 shows the District Council had cumulative total of 643 modern beehives in the referred years. In 2010/2011, the district had only 42 modern beehives; it was increased to 111 in 2011/2012 and then increased further to 170 in 2012/1013. Napacho Ward had the largest number of modern beehives (170 beehives, 26.4 percent) in the district followed by Likokona

(161 beehives, 25.0 percent), Lumesule (140 beehives, 21.8 percent) and Chipuputa (50 beehives, 7.8 percent). One general observation from these data is that much has to be done to promote bee keeping in the future through use of modern ways of bee keeping.

Table 3. 35: Number of Modern Beehives by Ward, Nanyumbu District Council; 2011 -2015

Ward	2010/11	2011/12	2012/13	2013/14	2014/15	Total	Percent of the Total
Napacho	0	0	170	0	0	170	26.4
Likokona	0	61	0	100	0	161	25.0
Lumesule	0	0	0	40	100	140	21.8
Chipuputa	0	50	0	0	0	50	7.8
Kilimanihewa	0	0	0	40	0	40	6.2
Nanyumbu	0	0	0	40	0	40	6.2
Maratani	35	0	0	0	0	35	5.4
Masuguru	7	0	0	0	0	7	1.1
Sengenya	0	0	0	0	0	0	0.0
Nangomba	0	0	0	0	0	0	0.0
Kamundi	0	0	0	0	0	0	0.0
Total	42	111	170	220	100	643	100.0

Source: District Executive Director’s Office (Natural Resource Department), Nanyumbu DC, 2016

Despite being viable project, modern bee keeping is yet to be achieved in Nanyumbu District Council due to the shortages of using modern beehives. This is evidenced by the number of modern beehives found in the last four years.

3.8.4 Fisheries

Fishing is another sub sector that contributes to the district GDP though it is still undeveloped and insignificant and only practiced along Ruvuma River on very small scale as evidenced by scarce fishing resources that were available by 2015 (Table 3.36). There were 36 licences mostly in Masuguru ward, Mkonona (10 licences) and Nanyumbu ward (1 licence). Table 3.36 shows that there were 40 unregistered fishermen in Nanyumbu district while the total revenue collection put at only TZS 470,000.00

Table 3. 36: Available fishing Resources available by ward, Nanyumbu District Council, 2015

Ward	Type of Fishing Resources			Revenue Collection
	No. of Fishing Licences	No. of Fishermen	No. of Un-Registered Fishing Vessels	
Masuguru	36	42	40	360,000.00
Mkonona	10	21	0	100,000.00
Nanyumbu	1	1	0	10,000.00
Total	47	64	40	470,000.00

Source:District Executive Director’s Office (Natural Resource Department), Nanyumbu DC, 2016

3.9 Historical Site Viewing Tourism

Nanyumbu District with a total area of 65,450 hectares of wildlife reserves is much endowed with wildlife which occupies 3.91% of the regions total land area. The type of animals found in these reserves are elephants, greater, Kudu, Zebra, water buffaloes, antelopes, Wildebeest, Impala, Wild dogs and Pig species. There are also aquatic animals mainly located in Ruvuma River, which include hippos and crocodiles. These wildlife reserves are areas of attraction for tourists who may decide to hunt, game viewing or to take photography. Other wonders of rocky Majeja Hills in Nakopi and Mahinyo Hills in Nandete Ward, eye catching scenery of Mtambaswala Unity Bridge, topography and very peaceful and hospitable Makua people. Game hunting in Lukwika Lumesule Game Reserves, infrastructural ventures, historical and archaeological ventures and certainly the best wildlife photographic safaris is what makes Nanyumbu District a must go tourism zone. Table 3.37 shows the historical sites potential for tourism in Nanyumbu district council.

Table 3. 37: Historical sites potential/attractive for Tourism Nanyumbu Council; 2015

Type of historical site available	Village/Mitaa	Ward	District
Majeja Hills	Nakopi	Napacho	Nanyumbu
Mahinyo Hills	Chivirikiti	Nandete	Nanyumbu
Lukwika/Lumesule Game Reserve	Mpombe, Masuguru	Nakopi	Nanyumbu
Ruvuma River 45km	Masuguru,Lukula Nanderu, Mitumbati, Marumba	Masuguru, Nanyumbu, Mkonona	Nanyumbu
Unity Bridge	Lukula/ Mtambaswala	Masuguru	Nanyumbu

Source: District Executive Director’s Office (Natural Resource Department), Nanyumbu DC, 2016

3.10 Eco Tourism

Well connected road network between Nanyumbu District headquarters, Mangaka and other parts such as Mtwara Municipality and other big commercial cities in Tanzania like Mbeya and Dar es Salaam provides easy accessibility to the district which encourage more people to come in search of business opportunities, mining activities as well as those who come for tourism purposes.

The available accommodation facilities which range from hotels to guest houses are to a large extent located at the centre of Mangaka, the district township which is well connected with tarmacked road to Mtambaswala near Ruvuma river. However, construction of new accommodation facilities becomes a pressing issue. There is also a need of increasing the number of financial services such as banks, bureau de change etc so as to meet the higher demand of these services in the near future. Table 3.38 shows the available accommodation facilities by ward in Nanyumbu district council by the year 2015. The District Council had 34 guest houses and no hotels by the end of 2015. Most of the guest houses (35.3 percent) were concentrated in Mangaka Ward which is the headquarters of the District Council, Mtambaswala in Masuguru ward 35.3 percent. Mikangaula had 4 guest houses (11.8 percent) whereas Nanyumbu had 5 guest houses (14.7 percent) as shown in table 3.38.

Table 3. 38: Accommodation facilities by Ward Nanyumbu Council; 2015

Ward	Number of Guest Houses	Percent
Mangaka	12	35.3
Masuguru	12	35.3
Nanyumbu	5	14.7
Mikangaula	4	11.8
Michiga	2	5.9
Nangomba	2	5.9
Total	34	100.0

Source: District Executive Director's Office (Natural Resource Department), Nanyumbu DC, 2016

3.11 Industrial Production

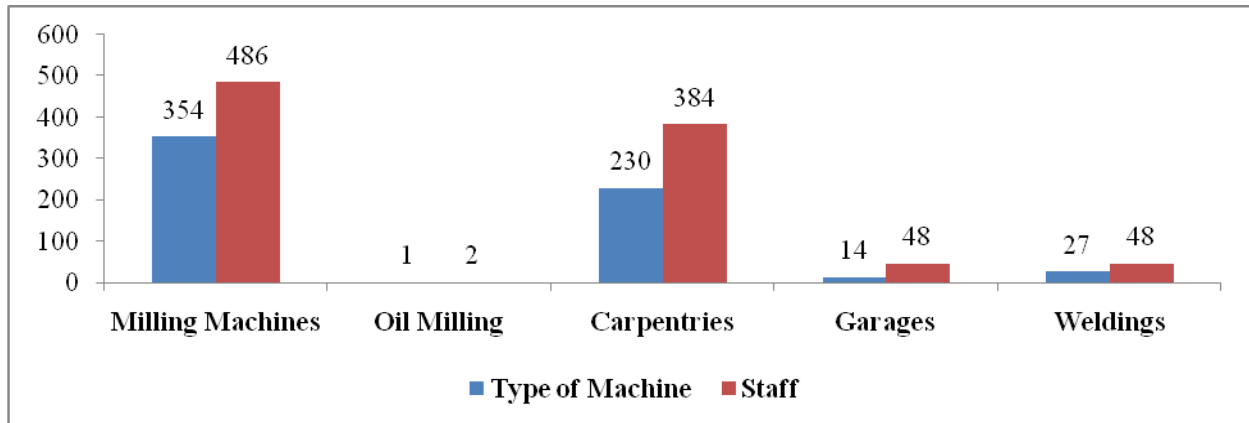
Industrial production sector mostly small scale contributes hugely to the growth of GDP creation of employment, income generation and stimulation of growth in both urban and rural areas of the district. However, the sector still faces a number of challenges which hinder its progress

significantly. These include poor infrastructure, low income per capita and lack of commitment from the stakeholders.

3.11.1 Commerce and Manufacturing Industries

Figure 3.2 shows that by the end of 2015 there were 626 small scale industries creating 968 jobs. More than fifty percent (56.5 percent) of the 626 industries were involved with grain milling. Small scale industries involved with timber processing counted were 230 industries and 4 garages. Majority of staff 139 were working in maize milling while very few of them (2 staff, 0.9 percent) working in Oil Milling Industries figure 3.2.

Figure 3. 2: Number of Industries and Staff by Type, Nanyumbu DC, 2015



Source: District Executive Director’s Office Nanyumbu DC, 2016

CHAPTER FOUR

Economic Infrastructure

4.0 Introduction

This chapter focuses on infrastructural development in Nanyumbu District Council which entails the road network development in terms of road accessibility, type and condition and Agricultural productivity. It also covers telecommunications such as mobile phones and development of the energy sector especially highlighting on availability and accessibility to hydro-electricity, solar energy and fuel wood.

4.1 Road Network

The Table 4.1 shows that the District has a total road network of 1005.8 km. This network is made up of 93.3km of trunk roads, 97 km of regional roads, 459kms of district/urban and 356.5 km of feeder roads. Greater road network was recorded to district/urban roads 46 percent followed by feeder roads 35 percent. The shortest road network was of trunk roads 9 percent followed by Regional roads 10 percent. All roads are supervised and maintained by Nanyumbu District Council. There have been recent economic infrastructural reforms especially in road network after the completion of Mangaka toTunduru and Mangaka to Mtambaswala tarmac road which guarantees reliable road connectivity between the district headquarters, neighboring districts and the Unity Bridge.

Table 4. 1: Length of Road Network by Type (in km), Nanyumbu District Council, 2015

Types of roads	Length in km	Percent
Trunk	93.3	9
Regional	97	10
District/Urban	459	46
Feeder	356.5	35
Total	1005.8	100

Source: District Engineer Works Office, 2016

4.1.1 Road Network Condition and Accessibility

The effectiveness of the road network is determined by rate of accessibility during the rainy season. The table 4.2 shows that among of the total District road network, 717.8 kilometer were

passable throughout the year (71.4percent), 288 kilometers were passable a greater part of the year (28.6percent) and there was no road not passable most of the year.

Table 4. 2: Passability Condition of Road Network, Nanyumbu District Council; 2015

Condition of Roads	Length in km	Percent
Passable throughout the year	717.8	71.4
Passable greater part of the year	288	28.6
Not passable most of the year	0	0
Total	1005.8	100.0

Source: District Engineer Works Office, 2016

4.1.2 Road Network Classification

Table 4.3 shows that 17.5 percent of the surface road network is tarmac, 7.0 percent is gravel and the rest is earth roads 75.5 percent. The great part of road surface network is earth roads 759.2km (75.5percent) followed by tarmac roads 175.7km (17.5percent). The least road surface network was gravel roads 70.9km (7.1percent).

Table 4. 3: Length of Road Network by Type of Road Surface; Nanyumbu District; 2015

Types of surface (Kms)	Length in km	Percent
Tarmac	175.7	17.5
Gravel	70.9	7.0
Earth	759	75.5
Total	1005.8	100.00

Source: Districts Works Office, 2016.

4.1.3 Agricultural Productivity Road Network

The economy of Nanyumbu District depends mainly on agricultural production. In 2015, the district produced 130,758 tons in which 88,076 tons were food crops and 42,682 tons were cash crops. Nanyumbu DC's road network covered agricultural production at 130 tons of food and cash crops per kilometer of road. This means during the crop season of 2015 on average, one kilometer of overall road networks in the District facilitated transportation of 130 tons of both cash and food crops.

Table 4. 4: Agricultural Productivity of the Road Network, Nanyumbu Council; 2014/15

Total Road Length (km)	Agricultural Production (tons)			tones/km
	Food crops	Cash crops	Total	
1005.8	88,076.00	42,682.00	130,758.00	130.03

Source: District Executive Director’s Office (District Medical Office), Nanyumbu District Council, 2016

4.2 Telecommunication Services

Nanyumbu District is accessible to cellular phone and postal services. Unfortunately, there are no radio and television stations operating in the locality. Popular local television channels such as Star TV, Independent Television (ITV), Channel Ten, Clouds TV, Tanzania Broadcasting Corporation (TBC), and TV 1 can also be accessed. The district has no internet cafe or post office. The district has a reliable network for private cellular phones, including Tigo, Vodacom, Airtel, and Halotel. Airtel has the highest average coverage in the district.

4.3 Energy Sector Development

Success or failure of development activities in almost all sectors in the economy hugely relies on the availability and accessibility to reliable energy supply. The main sources of energy in Nanyumbu District Council are firewood, charcoal, electricity, gas, solar and paraffin. However, firewood is commonly used in rural areas whereas electricity is used in the emerging urban centres though marred by frequent power cuts which often prompt the use of Solar necessary.

4.3.1 Electricity

Electricity as energy is a crucial aspect as well as a catalyst in economic development. TANESCO has been the sole supplier of electricity in the council though not in every hamlet/mtaa. Rural Energy Agency (REA) is underway to expand the coverage in more wards and hamlets. Table 4.5 shows number of institution, domestic and commercial customers of electricity from 2011 to 2015. In 2011, the Council had 1 institution, 79 domestic and 20 commercial customers connected to electricity. The number of institutions connected with electricity in 2015 were 42 for institutions, 804 were domestic customers while commercial segment of customers were 102. One general observation from these data is that the installation of electricity in Nanyumbu District Council for

institutions, domestic and commercial in 2015 increased from 403 customers in 2014 to a total of 948 users an increase of about 135 percent.

Table 4. 5: Number of Customers using/connected to Electricity, Nanyumbu District Council; 2011 – 2015

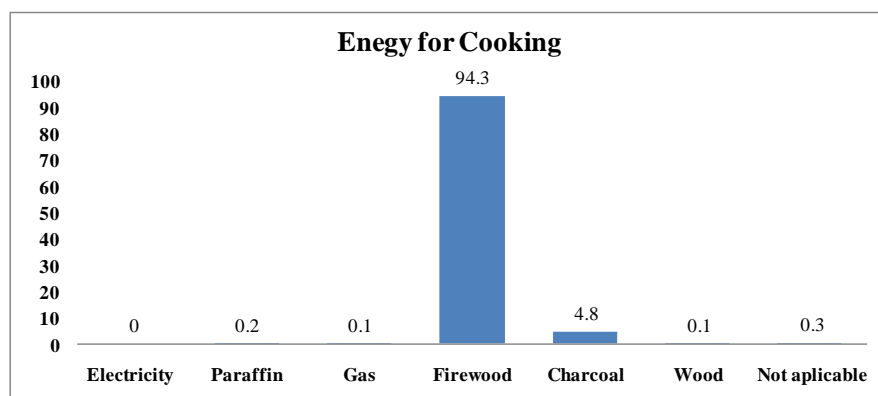
Year	Institution	Domestic	Commercial	Total
2011	1	79	20	100
2012	5	60	12	77
2013	3	292	20	315
2014	4	361	38	403
2015	42	804	102	948
Total	55	1,596	192	1,843
Percent	3.0	86.6	10.4	100

Source: TANESCO

4.3.2 Source of Energy for Cooking

Most of the private households in Nanyumbu district use firewood as source of energy for domestic energy requirements as well as fuel in the brick kilns which accounted for (94.3 percent), followed by charcoal (4.8 percent). Paraffin accounted for about 0.2 percent, gas 0.1 percent, wood sources 0.1 percent while electricity accounted for zero percent (Figure 4.1). The existing forest cover is being over exploited and depleted. The district is promoting for alternative use of fuels such as biogas, electricity, solar energy, and fossils in order to preserve forests.

Figure 4. 1: Sources of Energy for Cooking, Nanyumbu District Council 2015



Source. Mtwara regional social economic profile 2016

CHAPTER FIVE

Social Services

5.0 Introduction

Chapter Five discusses the status of social services in Nanyumbu District Council and 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 as well as mother and child health. It also covers the prevalence of HIV/AIDS and related diseases as well as its impact to the community.

Education is the second sector discussed in this chapter. It highlights education performance based on the increase of school facilities; pre-primary, primary and secondary education; colleges/universities and vocational training. Enrolment performance, school infrastructure and quality of education are also discussed.

Water supply and sanitation is also discussed in this chapter. Water supply for both rural and urban areas of Nanyumbu District Council is highlighted in terms of sources, technology and accessibility. Sanitation is also briefly discussed.

5.1 Health Sector

The Nanyumbu DC is still facing number of challenges in health sector such as shortages of health facilities, practitioners such as Assistant Medical Officers (AMOs) and Clinical Officers (COs), dental surgeons, radiologists and radiographic assistants as well as medical equipment and medicines. These shortages cause unnecessary loss of peoples' lives due to incomplete treatment of preventable diseases.

5.1.1 Health Facilities

Map 2 and Table 5.1 show that by 2015, Nanyumbu District Council had no hospital but has 3 health centers and 16 dispensaries. It is also revealed that, from 2002 to 2015, Nanyumbu, Napacho and Mangaka divisions had one health centre each. On the other hand, all divisions had dispensaries with Napacho and Maratani divisions having the largest number of dispensaries (5

each). It was followed by Mangaka division (4) and Nanyumbu division had the smallest number of dispensaries (2). In addition, all health facilities across the Council are owned by the government.

Map 2: Availability of Health Facilities by Type and Division, Nanyumbu DC, 2015

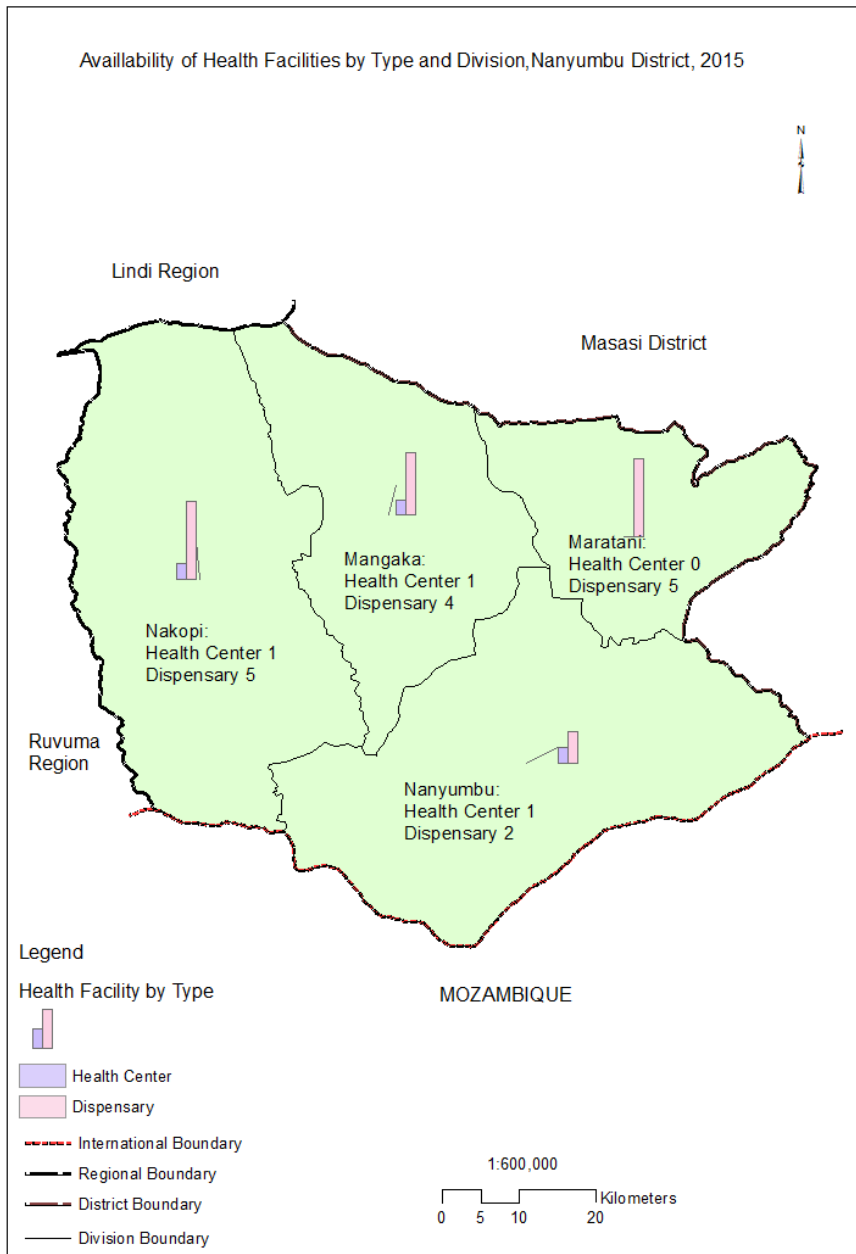


Table 5. 1: Availability of Health Facilities by Type and Division, Nanyumbu District, 2002, 2009 and 2015

Division	Number of Hospitals			Number of Health Centers			Number of Dispensaries		
	2002	2009	2015	2002	2009	2015	2002	2009	2015
Nanyumbu	0	0	0	1	1	1	2	2	2
Napacho	0	0	0	1	1	1	5	5	5
Maratani	0	0	0	0	0	0	5	5	5
Mangaka	0	0	0	1	1	1	4	4	4
Total	0	0	0	3	3	3	16	16	16

Source: District Executive Director's Office (District Medical Office), Nanyumbu District Council, 2016

Table 5.2 shows that Nanyumbu DC had 17 wards and 93 villages which depend on 3 health centers and 16 dispensaries. On average, one health centre in the Council serves 6 wards and one dispensary serves 6 villages. However, across the divisions, Nakopi had the lowest ratio whereby one health centre serves 4 wards and one dispensary serves 4 villages.

