



The United Republic of Tanzania

MWANZA CITY COUNCIL

SOCIO-ECONOMIC PROFILE, 2016



January, 2017



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SOCIO-ECONOMIC PROFILE, 2016

Jointly prepared by

Ministry of Finance,
National Bureau of Statistics
and
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National Bureau of Statistics
Dar es Salaam



Mwanza City Council
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Foreword



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

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

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

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

Mwanza CityCouncil prepares this Socio-Economic by using its own funds. The publication of the Mwanza CitySocial-Economic Profile series by the Ministry of Finance in collaboration with the National Bureau of Statistics and City Council Management Team should be viewed as a modest attempt towards finding solutions to the existing problem of data and information gap at city level.

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

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

I would like to take this opportunity to acknowledge with thanks, the contribution made by the Mwanza CityCouncil Director's Office, National Bureau of Statistics and other staffof the City Council who devoted their time to ensure the successful completion of this assignment.



Kiomon K. Kibamba

City Director

January, 2017

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infections
BCG	Bacillus Calmet Guerin (TB Vaccine)
CBO	Community Based Organization
CBPP	Contagious Bovine Plural Pneumonia
CPR	Classroom Pupil Ratio
DPR	Desk Pupil Ratio
DC	District Council
DPT3/HB3	Diphtheria Pertusis Tetanus 3 rd doze/ Haemoglobin Level
ECF	East Cost Fiver
RVF	Rift Valley Fever
Govt.	Government
Ha	Hectare
HIV	Human Immune Virus
IGAs	Income Generating Activities
IMR	Infant Mortality Rate
MMR	Maternal Mortality Rate
NCD	New Castle Disease
OPV3	Oral Polio Vaccine 3 rd Doze
PLHA	People Living with HIV/AIDS
PMTCT	Prevention Mother to Child Transmission
PR	Pass Rate
SACCOS	Savings and Credit Cooperative Societies
Sq. Km.	Square Kilometre
STD VII	Standard Seven
TB	Tuberculosis
TBAs	Traditional Birth Attendants
TPR	Toilet Pupil Ratio /Teacher Pupil Ratio
TT2	Tetanus Toxoid 2 nd doze

U5MR	Under Five Mortality Rate
VCT	Voluntary Counselling and Testing
VHC	Village Health Committee
VHWs	Village Health Workers
VWC	Village Water Committee
VWF	Village Water Fund
WUG	Water User Group

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CHAPTER ONE

Land, Climate, Agro-Ecological Zones and People

1.0 An Overview

Chapter one gives information about the geographical location, land area, administrative units, climate and agro-ecological zones of Mwanza city council. It also gives information on ethnic groups, population distribution and size as well as other demographic characteristics.

Mwanza city, besides being a headquarters of the City council, it is also the headquarters of Mwanza region, a major Tanzanian port of Lake Victoria and a business centre of a Great Lake Region and East Africa Community. The City can easily be reached by Ugandans and Kenyans through Lake Victoria and by road to countries such as Rwanda, DRC and Burundi.

1.2 Geographical Location

Mwanza City is located on the southern shores of Lake Victoria in Northwest Tanzania. It covers an area of 256.45 Kilometer square of which 184.90 (72 percentages) is dry land and 71.55 Kilometer (28 percentages) is covered by water. Of the 184.90 kilometer dry land area, approximately 173 kilometer is urbanized while the remaining areas consist of forested land, valleys, cultivated plains, grassy and undulating rocky hill areas.

1.3 Land Area, Land Use Pattern and Administrative Units

Mwanza City has a total area of 256 Sq. Km, divided into land area covering 173 Sq. Km, equivalent to 67.6 percent of total area and 83.0 Sq. Km, equivalent to 32.4 percent of water area, mostly dominated by lake Victoria. Comparing with other councils in Mwanza region, Mwanza city possesses the smallest area covered only a percent of the total area (25,233.0 Sq. Km) of the region.

Looking at ward level, Mkolani is the largest ward possessing 19 percent of city area followed by Buhongwa (17.6 percent) and Igoma (16.0 percent). The least wards in terms of area are Pamba and Mirongo covered on 0.8 percent of city area each (Table 1.1). One

general observation from these data is that other wards are not yet known their land areas because were demarcated recently. Therefore, their land areas are included from their former wards.

Table 1.1 Land and Water Areas by Ward (Square kilometer), Mwanza City Council, 2015

Ward	Land Area		Water Area		Total Area	
	Sq.km	Percent	Sq.km	Percent	Sq.km	Percent
Buhongwa	31	68.9	14	31.1	45	17.6
Lwanhima*	n.a	0.0	0	0.0	0	0.0
Mkolani	35	0.0	13.54	27.9	48.54	19.0
Luchehelele*	n.a	n.a	0	0.0	0	0.0
Butimba	12.91	61.7	8.01	38.3	20.92	8.2
Nyegezi*	0	0	0	0.0	0	0.0
Igogo	10	43.5	13	56.5	23	9.0
Mkuyuni	4	20.6	15.45	79.4	19.45	7.6
Pamba	2	100	0	0.0	2	0.8
Nyamagana	2	16	10.5	84.0	12.5	4.9
Mirongo	2.09	100	0	0.0	2.09	0.8
Isamilo	5	37.0	8.5	63.0	13.5	5.3
Mabatini*	0	0	0	0.0	0	0.0
Mbugani	4	100	0	0.0	4	1.6
Mahina	24	100	0	0.0	24	9.4
Mhandu*	0	0	0	0.0	0	0.0
Igoma	41	100	0	0.0	41	16.0
Kishiri*	0	0	0	0.0	0	0.0
Total	173	67.6	83	32.4	256	100

* These are new wards their areas are included in their former wards

Source: City Director's Office, Land and Natural Resources Department, Mwanza City, 2016

Administratively, Mwanza city was established in 2000 and became among the eight councils of Mwanza Region. It comprises of one division, namely Nyamagana, 18 wards and 175 streets. However, it is important to note that, although the law identifies Mwanza as a city, still has both rural and urban locations resulted to have both urban and rural wards. The urban wards comprise with Mbugani, Butimba, Mkuyuni, Mabatini, Nyegezi, Nyamagana, Igoma, Pamba, Mkolani, Mirongo, Isamilo and Igogo. The rural wards formed by Lwanhima, Kishiri, Buhongwa, Mhandu, Mahina and Luchehelele.

Table 1.2 Number of Administrative Units by Wards, Mwanza City Council; 2015

Ward	Land Area (Sq. km)	No. of Hamlets	Percent of Land Area
Buhongwa	45	18	17.6
Lwanhima*	0	18	n.a
Mkolani	48.54	10	19.0
Luchehele*	0	10	n.a
Butimba	20.92	8	8.2
Nyegezi*	0	8	n.a
Igogo	23	9	9.0
Mkuyuni	19.45	8	7.6
Pamba	2	10	0.8
Nyamagana	12.5	4	4.9
Mirongo	2.09	3	0.8
Isamilo	13.5	11	5.3
Mabatini*	0	6	n.a
Mbugani	4	6	1.6
Mahina	24	9	9.4
Mhandu*	0	11	n.a
Igoma	41	14	16.02
Kishili*	0	12	n.a
Total	256	175	100

* These are new wards their areas are included in their former wards

Source: City Director's Office, Land and Natural Resources Department, Mwanza City, 2016

1.3.0 Climate and Soil

1.3.1 Climate

Mwanza City lies at an altitude of 1,140 metres above the sea level with mean temperature ranges between 25.7OC and 30.2OC in hot season and 15.40C and 18.60C in the cooler months. The City also experiences the average annual rainfalls between 700 and 1000mm falling in two fairly distinct seasons, short and long rainfalls. The short rain season occurs between the months of October and December and long rain season last between February and May.

1.3.2 Topography

The topography of Mwanza City is characterized by gently undulating granites and granodiorite physiography with isolated hill masses and rock inselbergs. It is also characterized by well-drained sandy loamy soil generated from coarse grained cretaceous. The vegetation cover is typical savannah with scattered tall trees and tall grass.

1.4 Agro-Economic Zone

The status of the City causes agriculture-Economic Zone to be not extensive to date. There is only 21 square hectares suitable for irrigation. Currently, an urbanization process transformed the extensive Irrigation system to simple irrigation along the lake shores and some inland areas. Irrigation is mostly used in vegetable, fruits and maize production. The main areas where agriculture is practiced include; Kishili, Lwanhima, Buhongwa and Mkolani wards respectively. However, production of vegetables and fruits is increasing due to higher market demand within the city, whereas, a number of tons of vegetables and fruits are transported from other areas such as Kagera, Geita and Sengerema.

1.5 Population

Population is very important due to that it's a source of labour for the production of goods and services also provide market for goods and services, also the following are considered as the parameters of economic development; size, structure, distribution and quality of a population.

1.5.1 Ethnic Groups

Mwanza city council is one of fast growing city in Tanzania experiencing fast population growth by both natural increase and migration. As a result, there are varieties of ethnic

groups living in the city. The major ethnic groups are Sukuma, zinza, kerewe, Kara, haya and kurya, though are other minority ethnic groups such as Nyamwezi, Arabs, Hindi and other Asians which they speaks their native languages along with Swahili are also found in Mwanza city council (Table 1.3).The important thing to note is that the Sukuma tribe has sub ethnic groups such as Bakamba, Bakwimba, Bagolo, Baminza, Bajigaba, Balungu, Babasana, Bahwela, Bakwaya, Nyantuzu and many others, but all of them speak same native language of [kisukuma](#) along with [kiswahili](#).

Table 1.3 Major ethnic groups of people by Ward, Mwanza City Council; 2015

Ward	No. of Group	List of Five Major Groups
Buhongwa	4	Sukuma, Zinza, Wakerewe and Jita
Lwanhima	3	Sukuma, Zinza and Kerewe
Mkolani	3	Sukuma, Zinza and Kerewe
Luchebele	3	Sukuma, Zinza and Kerewe
Butimba	3	Sukuma, Zinza and Kerewe,
Nyegezi	4	Sukuma, Zinza, Kerewe and Kara
Igogo	4	Sukuma, Zinza, Kerewe and Haya
Mkuyuni	3	Sukuma, Zinza, Kerewe and kurya
Pamba	3	Sukuma, Zinza, Kerewe and jita
Nyamagana	3	Sukuma, Zinza, Kerewe and haya
Mirongo	4	Sukuma, Zinza, Kerewe and jita
Isamilo	4	Sukuma, Zinza, Kerewe and kurya
Mabatini	4	Sukuma, Zinza, Kerewe and Haya
Mbugani	4	Sukuma, Zinza, Kerewe and kurya
Mahina	4	Sukuma, Zinza, Kerewe and jita
Mhandu	4	Sukuma, Zinza, Kerewe and Kara
Igoma	4	Sukuma, Zinza, Kerewe and Haya
Kishili	4	Sukuma, Zinza, Kerewe and Jita
Total	5	Sukuma, Zinza, Wakerewe, Kurya, Haya and Jita

Source: City Executive Director's Office, Administration Department, Mwanza City, 2016

1.5.2 Population Size and Growth

According to the 2002 and 2012 Population Censuses reports, the population of Mwanza City increased from 241,923 (119,617 male and 122,305 female) in 2002 and reached 363,452 (177,812 male and 185,578 female) in 2012 with the annual natural growth rate of 3.0 percent.

At ward level, Table 1.4 shows the highest population increase was recorded in Buhongwa ward with an inter-censual increase of 121.7 percent between 2002 and 2012. It was followed by Mahina (85.5 percent), Mkolani (67.8 percent), Igoma (56.5 percent), Mkuyuni (41.6 percent) and lowest increase was recorded in Isamilo ward (35.6 percent). Table 1.4 also shows that wards such as Mirongo, Igogo and Nyamagana had negative population increase of 44.9 percent, 0.2 percent respectively in 2012. The main reason, among others, is the changing usage of dwellings from residential to commercial buildings in these wards causes the tenants to migrate to other wards in the city. One general observation from these data is absence or lack of data to new wards with marked (*) which were established after census period. The data for these wards are included in their former wards.

Table 1.4 Population Distribution by Sex and by Ward, Mwanza City Council; 2002 and 2012

Ward	2002			2012			Population Change	
	Male	Female	Total	Male	Female	Total	Number	Percent
Buhongwa	5,866	6,169	12,035	12,789	13,892	26,681	14,646	121.7
Lwanhima*							0	
Mkolani	9,472	9,714	19,187	15,716	16,483	32,199	13,012	67.8
Luchehelele*							0	
Butimba	21,067	18,415	39,482	24,287	22,657	46,944	7,462	18.9
Nyegezi*							0	
Mkuyuni	6,598	6,663	13,261	9,163	9,617	18,780	5,519	41.6
Igogo	15,524	15,723	31,247	13,374	13,929	27,303	-3,944	-12.6
Pamba	11,667	11,793	23,460	11,411	12,108	23,519	59	0.3
Nyamagana	3,072	2,745	5,817	2,961	2,846	5,807	-10	-0.2
Isamilo	8,791	9,065	17,856	11,752	12,406	24,220	6,364	35.6
Mirongo	2,687	2,625	5,312	1,478	1,447	2,925	-2,387	-44.9
Mbugani	18,878	18,426	37,304	19,010	20,031	39,041	1,737	4.7
Mabatini*							0	
Mahina	13,702	18,345	32,047	28,550	30,887	59,437	27,390	85.5
Mhandu*							0	
Igoma	17,817	18,345	36,162	27,321	29,275	56,596	20,434	56.5
Kishili*							0	
Total	119,617	122,305	241,923	177,812	185,578	363,452	121,529	50.2
Percent	49.4	50.6	100	48.9	51.1	100		

** New wards were not exists in the 2012 census, their data are included to their former wards.*

Source: NBS, Compiled Data from 2002 and 2012 Population Census Reports, Mwanza Region, 2016

1.5.3 Population Density

Mwanza city, like other councils in Mwanza region, has increased its population in 2012 compared to 2002 population, as a result, experienced high population density compared to other councils of Mwanza region. As stated above, high population increase, among other reasons, has been caused byimmigration of people from other councils within and outside Mwanza region to look for green pastures, due to availabilities of employment opportunities, education and health facilities. Table 1.6 shows that population density increased from 945 persons per Sq. km in 2002 to 1,420 persons per Sq. Km in 2012.

At ward level, Table 1.6 shows that Pamba ward with 11,730 persons per Sq. Km had the highest population density in 2002, although had only 6.5 percent of population of Mwanza city council. It was followed by Mirongo (9326 people per Sq. Km), Mbugani (8,544 persons per Sq. Km) and Butimba (1,887 persons per Sq. Km). The least populous ward was Buhongwa with only 267 persons per Sq. Km. in 2012, again, Pamba, Mirongo and Bugani were the first, second and third populous wards with 11,760 persons, 11,589 persons and 9,761 persons per Sq. Km respectively. Buhongwa continues to be the least populous ward in the City by having only 593 persons per Sq. Km (Table 1.6). One general observation from these data is that those populous wards were attributed by their land areas rather than population sizes.

Table 1.5 Population Distribution and Population Density by Wards, Mwanza City Council, 2002 and 2012

Ward	Land Area (Sq. Km)	Population (2002)	Population Density 2002	Population (2012)	Population Density 2012	Percent Share of Population, 2012
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Buhongwa	45	12,035	267	26,681	593	7.3
Lwanhima*	0			0	0	
Mkolani	48.54	19,187	395	32,199	663	8.9
Luchehele*	0			0	0	
Butimba	20.92	39,482	1,887	46,944	2,244	12.9
Nyegezi*	0			0	0	
Igogo	23	13,261	577	18,780	817	5.2
Mkuyuni	19.45	31,247	1,607	27,303	1,404	7.5
Pamba	2	23,460	11,730	23,519	11,760	6.5
Nyamagana	12.5	5,817	465	5,807	465	1.6
Mirongo	2.09	17,856	8,544	24,220	11,589	6.7
Isamilo	13.5	5,312	393	2,925	217	0.8
Mabatini*	0			0	0	0.0
Mbugani	4	37,304	9,326	39,044	9,761	10.7
Mahina	24	32,047	1,335	59,437	2,477	16.4
Mhandu*	0			0	0	
Igoma	41	36,162	882	56,596	1,380	15.6
Kishiri*	0			0	0	
Total	256	241,923	945	363,455	1,420	100.0

* New wards were not exists in the 2012 census, their data are included to their former wards.

Source: NBS, Compiled Data from 2002 and 2012 Population Census Reports, Mwanza Region, 2016

1.5.4 Population Structure(Age and Sex)

Mwanza City, like other councils in Tanzania Mainland, has population structure similar to pyramid with broad based structure. Table 1.7 shows that 39.6 percent of population is young population aged group 0 – 14 years with 15 percent of them are under five years, 12.9 percent aged 5 to 9 years and 11.7 percent age group 10 – 14 years. The youth population of broad age group of 15 – 34 years accounted for 40.5 percent while aged population with age between 35 and 85 and more years accounted for only 19.9 percent of total population in Mwanza city.

Looking at sex difference, two different scenarios experienced from the population structure of Mwanza city. Table 1.7 shows that more males dominated in the age of 35 years and above with exception of age group 45 – 49 years. Domination of female population is more so on at age 5 to 34 years and the overall percentage share of population among sexes was more so on for female population (51.1 percent) than male population (48.9 percent).

Table 1.6 Population Distribution by Age and Sex, Mwanza City Council, 2012

Age Group	Male	Percent	Female	Percent	Total	Percent Total
0 - 4	27,334	50.0	27,294	50.0	54,628	15.0
5 - 9	23,048	49.2	23,779	50.8	46,827	12.9
10 - 14	20,076	47.4	22,283	52.6	42,359	11.7
15 - 19	19,636	45.1	23,910	54.9	43,546	12.0
20 - 24	19,331	46.2	22,470	53.8	41,801	11.5
25 - 29	16,414	48.0	17,801	52.0	34,215	9.4
30 - 34	13,792	49.9	13,867	50.1	27,659	7.6
35 - 39	11,440	51.9	10,593	48.1	22,033	6.1
40 - 44	8,363	55.2	6,791	44.8	15,154	4.2
45 - 49	5,588	48.6	5,906	51.4	11,494	3.2
50 - 54	4,294	56.0	3,380	44.0	7,674	2.1
55 - 59	2,637	55.3	2,131	44.7	4,768	1.3
60 - 64	2,266	55.1	1,843	44.9	4,109	1.1
65 - 69	1,247	54.0	1,063	46.0	2,310	0.6
70 - 74	1,010	51.8	941	48.2	1,951	0.5
75 - 79	608	50.9	587	49.1	1,195	0.3
80+	728	42.1	1,001	57.9	1,729	0.5
Total	177,812	48.9	185,640	51.1	363,452	100.0

Source: NBS, the 2012 Population Census Report, Mwanza Region, 2016

1.5.5 Dependency and Sex Ratios

The Age Dependency Ratio gives the number of persons aged 0 – 14 years and those aged 65 years and above for every 100 persons aged 15 – 64 years. In 2012, Mwanza city had a total of 150,999 dependants with more young population aged less than 15 years (39.6 percent) and only 2.0 percent elder people, depending on 212,453, equivalent to 58.4 percent active population. As a result, age working group in Mwanza region supporting small number of dependants and causes dependency ratios to become moderate, 77 dependants per 100 active persons in the region (Table 1.8).

Age Sex Ratio is an indicator gives the number of male population for every 100 females in that age group. Table 1.8 shows that sex ratios at age groups 40 – 44 and all age groups from 50 to 79 years were above 100, meaning that male population were higher than female

population while rest of age groups except 0 – 4 their sex ratios were below 100, meaning that in these age group population was more so on for females than male population. However, the sex ratio for Mwanza city was 96 males per 100 females, portraying that the council has more females than males (Table 1.8).

Table 1.7 Sex Ratios by Age Group, Mwanza City; 2012

Age Group	Male	Female	Sex Ratio	Total	Percent Total
0 - 4	27,334	27,294	100	54,628	15.0
5 - 9	23,048	23,779	97	46,827	12.9
10 - 14	20,076	22,283	90	42,359	11.7
Sub Total	70,458	73,356	96	143,814	39.6
15 - 19	19,636	23,910	82	43,546	12.0
20 - 24	19,331	22,470	86	41,801	11.5
25 - 29	16,414	17,801	92	34,215	9.4
30 - 34	13,792	13,867	99	27,659	7.6
35 - 39	11,440	10,593	108	22,033	6.1
40 - 44	8,363	6,791	123	15,154	4.2
45 - 49	5,588	5,906	95	11,494	3.2
50 - 54	4,294	3,380	127	7,674	2.1
55 - 59	2,637	2,131	124	4,768	1.3
60 - 64	2,266	1,843	123	4,109	1.1
Sub Total	103,761	108,692	95	212,453	58.4
65 - 69	1,247	1,063	117	2,310	0.6
70 - 74	1,010	941	107	1,951	0.5
75 - 79	608	587	104	1,195	0.3
80+	728	1,001	73	1,729	0.5
Sub Total	3,593	3,592	100	7,185	2.0
Total	177,812	185,640	96	363,452	100.0

Source: NBS, the 2012 Population Census Report, Mwanza Region, 2016

CHAPTER TWO

Socio–Economic Development of Mwanza City Council

2.0 Introduction

Chapter Two highlights the socio-economic performance of Mwanza city and its poverty status. The economic indicators used include the Gross Domestic Product (GDP), Per Capita Gross Domestic Product and the main sources of income for the residents of Mwanza city. The non-income indicators cover food security, health and education development, housing conditions and its amenities inside and outside.

2.1 GDP and Per Capita GDP

Mwanza city, like other districts of Mwanza region, has never computed its GDP and Per capita GDP since it was established. Nevertheless, Mwanza city makes significant contribution to the Regional GDP. The 2011 Economic Survey Report shows that Mwanza region's share of the national GDP for the year 2016 was only 9.3 percent equivalent to TShs. 8,452,013 million while per capita income of regional residents was estimated to be TShs. 2,004,353, (equivalent to US\$ 911.1 at a rate of TZS 2,200 per USD). The regional GDP was TShs. 4,016,270 million in 2010 and Tshs. 6,654,600 million in 2013.

2.2 Non-Income Indicators

As stated earlier, beside GDP and per capita GDP, there are number of indicators that portray the level of development of the City. These indicators include main source of cash income, food security and consumption patterns, education attainment, adult literacy rate, health indicators and as well as housing conditions and its amenities inside and outside dwellings, such as access to safe drinking water, household's assets, and sources of energy for lighting and cooking. Housing conditions include types of construction materials for roofing, walling and flooring.

2.2.1 Main Sources of Cash Income

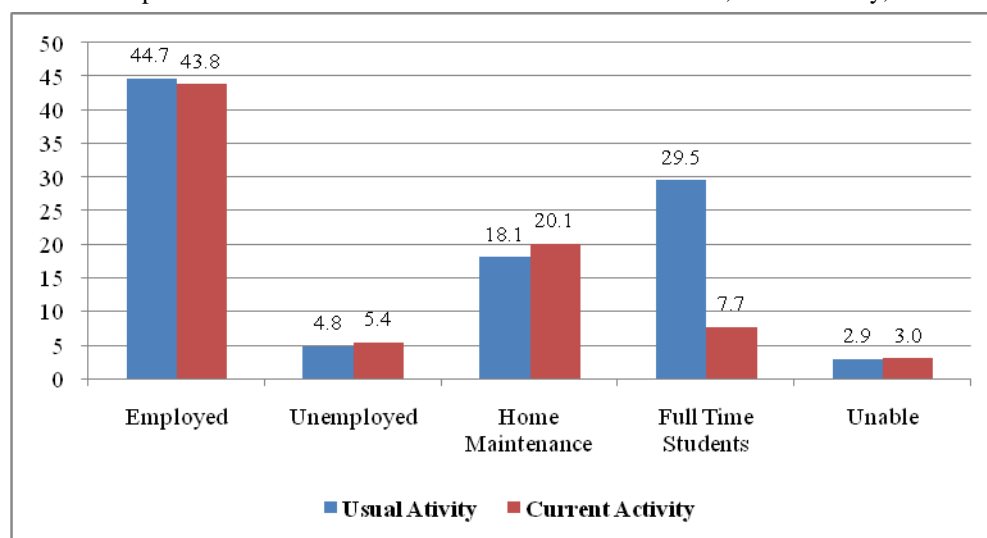
The 2012 Population and Housing Census Report show that Mwanza City Council, like its twin council of Ilemela Municipal, has vast economic opportunities due to diversification of industries performed in the City. Commercial food crops and forestry was reported to be the main source of income in the council engaged 13.9 percent of residents. It was followed by selling of raw food or uncooked food (13.6 percent), trade and commerce (12.9 percent of population), manufacturing (11.7 percent), construction (7.2 percent), services for food hotel and lodges (5.5 percent), domestic services (5.0 percent), haulage and storages (4.7 percent), administration and security services (3.3 percent), education services (3.1 percent) and fishing, hunting, livestock and other related (2.5 percent).

Diversifications of the economy of Mwanza city were also evidenced by variations of main occupation which person spent most of his/her working time in the process of the production of goods and services. The 2012 population census shows that service workers, shop and stall sales workers was the main occupation in Mwanza city, employed 21.9 percent of residents aged 10 years and above. It was followed by crafts and related workers (16.1 percent), elementary occupation (12.6 percent), farmers (12.5 percent) street venders and related workers (9.2 percent), technicians and associate professionals (5.7 percent). Plant machine operators and assemblers including drivers employed 4.7 percent of Mwanza residents, professionals (4 percent) and small business managers (3.6 percent) while other common occupations such as fishermen, livestock keepers, legislators, administrators and managers, clerks have employed less than 2 percent each.

As a result there was a small difference of unemployment levels between usual and current economic activities performed by Mwanza city residents as revealed by the 2012 population census report. Usual economic activity, according to census definition is any activity a person had been engaged during the 12 months prior to the census night, while current economic activity has the same definition but with referred to the period of seven days prior to the census night. Figure 2.1 shows that unemployment rate for current economic activities

performed by city residents was slightly higher (5.4 percent) than for usual economic activities (4.8 percent). Small variations were also observed on employment status of Mwanza city residents and those persons who were not able to work due to different reasons. This means that there was no significant different of involvement of people between a week or a years in doing economic activities.

Figure 2.1 Proportional Distributions of Usual and Current Activities, Mwanza City, 2012



Source: NBS, 2012 Population and Housing Census Report, Mwanza Region, 2016

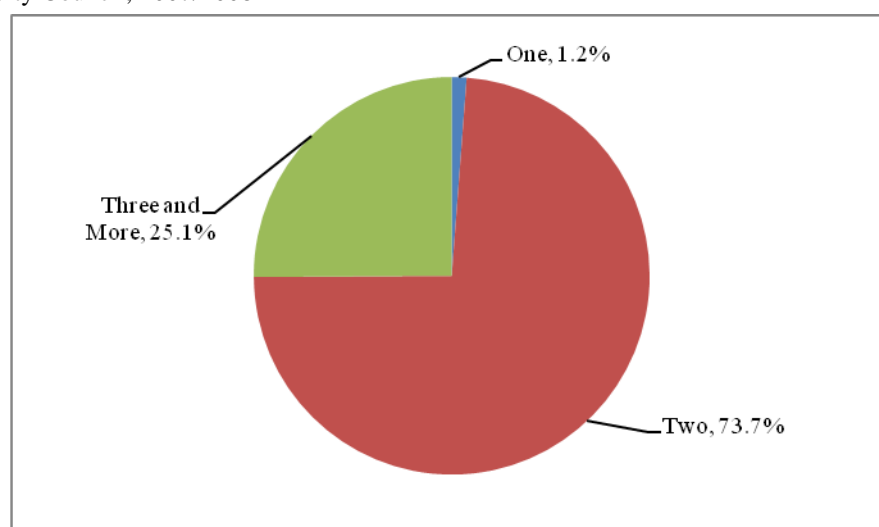
2.2.2 Food Security and Food Poverty

In Mwanza City Council, although Mwanza region experienced food insecurity, it has never observed that experience. Availability of grains such as maize, sorghum, millets and paddy together with protein including livestock and fish, small fish and related species make the council as among a few councils with plenty of foods varieties in the region. Food consumption as an indicator for poverty observed on the number of meals consumed in a day and the frequencies of protein intake per week, particularly meat and fish, are most superior in measuring poverty levels of the households.

2.2.2.1 Number of Meals per Day

The National Sample Census of Agriculture 2007/08 reveals that the majority of households in Mwanza city, as observed in Ilemela council, normally have two meals per day (73.7 percent) and at least a quarter of households have three and more. Moreover, the results also indicate that very few households have one meal (1.2 percent). These results indicate that food insufficiency affects a very small proportion of households in the council (Figure 2.2). One general observation on these data is that in 2007/08 both Ilemela municipal and Mwanza city were the same council.

Figure 2.2 Percentage Distribution of Rural Agricultural Households by Meals Taken per Day, Mwanza City Council; 2007/2008



Source: NBS, National Sample Census of Agriculture, Mwanza region, 2007/08.

2.2.3.2 Protein (Meat and Fish) Intake

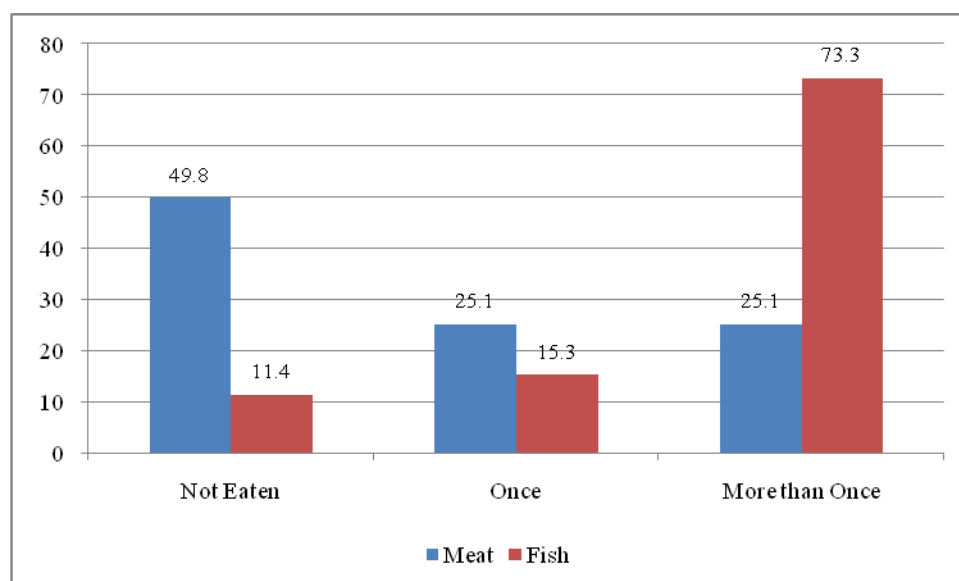
Protein intake among people in Mwanza city council shows fish preference than meat. The results of the 2007/08 National Sample Census of Agriculture shows that, regardless of availability of different types of meat, majority (49.8 percent) of the households never consumed meat during the week preceding the census. At least a quarter of households (25.1 percent) had meat once and more than once during the respective week.

The observation is different for fish consumption; majority (73.3 percent) of households in Mwanza city consumed fish more than once during the week preceding the census. Very few

households had fish (15.3 percent) once and those who had never consume fish during the week preceding the census were only 11.4 percent (Figure 2.3).

The results show that only small proportion of residents of Mwanza city had never consumed protein (11.4 percent) a week prior night of census, almost a quarter of them eat once and 73.3 percent ate more than twice a week. One general observation from these data is that majority of Mwanza residents preferred to eat fish than meat, although both are available at reasonable prices.

Figure 2.3 Percentage Distribution of Rural Agricultural Households by Frequency of Fish/Meat Consumption per Week by Households, Mwanza City Council, 2007/2008



Source: NBS, National Sample Census of Agriculture, Mwanza region, 2007/08.

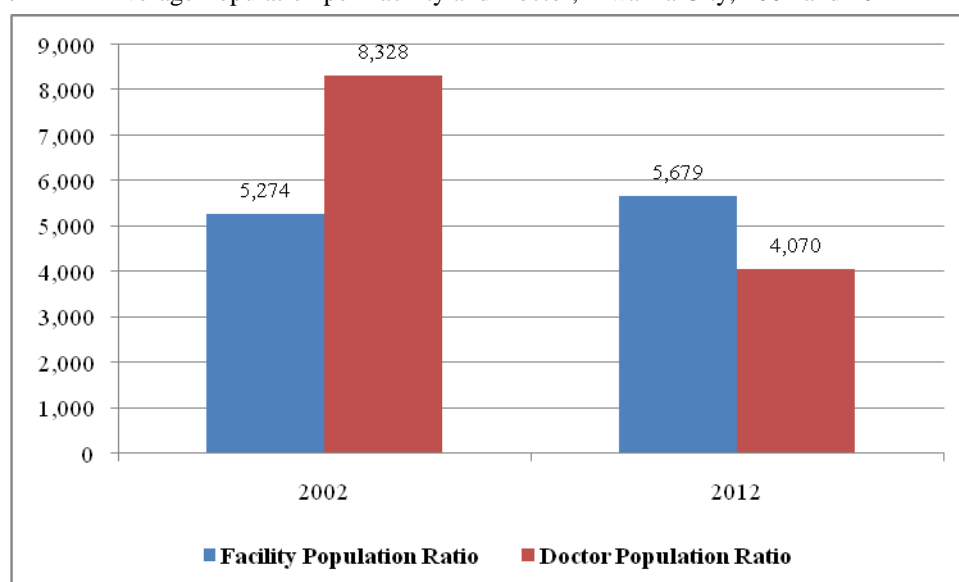
2.2.3 Health Indicators

The residents of Mwanza city have relatively good access to social services like health, education and water than rural councils in Mwanza region. However, the HIV/AIDS pandemic is among the diseases that have had a negative impact to the health of its residents resulted to high rate of morbidity, mortality, orphanhood and widowhood. The health situation of the City people can also be observed through other proxy health indicators include Infant Mortality Rate (number of infant deaths per 1,000 infants), Children under Five Years

Mortality Rate (infants and children deaths per 1,000 live births) and Doctor/Population Ratio (number of people per doctor).

According to the results of the 2002 and 2012 Population and Housing Censuses, Mwanza city had the best ratios of population per facility and doctor. Figure 2.4 shows that average population per doctor improve from 8,328 persons per doctor to 4,070 persons in 2012 while average population per facility, regardless to population increase in 2012, has slightly increased from 5,274 people in 2002 to 5,679 persons in 2012.

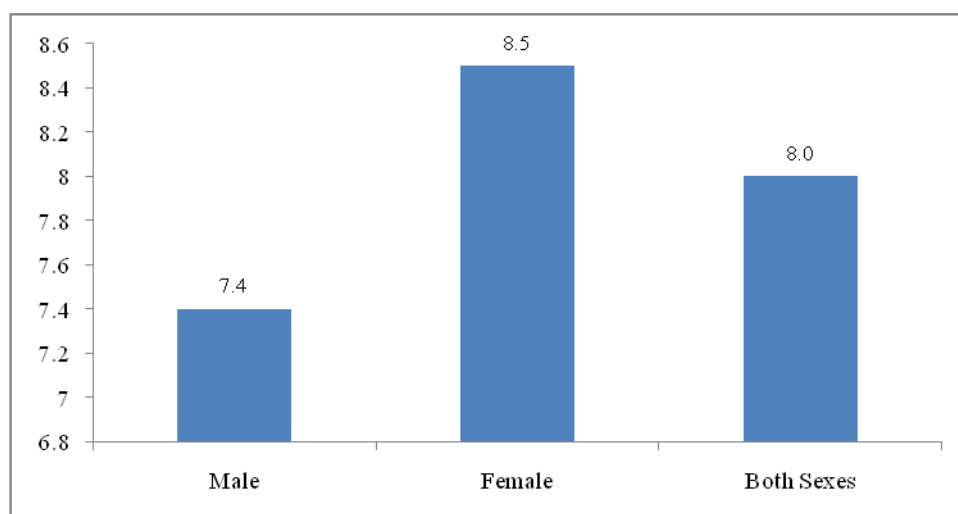
Figure 2.4 Average Population per Facility and Doctor, Mwanza City, 2002 and 2012



Source: NBS; The 2002 and 2012 Population Census' Results; and Mwanza Region Report.

The impact of HIV/AIDs pandemic disease have also replicated to the high rates of orphans experienced in 2012 population census. The City is among leading councils with highest rates of orphans in the Region as well as a country (Figure 2.5). There is a need for the City management to conduct a survey in order to know the factors contributing to have highest rates of orphans and come up with solutions.

Figure 2.5 Percentage Distribution of Orphans by Sex, Mwanza City, 2012

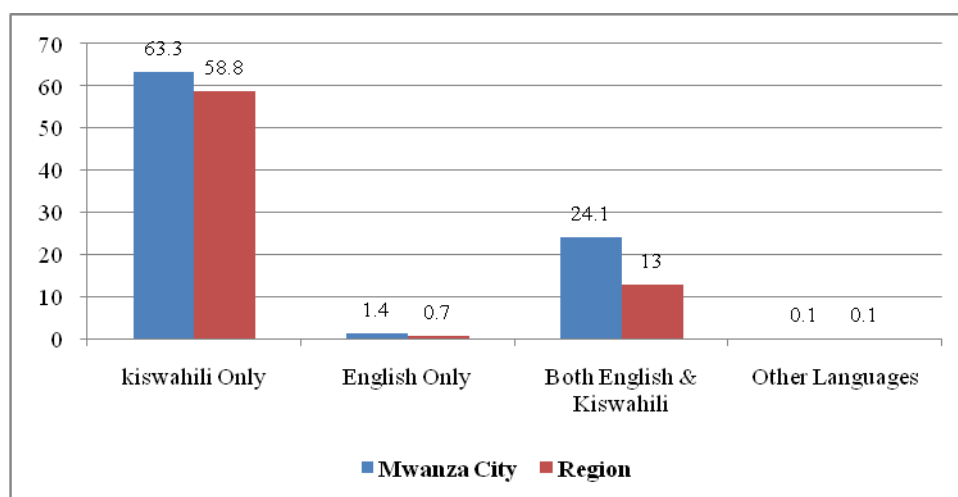


Source: NBS; The 2012 Population Census Results; and Mwanza Region Report. 2016

2.2.4 Literacy Rate and Literacy in Different Languages

The quality and wellbeing of people can also be quantified by the education status. The 2012 Population Census results show that Mwanza city has the highest literacy rate of persons aged five years and above in Mwanza region being 88.8 percent. It is followed by Illemela municipal council (88.3 percent) and Ukerewe district (74.6 percent) while Kwimba is the least council with only 61.9 percent of residents who are literate. However, the City is still has a large proportion of its residents who cannot be able to read and write any language (11.1 percent). With regard to literacy in different languages, Figure 4 shows that the literacy rate was highest in Kiswahili only (63.3 percent) followed by those literate in both Kiswahili and English (24.1 percent) and was lowest for other languages (0.1 percent). One general observation from these data is that literacy rate in different language is higher than the region literacy (Figure 2.6).