Table 5. 2: Distribution of Health Facilities by Division, Nanyumbu District, 2015

Division	No. of Wards	No. of Villages	No. of Health Centers	No. of Dispensaries	Average HC per Wards	Average Dispensary per Villages
Nanyumbu	3	17	1	2	0.3	0.1
Nakopi	4	19	1	5	0.3	0.3
Maratani	5	26	0	5	0.0	0.2
Mangaka	5	31	1	4	0.2	0.1
Total	17	93	3	16	0.2	0.2

Source: District Executive Director's Office (District Medical Office), Nanyumbu District, 2016

5.1.2 Population per Health Facility

Table 5.3 reveals that in 2002, Nanyumbu DC had population of 131,612 compared to 150,857 people in 2012 who depends on 19 health facilities. Population in the council increased from 2002 to 2015 while the number of health centers remains the same, meaning that more people will depends on same number of health facilities. Table 5.3 also reveals that, on average, one health facility in 2002 serviced 6,927 people although in 2012, one health facility was used by 7,940 people. With respect to divisions, Mangaka division had the largest population per health centre increasing from 2,692 people in 2002 to 9,215 in 2012. While, Nakopi had the smallest population per health facility decreasing from 6,940 in 2002 to 6,063 people in 2012.

Table 5. 3: Relating Health Facilities to the Population by Division, Nanyumbu District; 2002 and 2012

Division	2002 Population Census			2012 Population Census		
	Population	Health Facilities	Average Population per Facility	Population	Health Facilities	Average Population per Facility
Nanyumbu	28,706	3	9,569	24,496	3	8,165
Nakopi	41,640	6	6,940	36,377	6	6,063
Maratani	47,805	5	9,561	43,907	5	8,781
Mangaka	13,461	5	2,692	46,077	5	9,215
Total	131,612	19	6,927	150,857	19	7,940

Source: District Executive Director's Office (District Medical's Office), Nanyumbu District, 2016

Table 5.4 shows that in 2012 doctors were unevenly distributed throughout the district especially in Nanyumbu division with highest number of doctors serving a total population of 1,633 persons. The district's average population per doctor decreased from 4,875 persons in 2002 to 5,201 persons.

Table 5. 4: Distribution of Doctors among Population by Division, Nanyumbu District; 2002 and 2012

Division	2002 Population Census			2012 Population Census		
	Population	Doctors	Average Population per Doctor	Population	Doctors	Average Population per Doctor
Nanyumbu	28,706	15	1,914	24496	15	1,633
Nakopi	41,640	03	13,880	36377	05	7,275
Maratani	47,805	04	11,951	43907	04	10,976
Mangaka	13,461	05	2,692	46077	05	9,215
Total	131,612	27	4,875	150,857	29	5,201

Source: District Executive Director's Office (District Medical Office), Nanyumbu District; 2016

Table 5.5 shows that Nanyumbu DC had a total of 6 Trained Traditional Birth Attendants (TBAs), 182 Village Health Workers (VHWs) and 24 registered TMPs in 2015.

Table 5.5 also shows that the average number of Trained Traditional Birth Attendants per village in 2015 was 0.1 while for Village Health Workers it was 2. Moreover, it was observed that, the average number of health carders per village for each ward. Kilimanihewa ward had a better ratio of 0.4 TBAs per village, while all wards have 2 VHWs per village except Mnanje ward with only

one VHWs per village. Different from expectations of establishing complementary rural health facilities, it is obvious that the councils still have shortages of health facilities.

Table 5. 5: Distribution of Complementary Rural Health Service Providers by ward, Nanyumbu Council; 2015

Ward	No. of Villages	No. of TBAs (Trained)	TBAs per Village	No. of VHWs	VHWs per Village	No. of VHP	No. of TMP (Registered)
Mangaka	4	1	0.3	8	2	0	2
Kilimani hewa	5	2	0.4	10	2	0	0
Nangomba	5	1	0.2	10	2	0	0
Mikangaula	6	1	0.2	12	2	0	1
Maratani	4	0	0.0	8	2	0	0
Mnanje	6	0	0.0	8	1	0	0
Nandete	5	0	0.0	10	2	0	0
Chipuputa	6	1	0.2	12	2	0	7
Nanyumbu	8	0	0.0	16	2	0	1
Masuguru	3	0	0.0	6	2	0	0
Mkonona	6	0	0.0	12	2	0	2
Likokona	4	0	0.0	8	2	0	5
Michiga	4	0	0.0	8	2	0	0
Lumesule	5	0	0.0	10	2	0	2
Napacho	6	0	0.0	12	2	0	2
Kamundi	5	0	0.0	10	2	0	0
Sengenya	11	0	0.0	22	2	0	2
Total	93	6	0.1	182	2	0	24

Source: District Executive Director's Office (District Medical's Office), Nanyumbu District; 2016

5.1.3 Morbidity

Morbidity is a state of being affected by disease, illness, injury, or sickness. In this exercises, morbidity was measured in terms of number of persons who were ill, types of illnesses these persons experienced for in and outpatients.

5.1.4 Out-patients

Table 5.6 reveals that out of 72,538 out-patients recorded in 2011, 39,624 (85.8 percent) of them suffered from one of the first five illnesses. It was indicated that, malaria was the first cause of morbidity in Nanyumbu DC followed by Acute Respiratory Infections (ARI) 9,061 (12.5 percent) and diarrhea 6,825 (9.4 percent). In 2015, malaria was still the leading cause of morbidity in the council for out-patients, affecting 47,973 (48.8 percent) followed by URTI, 13,838 (14.1 percent) and Pneumonia 9,284 (9.4 percent).

Table 5. 6: Ten Most Commonly Reported Causes of Morbidity (Out Patients), Nanyumbu District 2011 and 2015

S/No.	Disease	2011		Disease	2015	
		No. of Cases	Percent		No. of Cases	Percent
1	Malaria	39,624	54.6	Malaria	47,973	48.8
2	ARI	9,061	12.5	URTI	13,838	14.1
3	Diarrhoea	6,825	9.4	Pneumonia	9,284	9.4
4	Pneumonia	3,692	5.1	UTI	6,757	6.9
5	Skin disease	3,058	4.2	Diarrhoea	6,057	6.2
6	Intestinal worms	2,584	3.6	Other diagnosis	3,272	3.3
7	Ear infection	2438	3.4	Intestinal worms	3,500	3.6
8	Eye infection	2278	3.1	Ill defined symptoms	2,448	2.5
9	Bronchial Asthma	1827	2.5	Skin infection	1959	2.0
10	Mental diseases	1151	1.6	GIT diseases non infectious	3,272	3.3
	Total	72,538	100.0	Total	98,360	100.0

Source: District Executive Director's Office (District Medical Office), Nanyumbu District council, 2016

5.1.5 In-patients

Table 5.7 shows that like out-patients, malaria was the first course of morbidity 583 (46.9 percent) in 2015, followed by pneumonia 385 (30.9 percent), Acute Respiratory Infections (ARI) – 80 (6.4 percent) and Diarrhea 74 (5.9 percent). In 2015, malaria again was the dominant cause of morbidity among in-patients in the council 13, 838 (33.3 percent) followed by pneumonia 9,284 (22.4 percent) and UTI 6,739 (16.2 percent).

Table 5. 7: Ten Most Commonly Reported Causes of Morbidity (In Patients), Nanyumbu District council, 2011 and 2015

S/No.	Disease	2011		Disease	2015	
		No. of Cases	Percent		No. of Cases	Percent
1	Malaria	583	46.9	Malaria	13,838	33.3
2	Pneumonia	385	30.9	Pneumonia	9,284	22.4
3	ARI	80	6.4	UTI	6739	16.2
4	Diarrhoea	74	5.9	Other diagnosis	4,163	10.0
5	Fracture	37	3.0	Carries	1278	3.1
6	Poisoning	15	1.2	Bronchial Asthma	1897	4.6
7	PID	9	0.7	Malaria	1269	3.1
8	Cardiovascular diseases	8	0.6	Acute ear infection	1098	2.6
9	Ill defined symptoms	8	0.6	Epilepsy	1016	2.4
10	Other diagnosis	45	3.6	Skin diseases non infectious	939	2.3
	Total	1244	100.0	Total	41,521	100.0

Source: District Executive Director's Office (District Medical's Office), Nanyumbu District Council, 2012

5.1.6 Mortality

Table 5.8 indicates that malaria was the dominant cause of mortality for in-patients in 2011, affecting 30 (73.2 percent), followed by Pneumonia 7 (17.1 percent) and other diagnosis 2 (4.9 percent). While, in 2015 malaria affected more in-patients 30 (40.0 percent) followed pneumonia 12 (16.0 percent) and hypertension 10 (13.33 percent).

Table 5. 8: Most Commonly Reported Causes of Mortality (In Patients), Nanyumbu District Council 2011 and 2015

S/No.	Disease	2011		Disease	2015	
		No. of Cases	Percent		No. of Cases	Percent
1	Malaria	30	73.2	Malaria	30	40.0
2	Pneumonia	7	17.1	Pneumonia	12	16.0
3	Other diagnosis	2	4.9	Hypertension	10	13.3
4	Poisoning	1	2.4	Diarrhea	9	12.0
5	ARI	1	2.4	HIV and AIDS	4	5.3
6	Burns	0	0.0	Diabetes	4	5.3
7	Animal bites	0	0.0	Heart failure	2	2.7
8	PID	0	0.0	Toxic effect of Alcohol	2	2.7
9	Diarrhoea	0	0.0	Cirrhosis of liver	1	1.3
10	Road accident	0	0.0	Asthma	1	1.3
Total		41	100.0	Total	75	100.0

Source: District Executive Director's Office (District Medical Office), Nanyumbu District, 2016

5.1.7 HIV/AIDS Infections

HIV prevalence rates for VCT volunteers screened for HIV indicates a decrease in Nanyumbu DC from 2011, to 2015. Table 5.9, shows that in 2011, 1,050 volunteers were screened for HIV and 152 (14.5 percent) were HIV positive. In 2015, the number of VCT volunteers screened for HIV increased to 1,101 however; the number of those who were HIV positive decreased to 148 (13.4 percent). On the other hand, more males VCT volunteers were screened for HIV compared to females from 2011 to 2015 but the number of males with HIV increased from 92 (12.1 percent) in 2011 to 123 (13.5 percent) in 2015. Conversely, the number of females who were HIV positive decreased from 60 (20.8 percent) in 2011 to 25 (13 percent).

Table 5. 9: HIV Prevalence Rates of VCT Volunteers Who Screened for HIV by Sex, Nanyumbu District, 2011, 2013 and 2015

Year	No. Screened			No. of HIV+			Percent HIV+		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2011	761	289	1050	92	60	152	12.1	20.8	14.5
2012	273	317	590	9	11	20	3.3	3.5	3.4
2013	968	322	1290	102	22	124	10.5	6.8	9.6
2014	540	585	1025	16	37	53	2.9	9.1	5.2
2015	908	193	1101	123	25	148	13.5	13.0	13.4
Total	2637	804	3441	317	107	424	12.0	13.3	12.3

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

Table 5.10 shows that out of 5,730 family blood donors screened for HIV infections in the council in the last five years, 603 (10.5 percent) were HIV positive and prevalence rates was largest for males 449 (10.6 percent) than female 154 (10.2 percent).

Table 5. 10: HIV Infections among Family Blood Donors and New AIDS Cases, Nanyumbu District Council; 2011 - 2015

Year	No. of Blood Donors			No. of HIV+			Percent of HIV+		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
2011	761	289	1050	92	60	152	12.1	20.8	14.5
2012	898	404	1302	62	29	91	6.9	7.2	7.0
2013	968	322	1290	102	22	124	10.5	6.8	9.6
2014	689	298	987	70	18	88	10.2	6.0	8.9
2015	908	193	1101	123	25	148	13.5	13.0	13.4
Total	4,224	1,506	5,730	449	154	603	10.6	10.2	10.5

Source: District Executive Director's Office (District Medical Office), Nanyumbu District Council, 2016

Table 5.11 shows that in 2015, 4,511 expectant mothers who participated in the PMTCT service 77 (1.7 percent) were HIV positive and all of them were given niverapine to prevent their children from HIV infections. The available data reveals that, Mikangaula dispensary had the largest number of expectant mothers who were HIV positive 16 (4.2) percent followed by Mangaka dispensary 11 (2.3 percent). However, Nakopi and Marumba dispensaries did not have expectant mothers with HIV among the screened women.

Table 5. 11: Expectant Mothers who participated in the PMTCT Service, Nanyumbu DC, 2015

Name of Hospital/Health Centre/Dispensary	No. of AN Attendants	No. Screened	No. HIV+	Percent of HIV+	No. Of Given Niverapine	Percent Given Niverapine
Mangaka	746	484	11	2.3	11	100.0
Sengenya	210	158	4	2.5	4	100.0
Nangomba	291	270	3	1.1	3	100.0
Mikangaula	416	383	16	4.2	16	100.0
Mikuva	186	176	4	2.3	4	100.0
Maratani	223	206	5	2.4	5	100.0
Nandete	258	248	2	0.8	2	100.0
Nanyumbu	311	277	2	0.7	2	100.0
Masuguru	225	222	3	1.4	3	100.0
Mkonona	186	189	1	0.5	1	100.0
Chipuputa	367	306	6	2.0	6	100.0
Likokona	326	301	5	1.7	5	100.0
Michiga	418	356	6	1.7	6	100.0
Lumesule	226	211	4	1.9	4	100.0
Nakopi	115	96	0	0.0	0	0.0
Mburusa	262	190	3	1.6	3	100.0
Mkumbaru	309	214	1	0.5	1	100.0
Makong'ondera	145	119	1	0.8	1	100.0
Marumba	108	105	0	0.0	0	0.0
Total	5,328	4,511	77	1.7	77	100.0

Source: District Executive Director's Office (District Medical Office), Nanyumbu District Council, 2016

Out of 17 wards, Masuguru ward had the highest HIV prevalence rate (4.3 percent) in the Council followed by Mkonona (4.2 percent), Lumesule (3.2 percent). Napacho (2.7 percent), and Nangomba (2.1 percent) a total of 94 attendants out 3,354 PMTCT were screened and 44 were found to be HIV positive (Table 5.12).

Table 5. 12: Number of Expectant Mothers Who Were Screened for HIV and Those Who Received ARVs by Ward, Nanyumbu District Council; 2015

Ward	No. of AN Attendants	No. Screened	No. HIV+	Percent of HIV+	No. Of Given Niverapine
Mangaka	805	6	6	0.7	1
Sengonya	286	3	2	1.0	0
Nangomba	143	3	3	2.1	0
Mikangaula	147	2	2	1.4	0
Maratani	227	3	3	1.3	0
Nandete	146	2	2	1.4	0
Nanyumbu	246	4	2	1.6	0
Masuguru	141	6	4	4.3	1
Mkonona	110	44	6	4.2	0
Chipuputa	139	2	0	1.4	0
Likokona	185	2	2	1.1	0
Michiga	453	8	2	1.8	0
Lumesule	62	2	2	3.2	0
Napacho	264	7	2	2.7	0
Total	3354	94	44	2.8	2

Source: District Executive Director's Office (District Medical Office), Nanyumbu District Council, 2016

5.1.9 Immunization Program

Table 5.13 shows that, children under-one year vaccinated TT2 in 2013 and 2015 in Nanyumbu DC were below the target. It is revealed that, in 2013 the council target was to vaccinate 6,274 children but only 3,202 (51 percent) of them were vaccinated and in 2015, the target was 6,251 but only 2,628 (42 percent) were vaccinated. In addition, Mangaka Health center had the largest number of vaccinated children 641 (95.4 percent) in 2013 followed by Michiga HC 379 (73.4 percent) and Nanyumbu health center 228 (65.9 percent). While, in 2015, Mangaka health center had the largest number of children vaccinated 308 (42.1 percent) followed by Mikangaula Disp vaccination 262 (37.5 percent) and Michiga Health center 232 (60.4 percent)

Table 5. 13: Percentage of Expectant Mothers Vaccinated TT2 by Ward, Nanyumbu District; 2011, 2013 and 2015

Name of Hospital/Health Centre/Dispensary	2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Mangaka Health center	672	641	95.4	731	308	42.1
Sengonya Disp	312	208	66.7	364	166	45.6
Likokona Disp	450	209	46.4	405	141	34.8
Michiga HC	516	379	73.4	384	232	60.4
Makong'ondera Disp	192	70	36.5	75	67	89.3
Lumesule Disp	200	116	58.0	226	85	37.6
Nakopi Disp	177	67	37.9	146	43	29.5
Mburusa Disp	300	124	41.3	272	147	54.0
Chipuputa Disp	407	128	31.4	411	169	41.1
Nanyumbu HC	346	228	65.9	449	165	36.7
Mkonona Disp	325	54	16.6	229	75	32.8
Marumba Disp	98	20	20.4	108	62	57.4
Masuguru Disp	227	109	48.0	246	97	39.4
Nangomba Disp	246	152	61.8	339	61	18.0
Mikangaula Disp	557	166	29.8	698	262	37.5
Maratani Disp	312	87	27.9	276	116	42.0
Mikuva Disp	249	119	47.8	328	157	47.9
Nandete Disp	420	153	36.4	417	145	34.8
Mkumbaru Disp	268	172	64.2	147	130	88.4
Total	6,274	3,202	51.0	6,251	2,628	42.0

Source: District Executive Director's Office (District Medical's Office), Nanyumbu District, 2016

There has been a relative increase in the number of children under one year who received BCG vaccination in Nanyumbu DC. The number of vaccinated children increased from 3,171 (50.5 percent) in 2013 to 5,383 (82.5 percent) children in 2015, At ward level BCG vaccination coverage was ranging from 8.9 percent at Makong'ondera Disp to 95.4 percent in Mangaka Disp in 2013 while, in 2015, the vaccination coverage was ranging from 66.7 percent in Nanyumbu Health Center to 92.7 percent in Mburusa disp.

Table 5. 14: Percentage of Children Under-One Year Vaccinated BCG by Ward, Nanyumbu District; 2013 and 2015

Dispensary	2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Chipuputa disp	407	268	65.8	411	324	78.8
Likokona Disp	450	253	56.2	405	291	71.9
Lumesule disp	200	153	76.5	327	226	69.1
Makong'ondera Disp	192	17	8.9	175	139	79.4
Mangaka Disp	672	641	95.4	731	618	84.5
Maratani disp	312	79	25.3	334	302	90.4
Masuguru disp	227	79	34.8	227	201	88.5
Mburusa Disp	300	100	33.3	300	278	92.7
Michiga HC	516	185	35.9	384	344	89.6
Mikangaula disp	557	166	29.8	651	584	89.7
Mikuva disp	249	74	29.7	242	202	83.5
Mkonona disp	325	187	57.5	310	232	74.8
Mkumbaru disp	268	105	39.2	240	203	84.6
Nakopi disp	177	53	29.9	146	112	76.7
Nangomba disp	246	205	83.3	305	227	74.4
Nanyumbu HC	346	98	28.3	442	295	66.7
Nandete disp	420	348	82.9	408	380	93.1
Sengenya Disp	312	132	42.3	364	318	87.4
Marumba disp	98	28	28.6	121	107	88.4
Total	6,274	3,171	50.5	6,523	5,383	82.5

Source: District Executive Director's Office (District Medical's Office), Nanyumbu District, 2016

The number of DPT3/HB3 vaccination for children under-one year in Nanyumbu DC increased from 4,606 in 2013 to 5,554 in 2015 (Table 5.15). At the council level the number of targeted children under one year who were to be vaccinated in 2013 and 2015 were 6,624 and 7228 respectively.

Table 5.15 further shows that in 2013 the wards with the largest DPT3/HB3 vaccination coverage were Lumesule (95.4 percent) followed by Mangaka (93.9 percent), Mikangaula (93.7 percent), Makong'ondera (93.2 percent) and Marumba (92.6 percent). While in 2015, Mkonona ward had the largest number of children vaccinated DPT3/HB3 (96.8percent) followed by

Mburusa ward (96.3 percent) and Nandete ward had 94.7 percent of the targeted children. Marumba ward recorded the smallest DPT3/HB3 vaccination coverage (37.1 percent) in 2015.

Table 5. 15: Percentage of Children under One Year Vaccinated DPT3 by Ward, Nanyumbu DC, 2013 and 2015

Ward	2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Chipuputa	407	158	38.8	411	297	72.3
Likokona	450	232	51.6	405	295	72.8
Lumesule	350	334	95.4	370	258	69.7
Makong'ondera	192	179	93.2	175	112	64.0
Mangaka	672	631	93.9	731	675	92.3
Maratani	312	248	79.5	276	226	81.9
Masuguu	227	138	60.8	220	174	79.1
Mburusa	300	77	25.7	246	237	96.3
Michiga	516	292	56.6	450	397	88.2
Mikangaula	557	522	93.7	600	566	94.3
Mikuva	249	146	58.6	698	306	43.8
Mkonona	325	191	58.8	380	368	96.8
Mkumbaru	268	102	38.1	300	278	92.7
Nakopi	177	96	54.2	147	99	67.3
Nangomba	246	108	43.9	250	198	79.2
Nanyumbu	346	297	85.8	417	338	81.1
Nandete	420	363	86.4	339	321	94.7
Sengenya	312	216	69.2	449	274	61.0
Marumba	298	276	92.6	364	135	37.1
Total	6,624	4,606	69.5	7,228	5,554	76.8

Source: District Executive Director's Office (District Medical's Office), Nanyumbu District, 2016

Table 5.16 gives account with regard to coverage of the Nanyumbu Councils under one year children for OPV3 vaccination was 76.5 percent in 2013 but slightly increased to 83.6 percent in 2015. The coverage at ward level was the best in 2015 since all reported ward had managed to vaccinate children over 63.6 percent of targeted children and Mikangaula was the best ward covering with 109.9 percent, while the least ward was Nanyumbu Health Center with 63.6 percent of vaccinated children in 2015.