Figure 2.6 Percentage Distribution of Population Aged Five Years and Above by Literacy Status, Mwanza City, 2012 Population Census



Source: NBS, 2012 Population and Housing Census Report, Mwanza Region, 2016.

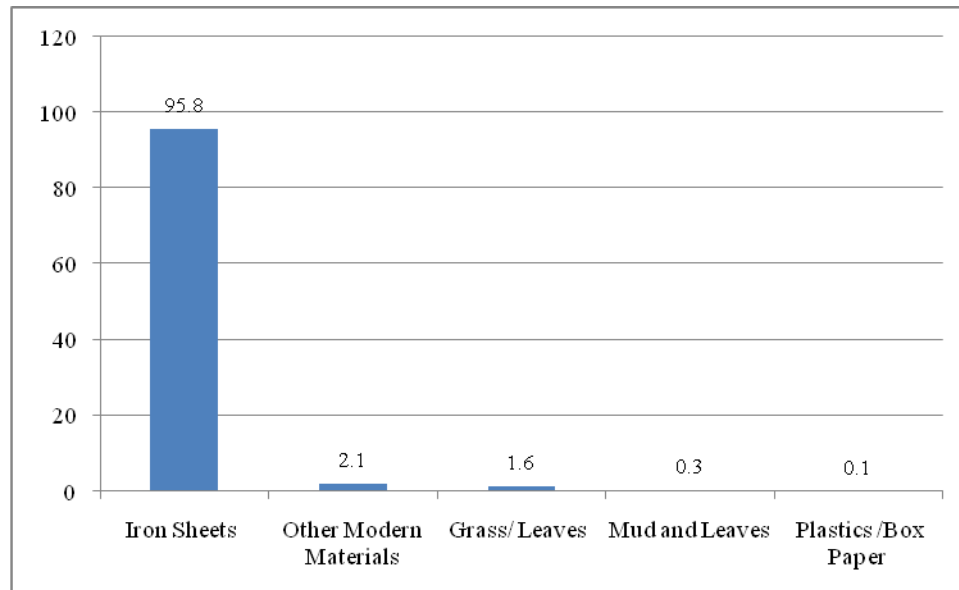
2.2.5 Housing Conditions

Housing condition is a key non-indicator of poverty of households based on the durability and quality of the houses in terms of the building materials used for the main elements of houses, namely, the roof, the walls and the floor. The availability of social amenities in or around the house such as water supply, toilet facilities, ownership of assets, etc are also considered. It is evident from the census results that great improvement in housing condition has been made in Mwanza city between 2002 and 2012.

(i) Roofing Materials

The 2012 population and housing census results shows that almost 98percent of households have modern roofing materials, iron sheets (95.8 percent and others 5.1 percent), while only 1.6 percent of households thatched by grass or leaves (1.6 percent). Rest of roofing materials were used with insignificant proportions of households. Figure 2.7 shows the percentage of households by type of roofing material.

Figure 2.7 Percentage of Households by Type of Roofing Material, Mwanza city, 2012

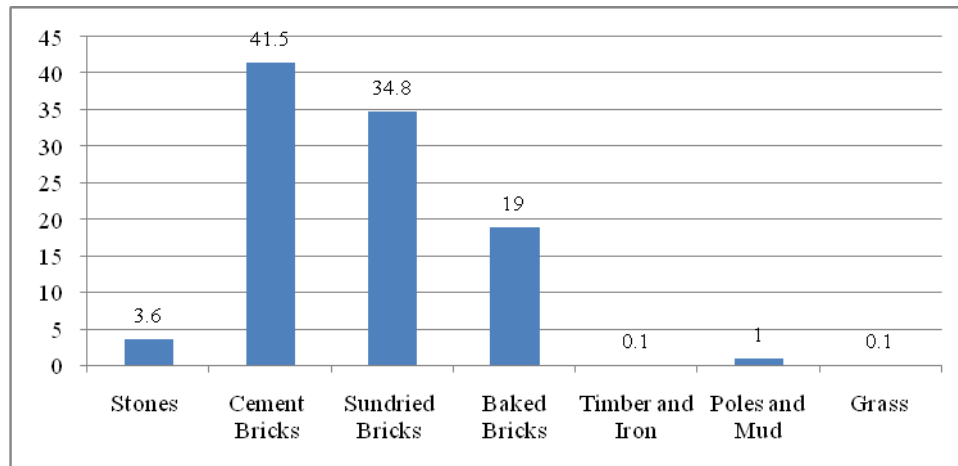


Source: NBS, The 2012 Population and Housing Census Report, Mwanza region, 2016

(ii) Walling Materials

Material used to construct walls of dwelling is another notable feature concerning the quality of dwellings and the same time measure the poverty status of the households. It is evidenced that there was a remarkable rise in the use of modern wall materials in 2012 compared to 2002. In 2012, 41.5 percent of households in Mwanza city build their walls by cement bricks, followed by sundried bricks (34.8 percent) and 19 percent of dwellings built walls by baked bricks. Only a percent of households used tradition materials such as mud and poles to build their walls while timber and iron together with grass accounted for 0.1 percent each (Figure 2.8).

Figure 2.8 Percentage of Households by Type of Wall Material, Mwanza City, 2012

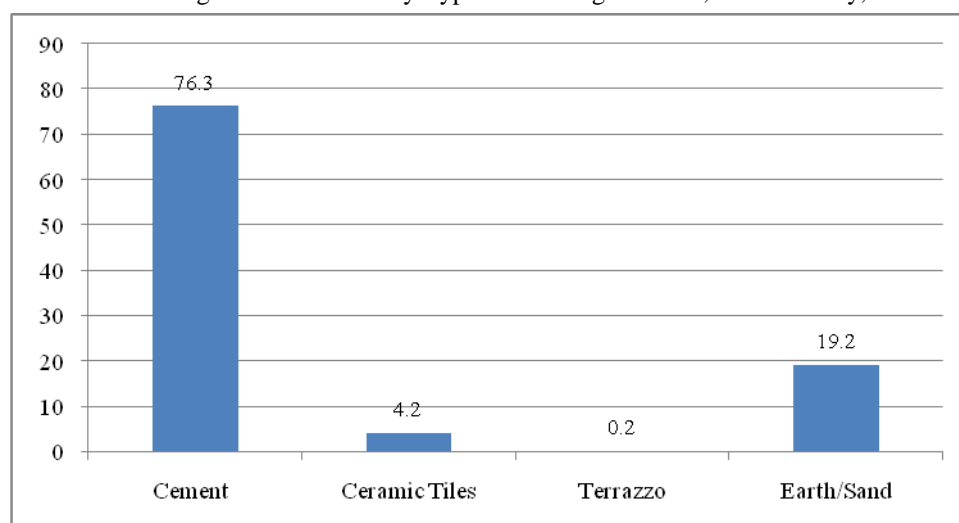


Source: NBS, The 2012 Population and Housing Census Report, Mwanza region, 2016

(iii) Flooring Materials

The status of floor can easily quantify by examining materials used. It is also evidenced that Mwanza city has done great achievement by residents to improve their dwellings in 2012 than was 2002. Figure 2.9 shows that most of household in Mwanza city used modern materials for flooring, 76.3 percent used cement and 4.2 percent used ceramic and or tiles as the flooring materials in 2012, while only 19.2 percent of households used earth or sand as flooring material.

Figure 2.9 Percentage of Households by Type of Flooring Material, Mwanza City, 2012:

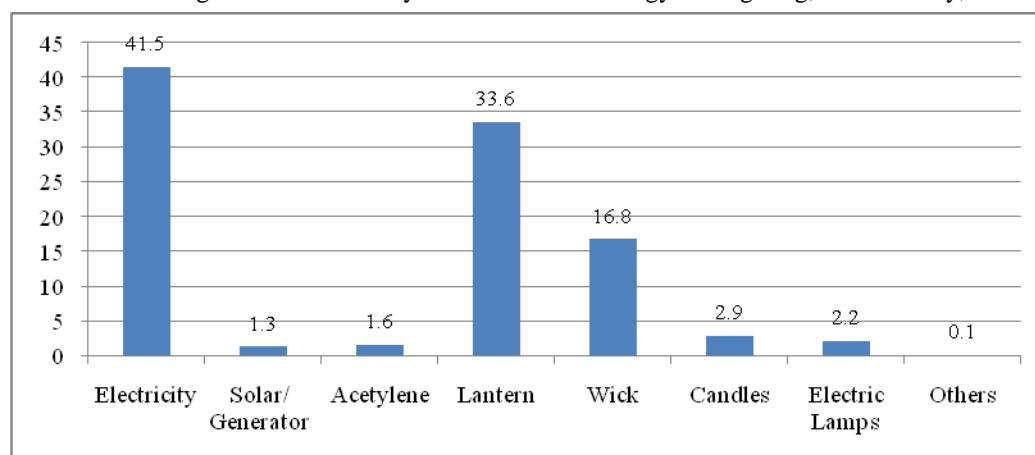


Source: NBS, The 2012 Population and Housing Census Report, Mwanza region, 2016

2.2.6 Sources of Energy for Lighting

Social amenities inside or outside dwellings have also been considered as prox-indicators for measuring poverty of private households, including energy sources for lighting and cooking, water supply, toilets and ownership of assets. The 2012 Population Census results have revealed that there has been a significant improvement in the proportion of households with access to electricity as a source of energy for lighting. Figure 11 shows that about 42 percent of total households use electricity as a source of energy for lighting followed by hurricane lamp (33.6 percent) and wick lamp (16.8 percent). Census results also highlight the increase use of modern energy source such as acetylene, solar power and electric torch or rechargeable lamp (Figure 2.10).

Figure 2.10 Percentage of Households by Main Source of Energy for Lighting,Mwanza City, 2012

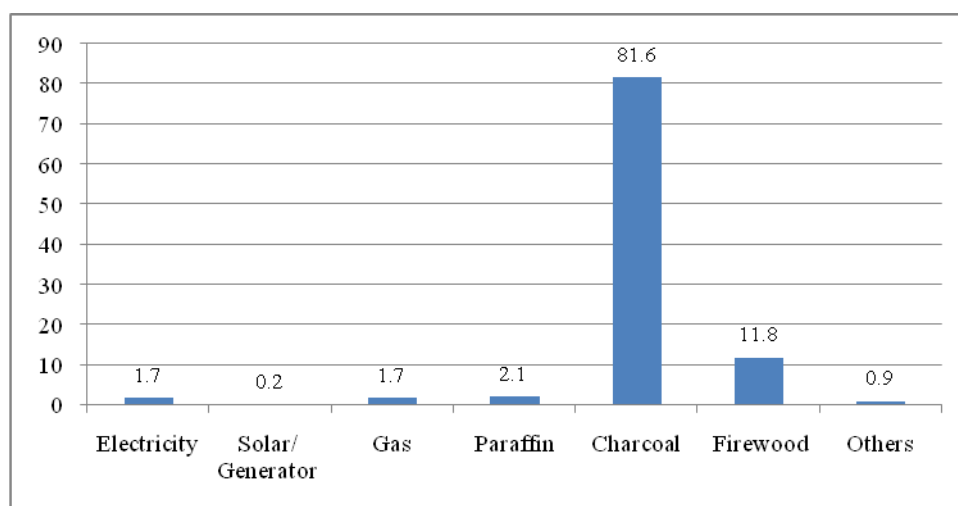


Source: NBS, The 2012 Population and Housing Census Report, Mwanza Region, 2016

2.2.7 Sources of Energy for Cooking

As reported in the Mwanza Region Profile of the 2012 Population and Housing Census Report, firewood remains as the most prevalent source of energy for cooking in Mwanza region. This is different to Mwanza city as according to the 2012 Population and housing Census, 81.6 percent of the households in the city use charcoal as the source of energy for cooking followed by firewood (11.8 percent). An interested findings show that there is a significant increase proportion for households using modern and/or environmental friendly source of energy for cooking such as electricity, solar energy and industrial gas. The city should know that the current practice if continues, deforestation and depletion of natural vegetation through using charcoal and firewood will destroy the nature and ecology of Mwanza region as a whole. Hence, measures should be taken to ensure that natural vegetation and ecology of the council are restored.

Figure 2.11 Percentage of Households by Main Source of Energy for Cooking,Mwanza city, 2007/08

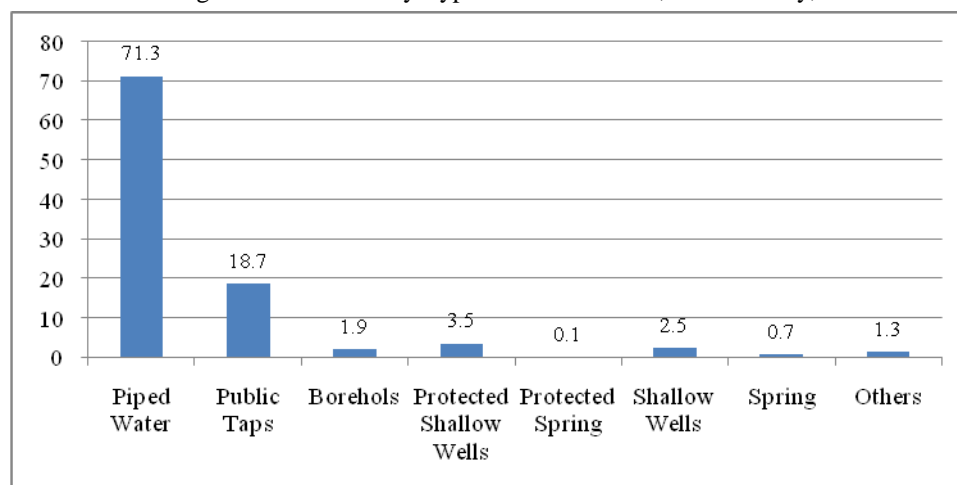


Source: NBS, National Sample Census of Agriculture, Tabora region, 2007/2008

2.2.8 Access to Clean Drinking Water

The topography and existence of Lake Victoria are the main reasons for the reliable sources of water in Mwanza city. The 2002 Population and Housing Census show that the piped water was the main source of drinking water in Mwanza city (71.3 percent) followed by public taps (18.7 percent), protect shallow wells (3.5 percent) and unprotect shallow wells (2.5 percent). However, the council has very small proportions of households who use boreholes, protected spring, springs and others such as surface water and rain water harvesting.

Figure 2.12 Percentage of Households by Type of Water Source, Mwanza City, 2012

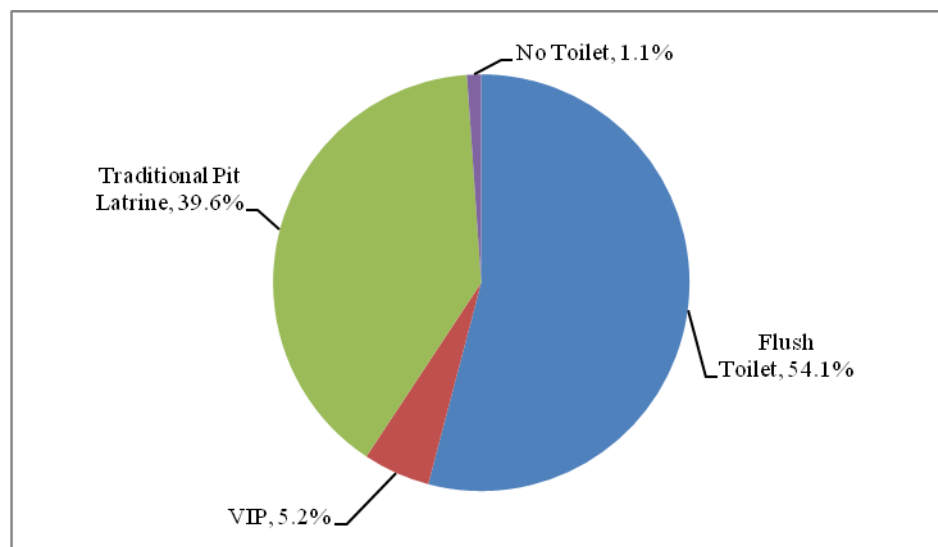


Source: NBS, 2012 Population and Housing Census Report, Mwanza region, 2016

2.2.9 Types of Toilets

Mwanza city, like other urban cities in the country, is well endowed with both improved and unimproved toilets facilities, the 2012 population and housing census shows Mwanza city with highest proportion of households with improved toilet facilities categorized as flush toilets (54.1 percent) and ventilated pit latrines (5.2 percent) while 39.6 percent of households in Mwanza city still use traditional pit latrines and 1.1 percent those with no toilets (Figure 2.12).

Figure 2.13 Percentage of Households by Type of Toilet Facility, Mwanza City, 2012

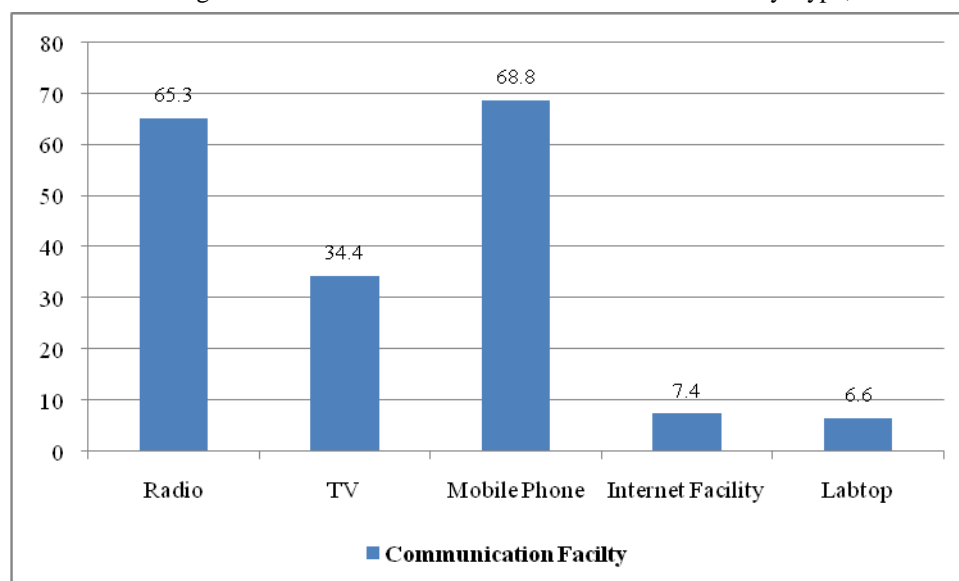


Source: NBS, 2012 Population and Housing Census Report, Mwanza region, 2016

2.2.9 Ownership of Assets

Economy of Mwanza city can also be accessed through ownership of modern communication and transport facilities, home appliances and implements. Figure 2.13 shows that proportion of private households that owned telephone both land line and mobile as main communication facility (68.8 percent) in 2012, Followed by radio (65.3 percent) and television (34.4 percent) in 2012. However, the ownership and accessibility of internet facility reached 7.4 percent (Figure 2.13). However, a mobile phone is the most owned asset in Mwanza city and has been used as a means of communication and media for private households.

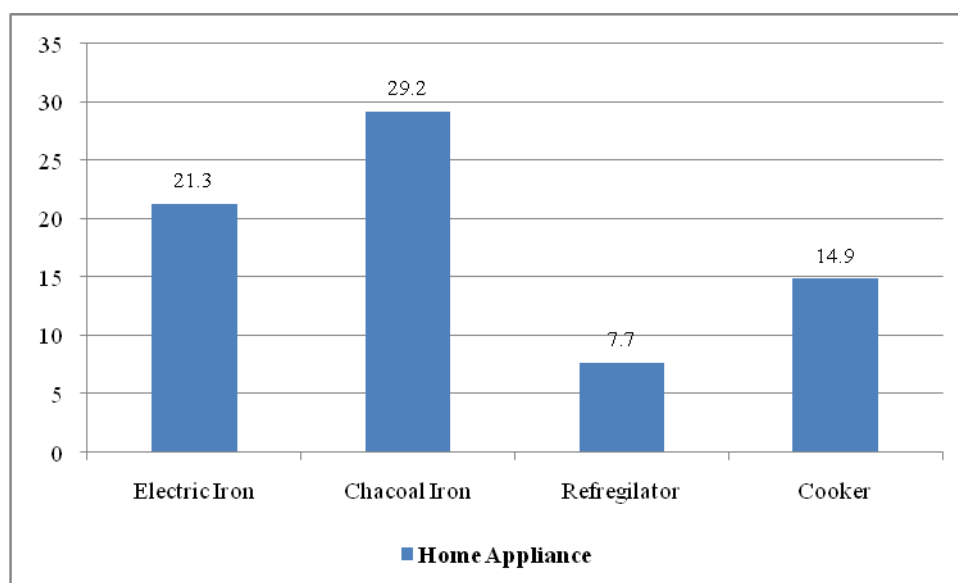
Figure 2.14 Percentage of Households Owned Communication Facilities by Type, Mwanza City, 2012



Source: NBS, Population and Housing Census, Mwanza Region Socio-economic Profile Report, 2012

Ownership of specified assets is a good indicator of household to evaluate its economic status. Great achievement on ownership of modern home appliances observed in 2012 than it was in 2002. The 2012 population census results also observe shifting of ownership of assets towards modern home appliances such as an electric or gas cooker (7.7 percent of households owned), fridge or refrigerators (14.9 percent) and an electric iron (21.3 percent) and charcoal iron (29.2 percent).

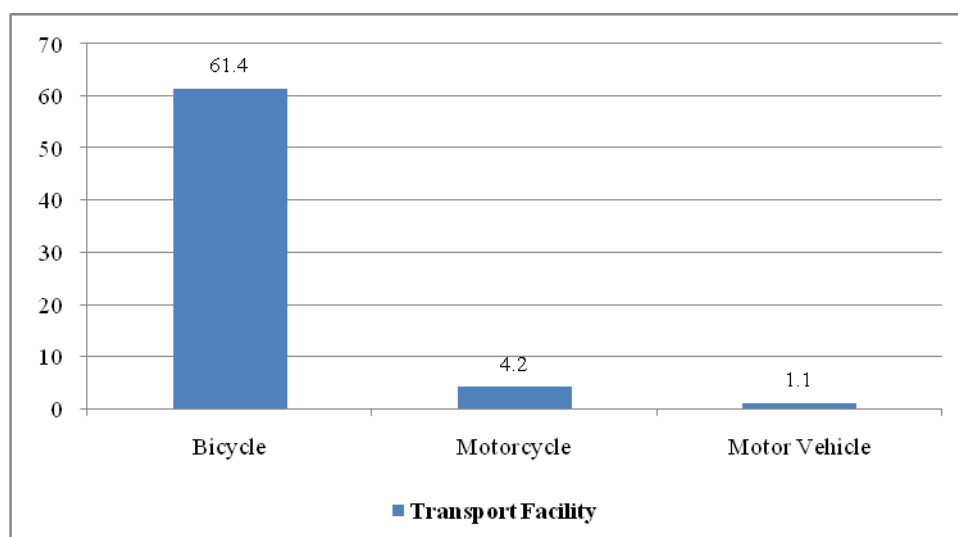
Figure 2.15 Percentage of Households Owned Modern Home Appliances by Type, Mwanza City, 2012



Source: NBS, Population and Housing Census, Mwanza Region Socio-economic Profile Report, 2012

Means of transport is another proxy indicator of poverty status of a household or region and even country. Figure 2.15 shows that bicycle is the most common means of transport of a household since 61.4 percent of households in Mwanza city own bicycle followed by motorcycle (4.2 percent) while only 1.1 percent of households owned motor vehicle in 2012.

Figure 2.16 Percentage of Households Owned Transport Facility by Type, Mwanza City, 2012



Source: NBS, Population and Housing Census, Mwanza Region Socio-economic Profile Report, 2012

2.3 Land Development

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

The available data show that demand for surveyed land plots has exceeded the supply in the last five years in Mwanza city. By the end of 2013 the cumulative numbers of building plots surveyed werein 19 wards of Mwanza city. In 2015 however, the number of plots surveyed decreased tobut there were total number of plots allocated as it was in 2013. It is obvious that lack of surveyed building plots in most cases create a problem of crowded environment and mushrooming of slums or shanty town at the end.

Table 2.1 Demand and Supply of Building Plots with Title Deed by Ward, Mwanza City; 2013 and 2015

Ward	2013				2015			
	No.of Plots Surveyed up to 2013	No. of Plots Allocated up to 2013	No. of Plots Offered Title Deed up to 2013	Percent of Plots with Title Deed by 2013	No.of Plots Surveyed from 2014 to 2015	No. of Plots Allocated from 2014 to 2015	No. of Plots Offered Title Deed from 2014 - 2015	Percent of Plots with Title Deed from 2014 to 2015
Buhongwa	1217	705	102	0	301	214	29	0
Lwanhima	703	43	43	0	200	141	21	0
Mkolani	223	21	21	0	112	96	20	0
Luchelele	0	0	0	0	0	0	0	0
Butimba	0	0	0	0	0	0	0	0
Nyegezi	421	40	40	0	49	49	11	0
Igogo	0	0	0	0	0	0	0	0
Mkuyuni	23	4	4	0	0	0	0	0
Pamba	0	0	0	0	0	0	0	0
Nyamagana	0	0	0	0	0	0	0	0
Mirongo	0	0	0	0	0	0	0	0
Isamilo	41	41	7	0	91	91	1	0
Mabatini	0	0	0	0	0	0	0	0
Mbugani	0	0	0	0	0	0	0	0
Mahina	214	214	8	0	16	0	0	0
Mhandu	1302	1302	82	0	82	82	8	0
Igoma	585	585	26	0	139	84	12	0
Kishiri	308	308	51	0	209	148	21	0
Total	5037	4525	384		1199	905	132	

Source: City Executive Director's Office –Land, Natural Resources and Environment Department, Mwanza City Council; 2016

2.4 Employment Status at the Council

The performance of the City mainly based on both human and financial resources. Mwanza city according to Table 2.2 shows that education sector covers 80 percent (49.2 percent primary teachers and 38.4 percent secondary teachers) out of 2,509 employees of Mwanza city in 2011, it was followed by health sector (9.4 percent) and agriculture and livestock (2

percent), while other sectors accounted for only a percent. The number of employees of key sectors has reached 3,391 in 2013 and became 3,680 in 2015. Again education sector had the highest percentage of employees in the city.

Table 2.2 Number of Government Employees in Key sectors of Economy, Mwanza city; 2011, 2013 and 2015

Key Sector	2011		2013		2015		Change of Staff 2011 and 2015	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Education - Primary Teachers	1,234	49.2	1,758	51.8	1,803	48.9	569	46.1
Education - Secondary Teachers	963	38.4	1,166	34.4	1,586	43.0	623	64.7
Health sector	237	9.4	393	11.6	210	5.7	-27	-11.4
Agriculture and Livestock sector	50	2.0	44	1.3	45	1.2	-5	-10.0
Natural Resource sector	14	0.6	14	0.4	18	0.5	4	28.6
Planning Stat. and Evaluation	6	0.2	6	0.2	7	0.2	1	16.7
Works	5	0.2	10	0.3	19	0.5	14	280.0
Total	2,509	100.0	3,391	100.0	3,688	100.0	1,179	47.0

Source: City Director's Office (City Administrative Officer), Mwanza City, 2016

CHAPTER THREE

Productive Sectors

3.0 Overview

Chapter three explains the performance of productive sectors in the city council. These sectors include agriculture, livestock, natural resources, mining, industrial development and the land sector development.

3.1 Agriculture

3.1.1 Introduction

Mwanza City Council is an urban area and its urban farming has been both extensive and intensive. Urban farmers are however ranging from government civil servants, businessmen and the most disadvantaged slum dwellers. Normally urban areas in Tanzania are not designed to accommodate farming or livestock keeping at any scale of operation. The land that is within urban areas is customary zoned out to accommodate residential areas, business centers, industrial sites, road and railway construction, recreational activity etc. Besides, factors that have contributed towards emergence and persistence of urban agriculture in Tanzania including Persistence of peasant culture. This is because of the current generation of urban dwellers in Tanzania including Mwanza City council still have remnants of rural culture. The persistence of the peasant culture explains the reasons why some urban residents planting various types of crops and keeps some form of livestock for cultural rather than purely economic ends.

The plight of urban worker. High living cost attributed by high inflation rates is another important reason for urban residents involving in urban farming so as to have self-food sufficiency through reducing cost of buying foods. However, according to agronomical factors, Mwanza City Council indulges more on food crops such as maize, paddy, sweet potatoes, cassava rather than cash crops. The same crops are also used as source of income.

3.1.2 Distribution of Arable Land

Many places observed in urbanizing Mwanza City Council is associated with the increase of surveyed plots for human settlements, business centres, social services, infrastructures and industries. This affected much on land size planted with food crops or cash crops. Arable land is the land that is suitable for growing crops. Out of the city council's total land area of 12,155 hectares, 3,473 hectares was arable land (table 3.1). Moreover, out of the arable land, only 92.8 per cent (3,223ha) of the arable land is under utilization. From the table, the wards with higher utilization of arable land were Igoma (100 per cent), Kishiri (100 per cent), Mhandu (97.4 per cent), Buhongwa (93.9 per cent), Lwanhima (92.3 per cent), Mahina (82.6 per cent), Igogo (Butimba (50.0 percent) and Mkuyuni (12.3 per cent). On the other hand, pure urban wards which did not involve in utilization of arable land were Luchelege, Nyegezi, Pamba, Nyamagana, Mironko, Mabatini and Mbugani.

Table 3.1 Distribution of Arable Land (ha) by Ward, Mwanza City Council; 2015

Ward	Total land Area (Ha)	Total Arable land (Ha)	Arable land Under Cultivation (Ha)	Percent of Arable land under cultivation
Buhongwa	3729	1,323	1242	93.9
Lwanhima	2623	928.6	857.1	92.3
Mkolani	-	-	177.5	-
Luchelege	-	-	-	-
Butimba	1420	344	172	50
Nyegezi	-	-	-	-
Igogo	611.5	41.5	25	60.2
Mkuyuni	802	57.2	7	12.3
Pamba	-	-	-	-
Nyamagana	-	-	-	-
Mironko	-	-	-	-
Isamilo	-	-	-	-
Mabatini	-	-	-	-
Mbugani	-	-	-	-
Mahina	-	192.5	159	82.6
Mhandu	117	117	114	97.4
Igoma	1430	351	351	100

Kishiri	1,422.20	118.5	118.5	100
Total	12,155	3,473	3,223	92.8

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.1.3 Food Crops

3.1.3.1 Area under Food Crops Cultivation

According to Table 3.2, over the season of 2011/12 – 2014/15 area cultivated with food crops in Mwanza City Council estimated annually at 4,045.6 ha. The crop season of 2014/15 had the lowest area planted with food crops of 2,729.3 ha and the crop season of 2013/14 had the biggest annual area of 4,638 ha. In terms of planted area, cassava is the dominant food crop followed by paddy, sweet potatoes and maize. 39.6 percent of the estimated annual area was dominated by cassava. Regarding to this cassava is referred as the most dependable food crop. Besides to this, the area planted with paddy was 25.3 percent, sweet potatoes (18.6 percent) and maize (16.5 percent) shown in Table 3.2 and Figure 3.1 is important for ensuring food sufficiency.

Table 3.2 Estimated Land Area (Ha) under Major Food Crops by Ward, Mwanza City Council, 2011 – 2015

Crop	Estimated Land Area (ha)					Total Area	Annual Average
	2010/11	2011/12	2012/13	2013/14	2014/15		
Cassava	285.1	249.0	221.2	210.5	261	1,226.8	245.4
Maize	160.7	159.4	117.3	112	138.7	688.1	137.6
Paddy	200.9	204.2	145.5	138.2	171	859.8	172.0
Sweet potatoes	277.2	280.9	206.3	197.3	244.6	1,206.3	241.3
Total	923.9	893.5	690.3	658	815.3	3,981.0	796.2
Percent	23.2	22.4	17.3	16.5	20.5	100	

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.1.4 Cash Crops

3.1.4.1 Area under Cash Crops Cultivation

Table 3.3 shows that paddy is the major cash crops in Mwanza City Council followed by tomatoes, cabbage, chinese cabbage, green pepper, onion, okra and water melon. On average, a total of 219.3 hacters are planted with these crops annually with paddy being the

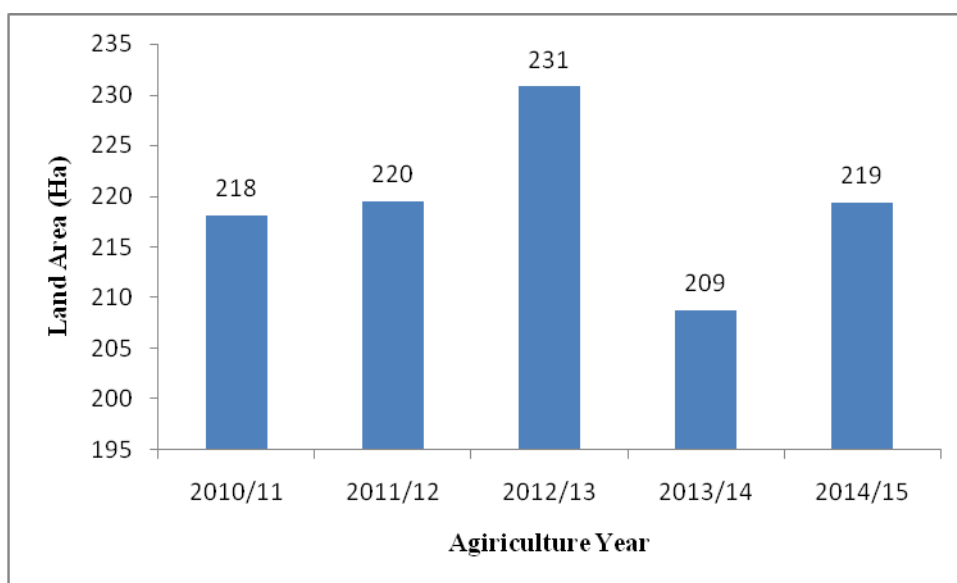
dominant crop. Land area planted with paddy was at the peak of 143.8 hectares in 2012/13. High pace observed in urbanizing Mwanza City Council is associated with the increase of surveyed plots for human settlements, business centres, social services infrastructures and industries etc. This affected much on land size planted with both food and cash crops. Small scale farming of paddy and tomatoes are specific cash crops. To improve their livelihood local people of Mwanza City Council also market food crops such as cabbage, chinese cabbage, green pepper, onion, okra and water melon (Fig 3.1).

Table 3.3 Estimated Land Area (Ha) under Major Cash Crops by Ward, Mwanza City Council; 2010/11 – 2014/15

Crop	Estimated Land Area (Ha)					Annual Average	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15		
Paddy	134.8	134.8	143.8	123.2	127.5	132.8	61.2
Tomatoes	33.8	34.1	33.7	33.6	36.5	34.3	15.8
Cabbage	31.4	32.5	34.6	32.5	33.6	32.9	15.2
Chinese Cabbage	3.5	2.9	2.6	4.5	6.2	3.9	1.8
Green Pepper	2.8	3.3	3.6	3.2	3.4	3.3	1.5
Ngogwe(nyanya chungu)	2.4	2.9	3.1	3.1	3.1	2.9	1.3
Okra	2.9	2.3	2.7	2.4	2.2	2.5	1.2
Onion	2.3	2.3	1.9	2.4	2.8	2.3	1.1
Bilinganya	2.2	2.2	2.4	2	2.1	2.2	1.0
Water melon	2	2.2	2.4	1.8	2	2.1	1.0
Total	218	220	231	209	219	219.3	100

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

Figure 3.1 Estimated Land Area (Ha) under Major Cash Crops, Mwanza City Council



Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.2 Crop Production

3.2.1 Major Food Crops

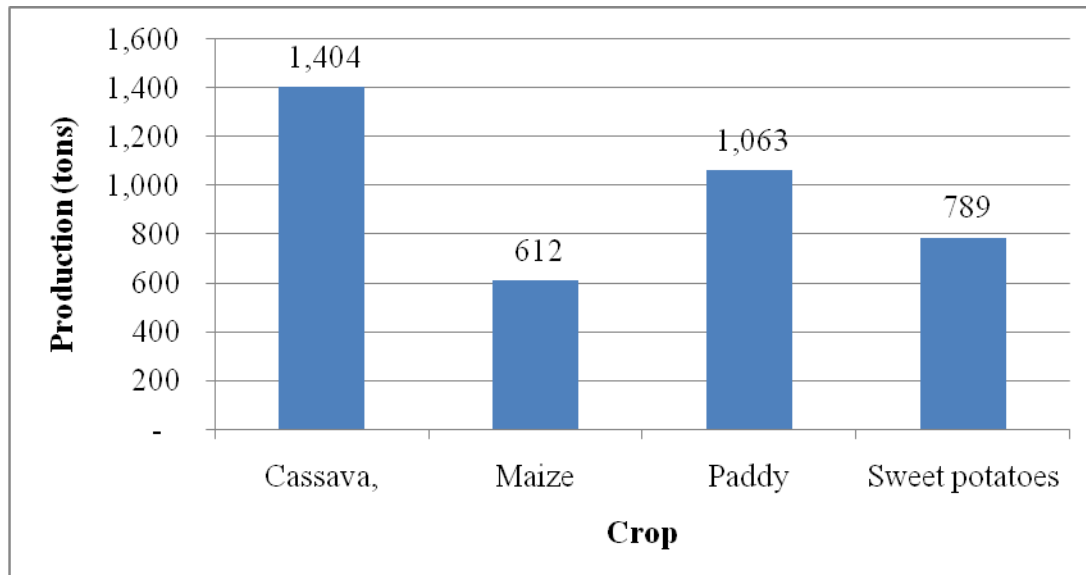
Over the reference period shown in Table 3.4, Mwanza City Council harvested a total of 11,603 tons of major food crops which averaged annually at 3,868tons. Cassava was the leading food crops in terms of production. It accounted for 36.3 percent of the total production (11,603 tons). Paddy was the second major food crop with 27.5 percent of the total production followed by sweet potatoes (20.4 percent). Maize was the least important food crop in terms of production (1,836 tons, 15.8 percent) as shown in figure 3.2.