Table 5. 16: Percentage of Children under One Year Vaccinated OPV3 by Ward, Nanyumbu District; 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
Mangaka	0	0	0	672	649	96.6	731	620	84.8
Sengenya	0	0	0	580	523	90.2	650	517	79.5
Likokona	0	0	0	450	241	53.6	400	277	69.3
Michiga	0	0	0	708	415	58.6	530	418	78.9
Lumesule	0	0	0	200	172	86.0	280	268	95.7
Nakopi	0	0	0	475	397	83.6	470	411	87.4
Chipuputa	0	0	0	407	345	84.8	425	361	84.9
Nanyumbu	0	0	0	346	230	66.5	346	220	63.6
Mkonona	0	0	0	423	273	64.5	423	316	74.7
Masuguru	0	0	0	227	151	66.5	227	179	78.9
Nangomba	0	0	0	246	183	74.4	246	206	83.7
Mikangaula	0	0	0	557	502	90.1	557	612	109.9
Maratani	0	0	0	650	424	65.2	650	495	76.2
Nandete	0	0	0	420	362	86.2	420	415	98.8
Total	0	0	0	6,361	4,867	76.5	6355	5,315	83.6

Source: District Executive Director's Office (District Medical Office), Nanyumbu District, 2016

Table 5.17 reveals that, measles vaccination in the council decreased by 16.9 percent from 4,831 children under one (78.2 percent) in 2013 to 3,398 children under one (61.3 percent) in 2015. Across the wards, Mangaka ward had the largest vaccination decrease from 101.9 in 2013 to 33.5 in 2015, followed by Nangomba ward decreasing from 95.1 in 2013 to 50.4 in 2015. However, Nakopi ward had increasing vaccination coverage (64.1 percent) in 2013 to (82.1 percent) in 2015 followed by Michiga ward coverage from (63.8 percent) 2013 to (80.2 percent).in 2015

Table 5. 17: Percentage of Children under One Year Vaccinated Measles by ward, Nanyumbu District; 2011, 2013 and 2015

Ward	2013			2015		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Mangaka	672	685	101.9	731	245	33.5
Sengenya	580	502	86.6	364	209	57.4
Likokona	450	294	65.3	400	212	53.0
Michiga	516	329	63.8	384	308	80.2
Lumesule	200	203	101.5	200	183	91.5
Nakopi	669	429	64.1	485	398	82.1
Chipuputa	407	352	86.5	407	245	60.2
Nanyumbu	346	193	55.8	320	210	65.6
Mkonona	325	317	97.5	325	178	54.8
Masuguru	227	163	71.8	227	137	60.4
Nangomba	246	234	95.1	246	124	50.4
Mikangaula	557	452	81.1	557	460	82.6
Maratani	561	338	60.2	475	203	42.7
Nandete	420	340	81.0	420	286	68.1
Total	6,176	4,831	78.2	5541	3,398	61.3

Source: District Executive Director's Office (District Medical Office), Nanyumbu District, 2016

5.2 Education Sector

5.2.0 Introduction

The development of the Education sector is embedded in the deliberate improvement in quality of entire education system covering pre-primary, primary, secondary, tertiary education which includes vocational education, colleges, and higher learning institutions as well as adult education through concerted efforts by individuals and the local government authorities to increase the intake of children to pre-primary, primary, secondary and tertiary schools in their respective areas.

5.2.1 Pre-Primary Education

It is imperative that all children who are supposed to start standard one must have undergone pre-primary education according to the Ministry of Education and Vocational Training. This has greatly prompted to the establishment of pre-primary schools countrywide in a move that

Nanyumbu District Council is no exception Table 5.19 shows the number of pre-primary schools in Nanyumbu DC has been increasing gradually since 2011 when the total number of public Pre-schools was 76. In 2012 the number increased to 80 in 2013 and rose to 87 in 2015. All of these schools are annexed to government primary school compounds since there are no privately-owned schools in the entire district.

At ward level, Nanyumbu ward was leading in 2015 by having highest number of pre-primary schools (9 schools) followed by Mkonona and Sengenya (with 8 pre-primary schools each). Maratani ward had the smallest number of pre-primary classes in the district (with 3 pre-primary schools each). (Table 5.18)

Table 5. 18: Number of Pre-Primary School by Ownership and ward, Nanyumbu District Council; 2011-2015

Ward	2011			2013			2015		
	Pub	Pri.	Total	Pub	Pri.	Total	Pub	Pri	Total
Nangomba	3	0	3	4	0	4	4	0	4
Nanyumbu	9	0	9	9	0	9	9	0	9
Maratani	3	0	3	3	0	3	3	0	3
Mikangaula	4	0	4	4	0	4	4	0	4
Mangaka	7	0	7	7	0	7	4	0	4
Lumesule	5	0	5	5	0	5	5	0	5
Likokona	5	0	5	5	0	5	5	0	5
Mkonona	5	0	5	8	0	8	8	0	8
Nandete	6	0	6	6	0	6	6	0	6
Napacho	6	0	6	6	0	6	6	0	6
Masuguru	4	0	4	4	0	4	4	0	4
Chipuputa	6	0	6	6	0	6	6	0	6
Sengenya	8	0	8	8	0	8	8	0	8
Mnanje	5	0	5	5	0	5	5	0	5
Kilimanihewa	0	0	0	0	0	0	4	0	4
Michiga	0	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	6	0	6
Total	76	0	76	80	0	80	87	0	87

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

N.B: Pub = Public
Pri. = Private

Table 5.19 shows that during the last five years the total enrolment in pre-primary schools has increased by 1.8 percent in the council. In Nanyumbu DC enrolment increased from 2672 pupils in 2011 to 2719 in 2015. Mikangaula ward had the highest percentage increase (149 percent) followed by Masuguru (98.5 percent) while Maratani ward had the highest decline of enrolment rate from 177 pupils in 2011 to 48 pupils in 2015 (72.9 percent decline).

Table 5. 19:Pre-Primary Schools Total Enrolment by Ownership and by Ward, Nanyumbu Council; 2011 – 2015

Ward	2011		2015		Increase 2011-2015	
	Pub	Pri.	Pub	Pri	Number	Percent
Nangomba	101	0	135	0	34	33.7
Nanyumbu	267	0	181	0	-86	-32.2
Maratani	177	0	48	0	-129	-72.9
Mikangaula	191	0	476	0	285	149.2
Mangaka	289	0	114	0	-175	-60.6
Lumesule	182	0	159	0	-23	-12.6
Likokona	147	0	133	0	-14	-9.5
Mkonona	165	0	254	0	89	53.9
Nandete	400	0	274	0	-126	-31.5
Napacho	0	0	0	0	0	0.0
Masuguru	66	0	131	0	65	98.5
Chipuputa	370	0	150	0	-220	-59.5
Sengenya	214	0	327	0	113	52.8
Mnanje	103	0	68	0	-35	-34.0
Kilimanihewa	0	0	152	0	152	0.0
Michiga	0	0	0	0	0	0.0
Kamundi	0	0	117	0	117	0.0
Total	2672	0	2719	0	47	1.8

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 201

Table 5.20 indicates that Council had an average of 6 pre-primary facilities per ward and less than a village per facility. There were 93 villages in the district. However, Nanyumbu had 8 pre-primary schools. All divisions had best ratio of less than a village per school (1:1). However, Nanyumbu division had average of 8 schools per ward (Table 5.20).

Table 5. 20: Availability of Pre-Primary School by Ward and Village, Nanyumbu District; 2015

Division	No. of Wards	No. of Villages	No. of Schools	Average Schools per Ward	Average Villages per School
Nanyumbu	3	17	23	8	1
Nakopi	4	19	20	5	1
Maratani	5	26	25	5	1
Mangaka	5	31	26	5	1
Total District	17	93	94	6	1

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Enrolment in Nanyumbu DC decreased from 2672 in 2011 to 2328 pupils in 2013 and then increased up to 2368 in 2015 (Table 5.21). Nevertheless, there was a significant increase in enrolment in all divisions. This is attributed to the increase in the awareness of education among parents and also easy accessibility of pre-primary schools. Pre-primary schools classes in government primary schools were started all over the country with intention of increasing enrolment of children aged 3-6 years in such schools.

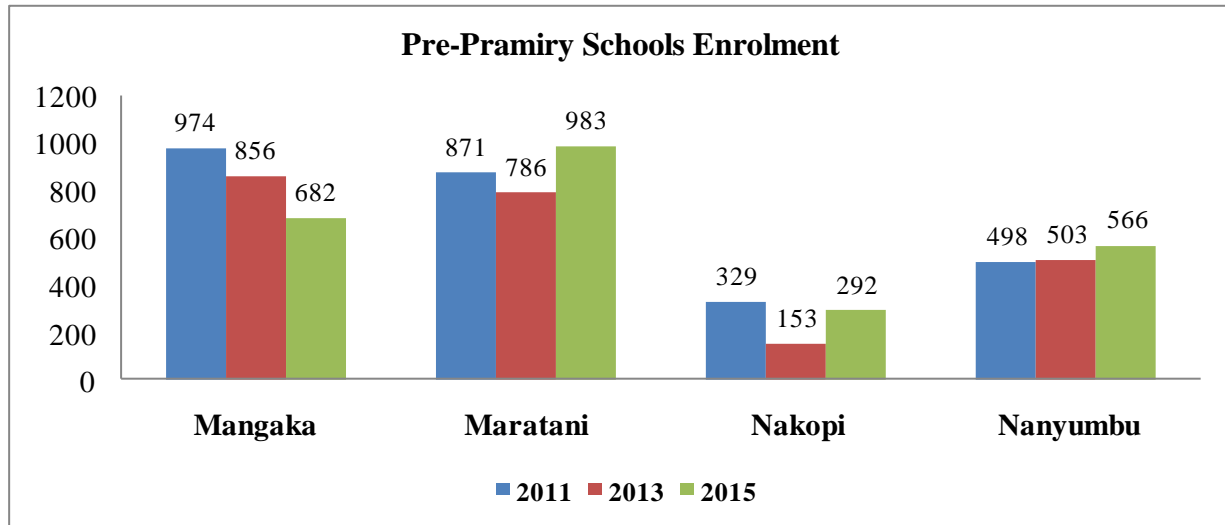
Table 5. 21: Pre-Primary Schools Enrolment by Division, Nanyumbu District Council; 2011, 2013 and 2015

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
Nanyumbu	498	21	1:24	474	21	1:23	503	23	1:22
Nakopi	329	19	1:17	262	19	1:14	153	20	1:8
Maratani	871	24	1:36	545	24	1:23	856	25	1:34
Mangaka	974	24	1:41	1047	25	1:42	856	26	1:33
Total District	2672	88	1:30	2328	89	1:26	2368	94	1:25

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Fig 5.1. presents pre-primary school enrolment in Nanyumbu DC indicating that Mangaka division had the highest enrolment rate in the council whereby 974 pupils were enrolled in 2011 followed by Maratani which recorded 871 enrolments. In 2013, Mangaka had the highest enrolment of 856 followed by Maratani with 786 pupils enrolled. . The lowest enrolments in the referred years was recorded in Nakopi division with 153 pupils enrolled in 2013 .

Figure 5. 1: Pre-Primary Schools Enrolment by Division, Nanyumbu Council; 2011, 2013 and 2015



Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016.

Table 5.22 shows that the highest performance in pre primary enrolment was recorded in Mikangaula ward which had 149.2 percent followed by Masuguru 98.5 percent, Mkonona 53.9 percent and Sengenya ward 52.8 percent whereas 8 wards Nanyumbu, Maratani, Mangaka, Lumesule, Nandete had negative increases of enrolment. The District Council Authority should emphasize the necessity of head teachers establishing some mechanism designed to boost education performance.

Table 5. 22: Pre-Primary Schools Enrolment by Ward, Nanyumbu District Council; 2011, 2013 and 2015

Ward	2011	2013	Change in Enrolment, 2011 and 2013		2015	Change in Enrolment, 2011 and 2015	
	Pupils	Pupils	Number	Percent	Pupils	Number	Percent
Nangomba	101	91	-10	-9.9	135	34	33.7
Nanyumbu	267	202	-65	-24.3	181	-86	-32.2
Maratani	177	130	-47	-26.6	48	-129	-72.9
Mikangaula	191	247	56	29.3	476	285	149.2
Mangaka	289	218	-71	-24.6	114	-175	-60.6
Lumesule	182	58	-124	-68.1	159	-23	-12.6
Likokona	147	95	-52	-35.4	133	-14	-9.5
Mkonona	165	217	52	31.5	254	89	53.9
Nandete	400	363	-37	-9.3	274	-126	-31.5
Napacho	0	0	0	0.0	0	0	0.0
Masuguru	66	84	18	27.3	131	65	98.5
Chipuputa	370	369	-1	-0.3	150	-220	-59.5
Sengenya	214	178	-36	-16.8	327	113	52.8
Mnanje	103	116	13	12.6	68	-35	-34.0
Kilimanihewa	0	0	0	0.0	152	152	0.0
Michiga	0	0	0	0.0	0	0	0.0
Kamundi	0	0	0	0.0	117	117	0.0
Total	2672	2368	-304	-11.4	2719	47	1.8

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

5.2.2 Primary Education

Primary Education is a basic right of every Tanzanian child of school going age (7-13). The number of primary schools in the council remained in the same number from 100 in 2013 to 108 in 2015, but distributed unevenly within the district.

Table 5.23 also shows that Mangaka division had the highest number of primary schools (26) followed by Maratani (25), Nanyumbu (23) and Nakopi division had the smallest number of schools (20).

Table 5. 23: Number of Primary Schools by Ownership and by Division; Nanyumbu District Council; 2011 – 2015

Division	2011			2013			2015			Percent Share
	Public	Private	Total	Public	Private	Total	Public	Private	Total	
Nanyumbu	21	0	21	21	0	21	23	0	23	24.47
Nakopi	19	0	19	19	0	19	20	0	20	21.28
Maratani	24	0	24	24	0	24	25	0	25	26.60
Mangaka	24	0	24	25	0	25	26	0	26	27.66
Total District	88	0	88	89	0	89	94	0	94	100.00

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 201

Table 5.24, also shows that Nanyumbu ward had the highest number of schools (11 schools) in 2015. Followed by Mkonona and Sengenya wards (8 schools), Napacho ward (7 schools) to mention few. Michiga ward was the only ward with few numbers of primary schools (3 schools only).

Table 5. 24: Number of Primary Schools by Ownership and by ward; Nanyumbu District Council; 2011 – 2015

Ward	2011		2012		2013		2014		2015	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Nangomba	3	0	3	0	4	0	4	0	4	0
Nanyumbu	9	0	9	0	9	0	9	0	11	0
Maratani	3	0	3	0	3	0	3	0	4	0
Mikangaula	10	0	10	0	10	0	10	0	4	0
Mangaka	7	0	7	0	7	0	7	0	4	0
Lumesule	5	0	5	0	5	0	5	0	5	0
Likokona	8	0	8	0	8	0	8	0	5	0
Mkonona	8	0	8	0	8	0	8	0	8	0
Nandete	6	0	6	0	6	0	6	0	6	0
Napacho	6	0	6	0	6	0	7	0	7	0
Masuguru	4	0	4	0	4	0	4	0	4	0
Chipuputa	6	0	6	0	6	0	6	0	6	0
Sengenya	8	0	8	0	8	0	8	0	8	0
Mnanje	5	0	5	0	5	0	5	0	5	0
Kilimanihewa	0	0	0	0	0	0	0	0	4	0
Michiga	0	0	0	0	0	0	0	0	3	0
Kamundi	0	0	0	0	0	0	0	0	6	0
Total	88	0	88	0	89	0	90	0	94	0

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

5.2.3 Distribution of Primary School Education System

Nanyumbu DC has met education policy of having a primary school at each village or street. On average, each village had one primary school as the council had 93 villages and 94 primary schools in 2015. Furthermore, Table 5.25 shows that on average each ward had total number of 6 schools. Whereas, Nanyumbu was the leading division with an average of 8 schools per ward while the remaining divisions had an average of 5 schools per ward. On the other, Map 3 shows distribution of primary schools by division in Nanyumbu District Council, 2015

Map 3: Distribution of Primary Schools by Division, Nanyumbu District Council; 2015

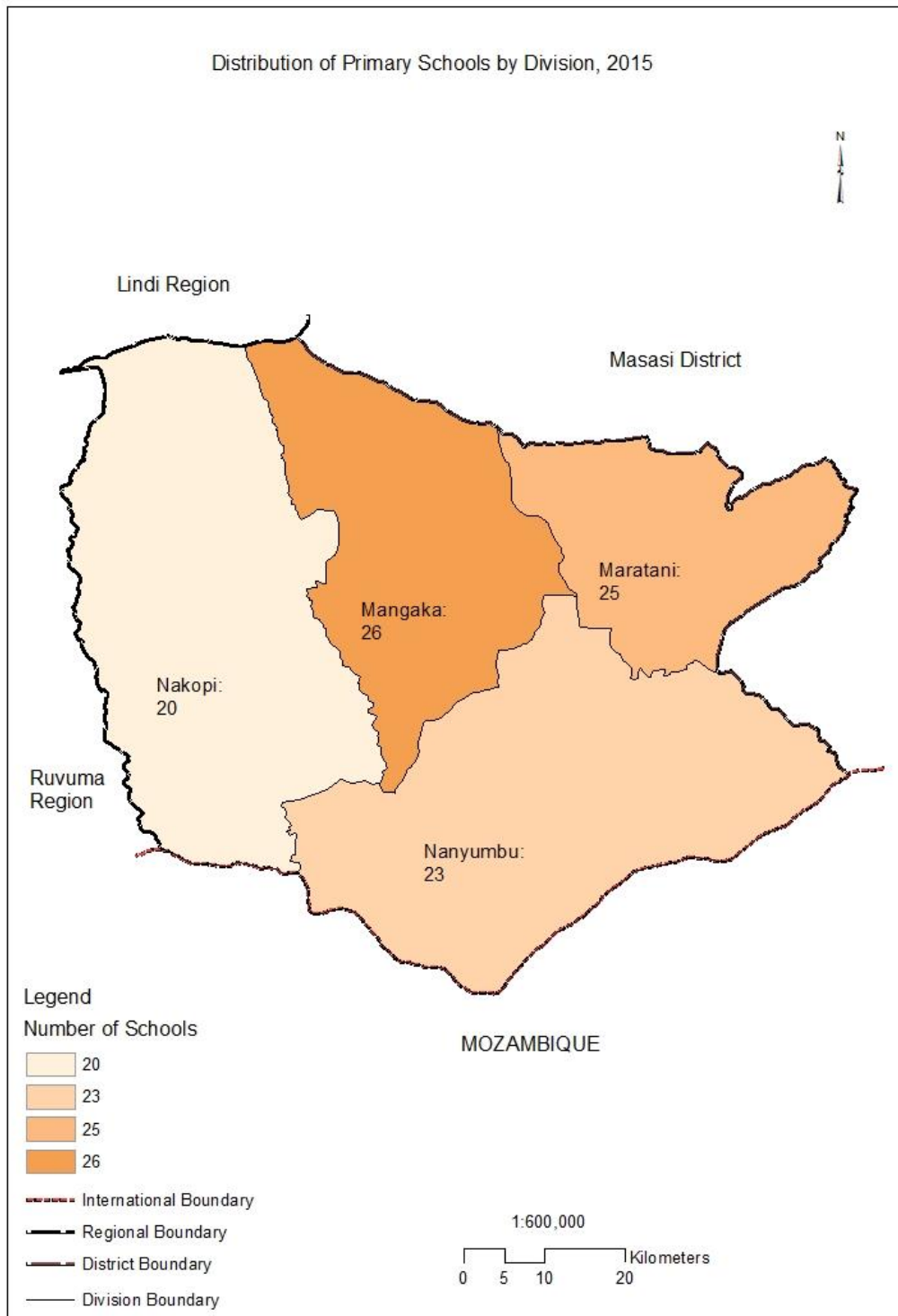


Table 5. 25: Distribution of Primary Schools by Division and Its Accessibility at Ward and Village Level, Nanyumbu District Council; 2015

Division	No. of Wards	No. of Villages	No. of Schools	Average Schools per Ward	Average Villages per School
Nanyumbu	3	17	23	8	1
Nakopi	4	19	20	5	1
Maratani	5	26	25	5	1
Mangaka	5	31	26	5	1
Total District	17	93	94	6	1

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

5. 2.4 Standard One Enrolment

Over a period of five years (2011 to 2015) Nanyumbu 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 5,131 pupils in 2011 to 5,574 pupils in 2013, reaching 6,314 in 2015. This showed from 2011 to 2013 there was an overall increase in enrolment of 443 pupils, equivalent to 7.9 percent while from 2013 to 2015 enrolment increased by 740 pupils (13.3 percent increase). In total there was an increase of 1,183 standard one pupils, equivalent to 23.1 percent from 2011 to 2015 (Table 5.26). The table further shows that not all wards had an increased standard one enrolment. Four out of 17 wards in the Council had a decline in Standard One enrolment with the largest decline been observed in Mangaka Ward (46.4 percent), Nangomba Ward (24.7 percent) and Likokona Ward (8.9 percent).

Table 5. 26: Standard I Enrolment by School Ownership and by Ward; Nanyumbu Council; 2011- 2015

Ward	2011	2013	2015	Change in Enrolment 2011 and 2015	
	Pupils	Pupils	Pupils	Number	Percent
Nangomba	1501	1444	1131	-370	-24.7
Nanyumbu	281	363	398	117	41.6
Maratani	117	175	263	146	124.8
Mikangaula	171	264	258	87	50.9
Mangaka	433	536	232	-201	-46.4
Lumesule	344	275	360	16	4.7
Likokona	315	306	287	-28	-8.9
Mkonona	165	217	324	159	96.4
Nandete	425	388	405	-20	-4.7
Napacho	252	333	320	68	27.0
Masuguru	160	137	183	23	14.4
Chipuputa	345	499	383	38	11.0
Sengenya	381	432	720	339	89.0
Mnanje	241	205	308	67	27.8
Kilimanihewa	0	0	212	0	0.0
Michiga	0	0	293	0	0.0
Kamundi	0	0	237	0	0.0
Total	5131	5574	6314	1183	23.1

Source: District Executive Director's Office (Education Department)

The enrolment procedure into standard one class has been expanded to embrace children aged 7-13 years. Table 5.27 shows that children enrolled in standard one at the age of seven years in 2015 accounted for 97.5 percent of the total enrolment while children aged eight years and over accounted for 2.5 percent. This improvement is attributable to changes of net enrolment rates, gross enrolment rates, reduction of drop out of pupils, availability of education facilities and performance of pupils in general.

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

Sex	Seven Years	Percent Enrolled	Eight to Ten Years	Percent Enrolled	Total	Percent Total
Boys	11,650.00	48.62	338.00	47.40	11,988.00	48.78
Girls	12,309.00	51.38	280.00	50.08	12,589.00	51.22
Total District	23,959.00	100.00	618.00	97.48	24,577.00	100.00

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.28: Boys enrolment was higher (50.2 percent) than girls (49.8 percent) in 2011. However, the percentage of girls enrolled in 2013 was higher (51.4 percent) against that of boys (48.6 percent). Again there were more girls (53. 0 percent) than that of boys in 2015. At

the ward level, Mangaka had the highest enrolment in 2011 with 3,417 pupils whereas Sengenya ward registered the highest enrolment (2,759) in 2015. .

Table 5. 28: Total (Std I-VII) Enrolment by Sex and Ward in Public Primary Schools; Nanyumbu District Council; 2011 – 2015

Ward	2011			2013			2015		
	Boys	Percent Girls	Total	Boys	Percent Girls	Total	Boys	Percent Girls	Total
Nangomba	762	48.7	1,484	722	50.0	1,444	545	51.8	1,131
Nanyumbu	1004	49.3	1,981	962	50.6	1,947	888	52.5	1,868
Maratani	427	54.5	938	555	53.8	1,202	625	52.9	1,328
Mikangaula	0	0.0	0	0	0.0	0	836	51.1	1,709
Mangaka	1694	50.4	3,417	1673	50.0	3,348	734	52.2	1,535
Lumesule	977	48.7	1,903	831	53.5	1,786	776	53.3	1,661
Likokona	1029	50.5	2,077	874	53.1	1,864	619	62.4	1,648
Mkonona	698	53.3	1,496	766	50.7	1,554	853	49.0	1,671
Nandete	1269	44.8	2,298	1055	51.1	2,156	1034	50.7	2,096
Napacho	1012	44.6	1,828	915	48.7	1,784	818	52.8	1,732
Masuguru	71	53.6	153	60	56.2	137	84	54.1	183
Chipuputa	1204	50.6	2,436	1081	51.9	2,249	851	54.8	1,883
Sengenya	1465	52.7	3,100	1434	52.0	2,987	1327	51.9	2,759
Mnanje	830	49.8	1,653	700	52.1	1,461	693	51.8	1,437
Kilimanihewa	0	0.0	0	0	0.0	0	91	57.1	212
Michiga	0	0.0	0	0	0.0	0	675	53.2	1,443
Kamundi	0	0.0	0	0	0.0	0	590	55.3	1,319
Total	12442	49.8	24,764	11628	51.4	23,919	12039	53.0	25,615

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

5. 2.5 Primary School Completion Rate

Table 5.29 shows shows number of students enrolled in 2007 and 2008 with number of students completed Std VII in 2013 and 2014. However, 82.3 percent of the students enrolled in 2007 completed Std VII in 2013 whereby completion rate of girls was 86.2 percent where as that of boys was 78.1 percent. Decrease in completion rate was observed in 2014 where only 75.7 percent the enrolled students completed Std VII. Of which 77.8 percent were girls and 73.8 percent boys. (Table 5.29)

Table 5. 29: Number of Pupils Enrolled Std I in 2007 and 2008 and Completed Std VII in 2013 and 2014 Nanyumbu District Council

Sex	2007 to 2013			2008 to 2014		
	Enrolled 2007	Completed 2013	Completion Rate	Enrolled 2008	Completed 2014	Completion Rate
Boys	1832	1430	78.06	2648	1942	73.3
Girls	1961	1690	86.18	2914	2267	77.8
Total	3793	3120	82.26	5562	4209	75.7

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.30 shows the completion rate for both boys and girls were 74.9 percent and 82.2 percent respectively in 2015. At ward level, Chipuputa ward had the highest rate of pupils 124.9 who completed primary school education who enrolled in 2007 and complete 2013 cycle, while Mangaka ward had the lowest enrolment (54.6 percent) although Kilimanihewa, Kamundi, Michiga wards did not have data on enrolment in 2007. Poor completion rate observed in some wards are due to the fact that most households living in those wards are peasants and have normadic routine of moving to their farms hence interfering with their children's school programs. Deep rooted rituals 'Jando and Unyago' is another hindrance to completion of school that encourage pupils drop out.

Table 5. 30: Number of Pupils Who Enrolled in STD I in 2009 and Completed STD VII in 2015 by Ward and by Sex, Nanyumbu District Council

ward	Enrolled 2007			Completed 2013			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Nangomba	104	106	210	88	73	161	84.6	68.9	76.7
Nanyumbu	128	143	271	121	141	262	94.5	98.6	96.7
Maratani	75	81	156	67	96	163	89.3	118.5	104.5
Mikangaula	82	115	197	80	111	191	97.6	96.5	97.0
Mangaka	351	383	734	174	227	401	49.6	59.3	54.6
Lumesule	159	162	321	84	107	191	52.8	66.0	59.5
Likokona	138	147	285	113	150	263	81.9	102.0	92.3
Mkonona	99	102	201	90	84	174	90.9	82.4	86.6
Nandete	143	152	295	105	118	223	73.4	77.6	75.6
Napacho	126	131	257	91	107	198	72.2	81.7	77.0
Masuguru	74	69	143	39	60	99	52.7	87.0	69.2
Chipuputa	78	95	173	97	119	216	124.4	125.3	124.9
Sengenya	217	207	424	196	172	368	90.3	83.1	86.8
Mnanje	136	163	299	85	125	210	62.5	76.7	70.2
Kilimanihewa	**	**	*	**	**	**	0.0	0.0	0.0
Michiga	**	**	**	**	**	**	0.0	0.0	0.0
Kamundi	**	**	**	**	**	**	0.0	0.0	0.0
Total	1910	2056	3966	1430	1690	3120	74.9	82.2	78.7

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.31 indicates an obvious decline in performance of primary schools in terms of completion rate in 2014 compared to 2013. Percentage of pupils who completed primary school education cycle in 2014 declined. Only 65 percent of pupils enrolled in primary schools in Nanyumbu in 2008 completed primary education in 2014 compared to 78.7 percent who completed primary school in 2013. Moreover, more girls (67.5 percent) completed education cycle than boys (62.3 percent) in 2014. This indicates that school dropout problem was relatively more serious for boys than for girls during that education cycle (Table 5.31).

Table 5. 31: Number of Pupils Who Enrolled in STD I in 2008 and Completed STD VII in 2014 by Ward and by Sex, Nanyumbu District Council

ward	Enrolled 2008			Completed 2014			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Nangomba	106	106	212	56	72	128	52.8	67.9	60.4
Nanyumbu	90	91	181	85	86	171	94.4	94.5	94.5
Maratani	73	92	165	26	46	72	35.6	50.0	43.6
Mikangaula	118	130	248	116	127	243	98.3	97.7	98.0
Mangaka	408	405	813	147	199	346	36.0	49.1	42.6
Lumesule	143	153	296	68	96	164	47.6	62.7	55.4
Likokona	110	154	264	90	126	216	81.8	81.8	81.8
Mkonona	98	116	214	83	76	159	84.7	65.5	74.3
Nandete	142	108	250	86	80	166	60.6	74.1	66.4
Napacho	92	105	197	75	60	135	81.5	57.1	68.5
Masuguru	78	96	174	53	40	93	67.9	41.7	53.4
Chipuputa	85	98	183	75	85	160	88.2	86.7	87.4
Sengenya	148	150	298	108	131	239	73.0	87.3	80.2
Mnanje	112	129	241	56	80	136	50.0	62.0	56.4
Kilimanihewa	0	0	0	0	0	0	0.0	0.0	0.0
Michiga	0	0	0	0	0	0	0.0	0.0	0.0
Kamundi	0	0	0	0	0	0	0.0	0.0	0.0
Total	1803	1933	3736	1124	1304	2428	62.3	67.5	65.0

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Primary School Dropout Rate

The dropout seems to vary from year to year depending on the size of enrollment. In 2012 the dropout was 284 (0.96 percent), it decreased to 256 (0.87 percent) in 2013 then decreased to 234 (0.83 percent) and decreased further to 54 (0.18 percent) in 2015. Dropout due to truancy was higher among boys than girls. This may be because more boys than girls are involved in fishing activities and cashewnut cultivation. However, only one dropout due to pregnancy was observed in 2014

Table 5. 32: Number of Drop Outs by Sex; Nanyumbu District Council; 2012 – 2015

Reason	2012			2013			2014			2015		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Truancy	131	148	279	139	83	222	120	93	213	32	22	54
Pregnancy	0	0	0	0	0	0	1	0	0	0	0	0
Death	0	5	5	8	5	13	5	8	13	0	0	0
Other	0	0	0	7	9	16	3	4	7	0	0	0
Total dropouts	131	153	284	154	102	256	128	106	234	32	22	54
Percent	0.9	1.01	0.96	1.08	0.67	0.87	0.9	0.7	0.83	0.2	0.14	0.18

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

Table 5.33 shows that out of the total 29,433 pupils enrolled into primary school education in 2012, 284 pupils (0.96 percent) were unable to complete standard seven due to truancy and other reasons. Truancy accounted for 98.24 percent of the total dropouts while other reasons constituted 1.76 percent. Other reasons included transfer to other schools outside respective ward and discontinuity from school due to illnesses. Girls were the most affected category (53.87 percent) than boys (46.13 percent) basing on the general observation drawn from Table 5.33.

Table 5. 33: Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2012

Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	131	46.13	148	52.1	279	98.2
Pregnancy	0	0	0	0	0	0
Death	0	0	5	1.8	5	2.0
Other	0	0	0	0	0	0
Total dropouts	131	46.13	153	53.9	284	100
Total Enrolment	14,371	48.83	15,062	51.2	29,433	1

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

Table 5.34 reveals that truancy emerged to be the main cause for school dropouts claiming 86.72 percent of the reasons made pupils drop out school in 2013. The total number of dropouts was relatively higher for boys (60.16 percent) compared to that of girls 39.84 percent in the referred year. It is further revealed that 256 out of the 29,537 enrolled in the 2008 failed to complete school which accounts for 2.8 percent. Deaths and other reasons were other causes for school drop outs in 2013 which constituted to 5.08 percent and 6.25 percent respectively. The total percentage of drop outs for 2013 was slightly lower (0.87 percent) compared to 0.96 percent for the previous year. Government efforts to sensitize the community members to send their

children to school, strict follow ups and implementation of education policy had begun to bear fruits in Nanyumbu district.

Table 5. 34:Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2013

Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	139	54.3	83	32.4	222	86.7
Pregnancy			0	0	0	0
Death	8	3.1	5	2	13	51
Other	7	2.7	9	3.5	16	6.3
Total dropouts	154	60.2	102	39.8	256	100
Total Enrolment	14,292	48.4	15,245	51.6	29,537	1

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

Table 5.35 shows that truancy (91.42 percent) was the main cause of school dropouts in Nanyumbu DC. Total number of dropouts for boys’ pupils was higher at 128 which is equivalent to 54.94percent of total dropouts in 2014. Girls’ dropouts constituted only 45.49percent. Incidentally, 5.58 percent of the total dropouts were caused by deaths that occurred in 2014; ‘other’ reasons which might be due to illness, poverty and so forth claimed 3.0 percent whereas pregnancy constituted 0.42 percent of the total drop outs. It was followed by death (14.7 percent) and pregnancy (12.3 percent) as shown in Table 5.35.

Table 5. 35: Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2014

Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	120	51.5	93	39.9	213	91.4
Pregnancy			1	0.4	1	0.4
Death	5	2.2	8	3.4	13	5.6
Other	3	1.3	4	1.7	7	3
Total dropouts	128	54.9	106	45.5	233	100
Total Enrolment	13,748	48.7	14,500	51.33	28,248	1

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

Table 5.36 shows a tremendous decline of drop out cases against the rising enrolment rate in Nanyumbu district in 2015.Only 54 pupils 0.18 percent out of 30,462 pupils were unable to finish school due to truancy. Truancy was the only cause that put the referred number of children out of school claiming 100 percent compared to other reasons such as death, pregnancy which accounted to zero percent. The total number of dropouts for boys maintained to be higher (59.25percent) compared to that of girls 40.74 percent in the referred year.

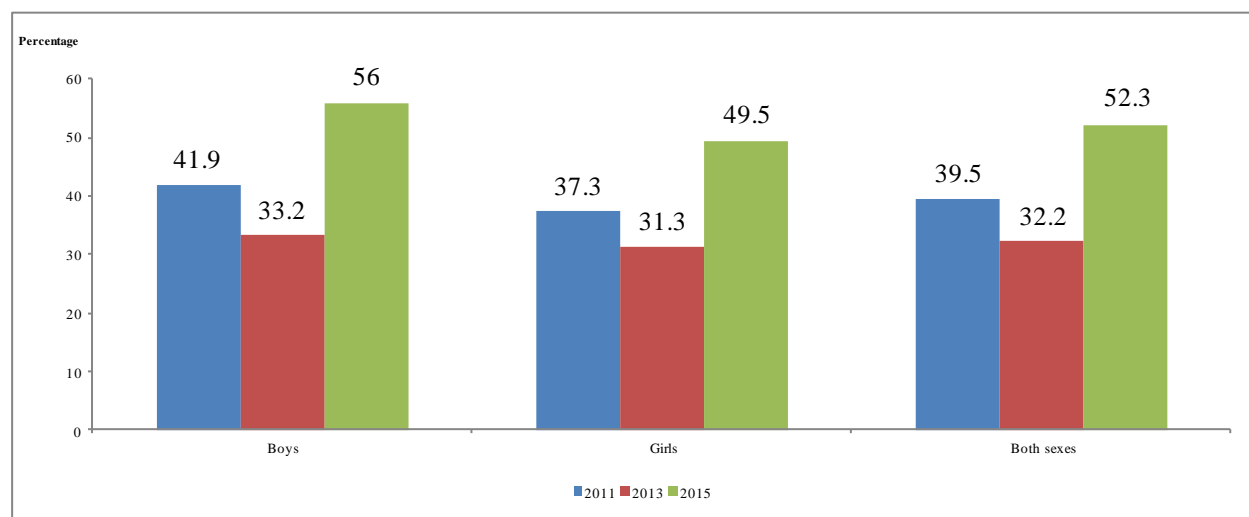
Table 5. 36: Primary School Drop Outs by Reasons and by Sex; Nanyumbu District Council; 2015

Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	32	59.3	22	40.7	54	100
Pregnancy	0	0	0	0	0	0
Death	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total dropouts	32	59.3	22	40.7	54	100
Total Enrolment	14,973	49.2	15,489	50.9	30,462	1.0

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

Figure 5.2 shows pass rates of pupils who sat for STD VII examination in 2011, 2013 and 2015. It is revealed that performance in these three year have been fluctuating year after year. In 2011 pass rate was 39.5 percent where by 41.9 percent of the pass rate were among boys and 37.3 percent were girls. In 2013 pass rate decreased to 32.2 percent whereas boys pass rate was 33.2 percent than girls pass rate 31.3 percent. The pass rate increased up to 52.3 percent in 2015 whereby boys pass rate was 56 percent higher than 49.5 percent of girls pass rate.

Figure 5. 2: Pass rates of Pupils Who Sat for STD VII Examinations, Nanyumbu District Council; 2011, 2013 and 2015



Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

Table 5.37 portrays the examination performance at ward level in Nanyumbu DC in 2011. It is also revealed that out of 3,591 pupils who sat for STD VII examinations in 2011, a total of 1,727 (41.9 percent) were boys and 1,864 (37.3 percent) were girls which implies that there were

more boys than girls who sat for the paper in the referred year. In 2011, Sengenya ward had the highest pass rate (88 percent) in the Council followed by Mangaka (64.9 percent), Chipuputa (61.26 percent).

Nevertheless, Mkonona ward had the lowest pass rate (15.8 percent) followed by Masuguru (19.0 percent) and Napacho ward 21.92 percent. Table 5.37 also shows that overall pass rate for girl was lower (37.3 percent) than boy (41.9 percent) in 2011. Similar trend was also observed in some wards like Nangomba, Mikangaula, Mangaka, Lumesule, Likokona, Mkonona, Nandete, Napacho and Mnanje except for Nanyumbu, Maratani, Masuguru, and Chipuputa wards. Kamundi, Michiga and Kilimanihewa wards were not yet been administratively recognized as wards hence no data were available.

Table 5. 37: Number of Pupils Who Sat and Passed STD VII Examinations, Nanyumbu District Council; 2011

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
Nangomba	108	119	227	44	45	89	40.7	37.8	39.2
Nanyumbu	131	125	256	36	46	82	27.5	36.8	32
Maratani	63	82	145	32	43	75	50.8	52.4	51.7
Mikangaula	111	97	208	74	61	135	66.7	62.9	64.9
Mangaka	204	229	433	91	83	174	44.6	36.2	40.2
Lumesule	149	150	299	56	41	97	37.6	27.3	32.4
Likokona	167	175	342	53	44	97	31.7	25.1	28.4
Mkonona	104	98	202	24	8	32	23.1	8.2	15.8
Nandete	159	163	322	37	30	67	23.3	18.4	20.8
Napacho	126	134	260	34	23	57	27	17.2	21.9
Masuguru	91	114	205	15	24	39	16.5	21.1	19
Chipuputa	138	177	315	87	113	200	63	63.8	63.5
Sengenya	68	65	133	62	55	117	91.2	84.6	88
Mnanje	121	136	257	78	77	155	64.5	56.6	60.3
Kilimanihewa	0	0	0	0	0	0	0	0	0
Michiga	0	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	0	0	0
Total	1,727	1,864	3,591	723	696	1419	41.9	37.3	39.5

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.38 shows the examination performance at ward level in Nanyumbu DC in 2013. Mangaka ward had the highest pass rate (56.4 percent) in the Council followed by Mikangaula (56.0 percent) and Mnanje had (43.1 percent) in the referred year. Again, Mkonona ward had the lowest

pass rate (11.1 percent) followed by Nanyumbu (22.0 percent) and Lumesule ward (22.5 percent). General boys' performance surpassed that of girls in the referred year. These results are suggestive of the importance of advocating the importance of education for girls in the council in order to improve their performances. The overall performance rate for boys and girls was relatively poor in 2013 (32.2 percent) compared to 39.9 percent) in 2011. One general observation drawn from these data is that the overall performance for 2013 was slightly higher than it was in 2011 which signifies an alarming setback in the education sector. Kamundi, Michiga and Kilimanihewa wards had not yet been administratively recognized as wards hence no data were available as shown in Table 5.38.