Table 3.4 Estimated Production in tons of Major Food Crops;Mwanza City Council; 2010/11 to 2014/15

Crop	Production (tons)			Total	Average per Year	Percent
	2011/12	2012/13	2013/14			
Cassava,	1,404	1,404	1,404	4,212	1,404	36.3
Maize	612	612	612	1,836	612	15.8
Paddy	1,063	1,063	1,063	3,189	1,063	27.5
Sweet potatoes	789	789	789	2,366	789	20.4
Total	3,868	3,868	3,868	11,603	3,868	100
Percent	33.3	33.3	33.3	100		

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

Figure 3.2 Annual Production in tons of Major Food Crops;Mwanza City Council; 2010/11 to 2014/15



Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.2.2 Irrigation Prospects



Irrigation farming in Mwanza City Council is feasible due to availability of some water bodies available. As table 3.5 shows, the whole Mwanza City Council has irrigation potential of 550 ha of which 82ha or 14.9 percent already exploited. The biggest potential area for irrigation found in Buhongwa ward which accounted for 86.5 percent followed by Lwanhima (8.5 percent) and Kishiri (4.9 percent) of the total potential area. However, traditional irrigation schemes are dominant with horticultural crops and paddy, tomatoes, Chinese cabbage being irrigable crops.

Table 3.5 Irrigation Prospects by Ward, Mwanza City Council; 2014/15

Ward	Estimated Potential Area (ha) for irrigation	Area (ha) under irrigation	Un utilized potential area (ha)	Percent of potential area
Buhongwa	470	65	405	86.5
Lwanhima	55	15	40	8.5
Kishiri	25	2	23	4.9
Total	550	82	468	100

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.2.3 Farm inputs

3.2.3.1 Introduction

Besides other factors, crop production is also impaired by low application rate of agricultural inputs and poor agronomic practices. It is also believed that farmers who grow high value crops with reliable market outlets can afford to use industrial fertilizers and pesticides because the profit margin is big. However, data obtained from agriculture department in Mwanza City Council shows the use of agricultural inputs is not so common among agricultural households in peripheral areas of the city council.

(i) Inorganic Fertilizers

Table 3.6a shows that over the five seasons chemical fertilizers supplied to farmers went to 3,012,200 kilograms for an annual average of 602,440 kilograms in 2010/11 to 2014/15. Sulphate of Ammonia was supplied in higher quantity (26.0 percent), followed by UREA (18.3 percent), DAP (12.8 percent), Minjingu (12.5 percent) to mention few and the least chemical fertilizer supplied to farmers was Sulo taste (NPK) 1kg for an annual average of 5,800 kilograms equivalent to 1.0 percent for the five seasons, 2010/11 to 2014/15. The season in which chemical fertilizers was supplied in large quantity in 2010/11 equivalent to 35.1 percent of total city council of chemical fertilizers. This was decreased year by year since Mwanza City Council is associated with the increase of surveyed plots for human settlements, business centres, social services, infrastructures and industries and

agriculture is discouraged. In all agriculture seasons, under supply of chemical fertilizer was a big problem which resulted to poor harvesting in the city council. There is a need, therefore, to review the distribution system used for the benefit of not only the farmers in Mwanza city council but also farmers in other part of the councils and the region at large.

Table 3.6 Type and Quantity of Chemical Fertilizers (Kgs) Distributed to Farmers; Mwanza City Council; 2010/11 to 2014/15

Type of Fertilizers	2010/11	2011/12	2012/13	2013/14	2014/15	Total	Average per Year	Percent
S/A	605,000	56,000	51,000	32,000	40,000	784,000	156,800	26.0
UREA	134,000	128,000	120,000	78,000	91,000	551,000	110,200	18.3
DAP	82,800	80,300	78,600	76,000	68,000	385,700	77,140	12.8
Minjingu	93,000	86,000	81,000	43,000	75,000	378,000	75,600	12.5
YARA	-	-	-	108,000	167,200	275,200	55,040	9.1
CAN	58,900	58,000	59,000	41,000	53,000	269,900	53,980	9.0
NPK	58,000	53,000	48,000	30,600	43,000	232,600	46,520	7.7
TSP	26,800	25,000	22,000	15,000	18,000	106,800	21,360	3.5
Sulo taste (NPK) 1kg	-	-	-	13,000	16,000	29,000	5,800	1.0
City council total	1,058,500	486,300	459,600	436,600	571,200	3,012,200	602,440	100
Percent	35.1	16.1	15.3	14.5	19.0	100		

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

(ii) Fungicides

Table 3.6b shows the distribution of different type of fungicides between 2010/11 and 2014/15 in Mwanza city council. Out of four different types of fungicides found in Mwanza city council, Linkomil were the most distributed fungicide with total distribution of 11,348 litres (37.0 percent), followed by Twiga thalomil 8,307 litres (27.1 percent), Redomil gold 7,730 litres (25.2 percent) and Movil 3,285 litres (10.7 percent) were the least important fungicides distributed in the city council over the specified seasons (Table 3.6b). One general observation from these data is that distribution of fungicides mostly depends on the demand from farmers and type of crops grown in a particular location.

Table 3.6 a Type and Quantity of Fungicides (in Litres) Distributed to Farmers; Mwanza City Council; 2010/11 to 2014/15

Type of Fungicides	Quantity Distributed (in Litres)					Total Distribution	Average Annual	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15			
Linkonil	-	3,337	3,323	1,756	2,932	11,348	2,270	37.0
Twiga thalomil	1,910	1,876	1,811	956	1,754	8,307	1,661	27.1
Redomil gold	1,710	1,670	1,610	1,240	1,500	7,730	1,546	25.2
Movil	-	-	1,320	765	1,200	3,285	657	10.7
Total	3,620	6,883	8,064	4,717	7,386	30,670	6,134	100

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

(iii) Insecticides/Pesticides

Table 3.9 shows distribution of insecticides in Mwanza city council for the year 2010/11 to 2014/15. Probably, the low use of insecticides is due to low distribution of the chemicals. Of the listed insecticides in Table 3.6c, Mo-Karetep and Ultracy A were the least distributed insecticides and are basically insecticides of less importance. On the other hand, Premethyl and Nuvan were highly distributed accounted for 30.2 percent and 27.3 percent of distributed insecticides in the city council respectively (Table 3.6c).

Table 3.6 b Type and Quantity of Insecticides (in Litres) Distributed to Farmers; Mwanza City Council; 2010/11 to 2014/15

Type of Insecticides	Quantity Distributed (in Litres)					Total Distribution	Average Annual	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15			
Premethyl	81	72	60.2	52	85	350.2	70.0	30.2
Nuvan	72	69	67	43	66	317	63.4	27.3
Mo-Karetep	63	59	57	38	55	272	54.4	23.5
Ultracy A	51	48	46	34	41	220	44.0	19.0
Total	267	248	230.2	167	247	1159.2	231.8	100

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.2.3 Improved Seeds

Use of improved seeds is among important factors for increasing agricultural productivity (output per unit of land). Maize is the leading crop in having a wide range of improved seeds in the region. Table 3.6d shows that Kilima, situka and TAN 600 are improved seeds for maize

which were mostly distributed in the city council during the referred seasons. Other improved seeds for cotton, sunflowers and vegetables were distributed in minimum quantities (Table 3.6d).

Table 3.6 c Type and Quantity of Improved seeds (Kgs) Distributed to Farmers; Mwanza City Council; 2010/11 to 2014/15

Type of Insecticides	Quantity Distributed (in Litres)					Total Distribution	Average Annual	Percent
	2010/11	2011/12	2012/13	2013/14	2014/15			
Kilima	142,000	139,800	137,000	79,500	134,000	632,300	126460	17.0
Situka	131,500	128,400	127,800	67,800	123,000	578,500	115700	15.5
TAN 600	103900	94200	89500	47800	86000	421400	84280	11.3
TMV 1	95,600	91,200	89,700	56,000	87,000	419,500	83900	11.3
Seed Co SC 403	82,100	81,300	79,000	34,000	77,000	353,400	70680	9.5
SDK (DK 8032)		103700	99500	43700	96000	342900	68580	9.2
Pannar 19	78,500	76,500	72,000	41,000	69,000	337,000	67400	9.1
Kifaru	-	61,700	58,000	31,000	56,000	206,700	41340	5.6
DH 04	-	47,000	44,500	21,400	43,000	155,900	31180	4.2
Kitale seeds	-	39,800	36,000	17,000	32,000	124,800	24960	3.4
Lubango Hybrid	-	32,000	29,800	12,000	27,000	100,800	20160	2.7
Katumani	12,400	12,300	12,000	3,450	10,000	50,150	10030	1.3
Total	646000	907900	874800	454650	840000	3,723,350	744670	100

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.2.4: Agriculture Implements

The use of agriculture implements depend on the size of farms owned by households and or investors. The city council is among councils in the region with largest population being peasant farmers, owning about 4 to 5 hectors of farm resulted to less demand of farm implements. Table 3.7 shows that the traditional implements were highly demanded compared with modern and sophisticated implements in the city council. In 2014/15, a total of 5 tractors were demanded in the city council but none supplied and only 4 power tillers were distributed which was less than the required 15. One general observation from these data is that local authorities in Mwanza city council should educate their farmers on the need of changing farming system from tradition to mordernised agriculture in order to increase their productivities.

Table 3.7 Availability of Agriculture Implements, Mwanza City Council; 2014/15

Type of Implements	Demand	Supplied	Deficit
Ox plough	351	87	264
Ox harrow	11	4	7
Oxridger	33	0	33
Oxcart	44	28	16
Oxcultivator	351	87	264
Ox chain	351	87	264
Ox shares	50	25	25
Tractors	5	0	5
Power tillers	15	4	11
Total	1211	322	889

Source: City Director's Office (Agriculture Department), Mwanza City Council, 2016

3.2.5 Food Satisfaction/Adequacy

Mwanza City Council has no experience of food inadequacy. Despite producing its own food, food adequacy of Mwanza City Council is supported by those foods coming in other councils within Mwanza region and nearby regions. Geographical position also favours to food adequacy in Mwanza City Council. This is true due to the fact that Mwanza City Council is the fast growing business centre for agricultural products especially starch food normally maize and rice brought in from Shinyanga region.`

3.2.6 Policy Implication in Agriculture

As the majority of farmers continue using hand hoe it becomes difficult to talk of modern farming as it appears most of farmers in Mwanza city Council will continue using hand hoes. In this regards, Agricultural First Policy implementation is far from being implemented.

3.2.7 Investment Opportunities in Agriculture sector

Rapid population growth and urbanization of Mwanza city Council is associated with increase in number of surveyed plots for residential areas, social services, and small scale

industries which in turn decrease agriculture land. Regarding to this, small scale farming is becoming more convenient to the council rather than large scale farming. However, establishment of agro-processing industries such as grain milling machines, sunflower oil extraction small scale industries and selling of agricultural inputs are the most suitable investment in agricultural sector in Mwanza city Council. Moreover, its geographical position puts Mwanza city Council to have the hub and important marketing centre for farming products which attracts businessmen within and outside the country. Mwanza to Dar es Salaam tarmac road influences rapid growing of Mwanza city Council and making it as a good business Centre. Warehouse construction, buying and reselling crops at higher profit identified as another investment can be made in Mwanza city Council. Moreover, being linked by tarmac road within and outside the country like Rwanda, Burundi, Uganda and Kenya, Mwanza city Council is the good place for establishing industries dealing with assembling farming implements and selling as well as manufacturing of agricultural inputs such as fertilizers, insecticides etc.

3.3 Livestock

3.3.1 Introduction

Like other urban areas in the country, rapid urbanization taking place in Mwanza City Council has not been accompanied with equitable economic growth and has resulted into increased urban poverty. As a result of this worsening of urban poverty, many low-income households suffer from extremely limited livelihood security. To address this issue, most livestock keepers in Mwanza City Council whom majority are people of low-income engage in urban livestock keeping as a response to limited alternative livelihood options and food insecurity.

3.3.2 Challenges of Urban Livestock keeping

As initiatives of developing livestock sector has been in urban areas with a view that improved livestock products in urban areas can supply the expanding urban population, this resulted into little attention to urban livestock keeping in Mwanza City Council. Consequences of this are urban livestock keeping in Mwanza City Council seldomly able to

access support services such as extension services; diseases control measures and other inputs.

(i) *Inappropriate waste management:*

Animal waste disposal in Mwanza City Council attributes in environment and public health problems which become more severe as the number of livestock increases.

(ii) *Water availability:*

Basing on the current situation in Mwanza City Council, livestock competes for water resources with humans as the demand for water for livestock keeping is not taken into account by the supply services. This is true as there are very few water points allocated for livestock.

(iii) *Poor livestock health and high cost of veterinary services:*

Livestock in Mwanza City Council faces challenges of poor health due to high cost of veterinary services which poor livestock keepers can not afford. This endangers prosperity of livestock sector in Mwanza City Council.

(iv) *Grazing land:*

Is another major constraint to livestock keeping in urban areas especially for larger livestock such as cattle and goats. Zero grazing is the most preferred option of feeding livestock in Mwanza City Council though it keeps high cost of feeding.

(v) *Low production levels:*

Due to limited feed availability and quality associated with poor livestock management practices, the production level of livestock in Mwanza City Council is generally low.

(vi) *Limited knowledge of livestock husbandry practices:*

As majority of livestock keepers in urban centres like Mwanza City Council are lacking advice services, always have limited knowledge on livestock husbandry practices.

3.3.3 Improvement of Livestock in Mwanza City Council

Urban areas like Mwanza City Council can improve livestock keeping through formulation of by-laws which can give guidance for urban livestock keeping development. Capacitating livestock keepers in urban areas on information concerning better livestock management practices and marketing information would have an advantage of improving livelihood of livestock keepers in urban areas whom majority are low-income households. Improving accessibility of livestock extension services is among important areas the town council needs to focus.

3.3.4 Opportunities for Urban livestock keeping

Most of the people in urban areas of Mwanza City Council and its peri-urban areas practise urban agriculture because it provides food for them; for income generation or poverty alleviation (because of the proximity to the market); promotes waste management (i.e. people take manure from the cattle barn or poultry house and send it to the farm); and as a means of converting by-products (e.g. brewers' spent grain, bran, seed cakes, low-quality roughage) into high-quality proteins/food (milk, meat and eggs).

3.3.5 Livestock Population

Table 3.7 shows estimated livestock population by ward in Mwanza City Council in 2014/15. Poultry counted at 322,054 (157,436 Indigenous chicken and 164,618 Broilers and Layers) was the most populous livestock followed by cattle (15,913), goats (12,678), pigs (3,664), sheep (1,536) and donkeys (33). Majority of livestock populated in Igoma as this ward led in number of cattle (2,786), goats (1,778) and sheep (208). Likewise, largest population of donkeys (33) was observed in Kishiri ward, pigs (882) in Mkolani ward and poultry (42,033) in Butimba ward.

Table 3.8 Estimated Livestock Population by ward, Mwanza City Council; 2015

Ward	Cattle	Goats	Sheep	Donkeys	Pigs	Indigenous chicken	Chicken (Broilers & Layers)
Igoma	2786	1778	208	0	204	12884	8664
Kishiri	2776	3104	417	33	312	15335	6420
Buhongwa	2250	2163	133	0	476	17100	10200
Pamba	336	453	88	0	62	2821	2060
Mkuyuni	181	103	28	0	158	10336	1700
Mbugani	170	84	18	0	350	2810	30150
Mahina	191	144	21	0	186	2350	3432
Mirongo	6	19	0	0	0	1750	540
Nyamagana	87	92	4	0	18	1314	11060
Mabatini	147	97	22	0	250	11205	6000
Isamilo	98	93	6	0	23	1300	1800
Mkolani	2130	2402	317	0	882	16891	18000
Igogo	127	187	27	0	23	3876	250
Butimba	632	203	63	0	103	10033	32000
Nyegezi	298	143	21	0	111	11223	8600
Luchebele	1302	297	41	0	207	10732	10320
Lwanhima	2104	1115	99	0	189	12345	6122
Mhandu	292	201	23	0	110	13131	7300
Total	15,913	12,678	1,536	33	3,664	157,436	164,618

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

(i) Cattle Population

Table 3.8 above shows by the end of 2014/15 Mwanza City Council had 15,913 cattle. Most of cattle (2,635) were found in Igoma and was the leading ward. However, cattle population in Igoma accounted for 2,786 cattle of the total cattle population counted in Mwanza City Council. Mirongo ward had the least concentration of cattle (6).

(ii) Goats Population

As it was for cattle, Kishiri ward had highest concentration of goats (3,104) of the total goats' population. Mirongo ward revealed to have smallest number of goats (19).

(iii) Sheep Population

As it was for goats, Kishiri ward also ranked first on sheep population (417) of the whole sheep population in Mwanza City Council. Among all wards listed in Table 3.8, Nyamagana had the smallest number of sheep (4 while Mirongo ward had none sheep).

(iv) Pig Population

According to Table 3.8, Mkolani ranked the first ward on pig population of 882 of the total pig population of 3,664 in Mwanza City Council. The second and third wards on pig population were Buhongwa 476 and Mbugani (350).

(v) Poultry/chicken Population

Because of easy management and as it does not require huge initial capital, majority of households in Mwanza City Council do poultry keeping. With reference to Table 3.8, by the end of 2014/15 Mwanza City Council had 341,035 poultry that is 145,617 Indigenous chicken and 195,418 Broiler and Layer chickens. Three wards with biggest poultry population were Butimba 42,033 (10,033 Indigenous and 32,000 Broilers and Layers), Buhongwa 34,891(16,891 Indigenous and 18,000 Broilers ad Layers) and Mbugani ward 32,960 (2,810 Indigenous, 30,150 Broilers and Layers). Mirongo had smallest number of poultry 2,290(1,750 Indigenous, 540 Broilers and Layers).

(vi) Donkeys Population

With 33 population donkeys was the livestock of the smallest number than other livestock shown in Table 3.8. Most of donkeys were only concentrated in Kishiri ward (33).

3.3.6 Distribution of Livestock Population by Type

(i) Cattle

Table 3.9 shows that indigenous cattle were the dominant type of livestock found in Mwanza city council. They accounted for 87.4 percent of the region's total cattle population while improved dairy cattle contributed 12.6 percent in 2015.

At ward level, Igoma ward had largest number (17.5 percent) of the city's total cattle population followed by Kishiri (17.4 percent), Buhongwa (14.1 percent), Mkolani (13.4 percent), Lwanhima (13.2 percent), Luchebele (8.2 percent), Butimba (4.0 percent), Pamba (2.1percent), Nyegezi (1.9 percent), Mhandu (1.8 percent), Mahina (1.2 percent), Mkuyuni (1.1 percent), Mbugani (1.1 percent), Mabatini (0.9 percent), Igogo (0.8 percent), Isamilo (0.6 percent) and Nyamagana (0.5 percent). Mironko ward was the least number (6 cattle) of cattle population in Mwanza city council (Table 3.9).

In the case of indigenous cattle, most of them were recorded in Kishiri(19.7 percent) followed by Igoma (19.3 percent), Buhongwa (15.1 percent), Lwanhima (14.4 percent), Mkolani (10.9 percent), Luchebele (8.6 percent), Butimba (3.1 percent), Pamba (1.5 percent), Nyegezi (1.4 percent), Mahina and Mkuyuni with 1.0 percent each, Igogo (0.7 percent), Mabatini (0.6 percent), Mbugani (0.5 percent) and Isamilo ward had 0.2 percent of the city's total indigenous cattle population in 2015 while the rest of wards, including Nyamagana and Mironko did not have indigenous cattle (Table 3.9)

Furthermore, dairy cattle were not common in Mwanza city council as they only constituted 12.6 percent of the city's total cattle population. Table 3.9 shows that majority of dairy cattle were kept in Mkolani with only 620 dairy cattle followed by Butimba (199), Buhongwa (153), Igoma (105), Luchebele (101), Lwanhima (99), Nyegezi and Mbugani with 97 dairy cattle each, Nyamagana (87), Mhandu (81), Pamba and Isamilo with 75 dairy cattle each, Mabatini (61), Mahina (58), Mkuyuni (36), Kishiri (32), Igogo (27) and Mironko (6) as shown in Table 3.9.

Table 3.9 Population Distribution of Cattle by Type and by Ward, Mwanza City Council; 2015

Council	Indigenous Cattle	Percent of Indigenous Cattle	Dairy Cattle	Percent of Dairy	City Total	Percent of City
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			Cattle			
Igoma	2681	19.3	105	5.2	2786	17.5
Kishiri	2744	19.7	32	1.6	2776	17.4
Buhongwa	2097	15.1	153	7.6	2250	14.1
Pamba	261	1.9	75	3.7	336	2.1
Mkuyuni	145	1.0	36	1.8	181	1.1
Mbugani	73	0.5	97	4.8	170	1.1
Mahina	133	1.0	58	2.9	191	1.2
Mirongo	0	0.0	6	0.3	6	0.0
Nyamagana	0	0.0	87	4.3	87	0.5
Mabatini	86	0.6	61	3.0	147	0.9
Isamilo	23	0.2	75	3.7	98	0.6
Mkolani	1510	10.9	620	30.9	2130	13.4
Igogo	100	0.7	27	1.3	127	0.8
Butimba	433	3.1	199	9.9	632	4.0
Nyegezi	201	1.4	97	4.8	298	1.9
Luchelele	1201	8.6	101	5.0	1302	8.2
Lwanhima	2005	14.4	99	4.9	2104	13.2
Mhandu	211	1.5	81	4.0	292	1.8
Total	13,904	100	2,009	100	15,913	100
Percent	87.4		12.6		100	

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

(ii) Goats

Table 3.14 shows that indigenous goats were the dominant type of goats (99.4 percent) in Mwanzacity council while dairy goats keeping are not common in the city council accounted only 0.6 percent in 2015. At ward level, Table 3.10 shows that Kishiri ward council had the largest number (24.5 percent) of goats' population in the city council followed by Mkolani (18.9 percent), Buhongwa (17.1 percent), Igoma (14.0 percent), Lwanhima (8.8 percent), Pamba (3.6 percent), Luchelele (2.3 percent), Butimba and Mhandu with 1.6 percent each of goats, Igogo (1.5 percent), Mahina and Nyegezi with 1.1 percent each, Mkuyuni and Mabatini with 0.8 percent each, Isamilo, Nyamagana and Mbugani with 0.7 percent each and Mirongo (0.1 percent) as shown in table 3.10.

In the case of indigenous goats, most of them were recorded in Kishiri(24.6 percent) followed by Mkolani (19.1 percent), Buhongwa (17.1 percent), Igoma (14.1 percent), Lwanhima(8.8 percent), Pamba (3.6 percent), Luchebele (2.3 percent), Mhandu and Butimba with 1.6 percent each, Igogo (1.5 percent), Mahina and Nyegezi with 1.1 percent each, Mkuyuni (0.8 percent), Mabatini, Isamilo and Mbugani with 0.7 percent each, Nyamagana (0.5 percent) and Mirongo ward had 0.2 percent of the city's total indigenous goats population in 2015 (Table 3.10).

Furthermore, dairy goats were not common in Mwanza city council as they only constituted 0.6 percent of the city's total goat population. Table 3.10 shows that majority of dairy goats were kept in Nyamagana with only 34 dairy goats followed by Buhongwa (10), Luchebele (8), Lwanhima and Mabatini with 6 dairy goats each, Butimba (4) and Isamilo with 2 dairy goats of the city's total dairy goats population in 2015 as shown in Table 3.10.

Table 3.10 Population Distribution of Goats by Type and by Ward, Mwanza City Council; 2015

Ward	Indigenous Goats	Percent of Indigenous Goats	Dairy Goats	Percent of Dairy Goats	Total	Percent of City
Igoma	1,778	14.1	-	-	1,778	14.0
Kishiri	3,104	24.6	-	-	3,104	24.5
Buhongwa	2,153	17.1	10	14.3	2,163	17.1
Pamba	453	3.6	-	-	453	3.6
Mkuyuni	103	0.8	-	-	103	0.8
Mbugani	84	0.7	-	-	84	0.7
Mahina	144	1.1	-	-	144	1.1
Mirongo	19	0.2	-	-	19	0.1
Nyamagana	58	0.5	34	48.6	92	0.7
Mabatini	91	0.7	6	8.6	97	0.8
Isamilo	91	0.7	2	2.9	93	0.7
Mkolani	2,402	19.1	-	-	2,402	18.9
Igogo	187	1.5	-	-	187	1.5
Butimba	199	1.6	4	5.7	203	1.6
Nyegezi	143	1.1	-	-	143	1.1
Luchebele	289	2.3	8	11.4	297	2.3

Lwanhima	1,109	8.8	6	8.6	1,115	8.8
Mhandu	201	1.6	-	-	201	1.6
Total	12,608	100	70	100	12,678	100
Percent	99.4		0.6		100	

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

3.3.7 Livestock Infrastructure

Poor health of domestic animals is always a problem to many pastoralists. The most common and problematic disease to cattle is East Coast Fever. Tick borne diseases are also causing problems to livestock.

Table 3.11 shows livestock infrastructure capable for controlling livestock diseases. With three operating/working dips, three veterinary centres, one slaughter slab and one charcodam highlighted in that table were available in Mwanza city council in 2015. However, absence of livestock crushes exposes livestock in a danger of being infected by diseases. By knowing the importance of veterinary centres it is important for the Mwanza city council Management Team think on ways of improving them. Improving availability and accessibility of other livestock infrastructures shown in Table 3.11 is paramount important for development of livestock industry in Mwanza City Council.

Table 3.11 Distribution of Livestock Infrastructure by Ward; Mwanza City Council, 2015

Ward	Dips			Veterinary Centres			Crushes	Hides/skin sheds	Abattoirs	Slaughter slab	Livestock market/Auction	Charcodams
	W	NW	Total	W	NW	Total						
Isamilo	1	0	1	1	0	1	0	0	0	0	0	0
Pamba	1	0	1	0	0	0	0	0	0	0	0	0
Butimba	1	0	1	0	0	0	0	0	0	0	0	0
Mhandu	0	0	0	0	0	0	0	0	0	1	0	1
Igoma	0	0	0	0	0	0	0	0	0	0	0	0
Mirongo	0	0	0	1	0	1	0	0	0	0	0	0
Nyamagana	0	0	0	1	0	1	0	0	0	0	0	0
Kishiri	0	0	0	0	0	0	0	0	0	0	0	0
Lwanhima	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	3	3	0	3	0	0	0	1	0	1

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

3.3.8 Causes of Livestock Morbidity and Mortality

Diseases, among other reasons, were the main causes of livestock morbidity and mortality in Mwanza city council. Data provided by local authorities of Mwanza city council shows different types of diseases for big, medium and small animals. The most common diseases in Mwanza city council are worms, anaplasmosis, east coast fever (ECF), mange, Foot Mouth Disease(FMD), Swine fever, babesiosis and mastitis. Others are Pollurum, coccidiosis, fowl coryza, mineral deficiency, cholera and gumboro.

(i) Causes of Cattle Morbidity and Mortality

Table 3.11 shows a list of common diseases which caused cattle morbidity in Mwanza city council between 2013, 2014 and 2015. In 2013, Table 3.11a shows that worms was the most common diseases caused highest cattle morbidity rate accounted 52.1 percent of reported 4,026 cases in the city council. The second and third causes for cattle morbidities were anaplasmosis (19.8 percent) and ECF (13.8 percent) diseases and mange with 7.6 percent of total cases reported was the fourth disease and the fifth disease was FMD (7.4 percent). In 2014 similar observation was experienced with different number of cases reported as shown in table 3.12a.

Similar observation was also experienced in 2015, of which worms remained as the first and anaplasmosis and ECF with equivalent percent (20.1) remained the second and third common cattle diseases in the city council. FMD with 13.3 percent of total cases reported was the fourth disease and the fifth disease was mange (12.2 percent). One general observation from these data is that there was a decrease of cattle morbidity cases caused by worm disease in 2013 to 2015. City council authority, therefore, should put more efforts on these diseases in order to prevent them in the future.

Table 3.11 a Five Major Cattle Diseases Causes Morbidity, Mwanza City Council, 2013, 2014 and 2015

Disease	2013		2014		2015	
	No.of cases	Percent	No.of cases	Percent	No.of cases	Percent

Worms	2,099	52.1	1,831	50.1	976	34.3
Anaplasmosis	797	19.8	737	20.2	573	20.1
ECF	527	13.1	505	13.8	571	20.1
Mange	306	7.6	307	8.4	347	12.2
FMD	297	7.4	275	7.5	378	13.3
Total	4,026	100	3,655	100	2,845	100

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

Table 3.11b shows death toll of cattle caused by different type of diseases in 2013, 2014 and 2015. In 2013, out of 26 cattle deaths, 73.1 percent were caused by east coast fever(ECF), FMD (15.4 percent), anaplasmosis (7.1 percent), and babesiosis (3.8 percent). Similar observations were experienced in 2014 with east coast fever being the number one killer disease (88.5 percent) followed by FMD (7.7 percent) and anaplasmosis (3.8 percent). Swine fever which was the least disease did not occur in 2013 and 2014. In 2015, out of 483 cattle deaths, 90.3 percent were caused by swine fever, ECF(8.7 percent), FMD (0.8 percent) and anaplasmosis (0.2 percent). One general observation from these data is that foot and mouth disease which was the most dangerous disease in last three decades has been controlled by city council authority (Table 3.11b).

Table 3.11 b Five Major Cattle Diseases Causes Mortality,Mwanza City Council, 2013, 2014 and 2015

Disease	2013		2014		2015	
	No.of cases	Percent	No.of cases	Percent	No.of cases	Percent
Swine fever	0	0.0	0	0.0	436	90.3
ECF	19	73.1	23	88.5	42	8.7
FMD	4	15.4	2	7.7	4	0.8
Anaplasmosis	2	7.7	1	3.8	1	0.2
Babesiosis	1	3.8	0	0.0	0	0.0
Total	26	100	26	100	483	100

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

(ii) Causes of Goat Morbidity and Mortality

Table 3.11c shows three common diseases that contributing to poor health of goats in Mwanza city council in 2013, 2014 and 2015. The diseases were Mange, Worms and Anaplasmosis. Table 3.13a also shows that, among all three diseases, Mange caused much illness to goats than any other diseases in all three years, accounted for 53.1 percent of 1,636 morbidity cases in 2013, 50.8 percent of 1,420 morbidity cases in 2014 and 59.2 percent of 1,229 morbidity cases in 2015. It was followed by worms 36.8 percent of reported morbidity cases in 2013, 36.9 percent of reported morbidity cases in 2014. However, anaplasmosis disease has been controlled as result became the least disease that causes morbidity in the city council in 2015 (Table 3.11c). One general observation from these data is that city councils have managed to control morbidity in the referred years as evidenced by the decline of number of occurrences from 1,636 cases in 2013, 1,420 cases in 2014 to 1,229 cases in 2015.

Table 3.11 c Three Major Goat Diseases Causes of Morbidity, Mwanza City Council; 2013, 2014 and 2015

Disease	2013		2014		2015	
	No.of cases	Percent	No.of cases	Percent	No.of cases	Percent
Anaplasmosis	181	11.1	174	12.3	242	19.7
Mange	853	52.1	722	50.8	727	59.2
Worms	602	36.8	524	36.9	260	21.2
Total Cases	1636	100	1420	100	1229	100

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

Out of three common diseases that causes deaths of goats, 83 percent of goat deaths were caused only by anaplasmosis diseases. In 2013, Table 3.19a shows that 100 percent of eight goat deaths were caused by anaplasmosis. Out of one goat death recorded in 2014, 100 percent of goat deaths were also caused by anaplasmosis. One general observation from these data is that city council authority managed to prevent the three major diseases that cause deaths of goats (anaplasmosis, worms and mange) by 100 percent in 2015 as shown in table 3.11d.

Table 3.11 d Three Major Goat Diseases Causes of Mortality, Mwanza City Council; 2013, 2014 and 2015

Disease	2013		2014		2015	
	No.of cases	Percent	No.of cases	Percent	No.of cases	Percent
Anaplasmosis	8	100	1	100	0	0
Mange	0	0	0	0	0	0
Worms	0	0	0	0	0	0
Total Cases	8	100	1	100	0	0

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

(iii) Causes of Sheep Morbidity and Mortality

With similar diseases were also observed as contributing factors to poor health of sheep in Mwanza city council in 2013, 2014 and 2015. The disease was only worms. This was the leading cause of morbidity to sheep in 2013, 2014 and 2015 which caused much illness of sheep. The number of reported cases was 101 cases in 2013, 97 cases in 2014 and 103 cases causes of sheep morbidity in 2015.

Similar observation was also experienced on causes of sheep deaths in the city council. Again, city council authority was managed to prevent all diseases in order to rescue sheep from deaths by 100 percent in 2013, 2014 and 2015.

(iv) Causes of Poultry Morbidity and Mortality

Apart from big and medium sizes livestock keeping, poultry keeping is another main economic activity done by the residents of Mwanza city council. Unfortunately, among many factors which affect poultry industry in the city council, diseases associated to poultry happened to be the leading factors. The most common poultry diseases include: new castle, coccidiosis, fowl coryza, cholera, mineral deficiency and gumboro. Table 3.11e shows that out of 157,714 reported cases of poultry illnesses, Fowl coryza was the leading disease for all three years

accounted for 30.5 percent in 2013, 29.7 percent out of 147,976 cases reported in 2014 and 24.4 percent out of 176,008 cases reported in 2015. One general observation from these data is that ranking of diseases have increased from 2013 to 2015 and decreased from 2013 to 2014 for the number of cases reported.

Table 3.11 e Six Common Poultry Diseases Causes Morbidity, Mwanza City Council; 2013, 2014 and 2015

Disease	2013		2014		2015	
	No.of cases	Percent	No.of cases	Percent	No.of cases	Percent
Fowl coryza	48,062	30.5	43,952	29.7	43,004	24.4
Gumboro	36,678	23.3	35,926	24.3	38,442	21.8
Coccidiosis	26,422	16.8	24,024	16.2	35,442	20.1
Newcastle	22,062	14.0	25,714	17.4	31,758	18.0
Cholera	15,086	9.6	11,266	7.6	12,064	6.9
Mineral deficiency	9,404	6.0	7,094	4.8	15,298	8.7
Total	157,714	100	147,976	100	176,008	100

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

Fowl coryza, besides being the first causes of morbidity for poultry in the city council, but Newcastle being the first disease for poultry deaths in both year, lost 25.7 percent of poultry lives out of 93,092 in 2014 and 25.9 percent out of 110,556 in 2015 (Table 3.11f). In 2013 Fowl coryza was the first disease for poultry deaths accounted 22.6 percent out of 97,728 cases reported. One general observation from these data is that Newcastle which was one poultry killer disease in the last three years has been prevented significantly in recent years.

Table 3.11 f Six Common Poultry Diseases Causes Mortality, Mwanza City Council; 2013, 2014 and 2015

Disease	2013		2014		2015	
	No.of cases	Percent	No.of cases	Percent	No.of cases	Percent
Fowl coryza	22,120	22.6	22,906	24.6	20,306	18.4
Gumboro	21,042	21.5	18,742	20.1	23,558	21.3
Newcastle	19,056	19.5	23,942	25.7	28,582	25.9

Coccidiosis	17,926	18.3	19,206	20.6	28,352	25.6
Cholera	17,578	18.0	8,138	8.7	9,650	8.7
Mineral deficiency	6	0.0	158	0.2	108	0.1
Total	97,728	100	93,092	100	110,556	100

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

3.3.9 Marketing Livestock and Their Products

Lack of proper procedure of marketing livestock have created a problem of getting actual number of livestock marketed and the amount of revenue collected from each type of livestock in the city council and region at large.

(i) Hides and Skins

Marketing hides and skin of livestock have been facing number of problems in Mwanzacity council as well as the region at large. Among others, participation of private sector due to free market, lack of official markets, lack of public hides and skin sheds, lack of veterinary officers and falling of prices of livestock products has an adverse impact on the flow of reliable data from the grassroots to the ward council and city council level.

Nevertheless, Table 3.12 shows an indicative number of livestock hides and skins marketed by council in Mwanzacity council between 2013 and 2015.

Generally, there was an increasing trend of both units marketed and the revenue obtained. The number of units marketed increased from 127,433 in 2013 to 130,353 in 2015. Also the value obtained decreased from Tshs. 925,582,500 in 2013 to Tshs. 434,888,000 in 2015 since price of cattle hides decreased. Cattle hides being a dominant livestock product in both years were sold at an average price of Tshs. 7,203 per unit and Tshs. 3,336.

Table 3.12 The Number of Livestock Hides and Skins Marketed by Type; Mwanza City Council, 2013 and 2015

Category	2013			2015		
	Number	Revenue (TShs.)	Average Price per	Number	Revenue (TShs.)	Average Price per Unit

				Unit			
Cattle	59,136	650,496,000	11,000		47,832	286,992,000	6,000
Hides							
Goat Skins	36,047	162,211,500	4,500		48,229	96,458,000	2,000
Sheep	32,250	112,875,000	3,500		34,292	51,438,000	1,500
Skins							
Total	127,433	925,582,500	7,263		130,353	434,888,000	3,336

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

(ii) Milk Production

Table 3.13 shows that although milk production in Mwanza city council decreased from 7,823,400 litres in 2013 to 6,844,560 litres in 2015. But, revenue collected increased from Tshs. 7,823,400,000 in 2013 to Tshs. 9,582,384,000 in 2015. Among other things, increase of revenue was influenced by high average price rates of 2015 than were before (Table 3.16). However, more than half of revenue earned in both years was due to selling of indigenous cattle than improved cattle due to the population size and not because high productivity.

Table 3.13 Number of Litres of Milk Marketed by Type of Livestock; Mwanza City Council, 2013 and 2015

Milk from	2013			2015		
	Number of Litres	Revenue (TShs.)	Average Price per Litre	Number of Litres	Revenue (TShs.)	Average Price per Litre
Indigenous	2,346,000	2,346,000,000		2,032,352	2,845,292,800	
Cattle	0	0	1,000	2	0	1,400
Dairy Cattle	5,377,400	5,377,400,000	1,000	4,742,188	6,639,063,200	1,400
Dairy Goats	100,000	100,000,000	1,000	70,020	98,028,000	1,400

Total	7,823,400	7,823,400,00	1,000	6,844,560	9,582,384,00	1,400
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Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

3.3.10 Establishment and Personnel

Table 3.14 reflects availability of livestock personnel by Council in Mwanza city council. Almost all wards had a critical shortage of staff in city council. The city council had only 11 livestock field officers with no veterinary officer, livestock officer and pests and tsetse field officer, Livestock Auxiliary in 2015.