Table 5. 38: Number of Pupils Who Sat and Passed STD VII Examinations, Nanyumbu 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
Nangomba	88	73	161	18	16	34	20.5	21.9	21.1
Nanyumbu	129	139	268	36	23	59	27.9	16.5	22.0
Maratani	67	96	163	19	27	46	28.4	28.1	28.2
Mikangaula	80	111	191	42	65	107	52.5	58.6	56.0
Mangaka	160	166	326	79	105	184	49.4	63.3	56.4
Lumesule	84	107	191	26	17	43	31.0	15.9	22.5
Likokona	119	144	263	45	38	83	37.8	26.4	31.6
Mkonona	99	109	208	19	4	23	19.2	3.7	11.1
Nandete	108	89	197	42	36	78	38.9	40.4	39.6
Napacho	91	107	198	26	32	58	28.6	29.9	29.3
Masuguru	39	65	104	17	12	29	43.6	18.5	27.9
Chipuputa	97	119	216	43	36	79	44.3	30.3	36.6
Sengenya	196	172	368	37	38	75	18.9	22.1	20.4
Mnanje	99	89	188	34	47	81	34.3	52.8	43.1
Kilimanihewa	0	0	0	0	0	0	0.0	0.0	0.0
Michiga	0	0	0	0	0	0	0.0	0.0	0.0
Kamundi	0	0	0	0	0	0	0.0	0.0	0.0
Total	1,456	1,586	3042	483	496	979	33.2	31.3	32.2

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.39 shows general Nanyumbu DC to have risen compared to the previous years. The overall pass rates for both sexes also went up whereby boys had 55.98 percent and 49.53 percent for girls. In 2015, Sengenya and Mangaka wards had the best pass rates for both sexes in the district of which Sengenya had 92.9 percent and Mangaka (72.3 percent). Maratani ward was the last in the general performance with 27.7 percent for both boys and girls. Table 5.39 indicates general variations in the performance of boys and girls unlike the previous year where boys'

performance in individual wards was virtually higher than that of girls. Kamundi ward making its debut in 2015 had 52.29 percent. Some of the data for Michiga were unavailable. However, it can also be observed that the year 2015 recorded comparatively the lowest number of pupils who sat for the final primary school examinations which does portray good picture to the education sector in Nanyumbu district and much is desired from the local government and other stakeholders to increase both the completion rate and individual school performance.

Table 5. 39: Number of Pupils Who Sat and Passed STD VII Examinations, Nanyumbu 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
Nangomba	31	60	91	26	25	51	83.9	41.7	56.0
Nanyumbu	78	118	196	28	37	65	35.9	31.4	33.2
Maratani	33	68	101	9	19	28	27.3	27.9	27.7
Mikangaula	68	91	159	41	60	101	60.3	65.9	63.5
Mangaka	65	72	137	45	54	99	69.2	75.0	72.3
Lumesule	61	79	140	51	37	88	83.6	46.8	62.9
Likokona	88	124	212	56	77	133	63.6	62.1	62.7
Mkonona	78	72	150	41	30	71	52.6	41.7	47.3
Nandete	86	80	166	39	32	71	45.4	40.0	42.8
Napacho	57	71	128	25	30	55	43.9	42.3	43.0
Masuguru	24	62	86	15	31	46	62.5	50.0	53.5
Chipuputa	77	127	204	34	54	88	44.2	42.5	43.1
Sengenya	87	124	211	85	111	196	97.7	89.5	92.9
Mnanje	65	68	133	43	31	74	66.2	45.6	55.6
Kilimanihewa	85	88	173	65	49	114	76.5	55.7	65.9
Michiga	0	0	0	49	64	113	-	0.0	0.0
Kamundi	78	75	153	27	53	80	34.6	70.7	52.3
Total	1,061	1,379	2440	594	683	1277	56.0	49.5	52.3

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.40 also shows that out of 4,620 selected pupils only 3,543 (76.69 percent) were able to join secondary school in all the referred years. The best practice was experienced in 2011 and 2015 whereby 79.87 percent and 80.80 percent respectively of the selected boys and girls joined secondary school. The worst year was 2013 where the selected number of 1,419 pupils who were supposed to join Form I only 68.50 percent were able to join, however, the percentage of girls (71.13) was higher than that of boys (67.28). This is attributed to lack of awareness on the importance of education, income poverty of the parents/guardians, some pupils, although selected to join form one, are forced by their parents/guardians to engage in income generating activities in order to raise their family incomes (Table 5.40)

Table 5. 40: Number of Pupils Who Selected and Joined Form I in Public Secondary Schools by Sex, Nanyumbu District Council; 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	824	825	1649	665	652	1317	80.70	79.03	79.87
2013	709	710	1419	477	505	972	67.28	71.13	68.50
2015	712	840	1552	584	670	1254	82.02	79.76	80.80
Total	2245	2375	4620	1726	1827	3543	76.88	76.93	76.69

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.41 indicates that all pupils who were selected to join secondary schools were absorbed in secondary schools available in their respective wards in Nanyumbu district in 2011, 2013, 2015 except for few wards. Plans are however, required to increase number of classrooms or build more secondary schools in order to provide chances for all selected pupils to join secondary school.

Table 5. 41: Number of Pupils who were Selected and Joined Form I in Public Secondary Schools by Ward, Nanyumbu District Council, 2011, 2013 and 2015

Ward	Pupils Selected to Join Form I			Pupils Joined Form I			Percent of Pupils Joined Form I		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Nangomba	89	34	51	89	34	51	100	100	100
Nanyumbu	82	59	65	82	59	65	100	100	100
Maratani	102	46	28	75	46	28	73	100	100
Mikangaula	135	107	101	130	100	94	96	93	93
Mangaka	174	184	99	174	184	99	100	100	100
Lumesule	97	50	90	0	43	84	0	86	93
Likokona	97	83	133	97	83	133	100	100	100
Mkonona	32	23	72	32	23	72	100	100	100
Nandete	67	78	71	67	78	71	100	100	100
Napacho	260	198	128	57	58	55	21	29	42
Masuguru	39	29	46	39	29	46	100	100	100
Chipuputa	200	79	88	200	79	87	100	100	98
Sengenya	120	368	211	120	75	199	100	20	94
Mnanje	155	81	74	155	81	74	100	100	100
Kilimanihewa	0	0	114	0	0	114	0	0	100
Michiga	0	0	101	0	0	101	0	0	100
Kamundi	0	0	80	0	0	80	0	0	100
Total	1649	1419	1552	1317	972	1453	79.87	68.50	93.62

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

5.2.6 Transition to Secondary Education

Transition rate refers to the proportion of pupils who graduated primary education joining secondary education. It also reflects the capacity of secondary education provided in the council or ward.

In all three years, a total of 4620 pupils who completed primary education 3742 (81.0 percent) joined secondary education in public schools in Nanyumbu Council. Table 5.42 also shows that children absorbed into secondary education in public schools were 79.9 percent of 9 pupils completed primary education in 2011, 51.8 percent from 7,336 graduates in 2013 and 71.7 percent out of 6,518 graduates in 2015. One general observation from these results is that region should improve its transition rate in order to reduce number of children who entering labour market without having enough education.

Table 5. 42: Number of Pupils Who Completed Primary Education and Joined Secondary Education in Public Secondary Schools by Sex, Nanyumbu District Council; 2011, 2013 and 2015

Years	Pupils Completed Primary Education			Pupils Joined Secondary Education			Transition Rates		
	Boys	Girls	Both Sexes	Boys	Girls	Both Sexes	Boys	Girls	Both Sexes
2011	837	825	1649	665	652	1317	79.5	79.0	79.9
2013	709	710	1419	477	505	972	67.3	71.1	68.5
2015	712	840	1552	672	781	1453	94.4	93.0	93.6
Total	2258	2375	4620	1814	1938	3742	80.3	81.6	81.0

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

5.2.7 Primary schools Facilities

School facilities include classrooms, teachers' houses, toilet facilities, desks, teachers' offices, and school furniture and water sources. School facilities are very necessary in creating conducive learning environment and is also a motivating factor for both teachers and pupils.

(i) Classrooms

Table 5.43 verifies that Nanyumbu DC suffers from an acute shortage of 387 classrooms which is equivalent to (45.6 percent) with a classroom ratio (CPR 1:61) hence did not meet the stipulated ratio of pupils classroom ratio of one classroom per 45 pupils (CPR 1:45) whereby the

use of each classroom in primary and secondary schools should follow the national standard of accommodating 45 pupils/students only.

There is a need for improving the learning environment in primary schools in the Council, more classrooms are therefore needed in primary schools to enable the pupils to sit more comfortably and enhance teaching efficiency and effectiveness of the teachers and pupils.

Table 5. 43: Availability of Classrooms in Public Primary Schools by Ward, Nanyumbu District Council; 2015

Ward	No. of Schools	Total Pupils	Available Classrooms	Classroom Pupils Ratio	Required Classrooms	Deficit of Classrooms	
						Number	Percent
Nangomba	4	1212	20	61	31	11	35.5
Nanyumbu	11	1868	42	44	86	44	51.2
Maratani	4	1123	22	51	37	15	40.5
Mikangaula	4	1709	25	68	51	26	51.0
Mangaka	4	1829	17	108	39	22	56.4
Lumesule	5	1661	26	64	37	11	29.7
Likokona	5	1648	22	75	53	31	58.5
Mkonona	8	1820	37	49	52	15	28.8
Nandete	6	2096	33	64	81	48	59.3
Napacho	7	1952	40	49	73	33	45.2
Masuguru	4	973	19	51	25	6	24.0
Chipuputa	6	2033	35	58	51	16	31.4
Sengenya	8	2779	32	87	69	37	53.6
Mnanje	5	1437	32	45	44	17	38.6
Kilimanihewa	4	1447	17	85	45	28	62.2
Michiga	3	1443	21	69	41	20	48.8
Kamundi	6	1319	26	51	33	7	21.2
Total	94	28349	466	61	848	387	45.6

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(ii) Pit Latrines

Having sufficient number of pits latrines serves the total number of boys and girls is another challenge for Nanyumbu DC with 310 pit-latrine for boys and 326 for girls in 2015 (Table 5.44). Basing on the standard set by the Government of Tanzania, the standard pupils' pit-latrine ratio is 1:20 for girls and (1:24) for boys Nanyumbu district Council has a deficit of 1584. This implies that there was a serious shortage of pit-latrines in primary schools as one pit-latrine was used by 43 and 45 boys and girls pupils respectively in 2015. The Council should make sure that wards follow ratios of Pit-latrine per girls and boys in order to provide favorable environment for learning

Table 5. 44: Availability of Pit Latrine in Public Primary Schools by Ward, Nanyumbu Council, 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
Nangomba	592	620	8	8	74	78	24	31	16	23
Nanyumbu	888	980	9	11	99	89	36	49	27	38
Maratani	638	711	15	14	43	51	26	36	11	12
Mikangaula	836	873	22	25	38	35	33	44	11	19
Mangaka	626	624	10	10	63	62	31	37	21	27
Lumesule	776	885	24	25	32	35	31	44	7	19
Likokona	619	1029	18	18	34	57	28	49	10	31
Mkonona	853	818	28	28	30	29	34	41	6	11
Nandete	1034	1062	19	23	54	46	43	48	24	25
Napacho	984	968	23	25	43	39	33	40	10	15
Masuguru	432	541	21	21	21	26	38	48	40	44
Chipuputa	926	1107	21	21	44	53	37	55	16	34
Sengenya	1347	1432	27	29	50	49	54	72	27	43
Mnanje	693	744	17	20	41	37	23	30	26	34
Kilimanihewa	713	734	8	8	89	92	29	38	21	30
Michiga	675	768	22	22	31	35	31	30	8	9
Kamundi	590	729	18	18	33	41	24	37	6	19
Total	13222	14625	310	326	43	45	555	729	287	433

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(iii) Staff Houses

Table 5.45 shows that Nanyumbu District Council has shortage of 494 primary school teachers 'houses which is equivalent to a deficit of 58.9 percent. There is no ward with sufficient number of houses. It is worth noting that all wards suffered from a critical shortage of houses ranging from 16.7 percent (Mkonona) to 88 percent (Mangaka).

Table 5. 45: Availability of Primary School Teachers' Houses by Ward, Nanyumbu Council; 2015

Ward	No. of Schools	Available Teachers	Available Houses	House Teachers Ratio	Required Houses	Deficit of Houses	
						Number	Percent
Nangomba	4	31	16	2	31	15	48.4
Nanyumbu	11	49	36	1	84	48	57.1
Maratani	4	21	15	1	37	22	59.5
Mikangaula	4	35	26	1	45	19	42.2
Mangaka	4	47	6	8	50	44	88.0
Lumesule	5	33	20	2	42	22	52.4
Likokona	5	43	17	3	54	37	68.5
Mkonona	8	36	30	1	36	6	16.7
Nandete	6	44	26	2	56	30	53.6
Napacho	7	30	30	1	52	22	42.3
Masuguru	4	22	15	1	48	33	68.8
Chipuputa	6	43	34	1	51	17	33.3
Sengenya	8	71	29	2	71	42	59.2
Mnanje	5	35	9	4	40	31	77.5
Kilimanihewa	4	13	13	1	56	43	76.8
Michiga	3	31	8	4	37	29	78.4
Kamundi	6	35	14	3	48	34	70.8
Total	94	619	344	2	838	494	58.9

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(iv) Desks

Nanyumbu district council had acute shortage of 2,284 in 2015. Most of the wards experience shortages of desks with the exception of Mangaka, Mkonona, Masuguru wards, which comply with the official desk pupils ratio of 1:3 while Maratani 1:4. Nandete 1:4 Mikangaula 1:4 Kilimanihewa and Michiga 1:4 and Kamundi 1:5 wards did not meet the required standard on desks. (Table 5.46).

Table 5. 46: Availability of Desks in Public Primary Schools Ward, Nanyumbu District Council; 2015

Ward	No. of Schools	Total Pupils	Available Desks	Desk Pupils Ratio	Required Desks	Deficit of Desks	
						Number	Percent
Nangomba	4	1212	385	3	713	328	46.0
Nanyumbu	11	1868	617	3	811	194	23.9
Maratani	4	1349	354	4	450	96	21.3
Mikangaula	4	1709	434	4	742	308	41.5
Mangaka	4	1829	870	2	776	-94	0.0
Lumesule	5	1661	607	3	859	252	29.3
Likokona	5	1648	393	4	614	221	36.0
Mkonona	8	1671	792	2	0	-792	0.0
Nandete	6	2096	502	4	697	195	28.0
Napacho	7	1732	546	3	746	200	26.8
Masuguru	4	973	282	3	263	-19	0.0
Chipuputa	6	2033	651	3	1017	366	36.0
Sengenya	8	2779	570	5	926	356	38.4
Mnanje	5	1437	498	3	572	74	12.9
Kilimanihewa	4	1447	386	4	482	96	19.9
Michiga	3	1443	390	4	587	197	33.6
Kamundi	6	1319	272	5	578	306	52.9
Total	94	28206	8549	3	10833	2284	21

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(v) Accessibility of Water

Accessibility to clean and safe water is one of the crucial necessities for maintaining hygienic conditions in a learning environment.

Table 5.47 shows that Water tanks were the major source of water supply in primary schools Nanyumbu DC followed by water wells. Water tap was the least or uncommon source water in only one school in Mangaka ward in 2015. However, not all schools in the district had water facilities in their compounds. In Napacho ward there were only 3 primary schools served with water from tanks (Table 5.47). The wards should consider accessibility of water supply in their primary schools especially by drilling boreholes capitalizing on available drilling machine in the concil as a preventive mechanism for combating waterborne diseases and creating conducive learning environment to the pupils.

Table 5. 47: Accessibility of Water in Public Primary Schools by Ward, Nanyumbu Council, 2013 and 2015

Ward	Total No. of Schools	2013			Total No. of Schools	2015		
		No. of Primary Schools with working				No. of Primary Schools with working		
		Water Tanks	Water wells	Tape water		Water Tanks	Water wells	Tape water
Nangomba	4	0	0	0	4	0	4	0
Nanyumbu	11	0	0	0	11	0	0	0
Maratani	4	0	0	0	4	0	0	0
Mikangaula	4	0	0	0	4	0	0	0
Mangaka	4	0	0	0	4	0	0	1
Lumesule	5	0	0	0	5	0	0	0
Likokona	5	0	0	0	5	0	0	0
Mkonona	8	0	0	0	8	0	0	0
Nandete	6	0	0	0	6	0	0	0
Napacho	7	3	0	0	7	3	0	0
Masuguru	4	0	1	0	4	0	2	0
Chipuputa	6	0	0	0	6	0	0	0
Sengenya	8	0	0	0	8	0	0	0
Mnanje	5	0	0	0	5	0	0	0
Kilimanihewa	4	0	0	0	4	0	0	0
Michiga	3	0	0	0	3	0	0	0
Kamundi	6	0	0	0	6	0	0	0
Total	94	3	1	0	94	3	6	1

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(vi) Teachers

Table 5.48 shows that out of 653 available primary school teachers in the council, 76.46 percent (53.7 percent male and 39.8 percent female teachers) had a certificate qualification, four (4) percent (2.9 percent male and 1.1 percent female) were diploma holders and only 2.6 percent had degree qualifications. General observation from these data is that, in 2015, the proportion number of males in all levels of qualifications exceeded female teachers in the council.

Table 5. 48: Availability of Public Primary School’s Teachers by ward, Nanyumbu District Council; 2015

Ward	Total Pupils	Teachers Required	Available Teachers	Deficit	Percent of Deficit	Teacher Pupils Ratio
Nangomba	1212	40	31	9	22.5	39
Nanyumbu	1868	84	49	35	41.7	38
Maratani	1349	34	20	14	41.2	67
Mikangaula	1709	45	35	10	22.2	49
Mangaka	1829	50	47	3	6.0	39
Lumesule	1661	42	33	9	21.4	50
Likokona	1648	54	43	11	20.4	38
Mkonona	1671	56	36	20	35.7	46
Nandete	2096	56	44	12	21.4	48
Napacho	1732	44	26	18	40.9	67
Masuguru	973	48	22	26	54.2	44
Chipuputa	2033	51	43	8	15.7	47
Sengenya	2779	69	71	0	0.0	39
Mnanje	1437	40	35	5	12.5	41
Kilimanihewa	1447	56	52	4	7.1	28
Michiga	1143	37	31	6	16.2	37
Kamundi	1319	48	35	13	27.1	38
Total	27906	854	653	203	23.8	43

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016.

5.2.8 Adult Education

Beside the expansion of primary and secondary education, the district council has also expanded adult education using primary schools as centers with head teachers being in charge of adult education campaigns through MUKEJA and MEMKWA programs. Table 5.49 shows that in 2015 the Council had 12 centres for MUKEJA programme. Enrolment of MUKEJA programs in 2015 was 11. Lack of sensitization campaigns to adults is the reason for the poor enrolment in such programs in 2015. Moreover, the ward should have regular sensitization campaigns for sustainability of the two programs.

Table 5. 49: Number of Adult Education Centers and Enrolments by Ward, Nanyumbu Council; 2013 and 2015

Ward	No. of Centers (MUKEJA) - ICBAE		Centre Enrolment (MUKEJA) - ICBAE		MEMKWA (Colbert) enrolment	
	2013	2015	2013	2015	2013	2015
Nangomba	0	1	0	0	0	0
Nanyumbu	0	0	0	0	0	0
Maratani	0	0	0	0	0	0
Mikangaula	0	0	0	0	0	0
Mangaka	0	0	0	0	0	0
Lumesule	0	5	0	5	0	0
Likokona	0	0	0	0	0	0
Mkonona	0	0	0	0	0	0
Nandete	0	6	0	6	0	0
Napacho	0	0	0	0	0	0
Masuguru	0	0	0	0	0	0
Chipuputa	0	0	0	0	0	0
Total	0	12	0	11	0	0

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

5.2.9 Secondary Education

In Tanzania, secondary education has two levels which are “O-Level (Form I –IV) and “A-Level (Form V and VI). Students sit for their national examinations in Form IV and Form VI, they need to pass the Form IV exams in order to successfully graduate from O level secondary education. However, in order to continue with Form V, they need to score marks at the level of Division One or Two, which are the top scores to advance academically.

Table 5.50 shows that in 2011, 2013 and 2015, Nanyumbu DC had only 12 public secondary schools. In the five year period, Mkonona, Napacho, Mnanje, Kilimanihewa and Kamundi ward did not have both public and private secondary schools. Nevertheless, other wards had only public secondary schools.

Table 5. 50: Number of Secondary Schools by Ownership and Ward, Nanyumbu District Council; 2011, 2013 and 2015

Ward	2011			2013			2015		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Nangomba	1	0	1	1	0	1	1	0	1
Nanyumbu	1	0	1	1	0	1	1	0	1
Maratani	1	0	1	1	0	1	1	0	1
Mikangaula	1	0	1	1	0	1	1	0	1
Mangaka	1	0	1	1	0	1	1	0	1
Lumesule	1	0	1	1	0	1	1	0	1
Likokona	1	0	1	1	0	1	1	0	1
Mkonona	0	0	0	0	0	0	0	0	0
Nandete	1	0	1	1	0	1	1	0	1
Napacho	0	0	0	0	0	0	0	0	0
Masuguru	1	0	1	1	0	1	1	0	1
Chipuputa	1	0	1	1	0	1	1	0	1
Sengenya	1	0	1	1	0	1	1	0	1
Mnanje	0	0	0	0	0	0	0	0	0
Kilimanihewa	0	0	0	0	0	0	0	0	0
Michiga	1	0	1	1	0	1	1	0	1
Kamundi	0	0	0	0	0	0	0	0	0
Total	12	0	12	12	0	12	12	0	12

Source: District Executive Director's Office (Education Department), Nanyumbu Dc, 2016

General observation drawn from these data is that the effect of government campaign to establish at least one secondary school in each ward had enabled an even distribution of secondary schools in the council. By the end of 2015 the District Council had 12 public schools which are evenly distributed among the wards with each ward with one school each with an exception of Mkonona, Kamundi, Maratani divisions (Table 5.51).

Table 5. 51: Distribution of Secondary schools by Division, Nanyumbu District Council; 2015

Division	No. of Ward	No. of Villages	No. of Schools	School Ward Ratio	Average No. of Villages per School
Nanyumbu	3	17	1	0.3	0.06
Nakopi	4	19	4	1.0	0.21
Maratani	5	26	3	0.6	0.12
Mangaka	5	31	4	0.8	0.13
Total	17	93	12	0.7	0.13

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.52 shows enrolments in secondary schools increased by 20.6 percent from 1168 students in 2011 to 1409 students in 2015. At ward level, Lumesule ward had 100 percent of enrolment increase, followed by Chipuputa ward 67.5 percent increase, Mnanje 52.5 percent, Nangomba

41.8 percent. Whilst, Likokona ward was observed to decrease in enrolment rate by 45.9 percent decrease. Also Napacho ward had 28.8 percent decrease, Sengenya ward had 15.5 percent decrease.

Table 5. 52: Total Form 1 Enrolment in Public Secondary Schools by Ward and Sex, Nanyumbu District Council; 2011 and 2015

Ward	2011			2015			Increase	2011- 2015
	Boys	Girls	Total	Boys	Girls	Total	Number	Percent
Mangaka	80	80	160	83	115	198	38	23.8
Nangomba	42	25	67	39	56	95	28	41.8
Lumesule	0	0	0	39	45	84	84	100.0
Likokona	96	63	159	44	42	86	-73	-45.9
Sengenya	76	79	155	56	75	131	-24	-15.5
Mnanje	40	40	80	67	55	122	42	52.5
Mikangaula	90	70	160	76	82	158	-2	-1.3
Maratani	0	0	0	0	0	0	0	0.0
Nandete	37	30	67	38	30	68	1	1.5
Mkonona	0	0	0	0	0	0	0	0.0
Nanyumbu	104	56	160	89	82	171	11	6.9
Masuguru	0	0	0	0	0	0	0	0.0
Chipuputa	49	31	80	69	65	134	54	67.5
Napacho	47	33	80	36	21	57	-23	-28.8
Kilimanihewa	0	0	0	0	0	0	0	0.0
Kamundi	0	0	0	0	0	0	0	0.0
Michiga	0	0	0	0	0	0	0	0.0
Total	661	507	1168	689	720	1409	241	20.6

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.53 shows cohort of students who were enrolled in Form I in 2011 and completed secondary school education in 2014 by ward and sex in Nanyumbu district council. In 2014, out of 1164 students who enrolled in 2011, only 146 equivalent to 12.6 percent completed form IV in 2014. More effort is needed to ensure that more boys and girls complete secondary education. Stern measures against child pregnancy, truancy should be taken increase the completion rate.

Table 5. 53: Number of Students Registered in 2011 and Completed Form IV in 2014 by Ward and Sex in Public Secondary Schools, Nanyumbu District Council

Ward	2011			2014			Increase 2011- 2014	
	Boys	Girls	Total	Boys	Girls	Total	Number	Percent
Mangaka	80	80	160	83	115	198	38	19.2
Nangomba	42	25	67	39	56	95	28	29.5
Lumesule	0	0	0	39	45	84	84	100
Likokona	96	63	159	44	42	86	-73	-84.9
Sengenya	76	79	155	56	75	131	-24	-18.3
Mnanje	40	40	80	67	55	122	42	34.4
Mikangaula	90	70	160	76	82	158	-2	-1.3
Maratani	0	0	0	0	0	0	0	0
Nandete	37	30	67	38	30	68	1	1.5
Mkonona	0	0	0	0	0	0	0	0
Nanyumbu	104	56	160	89	82	171	11	6.4
Masuguru	0	0	0	0	0	0	0	0
Chipuputa	49	31	80	69	65	134	54	40.3
Napacho	47	33	80	36	21	57	-23	-40.4
Kilimanihewa	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	0	0
Michiga	0	0	0	0	0	0	0	0
Total	661	507	1168	636	668	1304	136	10.4

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.54 shows the second cohort of students who were enrolled in 2012 and completed in 2015. The completion rate increased significantly from 12.6 percent in 2014 to 32.17 percent in 2015 (Table 5.54). Although variations occurred among wards but similar experience was observed at ward level. It was observed that Nanyumbu, Mangaka, Mnanje and Mikangaula wards had more students who completed Form IV.

Table 5. 54: Number of Students Registered in 2012 and Completed Form IV in 2015 by Ward and Sex in Public Secondary Schools, Nanyumbu District Council

Ward	Enrolled 2012			Completed 2015			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Mangaka	99	82	181	35	29	64	35.4	35.4	35.4
Nangomba	101	79	180	24	23	47	23.8	29.1	26.1
Lumesule	49	37	86	18	11	29	36.7	29.7	33.7
Likokona	99	95	194	8	11	19	8.1	11.6	9.8
Sengenya	90	68	158	13	28	41	14.4	41.2	25.9
Mnanje	65	76	141	22	28	50	33.8	36.8	35.5
Mikangaula	93	95	188	31	19	50	33.3	20.0	26.6
Maratani	0	0	0	0	0	0	0.0	0.0	0.0
Nandete	78	32	110	30	17	47	38.5	53.1	42.7
Mkonona	0	0	0	0	0	0	0.0	0.0	0.0
Nanyumbu	82	84	166	47	40	87	57.3	47.6	52.4
Masuguru	0	0	0	0	0	0	0.0	0.0	0.0
Chipuputa	36	80	116	18	11	29	50.0	13.8	25.0
Napacho	53	65	118	17	15	32	32.1	23.1	27.1
Michiga	0	0	0	17	15	32	0.0	0.0	0.0
Total	845	793	1638	280	247	527	33.1	31.1	32.2

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

5.2.9.1 Pass rates

Table 5.55 shows students performance in form IV examinations in public secondary schools. Pass rate in form IV examinations is divided into divisions with division I being the highest pass. Pass rate reflects the quality of secondary education provided in the council. Generally the performance of Form IV examinations in Nanyumbu DC for 2011, 2013 and 2015 was very low. However it was noted that no student attained division I for all the three years. Only 10 boys attained division II in 2015, majority of the students attained division IV and O (failed) and only 47 cumulated students attained division III in all three years. (Table 5.55)

Table 5. 55: Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Nanyumbu District Council; 2011, 2013 and 2015

Division	2011			2013			2015			Cumulative Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
I	0	0	0	0	0	0	0	0	0	0	0	0
II	0	0	0	0	0	0	10	0	10	10	0	10
III	3	0	3	7	1	8	29	7	36	39	8	47
IV	74	4	78	58	34	92	102	94	196	234	132	366
0	111	64	175	92	97	189	79	96	175	282	257	539
Total	188	68	256	157	132	289	220	197	417	565	397	962
Percent	73.4	26.6	100	54.3	45.7	100	52.8	47.2	100	58.7	41.3	100

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

5.2.9.2 Secondary school Facilities

School facilities play pivotal role in improving quality of education in any Council. The most common facilities that play major role on improving the quality of education include classrooms, toilets, staff quarters, libraries, laboratories, dormitories, desks and teachers, availability of electricity and clean and safe water.

(i) Teachers

The expansion of enrolment in Primary Schools led to the increase in number of students who join Secondary Education. This increase in number led to the demand of more secondary school teachers.

Table 5.56 shows at ward level Mangaka, Nangomba, Mikangaula, and Chipuputa, secondary schools had more than 30 teachers per school. The rest had less than 30 teachers which caused shortage in the council. According to the acceptable teacher student's ratio of 1:45, the required teachers were 345. Table 5.56 also shows that Likokona ward with (26.5 percent) shortage was the most affected council followed by Mangaka (22.5 percent).

Table 5. 56: Availability of Public Secondary School’s Teachers by Ward, Nanyumbu Council; 2015

Ward	No. of Schools	Available Teachers	School Teachers Ratio	Required Teachers	Deficit of Teachers	
					Number	Percent
Mangaka	1	31	31	40	9	22.5
Nangomba	1	35	35	36	1	2.8
Lumesule	1	27	27	23	-4	-17.4
Likokona	1	25	25	34	9	26.5
Sengenya	1	28	28	30	2	6.7
Mnanje	1	23	23	25	2	8.0
Mikangaula	1	30	30	27	-3	-11.1
Maratani	0	0	0	0	0	0.0
Nandete	1	26	26	24	-2	-8.3
Mkonona	0	0	0	0	0	0.0
Nanyumbu	1	29	29	32	3	9.4
Masuguru	0	0	0	0	0	0.0
Chipuputa	1	30	30	24	-6	-25.0
Napacho	1	28	28	20	-8	-40.0
Kilimanihewa	0	0	0	0	0	0.0
Kamundi	0	0	0	0	0	0.0
Michiga	1	23	23	30	7	23.3
Total	12	335	335	345	10	2.9

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

Table 5.57 shows that, in 2015 out of 335 public secondary school teachers (68.7 percent male and 31.3 percent female) available in Nanyumbu DC, 63.9 percent of them were diploma holders. Whereby 69.2 percent of the diploma holders were male and 30.8 percent were female. The council had total of 36.1 percent degree holder teachers in which 67.8 percent of them were male and 32.3 percent of them were females. Whilst, the council is still in need of more teachers especially degree holders and masters holders, also more teaching posts should be offered to female teachers than male teachers.

Table 5. 57: Availability of Public Secondary School’s Teachers by Qualification and Ward, Nanyumbu Council; 2015

Ward	Diploma			Degree			Masters and Others			Total Teachers		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mangaka	11	7	18	9	4	13	0	0	0	20	11	31
Nangomba	14	8	22	9	4	13	0	0	0	23	12	35
Lumesule	14	6	20	6	1	7	0	0	0	20	7	27
Likokona	11	4	15	6	4	10	0	0	0	17	8	25
Sengenya	18	3	21	5	2	7	0	0	0	23	5	28
Mnanje	11	1	12	7	4	11	0	0	0	18	5	23
Mikangaula	13	7	20	7	3	10	0	0	0	20	10	30
Maratani	0	0	0	0	0	0	0	0	0	0	0	0
Nandete	10	6	16	8	2	10	0	0	0	18	8	26
Mkonona	0	0	0	0	0	0	0	0	0	0	0	0
Nanyumbu	10	7	17	9	3	12	0	0	0	19	10	29
Masuguru	0	0	0	0	0	0	0	0	0	0	0	0
Chipuputa	14	7	21	7	2	9	0	0	0	21	9	30
Napacho	14	6	20	5	3	8	0	0	0	19	9	28
Kilimanihewa	0	0	0	0	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	0	0	0	0	0	0
Michiga	8	4	12	4	7	11	0	0	0	12	11	23
Total	148	66	214	82	39	121	0	0	0	230	105	335

Source: District Executive Director’s Office (Education Department), Nanyumbu DC, 2016

The Council experiences a serious problem of shortage of science and mathematics teachers. The Council did not have enough teachers for science and mathematics subjects. Table 5.58 shows among 284 available teachers; only 41 and the rest of them are arts teachers. Lumesule and Mnanje wards were the most affected with only 2 teachers who taught science. The most privileged ward was Mangaka with (6), followed by Napacho (5), Nanyumbu (4), Sengenya (4).

Table 5. 58: Number of Science and Arts Teachers in Public Secondary Schools by Ward, Nanyumbu Council; 2015

Ward	Available Science Teachers				Available Arts Teachers			
	Male	Female	Total	Required Teachers	Male	Female	Total	Required Teachers
Mangaka	3	3	6	16	17	5	22	19
Nangomba	3	0	3	13	19	14	33	17
Lumesule	2	0	2	8	18	5	23	15
Likokona	2	1	3	8	14	6	20	15
Sengenya	3	1	4	16	19	3	22	19
Mnanje	2	0	2	8	17	5	22	15
Mikangaula	3	0	3	16	17	8	25	19
Maratani	0	0	0	0	0	0	0	0
Nandete	2	1	3	8	14	8	22	15
Mkonona	0	0	0	0	0	0	0	0
Nanyumbu	1	3	4	16	16	9	25	19
Masuguru	0	0	0	0	0	0	0	0
Chipuputa	3	0	3	13	18	9	27	17
Napacho	4	1	5	8	18	5	23	15
Kilimanihewa	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	0	0
Michiga	3	0	3	13	11	9	20	17
Total	31	10	41	143	198	86	284	202

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(ii) Administration blocks

Table 5.59 shows that the council had very few public secondary schools with administration blocks, only 16.7 percent. Out of 12 public secondary schools, only 2 schools namely Mangaka and Michiga had administration blocks in 2015. Mangaka and Michiga wards had only one administration block each but the rest of the wards did not have administration blocks (Table 5.59). Mnanje, Masuguru, Mkonona, Kilimanihewa, and Kamundi had no secondary schools. Therefore, insufficiency of administration blocks is one of the challenges that face the district authority that calls for concerted efforts from various stakeholders for immediate interventions.

Table 5. 59: Availability of Administration blocks in Public Secondary Schools by Ward, Nanyumbu Council; 2015

Ward	No. of Schools	Available Administration Block	Percent of Schools with Admin Block	Required Teachers	Deficit of Admin.	
					Number	Percent
Mangaka	1	1	100	1	0	0
Nangomba	1	0	0	1	1	100
Lumesule	1	0	0	1	1	100
Likokona	1	0	0	1	1	100
Sengenya	1	0	0	1	1	100
Mnanje	0	0	0	0	0	0
Mikangaula	1	0	0	1	1	100
Maratani	1	0	0	1	1	100
Nandete	1	0	0	1	1	100
Mkonona	0	0	0	0	0	0
Nanyumbu	1	0	0	1	1	100
Masuguru	0	0	0	0	0	0
Chipuputa	1	0	0	1	1	100
Napacho	1	0	0	1	1	100
Kilimanihewa	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0
Michiga	1	1	100	1	0	0
Total	12	2	16.7	12	10	83.3

(iv) Classrooms

Table 5.60 shows all wards experienced shortages of classroom ranging from zero percent to 56.3 percent at ward level. Napacho was the most affected ward with critical shortages of 75.0 percent whereas the lowest ward was Mnanje which had shortage of 25.0 percent of the required number of classrooms in 2015. Table 5.560 shows that the Council had 39.31 percent deficit required number of classrooms in 2015. Table 5.58 also shows that, the classroom students' ratio, according to the available classrooms and students was 1:44. The observation from this ratio reveals that at council level the classroom students ratio is within the acceptable number of 1:45 students per class approved by education authorities.

Table 5. 60: Availability of Classrooms in Public Secondary Schools by Ward; Nanyumbu District Council; 2015

Ward	No. of Schools	Total Pupils	Available Classrooms	Classroom Pupils Ratio	Required Classrooms	Deficit of Classrooms	
						No.	Percent
Mangaka	1	622	16	39	16	0	0.0
Nangomba	1	213	6	36	9	3	33.3
Lumesule	1	195	4	49	8	4	50.0
Likokona	1	220	4	55	8	4	50.0
Sengenya	1	413	5	83	8	3	37.5
Mnanje	1	383	7	55	16	9	56.3
Mikangaula	1	284	10	28	16	6	37.5
Maratani	0	-	0	0	0	0	0.0
Nandete	1	252	6	42	8	2	25.0
Mkonona	0	-	0	0	0	0	0.0
Nanyumbu	1	468	11	43	16	5	31.3
Masuguru	0	-	0	0	0	0	0.0
Chipuputa	1	309	6	52	8	2	25.0
Napacho	1	255	4	64	16	12	75.0
Kilimanihewa	0	0	0	0	0	0	0.0
Kamundi	0	-	0	0	0	0	0.0
Michiga	1	248	9	28	16	7	43.8
Total	12	3862	88	44	145	57	39.3

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Nanyumbu District council experienced a shortage of 335 houses or five time the available houses. Table 5.61 also shows that though all wards experienced shortage of staff quarters, Likokona was the most affected ward with 96 percent deficit followed by Nangomba (94 percent) Mikangaula (90 percent and Chipuputa(90 percent (Table 5.61). Therefore, more effort should also be directed towards building staff houses together with other facilities.

Table 5. 61: Availability of Teachers Houses in Public Secondary Schools by Ward, Nanyumbu District Council; 2015

Ward	No. of Schools	Available Teachers	Available Houses	House Teachers Ratio	Required Houses	Deficit of Teachers' Houses	
						Number	Percent
Mangaka	1	31	7	4.4	31	24	77.4
Nangomba	1	35	2	17.5	35	33	94.3
Lumesule	1	27	3	9.0	27	24	88.9
Likokona	1	25	1	25.0	25	24	96.0
Sengenya	1	28	3	9.3	28	25	89.3
Mnanje	1	23	3	7.7	23	20	87.0
Mikangaula	1	30	3	10.0	30	27	90.0
Maratani	0	0	0	0.0	0	0	0.0
Nandete	1	26	5	5.2	26	21	80.8
Mkonona	0	0	0	0.0	0	0	0.0
Nanyumbu	1	29	3	9.7	29	26	89.7
Masuguru	0	0	0	0.0	0	0	0.0
Chipuputa	1	30	3	10.0	30	27	90.0
Napacho	1	28	5	5.6	28	23	82.1
Kilimanihewa	0	0	0	0.0	0	0	0.0
Kamundi	0	0	0	0.0	0	0	0.0
Michiga	1	23	3	7.7	23	20	87.0
Total	12	335	41	8.2	335	294	87.8

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

Table 5.62 indicates that there was a serious shortage of pit latrines in secondary schools as it was for primary schools with one pit latrine was used by 39 boys and 32 girls students in 2015. Table 5.62 also shows that most of the ward did not have enough toilets in 2015 in Nanyumbu DC basing on the standard set by the education authorities, the standard pupils pit latrine ratio is 1:20 for girls and (1:25) for boys. Only Michiga ward met this standard with a ratio of 1:16 boys and 1:15 latrine pits for girls.

Table 5. 62: Availability of Pit Latrine in Public Secondary Schools by Sex and Ward; Nanyumbu District Council 2015

Ward	Total Pupils		Available Pit Latrine		Hole Pupils Ratio		Required Pit Latrines		Deficit of Latrine (No.)	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Mangaka	290	332	9	10	32	33	13	16	4	6
Nangomba	102	111	1	1	102	111	6	8	5	7
Lumesule	101	94	2	3	51	31	6	8	4	5
Likokona	112	108	3	3	37	36	6	8	3	5
Sengenya	180	233	3	3	60	78	13	16	10	13
Mnanje	185	198	2	2	93	99	6	8	4	6
Mikangaula	249	284	3	3	83	95	6	8	3	5
Maratani	0	0	0	0	0	0	0	0	0	0
Nandete	141	111	10	20	14	6	10	10	0	-10
Mkonona	0	0	0	0	0	0	0	0	0	0
Nanyumbu	265	203	6	6	44	34	10	9	4	3
Masuguru	0	0	0	0	0	0	0	0	0	0
Chipuputa	161	148	1	1	161	148	6	4	5	3
Napacho	134	121	5	5	27	24	6	8	1	3
Kilimanihewa	0	0	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	0	0	0	0
Michiga	128	120	8	8	16	15	12	16	4	8
Total	2048	2063	53	65	39	32	100	119	47	54

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(vi) Dormitories

The availability of dormitories best addresses the challenges associated with walking long distances hence exposing students vulnerabilities to such as early pregnancies and reduce the rates of drop outs, and truancy. However, in all wards there were only 3 dormitories in Mangaka, Nanyumbu and Napacho wards which accounted for mere 12.5 percent of dormitories in all wards at the end of 2015 (Table 5.63). The rest of wards did not have this essential facility. This is an important aspect as far as education sector in the district is concerned in order to create conducive learning environment and minimizing chances of vulnerabilities to girls.

Table 5. 63: Availability of dormitories/hostels in Public Secondary Schools by Ward, Nanyumbu District Council; 2015

Ward	No. of Schools	Available Dormitories	School Dormitories Ratio	Required Dormitories	Deficit of Dormitory	
					Number	Percent
Mangaka	1	1	1	2	1	50
Nangomba	1	0	0	2	2	100
Lumesule	1	0	0	2	2	100
Likokona	1	0	0	2	2	100
Sengenya	1	0	0	2	2	100
Mnanje	1	0	0	2	2	100
Mikangaula	1	0	0	2	2	100
Maratani	0	0	0	0	0	0
Nandete	1	0	0	2	2	100
Mkonona	0	0	0	0	0	0
Nanyumbu	1	1	1	2	1	50
Masuguru	0	0	0	0	0	0
Chipuputa	1	0	0	2	2	100
Napacho	1	1	1	2	1	50
Kilimanihewa	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0
Michiga	1	0	0	2	2	100
Total	12	3	0.25	24	21	87.5

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(vi) Libraries

Table 5.64 reveals that 91.6 percent of all public secondary schools in Nanyumbu DC lack the library facility in their premises. Library facility serves as a major source of knowledge and a suitable ground for students to cultivate their reading skills and supplement their class lessons. Incidentally, only Mangaka had a library at the end of 2015 which is equivalent to 8.3 percent which implies that the district and other stakeholders still have a long way to go in order to ensure that these important facilities are in place.