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

Table 3.14 Availability of Livestock Personnel by Ward, Mwanza City Council; 2015

Ward	Veterinary Officers	Livestock Officers	Livestock Field Officers	Pests and Tsetse Field	Livestock Auxiliary	Total
Igoma	0	0	1	0	0	1
Kishiri	0	0	1	0	0	1
Buhongwa	0	0	1	0	0	1
Pamba	0	0	1	0	0	1
Mkuyuni	0	0	1	0	0	1
Mbugani	0	0	1	0	0	1
Mahina	0	0	1	0	0	1
Mirongo	0	0	0	0	0	0
Nyamagana	0	0	1	0	0	1
Mabatini	0	0	0	0	0	0
Isamilo	0	0	1	0	0	1
Mkolani	0	0	1	0	0	1
Igogo	0	0	0	0	0	0
Butimba	0	0	1	0	0	1
Nyegezi	0	0	0	0	0	0

Luchebele	0	0	0	0	0	0
Lwanhima	0	0	0	0	0	0
Mhandu	0	0	0	0	0	0
Total	0	0	11	0	0	11

Source: City Director's Office (Livestock Department), Mwanza City Council, 2016

3.3.11 Policy Implication

Mwanza city council, like other councils in Mwanza region, has larger livestock population, including cattle, goats, sheep and poultry employed significant number of people and contributes large share to the GDP of the region and country at large. Main reason for poor performance of this sector has been influenced by poor or traditional practice of livestock keeping with no regular treatment, absence of livestock infrastructure and medicine.

3.3.12 Investment Opportunities in Livestock Subsector

Mwanza city council has inadequate livestock infrastructure that are working such as dips, veterinary centres, water points, abattoirs etc. Therefore, construction of livestock infrastructures might be a priority area for investing in livestock sub sector. Other areas which highly need investors are dairy farming and livestock processing industries such as milk processing, leather tanning and meat canning; specifically the region needs to look at the following possibilities:

(i) *Meat processing:*

Mwanza city council is strategically located in the zone to house a modern meat processing plant. There is a need for building abattoirs in councils which could process and add value and serve as a local market for livestock keepers.

(ii) *Tanneries:*

For adding value to the hides and skins by fully processing them or semi processed (wet blue) before export.

(iii) *Chicken – Meat processing industry*

In Mwanza region, Mwanza city council is very prominent in the production of traditional chicken. Chicken meat of this region is unique and has a palatable taste which attracts the market within and outside the city council. Due to reliable source of chicken; the city council is a good strategic area for investing in chicken-meat processing industry.

(iv) Animal feeds:

Supplement feeds can be manufactured and sold to farmers. Fodder can also be planted and so is the selling of hay or seeds that can improve range land in the region.

(v) Livestock services and pharmaceuticals:

Establishment of livestock pharmaceutical shops and veterinary clinics where qualified veterinary and livestock officers can offer consultancy services especially in remote areas.

(vi) Livestock Auctions markets:

There is a need for improvement of available livestock markets by establishing all necessary facilities such as dips, slaughter slabs crushers, skin and hide shed as well as necessary offices and equipment related to the sector.

3.4 Natural Resources

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

Urbanization of Mwanza City Council is accompanied by rapid population growth. Social impact associated to this including changes of natural resources use and economic activity. Protection of natural resources is the most challenging problem facing management of urbanization process in Mwanza City Council. This is true as high urban population growth raised the need for the Mwanza City Council to have adequate planned, surveyed and serviced land for households and public uses which all these processes put more pressure on natural resources. In due cause, balancing urban development and management processes

against natural resources protection guiding principles is important for sustainable development of the city council.

3.4.1 Forestry

Table 3.15 presents forest reserves by councils in Mwanza city council in 2015. Eighteen wards in the city council comprising of Buhongwa, Lwanhima, Mkolani, Luchebele, Butimba, Nyegezi, Igogo, Mkuyuni, Pamba, Nyamagana, Mirongo, Isamilo, Mabatini, Mbugani, Mahina, Mhandu, Igoma and Kishiri had a total of 17,300 hectares of total land area and total natural forest reserves of 1,253 hectares which is equivalent to 7.2 percent of the city council land area. Mkolani has the largest area, (850 hectares) of natural forest reserves followed by luchebele ward with 150 hectares. Other wards do not possess area under forest reserves including Nyegezi, Igogo, Mkuyuni, Pamba, nyamagana to mention few as shown in table 3.15.

Table 3.15 Status of Forest Cover by ward, Mwanza city Council; 2015

Ward	Total Land Area (ha)	Natural forest reserve area (ha)
Buhongwa	31,000	21
Lwanhima	0	30
Mkolani	35,000	850
Luchebele	0	150
Butimba	12,910	80
Nyegezi	0	100
Igogo	10,000	0
Mkuyuni	40,000	0
Pamba	2,000	0
Nyamagana	2,000	0
Mirongo	2,090	0
Isamilo	5,000	20
Mabatini	0	0
Mbugani	4,000	0
Mahina	24,000	2
Mhandu	0	0
Igoma	41,000	0
Kishiri	0	0
Total	17,300	1,253

Source: City Director's Office (Natural Resources Department), Mwanza City Council, 2016

Though the city council is endowed with inadequate forestry resources due to increasing human activities, high urban population growth raised the need for the Mwanza City Council to have adequate planned, surveyed and serviced land for households and public uses which all these processes put more pressure on natural resources. The city council has taken necessary initiatives of tree planting in order to prevent critical deforestation that might happen in the near future.

Various wards were involved in both raising and planting trees in adversely affected areas. A total of 207,365 tree seedlings were planted in Mwanza city council from Mkuyuni ward in 2011. Isamilo ward planted a total of 10,000 tree seedlings in 2013. There was no data for other wards.

3.4.2 Environmental Conservation

Table 3.16 shows the number of NGOs and Number of Development Partners that have been involved in environmental conservation through different approaches. To alleviate the shortage of clean and safe water as well as inadequate number of health facilities in the city council, most of the NGO's have been involved in construction of water infrastructures as well as construction of health facilities, provision of agriculture inputs and implements in order to improve the socio well being of Mwanza city residents. Tree planting were also given priority as the table shows that the NGO so called adverse was keen in tree planting activities.

Table 3.16 Number of NGOs and Development Partners Involved in Environmental Conservation by ward, Mwanza City Council; 2015

ward	Number of NGOs	Number of Development Partners	Percent NGOs
Mkolani	18	1	10.8
Isamilo	40	2	24.1
Mahina	27		16.3
Mirongo	1	0	0.6
Luchebele	17	3	10.2
Pambba	31	2	18.7
Butimba	21	1	12.7

Igogo	11	1	6.6
Total	166	10	100

Source: City Director's Office (Natural Resources Department), Mwanza City Council, 2016

3.4.3 Beekeeping

Production of honey and wax is another sector which has not been fully utilised by residents of Mwanza city council. Besides having conducive environment for modern bee keeping the region had only 12 cumulative traditional beehives in 2015 which found in Buhongwa ward. There is a need for the city council management to raise awareness of this opportunity in order to alleviate poverty levels for those living along these forests.



Implementation of modern bee keeping is yet to be achieved in Mwanza city council due to the shortages of using modern beehives. This is evidenced by the number of modern beehives found in the last five years. Table 3.17 shows that Mwanza city council had cumulative total of 881 modern beehives for the specified years. In 2011, the city council had only 6 modern beehives, it was increased to 149 in 2013 and reached 328 in 2015. Buhongwa had the largest percentage (40.4 percent) of beehives in the city council followed by Lwanhima (17.9 percent), Luchehele (5.4 percent), Igoma (4.1 percent), Mkolani (3.9 percent), Pamba (3.6 percent), Kishiri (2.9 percent), Nyagezi (2.3 percent) and Butimba (1.1 percent). Again other wards in city council does not have good environment for bee keeping of modern beehives in the city council (Table 3.20). One general observation from these data is that there is a high expectation on the improvement of bee keeping in future due to a significant increase on the use of modern beehives in recent years.

Table 3.17 Number of Modern Beehives by ward, Mwanza City Council; 2011 to 2015

Ward	2011	2012	2013	2014	2015	Total	Percent
Buhongwa	-	89	99	-	168	356	40.4
Lwanhima	-	-	30	54	74	158	17.9
Luchehele	-	12	12	12	12	48	5.4
Igoma	6	6	8	8	8	36	4.1
Mkolani	-	-	-	16	18	34	3.9
Pamba	-	-	-	16	16	32	3.6

Kishiri	-	-	-	12	12	24	2.7
Nyegezi	-	-	-	10	10	20	2.3
Butimba	-	-	-	5	5	10	1.1
Igogo	-	-	-	-	-	-	-
Mkuyuni	-	-	-	-	-	-	-
Nyamagana	-	-	-	-	-	-	-
Mirongo	-	-	-	-	-	-	-
Isamilo	-	-	-	-	-	-	-
Mabatini	-	-	-	-	-	-	-
Mbugani	-	-	-	-	-	-	-
Mahina	-	-	-	-	-	-	-
Mhandu	-	-	-	-	-	-	-
Total	6	107	149	291	328	881	100

Source: City Director's Office (Natural Resources Department), Mwanza City Council, 2016

3.4.4 Fishery

Tanzania is one of the largest fishing country in Africa. According to FAO; it is ranked in the top ten countries in terms of total capture fisheries production. Inland production is from water bodies which Lake Victoria is the largest in Africa and the major source for fishing in Mwanza city council. The main location of fishing activities in the city council is Mkuyuni, Nyamagana, Kishiri, Luchebele, Pamba, Igoma, Mhandu and Buhongwa ward. Table 3.21 shows fishery resource facilities and production in 2015. Mwanza city council has large share of lake Victoria water body but has not yet utilised due to absence of official fish market centres which resulted to the improvement of well being of fishermen and population of Mwanza city council as a whole.

Table 3.18 shows that the city council had 359 fishing licences, 1,077 fishermen and 359 registered fishing vessels. Table 3.18 also shows that a total of 1,722.7 million kilograms of fishes were caught in 2015 and total of TZS 4,544.8 million were earned by Mwanza city council residents. Mkuyuni, Nyamagana and Kishiri were the three giant wards which performance of the sector was significantly observed. While Lwanhima, Mkolani, Butimba,

Nyegezi wards to mention few had no fishing activity due to absence of water body as shown in table 3.18.

Table 3.18 Fishery Resources and Production by ward from January to December, 2015; Mwanza City Council

Ward	No. of Fishing licences	No. of Fishermen	No. of Registered Fishing Vessels	Fish Production	
				Weight (kg)	Value (Tshs. "000")
Buhongwa	-	-	-	9,600	38,400
Lwanhima	-	-	-	-	-
Mkolani	-	-	-	-	-
Luchebele	227	681	227	28,800	144,000
Butimba	-	-	-	-	-
Nyegezi	-	-	-	-	-
Igogo	-	-	-	-	-
Mkuyuni	132	396	132	1,277,288	2,338,661
Pamba	-	-	-	26,148	130,740
Nyamagana	-	-	-	295,320	1,476,600
Mirongo	-	-	-	-	-
Isamilo	-	-	-	-	-
Mabatini	-	-	-	-	-
Mbugani	-	-	-	-	-
Mahina	-	-	-	-	-
Mhandu	-	-	-	21,000	105,000
Igoma	-	-	-	25,200	125,000
Kishiri	-	-	-	39,360	186,390
Total	359	1,077	359	1,722,716	4,544,791

Source: City Director's Office (Natural Resources Department), Mwanza City Council, 2016

The revenues collected from selling fish products in Mwanza city council for 2013, 2014 and 2015 was Tshs. 302,765,839.64, 40,416,450 and 90,690,000 respectively. There is no improvement of revenue earned by fishermen in the city council when comparing 2013 and 2015 seasons. The revenue earned by fishermen decreased by Tshs. 212,075,839.64 between 2013 and 2015.

3.4.5 Historical Site Viewing Tourism

According to the national industry's mission statement that forms the basis of the tourism policy is develop sustainable quality tourism that is ecologically friendly to the conservation and restoration of the environment and its people's culture. Mwanza city council is one of the unique destination in the Tanzania that has yet been discovered by many. It is a land of much wonder holding an unparalleled diversity of fauna, flora and many natural features. The wonders of rocks, the scenery, topography and very friendly people, harbour, the growth of excellent cultural tourism beach holidays, game hunting, infrastructure ventures, historical and archaeological ventures and certainly the best wildlife photographic safaris on the continent. Table 3.19 shows the historical sites potential for tourism in Mwanza city council.

Table 3.19 Historical sites potential/attractive for Tourism; Mwanza City Council;2015

Type of historical site available	Village/Mitaa	Ward	District
Gunzet House		Nyamagana	Nyamagana
Bismark Rock	capripoint	Nyamagana	Nyamagana
Rock Beach Garden	capripoint	Nyamagana	Nyamagana
Ghandi Hall	Nyamagana Mashariki	Nyamagana	Nyamagana
MWAWASA/Old Prison	Nyamagana Mashariki	Nyamagana	Nyamagana
Grave yard/Makaburi Capripoint	Idara ya Maji	Nyamagana	Nyamagana
MV Bukoba Grave yard			Nyamagana
Central Market	Pamba A	Pamba	Nyamagana
Igogo caves	Jiwe	Igogo	Nyamagana
Igogo caves	Malulu	Igogo	Nyamagana
Saanane Island	capripoint	Nyamagana	Nyamagana
Hindu Temples			
Swamirayan,Sikh,ariyan temle	Nyamagana Magharibi	Nyamagana	Nyamagana
Fish monument	Nyamagana Magharibi	Nyamagana	Nyamagana
Uhuru monument		Nyamagana	Nyamagana
Kemondo Garden	Nyamagana Mashariki	Nyamagana	Nyamagana
European Cemetery	Nyamaghana magharibi	Nyamagana	Nyamagana
Nyerere monument	Pamba B	Pamba	Nyamagana
Nyamagana stadium	Nyamagana Magharibi	Nyamagana	Nyamagana
CCM Building The first slypur at Mwanza	Nyamaghana Mashariki	Nyamagana	Nyamagana

Source: City Director's Office (Natural Resources Department), Mwanza City Council, 2016

3.4.6 Eco Tourism

Availability of good infrastructure such as accommodation facilities, telecommunication services, roads, banking/bureau de change services and tour operators are essential tools in the development of competitive tourism industry. Dar es Saalam to Mwanza road plays a key role in the eco-tourism development of the region. The road provides easy communication between the region and other big commercial cities in Tanzania like Dar es Salaam and Mwanza city council 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 the Mwanza city council. In this regards, construction of new accommodation facilities become 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 3.20 shows accommodation facilities by wards in Mwanza city council for the year 2015. According to Table 3.20, the city council had 243 guest houses and 43 hotels by the end of 2015. Most of the guest houses (15.6 percent) and hotels (27.9 percent) were concentrated in Mbugani and Pamba wards respectively of the city council. Mhandu ward was second ward in number of guest houses (30) as shown in table 3.20.

Table 3.20 Accommodation facilities by ward, Mwanza City Council; 2015

Ward	No. of Guest House	Percent	No. of Hotel	Perecent
Nyamagana	5	2.1	9	20.9
Mirongo	14	5.8	6	14.0
Buhongwa	13	5.3	2	4.7
Mhandu	30	12.3	0	0.0
Luchehele	8	3.3	3	7.0
Isamilo	5	2.1	2	4.7
Mahina	5	2.1	0	0.0
Mbugani	38	15.6	4	9.3

Mabatini	23	9.5	0	0.0
Mkolani	18	7.4	0	0.0
Igogo	9	3.7	0	0.0
Pamba	13	5.3	12	27.9
Mkuyuni	16	6.6	0	0.0
Nyegezi	8	3.3	1	2.3
Kishili	13	5.3	0	0.0
Butimba	25	10.3	4	9.3
Total	243	100	43	100

Source: City Director's Office (Natural Resources Department), Mwanza City Council, 2016

3.5. Mining Sector

Mining though is an economic activity, so far is not well implemented in the city council. Currently, there are lot of surveys and researches going on in search of existence of mineral deposits in terms of quantity and quality. These surveys and researches are done heavily by foreign companies while local companies are invested in small scales. However, there are small scale extractions of mineral at Buhongwa, Lwanhima, Igoma and Kishiri ward, mostly extracted mineral includes quarrying and sand minerals as shown in table 3.21. There was no data on distribution of existing mineral deposits in other wards. These minerals are mostly purchased by brokers and dealers in Mwanza City Council.

Table 3.21 Distribution of Existing Mineral Deposits and Scale of Mining by ward, Mwanza City Council;2015

Ward	Type of Mineral Deposit	Small Scale	Medium Scale	Large scale
Buhongwa	Agregate sand	127	-	1
	Rock	59	-	-
Lwanhima	Agregate sand	2	-	1
	Rock	43	-	-
Mkolani	-	-	-	-
Luchebele	-	-	-	-
Butimba	-	-	-	-
Nyegezi	-	-	-	-
Igogo	-	-	-	-
Mkuyuni	-	-	-	-
Pamba	-	-	-	-

Nyamagana	-	-	-	-
Mirongo	-	-	-	-
Isamilo	-	-	-	-
Mabatini	-	-	-	-
Mbugani	-	-	-	-
Mahina	-	-	-	-
Mhandu	-	-	-	-
Igoma	Agregate sand	46	-	-
	Rock	32	-	-
Kishiri	Agregate sand	27	-	-
	Rock	15	-	-
Total		351		2

Source: City Director's Office (Mining Sector), Mwanza City Council, 2016

3.5.1 Industrial Production

Industries all over Mwanza region are known to play a major role in socio-economic development. This is also the case in Mwanza city council, where industries, mostly small scale contribute significantly to jobs creation, income generation and stimulation of growth in urban areas of the city council.

Looking at Table 3.22, by the end of 2015 there were 231 small scale industries employing 1,180 staff. More than thirty percent (i.e 32.9 percent) of the 76 industries were involved with carpentry. Small scale industries involved with welding counted to have 76 industries (32.9 percent), service industries 32 (13.9 percent). Majority of staff (430 or 36.4 percent of the total staff) were working in service industry - garage while very few of them (8 staff, 0.7 percent) working in fresh water industry.

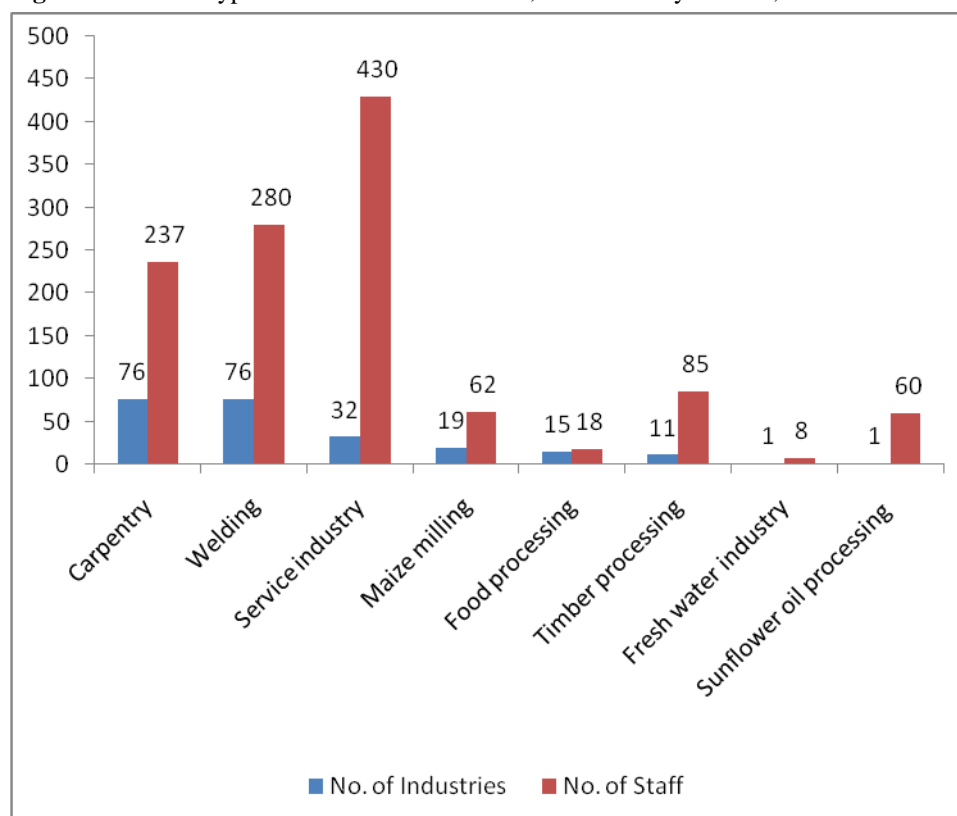
Table 3.22 Type of Small Scale Industries by ward, Mwanza City council; 2015

Type of Industry	Number of Industries	Percent	Total no. of staff	Percent
Carpentry	76	32.9	237	20.1
Welding	76	32.9	280	23.7
Service industry – garage	32	13.9	430	36.4
Maize milling	19	8.2	62	5.3

Food processing	15	6.5	18	1.5
Timber processing	11	4.8	85	7.2
Fresh water industry(Nole)	1	0.4	8	0.7
Sunflower oil processing mill	1	0.4	60	5.1
Total	231	100	1,180	100

Source: City Director's Office (Trade Department), Mwanza City Council, 201 6

Figure 3.3 Type of Small Scale Industries, Mwanza City council; 2015



Source: City Director's Office (Trade Department), Mwanza City Council, 201 6

Table 3.23 gives a number of medium scale industries which were available in the city council in 2015. The distribution of medium scale industries by ward were as follows: Mhandu (64.9 percent), Igoma (19.3), Nyamagana (7.0 percent), Lwanhima (5.4 percent), Igogo and Mkuyuni with 1.8 percent each, of the total of 57 medium industries which were available in Mwanza City Council in 2015.

Table 3.23 Type of Medium Scale Industries by ward; Mwanza City Council; 2015

Ward	Type of Industry	Number of industries	Percent
Lwanhima	Phamacetical	1	1.8
	Bricks	1	1.8
	Local soap	1	1.8
Igogo	Publisher	1	1.8
Mkuyuni	Magodoro Hasham Jamali	1	1.8
Nyamagana	Maize Milling	2	3.5
	Timber processing	2	3.5
Mhandu	Service Industry	30	52.6
	Capentry	7	12.3
Igoma	Mwanza Fishing	1	1.8
	Eincher Mwanza Branch	3	5.3
	Mabati chapa Kiboko	3	5.3
	Umoja wa wafanyabiashara wa mbao	4	7.0
Total		57	100

Source: City Director's Office (Trade Department), Mwanza City Council, 201 6

Table 3.24 gives a number of large scale industries which were available in the city council in 2015. The distribution of large scale industries by ward were as follows: Igogo (5 industries), Mkuyuni (one industry) and Mahina (one industry) in which a total of 7 large industries were available in Mwanza City Council in 2015.

Table 3.24 Number of Large Scale Industries by ward, Mwanza City Council; 2015

Ward	Type of Industry	Number of industries
Igogo	Fishing prod	1
	Poly bags	1
	Vegetable oil industry	1
	Gas plant	1
	Marine seru	1
Mkuyuni	Kiwanda cha magodoro	1
Mahina	Food processing Biscut	1
Total		7

Source: City Director's Office (Trade Department), Mwanza City Council, 201 6

CHAPTER FOUR

Economic Infrastructure

4.0 Introduction

Chapter Four explains the existing economic infrastructure in Mwanza city council. It covers the road network development in terms of road classification, type of road surface and passability. It also covers railways, air and postal services including radio and television facilities. In the energy sector developments in regards to hydro-electricity, biogas, solar energy, fuel wood and fossil fuels are discussed.

4.1 Road network

As indicated in Table 4.1, road network for Mwanza city council in 2015 was about 577 kilometer. Trunk road constitutes 30 kilometer (5.2 percent) of the regional network. The district /council roads constitute 547 kilometer (94.8 percent).

Buhongwa ward had the largest road network with the total length of 47 kilometers and Mirongo ward being the least with 9.5 kilometers. Unfortunately the council had neither regional nor feeder roads.

Table 4.1 Length of Road Network by ward (in km) Mwanza City Council, 2015

Ward	Type (in km)				
	Trunk	Regional	District/Urban	Feeder	Total
Buhongwa	4	-	43.0	-	47.0
Lwanhima*	0	-	35.0	-	35.0
Mkolani	2	-	42.3	-	44.3
Luchehele*	0	-	39.5	-	39.5
Butimba	2	-	33.4	-	35.4
Nyegezi	1	-	32.6	-	33.6
Igogo	3	-	22.3	-	25.3
Mkuyuni	1.5	-	23.9	-	25.4
Pamba	1	-	25.7	-	26.7
Nyamagana	2	-	26.5	-	28.5
Mirongo	0	-	9.5	-	9.5
Isamilo	2	-	27.3	-	29.3
Mbugani	1	-	13.2	-	14.2
Mabatini*	3	-	15.3	-	18.3
Mahina	2	-	39.8	-	41.8

Mhandu*	1	-	37.2	-	38.2
Igoma	4	-	38.8	-	42.8
Kishiri*	0.5	-	41.8	-	42.3
Total	30	0	547.0	0	577.0
Percent	5.2	0	94.8	0	100

Source: *Compiled data from CityExecutive Director's office, 2016*

4.1.1 Road network classification

Out of 577 kilometers road network of Mwanza city council only 36.92 kilometers (6.4 percent of the road network) is tarmac. The 128.25 km (22.2 percent) are gravel road and the remaining 411.85 km (71.4 percent) are earth roads. Tarmac and gravel roads make up only 28.6 percent of the network henceforth there is no any close affinity between road worthiness and tarmac/gravel surfaces, it can generally be said that only 28.6 percent of the region's road network is passable throughout the year. (Table 4.2)

Table 4.2 Length of Road Network by Type of Road Surface by ward; Mwanza city Council; 2015

Ward	Tarmac	Gravel	Earth	Total
Buhongwa	0	6.5	41.53	48.03
Lwanhima	0	4	33.98	37.98
Mkolani	0.53	8.55	33.22	42.3
Luchebele	3.27	10	28.23	41.5
Butimba	3.5	7.5	22.38	33.38
Nyegezi	2.2	2.5	27.87	32.57
Igogo	2.2	6.5	13.56	22.26
Mkuyuni	0.5	4	19.43	23.93
Pamba	7.09	10.5	13.15	30.74
Nyamagana	9.03	2.5	14.97	26.5
Mirongo	2.15	1	6.3	9.45
Isamilo	5.75	8	13.55	27.3
Mabatini	0	8.5	11.78	20.28
Mbugani	0.7	1.8	10.71	13.21
Mahina	0	13.5	26.26	39.76
Mhandu	0	9.5	32.72	42.22
Igoma	0	15.2	28.59	43.79
Kishiri	0	8.2	33.62	41.82
Total	36.92	128.25	411.85	577.0
Percent	6.4	22.2	71.4	100

Source: *Compiled data from CityExecutive Director's office, 2016*

4.2 Railway Transport

Mwanza region is served by the central line railway system that connects Mwanza with Tabora, Kigoma and Dar es Salaam. The importance of the Central Railway system to the region is felt in hauling agricultural and industrial goods to and from the region. Goods transport from the region is to a great magnitude dominated by cotton. This smears for all the railway stations within the region. Railway station within Mwanza City council which serves embarking and disembarking is Mwanza Town Station where passengers are also ferried by this Central Railway System. The information provided by Tanzania Railway Limited shows that a total of 10,232 passengers used the line while as much as 446 tons of cargo was ferried.

4.3 Marine Transport

Mwanza region is well served with marine transport. Public marine vessels are the major carriers of both passengers and cargoes destined for the neighboring lake zone regions - Kagera and Mara. There are also marine transport facilities connecting Mwanza lake port with other lake ports of Kenya and Uganda. There are private marine vessels also mainly ferries which move passengers to and from Sengerema landing ports to Mwanza city, Ukerewe landing port and Mwanza City. However, Mwanza city council is served by one station known as Kamanga which ferried 784,762 passengers in 2015 and 172,800,000 tons of cargoes.

4.4 Telecommunication Services

Mwanza City council enjoys internet and telephone services (both cellular phone and land line based telephone services) and postal services. The council is very fortunate as it has 6 radios and 2 television stations transmitting from Jembe FM, Mwanza City Radio Fm, Sauti Fm, Passion Fm, Lake Fm, Cloud Fm, City Tv and Barmedias Tv. Famous Tanzania local television channels Star Tv, Independent Television (ITV), Channel Ten, Clouds TV, Tanzania Broadcasting Corporation (TBC) all these can be accessed. The council has also 4 internet cafes, 1 post office and 4 sub-post offices.

Besides land lines provided by TTCL, Mwanza city has a very good network for private mobile phones, including Tigo, Vodacom, Airtel, Zantel, Halotel and TTCL Mobile. Whereas Halotel has the highest average coverage in the council (100 percent) followed by Tigo (84 percent) and

Airtel (68.5 percent). Other mobile companies including TTCL mobile, Vodacom and zantel were not able to specify their coverate rates.

4.5 Energy Sector Development

Energy is a prerequisite for proper functioning of nearly all sectors in the economy. It is an essential service whose availability and quality determines success or failure of development endeavours. The main sources of energy in Mwanza city council are electricity, gas, paraffin, solar, firewood and charcoal. Electricity is commonly used in urban and rural areas.

4.6 Electricity

Electricity supply stimulates development, both social and economic. It improves ease and generally improves the quality of life. Electricity supply in the council is not yet stable and faces a number of problems such as intermittent power supply, low voltage, rationing, and outages. In one way or another, these problems affect production of goods and services in the council. Table 4.3 shows different type of customers supplied electricity by TANESCO in 2011, 2013 and 2015. Number of institutions connected with electricity in the council increased from 20 in 2011 to 21 in 2013 and 2015. Number of domestic installation increased from 9,121 customers in 2011 to 15,751 in 2013 and reached 26,667 customers in 2015 while commercial segment of customers was constant for three year in 2011, 2013 and 2015 with 152 customers. However for the three years 2011, 2013, 2015 number of institution customers was 0.1 percent of the total customers, Domestic 99 percent and commercial 0.9 percent.

Table 4.3 Number of Customers using/connected to Electricity; Mwanza City council; 2011 – 2015

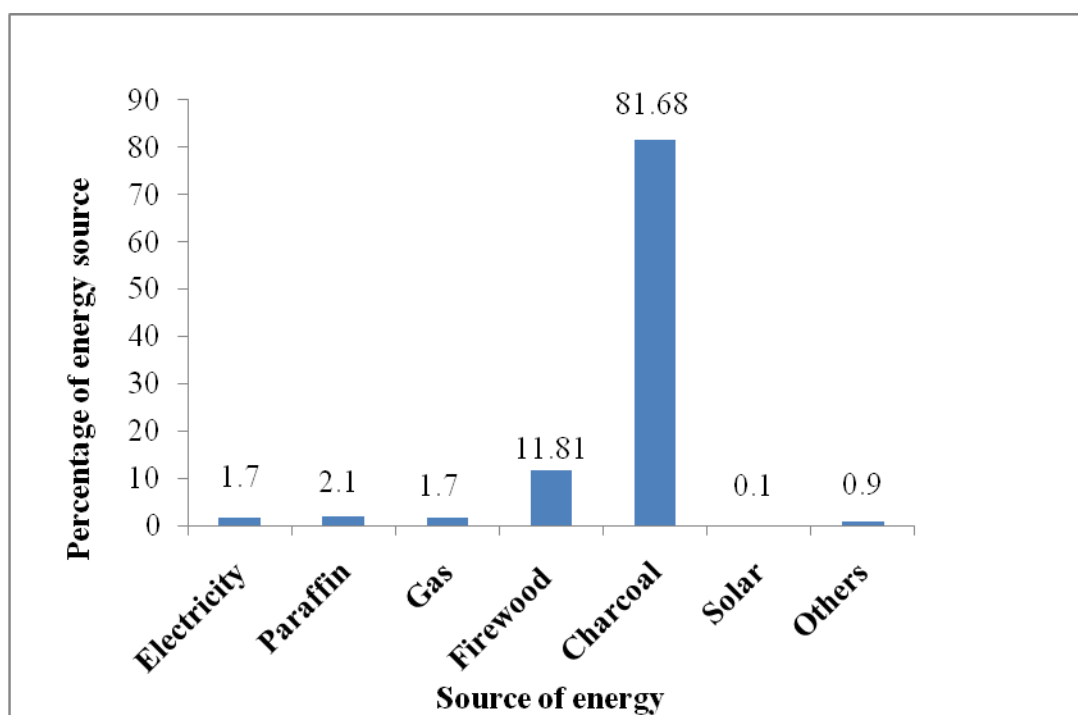
Year	No. of Customers			
	Institution	Domestic	Commercial	Total connected
2011	20	9,121	152	9,293
2013	21	15,751	152	15,924
2015	21	26,667	152	26,840
Total	62	51,539	456	52,057
Percent	0.1	99.0	0.9	100.0

Source: *Mwanza City Council, TANESCO's Office records, 2016*

4.7 Source of Energy for Cooking

The 2012 population and housing census collected information on households' main source of energy for cooking. The information serene indicates the access and availability to modern sources of energy for cooking in the city coucil. Results show total number of 75,659 households use different sources of energy for cooking. Most of the private households use charcoal as source of energy for cooking (81.68 percent), followed by firewood (11.8 percent). Paraffin accounted for about 2.1 percent whereas electricity and gas was 1.7 respectively percent while other sources like solar and other sources accounted for less than one percent each. (Figure 4.1)

Figure 4.1 Number of Private Households by Main Sources of Energy for cooking, Mwanza City Council, 2012 Census



Source: NBS Census Report, 2012

CHAPTER FIVE

Social Services

5.0 An Overview

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

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

Water supply and sanitation is also discussed in this chapter. Performance of water supply for both rural and urban areas of Mwanza city council highlighted in terms of sources, technology and capacity of water supply. However, sanitation and sewage system at the City is also briefly explained.

5.1.1 Health Sector

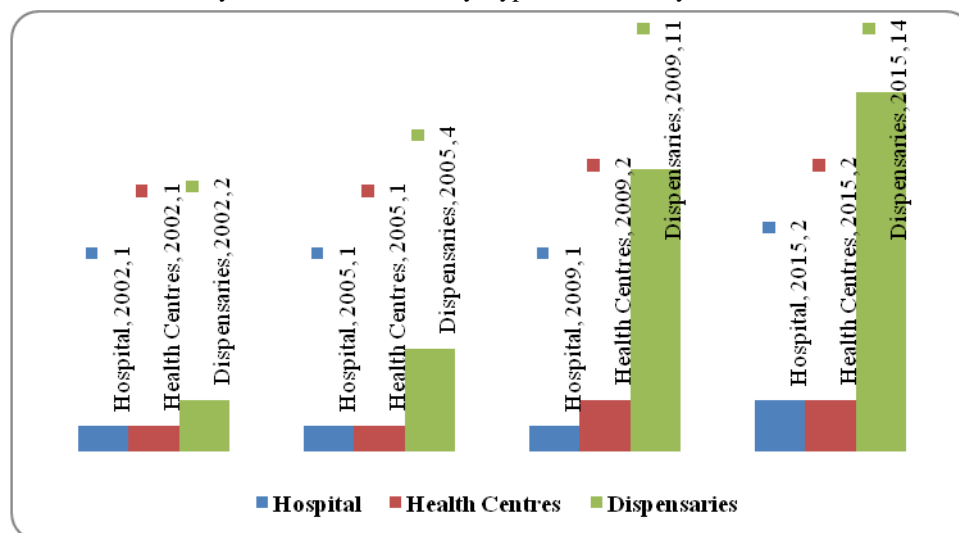
The status of public health services can be visualized through the health facilities, availability and commitment of health practitioners, implementation of preventive and curative measures and availability of medicine. Among others, the city experiences shortages of health practitioners such as medical specialists, radiographers, doctors, pharmacists, assistant medical officers (AMOs) and nursing officers (NOs) as well as equipment and medicines. This causes unnecessary loss of peoples' lives due to preventable diseases. The major killer diseases in Mwanza city council include: Malaria both uncomplicated and severe, Anemia, Pneumonia, modern diseases such as hypertension, diabetes, accidents and other related diseases.

5.1.2 Health Facilities

Mwanza city, like other councils in the region, has done great achievements in the health sector by improving the availability of health facilities (Figure 5.1) and other medical equipments. Figure 5.1 shows that public health facilities increased from 4 in 2002 to 14 facilities (a hospital, 2 health

facilities and 11 dispensaries) in 2012 and reached 18 facilities (2 hospitals, 2 health centres and 14 dispensaries) in 2015. One general observation is that, the city also similar problem of having uneven distribution of health facilities like other councils in the Region.

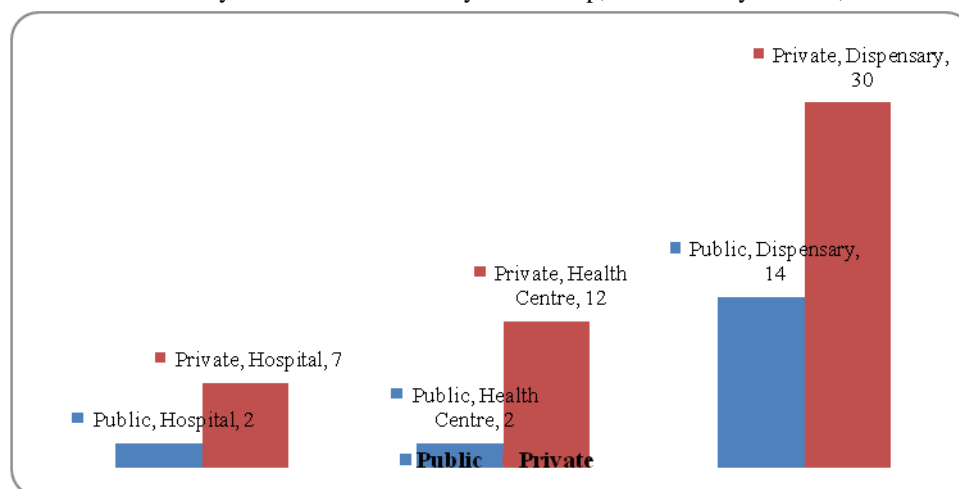
Figure 5.1 Availability of Health Facilities by Type, Mwanza city council; 2002, 2009 and 2015



Source: City Director's Office, City Medical Office, Mwanza city council, 2016

Looking at ownership, private participation in the provision of health services as emerged by the health policy is significant in Mwanza city council. Figure 5.2 shows that, out of 57 health facilities, 39 facilities, equivalent to 28.7 percent are privately owned; 10 are hospitals, 23 health centers and 73 dispensaries.