Table 5. 64: Availability of Libraries in Public Secondary Schools by Ward; Nanyumbu District Council; 2015

Ward	No. of Schools	Available Libraries	Percent of Schools with Libraries	Required Libraries	Deficit of Libraries	
					Number	Percent
Mangaka	1	1	100	1	0	0
Nangomba	1	0	0	1	1	100
Lumesule	1	0	0	1	1	100
Likokona	1	0	0	1	1	100
Sengenya	1	0	0	1	1	100
Mnanje	1	0	0	1	1	100
Mikangaula	1	0	0	1	1	100
Maratani	0	0	0	0	0	0
Nandete	1	0	0	1	1	100
Mkonona	0	0	0	0	0	0
Nanyumbu	1	0	0	1	1	100
Masuguru	0	0	0	0	0	0
Chipuputa	1	0	0	1	1	100
Napacho	1	0	0	1	1	100
Kilimanihewa	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0
Michiga	1	0	0	1	1	100
Total	12	1	8.3	12	11	91.6

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(vi) Furniture (Tables and Chairs)

Table 5.65 reveals that in 2015 there was a shortage of furniture in all schools except schools from Sengenya ward which had extra furniture. It can also be observed that the district council had a shortage of 2106 tables and 2180 chairs (48.7 percent and 50.43 percent) out of the required 4322 tables and 4322 chairs each. This marks critical shortages of furniture since facility student ratio was 1:1 for table and 1:1.2 for chair in 2015. It is there advisable to involve other stakeholders in the education sector in addressing the problem of furniture in their areas to supplement government efforts.

Table 5. 65: Availability of Tables and chairs in Public Secondary Schools by Ward, Nanyumbu District Council; 2015

Ward	Total Students	Available		Facility Pupils Ratio		Required		Deficit of	
		Tables	Chairs	Tables	Chairs	Tables	Chairs	Tables	Chairs
Mangaka	622	386	359	2	2	501	501	115	142
Nangomba	213	112	178	2	1	197	197	85	19
Lumesule	195	104	107	2	2	320	320	216	213
Likokona	220	120	120	2	2	320	320	200	200
Sengenya	413	315	349	1	1	320	320	5	-29
Mnanje	383	129	105	3	4	233	233	104	128
Mikangaula	284	209	227	1	1	426	426	217	199
Maratani	0	0	0	0	0	0	0	0	0
Nandete	252	165	107	2	2	360	360	195	253
Mkonona	0	0	0	0	0	0	0	0	0
Nanyumbu	468	279	300	2	2	365	365	86	65
Masuguru	0	0	0	0	0	0	0	0	0
Chipuputa	309	160	120	2	3	320	320	160	200
Napacho	255	117	60	2	4	320	320	203	260
Kilimanihewa	0	0	0	0	0			0	0
Kamundi	0	0	0	0	0	0	0	0	0
Michiga	248	120	110	2	2	640	640	520	530
Total	3862	2216	2142	2	2	4322	4322	2106	2180

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(vi) Laboratories

Apart from libraries, the laboratory is another necessary facility for science students to enhance their practical learning in their subjects. Lack of laboratory facility in their schools will pose real challenge to students taking science subjects. In 2015, Nanyumbu DC had a total of 15 laboratories in 12 the public secondary schools compared to the required 36, resulted to significant shortage of 58.3 percent. This hinders to a great deal practical lessons for science subjects conducted in most secondary schools in the district council (Table 5.66).

Table 5. 66: Availability of Laboratories in Public Secondary Schools by Ward; Nanyumbu District Council; 2015

Ward	No. of Schools	Available Laboratories	Laboratory Schools Ratio	Required Laboratories	Deficit of Laboratories	
					Number	Percent
Mangaka	1	3	3	3	0	0
Nangomba	1	1	1	3	2	66.7
Lumesule	1	1	1	3	2	66.7
Likokona	1	1	1	3	2	66.7
Sengenya	1	1	1	3	2	66.7
Mnanje	1	1	1	3	2	66.7
Mikangaula	1	1	1	3	2	66.7
Maratani	0	0	0	0	0	0
Nandete	1	1	1	3	2	66.7
Mkonona	0	0	0	0	0	0
Nanyumbu	1	2	2	3	1	33.3
Masuguru	0	0	0	0	0	0
Chipuputa	1	1	1	3	2	66.7
Napacho	1	1	1	3	2	66.7
Kilimanihewa	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0
Michiga	1	1	1	3	2	66.7
Total	12	15	1.25	36	21	58.3

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(xi) Electricity Power Supply in Secondary schools

Table 5.67 shows solar energy was the leading source of energy supply, used by 11 schools out of 12 public secondary schools whereas Mangaka was the only school that was supplied with electricity power from the National Grid and a standby generator. The remaining schools had no electric power. Other sources of energy such as Biogas, Generator were still unexploited in the district at the end of 2015. One general observation from these data is that the availability of national grid managed by TANESCO will enhance learning in remarkable way in a number of public secondary schools to have electricity facility in all wards of Nanyumbu district council.

Table 5. 67: Availability of Electricity Power in Secondary Schools by Ward, Nanyumbu District Council; 2015

Ward	No. of Schools	Source of Electricity					Total Schools With Electricity	
		National Grid	Biogas	Solar	Generator	Others	No.	Percent
Mangaka	1	1	0	0	1	0	1	100
Nangomba	1	0	0	1	0	0	1	100
Lumesule	1	0	0	1	0	0	1	100
Likokona	1	0	0	1	0	0	1	100
Sengenya	1	0	0	1	0	0	1	100
Mnanje	1	0	0	1	0	0	1	100
Mikangaula	1	0	0	1	0	0	1	100
Maratani	0	0	0	0	0	0	0	0
Nandete	1	0	0	1	0	0	1	100
Mkonona	0	0	0	0	0	0	0	0
Nanyumbu	1	0	0	1	0	0	1	100
Masuguru	0	0	0	0	0	0	0	0
Chipuputa	1	0	0	1	0	0	1	100
Napacho	1	0	0	1	0	0	1	100
Kilimanihewa	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	0	0
Michiga	1	0	0	1	0	0	1	100
Total	12	1	0	11	0	0	11	100

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

(xii) Water

Supply of sufficient clean and safe water is a fundamental issue in maintaining proper sanitation and ensuring hygienic learning environment for students. Table 5.68 shows that Nanyumbu DC had only one well used as a source of water supply in Mangaka since 2013 at the ward level. Until 2015, the data reveal that there was no any single source of water supply of clean and safe water in 12 schools. This raises concern to the hygienic conditions without this important liquid in secondary schools in the district.

Table 5. 68: Accessibility of Water in Public Secondary Schools by Ward, Nanyumbu District Council; 2013 and 2015

Ward	Total No. of Schools	2013			Total No. of Schools	2015		
		No. of Schools with working				No. of Schools with working		
		Water Tanks	Water wells	Tape water		Water Tanks	Water wells	Tape water
Mangaka	1	0	1	0	1	0	1	0
Nangomba	1	0	0	0	1	0	0	0
Lumesule	1	0	0	0	1	0	0	0
Likokona	1	0	0	0	1	0	0	0
Sengenya	1	0	0	0	1	0	0	0
Mnanje	1	0	0	0	1	0	0	0
Mikangaula	1	0	0	0	1	0	0	0
Maratani	0	0	0	0	0	0	0	0
Nandete	1	0	0	0	1	0	0	0
Mkonona	0	0	0	0	0	0	0	0
Nanyumbu	1	0	0	0	1	0	0	0
Masuguru	0	0	0	0	0	0	0	0
Chipuputa	1	0	0	0	1	0	0	0
Napacho	1	0	0	0	1	0	0	0
Kilimanihewa	0	0	0	0	0	0	0	0
Kamundi	0	0	0	0	0	0	0	0
Michiga	1	0	0	0	1	0	0	0
Total	12	0	1	0	12	0	1	0

Source: District Executive Director's Office (Education Department), Nanyumbu DC, 2016

5.3 WATER SUPPLY AND SANITATION

5.3.1 Overview

Tanzania is a big country with almost, one out of every two persons has no access to clean and safe water supply. Due to the big geographical dispersion, rural Tanzanians often have to travel long distances and spend many hours to fetch water. This has a huge negative impact on economic development and also results in girls dropping out of school as they join their mothers in fetching potable water. Improving supply of clean and safe water will therefore reduce the number of girls dropping out of schools, save time which will be used by women on other economic activities and increase the standard of their lives.

There will also be cost savings as the Government will spend less on public health due to spread of water borne diseases. However, for Nanyumbu DC, the Water Supply and Sanitation Sector covers rural water supply only in terms of water sources, schemes and technology used to supply water.

5.3.2 Water Supply

Sustainable access to clean and safe water is essential for reducing poverty and health problems in the rural and urban society. The largest use of water is for domestic purpose but due to the increase 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 participation of the private sector. Hence the Government is encouraging private investment in the water sector.

By 2015, access to clean and safe water was still a major problem in most part of Nanyumbu DC. The main dependable source of drinking water was the bore holes, unprotected shallow well and rain water tanks. Dependence on shallow wells (unsafe water) is evidence that the council still has a lot to do in implementing the (2006 - 2025) National Rural Water Supply and Sanitation Program (NRWSSP). This program aims for long term plan development of the rural water supply and sanitation so as to meet the SDGs' targets and beyond.

Table 5.69 reveals that, in 2015, Nanyumbu DC had a total of 208 rural water schemes (sources) in various stages of operation or non-operation. Of these schemes, 130 (62.5 percent of total schemes) were operating (working) and the remaining 78 schemes (37.5 percent) were not operating (not working). Bore holes was the dominant water source in rural areas as the council had 48 operating or working shallow wells (23.1 percent of Council's operating water sources). Shallow wells with 39 operating (18.8 percent) was the second dependable water source, followed by rain water tanks with 28 working (13.5 percent) and river with 1 permanent sources (0.5 percent).

At ward level, Nandete the largest number of working bore holes with six sources, followed by Kilimanihewa and Sengenya ward with five each (working bore holes). Sengenya ward was the leading with five working shallow wells, followed by Mkonona and Mangaka with four working sources each. Rain Harvest Water Tanks were another source of water in which Nandete ward had 6 working water tanks. While Mangaka, Lumesule, Napacho, Chipuputa, Masuguru, Sengenya and Mnanje wards had three working water tanks each. Basing on the facts given in Table 5.66, most of the wards had unreliable water sources. Hence, the council still has a long way to go in improving the availability of safe and clean water to her people.

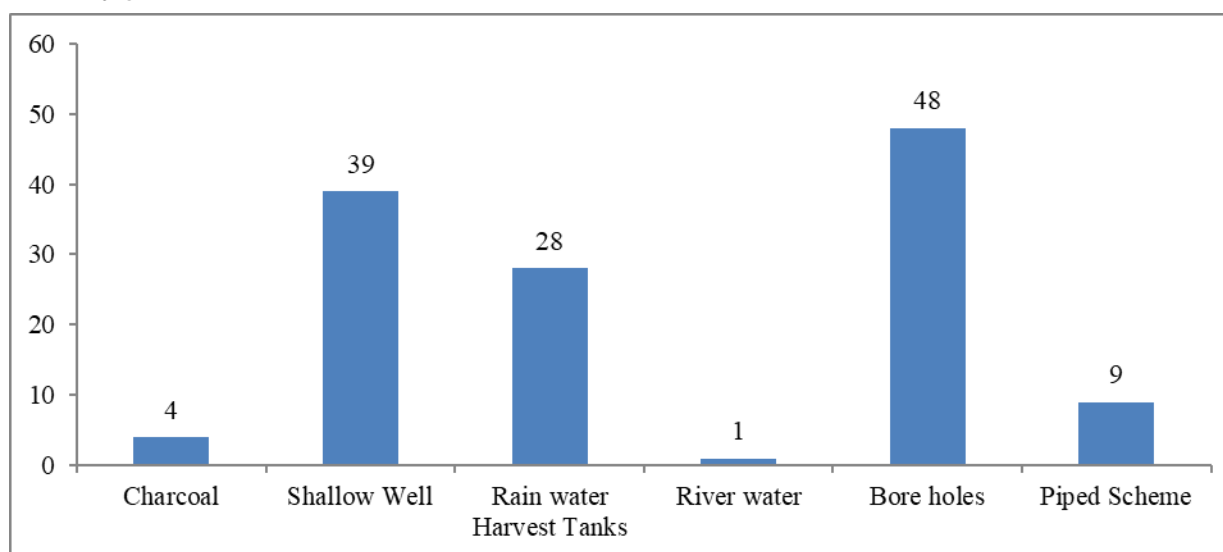
Table 5. 69: Number and Type of Rural Water Sources by Ward, Nanyumbu District Council, 2015

Ward	Charcoal		Spring		Shallow Well		Rain water Harvest Tanks		River water		Bore holes		Piped Scheme		Total
	W	NW	W	NW	W	NW	W	NW	P	S	W	NW	W	NW	
Mangaka	0	0	0	0	4	0	3	1	0	1	3	3	1	0	16
Kilimanihewa	0	0	0	0	0	2	0	1	0	1	5	4	0	1	14
Likokona	0	0	0	0	0	0	0	0	0	1	2	3	0	0	6
Michiga	0	0	0	0	2	0	0	0	0	1	1	3	0	0	7
Lumesule	0	0	0	0	2	1	3	0	0	1	1	4	1	0	13
Napacho	1	0	0	0	3	4	3	0	0	1	2	5	0	0	19
Chipuputa	0	0	0	0	0	0	3	0	0	0	2	0	2	0	7
Nanyumbu	1	0	0	0	3	6	0	0	0	0	4	3	0	1	18
Masuguru	0	0	0	0	2	3	3	0	1	0	3	2	0	1	15
Mkonona	1	0	0	0	4	2	1	0	0	0	4	1	0	0	13
Sengenya	0	0	0	0	5	2	3	0	0	0	5	3	1	0	19
Nangomba	0	0	0	0	3	0	0	0	0	1	2	0	0	0	6
Mikangaula	0	0	0	0	2	2	0	0	0	0	3	0	1	0	8
Kamundi	0	0	0	0	3	0	0	0	0	0	3	1	0	0	7
Maratani	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
Mnanje	1	0	0	0	3	2	3	0	0	0	2	0	1	0	12
Nandete	0	0	0	0	3	0	6	0	0	0	6	4	2	0	21
Total	4	0	0	0	39	30	28	2	1	7	48	36	9	3	207

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

Source: District Executive Director's Office (Water Supply and Sanitation Department), Nanyumbu District Council, 2015

Figure 5. 3: Number of Working/Operating Main Rural Water Sources by Type, Nanyumbu District Council, 2015



Source: District Executive Director’s Office (Water Supply and Sanitation Department), Nanyumbu District Council, 2015

Table 5.70 shows that, Nanyumbu DC had a total 160 working (98.8 percent) water delivery technologies and 2 (1.2 percent) that was not working. Hand pumps were the most popular water delivery technology. It accounted for 90.7 percent of all working water schemes. Working diesel pumps were 9 (5.6 percent) and were the second dependable water delivery technology in Nanyumbu DC. Also there were four electricity pumps accounting for 2.5 percent of all working water schemes.

Napacho and Nanyumbu wards had largest number of hand pumps technology (15 hand pumps each) followed by Sengenya ward with 12 hand pumps. Chipuputa and Nandete had 11 working hand pumps while Mkonona and Kilimanihewa had 11 hand pumps each to mention few. Electricity pumps were available in Nandete, Chipuputa and Mangaka wards. (Table 5.70)

Table 5. 70: Number and Type of Technology Used in Rural Water Schemes by Ward, Nanyumbu District Council, 2015

Ward	Electricity Pump		Diesel Pump		Hand Pump	
	W	NW	W	NW	W	NW
Mangaka	1	0	0	0	9	0
Kilimanihewa	0	0	0	1	10	0
Likokona	0	0	0	0	5	0
Michiga	0	0	0	0	6	0
Lumesule	0	0	2	0	6	0
Napacho	0	0	0	0	15	0
Chipuputa	1	0	1	0	11	0
Nanyumbu	0	0	0	1	15	0
Masuguru	0	0	1	0	7	0
Mkonona	0	0	0	0	10	0
Sengenya	0	0	1	0	12	0
Nangomba	0	0	0	0	5	0
Mikangaula	0	0	1	0	6	0
Kamundi	0	0	0	0	7	0
Maratani	0	0	0	0	6	0
Mnanje	0	0	1	0	6	0
Nandete	2	0	2	0	11	0
Total	4	0	9	2	147	0

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

Source: District Executive Director's Office (Water Supply and Sanitation Department), Nanyumbu DC, 2016

5.3.1 Rural Water Supply

The Water policy requires every person to get water within the shortest distance and source of water being improved ones, such as piped water, protected boreholes, dug wells and springs. The 2012 Population and Housing Census shows that almost 57 percent of households have access clean and safe drinking water from improved sources in Mtwara region. The region, therefore mainly uses different type of water sources shallow wells, bore holes, charcoal dams and surface water such as springs, lake, river and rain water harvesting.

Table 5.71 reveals that a minimal proportion of 24,750 which accounted for (14.01 percent) of the total Nanyumbu Council of 176,699 rural public population were served with clean water in 2015 while a great proportion of rely on traditional water wells for drinking and other domestic uses which is quite detrimental to their health simply because a large segment of the rural

population do not bother to boil or treat water sources due to the looming poverty and lack of awareness.

Table 5. 71: Rural Population Served with Clean Water by Ward, Nanyumbu District Council; 2015

Ward	Total Rural population	Population Served with Clean Water	Percent Population Served with Clean Water
Mangaka	17,214.00	4,000	23.24
Kilimanihewa	0	0	0
Likokona	18,630.00	500	2.68
Michiga	14,901.00	0	0
Lumesule	7,656.00	3,750	48.98
Napacho	10,092.00	1,000	9.91
Chipuputa	9,925.00	2,500	25.19
Nanyumbu	10,825.00	2,250	20.79
Masuguru	5,945.00	1,500	25.23
Mkonona	8,137.00	500	6.14
Sengenya	13,480.00	2,250	16.69
Nangomba	8,178.00	750	9.17
Mikangaula	16,847.00	750	4.45
Kamundi	10,941.00	0	0
Maratani	6,668.00	250	3.75
Mnanje	7,193.00	1,000	13.90
Nandete	10,067.00	3,750	37.25
Total	176,699	24,750	14.01

Source: District Executive Director's Office (Water Department), Nanyumbu DC, 2016

Until 2015 Nanyumbu DChad established 91 water user groups scattered in all 17 wards out of which only 21 were active and 21 were inactive groups. The district had 21 operating account whereas 70 groups were recorded to have been dormant (Table 5.72). The total sum of funds collected by the end of 2015 amounted to TZS16,754,382.00

Table 5. 72: Number of Water User Groups (WUGs) and Operation and Maintenance Accounts (O&M) by Ward, Nanyumbu District Council; 2015

Ward	Number of Groups	WUGs		O&M		Total Funds (Tzs) as per 31/12/2015
		Active	Inactive	Operate	Dormant	
Mangaka	4	1	3	1	3	100,000
Kilimanihewa	5	0	5	0	5	0
Likokona	2	0	2	0	2	0
Michiga	4	0	4	0	4	0
Lumesule	5	2	3	2	3	1,676,415.34
Napacho	6	1	5	1	5	0
Chipuputa	6	2	4	2	4	1,500,000
Nanyumbu	8	2	6	2	6	89,745
Masuguru	3	1	2	1	2	225,000
Mkonona	6	0	6	0	6	0
Sengenya	11	2	9	2	9	5,393,595.95
Nangomba	5	0	5	0	5	0
Mikangaula	6	2	4	2	4	5,010,000
Kamundi	5	3	2	3	2	830,000
Maratani	4	0	4	0	4	0
Mnanje	6	1	5	1	5	100,000
Nandete	5	4	1	4	1	1,829,625.41
Total	91	21	70	21	70	16,754,382

Source: District Executive Director's Office (Water Department), Nanyumbu DC, 2016

Table 5.73 shows that Nanyumbu District Council had managed to establish water committees and water user's groups by 2015. A total number of WUG or VWF members were 728 whereas men were 364 and 364 females. In 2015, no funds were collected as water fee by Kilimanihewa, Likokona, Michiga, Napacho, Nangomba and Maratani groups. (Table 5.73)

Table 5. 73: Number of Rural Village Water Committees, Village Water Funds and Funds in the VWCs by Ward; Nanyumbu District Council as at 31.12 2015

Ward	Village	Village Water Committees			Village Water Fund (VWF)/Water Users Group (WUG)	Total funds in Tzs
		Male	Female	Total members		
Mangaka	4	16	16	32	100,000	100,000
Kilimanihewa	5	20	20	40	0	0
Likokona	2	8	8	16	0	0
Michiga	4	16	16	32	0	0
Lumesule	5	20	20	40	1,676,415.34	1,676,415.34
Napacho	6	24	24	48	0	0
Chipuputa	6	24	24	48	1,500,000	1,500,000
Nanyumbu	8	32	32	64	89,745	89,745
Masuguru	3	12	12	24	225,000	225,000
Mkonona	6	24	24	48	0	0
Sengenya	11	44	44	88	5,393,595.95	5,393,595.95
Nangomba	5	20	20	40	0	0
Mikangaula	6	24	24	48	5,010,000	5,010,000
Kamundi	5	20	20	40	830,000	830,000
Maratani	4	16	16	32	0	0
Mnanje	6	24	24	48	100,000	100,000
Nandete	5	20	20	40	1,829,625.41	1,829,625.41
Total	91	364	364	728	16,754,381.7	16,754,382

Source: District Executive Director's Office (Water Department), Nanyumbu DC, 2016

5.3.2 Sanitation

The commonest way of disposing human waste in Nanyumbu DC is through pit latrines and very few households have septic tanks.

Table 5.74 shows that out of 57,354 households in Nanyumbu DC 47,964 which accounted for 84 percent of the total households had toilet facilities and 9,390 households which was equivalent to 16 percent did not have toilets facilities. Maratani (42.91 percent) was the leading ward with the highest percentage of households without toilet facilities followed by Mikangaula ward (38.1 percent). These results ought to be a wakeup call to District Authorities to create more awareness and persuade the remaining households to change attitude towards use toilet facilities.