Figure 5.2 Availability of Health Facilities by Ownership, Mwanza city council; 2015



Source: City Director's Office, City Medical Office, Mwanza city council, 2016

Besides achievement reached so far in health sector, the city is still lagging behind in the implementation of health policy under which each ward has to have a health center and have a dispensary in each mtaa. Table 5.1 shows that Mwanza city has the biggest shortages of both public health centers and dispensaries, as of now one health centre servicing almost 10 wards and each dispensary facilitating 14 mitaa. Only two wards, namely Mironko and Igoma had public health centre each and 14 out of 175 mitaa had at least a public dispensary (Table 5.1). One general observation in this sector is that, the observed shortages have been reduced by the participation of private sector and reached to less than a ward and 4 mitaa per health centre a dispensary respectively (Table 5.1).

Table 5.1 Distribution of Public Health Facilities by Administrative Unit, Mwanza city council; 2015

Ward	No. of Mitaa	Public Facilities				Total (Public and Private) Facilities			
		No. of Health Centres	No. of Dispensaries	Average Wards per HC	Average Mitaa per Dispensary	No. of Health Centres	No. of Dispensaries	Average Wards per HC	Average Mitaa per Dispensary
Pamba		0	1	0	0	1	2	0.5	0
Nyamagana		0	1	0	0	1	3	0.3	0
Isamilo		0	0	0	0	2	1	1.0	0

Mirongo	1	0	1	0	3	0	0.0	0	
Mbugani	0	1	0	0	1	4	0.3	0	
Mabatini	0	0	0	0	1	2	0.5	0	
Mhandu	0	0	0	0	0	1	1.0	0	
Mkolani	0	3	0	0	0	4	0.3	0	
Nyegezi	0	0	0	0	0	1	1.0	0	
Butimba	0	1	0	0	1	4	0.3	0	
Mahina	0	1	0	0	1	3	0.3	0	
Igogo	0	1	0	0	0	3	0.3	0	
Igoma	1	1	1	0	2	6	0.2	0	
Mkuyuni	0	0	0	0	0	1	1.0	0	
Luchelele	0	1	0	0	0	5	0.2	0	
Buhongwa	0	2	0	0	1	2	0.5	0	
Kishiri	0	0	0	0	0	0	0.0	0	
Lwanhinma	0	1	0	0	0	2	0.5	0	
Total	175	2	14	1.4	12.5	14	44	0.4	4.0

Source: City Director's Office, City Medical Office, Mwanza city council, 2016

5.1.3 Health Facility Ratios

The availability of health facilities in Mwanza city council falls within WHO standards. The average coverage of the population by health facilities in Mwanza city council was 1.9 facilities per 10,000 people in 2002, but reduced to 1.6 facilities per 10,000 people in 2015. Looking at council level, Table 5.2 shows that Mwanza city, though is still far from WHO standards, was among the best council in the region with population coverage per facility in 2015. Looking at health facilities per 10,000 people in 2002, the best average was 2.1 facilities per 10,000 persons recorded at Magu district council followed by Mwanza city (1.9) and Misungwi (1.2). Likewise, Sengerema and Buchosa district councils had the worst coverage with averages of 0.8 and 0.9 facilities per 10,000 persons in 2002 and 2015 respectively (Table 5.2).

Table 5.2 Relating Health Facilities to the Population by Council, Mwanza city council; 2002 and 2015

Council	2002				2015			
	Total Population	Total No. of h.f.s	Mean Average Population Per h.f.s	H.f.s per 10,000 people	Total Population	Total No. of h.f.s	Mean Average Population Per h.f.s	H.f.s per 10,000 people
Ukerewe	260,831	27	9,660	1.0	345,147	37	9,328	1.1

Magu	244,356	51	4,791	2.1	299,759	47	6,378	1.6
Mwanza City	474,679	90	5,274	1.9	411,101	64	5,679	1.6
Kwimba	314,925	35	8,998	1.1	449,098	57	7,132	1.3
Sengerema	498,993	42	11,881	0.8	335,267	46	7,288	1.4
Ilemela*					343,001	43	7,977	1.3
Misungwi	256,133	31	8,262	1.2	351,607	45	7,813	1.3
Buchosa*					327,767	30	10,926	0.9
Total	2,049,917	276	7,427	1.3	2,862,747	369	7,514	1.3

* Ilemela municipal Council was part of Mwanza City and Buchosa was part of Sengerema district council.

H.f.s: means Health facilities

Source: City Director's Office, City Medical Office, Mwanza city council, 2016

5.1.4 Population per Doctor Ratio

Table 5.3 shows that the distribution of doctors for the 2011 was uneven and in favour of Mwanza city which is the headquarters of the City. The City average population per doctor was 13,225 in 2002 and decreased to 6, in 2015. A similar trend is observed at council level but more so in Mwanza city compared to the rest of council. One general observation is that, Mwanza city be a headquarters of the city has more referral hospitals, of which doctors and specialist doctors are found compared to other health facilities. Table 5.3 also reveals that Magu district council had the highest average population per doctor in 2002, while Buchosa district council was recorded with the highest average population per doctor in 2015.

Mwanza city, like other urban councils, does not enough health facilities in all mitaa which resulted to have difficulties on doing analysis at ward level since not all wards have health facility.

Table 5.3 Distribution of Doctors among Population by Council, Mwanza city council; 2002 and 2015

Council	2002			2015		
	Total Population	No. of Doctors	Average Population per Doctor	Total Population	No. of Doctors	Average Population per Doctor
Ukerewe	260,831	22	11,856	345,147	48	7,191
Magu	244,356	7	34,908	299,759	18	16,653
Mwanza City	474,679	57	8,328	411,101	101	4,070
Kwimba	314,925	18	17,496	449,098	53	8,474
Sengerema	498,993	21	23,762	335,267	47	7,133

Ilemela*				343,001	84	4,083
Misungwi	256,133	30	8,538	351,607	75	4,688
Buchosa*				327,767	10	32,777
Total	2,049,917	155	13,225	2,862,747	436	6,566

Note: * Ilemela municipal Council was part of Mwanza City and Buchosa was part of Sengerema district council.

Source: City Director's Office, City Medical Office, Mwanza city council, 2016

The available official health facilities and practitioners were not enough to serve the ever growing population of Mwanza city, the council has managed to establish primary rural health services to complement the existing health facilities. Table 5.4 shows that there 368 village health workers and registered 113 traditional medical practitioners distributed evenly in the city.

Table 5.4 Distribution of Rural Health Facilities by Ward, Mwanza city council, 2015

Ward	No. of TBAs (Trained)	No. of VHWs	Percent VHWs	No. of VHP	No. of TMP (Registered)	Percent TMP
Buhongwa	0	31	8.4	0	7	6.2
Lwanhima	0	36	9.8	0	0	0.0
Mkolani	0	19	5.2	0	4	3.5
Luchehele	0	23	6.3	0	0	0.0
Butimba	0	19	5.2	0	4	3.5
Nyegezi	0	18	4.9	0	0	0.0
Igogo	0	38	10.3	0	0	0.0
Mkuyuni	0	18	4.9	0	8	7.1
Pamba	0	23	6.3	0	13	11.5
Nyamagana	0	5	1.4	0	8	7.1
Mirongo	0	9	2.4	0	4	3.5
Isamilo	0	22	6.0	0	3	2.7
Mabatini	0	11	3.0	0	0	0.0
Mbugani	0	17	4.6	0	0	0.0
Mahina	0	8	2.2	0	14	12.4
Mhandu	0	15	4.1	0	9	8.0
Igoma	0	31	8.4	0	24	21.2
Kishiri	0	25	6.8	0	9	8.0
Total	0	368	100.0	0	113	100.0

Source: City Director's Office, City Medical Office, Mwanza city council, 2016

5.1.5 Status of Health Personnel

Table 5.5 shows that in 2015, the city was still experiencing a significant shortage of health personnel in regard to specialised doctors, medical doctors, dental surgeon, radiologists, dental therapists and pharmacists. In 2015, health personnel were dominated by trained nurses - NM/PHN (24.4 percent) followed by clinical officers (19.9 percent), medical attendants (11.8 percent) and health assistants (11.3 percent). Looking at sex difference, Table 5.5 also shows that 58.8 percent of medical personnel in Mwanza city were female and only 41.2 percent were male. There is a need for city authority to ensure good working conditions for specialists and doctors in order to motivate them to work in Mwanza city council.

Table 5.5 Type and Number of Medical Personnel by Ward, Mwanza City Council; 2015

Medical Personnel	Male	Percent	Female	Percent	Total	Percent
Specialist Doctors	1	100.0	0	0.0	1	0.5
Medical doctors	7	63.6	4	36.4	11	5.0
Ass. Medical Officers	3	50.0	3	50.0	6	2.7
Clinical Officers	34	77.3	10	22.7	44	19.9
Ass. Clinical Officers	1	100.0	0	0.0	1	0.5
Dental Surgeon	1	100.0	0	0.0	1	0.5
Ass. Dental Officer	1	100.0	0	0.0	1	0.5
Dental Therapist	0	0.0	1	100.0	1	0.5
Pharmacists	2	66.7	1	33.3	3	1.4
Pharmaceutical Technicians	2	66.7	1	33.3	3	1.4
Pharmaceutical Assistant	1	33.3	2	66.7	3	1.4
Laboratory Technicians	4	36.4	7	63.6	11	5.0
Laboratory Ass.	0	0.0	4	100.0	4	1.8
Radiologist	0	0.0	0	100.0	0	0.0
Radiographer	2	66.7	1	33.3	3	1.4
Radiographic Assistant	0	0.0	0	100.0	0	0.0
Nursing Officers	1	33.3	2	66.7	3	1.4
Trained Nurse/NM/PHN	9	16.7	45	83.3	54	24.4
Medical Attendants	0	0.0	26	100.0	26	11.8
Health Officers	17	68.0	8	32.0	25	11.3
Health Assistants	1	100.0	0	0.0	1	0.5
Health Secretaries	1	100.0	0	0.0	1	0.5
Other Medical Carders	3	16.7	15	83.3	18	8.1

Total	91	41.2	130	58.8	221	100.0
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Source: City Director's Office, City Medical Office, Mwanza city council, 2016

5.1.6 Morbidity

The health service aims at solving the problems of morbidity or sicknesses as well as mortality. However, in order to take care of morbidity, the government needs an inventory of these health problems. The inventory shows that the ten most common causes of illnesses are as shown in Table 5.6.

Out-patients

Table 5.6 shows that 86.7 percent out of 776,340 out patients recorded in 2011 were suffering from one or the other of the first five illnesses. In 2015 the first five causes of morbidity in the city applied to 87.2 percent out of 133,630 out-patients. Table 5.6 also shows that the first illness of out-patients in 2011 was malaria as a cause of morbidity in Mwanza city council. Acute respiratory infections (ARI) and other diagnosis were ranked second and the third with 18.4 percent each of occurrences. The fourth and fifth diseases were diarrhea and intestine worms respectively.

In 2015, observations were similar to those of 2011 except for the magnitude of cases (Table 5.6). Again malaria ranked first with a total of 54.2 percent of out patients followed by intestine worms (13.7 percent) and acute respiratory infections (10.4 percent). The Fourth and fifth diseases were skin infections and other diagnosis (4.5 percent each).

Table 5.6 Ten Most Commonly Reported Causes of Morbidity (Out Patients), Mwanza city council; 2011 and 2015

Number	2011			2015		
	Disease	No. of Occurrences	Percent	Disease	No. of Occurrences	Percent
1	Maralia	304,337	39.2	Maralia	72,367	54.2
2	Other diagnosis	143,230	18.4	Intestine worms	18,264	13.7
3	ARI	143,230	18.4	ARI	13,944	10.4
4	Diarrhea	42,930	5.5	Skin Infection	6024	4.5
5	Intestine worms	39,066	5.0	Other diagnosis	5975	4.5

	Sub Total	672,793	86.7		Sub Total	116,574	87.2
6	Pneumonia	34,770	4.5		Pneumonia	5703	4.3
7	Skin disease	32,485	4.2		Eye condition	3592	2.7
8	Eye condition	18,057	2.3		Emergency surgical	2016	1.5
9	Ear condition	12,502	1.6		Diarrhoea	4584	3.4
10	Animal bite	5,733	0.7		Anaemia	1161	0.9
	Total	776,340	100.0		Total	133,630	100.0

Source: City Director's Office, City Medical Office, Mwanza city council, 2016

In-patients

In 2011, severe malaria was the first cause of illness for inpatients recorded in Mwanza city council, followed by uncomplicated malaria, tuberculosis, diarrhea and pneumonia. Others were acute respiratory infections and anemia illnesses recorded in 2011 (Table 5.7). Unlike 2011, ten illnesses were observed for in patients in 2015 and almost 91 percent of inpatients were suffering from one or other of the first five diseases. Other diseases, uncomplicated malaria and severe malaria were the first, second and third causes of morbidity in Mwanza city council. The fourth and fifth causes of illnesses were pneumonia and anemia (Table 5.7).

Two general observations have been drawn in this analysis. The first one is that over 90 percent of patients recorded in both years were suffering the first five illnesses described above. The second is that though the data recorded in Table 5.7 ranked illnesses at city level, variations in magnitude and ranking among illnesses observed among the wards in the city.

Table 5.7 Ten Most Commonly Reported Causes of Morbidity (In Patients), Mwanza city council; 2011 and 2015

No.	2011			2015		
	Disease	No. of Cases	Percent	Disease	No. of Cases	Percent
1	Severe Malaria	23,704	30.5	Other Diagnosis	5,305	34.7
2	Uncomplicated Malaria	22,252	28.7	Uncomplicated Malaria	3,421	22.4
3	Tuberculosis	11,983	15.4	Severe Malaria	2,757	18.0
4	Diarrhea Disease	7,847	10.1	Pneumonia	1,261	8.2
5	Pneumonia	4,188	5.4	Anemia	1,160	7.6
	Sub Total	69,974	90.2	Sub Total	13,904	90.9
6	ARI	3,912	5.0	Diarrhea	881	5.8

7	Anemia	3,709	4.8	TB	320	2.1
8	Fracture	0	0.0	Bum	133	0.9
9	CSM	0	0.0	Poisons	32	0.2
10	Cholera	0	0.0	ARI	21	0.1
Total		77,595	100.0	Total	15,291	100.0

Source: City Director's Office, City Medical Office, Mwanza city council, 2016

5.1.7 Mortality

The available data does not give the true picture of the mortality level, but gives indicative information on causes of mortality in Mwanza city council. Table 5.8 shows that severe malaria was a dominant cause of mortality for inpatients of all ages in 2011 in the city followed by pneumonia (25.1 percent), anemia (19.4 percent), tuberculosis (15.0 percent) and diarrhea (10.3 percent).

In 2015, among the causes of mortality for inpatients of all ages in 2015 was also severe malaria (38.3 percent) followed by pneumonia (22.6 percent), other diagnosis (11.5 percent), anemia (8.3 percent) and normal delivery (7.7 percent). Other diseases were tuberculosis, acute respiratory infection and burns (Table 5.8).

Table 5.8 Ten Most Commonly Reported Causes of Mortality (In Patients), Mwanza city council; 2011 and 2015

Number	2011			2015		
	Disease	No. of Cases	Percent	Disease	No. of Cases	Percent
1	Severe Malaria	192	30.1	Severe Malaria	193	38.3
2	Pneumonia	160	25.1	Pneumonia	114	22.6
3	Anemia	124	19.4	Other Diagnosis	58	11.5
4	Tuberculosis	96	15.0	Anemia	42	8.3
5	Diarrhea	66	10.3	Normal delivery	39	7.7
	Sub Total	638	100.0	Sub Total	446	88.5
6	ARI	0	0.0	Tuberculosis	51	10.1
7	Fracture	0	0.0	ARI	7	1.4
8	Neoplasm	0	0.0	Burns	5	1.0
9	Clinical AIDs	0	0.0	Diarrhea	0	0.0
10	Uncomplicated Malaria	0	0.0	Uncomplicated Malaria	0	0.0
	Total	638	100.0		504	100.0

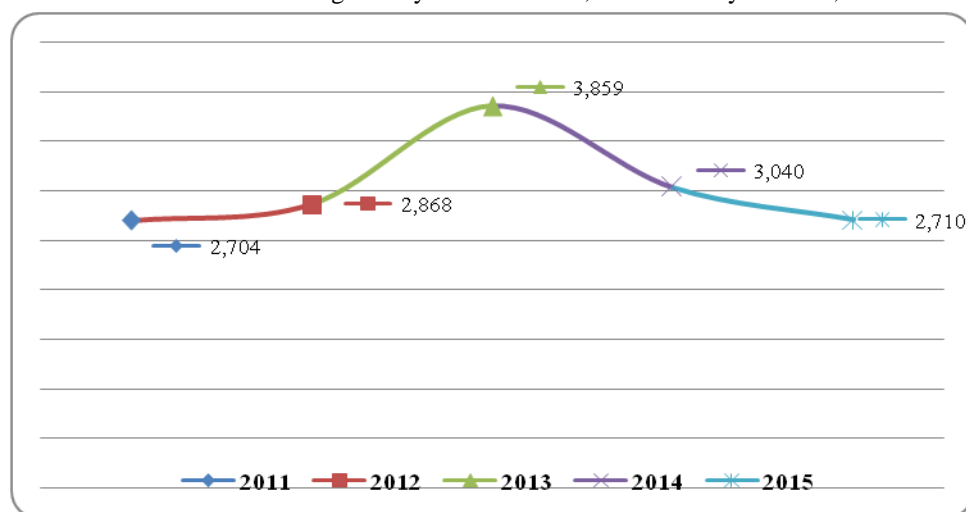
Source: City Director's Office, City Medical Office, Mwanza city council, 2016

5.1.8 HIV/AIDS Infections

Mwanza city council, like other councils in the country, uses three approaches to measure the extent and trend of the HIV prevalence among its people. These approaches are testing family blood donors, prevalence among VCT volunteers and expected mothers participating in the PMTCT service.

Though family blood donation is done in health facilities of Mwanza city the blood test is screened at Bugando Hospital and results are realized at aggregate level. This makes difficulties to analyse HIV prevalence at ward level. However, the data released by Bugando Hospital shows that number of new HIV cases fluctuated from 2,704 in 2011 to 3,859 cases in 2013, but dropped to 2,710 cases in 2015 (Figure 5.3).

Figure 5.3 HIV Infections among Family Blood Donors, Mwanza City Council; 2011 - 2015

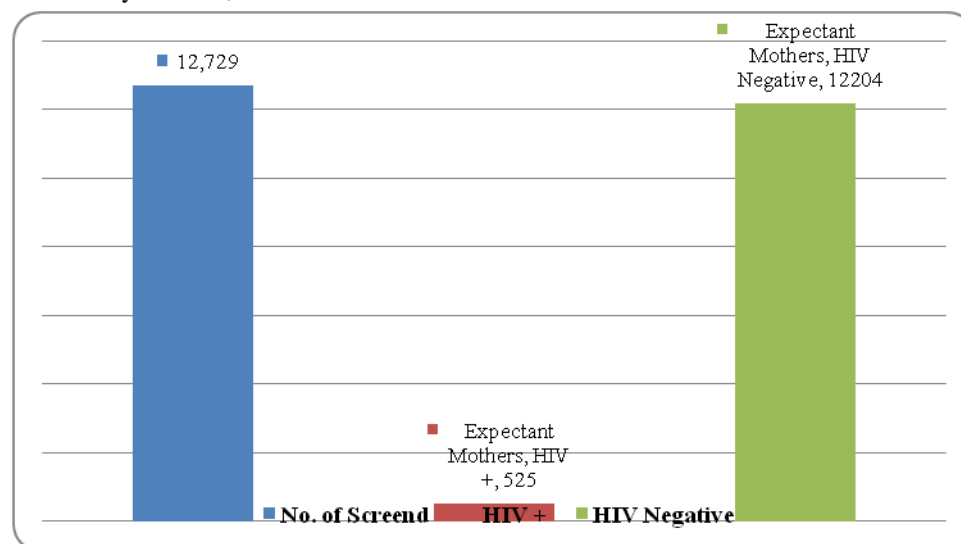


Source: City Director's Office, City Medical Office, Mwanza city council, 2016

The city also experienced similar challenge of getting disaggregated data on the prevalence of HIV/AIDS for expectant mothers from PMTCT service since blood testing is also done by the referral hospital of Bugando. However, Figure 5.4 reveals that out of 12,729 expectant mothers who participated in that service and hence screened, 535 expectant mothers, equivalent to 4.1 percent of

them were found to be HIV positive and 95.9 percent were HIV negative. The results from medical records also show all expectant mothers who are HIV positive attend clinics and receive ARVs.

Figure 5.4 Number of Expectant Mothers Who Screened for HIV Prevalence Through PMTCT Service, Mwanza City Council; 2015

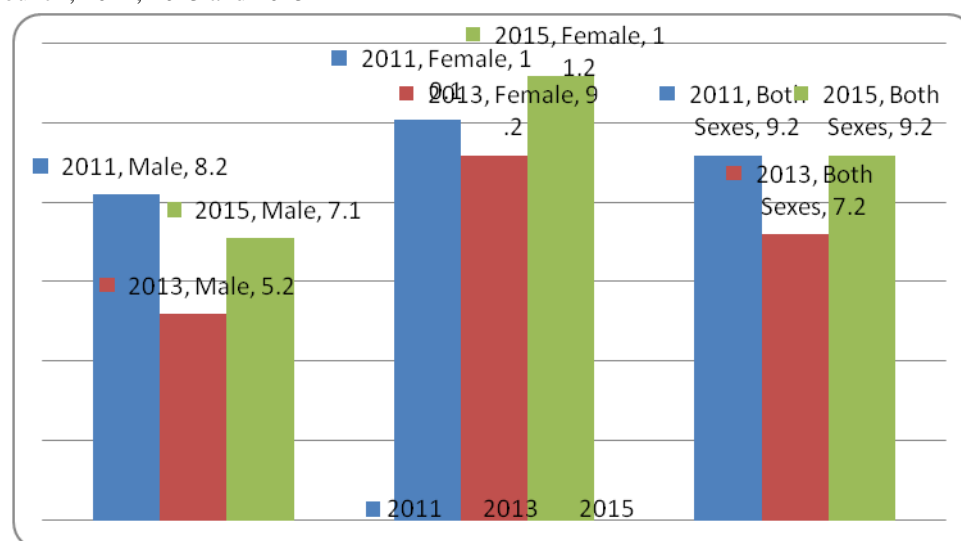


Source: City Director's Office, City Medical Office, Mwanza city council, 2016

Establishment of VCT services in all areas to a great extent enabled the City to establish a reliable source of data on the extent and significant of HIV prevalence since it managed to raise confidence and willingness of people to examine their health. Figure 5.5 shows a steady prevalence rate of persons with HIV positive from 9.2 percent in 2011 to 7.2 percent in 2013, but rose again to 9.2

percent in 2015. General observation from the data is that the proportion of female volunteers who affected by HIV were more than male in all three years (Figure 5.5).

Figure 5.5 HIV Prevalence Rates of VCT Volunteers who screened for HIV by Sex, Mwanza city council, 2011, 2013 and 2015



Source: City Director's Office, City Medical Office, Mwanza city council, 2016

5.1.8 The Impact of HIV/AIDS

The socio-economic assessment of Mwanza city council is not complete without addressing the extreme challenges caused by the HIV/AIDS and the efforts so far made by various local and international organisations to combat the epidemic. HIV/AIDS is highlighted in this document, because it has been a major health problem since its advent at the end of 1987. The other reason for

addressing the epidemic stems from the role it plays in impoverishing families and generating widows, orphans and vulnerable children due to the loss of bread-winners in their families.

The report from the HIV and Malaria Survey and medical record provided by councils qualifies Mwanza as among the few cities with ever increasing rates of HIV/AIDS prevalence in the country. Economically, Mwanza people are migrant labours who migrate from various parts of the country and with its status, being a center for business in east and central Africa has attracted businessmen from Uganda, DRC, Rwanda, Burundi, South Sudan and Kenya, which makes it easy for them to be engaged in sexual relationships. Other reasons include the traditional practice of prolonged drinking and unsafe sexual practices, polygamy as well as poverty. The poor, especially young girls who migrate to Mwanza city end up being domestic workers for sometime before resorting to prostitution for better survival.

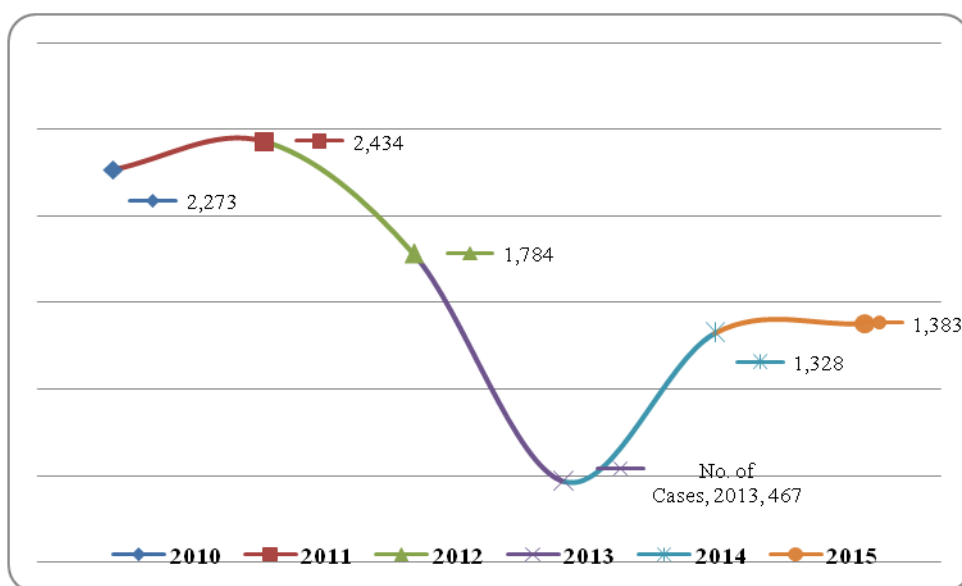
(i) The HIV Related Diseases

Understanding the status of HIV/AIDS prevalence in Mwanza is very difficult since the most of people are considering HIV/AIDS as a shameful disease to the extent many people die at home. With the exception of 2015, the reluctance of people to be tested in order to know their health status remains to be a big challenge. Therefore, there are people who live with the HIV/AIDS virus without knowing that they have it. One of the indications of the high prevalence rate in the city is the prevalence rate of HIV related diseases, including malaria and tuberculosis. As well as the impact of HIV such increase of widows and orphans.

(ii) Tuberculosis

Mwanza city, like other cities of Tanzania mainland, tuberculosis is among few communicable diseases spread at a highest rate due to congestion of people in various places, including public places such as markets, bus stand, public gathering and inside town buses. Medical record shows that the incidences of tuberculosis increased from 2,273 persons in 2010 to 2,434 cases in 2011, but decreased to 1,328 cases in 2014 before rose slightly to 1,383 cases in 2015 (Figure 5.6). The recorded tuberculosis incidences for 2013 was for females only.

Figure 5.6 Number of Tuberculosis (TB) Cases by Sex, Mwanza City Council, Mwanza Region; 2010 - 2015



Source: City Director's Office, City Medical Office, Mwanza city council, 2016

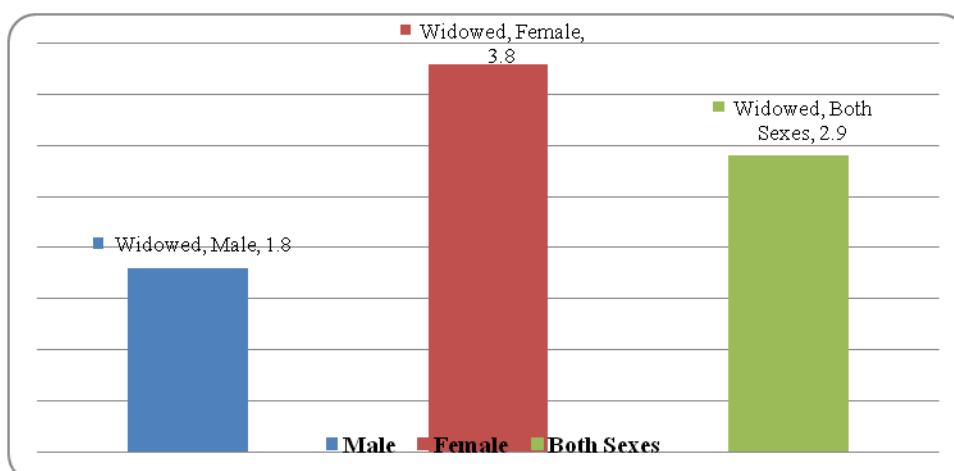
(iii) Malaria

Malaria is the most common disease which causes morbidity and mortality in the city. As stated earlier, malaria has divided into two broad categories of severe and uncomplicated ones. Malaria was number one most disease which caused morbidity in both referred years, 2013 and 2015 with 39.2 percent and 54.5 percent of inpatients respectively. Malaria was also the most causes of mortality in Mwanza city as shown in Table 5.8. In 2013, severe malaria was considered as number one killer disease of Mwanza city residents in 2015. 30.1 percent and 39.3 percent of mortality causes in the city was severe malaria respectively.

(iv) Widows

The data gathered in 2012 population census shows that the proportion of the widows category ranged from two (2.0) percent in Ilemela Municipal Council to 3.6 percent in Ukerewe District Council. Mwanza city with 2.1 percent of widow was the second least after Ilemela municipal council in the region (Figure 5.7). This information is not detailed because is not disaggregated at ward level. There is a need of conducting a study that will gather current information of widowed and their problems in order to come up with appropriate measures and solutions.

Figure 5.7 The Percentage of the Widowed by Sexny Council, Mwanza Region; 2012

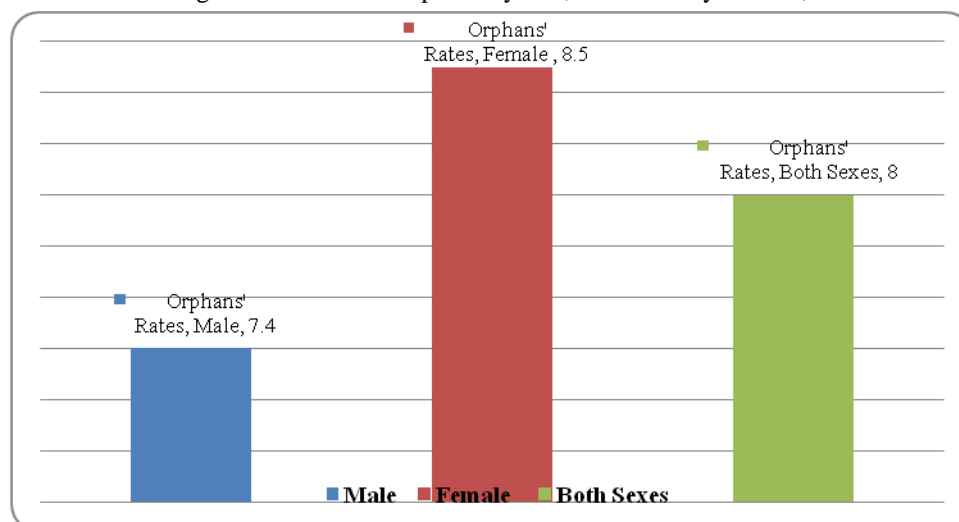


Source: NBS, 2012 Population and Housing Census Report (Mwanza Profile), 2015

(iv) The Increase of Orphaned Children

An orphan is a child under the age of 18 years who has lost one or both parents. Figure 5.8 shows that about 8 percent of persons below 18 years had lost one or both parents and female orphan's rate was higher (8.5 percent) than male (7.4 percent) rate. As stated above, the city need to conduct a study to gather information of vulnerable children and particularly orphans in order to come up with measures and strategy of helping them.

Figure 5.8 Percentage Distribution of Orphans by Sex; Mwanza city council, 2012 Census



Source: NBS, Population Census Reports, 2012, Mwanza city council Socio-Economic Report, 2015.

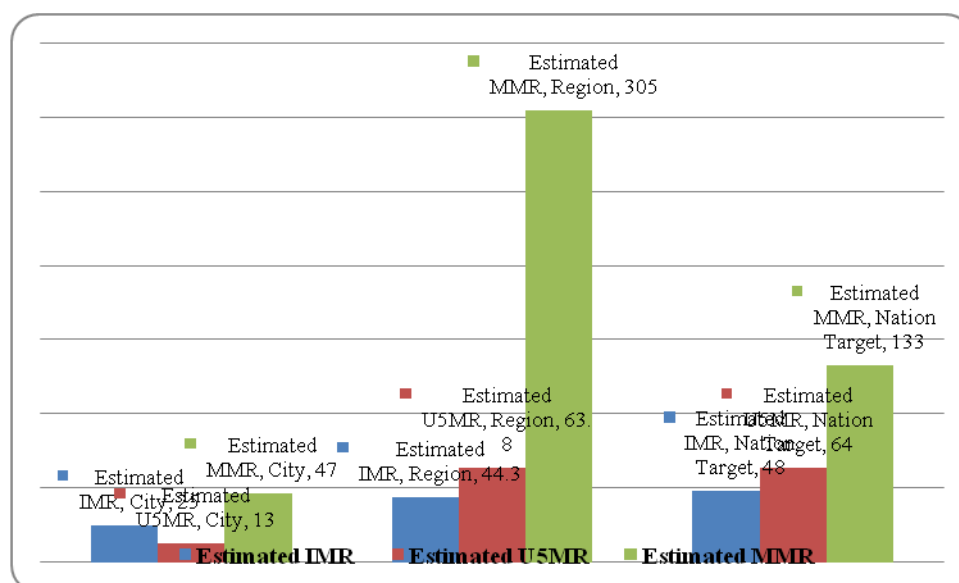
5.1.9 Child Nutrition

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

5.1.10 Mother and Child Health Care

Protection of expectant/lactating mothers and children from measles, tuberculosis, etc through immunisation programme (CSPD) which is supported by development partners has to a large extent reduced the risk of their being infected. This is evidenced by the decline of infant and children under five years' mortality rates in Mwanza region by 2012. However, there are only indicative medical records on the status of infant and under five years mortality rates for the council (Figure 5.9). Therefore, cautions are required when using these councils' indices because referred medical records only.

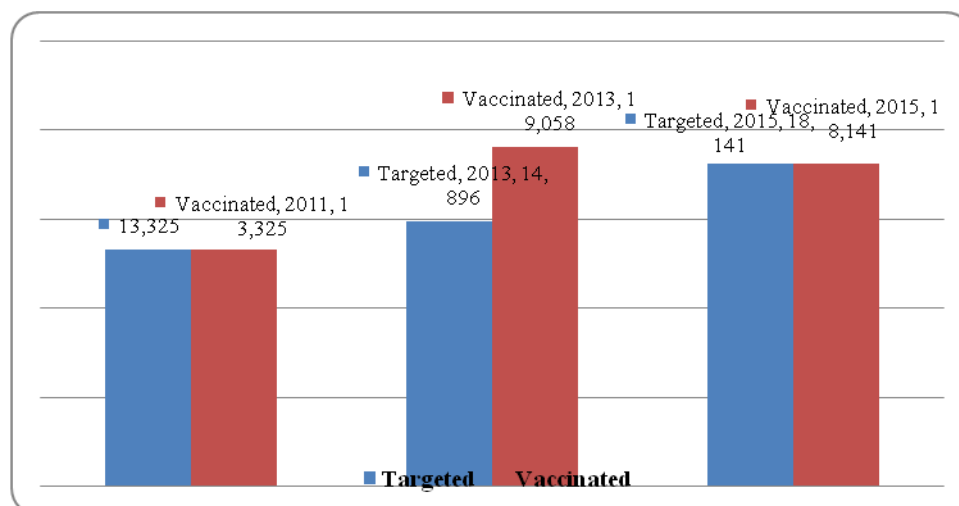
Figure 5.9 Trend of Infant and Under Five Years Mortality Indicators, Mwanza city council; 2012



Source: NBS, Population Census Reports, 2012, Mwanza city council Socio-Economic Report, 2015.

Reduction of deaths among children and their mothers is attributed to the wide coverage of immunisation campaigns in the city. The proportion of expectant mothers vaccinated with TT2 in Mwanza city council was very high in all three years, 100 percent in 2011, 128.1 percent in 2013 and 100 percent in 2015 (Figure 5.10). General observation on these results is that, one among reasons, were influenced by the accessibility of health facilities in most part of the city and understanding of expectant mothers on the need of vaccination to their children.

Figure 5.10 Percentage of Expectant Mothers Vaccinated TT2, Mwanza city council; 2011, 2013 and 2015



Source: City Director's Office, City Medical Office, Mwanza city council, 2016

The trend of BCG vaccination for children under one year shows an increase in the number of children vaccinated in 2013 and 2015, although there was a decline in percentages compared with 2011. In 2011, 188.9 percent of 11,074 targeted children under one year were vaccinated, while 172.7 percent of 13,050 targeted children were vaccinated with BCG in 2013 and out of 14,274 of targeted children 220 percent vaccinated in 2015. This is a very good picture for the city on the extent of immunizing children under one year. Atwardlevel, the percentage of vaccination coverage in 2011 ranged from 80.8 percent (Mahina ward) to 408.2 percent (Isamilo ward) but in 2013, again Isamilo ward with 366 percent had the highest coverage and Mahina had the lowest (80.1 percent) vaccination coverage of children under one year in 2015 (Table 5.9). One general observation from these data is that six wards had zero coverage due to absence of mother and child clinics. These wards are Mabatini, Mhandu, Nyegezi, Mkuyuni, Luchehele and kashiri.

Table 5.9 Percentage of Children Under One Year Vaccinated BCG by Council, Mwanza city council; 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
Pamba	1,476	4,934	334.3	1,641	5,069	308.9	1,611	5,528	343.1
Nyamagana	93	156	167.7	258	291	112.8	261	171	65.5
Isamilo	1,082	4,418	408.3	1,244	4,553	366.0	1,278	8,185	640.5
Mirongo	967	961	99.4	1,132	1,096	96.8	974	1,649	169.3
Mbugani	953	1,012	106.2	1,118	1,143	102.2	982	518	52.7
Mabatini	0	0	0.0	0	0	0.0	194	382	196.9
Mhandu	0	0	0.0	0	0	0.0	0	143	0.0
Mkolani	875	1,341	153.3	1,201	1,476	122.9	889	789	88.8
Nyegezi	0	0	0.0	0	0	0.0	0	106	0.0
Butimba	1,344	2,623	195.2	1,509	2,760	182.9	1,886	4,984	264.3
Mahina	1,263	1,021	80.8	1,428	1,156	81.0	1,110	703	63.3
Igogo	905	1,331	147.1	1,070	1,471	137.5	1,465	755	51.5
Igoma	1,206	1,858	154.1	1,371	1,991	145.2	1,749	3,726	213.0
Mkuyuni	0	0	0.0	0	0	0.0	0	0	0.0
Luchebele	0	0	0.0	0	0	0.0	0	872	0.0
Buhongwa	910	1,266	139.1	1,528	1,528	100.0	1,533	1,397	91.1
Kishili	0	0	0.0	0	0	0.0	0	0	0.0
Lwanhima	0	0	0.0	0	0	0.0	342	345	100.9
Total	11,074	20,921	188.9	13,050	22,535	172.7	14,274	31,405	220.0

Source: City Director's Office, City Medical Office, Mwanza city council, 2016

In regard to DPT3, the coverage of immunisation in the city was good, the growth has been steady although declined in percentage. The overall percentages of vaccinated children decreased from 117.5 percent of 11,017 targeted children in 2011 to 98.3 percent of 13,050 targeted children in 2013 but increased slightly to 109.9 percent in 2015. In 2011, Butimba was the best vaccinated ward (248.7 percent of its target) and also was the best (146.9 percent) ward in 2013. Mabatini ward was the best in 2015 by covering 216 percent of the 194 targeted children (Table 5.10).

Table 5.10 Percentage of Children under One Year Vaccinated DPT3 by Ward, Mwanza city council; 2011, 2013 and 2015

Ward	2011	2013	2015
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	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Buhongwa	910	1,113	122.3	1,528	1,248	81.7	1,533	1,204	78.5
Lwanhima	0	0	0.0	0	0	0.0	342	193	56.4
Mkolani	875	1,051	120.1	1,201	1,083	90.2	889	871	98.0
Luchebele	0	0	0.0	0	0	0.0	0	820	0.0
Butimba	1,344	3,343	248.7	1,509	2,217	146.9	1,886	2,326	123.3
Nyegezi	0	0	0.0	0	0	0.0	0	0	0.0
Igogo	905	981	108.4	1,070	887	82.9	1,465	1,146	78.2
Mkuyuni	0	0	0.0	0	0	0.0	0	0	0.0
Pamba	1,476	1,392	94.3	1,641	1,764	107.5	1,611	1,485	92.2
Nyamagana	93	102	109.7	258	98	38.0	261	120	46.0
Mirongo	967	976	100.9	1,132	1,112	98.2	974	1,019	104.6
Isamilo	1,082	689	63.7	1,244	1,098	88.3	1,278	2,011	157.4
Mabatini	0	0	0.0	0	0	0.0	194	419	216.0
Mbugani	953	841	88.2	1,118	705	63.1	982	880	89.6
Mahina	1,263	973	77.0	1,428	954	66.8	1,110	767	69.1
Mhandu	0	0	0.0	0	0	0.0	0	161	0.0
Igoma	1,206	2,437	202.1	1,371	1,110	81.0	1,749	2,950	168.7
Kishiri	0	0	0.0	0	0	0.0	0	0	0.0
Total	11,074	13,012	117.5	13,050	12,828	98.3	14,274	15,685	109.9

Source: Complied Data from District Executive Directors' Offices, Mwanza city council, 2016

Coverage of the city under one year children for OPV3 vaccination depicts similar trend shown by other vaccinations, it increased in magnitude but decreases their proportions of vaccinated children. Vaccinated children with OPV3 dropped from 118.3 of 11,704 targeted children in 2011 to 98.3 percent out of 13,050 targeted children in 2013 before rose to 109.9 percent of 14,274 targeted children in 2015. At ward level, Table 5.15 shows that with coverage of 207.8 percent, 130.2 percent and 228.4 percent, Mkolani, Butimba and Mabatini were the best wards in 2011, 2013 and 2015 respectively. The worst ward in 2011 and 2013 was Mahina (71.7 percent and 48.2 percent) respectively and Nyamaganaward with 51 percent coverage was the worst in 2015 (Table 5.11).

Table 5.11 Percentage of Children under One Year Vaccinated OPV3 by Ward, Mwanza city council; 2011, 2013 and 2015

Ward	2011	2013	2015
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	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Buhongwa	910	1,819	199.9	1,528	1,349	88.3	1,533	1,474	96.2
Lwanhima	0	0	0.0	0	0	0.0	342	227	66.4
Mkolani	875	1,818	207.8	1,201	1,183	98.5	889	970	109.1
Luchebele	0		0.0	0	0	0.0	0	129	0.0
Butimba	1,344	2,005	149.2	1,509	1,964	130.2	1,886	2,526	133.9
Nyegezi	0		0.0	0	0	0.0	0	0	0.0
Igogo	905	847	93.6	1,070	983	91.9	1,465	1,198	81.8
Mkuyuni	0	0	0.0	0	0	0.0	0	0	0.0
Pamba	1,476	1,376	93.2	1,641	1,658	101.0	1,611	2,030	126.0
Nyamagana	93	97	104.3	258	232	89.9	261	133	51.0
Mirongo	967	953	98.6	1,132	1,124	99.3	974	950	97.5
Isamilo	1,082	957	88.4	1,244	1,116	89.7	1,278	2,037	159.4
Mabatini	0		0.0	0	0	0.0	194	443	228.4
Mbugani	953	761	79.9	1,118	702	62.8	982	565	57.5
Mahina	1,263	905	71.7	1,428	689	48.2	1,110	801	72.2
Mhandu	0	0	0.0	0	0	0.0	0	0	0.0
Igoma	1,206	2,312	191.7	1,371	1,168	85.2	1,749	2,804	160.3
Kishiri	0	0	0.0	0	0	0.0	0	0	0.0
Total	11,074	13,102	118.3	13,050	12,828	98.3	14,274	15,685	109.9

Source: Complied Data from District Executive Directors' Offices, Mwanza city council, 2016

Measles vaccination is performed to protect children against measles. Medical records from health facilities of Mwanza city council for year 2011, 2013 and 2015 show similar experience observed from other vaccinations. 130.4 percent out of 11,074 targeted children were vaccinated in 2011, 118.4 percent out of 13,050 targeted children vaccinated in 2013 and 120.1 percent of 14,274 targeted children were vaccinated in 2015 (Table 5.16). At ward level, coverage for both targeted and vaccinated defers among wards in the specified years. In 2011, the proportion of vaccinated children, ranged from 77.4 percent (Mahina) to 207.8 percent (Mkolani). In 2013, vaccinations ranged from 71.8 percent in Mahina to 200.7 percent in Igoma ward. In 2015, the best performer was Mabatini with coverage of 272.2 percent and the worst performer was Mbugani with coverage of 49.0 percent of targeted children only (Table 5.12).

Table 5.12 Number of Children under One Year Vaccinated Measles by Council, Mwanza city council; 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
Buhongwa	910	1,819	199.9	1,528	1,349	88.3	1,533	1,474	96.2
Lwanhima	0	0	0.0	0	0	0.0	342	227	66.4
Mkolani	875	1,818	207.8	1,201	1,183	98.5	889	970	109.1
Luchehele	0	0	0.0	0	0	0.0	0	129	0.0
Butimba	1,344	2,005	149.2	1,509	1,964	130.2	1,886	2,526	133.9
Nyegezi	0	0	0.0	0	0	0.0	0	0	0.0
Igogo	905	1,002	110.7	1,070	869	81.2	1,465	1,082	73.9
Mkuyuni	0	0	0.0	0	0	0.0	0	0	0.0
Pamba	1,476	1,284	87.0	1,641	1,243	75.7	1,611	1,750	108.6
Nyamagana	93	95	102.2	258	103	39.9	261	133	51.0
Mirongo	967	1,127	116.5	1,132	1,369	120.9	974	802	82.3
Isamilo	1,082	1,256	116.1	1,244	1,380	110.9	1,278	2,043	159.9
Mabatini	0	0	0.0	0	0	0.0	194	528	272.2
Mbugani	953	815	85.5	1,118	1,358	121.5	982	481	49.0
Mahina	1,263	977	77.4	1,428	1,025	71.8	1,110	1,050	94.6
Mhandu	0	0	0.0	0	0	0.0	0	0	0.0
Igoma	1,206	2,241	185.8	1,371	2,751	200.7	1,749	3,943	225.4
Kishiri	0	0	0.0	0	0	0.0	0	0	0.0
Total	11,074	14,439	130.4	13,050	14,594	111.8	14,274	17,138	120.1

Source: Complied Data from District Executive Directors' Offices, Mwanza city council, 2016

5.1.11 Policy Implication on Health sector

Provisions of health services in Mwanza city council are still below the nation and international standards requirements. The city still has inadequate number of doctors, health infrastructure and facilities. Moreover, inadequate number of doctors limited provision of curative and preventive health services such as operations, professional assistance and advices, mother and child health facilities, diagnosis of illness due to shortage or lack of medical machines and equipment, to mention a few. This is evidenced by high rates of infant and child mortality as well as maternal mortality rate as indicated in this report. However, health services can be improved through formulating incentives which will motivate doctors and other health workers to work in rural areas.

Likewise, the strategy of constructing dispensaries in every mtaa and one health centre in every ward by both public and private sectors should be adhered to for increasing accessibility of health services to rural population.

5.1.12 Investment Opportunities for Health Sector

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

5.2 The Education Sector

5.2.0 An Overview

Development of Education sector examine the quantity and 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. Therefore, the development of the sector in Mwanzacity council involves improving in all the above mentioned areas. This understanding has been evidenced by steps so far taken by individuals and the local government authorities to increase the intake of children to pre-primary, primary, secondary and tertiary schools in recent years.

5.2.1 Pre-Primary Education

The condition set by the Ministry of Education and Vocational Training that all children who start standard one must have undergone pre-primary education, accelerated the establishment of pre-primary schools all over the country including Mwanza city council. Pre-schools are meant for children aged 3-6 years.

As Table 5.13 shows the region managed to increase the number of pre-primary schools from 69 in 2011, 75 in 2012, 78 in 2013 to 87 in 2014 and reached 97 in 2015 (Table 5.17). Looking at ownership, most of these schools annexed to private primary school compounds, as a result 55 percent of pre-primary schools in 2011 was privately owned, 57 percent in 2012, 56 percent in 2013, 58 percent in 2014 and 56 percent in 2015 (Table 5.17). At ward level, Mahuna and Mhandu wards

with the highest number of pre-primary schools (12 each) in the city council followed by Isamilo 10, Pamba 9, Kishiri 8, Buhongwa and Nyegezi with 7 schools each, Butimba 5, Mkolani, Luchebele, Nyamagana and Igoma with 4 each, Lwanhima and Mkuyuni with 3 each, Igogo, Mirongo and Mabatini with one school each in 2015.

Table 5.13 Number of Pre-Primary School classes by Ownership and by ward, Mwanza City Council; 2011 to 2015

Ward	2011			2012			2013			2014			2015		
	Pub	Pri v	Tot	Pu b	Pri v	Tot	Pu b	Pri v	Tot	Pu b	Pri v	Tot	Pu b	Pri v	Tot
Buhongwa	2	4	6	2	4	6	2	5	7	2	5	7	2	5	7
Lwanhima	2	-	2	2	-	2	2	-	2	2	1	3	2	1	3
Mkolani	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4
Luchebele	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4
Butimba	3	-	3	3	-	3	3		3	3	1	4	4	1	5
Nyegezi	1	6	7	1	6	7	1	6	7	1	6	7	1	6	7
Igogo	1	-	1	1	-	1	1	-	1	1	-	1	1	-	1
Mkuyuni	2	-	2	2	-	2	2	-	2	2	-	2	3	-	3
Pamba	3	4	7	3	4	7	3	4	7	3	4	7	5	4	9
Nyamagana	-	1	1	-	1	1	-	1	1	-	2	2	-	4	4
Mirongo	1	-	1	1	-	1	1	-	1	1	-	1	1	-	1
Isamilo	1	8	9	1	8	9	1	8	9	1	8	9	2	8	10
Mabatini	1	-	1	1	-	1	1	-	1	1	-	1	1	-	1
Mbugani	-	-		-	-		-	-		-	-		1	1	2
Mahina	-	6	6	-	9	9	1	9	10	2	9	11	3	9	12
Mhandu	3	5	8	4	7	11	4	7	11	4	8	12	4	8	12
Igoma	1	2	3	1	2	3	2	2	4	2	2	4	2	2	4
Kishiri	4	-	4	4	-	4	4	-	4	5	2	7	5	3	8
Total	31	38	69	32	43	75	34	44	78	36	50	86	43	54	97
Percent	45	55	100	43	57	100	44	56	100	42	58	100	44	56	100

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Pub=Public, Pri. = Private and Tot = Total

Figure 5.11 Number of Pre-Primary School classes by Ownership, Mwanza City Council; 2011 to 2015

Igogo	45	-	45	59	-	59	14	31.1
Mkuyuni	118	-	118	149	-	149	31	26.3
Pamba	176	-	176	462	120	582	406	230.7
Nyamagana	-	73	73	98	150	248	175	239.7
Mirongo	50	-	50	56	-	56	6	12.0
Isamilo	67	787	854	59	676	735	-119	-13.9
Mabatini	188	-	188	307	-	307	119	63.3
Mbugani	-	-	-	51	-	51	51	-
Mahina	45	59	104	126	91	217	113	108.7
Mhandu	182	194	376	290	215	505	129	34.3
Igoma	33	174	207	81	182	263	56	27.1
Kishiri	270	-	270	490	149	639	369	136.7
Total	1,900	1,634	3,534	3,299	2,107	5,406	1,872	53.0

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2 Primary Education

Education is a basic right of every Tanzanian child of school going age (7-13). To render this possible the Government of Tanzania put in place the policy of Universal Primary Education (UPE) in 1974 making such education compulsory and setting out to make enrolment increase possible. To achieve this goal, the first task was to have enough primary schools that would ensure enrolment of all school going age children in the region.

By increasing number of primary schools from 95 in 2011 to 226 in 2015 the city council showed positive attitude by giving every child of school going age has a chance of being enrolled into standard one. Table 5.15 shows that, on average, each ward had at least 4 public primary schools and a primary school in each mtaa as city council had 19 wards, 123 mtaa and 226 public primary schools in 2015. Furthermore, Table 5.19 also reveals that Nyegezi had the largest number of public primary schools (151), whilst Mahina had the least with 0 schools.

Table 5.15 Distribution of Primary Schools by Council; Mwanza Region, 2015

Ward	No. of Mtaa	No. of Schools	Schools Mtaa Ratio
Buhongwa	18	3	6
Lwanhima	18	2	9

Mkolani	10	3	3
Luchehele	10	3	3
Butimba	8	6	1
Nyegezi	8	2	1
Igogo	9	6	2
Mkuyuni	8	4	2
Pamba	10	8	1
Nyamagana	4	2	2
Mirongo	3	4	1
Isamilo	11	8	1
Mabatini	6	5	1
Mbugani	6	1	6
Mahina	9	3	3
Mhandu	11	10	1
Igoma	14	6	2
Kishiri	12	7	2
Total	175	80	47

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Looking at ownership, out of 95 primary schools recorded in 2011, only 8.0 percent was privately owned. In 2013, private primary schools was only 37.6 percent out of 162 schools and 64.2 percent of 226 primary schools were privately owned in 2015 (Table 5.16).

Table 5.16 Number of Primary Schools by Ownership and by ward;Mwanza City Council;2011 to 2015

Ward	2011			2013			2015			Percent share
	Pub	Pri.	Total	Pub	Pri.	Total	Pub	Pri	Total	
Buhongwa	3	4	7	3	5	8	3	5	8	3.5
Lwanhima	2	-	2	2	-	2	2	1	3	1.3
Mkolani	3	1	4	3	1	4	3	1	4	1.8
Luchehele	3	1	4	3	1	4	3	1	4	1.8
Butimba	6	-	6	6	-	6	6	1	7	3.1
Nyegezi	2	2	4	2	67	69	2	122	124	54.9
Igogo	6	-	6	6	-	6	6	-	6	2.7
Mkuyuni	4	-	4	4	-	4	4	-	4	1.8
Pamba	8	-	8	8	-	8	8	-	8	3.5
Nyamagana	2	-	2	2	-	2	2	-	2	0.9
Mirongo	4	-	4	4	-	4	8	-	8	3.5

Isamilo	8	3	11	8	3	11	8	3	11	4.9
Mabatini	5	-	5	5	-	5	5	-	5	2.2
Mbugani	4	-	4	4	-	4	4	-	4	1.8
Mahina	-	3	3	-	3	3	-	3	3	1.3
Mhandu	7	2	9	7	3	10	7	3	10	4.4
Igoma	5	2	7	5	2	7	5	2	7	3.1
Kishiri	5	-	5	5	-	5	5	3	8	3.5
Total	77	18	95	77	85	162	81	145	226	100
Percent	34.1	8.0	42.0	34.1	37.6	71.7	35.8	64.2	100	

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2.1 Standard One Enrolment

Over the period of five years, 2011 to 2015, Mwanza city council implemented successfully the call of the government to increase enrolment in primary school. Table 5.17 shows enrolments of standard I in primary schools for each council in 2011, 2013 and 2015. Standard One enrolment in the city council increased from 11,417 pupils in 2011 to 12,431 pupils in 2013 and reached 13,943 in 2015. Table 5.21 also shows that the proportion of enrolments in public schools was higher than private schools; 93.1 percent in 2011, 92.3 percent in 2013 and 91.7 percent in 2015.

Table 5.17 Standard I Enrolment by School Ownership and by Ward; Mwanza City Council; 2011, 2013 and 2015

Ward	2011			2013			2015		
	Pub	Pri.	Total	Pub	Pri.	Total	Pub	Pri	Total
Buhongwa	582	141	723	661	197	858	1090	228	1318
Lwanhima	314	-	314	255	-	255	402	18	420
Mkolani	444	13	457	576	19	595	625	20	645
Luchehele	332	29	361	395	33	428	463	31	494
Butimba	1008	-	1008	1080	-	1080	1031	24	1055
Nyegezi	328	84	412	350	143	493	358	167	525
Igogo	809	-	809	892	-	892	853	-	853
Mkuyuni	517	-	517	531	-	531	556	-	556
Pamba	110	-	110	1221	-	1221	1295	-	1295
Nyamagana	108	-	108	126	-	126	114	-	114
Mirongo	445	-	445	280	-	280	299	-	299
Isamilo	612	217	829	603	201	804	645	188	833
Mabatini	636	-	636	673	-	673	685	-	685
Mbugani	187	-	187	157	-	157	212	-	212

Mahina	602	82	684	662	76	738	810	86	896
Mhandu	1140	146	1286	1230	163	1393	1276	168	1444
Igoma	1592	80	1672	945	122	1067	925	100	1025
Kishiri	859	-	859	840	-	840	1152	122	1274
Total	10625	792	11417	11477	954	12431	12791	1152	13943
Percent	93.1	6.9	100	92.3	7.7	100	91.7	8.3	100

Source: City Director's Office (Education Department), Mwanza City Council, 2016

The enrolment into standard one, according to the education policy, though is for children aged seven years, it has been expanded to cover between 7 to 13 years due to culture and norms of the people of Tanzania. Table 5.18 shows that the proportion of children enrolled in standard one at the age of seven years in the last five years varies between 76.0 percent in 2014 and 77.8 percent in 2015, while pupils for eight and more years ranged from 10.9 percent in 2015 to 13.3 percent in 2014. Great achievement has been observed in standard one enrolment was caused by the community participation in school committees and through MEMM and MEMKWA which motivate parents in the city council to enroll their children as per policy instruction.

Table 5.18 Standard I Registered by Age Group in Public Primary Schools, Mwanza City Council; 2011 to 2015

Years	Seven Years		Eight to Ten Years		Total Enrolment	Enrolment Change	
	Number	Percent	Number	Percent		Number	Percent
2011	9,026	73.9	1,709	14.0	12,214		
2012	9,099	76.4	1,211	10.2	11,906	-308	-2.6
2013	9,706	77.1	1,399	11.1	12,582	676	5.4
2014	10,172	76.0	1,784	13.3	13,380	798	6.0
2015	11,409	77.8	1,598	10.9	14,663	1,283	8.7
Total	49,412	76.3	7,701	11.9	64,745	50,082	

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Looking and sex difference, Table 2.23 shows that the proportion of girls enrolled standard one at age seven were more than boys in the specified period, while more boys were enrolled at age eight to ten years. The cumulative enrolment between 2011 and 2015 shows that out of 49,412 Standard One pupils aged seven years, 51.3 percent were girls, while only 49.0 percent of 7,701 pupils aged eight to 10 years were girls. One general observation from these data is that Mwanza city council had successively achieved the national objective of ensuring girls get equal opportunity as boys in standard one enrolment for the respective years (Table 5.19).

Table 5.19 Standard I Enrolment by Age and by Sex, Mwanza City Council, 2011 - 2015

Years	Seven Years			Eight to Ten Years			Total Enrolment		
	Boys	Percent Girls	Total	Boys	Percent Girls	Total	Boys	Percent Girls	Total
2011	4,424	51.0	9,026	860	49.7	1,709	5,969	51.1	12,214
2012	4,427	51.3	9,099	698	42.4	1,211	5,795	51.3	11,906
2013	4,719	51.4	9,706	739	47.2	1,399	6,185	50.8	12,582
2014	4,930	51.5	10,172	849	52.4	1,784	6,480	51.6	13,380
2015	5,566	51.2	11,409	784	50.9	1,598	7,152	51.2	14,663
Total	24,066	51.3	49,412	3,930	49.0	7,701	31,581	51.2	64,745

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.20 portrays similar experience observed on standard one enrolment in Mwanza city council, total enrolment in public primary school for girls was slightly higher than boys in the specified years. Insignificant difference in the number of boys and girls enrolled was a result of the region's efforts to implement national objective of ensuring girls get equal opportunity as boys in primary school education. Table 5.24 further indicates that, besides achieving the national objective of equal opportunity for girls and boys, it has also managed to increase 268,577 pupils of total (STD I – VII) enrolment in the last five years.

Table 5.20 Total (STD I – VII) Enrolment of Public Primary Schools by Sex; Mwanza City Council, 2011 to 2015

Year	Boys		Girls		Both Sexes	Enrolment Change	
	Number	Percent	Number	Percent		Number	Percent
2011	32,018	48.5	33,945	51.5	65,963		
2012	32,133	48.9	33,585	51.1	65,718	-245	-0.4
2013	32,510	48.4	34,672	51.6	67,182	1,464	2.2

2014	33,965	48.7	35,749	51.3	69,714	2,532	3.6
2015	35,349	48.6	37,349	51.4	72,698	2,984	4.1
Total	165,975	48.6	175,300	51.4	341,275	268,577	

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Over the period of three years 2011, 2013 and 2015 the wards of Mwanza city council implemented successfully the call of the government to increase enrolment in primary school. As Table 5.21 indicates, the enrolment increased from 65,963 in 2011 to 67,182 in 2013 and reached 72,698 in 2015. In regard to sex difference at ward level, Buhongwa did well in 2011 as girl's enrolment accounted for 59.9 and was the highest among wards. Likewise, Isamilo ward did well in 2013 with 54.1 percent in girl's enrolment but was the least girl's enrolment with 47.8 percent in 2015 and Mbugani with girl's enrolment of 58.5 percent did well in 2015. Mironko and Luchehele had the least girl's enrolment in both years with only 48.1 percent in 2011, and 48.0 percent in 2013 respectively.

Table 5.21 Total (STD I – VII) Enrolment of Public Primary Schools by Council and Sex; Mwanza City Council, 2011, 2013 and 2015

Ward	2011			2013			2015		
	Boys	Percent Girls	Total	Boys	Percent Girls	Total	Boys	Percent Girls	Total
Buhongwa	1,245	59.9	3,107	1,723	51.5	3,549	2,055	53.1	4,383
Lwanhima	679	49.6	1,347	577	51.3	1,184	730	51.1	1,492
Mkolani	1,425	52.3	2,990	1,623	50.7	3,294	1,739	52.0	3,625
Luchehele	1,045	48.3	2,022	1,155	48.0	2,223	1,277	49.8	2,543
Butimba	2,558	51.2	5,239	2,845	50.4	5,737	3,016	50.0	6,032
Nyegezi	1,059	50.4	2,135	1,143	50.3	2,302	997	52.3	2,092
Igogo	2,590	51.8	5,375	2,624	51.1	5,361	2,377	52.0	4,951
Mkuyuni	1,342	50.7	2,722	1,245	52.7	2,632	1,393	51.6	2,876
Pamba	3,213	52.4	6,754	3,210	52.9	6,814	3,868	51.3	7,939
Nyamagana	324	50.0	648	314	49.1	617	329	48.7	641
Mironko	867	48.1	1,670	750	50.0	1,501	814	49.7	1,619
Isamilo	1,680	50.8	3,416	1,293	54.1	2,817	1,577	47.8	3,021
Mabatini	2,002	51.9	4,162	2,031	52.1	4,242	2,042	53.0	4,341
Mbugani	1,240	51.8	2,571	972	51.3	1,994	682	58.5	1,643

Mahina	1,634	52.2	3,420	1,772	52.2	3,710	2,052	52.7	4,340
Mhandu	3,960	49.3	7,803	3,756	51.9	7,801	3,945	51.5	8,142
Igoma	2,918	50.8	5,927	3,105	51.8	6,436	3,776	51.2	7,745
Kishiri	2,237	51.9	4,655	2,372	52.3	4,968	2,680	53.9	5,816
Total	32,018	51.5	65,963	32,510	51.6	67,182	35,349	51.4	72,698

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2.2 Completion Rate of Primary School

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

Table 5.22 shows the performance of two cohorts. The average completion rate for cohort one was 79.5 percent (79.7 percent for boys and 77.4 percent for girls). This cohort was enrolled in 2008 and finished in 2014. The average completion for the second cohort was 80.2 percent (75.5 percent boys and 84.8 percent girls) and this cohort was enrolled in 2009 and finished in 2015. Looking at sex difference, there was an improvement in girls' retention than boys. In first cohort, completion rate for girls was 79.4 percent compared to 79.7 percent boys, while girls' retention in cohort two stood at 84.8 percent compared to 75.5 percent boys as indicated in Table 5.22.

Table 5.22 Number of Pupils Who Enrolled in STD I in 2008 and Completed STD VII in 2014 and those Who Enrolled in 2009 and Completed STD VII in 2015; Mwanza City Council

Sex	2008 to 2014			2009 to 2015		
	Enrolled 2008	Completed 2014	Completion Rate	Enrolled 2009	Completed 2015	Completion Rate
Boys	4,724	3,765	79.7	4,907	3,706	75.5
Girls	5,328	4,230	79.4	5,054	4,284	84.8
Total	10,052	7,995	79.5	9,961	7,990	80.2

Source: City Director's Office (Education Department), Mwanza City Council, 2016

At ward level, wards like Buhongwa, Pamba and Igogo had insignificant differences in the proportion of boys and girls who completed primary school education cycle one. Buhongwa ward had the highest rate of pupils who completed primary school education who enrolled in 2008 and complete 2014 cycle, while Lwanhima had the least (Table 5.23). Poor completion rate observed in some wards are due to the fact that most households living in those wards are livestock keepers who have no permanent residence leading to internal migration which cause pupils drop out.

Table 5.23 Total (STD I – VII) Enrolment of Public Primary Schools by ward and Sex; Mwanza City Council, 2011, 2013 and 2015

Ward	Enrolled 2008			Completed 2014			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Buhongwa	137	171	308	133	165	298	97.1	96.5	96.8
Lwanhima	152	142	294	52	58	110	34.2	40.8	37.4
Mkolani	171	191	362	178	168	346	104.1	88.0	95.6
Luchehele	186	135	321	146	113	259	78.5	83.7	80.7
Butimba	321	448	769	309	381	690	96.3	85.0	89.7
Nyegezi	249	189	438	158	170	328	63.5	89.9	74.9
Igogo	422	478	900	257	305	562	60.9	63.8	62.4
Mkuyuni	321	448	769	309	381	690	96.3	85.0	89.7
Pamba	469	565	1034	351	431	782	74.8	76.3	75.6
Nyamagana	56	57	113	41	50	91	73.2	87.7	80.5
Mirongo	135	114	249	88	96	184	65.2	84.2	73.9
Isamilo	286	314	600	241	274	515	84.3	87.3	85.8
Mabatini	283	311	594	200	242	442	70.7	77.8	74.4
Mbugani	168	202	370	157	172	329	93.5	85.1	88.9
Mahina	258	296	554	203	214	417	78.7	72.3	75.3
Mhandu	422	557	979	400	490	890	94.8	88.0	90.9
Igoma	403	416	819	330	313	643	81.9	75.2	78.5
Kishiri	285	294	579	212	207	419	74.4	70.4	72.4
Total	4724	5328	10052	3765	4230	7995	79.7	79.4	79.5

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Performance of primary schools in terms of completion rate was better in 2014 than 2015. Proportion of pupils who completed primary school education cycle in 2014 exceeded those of 2015 year. This was a 79.5 percent of 7,995 total pupils who completed primary education in 2014 compared with 80.2 percent of 7,990 pupils of 2015. Moreover, more girls (4,284) completed

education cycle than boys in 2015. This indicates that school dropout problem was more serious for boys than for girls during that education cycle (table 2.24).

Table 5.24 Number of Pupils Who Enrolled in STD I in 2009 and Completed STD VII in 2015 by ward and by Sex, Mwanza City Council

Ward	Enrolled 2009			Completed 2015			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Buhongwa	162	211	373	160	209	369	98.8	99.1	98.9
Mkolani	81	103	184	57	60	117	70.4	58.3	63.6
Mhandu	241	245	486	169	188	357	70.1	76.7	73.5
Butimba	163	148	311	116	132	248	71.2	89.2	79.7
Mkuyuni	391	389	780	331	355	686	84.7	91.3	87.9
Mbugani	263	121	384	177	188	365	67.3	155.4	95.1
Isamilo	389	434	823	209	287	496	53.7	66.1	60.3
Luchehele	391	389	780	331	355	686	84.7	91.3	87.9
Nyamagana	500	495	995	370	424	794	74.0	85.7	79.8
Igoma	58	53	111	54	28	82	93.1	52.8	73.9
Pamba	116	119	235	83	69	152	71.6	58.0	64.7
Mahina	303	320	623	252	265	517	83.2	82.8	83.0
Nyegezi	244	310	554	172	253	425	70.5	81.6	76.7
Mabatini	206	225	431	157	179	336	76.2	79.6	78.0
Mirongo	277	286	563	168	197	365	60.6	68.9	64.8
Kishiri	454	528	982	417	549	966	91.9	104.0	98.4
Igogo	360	401	761	291	326	617	80.8	81.3	81.1
Lwanhima	308	277	585	192	220	412	62.3	79.4	70.4
Total	4907	5054	9961	3706	4284	7990	75.5	84.8	80.2

Source: City Director's Office (Education Department), Mwanza City Council, 2016

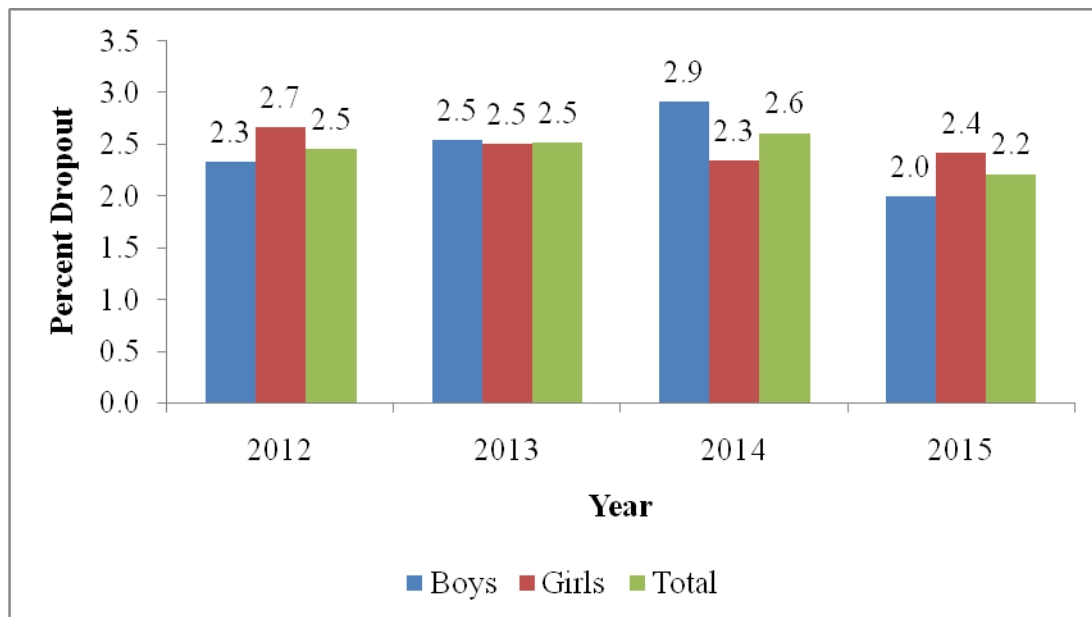
5.2.2.3 Drop- out Rate in Primary Schools

Table 5.25 portrays the situation of primary school pupil's dropout in three consecutive years; 2012, 2013 and 2014 in Mwanza city council. General observation from the information recorded is that proportion of drop out of primary schools' pupils has been increasing in recent years. It remains constant with 2.5 percent in 2012 and 2013 and increases from 2.5 percent in 2013 to 2.6 percent in 2014 and decreases up to 2.2 percent in 2015. Dropout was so on for girls than boys; 2.3 percent to dropout for boys compared to 2.7 percent girls in 2012, 2.0 percent boys against 2.4 percent girls in 2015 (Table 5.25 and Figure 5.26). This means that in each year there was a slight difference in number of boys and girls who dropped out from schools

Table 5.25 Drop Outs by Reasons in Public Primary Schools, Mwanza City Council; 2012 to 2015

Reason	2012			2013			2014			2015		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Truancy	338	391	729	369	369	738	388	389	777	298	397	695
Pregnancy		3			1			-			1	
Death	5	7	12	5	3	8	18	11	29	9	9	18
Other	114	145	259	134	160	294	171	124	295	125	150	275
Total dropouts	461	564	1,007	508	533	1,041	568	517	1,085	432	556	988
Total Enrolment	19,783	21,141	40,924	19,981	21,305	41,286	19,460	22,071	41,531	21,613	23,011	44,624
Percent	2.3	2.7	2.5	2.5	2.5	2.5	2.9	2.3	2.6	2.0	2.4	2.2

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.26 Percentage Drop Outs by Sex; Mwanza City Council; 2012 – 2014

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.27 shows the out of the total 40,924 pupils enrolled into primary school education in 2012, 1,007 pupils (2.5 percent) failed to complete standard seven due to truancy, pregnancy, death or other reasons. Causing 1.8 percent of the total dropouts, truancy happened to be the most serious problem for primary school pupils in completing standard seven in Mwanza city council. Table 5.27 also shows that girls were the most affected (53.6 percent) than boys (46.4 percent).

Table 5.27 Primary School Drop Outs by Reasons and by Sex; Mwanza City Council; 2012

Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	338	46.4	391	53.6	729	1.8
Pregnancy			3			
Death	5	41.7	7	58.3	12	0.0
Other	114	44.0	145	56.0	259	0.6
Total dropouts	461	45.8	564	56.0	1007	2.5
Total Enrolment	19783	48.3	21141	51.7	40924	100

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Similar trend on causes and rate of drop outs were observed in 2013. Table 5.28 shows that truancy continued be a main cause of school dropouts in Mwanza city council followed by other reasons (0.7 percent), including transferring to other schools outside respective council and discontinues due to illnesses. Deaths and pregnancy were the least causes of dropouts accounted with eight number of pupils and one girl respectively.

Table 5.28 Primary School Drop Outs by Reasons and by Sex; Mwanza City Council; 2013

Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	369	50.0	369	50.0	738	1.8
Pregnancy			1			
Death	5	62.5	3	37.5	8	0.0
Other	134	45.6	160	54.4	294	0.7
Total dropouts	508	48.8	533	51.2	1,041	2.5
Total Enrolment	19,981	48.4	21,305	51.6	41,285	100

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Out of the total 41,531 pupils enrolled into standard I-VII in all primary schools in Mwanza city council in 2014, about 2.6 percent of pupils failed to complete standard seven due to truancy, pregnancy, death or other reasons. Total number of dropouts for boys' pupil was the higher at 568 which is equivalent to 52.4 percent of total dropouts in 2014. Girls' dropouts constituted only 47.6 percent. By being the source of 1.9 percent of the total dropout, truancy continued be a main cause

of school dropouts in Mwanza city council followed by ‘other’ reasons which might be due to illness, poverty and so forth happened to be the most common problem for primary school pupils in completing standard seven (0.7 percent) then was followed by death (0.1 percent) as shown in table 5.29.

Table 5.29 Primary School Drop Outs by Reasons and by Sex; Mwanza City Council; 2014

Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	388	49.9	389	50.1	777	1.9
Pregnancy			-			
Death	18	62.1	11	37.9	29	0.1
Other	171	58.0	124	42.0	295	0.7
Total dropouts	568	52.4	517	47.6	1,085	2.6
Total Enrolment	19,460	46.9	22,071	53.1	41,531	100

Source: City Director’s Office (Education Department), Mwanza City Council, 2016

Table 5.30 shows the out of the total 44,624 pupils enrolled into primary school education in 2015, 988 pupils (2.2 percent) failed to complete standard seven due to truancy, pregnancy, death or other reasons. Causing 1.6 percent of the total dropouts, truancy happened to be the most serious problem for primary school pupils in completing standard seven in Mwanza city council. Table 5.30 also shows that girls were the most affected (56.3 percent) than boys (43.7 percent).