Table 5. 74: Total Number of Households with Toilet Facilities by Ward; Nanyumbu District Council; 2015

Ward	Total Number of Households	Total Number of Households with Toilets	percent of Households with Toilets	Total Number of Households without Toilets	Percent of household without toilets
Mangaka	3344	3014	90.13	330	10.95
Nangomba	2328	2012	86.43	316	15.71
Kamundi	2784	2172	78.02	612	28.18
Mikangaula	2925	2118	72.41	807	38.1
Mnanje	3348	2786	83.21	562	20.17
Michiga	3242	2934	90.5	308	10.5
Nandete	3787	3112	82.18	675	21.69
Maratani	2621	1834	69.97	787	42.91
Mkonona	2773	2115	76.27	658	31.11
Nanyumbu	4322	3977	92.02	345	8.67
Chipuputa	3114	2978	95.63	136	4.57
Masuguru	1948	1867	95.84	81	4.34
Likokona	3767	2978	79.05	789	26.49
Napacho	4528	3798	83.88	730	19.22
Lumesule	4258	3828	89.9	430	11.23
Sengenya	5270	4324	82.05	946	21.88
Kilimanihewa	2995	2117	70.68	878	41.47
Total	57,354	47,964	84	9,390	16.0

Source: District Executive Director's Office (Water Department), Nanyumbu DC, 2016

5.3.3 Investment Opportunities in Water Supply

Nanyumbu DC faces shortages of clean and safe water supply despite different types of water sources such as permanent Ruvuma River and seasonal streams. Incidentally, the council has very few piped water sources. In this regard, investment is needed in the supply of pipes, drilling, charcoal dam and pumping equipment and increase the capacity of water storage. Investment is also needed for the supply of electricity to be used in electricity pumps.

CHAPTER SIX

Other Development Issues

6.1 Introduction

This chapter highlights on other development issues which includes child protection and vulnerability, gender empowerment, development and involvement in decision making, youth contribution in the development of the district including their participation in economic activities. The issue of cooperative activities and their impact in the community has also been given weight in this chapter.

6.2 Child Protection

According to the Child Policy 2008, Right for Protection concerns the prevention of wicked and evil actions which are done to children. Such protection and security is needed in all stages of growth of children, before and after being born. So, a child needs security and protection against heavy duties and occupations, which are incongruent with the age; tyranny over the children's assets, especially the orphaned ones; to be abandoned, to be neglected; illegitimate/criminal abortions; to be oppressed; not to be taken into consideration; to be denied of one's nationality.

Furthermore, a child needs protection against abuse, violent action such as genital mutilation especially to girl children; or being sent into childhood marriages (for both girls and boys); substance abuse and rapes.

In addition to that, as part of the implementation of the National Costed Plan Action, Nanyumbu District has put in place formal and informal structures such as the District Child Protection Team (DCPT) as an informal instrument working alongside other formal organs in protecting children in the district against all forms of abuse.

6.2.1 Child Vulnerability

Vulnerability is state of high risk of deprivation or, according to the World Bank, “an expected welfare loss above a socially accepted norm, which results from risky or uncertain events and the lack of appropriate risk-management instruments.”

Table 6.1 gives account of the situation in Nanyumbu District Council with regard to the state of vulnerability. Data shows that there are high percentages of most vulnerable children who are orphans in all wards as compared to most vulnerable children who are non-orphans. The Council had 67,809 non-orphans compared to 2,107 orphans categorized as the most vulnerable children. The table also shows that out of 2,107 orphans, girls’ orphans were (55.8 percent) than boys (44.2 percent), which are more than half of the population, hence special care and other appropriate interventions, are needed for both sexes as vulnerable children.

Table 6. 1: Number of Most Vulnerable Children by Ward, Nanyumbu District Council; 2015

Ward	Total Children Aged 0-17	Most Vulnerable Children							
		Orphans				Non-orphans			
		Girls Percent	No. of boys	Boys Percent	Total	Girls Percent	No. of boys	Boys Percent	Total
Mangaka	4460	55.8	38	44.2	86	50	2190	50	4374
Kilimanihewa	4614	44.4	70	55.6	126	49	2299	51	4488
Nangomba	4263	47.6	55	52.4	105	50	2079	50	4158
Mikangaula	4331	47.1	54	52.9	102	50	2125	50	4229
Sengenya	4272	53.9	116	46.2	251	50	2016	50	4021
Mnanje	4237	51.4	36	48.6	74	50	2101	50	4199
Nandete	3641	55.3	38	44.7	85	49.2	1805	50.8	3556
Maratani	3632	50	49	50	98	50	1768	50	3534
Kamundi	4244	41.3	104	58.8	177	50	2016	50	4067
Chipuputa	4228	32.7	138	67.3	205	50	2011	50	4023
Nanyumbu	4397	45.03	83	55	151	50	2128	50	4246
Masuguru	3617	38.5	56	61.5	91	52	1705	48	3526
Likokona	3905	59.8	39	40.2	97	49	1952	51	3808
Michiga	4291	40.2	61	59.8	102	50	2098	50	4189
Napacho	4140	47.7	67	52.3	128	50	2011	50	4012
Lumesule	4040	72.1	38	28	136	51	1921	49	3904
Mkonona	3604	43.01	53	57	93	50	1746	50	3511
Total	69,916	55.8	1,095	44.2	2,107	50	33,971	50	67,809

Source: Compiled data from District Executive Director’s office, 2016

6.2.2 Day Care Centers

Day care centers contributed a lot in reducing the burden of women in taking care of children and thus, giving women more time to participate in income generating activities, therefore there is a need to put more efforts in creating awareness and sensitizing on the importance of day care centers.

Table 6.2 shows the number of day care centers as well as the number of children in these centres for the year 2013 and 2015. In 2013 the Council had only one-day care center situated at Mangaka ward. The number of day care centers increased to five in 2015 in three wards of Mangaka (2) with 99 pupils, Kilimanihewa (2) centres with 94 pupils and Sengenya (1) center with 61 pupils. Number of pupils increased also from 55 pupils in 2013 to 254 pupils in 2015 equivalent to 78.3percent. Awareness and sensitization campaign is needed on encouraging people to invest in the construction of day care centers. Efforts should aim at wards which have no day care centers.

Table 6. 2: Distribution of Day Care Centers by Ward; Nanyumbu Council; 2013 and 2015

Ward	2013		2015		Difference in Numbers of Pupils	Percent Difference of Pupils
	Number of Centers	Number of pupils	Number of Centers	Number of pupils		
Mangaka	1	55	2	99	44	44.4
Kilimanihewa			2	94	94	100
Sengenya			1	61	61	100
Total	1	55	5	254	199	78.3

Source: Compiled data from District Executive Director's office, 2016

6.3 Gender Empowerment

In order to ensure that equality is mainstreamed into all spheres of life, gender issues must be given more weight particularly ensuring that women are fully in policy and decision-making processes and in all aspects of economic, socio-cultural and political life involved in a participatory approach. Measures have been taken to assist women to actively participate in establishment of women economic groups, participation in CBOs and other self-help community initiatives such as Village Community Banks.

6.3.1 Women Economic Groups

The District has established a Women Development Fund to financially back up women economic groups. The Council plays a pivotal role to ensure that women groups are socially and economically self- help projects geared to stem out poverty. The district had 83 and 182 women economic groups in 2013 and 2015 respectively. In 2013 and 2015, women groups in 17 wards, were supported with loan of TZS. 9,500,000 and TZS. 25,500, 000 respectively.

Table 6.3 shows that most economic groups were in Nangomba and Mangaka wards with 18 and 14 groups respectively who received a total loan of TZS. 4,000,000. Groups of women in three wards of Mnanje, Masuguru and Mkonona were not supported with loans in 2013 and 2015 while Nanyumbu and Likonona wards were supported with loans in year 2013 only. The District is advised to make equal consideration to all women groups in terms of loan services.

Table 6. 3: Number of Women Economic Groups by Ward; Nanyumbu District Council; 2013 and 2015

Ward	2013				2015			
	Total no. of Registered groups	Total Members	No. of Groups Assisted	Total Loaned TZs	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned TZs.
Mangaka	14	150	3	3,000,000	21	243	3	4,000,000
Kilimanihewa	0	0	0	0	18	207	2	4,000,000
Nangomba	18	172	1	1,000,000	23	211	1	1,000,000
Mikangaula	10	78	0	0	17	204	2	3,000,000
Sengenya	3	32	0	0	8	120	1	1,000,000
Mnanje	5	50	0	0	11	103	0	0
Nandete	4	42	0	0	6	78	1	1,000,000
Maratani	3	31	0	0	8	71	2	2,000,000
Kamundi	0	0	0	0	11	113	1	1,500,000
Chipuputa	3	32	0	0	7	91	2	2,000,000
Nanyumbu	6	59	3	3,000,000	10	134	0	0
Masuguru	2	21	0	0	5	83	0	0
Likokona	4	42	2	2,500,000	9	135	0	0
Michiga	0	0	0	0	6	95	1	1,500,000
Napacho	1	11	0	0	5	57	1	2,000,000
Lumesule	8	82	0	0	13	192	2	2,500,000
Mkonona	2	21	0	0	4	49	0	0
Total	83	823	9	9,500,000	182	2,186	19	25,500,000

Source: Compiled data from District Executive Director's office, 2016

6.3.2 Women participation in Decision Making

At ward level, similar observation was also experienced although there were some variations in the participation in all three areas. Table 6.4 shows that Mangaka ward had equal ratio between men and women (50.0 percent) in the Political posts, but had the least ratio of women compared to men in the managerial and professional posts. Overall percentage of participation of gender in managerial, professional and politician posts is 68.2 and 31.8percentages for men and women respectively. The District management has to ensure equal gender participation in managerial, professional and politician posts.

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

Ward	Managerial			Professionals/ Technicians			Politicians (MPs, DC, Councilors)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mangaka	53	18	71	158	109	267	2	2	4
Nangomba	5	3	8	31	15	46	0	1	1
Lumesule	2	1	3	12	28	40	1	0	1
Likokona	8	1	9	33	67	100	1	0	1
Sengenya	8	0	8	55	19	74	2	0	2
Mnanje	4	1	5	46	16	62	1	0	1
Mikangaula	13	0	13	36	57	93	1	1	2
Maratani	7	1	8	27	8	35	0	1	1
Nandete	6	0	6	23	37	60	1	0	1
Mkonona	5	0	5	25	7	32	1	0	1
Nanyumbu	8	0	8	27	13	40	1	1	2
Masuguru	3	1	4	16	12	28	1	0	1
Chipuputa	6	0	6	24	31	55	1	0	1
Napacho	3	0	3	36	9	45	0	1	1
Total	131	26	157	549	428	977	13	7	20
Percent	83.44	16.56	100	56.19	43.81	100	65	35	100

Source: Compiled data from District Executive Director's office, 2016

6.4 Youth in Development

Youths are one of the groups in the population who provide the country's labour force. A fully employed youth group is a great asset in development. Self-employment is in the private sector, full participation in which working capital is essential. Table 6.5 shows the number of youth economic groups available in the District and amount of loans supported to these groups. The table reveals that the council had 49 and 115 youth economic groups in 2013 and 2015 respectively. The number of members also increased from 540 in 2013 to 1480 in 2015. The

amount of loans supported to youth groups in 2013 were TZS 8,500,000 compared to TZS 39,500,000 in 2015. However, the District Council needs to go an extra mile to make the youth economic groups sustainable so as to become productive members of the community and contribute to the district economy and eradicate poverty.

Table 6. 5: Youth Economic Groups and Total Money Loaned by Ward, Nanyumbu District 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 (TZS)
Male	Female	Total	Male	Female				Total				
Mangaka	9	82	17	99	1	1,500,000	13	94	62	156	2	4,500,000
Kilimanihewa	0	0	0	0	0	0	7	41	43	84	1	1,500,000
Nangomba	6	37	19	56	2	2,000,000	8	39	65	104	1	2,000,000
Mikangaula	5	24	22	46	1	1,000,000	10	52	71	123	3	3,500,000
Sengenya	3	21	11	32	1	1,000,000	6	38	23	61	1	2,000,000
Mnanje	2	6	13	19	1	2,000,000	5	21	39	60	2	3,000,000
Nandete	2	10	11	21	1	1,000,000	7	33	58	93	2	2,500,000
Maratani	3	26	5	31	0	0	5	25	32	57	1	2,000,000
Kamundi	0	0	0	0	0	0	8	48	53	101	2	3,000,000
Chipuputa	3	17	12	29	0	0	6	37	41	78	0	0
Nanyumbu	4	34	9	43	0	0	5	18	43	52	1	2,000,000
Masuguru	2	13	12	25	0	0	4	15	30	45	1	1,500,000
Likokona	4	26	17	43	0	0	6	59	58	117	1	2,000,000
Michiga	0	0	0	0	0	0	7	48	36	84	2	3,000,000
Napacho	1	7	5	11	0	0	4	46	39	85	2	2,000,000
Lumesule	3	24	8	32	0	0	9	51	57	108	2	3,500,000
Mkonona	2	11	6	17	0	0	5	37	35	72	1	1,500,000
Total	49	338	167	504	7	8,500,000	115	702	785	1480	25	39,500,000

Source: Compiled data from District Executive Director's office, 2016

6.4.1 Motorcycle (BodaBoda) Operators

Bodaboda business is another lucrative informal sector embracing a large segment of youths which has a huge contribution in reducing poverty and joblessness. The number of motorcycle riders has increased in recent years, making it one of the fastest growing businesses in Tanzania.

Table 6.6 shows that there are 590 Motorcycle operators in Nanyumbu District mostly youths that earn their livelihoods through this business. The data reveal that Mangaka, Chipuputa, Kilimanihewa wards have the highest number of motorcycle operators with 280 whereas Napacho and Nangomba wards recorded the least number of Bodaboda operators in the District. It is therefore necessary to educate and support these groups of youths especially in rural wards

about self-employment for sustainability of this business. The average income earned by a single motorcycle operator (BodaBoda) in a month is TZS 191,176.47.

Table 6. 6: Number of Motorcycle Operators (BodaBoda) by Ward/Business center, Nanyumbu District Council; 2015

Ward	Number of Bodaboda operators	Estimated Income earned per Bodaboda operator in a month (TZS)
Maratani	46	260,000
Chipuputa	56	280,000
Lumesule	32	180,000
Masuguru	21	160,000
Mnanje	31	210,000
Kamundi	18	160,000
Sengenya	28	180,000
Likokona	42	160,000
Michiga	34	180,000
Nandete	48	160,000
Napacho	22	120,000
Nangomba	20	140,000
Mikangaula	34	180,000
Nanyumbu	24	160,000
Mangaka	61	280,000
Kilimanihewa	52	280,000
Mkonona	21	160,000
Total	590	3,250,000

Source: Compiled data from District Executive Director's office, 2016

6.5 Cooperative Development

6.5.1 Savings and Credit Cooperative Societies

The emergency of cooperative movement in Nanyumbu district has been particularly dramatic in the field of Savings and Credit Cooperative Societies (SACCOS). The existence of SACCOS in the district is among of the factors contributing to development especially for families in the low income bracket and individuals. Savings and credit cooperative societies' members can secure loans from financial institutions in Tanzania who prefer to channel loans to these groups or individuals through their SACCOS. Table 6.7 shows that, only five wards namely Mangaka, Mnanje, Mkonona, Nanyumbu and Chipuputa positively responded to the call to form cooperative groups. However, out of the named wards only 2 wards had active groups by the end of 2015.

This indicates that only 5 SACCOS were registered in Nanyumbu District (3 active, 2 dormant) in 2015. The total numbers of members in 2015 were 527 members (355 males, 172 females). Total value of shares owned by all members amounted to TZS 10,656,000, while a total of TZS. 175,616,000 were loaned to members in 2015. The table also shows that, out of 175,616,000 loaned money, TZS 69,013,855 (39.3 percent) were recovered by the end of the year 2015. This implies slow loan recovery pace in the council which threatens the economic sustainability and existence of these groups. At ward level, Nanyumbu ward had the highest rate of loan recovery at 67.5 percent followed by Mangaka ward (40percent), Mkonona (36.9percent), and Mnanje (35 percent). Chipuputa ward had the lowest loan recovery rate of 7.1 percent.

Table 6. 7: Number of SACCOS by Status by Ward, Nanyumbu District Council; 2015

Ward	No. of SACCOS (Registered)		Total Members		Total Value of Shares (TZs) as at 31.12.2015	Total Money Loaned to members Jan –Dec 2015 (TZs)	Total Loans recovered from members Jan –Dec 2015 (TZs)
	Active	Dormant	Male	Female			
Mangaka	0	1	166	106	5,490,000	55,980,000	22,400,000
Nangomba	0	0	0	0	0	0	0
Lumesule	0	0	0	0	0	0	0
Likokona	0	0	0	0	0	0	0
Sengenya	0	0	0	0	0	0	0
Mnanje	0	1	28	11	850,000	4,000,000	1,400,000
Mikangaula	0	0	0	0	0	0	0
Maratani	0	0	0	0	0	0	0
Nandete	0	0	0	0	0	0	0
Mkonona	1	0	79	36	1,145,000	35,241,000	13,000,000
Nanyumbu	1	0	25	7	2,381,000	43,895,000	29,610,000
Masuguru	0	0	0	0	0	0	0
Chipuputa	1	0	57	12	790,000	36,500,000	2,603,855
Napacho	0	0	0	0	0	0	0
Total	3	2	355	172	10,656,000	175,616,000	69,013,855

Source: Compiled data from District Executive Director's office, 2016

6.5.2 Village Community Banks

Village Community Banks (VICOBA) program in the district has proved to be one of the catalysts of economic development for low income earners whereby families can save and secure short-term soft loans without undergoing hard to fulfill conditions in other financial institutions where collaterals are required in order to obtain loan. VICOBA members have access to financial

resources because financial institutions in Tanzania prefer to channel loans to these groups or individuals through their economic initiative groups.

Table 6.8 shows that the District has a total of 270 Village Community Banks with 5469 members. Women occupy a large number of 3,683 members (67.3percent) while 1,786 members 32.7percent occupied by men. Most of Village Community Banks are found in Sengenya ward and Maratani each with (37) and (31) respectively.

Table 6. 8: Village Community Bank (VICOBA) by Ward, Nanyumbu District Council, 2015

Ward	Number of VICOBA	Male	Female	Total members
Maratani	31	190	344	534
Chipuputa	12	74	151	225
Lumesule	8	52	146	198
Masuguru	16	109	243	352
Mnanje	29	317	396	713
Kamundi	11	105	156	261
Sengenya	37	201	534	735
Likokona	12	57	147	204
Michiga	9	23	166	189
Nandete	13	115	171	286
Napacho	7	38	95	133
Nangomba	13	84	163	247
Mikangaula	4	17	37	54
Nanyumbu	15	98	187	285
Mangaka	20	103	284	387
Kilimanihewa	24	159	345	504
Mkonona	9	44	118	162
Total	270	1786	3683	5469
Percent		32.66	67.34	100

Source: Compiled data from District Executive Director's office, 2016

6.6 Financial Institutions

In 2015, there was only one financial institution (NMB -National Microfinance Bank) operating in Nanyumbu District Council. This implies that the Council needs more financial institutions to match the increase of the emerging number of formal and informal small-scale businesses.

6.7 Civil Society Participation in Development

Social and economic development in Nanyumbu District embraces the international and local Civil Society which through community based organisations and non-governmental organisations and voluntary agencies. The range of areas of involvement process is wide. Some

of the CBOs and NGOs have given their assistance in addressing health problems, child protection issues, gender empowerment, environmental conservation and poverty alleviation just to mention a few.

Below is a list of the CBOs and NGOs that are operating in Nanyumbu District Council.

1. Child Advocates Foundation,
P.O Box 246,
Nanyumbu.
2. Nanyumbu Youth Development Network,
P.O. Box 246,
Nanyumbu.
3. Nanyumbu Non-Governmental Organizations Network (NANGONET)
P.O. Box 246,
Nanyumbu.
4. Nanyumbu Development Foundation (NADEFO)
P.O. Box 246,
Nanyumbu.
5. Kikundi Mwavuli Masasi (KIMAS)
P.O. Box 246,
Nanyumbu.
6. Terre Des Hommes
P.O. Box 246,
Nanyumbu.
7. Proud Development Foundation
P.O. Box 246,
Nanyumbu.
8. Likokona Environment
P.O. Box 246,
Nanyumbu.
9. Uhifadhi Mazingira Kazamoyo (UMIKA)
P.O. Box 246,
Nanyumbu.
10. Walio Katika Mapambano ya Aids Tanzania
P.O. Box 246,
Nanyumbu.

References

1. 2012 Population and Housing Census, Age and Sex Distribution, Volume II, Central Census Office, National Bureau of Statistics, September, 2013;
2. 2012 Population and Housing Census, Village and Street Statistics, Age and Sex Distribution, Mtwara Region, Volume II, Central Census Office, National Bureau of Statistics, June, 2005;
3. 2012 Population and Housing Census Population by Administrative Units, Volume I, March 2013;
4. 2002 Population and Housing Census General Reports Central Census Office, National Bureau of Statistics; January 2003;
5. National Sample Census of Agriculture 2002/03 and 2007/08, Mtwara Region Reports, National Bureau of Statistics,
6. Mtwara Region Socio-Economic Profile, Second Edition, July 2004