Table 5.30 Primary School Drop Outs by Reasons and by Sex; Mwanza City Council; 2015

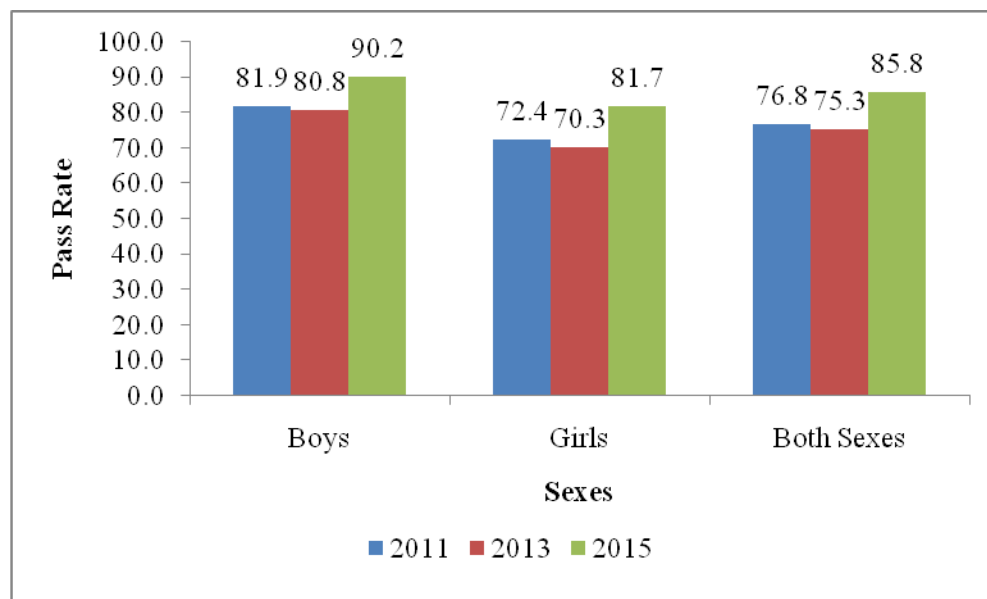
Reason	Boys		Girls		Total	
	Number	Percent	Number	Percent	Number	Percent
Truancy	298	42.9	397	57.1	695	1.6
Pregnancy			1			
Death	9	50.0	9	50.0	18	0.0
Other	125	45.5	150	54.5	275	0.6
Total dropouts	432	43.7	556	56.3	988	2.2
Total Enrolment	21,613	48.4	23,011	51.6	44,624	100.0

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2.4 Pass Rate in Primary schools

Pass rate refers to the percentage of pupils who passed standard seven examinations out of the total pupils who sat for the examinations. Figure 5.12 shows that pass rate for standard seven pupils was increasing though poor performance was observed in 2013. It decreased from 76.8 percent in 2011 to 75.3 percent in 2013, before rose significantly to 85.8 percent in 2015. One general observation from these data is that girls had lower pass rates than boys in all three years. The lower pass rate for girls is associated with the tendency of girls spending most of their time attending home affairs rather than engaging more in self-study.

Figure 5.12 Pass rates of Pupils Who Sat for STD VII Examinations, Mwanza City Council; 2011, 2013 and 2015



Source: City Director's Office (Education Department), Mwanza City Council, 2016

At ward level, Table 5.31 shows examination performance by ward in Mwanza city council. In 2011, Mbugani ward had the highest pass rate (91.7 percent) in the city council followed by Mirongo ward (90.9 percent), Butimba (87.0 percent) and Mkolani (84.6 percent). Luchebele had ward the lowest pass rate (58.3 percent) as shown in Table 5.31.

Table 5.31 Number of Pupils Who Sat and Passed STD VII Examinations, Mwanza City 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
Buhongwa	121	151	272	86	101	187	71.1	66.9	68.8
Lwanhima	79	100	179	53	54	107	67.1	54.0	59.8
Mkolani	157	148	305	137	121	258	87.3	81.8	84.6
Luchehele	141	154	295	94	78	172	66.7	50.6	58.3
Butimba	370	458	828	332	388	720	89.7	84.7	87.0
Nyegezi	120	162	282	100	101	201	83.3	62.3	71.3
Igogo	327	331	658	252	200	452	77.1	60.4	68.7
Mkuyuni	195	234	429	141	180	321	72.3	76.9	74.8
Pamba	353	449	802	260	303	563	73.7	67.5	70.2
Nyamagana	55	74	129	49	54	103	89.1	73.0	79.8
Mirongo	107	101	208	101	88	189	94.4	87.1	90.9
Isamilo	242	313	555	194	198	392	80.2	63.3	70.6
Mabatini	199	263	462	170	185	355	85.4	70.3	76.8
Mbugani	138	165	303	128	150	278	92.8	90.9	91.7
Mahina	179	175	354	150	137	287	83.8	78.3	81.1
Mhandu	420	510	930	353	426	779	84.0	83.5	83.8
Igoma	289	340	629	241	211	452	83.4	62.1	71.9
Kishiri	243	253	496	219	196	415	90.1	77.5	83.7
TOTAL	3,735	4,381	8,116	3,060	3,171	6,231	81.9	72.4	76.8

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.32 shows trend of performance of primary schools examination in Mwanza city council in 2013. There was a variation of overall performance on the results of standard seven examinations among councils, ranged from 53.3 percent (Luchehele ward) to 92.1 percent (Isamilo ward). Again boys' performances were higher than girls in all wards. These results portray the importance of launching a massive campaign on raising the importance of education for girls in the city council in order to improve their performances. One general observation from these data is that the overall performance for 2013 was lower than it was in 2011.

Table 5.32 Number of Pupils Who Sat and Passed STD VII Examinations, Mwanza City 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

Buhongwa	134	165	299	104	104	208	77.6	63.0	69.6
Lwanhima	52	58	110	36	25	61	69.2	43.1	55.5
Mkolani	161	153	314	130	115	245	80.7	75.2	78.0
Luchehele	146	113	259	116	22	138	79.5	19.5	53.3
Butimba	334	363	697	285	275	560	85.3	75.8	80.3
Nyegezi	119	135	254	83	91	174	69.7	67.4	68.5
Igogo	257	305	562	213	256	469	82.9	83.9	83.5
Mkuyuni	156	153	309	144	115	259	92.3	75.2	83.8
Pamba	358	448	806	282	308	590	78.8	68.8	73.2
Nyamagana	41	48	89	37	38	75	90.2	79.2	84.3
Mirongo	88	96	184	73	85	158	83.0	88.5	85.9
Isamilo	211	231	442	199	208	407	94.3	90.0	92.1
Mabatini	200	242	442	151	160	311	75.5	66.1	70.4
Mbugani	146	147	293	109	108	217	74.7	73.5	74.1
Mahina	205	215	420	137	119	256	66.8	55.3	61.0
Mhandu	450	581	1031	350	397	747	77.8	68.3	72.5
Igoma	352	369	721	297	243	540	84.4	65.9	74.9
Kishiri	215	204	419	182	162	344	84.7	79.4	82.1
TOTAL	3,625	4,026	7,651	2,928	2,831	5,759	80.8	70.3	75.3

Source: City Director's Office (Education Department), Mwanza City Council, 2016

In 2015, the city council made great achievement on standard seven examination performances.

Table 5.33 shows that the overall performance was 85.8 percent of 7,376 examinees. Again similar performance differences between boys and girls observed; 90.2 percent boys compared to 81.7 percent for girls. With exception of Ilemela municipal council, rest of councils recorded higher performances for boys than girls (Table 5.33).

Table 5.33 Number of Pupils Who Sat and Passed STD VII Examinations, Mwanza City 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
Buhongwa	171	196	367	169	179	348	98.8	91.3	94.8
Lwanhima	66	67	133	52	48	100	78.8	71.6	75.2
Mkolani	193	209	402	164	188	352	85.0	90.0	87.6
Luchehele	138	88	226	146	63	209	105.8	71.6	92.5
Butimba	335	400	735	283	211	494	84.5	52.8	67.2
Nyegezi	126	131	257	102	114	216	81.0	87.0	84.0

Igogo	178	229	407	167	200	367	93.8	87.3	90.2
Mkuyuni	136	140	276	136	127	263	100.0	90.7	95.3
Pamba	330	346	676	320	311	631	97.0	89.9	93.3
Nyamagana	28	47	75	26	43	69	92.9	91.5	92.0
Mirongo	84	75	159	78	49	127	92.9	65.3	79.9
Isamilo	226	219	445	177	159	336	78.3	72.6	75.5
Mabatini	191	256	447	180	212	392	94.2	82.8	87.7
Mbugani	150	145	295	127	151	278	84.7	104.1	94.2
Mahina	173	203	376	142	149	291	82.1	73.4	77.4
Mhandu	433	470	903	408	421	829	94.2	89.6	91.8
Igoma	364	301	665	320	261	581	87.9	86.7	87.4
Kishiri	245	287	532	219	226	445	89.4	78.7	83.6
TOTAL	3,567	3,809	7,376	3,216	3,112	6,328	90.2	81.7	85.8

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.34 shows the ability of the region to accommodate all pupils who passed standard VII examinations to the secondary education. It also reflects the capacity of secondary education provided in the region. In a period of three years, 2011, 2013 and 2015 a total of 18,738 pupils were selected to join Form One, 98.5 percent of them joined Form One in the city council (Table 5.34). Number of pupils joined Form One decreased drastically from 6,292 in 2011 to 5,804 pupils in 2013, but again rose significantly to 6,365 in 2015.

Table 5.34 also shows that of the selected pupils, the proportions of boys were higher than girls in all respective years (Table 5.34). Among other factors, income poverty from which parents/guardians suffer, some pupils, although were selected to join form one, are forced by their parents/guardians to participate in income generating activities in order to raise income of their families.

Table 5.34 Number of Pupils Who Selected and Joined Form I in Public Secondary Schools by Sex, Mwanza Region; 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	3,142	3,204	6,400	3,089	3,203	6,292	98.3	100.0	98.3

2013	3,012	2,907	5,926	2,943	2,847	5,804	97.7	97.9	97.9
2015	3,210	3,202	6,412	3,200	3,065	6,365	99.7	95.7	99.3
Total	9,364	9,313	18,738	9,232	9,115	18,461	98.6	97.9	98.5

Source: City Director's Office (Education Department), Mwanza City Council, 2016

At ward level, Luchehele and other wards sent all pupils who were selected to join Form One were accommodated in their secondary schools in all referred years except Isamilo ward (99.0 percent), Mhandu (96.4 percent) and Igogo (92.4 percent). Table 5.35 also shows that Nyamagana (109.3 percent) and other wards (100 percent) managed to accommodate all pupils into secondary schools in 2013 except Isamilo (95.5 percent), Mhandu (95.5 percent), Igogo (90.9 percent) and Luchehele ward (82.0 percent). Similarly most of the wards had highest absorption rates to accommodate all selected pupils in their secondary schools in 2015 except Isamilo (98.8 percent), Mhandu (97.3 percent), Igogo (96.2 percent), Mirongo (95.5 percent) and Butimba (83.2 percent) as shown in table 5.35. Initiatives are however needed to increase number of classrooms or build more secondary schools in order to provide chances for all selected pupils to joined Form One.

Table 5.35 Number of Pupils who were Selected and Joined Form I in Public Secondary Schools by Ward, Mwanza City 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
Buhongwa	187	208	348	187	208	348	100	100	100
Lwanhima	97	61	100	97	61	100	100	100	100
Mkolani	278	277	388	278	277	388	100	100	100
Luchehele	172	222	164	186	182	164	108.1	82.0	100
Butimba	720	560	594	720	560	494	100	100	83.2
Nyegezi	201	174	216	201	174	216	100	100	100
Igogo	450	462	366	416	420	352	92.4	90.9	96.2
Mkuyuni	321	259	269	321	259	269	100	100	100
Pamba	563	592	631	563	592	631	100	100	100
Nyamagana	103	75	69	103	82	69	100	109.3	100
Mirongo	189	158	133	189	158	127	100	100	95.5
Isamilo	396	426	340	392	407	336	99.0	95.5	98.8
Mabatini	353	317	392	353	317	392	100	100	100
Mbugani	348	217	278	348	217	278	100	100	100

Mahina	287	256	291	287	256	291	100	100	100
Mhandu	824	776	847	794	741	824	96.4	95.5	97.3
Igoma	452	540	581	452	540	581	100	100	100
Kishiri	405	339	405	405	339	405	100	100	100
TOTAL	6346	5919	6412	6292	5790	6265	99.1	97.8	97.7

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2.5 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 city council or ward. In all three years, a cumulative total of 23,143 pupils who completed primary education only 79.3 percent joined secondary education in public schools and the remaining 20.7 percent of children enter into labour market (Table 5.36). Table 5.36 also shows that children absorbed into secondary education in public schools were 77.5 percent of 8,116 pupils completed primary education in 2011, 75.7 percent from 7,651 graduates in 2013 and 84.9 percent out of 7,376 graduates in 2015. One general observation from these results is that city council should improve its transition rate in order to reduce number of children who entering labour market without having enough education.

Table 5.36 Number of Pupils Who Completed Primary Education and Joined Secondary Education in Public Secondary Schools by Sex, Mwanza City 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	3,735	4,381	8,116	3,089	3,203	6,292	82.7	73.1	77.5
2013	3,625	4,026	7,651	2,943	2,847	5,790	81.2	70.7	75.7
2015	3,567	3,809	7,376	3,200	3,065	6,265	89.7	80.5	84.9
Total	10,927	12,216	23,143	9,232	9,115	18,347	84.5	74.6	79.3

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2.6 Primary schools Facilities

A teacher may be the single most important factor in the development of primary education. But after the teacher, primary school facilities are the most important factor. School facilities include but

not confined to classrooms, toilet facilities, teachers' houses, desks, teachers' offices, and miscellaneous school furniture and water sources.

(i) Classrooms

According to education Policy, the use of each classroom in primary and secondary schools should follow the national standard of accommodating 45 pupils/students only. If it happens a classroom accommodates more than 45 pupils is an indication that there is a shortage of classrooms in that particular school.

Table 5.37 shows that Mwanza city council had inadequate classrooms since most of schools failed to meet the requirement of pupils classroom ratio of one classroom per 45 pupils (CPR 1:45). At CPR of 1:104 in 2015, the city council experienced a shortage of classrooms in primary schools which led to the demand of 1,107 classrooms.

Table 5.37 also shows that all wardss of the city council experienced shortages of classrooms (except Mirongo and Mhandu ward) because their classroom pupils' ratios were far above the national standard (CPR of 1:45). With a ratio of 104 pupils per classroom, Igoma ward had largest classroom pupils ratio in the city council followed by Mahina (CPR of 1:194) and Buhongwa (CPR of 1:191) as shown in table 5.37. For improving learning environment in primary schools in the city council, more classrooms are therefore needed in primary schools to enable the pupils to sit more comfortably and enhance teaching effectiveness of the teachers.

Table 5.37 Availability of Classrooms in Public Primary Schools by Ward; Mwanza City Council; 2015

Ward	No. of Schools	Total Pupils	Available Classrooms	Classroom Pupils Ratio	Required Classrooms	Deficit of Classrooms	
						Number	Percent
Igogo	6	5,010	58	86	117	59	50.4
Isamilo	8	4,111	53	78	103	50	48.5
Buhongwa	3	4,387	23	191	98	75	76.5
Butimba	6	6,077	57	107	135	78	57.8
Igoma	5	8,930	39	229	203	164	80.8
Kishili	5	5,729	43	133	128	85	66.4
Mkolani	3	3,625	22	165	81	59	72.8

Mkuyuni	4	3,874	36	108	86	50	58.1
Nyegezi	2	2,027	20	101	49	29	59.2
Pamba	8	7,939	64	124	180	116	64.4
Luchelele	3	2,793	33	85	69	36	52.2
Lwanhima	2	1,495	26	58	33	7	21.2
Mabatini	5	4,341	33	132	97	64	66.0
Mahina	3	5,624	29	194	125	96	76.8
Mbugani	4	1,418	27	53	32	5	15.6
Mhandu	7	86	56	2	192	136	70.8
Mirongo	4	1,619	40	40	36	-4	-11.1
Nyamagana	2	681	14	49	16	2	12.5
Total	80	69,766	673	104	1,780	1,107	62.2

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(ii) Pit Latrine

All primary schools in the region had 375 pit-latrine for boys and 415 for girls in 2015 (Table 5.38). 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. Table 5.38 indicates that there was a serious shortage of pit-latrine in primary schools as one pit-latrine was used by 101 and 97 boys and girls pupils respectively in 2015. Pamba and Mkuyuni ward experienced remarkable shortages of pit latrine for boys (CPR of 1:208, 1:188) and girls (CPR of 1:229, 1:166) respectively. The city council should make sure that wards follow ratios of Pit-latrine per girls and boys in order to provide environment and hygiene of pupils.

Table 5.38 Availability of Pit Latrine in Public Primary Schools by Ward, Mwanza City 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
Igogo	2,407	2,603	37	39	65	67	94	128	57	89
Isamilo	2,085	2,026	26	29	80	70	84	102	58	73
Buhongwa	2,055	2,332	26	30	79	78	56	63	30	33
Butimba	3,016	3,016	23	30	131	101	121	153	98	123
Igoma	4,346	4,584	24	28	181	164	174	229	150	201
Kishili	2,682	3,047	25	27	107	113	106	152	81	125
Mkolani	1,739	1,886	14	14	124	135	89	110	75	96
Mkuyuni	1,880	1,994	10	12	188	166	77	94	67	82
Nyegezi	960	1,067	16	16	60	67	41	59	25	43

Pamba	3,960	4,125	19	18	208	229	159	206	140	188
Luchehele	1,373	1,420	26	30	53	47	71	74	45	44
Lwanhima	763	732	14	22	55	33	31	36	17	14
Mabatini	2,042	2,299	20	20	102	115	82	115	62	95
Mahina	2,729	2,895	28	29	97	100	109	145	81	116
Mbugani	682	761	10	10	68	76	27	38	17	28
Mhandu	3,962	4,218	27	31	147	136	158	211	131	180
Mirongo	814	805	20	20	41	40	33	40	13	20
Nyamagana	329	312	10	10	33	31	14	16	4	6
Total	37,824	40,112	375	415	101	97	1,526	1,971	1,151	1,556

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(iii) Staff Houses

Of the various teaching incentives, the provision of staff quarters is very crucial as it facilitates the retention of teachers and also promotes teaching morale. Table 5.39 reveals that Mwanza city council had a total of 61 teachers' houses and if we consider the required official House Teacher Ratio (HTR) of 1:1, the city council had a remarkable shortage of 1,790 houses in 2015.

Table 5.39 also shows that there is no ward with a surplus of houses. It is important to note that all wards suffered from a critical shortage of houses ranging from 200 (Mhandu) to 25 (Lwanhima). With its urban nature and being the headquarters of the region, Mwanza city had biggest shortage in absolute numbers since most of the teachers prefer to work in this city council rather than other councils in the region.

Table 5.39 Availability of Primary School Teachers' Houses by Ward, Mwanza City Council; 2015

Ward	No. of Schools	Available Teachers	Available Houses	House Teachers Ratio	Required Houses	Deficit of Houses	
						Number	Percent
Buhongwa	3	116	8	15	97	89	91.8
Butimba	6	183	4	46	135	131	97.0
Igogo	6	105	1	105	118	117	99.2
Igoma	5	163	4	41	163	159	97.5
Isamilo	8	164	3	55	164	161	98.2
Kishili	5	120	4	30	119	115	96.6
Luchehele	3	60	9	7	73	64	87.7
Lwanhima	2	33	8	4	33	25	75.8

Mabatini	5	108	0	0	108	108	100.0
Mahina	3	90	1	90	111	110	99.1
Mbugani	4	52	5	10	52	47	90.4
Mhandu	7	202	2	101	202	200	99.0
Mirongo	4	92	3	31	36	33	91.7
Mkolani	3	91	5	18	81	76	93.8
Mkuyuni	4	81	n.a	n.a	89	0	0.0
Nyamagana	2	36	n.a	n.a	36	0	0.0
Nyegezi	2	57	n.a	n.a	58	0	0.0
Pamba	8	190	4	48	176	172	97.7
Total	80	1943	61	32	1851	1790	96.7

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(iv) Furniture(Desks)

The average number of pupils per desk is an important indicator of the provision of favourable and conducive learning environment for the pupils. With 606,459 pupils registered in 2015, Mwanza region needed about 202,153 desks so as to comply with the official Desk Pupils Ratio of 1:3. The region, therefore, had acute shortage of 77,651 in 2015. All councils experience shortages of desks, but Magu and Buchosa were the most affected councils which shortages stood at 87.6 percent and 82.6 percent of desks respectively (Table 5.40).

Table 5.40 Availability of Desks in Public Primary Schools Ward, Mwanza City Council; 2015

Ward	No. of Schools	Total Pupils	Available Desks	Desk Pupils Ratio	Required Desks	Deficit of Desks	
						Number	Percent
Buhongwa	3	4,387	577	7.6	1,462	885	60.5
Lwanhima	2	1,495	377	4.0	499	122	24.4
Mkolani	3	3,625	455	8.0	1,208	753	62.3
Luchehele	3	2,793	924	3.0	1,012	88	8.7
Butimba	6	6,077	1,030	5.9	2,026	996	49.2
Nyegezi	2	2,027	350	5.8	676	326	48.2
Igogo	6	5,010	1,280	3.9	1,734	454	26.2
Mkuyuni	4	3,874	1,082	3.6	748	(334)	-44.7
Pamba	8	7,939	1,214	6.5	2,646	1,432	54.1
Nyamagana	2	681	281	2.4	230	(51)	-22.2
Mirongo	4	1,619	587	2.8	540	(47)	-8.7
Isamilo	8	4,111	701	5.9	1,370	669	48.8
Mabatini	5	4,341	708	6.1	1,447	739	51.1

Mbugani	4	1,418	420	3.4	-	-	-
Mahina	3	5,624	997	5.6	1,875	878	46.8
Mhandu	7	8,190	1,166	7.0	2,730	1,564	57.3
Igoma	5	8,930	1,472	6.1	2,977	1,505	50.6
Kishiri	5	5,729	1,908	3.0	814	(1,094)	-134.4
Total	80	77,870	15,529	5.0	23,994	8,465	35.3

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(v) Accessibility of Water

Mwanza city council has managed to supply water to some of its primary schools through water tanks, water wells and tap water. Table 5.41 shows that tape water was the major source of water supply in primary schools in Mwanza city council followed by water tanks and water well was the least common source water in primary schools in 2015. However, not all schools in the district council had water facilities in their compounds. The wards should consider accessibility of water supply in their primary schools as pre-condition of protecting waterborne diseases and influence reduction of pupil's drop out caused by deaths.

Table 5.41 Accessibility of Water in Public Primary Schools by Ward, Mwanza City 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
Buhongwa	3	1	0	0	3	1	0	0
Lwanhima	2	-	-	-	2	-	-	-
Mkolani	3	2	-	3	3	2	-	3
Luchehele	3	1	-	3	3	1	-	3
Butimba	6	-	-	5	6	-	-	5
Nyegezi	2	-	-	2	2	-	-	2
Igogo	6	1	-	3	6	1	-	4
Mkuyuni	4	-	1	1	4	-	1	1
Pamba	8	-	-	8	8	2	-	8
Nyamagana	2	-	-	2	2	-	-	2
Mirongo	4	-	1	4	4	-	1	4
Isamilo	8	-	1	8	8	-	1	8

Mabatini	5	-	-	2	5	-	-	2
Mbugani	4	-	-	1	4	-	-	-
Mahina	3	2	-	2	3	2	-	2
Mhandu	7	-	1	5	7	-	1	5
Igoma	5	3	1	7	5	3	1	7
Kishiri	5	2	1	3	5	2	1	3
Total	80	12	6	59	80	14	6	59

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2.7 Adult Education

Along with the expansion of primary and secondary education, the region has also expanded adult education using primary schools as centres with head teachers being in charge of adult education campaigns through MUKEJA and MEMKWA programs. Table 5.42 shows that in 2013 and 2015 the district council had 11 and 15 centres for MUKEJA programme respectively. Enrolment of MUKEJA and MEMKWA programs in 2013 were 8 and 37 respectively. However, in 2015 adult enrolments in the two programs increased to 289 and 438. Lack of sensitization campaigns to adults is the reason for the decrease in the number of adults who joined such programs in 2015. Moreover, the ward should have regular sensitization campaigns for sustainability of the two programs.

Table 5.42 Number of Adult Education Centers and Enrolments by Ward, Mwanza City Council; 2013 and 2015

Ward	No. of Centres (MUKEJA) - ICBAE		Centre Enrolment (MUKEJA) - ICBAE		MEMKWA (Colbert) enrolment	
	2013	2015	2013	2015	2013	2015
Buhongwa	7	7	7	7	3	3
Lwanhima	0	0	0	0	0	27
Mkolani	0	0	0	0	0	49
Luchehele	0	0	0	0	18	13
Butimba	3	6	0	0	25	21
Nyegezi	0	0	0	0	0	0
Igogo	0	0	0	0	0	0
Mkuyuni	0	0	0	0	28	39
Pamba	0	1	0	15	0	18
Nyamagana	0	0	0	0	22	19

Mirongo	0	0	0	0	18	16
Isamilo	1	0	1	0	29	47
Mabatini	0	0	0	0	0	0
Mbugani	0	0	0	0	0	0
Mahina	0	0	0	0	38	32
Mhandu	0	0	0	0	83	103
Igoma	0	1	0	15	0	18
Kishiri	0	0	0	0	25	33
Total	11	15	8	37	289	438

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.2.8 Special Education

The issue of disability of late has been gaining recognition worldwide. This is due to the fact that the level of disability appears to be on the increase in most societies. Hence, it is important to prepare programme for the disabled pupils to get special education according to their type of impairment. Table 5:43 shows that the number of pupils enrolled in special education had increased from 178 in 2013 to 226 in 2015. Most of pupils (51 in 2013 and 51 in 2015) were intellectual impaired followed by physical impaired, deaf and other impaired (Table 5.43). Furthermore, of the impaired pupils, boys outnumbered girls' pupils in 2015.

Table 5.43 Number of Pupils enrolled with their Type of impairment; Mwanza City Council; 2013 and 2015

Type of Impairment	2013			2015		
	Male	Female	Total	Male	Female	Total
Visual Impaired	7	2	9	9	5	14
Deaf	17	11	28	18	8	26
Intellectual Impairment	28	23	51	30	21	51
Albinos	5	7	12	9	8	17
Physical Impairment	28	23	51	30	21	51
Other Impairment	18	9	27	42	25	67
Total	103	75	178	138	88	226

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.3 Secondary Education

The development of secondary education in Mwanza City Council improved very recent due to its historical context and the poor infrastructure. As a result, until 2011, the city council had only 28 public secondary schools. The number of secondary schools increased to 51 in 2013. In 2015 the number of secondary schools reached 55 out of that 30 were publically owned (Table 5.44). However, private sector contributed significantly since private secondary schools increased the number from 23 in 2011 to 25 schools in 2015.

Table 5.44 Number of Secondary Schools by Ownership and Ward, Mwanza City Council; 2011, 2013 and 2015

Ward	2011			2013			2015		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Buhongwa	2	4	6	2	6	8	1	4	5
Lwanhima	0	0	0	0	0	0	1	2	3
Mkolani	4	6	10	4	6	10	2	4	6
Luchebele	0	0	0	0	0	0	2	2	4
Butimba	3	0	3	4	0	4	3	0	3
Nyegezi	0	0	0	0	0	0	1	0	1
Igogo	2	0	2	2	0	2	2	0	2
Mkuyuni	2	0	2	2	0	2	2	0	2
Pamba	4	1	5	4	1	5	4	1	5
Nyamagana	1	0	1	1	0	1	1	0	1
Mirongo	1	1	2	1	1	2	1	1	2
Isamilo	2	2	4	2	2	4	2	2	4
Mabatini	0	0	0	0	0	0	1	0	1
Mbugani	2	0	2	2	0	2	1	0	1
Mahina	3	7	10	3	7	10	2	5	7
Mhandu	0	0	0	0	0	0	1	2	3
Igoma	2	2	4	3	2	5	2	1	3
Kishiri	0	0	0	0	0	0	1	1	2
Total	28	23	51	30	25	55	30	25	55

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.3.1 Secondary School Enrolment

The enrolment of students in Mwanza City council increased with the increase of school infrastructure constructed through community participation. Over the period given in Table 5.45, enrolments in secondary schools decreased by 12.7 percent from 6,061 students in 2011 to 5,377 students in 2015. General observation shown by these data is that, with exception of seven wards, rest of wards had decreased their enrolment with more so on at Mkuyuni and Isamilo wards. Further Table 5.45 shows that enrolment at ward level fluctuated due to income poverty from which parents/guardians suffer, some students, although were selected to join form one, forced by their parents/guardians to participate in income generating activities in order to raise income of their families. This however, was the main reason for the decrease in pupils who joined form one in 2015 for the urban wards.

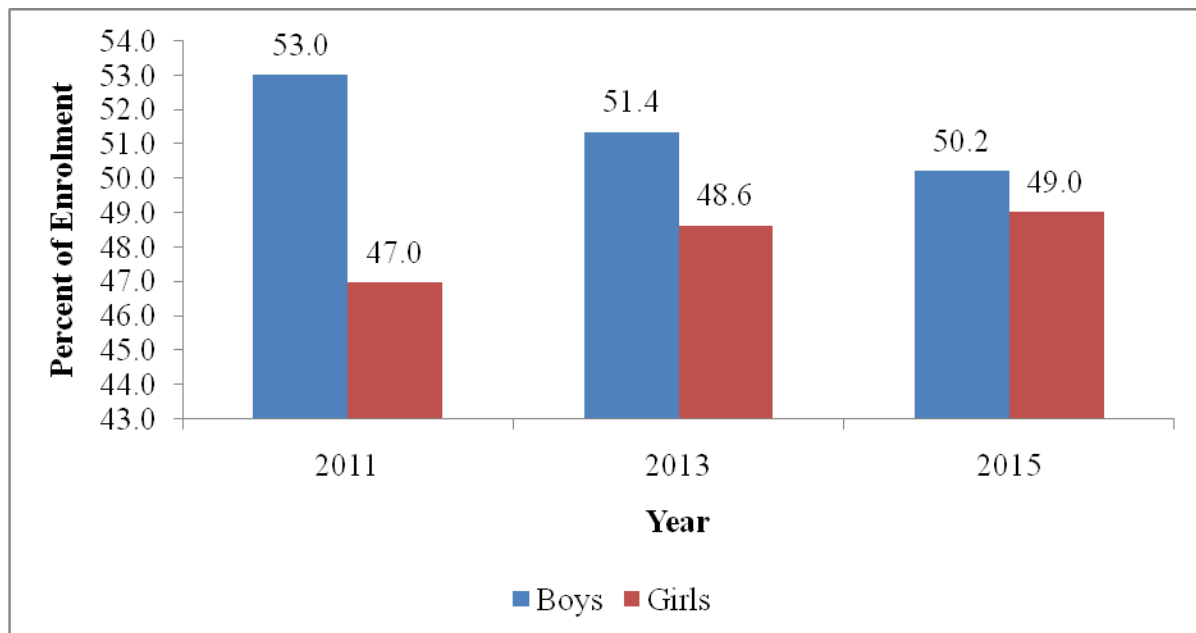
Table 5.45 Total Form 1 Enrolment in Public Secondary Schools by Ward and Sex, Mwanza City Council; 2011 and 2015

Ward	2011			2015			Increase 2011 - 2015	
	Boys	Girls	Total	Boys	Girls	Total	Number	Percent
Igoma	124	119	243	226	213	439	196	44.6
Lwanhima	33	37	70	62	77	139	69	49.6
Mhandu	119	91	210	140	138	278	68	24.5
Kishiri	125	125	250	123	142	265	15	5.7
Nyegezi	137	102	239	128	115	243	4	1.6
Mirongo	109	87	196	91	109	200	4	2.0
Buhongwa	145	115	260	93	167	260	0	0.0
Mkolani	156	91	247	112	127	239	-8	-3.3
Mahina	206	175	381	186	163	349	-32	-9.2
Butimba	234	202	437	218	128	386	-51	-13.2
Mbugani	132	92	224	88	85	173	-51	-29.5
Luchehele	100	71	171	54	52	106	-65	-61.3
Igogo	212	204	416	187	164	351	-65	-18.5
Nyamagana	92	63	155	38	44	82	-73	-89.0
Mabatini	146	156	302	112	100	212	-90	-42.5
Pamba	636	545	1181	547	502	1049	-132	-12.6
Mkuyuni	282	140	422	119	126	245	-177	-72.2
Isamilo	226	433	657	177	184	361	-296	-82.0
TOTAL	3,214	2,848	6,061	2,701	2,636	5,377	-684	-12.7

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Sex imbalance was observed in a specified period as more boys were enrolled than girls (Figure 5.13). Of the selected pupils, more boys (53.0 percent) than girls (47.0 percent) joined form one in 2011. Similar trend observed in 2013 and 2015 which was caused by, among other factors, poor performance in standard seven examinations and lack of awareness on the importance of education for girls children.

Figure 5.13 Percentage Distribution of Form 1 Enrolment in Public Secondary Schools by Sex, Mwanza City Council; 2011, 2013 and 2015



Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.46 shows the cohort of students who enrolled Form I in 2011 and completed secondary school education in 2014 by council and sex in Mwanza City council. In 2014, out of 6,016 students who enrolled in 2011, only 2,487, equivalent to 41.3 percent completed form IV in 2014. More effort is needed to ensure that more boys and girls complete secondary education.

Table 5.46 Number of Students Registered in 2011 and Completed Form IV in 2014 by Ward and Sex in Public Secondary Schools, Mwanza City Council.

Ward	Enrolled 2011			Completed 2014			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Buhongwa	149	89	238	93	56	149	62.4	62.9	62.6
Lwanhima	42	41	83	121	45	166	288.1	109.8	200.0

Mkolani	152	81	233	100	62	162	65.8	76.5	69.5
Luchelele	107	22	189	68	35	103	63.6	159.1	54.5
Butimba	263	217	480	98	54	152	37.3	24.9	31.7
Nyegezi	169	102	271	67	30	97	39.6	29.4	35.8
Igogo	228	222	450	61	24	85	26.8	10.8	18.9
Mkuyuni	323	147	470	21	13	34	6.5	8.8	7.2
Pamba	553	487	1040	62	55	117	11.2	11.3	11.3
Nyamagana	130	100	230	140	82	222	107.7	82.0	96.5
Mirongo	113	124	237	51	30	81	45.1	24.2	34.2
Isamilo	258	222	480	67	38	105	26.0	17.1	21.9
Mabatini	120	120	240	49	43	92	40.8	35.8	38.3
Mbugani	132	92	224	58	38	96	43.9	41.3	42.9
Mahina	260	219	479	58	32	90	22.3	14.6	18.8
Mhandu	119	119	238	30	22	52	25.2	18.5	21.8
Igoma	109	86	195	68	52	120	62.4	60.5	61.5
Kishiri	120	119	239	387	177	564	322.5	148.7	236.0
TOTAL	3347	2609	6016	1599	888	2487	47.8	34.0	41.3

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.53 shows the second cohort of students who were enrolled in 2012 and completed in 2015. Great achievement was done by the local government authorities to a large extent had improved the number of form IV leavers in the district council. The completion rate decreased significantly from 41.3 percent in 2014 (cohort one) to 21.2 percent in 2015 (Table 5.45). At ward, similar experience was observed among wards, although variations occurred between them. One general observation from Table 5.45 is that wards including Pamba, Butimba, Igogo and Isamilo had more students who completed Form IV than those enrolled in 2012. This was attributed by students transferred from other wards to their schools.

Table 5.45: Number of Students Registered in 2012 and Completed Form IV in 2015 by Ward and Sex in Public Secondary Schools, Mwanza City Council.

Ward	Enrolled 2012			Completed 2015			Completion Rates		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Pamba	113	108	221	613	504	1117	542.5	466.7	505.4
Butimba	237	233	470	233	218	451	98.3	93.6	96.0
Igogo	112	101	213	187	153	340	167.0	151.5	159.6
Isamilo	172	156	328	168	143	311	97.7	91.7	94.8
Mahina	232	195	427	157	151	308	67.7	77.4	72.1

Buhongwa	93	56	149	116	159	275	124.7	283.9	184.6
Mkuyuni	69	86	155	134	133	267	194.2	154.7	172.3
Igoma	120	120	240	146	110	256	121.7	91.7	106.7
Kishiri	784	553	1337	106	129	235	13.5	23.3	17.6
Mabatini	130	110	240	103	131	234	79.2	119.1	97.5
Nyegezi	140	135	275	118	102	220	84.3	75.6	80.0
Mhandu	110	89	199	111	108	219	100.9	121.3	110.1
Mkolani	231	229	460	127	79	206	55.0	34.5	44.8
Mirongo	104	110	214	92	101	193	88.5	91.8	90.2
Mbugani	96	101	197	76	85	161	79.2	84.2	81.7
Luchehele	212	195	407	78	71	149	36.8	36.4	36.6
Nyamagana	275	252	527	66	57	123	24.0	22.6	23.3
Lwanhima	262	217	479	54	55	109	20.6	25.3	22.8
TOTAL	3492	3046	6538	804	585	1389	23.0	19.2	21.2

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.3.2 Pass Rates

Table 5.47 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 city council. Generally the performances of Form IV examinations in Mwanza city council for 2011, 2013 and 2015 were not good. There were only 0.8 percent of boy students and 0.2 girl students who attained division One (I), only 3.3 percent of boy students and 1.1 percent girl students who attained division II. Unfortunately, 43.6 percent of students (22.4 percent of boys and 21.2 percent of girls) failed completely. The City Council Authority should take this performance matter seriously.

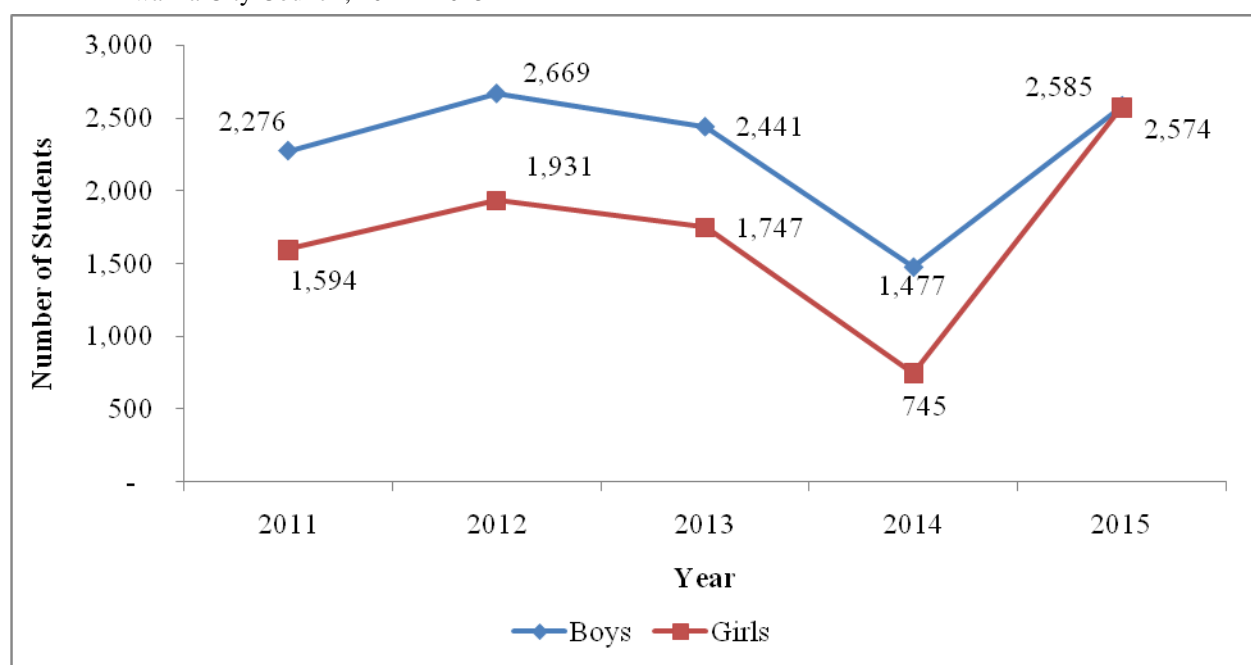
Table 5.47 Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Mwanza City Council; 2011, 2013 and 2015

Division	2011			2013			2015			Total		Percent		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Boys	Girls	Total
I	19	2	21	43	8	51	40	12	52	102	22	0.8	0.2	0.9
II	91	25	116	160	51	211	179	70	249	430	146	3.3	1.1	4.4
III	264	90	354	278	174	452	283	213	496	825	477	6.3	3.6	9.9
IV	1019	635	1654	831	656	1487	1144	1157	2301	2994	2448	22.7	18.5	41.2
0	883	824	1707	1129	858	1987	939	1122	2061	2951	2804	22.4	21.2	43.6
Total	2276	1576	3852	2441	1747	4188	2585	2574	5159	7302	5897	55.3	44.7	100.0

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Looking at sex, Figure 5.14 shows that boys' students performed better than girls in all referred period, 2,276 and 2,585 boys in 2011 and 2015 compared with 1,594 and 2,574 girls respectively. One general observation from these data is that girl's performance had improved in recent years and managed to narrow the gap with boy's performance. For example, the performance gap between sexes had been narrowed in 2015 (2,585 boys against 2,574 girls) than it was in 2011 (Figure 5.14). However, more strategies are needed to be formulated in order to improve more girls' performance in the city council. These strategies include construction of dormitories for girls, provision of food and other performance incentives for girls' students.

Figure 5.14 Students Performance in Form IV Examinations in Public Secondary Schools by Sex, Mwanza City Council; 2011 - 2015

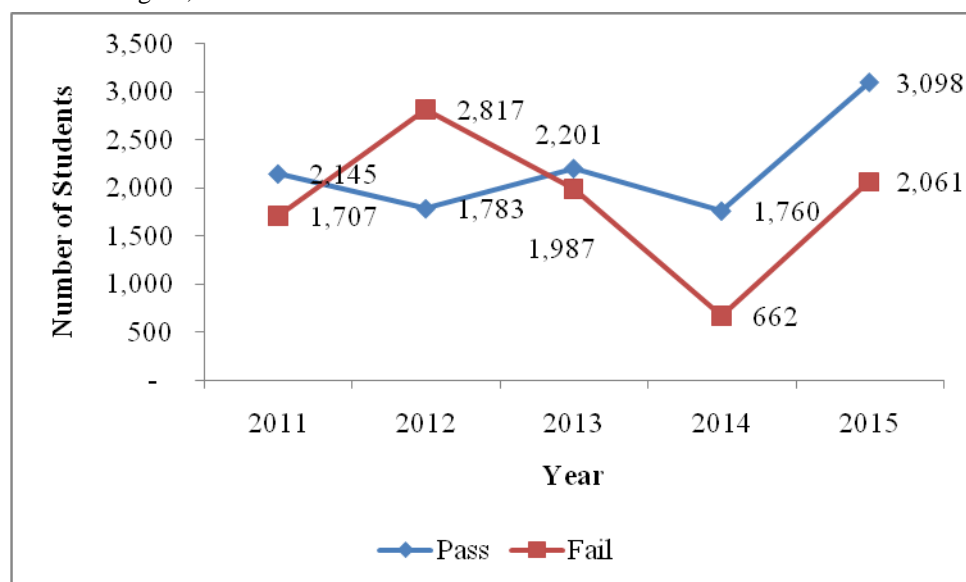


Source: City Director's Office (Education Department), Mwanza City Council, 2016

Criteria set by the Ministry of Education and Vocational Training Centre recognize any student who has passed his or her Form IV examinations if he/she attains any division between one and four and failure if he/she attains zero division. Figure 5.15 shows that the city council has been improving its performance in recent years. Out of 3,852 examinees, 2,145 passed their Form IV examinations in 2011. With exception of 2012 and 2014, pass rates have increased in the rest of referred years.

(Figure 5.15). Figure 5.15 also shows that number of students attained division zero decreased, although was increased from 1,707 students in 2011 to 2,817 in 2012, but decreased significantly to 2,061 students in 2015.

Figure 5.15 Students Performance in Form IV Examinations in Public Secondary Schools, Mwanza Region; 2011 - 2015



Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.3.3 Form V Enrolment

The enrolment of students in high schools in Mwanza city council increased with the increase of school infrastructure constructed through people's participation due to parents' awareness of the importance of education to their children. Table 5.48 shows that student's enrolment decreased by 5.1 percent from 2011 to 2013, and then grew at a faster rate of almost 43.9 percent between 2013 and 2015. Enrolment of girls in high schools rose slightly from 35.4 percent in 2011 to 35.6 percent in 2015 and reached 34.9 percent in 2015. The boys' enrolment fell from 64.6 to 64.5 percent between 2011 and 2013 then fell further to 56.2 percent in 2015 (Table 5.48).

Table 5.48 Total Form V Enrolment in Public High Schools by Sex, Mwanza City Council; 2011, 2013 and 2015

Year	Boys	Percent	Girls	Percent	Total	Enrolment Change
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						Number	Percent
2011	496	48.20	533	51.8	1029		
2013	497	50.77	482	49.2	979	-50	-5.1
2015	774	51.46	730	48.5	1504	525	34.9
Total	1767	50.31	1745	49.7	3512	2008	

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.49 shows the number of students who completed high school education by sex in Mwanza city council. In 2011, out of 972 students who completed form VI, 493 of them or 50.7 percent were girls and 49.3 percent boys. The percentage of girls decreased to 44.5 percent in 2013 and then increased up to 46.3 percent in 2015. The situation was deferent for boys' students, while completion rate for girls increased that of boys increased from 49.3 percent in 2011 to 55.5 percent in 2013 and then decreased to 53.7 in 2015. Unlike in completion of secondary education, the situation in this case is a bit good. Overall, the number of form VI leavers has been increasing year after year in the city council.

Table 5.49 Number of Students Who Completed 'A'-Level Secondary School Education by Sex, Mwanza City Council; 2011, 2013 and 2015

Year	Boys	Percent	Girls	Percent	Total	Change of Students	
						Number	Percent
2011	479	49.3	493	50.7	972		
2013	672	55.5	539	44.5	1211	239	19.7
2015	505	53.7	436	46.3	941	-270	-28.7
Total	1,656	53.0	1,468	47.0	3,124	2,183	

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.3.4 Form VI Pass Rate

Table 5.47 shows student's performance in Form VI examinations. Unlike form IV examinations performance, performance in Mwanza city council for Form VI examinations over the period from 2011, 2013 and 2015 is encouraging. Out of 751 boy students and 677 girl students who did examinations in 2011, only 125 boys and 139 girls fail their examinations. Similar trends have observed in 2013 and 2014 examination results. One general observation experienced in these data is that, only 13.6 percent of boy students and 11.3 of girl students failed completely. About 3.1 percent of boy students and 1.5 percent of girl students attained division I. Student Performance for both boys and girls increased with time over the period from 2011 to 2015 (Table 5.47).

Table 5.50 Students Performance in Form VI Examinations in Public Secondary Schools by Sex, Mwanza Region; 2011, 2013 and 2015

Division	2011			2013			2015			Total		Percent		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Boys	Girls	Total
I	41	24	65	35	4	39	76	45	121	152	73	3.1	1.5	4.5
II	123	67	190	278	63	341	154	107	261	555	237	11.2	4.8	16.0
III	243	254	497	105	323	428	193	208	401	541	785	10.9	15.8	26.7
IV	219	193	412	242	198	440	264	268	532	725	659	14.6	13.3	27.9
O	125	139	264	356	198	554	193	222	415	674	559	13.6	11.3	24.9
Total	751	677	1428	1016	786	1802	880	850	1730	2647	2313	53.4	46.6	100

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.3.5 Special Education

The issue of disability of late has been gaining recognition worldwide. This is due to the fact that the level of disability appears to be on the increase in most societies. Hence, it is important to prepare programme for the disabled pupils to get special education according to their type of impairment. Table 5.48 shows that the number of pupils enrolled in special education had increased from 19 in 2013 to 39 in 2015. Most of pupils (10 in 2013 and 18 in 2015) were albino followed by deaf (Table 5.51). Furthermore, of the impaired pupils, girls outnumbered boys' pupils in 2013 and 2015.

Table 5.51 Number of Pupils enrolled with their Type of impairment; Mwanza City Council; 2013 and 2015

Type of Impairment	Number of Students enrolled					
	2013			2015		
	Boys	Girls	Total	Boys	Girls	Total
Totally Blind	0	2	2	0	2	2
Low Vision	0	0	0	0	5	5
Albino	0	10	10	0	18	18
Deaf	0	0	0	1	10	11
Physical Hand capped	2	5	7	0	3	3
Total	2	17	19	1	38	39

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.3.5 Secondary school Facilities

The quantity and quality of facilities for the secondary school system in Mwanza city council are yet to attain the standards set by the educational authorities. Besides the capability of students themselves, lack of school facilities play significant role in improving quality of education in any region. 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

Expansion of secondary education has a direct related to the increase in the number of teaching staff. This is very crucial for the sustainable improvement of education quality. Table 5.52 shows distribution of teachers in each ward of Mwanza CityCouncil in 2015. In 2015 Mwanza city council had a total of 1,431 teachers distributed in 30 public secondary schools. This gives an average School Teachers Ratio of 1:48 At ward level, most of with them with an exception of Lucheles, Mkuyuni, Igoma, Mahina, Mbugani, Nyamagana and Igogo wards had secondary schools more than 48 teachers per school. According to the acceptable teacher student's ratio of 1:45, Mwanza city council had excess of 54 teachers (Table 5.52).

Table 5.52 Availability of Public Secondary School's Teachers by Ward, Mwanza City Council; 2015

Ward	No. of Schools	Available Teachers	School Teachers Ratio	Required Teachers	Deficit of Teachers	
					Number	Percent
Buhongwa	1	79	79	76	-3	-3.9
Mkolani	2	150	75	145	-5	-3.4
Pamba	4	263	66	274	11	4.0
Lwanhima	1	62	62	40	-22	-55.0
Mabatini	1	54	54	44	-10	-22.7
Nyegezi	1	54	54	43	-11	-25.6
Butimba	3	153	51	158	5	3.2
Mirongo	1	49	49	55	6	10.9
Mhandu	1	47	47	57	10	17.5
Isamilo	2	92	46	81	-11	-13.6
Kishiri	1	40	40	66	26	39.4
Lucheles	2	73	37	75	2	2.7
Mkuyuni	2	70	35	78	8	10.3
					138	

Igoma	2	67	34	80	13	16.3
Mahina	2	66	33	86	20	23.3
Mbugani	1	32	32	41	9	22.0
Nyamagana	1	29	29	14	-15	-107.1
Igogo	2	51	25.5	72	21	29.2
Total	30	1431	47.7	1485	54	3.6

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Table 5.53 shows that, out of 1,428 Public Secondary school teachers available in Mwanza city council by 2015, 25.7 percent were diploma holders, 69.9 percent degree holders and only 4.4 percent were masters' holders. At ward level, secondary schools in Pamba was the most privileged as 186 and 13 teachers were degree and masters holders respectively, followed by Mkolani (122 degree and 16 masters) and Butimba (106 degree and 9 masters). One general observation from these data is that the city council has more qualified teachers because over 60 percent have degree and above and those with diploma.

Table 5.53 Availability of Public Secondary School's Teachers by Qualification and Ward, Mwanza City Council; 2015

Ward	Diploma			Degree			Masters and Others			Total Teachers		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Pamba	42	20	62	83	103	186	6	7	13	131	130	261
Mkolani	3	11	14	71	51	122	8	8	16	82	70	152
Butimba	12	11	23	54	72	106	6	0	9	72	83	138
Isamilo	14	6	20	42	27	69	1	1	2	57	34	91
Luchebele	8	5	13	33	25	58	10	1	11	51	31	82
Buhongwa	16	6	22	24	33	57	0	0	0	40	39	79
Mkuyuni	15	5	20	27	20	47	0	1	1	42	26	68
Igoma	13	9	22	30	14	44	1	0	1	44	23	67
Mahina	14	9	23	28	15	43	0	0	0	42	24	66
Lwanhima	13	4	17	25	18	43	2	0	2	40	22	62
Mabatini	10	9	19	11	20	31	2	3	5	23	32	55
Nyegezi	6	10	16	8	30	38	0	0	0	14	40	54
Igogo	18	11	29	10	11	21	1	0	1	29	22	51
Mirongo	4	3	7	29	13	42	0	0	0	33	16	49
Mhandu	8	5	13	18	14	32	1	1	2	27	20	47
Kishiri	11	6	17	12	11	23	0	0	0	23	17	40
Mbugani	11	10	21	8	4	12	0	0	0	19	14	33

Nyamagana	4	4	8	9	12	21	0	0	0	13	16	29
Total	222	144	366	522	493	995	38	22	63	782	659	1424
Percent	15.6	10.1	25.7	36.7	34.6	69.9	2.7	1.5	4.4	54.9	46.3	100

Source: City Director's Office (Education Department), Mwanza City Council, 2016

Campaigns for increasing the number of Science Teachers in Mwanza city council should be enhanced by the City Council Authority, since among 1,348 available teachers; only 269 are Science teachers and the rest of them are arts' teachers. Nyamagana ward was the most affected with only 3 teachers whom they taught science subjects. The most privileged council was Pamba (62), followed by Mkolani (36) and Butimba (28) as shown in Table 54.

Table 5.54 Number of Science and Arts Teachers in Public Secondary Schools by Ward, Mwanza City Council; 2015

Ward	Available Science Teachers			Required Teachers	Available Arts Teachers			Required Teachers
	Male	Female	Total		Male	Female	Total	
Pamba	43	19	62	114	73	127	200	160
Mkolani	25	11	36	48	57	59	116	46
Butimba	22	6	28	32	60	65	125	28
Buhongwa	13	7	20	2	27	32	59	0
Igoma	12	2	15	21	30	21	51	39
Nyegezi	8	6	14	7	12	28	40	0
Isamilo	11	3	14	26	41	30	71	55
Mkuyuni	9	4	13	18	34	23	57	44
Igogo	10	1	11	10	19	21	40	6
Mirongo	5	5	10	14	19	20	39	0
Mhandu	7	1	8	18	21	18	39	0
Luchehele	6	1	7	21	16	13	29	0
Mbugani	2	5	7	8	14	12	26	1
Kishiri	6	1	7	26	17	16	0	0
Mabatini	3	2	5	19	19	30	49	22
Mahina	4	1	5	18	38	23	61	41
Lwanhima	4	0	4	11	31	20	51	29
Nyamagana	2	1	3	3	11	15	26	26
Total	192	76	269	416	539	573	1079	497

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(ii) Administration blocks

Administration blocks are important facilities for provision of enabling environment to the teachers to provide quality education. Therefore inadequacy of administration blocks is one among challenges that needed to be resolved by the city council authority. Table 5.55 shows that the city council had very few public secondary schools with administration blocks, only 73.3 percent. Out of 30 public secondary schools, only 8 schools had administration blocks in 2015. All wards with the exception of Mkolani, Nyegezi and Mbugani also Luchehele, Pamba and Igoma with only 50 percent had no administration blocks (Table 5.55).

Table 5.55 Availability of Administration blocks in Public Secondary Schools by Ward, Mwanza City Council; 2015

Ward	No. of Schools	Available Administration Block	Percent of Schools with Admin Block	Required Teachers	Deficit of Admin.	
					Number	Percent
Mkolani	2	2	100	2	0	0
Nyegezi	1	1	100	1	0	0
Mbugani	1	1	100	1	0	0
Luchehele	2	1	50	2	1	50
Pamba	4	2	50	4	2	50
Igoma	2	1	50	2	1	50
Buhongwa	1	0	0	1	1	100
Lwanhima	1	0	0	1	1	100
Butimba	3	0	0	3	3	100
Igogo	2	0	0	2	2	100
Mkuyuni	2	0	0	2	2	100
Nyamagana	1	0	0	1	1	100
Mirongo	1	0	0	1	1	100
Isamilo	2	0	0	1	1	100
Mabatini	1	0	0	1	1	100
Mahina	2	0	0	2	2	100
Mhandu	1	0	0	1	1	100
Kishiri	1	0	0	1	1	100
Total	30	8	26.7	30	22	73.3

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(iii) Teachers' Houses

Besides the shortage of teachers, the City Council also experienced a shortage of staff quarters in all wards. Table 5.56 shows that, the City Council House Teachers Ratio was

1:17. The required staff quarters were 1,474. Therefore, the City council experienced a shortage of 1,394 houses or seventeen times the available houses. Table 5.56 also shows that though all wards experienced shortage of staff quarters, Pamba was the most affected ward followed by Butimba and Mkolani (Table 5.56).

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

Table 5.56 Availability of Teachers Houses in Public Secondary Schools by Ward, Mwanza City Council; 2015

Ward	No. of Schools	Available Teachers	Available Houses	House Teachers Ratio	Required Houses	Deficit of Teachers' Houses	
						Number	Percent
Buhongwa	1	79	0	0	79	79	100
Lwanhima	1	55	2	27.5	62	60	96.8
Mkolani	2	152	22	0	150	128	85.3
Luchebele	2	36	26	0	77	51	66.2
Butimba	3	153	1	153	153	152	99.3
Nyegezi	1	54	0	0	75	75	100
Igogo	2	51	0	0	68	68	100
Mkuyuni	2	70	2	35	71	69	97.2
Pamba	4	262	27	9.7	244	217	88.9
Nyamagana	1	29	0	0	29	29	100
Mirongo	1	49	0	0	92	92	100
Isamilo	2	85	0	0	49	49	100
Mabatini	1	54	0	0	54	54	100
Mbugani	1	33	0	0	41	41	100
Mahina	2	66	0	0	66	66	100
Mhandu	1	47	0	0	47	47	100
Igoma	2	66	0	0	77	77	100
Kishiri	1	40	0	0	40	40	100
Total	30	1381	80	17.3	1474	1394	94.6

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(iv) Classrooms

Table 5.53 shows that the required number of classrooms at the city council had 31.2 percent deficit in 2015. Table 5.57 also shows that, the classroom students ratio, according to the available classrooms and students was 1:58. The observation from this ratio is that there more students in a classroom than the acceptable number of 45 students per class approved by education authorities. At ward level, all wards (with an exception of Nyamagana and Igogo) registered shortages ranging from 1 percent to 38.8 percent. Pamba ward was the most affected with shortages of 38.8 percent. Mbugani ward had lowest shortage of 1 percent of the required number of classrooms in 2015.

Table 5.57 Availability of Classrooms in Public Secondary Schools by Ward; Mwanza City Council; 2015

Ward	No. of Schools	Total Pupils	Available Classrooms	Classroom Pupils Ratio	Required Classrooms	Deficit of Classrooms	
						No.	Percent
Pamba	4	5107	71	72	116	45	38.8
Buhongwa	1	1418	10	142	35	25	71.4
Kishiri	1	1099	12	92	28	16	57.1
Igoma	2	1525	23	66	38	15	39.5
Butimba	3	1690	29	58	42	13	31.0
Mahina	2	1439	29	50	41	12	29.3
Mkolani	2	1961	37	53	48	11	22.9
Mhandu	1	916	11	83	22	11	50.0
Luchehele	2	1336	33	40	41	8	19.5
Mkuyuni	2	862	20	43	27	7	25.9
Isamilo	2	1192	23	52	30	7	23.3
Mabatini	1	866	16	54	22	6	27.3
Lwanhima	1	490	8	61	12	4	33.3
Nyegezi	1	897	19	47	22	3	13.6
Mirongo	1	670	14	48	16	2	12.5
Mbugani	1	655	16	41	17	1	5.9
Nyamagana	1	273	7	39	7	0	0.0
Igogo	2	1088	27	40	25	-2	-8.0
Total	30	23484	405	58	589	184	31.2

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(v) Toilets

All public secondary schools in the city had a total of 501 pitlatrines (223 for boys and 278 girls) in 2015 (Table 5.54). Basing on the standard set by the education authorities, the standard pupils pitlatrine ratio is 1:20 for girls and (1:25) for boys .Table 5.58 indicates that there was a serious shortage of pitlatrines in secondary schools as it was for primary schools with one pitlatrine was used by 53 boys and 41 girls students in 2015. Table 5.59 also shows that Luchebele andNyamaganahad enough toilets in 2015. Pamba was the most affected followed by Mahina and Butimba wards.

Table 5.58 Availability of Pit Latrine in Public Secondary Schools by Sex and Ward; Mwanza City 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
Pamba	2715	2402	32	47	85	51	100	133	68	86
Mahina	747	692	7	7	107	99	34	35	27	28
Butimba	876	812	14	18	63	45	38	38	24	20
Igoma	796	729	10	9	80	81	32	36	22	27
Isamilo	620	572	5	14	124	41	24	36	19	22
Mhandu	433	483	6	10	72	48	23	24	17	14
Kishiri	558	541	6	10	93	54	21	23	15	13
Igogo	555	533	7	7	79	76	22	26	15	19
Nyegezi	480	417	5	6	96	70	19	21	14	15
Buhongwa	504	914	7	8	72	114	20	46	13	38
Mbugani	336	319	5	10	67	32	18	17	13	7
Mkolani	547	1414	6	86	91	16	18	130	12	44
Mabatini	448	418	7	9	64	46	18	21	11	12
Mirongo	249	231	4	5	62	46	10	16	6	11
Lwanhima	253	237	3	4	84	59	8	8	5	4
Luchebele	1124	212	65	7	17	30	65	7	0	0
Nyamagana	120	153	8	10	15	15	5	8	-3	-2
Mkuyuni	429	433	26	11	17	39	18	22	-8	11
Total	11790	11512	223	278	53	41	493	647	270	369

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(vi) Dormitories

Construction of dormitories in schools is essential due to the geographical location of wards in and distribution of human settlements Mwanza city council. The availability of dormitories can help students solve the problem of walking long distances and reduce the rates of drop outs, pregnancies and truancy. Unfortunately, all wards had shortage of dormitories in 2015. This implies that most of the students are attending day school or are renting to near school.

In ranking of wards in terms of the level of deficit, Nyamagana ranked first since shortage of dormitory was at the highest (124 dormitories) in the City council (Table 5.59). Lack of dormitories especially in urban areas has causes the increase of dropout rate and poor examination performances in the city.

Table 5.59 Availability of dormitories/hostels in Public Secondary Schools by Ward, Mwanza City Council; 2015

Ward	No. of Schools	Available Dormitories	School Dormitories Ratio	Required Dormitories	Deficit of Dormitory	
					Number	Percent
Buhongwa	1	1	1	5	4	80
Lwanhima	1	0	0	2	2	100
Mkolani	2	8	4	11	3	27.3
Luchehele	2	8	4	24	16	66.7
Butimba	3	0	0	6	6	100
Nyegezi	1	0	0	1	1	100
Igogo	2	0	0	2	2	100
Mkuyuni	2	0	0	2	2	100
Pamba	4	4	1	128	124	96.9
Nyamagana	1	0	0	1	1	100
Mirongo	1	0	0	0	0	0
Isamilo	2	0	0	20	20	100
Mabatini	1	0	0	2	2	100
Mbugani	1	0	0	1	1	100
Mahina	2	0	0	6	6	100
Mhandu	1	0	0	2	2	100
Igoma	2	0	0	6	6	100
Kishiri	1	0	0	1	1	100
Total	30	21	0.7	220	199	90.5

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(vii) Libraries

The library facility is considered essential but not crucial for the development of knowledge and skills of a student. According to the standards set by the Ministry of Education and Vocation Training, every secondary school should have a library to enable students borrow and use supplementary books besides textbooks. Table 5.60 shows that there were four public secondary schools had library facility in the city. Furthermore only three wards had libraries at the end of 2015. This implies that very few supplementary books were available for renting to students in other councils.

There is no excuse in this regard since it is pre-request for secondary school education system in the City council. So it is important for the city authorities to include the provision of libraries in their school development plans in the near future (Table 5.60).

Table 5.60 Availability of Libraries in Public Secondary Schools by Ward; Mwanza City Council; 2015

Ward	No. of Schools	Available Libraries	Percent of Schools with Libraries	Required Libraries	Deficit of Libraries	
					Number	Percent
Buhongwa	1	0	0	1	1	100
Lwanhima	1	0	0	1	1	100
Mkolani	2	2	100	2	0	0
Luchehele	2	1	50	2	1	50
Butimba	3	0	0	4	4	100
Nyegezi	1	0	0	1	1	100
Igogo	2	0	0	2	2	100
Mkuyuni	2	0	0	2	2	100
Pamba	4	1	25	4	3	75
Nyamagana	1	0	0	1	1	100
Mirongo	1	0	0	1	1	100
Isamilo	2	0	0	3	3	100
Mabatini	1	0	0	1	1	100
Mbugani	1	0	0	1	1	100
Mahina	2	0	0	2	2	100
Mhandu	1	0	0	1	1	100
Igoma	2	0	0	2	2	100
						146

Kishiri	1	0	0	1	1	100
TOTAL	30	4	13.3	32	28	87.5

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(viii) Furniture (Tables and Chairs)

Table 5.57 shows that the city had an excess of 1,412 tables and a deficit of 185 chairs out of the required 20,461 tables and 21,916 chairs. The ratios computed in Table 5.61 give an indication of excess of furniture since facility student ratio was 1:1 for both table and chair in 2015. At ward level, General observation from these data is that there was an excess of furniture in most of schools except schools from few wards as shown in table 5.61 The critical shortages were in Buhongwa (602 tables and chairs each) and Igoma (255 tables and chairs each) as shown in Table 5.57.

Table 5.61 Availability of Tables and chairs in Public Secondary Schools by Ward, Mwanza City Council; 2015

Ward	Total Students	Available		Facility Pupils Ratio		Required		Deficit of	
		Tables	Chairs	Tables	Chairs	Tables	Chairs	Tables	Chairs
Buhongwa	1418	816	816	1.7	1.7	1418	1418	602	602
Lwanhima	490	444	444	1.1	1.1	490	490	46	46
Mkolani	1961	782	782	2.5	2.5	845	845	63	63
Luchehele	1336	1464	1464	0.9	0.9	1354	1354	-110	-110
Butimba	1690	1700	1690	1.0	1.0	169	1687	-1531	-3
Nyegezi	897	897	784	1.0	1.1	480	417	-417	-367
Igogo	1088	1088	1088	1.0	1.0	1101	1101	13	13
Mkuyuni	862	862	862	1.0	1.0	862	862	0	0
Pamba	5107	5814	5814	0.9	0.9	5130	5130	-684	-684
Nyamagana	273	476	364	0.6	0.8	270	270	-206	-94
Mirongo	670	711	765	0.9	0.9	670	670	-41	-95
Isamilo	1192	1252	1252	1.0	1.0	1192	1192	-60	-60
Mabatini	866	599	638	1.4	1.4	866	866	267	228
Mbugani	655	655	655	1.0	1.0	635	635	-20	-20
Mahina	1439	1497	1497	1.0	1.0	1439	1439	-58	-58
Mhandu	916	696	696	1.3	1.3	916	916	220	220
Igoma	1525	1270	1270	1.2	1.2	1525	1525	255	255
Kishiri	1099	850	850	1.3	1.3	1099	1099	249	249

Total	23484	21873	21731	1.1	1.1	20461	21916	-1412	185
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Source: City Director's Office (Education Department), Mwanza City Council, 2016

(ix) Laboratories

The laboratory is a necessary facility for students taking science subjects. The specifications set by the government is that each school should have at least three laboratories for physics, chemistry and biology subjects. In 2015, Mwanza city council had a total of 93 laboratories in 30 the public secondary schools compared to the required 114, resulted to significant shortage of 18.4 percent. This implies that few practical exercises for science subjects done in most of secondary schools in the city (Table 5.62). At ward level, most of the wards had shortage of laboratories ranging from 1 to 4 laboratories (Table 5.62).

The observed situation is probably due to the fact that the City is in the transition period of building secondary education system. But it is important for the city authorities to include the provision of laboratories in their school development plans for the future.

Table 5.62 Availability of Laboratories in Public Secondary Schools by Ward; Mwanza City Council; 2015

Ward	No. of Schools	Available Laboratories	Laboratory Schools Ratio	Required Laboratories	Deficit of Laboratories	
					Number	Percent
Buhongwa	1	4	4	5	1	20
Lwanhima	1	3	3	4	1	25
Mkolani	2	6	3	6	0	0
Luchehele	2	6	3	10	4	40
Butimba	3	9	3	12	3	25
Nyegezi	1	3	3	3	0	0
Igogo	2	6	3	7	1	14.3
Mkuyuni	2	6	3	8	2	25
Pamba	4	14	3.5	18	4	22.2
Nyamagana	1	3	3	4	1	25
Mirongo	1	3	3	3	0	0
Isamilo	2	6	3	6	0	0
Mabatini	1	3	3	3	0	0
					148	

Mbugani	1	3	3	4	1	25
Mahina	2	6	3	7	1	14.3
Mhandu	1	3	3	4	1	25
Igoma	2	6	3	7	1	14.3
Kishiri	1	3	3	3	0	0
Total	30	93	3.1	114	21	18.4

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(x) Electricity

Table 5.63 shows various sources of electricity used in secondary schools in Mwanza City council at the end of 2015. About 83.3 percent of 30 schools had electricity facility and Tanesco continued to be the main supplier of electricity in 25 secondary schools in the city. Solar energy was not the source of Electricity and other sources not covered in schools. One general observation from these data is that the availability of national grid managed by TANESCO has enabled significant number of public secondary schools to have electricity facility in 16 wards of Mwanza city council.

Table 5.63 Availability of Electricity Power in Secondary Schools by Ward, Mwanza City Council; 2015

Ward	Total No. of Schools	Number of Secondary school using					Total	Percent
		National Grid electricity	Biogas	Solar Power	Generator	Other Sources		
Buhongwa	1	1	0	0	0	0	1	100
Lwanhima	1	0	0	0	0	0	0	0
Mkolani	2	2	0	0	0	0	2	100
Luchehele	2	2	0	0	0	0	2	100
Butimba	3	2	0	0	0	0	3	100
Nyegezi	1	1	0	0	0	0	1	100
Igogo	2	2	0	0	0	0	2	100
Mkuyuni	2	0	0	0	0	0	0	0
Pamba	4	3	0	0	0	0	3	75
Nyamagana	1	1	0	0	0	0	1	100
Mirongo	1	1	0	0	0	0	0	0
Isamilo	2	2	0	0	0	0	2	100
Mabatini	1	1	0	0	0	0	1	100
Mbugani	1	1	0	0	0	0	1	100
Mahina	2	2	0	0	0	0	2	100

Mhandu	1	1	0	0	0	0	1	100
Igoma	2	2	0	0	0	0	2	100
Kishiri	1	1	0	0	0	0	1	100
Total	30	25	0	0	0	0	25	83.3

Source: City Director's Office (Education Department), Mwanza City Council, 2016

(xi) Water

Availability of adequate supply of clean and safe potable water for the secondary school students is of utmost importance for their health. In 2013, Table 5.60 shows that Mwanza city council had managed to establish water sources in 32 out of 27 secondary schools. Out of those schools, 4 schools used water tanks, no water wells and 28 tape water. In 2015, number of schools getting water source was 31 out of 27 secondary schools and tape water continued to be the main source of water (28 schools) followed by water tanks (3) and no water wells continues to be the least used by school (Table 5.64). At ward level, variations observed in the use of water sources to their secondary schools. One general observation portrayed by these data is that most of rural wards use water tanks and the urban wards use tape water as their main sources of water supply to their schools (Table 5.64).

Table 5.64 Accessibility of Water in Public Secondary Schools by Ward, Mwanza City 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
Buhongwa	1	1	0	1	1	1	0	1
Lwanhima	1	1	0	1	1	0	0	1
Mkolani	2	0	0	2	2	0	0	2
Luchelele	2	0	0	2	2	0	0	2
Butimba	3	0	0	3	3	0	0	3
Nyegezi	1	0	0	1	1	0	0	1
Igogo	2	1	0	2	2	1	0	2
Mkuyuni	2	0	0	2	2	0	0	2
Pamba	4	0	0	4	4	0	0	4
Nyamagana	1	0	0	1	1	0	0	1
Mirongo	1	0	0	1	1	0	0	1
Isamilo	2	0	0	2	2	0	0	2
Mabatini	1	0	0	1	1	0	0	1
Mbugani	1	0	0	1	1	0	0	1
Mahina	2	0	0	1	2	0	0	1
Mhandu	1	0	0	1	1	0	0	1

	CTEM	0	5	5	1	7	8	37.5
	CBA	0	0	0	8	16	24	100
	DPSCM	0	0	0	2	2	4	100
	DA	0	0	0	7	10	17	100
	DBA	0	0	0	3	2	5	100
	PGDAF	3	2	5	6	3	9	44.4
	MAEC	11	7	18	6	2	8	-125
	MAMC	4	10	14	4	6	10	-40
	MA LINGUISTIC	20	10	30	20	10	30	0
	MA-History	23	5	28	17	13	30	6.7
	MHEMD	15	6	21	10	4	14	-50
	MEMP	117	70	187	85	54	139	-34.5
	MASO	13	28	41	12	8	20	-105
	LLM	18	23	41	15	9	24	-70.8
	MBA	88	40	128	42	38	80	-60
	BScCE	79	13	92	142	27	169	45.6
	BScCEE	48	3	51	77	12	89	42.7
	DCSc	0	0	0	5	4	9	100
	CCSc	0	0	0	4	0	4	100
	CIT	0	0	0	8	4	12	100
	IT Technician	20	8	28	0	0	0	0
	BAMC	226	275	501	101	77	178	-181.5
	BAPRM	689	732	1421	242	244	486	-192.4
	BAEC	128	31	159	77	48	125	-27.2
	BASO	246	232	478	60	87	147	-225.2
	DJMS	0	0	0	5	8	13	100
	CJM	37	31	68	17	29	46	-47.8
	BAED	1905	1365	3270	2233	1118	3351	2.4
	B Phil Ed	198	51	249	42	14	56	-344.6
	DPE	0	0	0	20	34	54	100
	LLB	908	443	1351	414	241	655	-106.3
	DLAW	0	0	0	29	32	61	100
	CLAW	0	0	0	20	20	40	100
	TOTAL	5954	4118	10072	4373	2664	7037	-43.1
MWEAS	ECDE	15	27	42	13	61	74	43.2
	Dip Educ.	31	4	35	15	6	21	-66.7
	Grade III A.	35	16	51	140	96	236	78.4
IFM	Basic Technician							
	Certificate in Accounting	20	15	35	9	5	14	-150

	Basic Technician Certificate in Banking and Finance	34	27	61	4	9	13	-369.2
	Basic Technician Certificate in Insurance and Social Protection	0	0	0	5	6	11	100
	Masters of Science in Accounting Finance	0	0	0	0	0	0	0
	Masters of science in Finance and Investment	0	0	0	11	12	23	100
	Technician Certificate in Accounting	0	0	0	12	12	24	100
	Technician Certificate in Banking and Finance	0	0	0	13	22	35	100
	Technician Certificate in Insurance and Risk Management	0	0	0	11	7	18	100
	Ordinary Diploma in Accounting-YEAR 2	0	0	0	16	10	26	100
	Ordinary Diploma in Banking and Finance- YEAR 2	0	0	0	18	24	42	100
	Basic Technician Certificate in Accounting- Spring Intake	0	0	0	24	15	39	100
	Basic Technician Certificate in Banking and Finance-Spring Intake	0	0	0	21	28	49	100
CBE	Certificate Accountancy	103	82	185	46	39	85	-117.6
	Certificate of procurements&supplier(CP S)	313	294	607	62	62	124	-389.5
	Certificate of Bussiness Adminstration(CBA)	100	48	148	30	32	62	-138.7
	Certificate of Marketing (CMK)	131	46	177	7	6	13	-1261.5
	Diploma in Accountancy	122	142	264	64	67	131	-101.5
	Diploma in procurement logistic supply management(DPLFPS)	191	219	410	111	102	213	-92.5
	Diploma in Bussiness Administration(DBA)	33	30	63	34	33	67	6.0

	Diploma in Marketing(DMK)	15	21	36	21	10	31	-16.1
	Post Graduate Diploma in Bussiness Administration(PGDBA)	7	2	9	0	0	0	0
	Post Graduate Diploma in Financial Management(PGDFM)	8	0	8	0	0	0	0
	Post graduate Diploma in Accountancy(PGDACC)	0	0	0	0	0	0	0
	Post graduate Diploma in Human Resource Management(PGDHRM)	3	3	6	0	0	0	0
	Bachelor in Accountancy(BAC)	0	0	0	50	42	92	100
	Bachelor in Bussiness Administration(BA)	0	0	0	44	32	76	100
	Bachelor in Procurement & supply Management(BPS)	0	0	0	31	25	56	100
Butimba	Diploma Education	302	75	377	0	0	0	0
	Grade IIIA	26	26	167	0	0	0	0
	PRE-EDUCATION	0	0	0	0	0	0	0
	P/ Education	0	0	0	0	0	0	0
	Primary Education	0	0	0	81	28	109	100
	Pre Education	0	0	0	10	2	12	100
	P/Education	0	0	0	4	2	6	100
Fisheries	Aquacture Technology	0	0	0	26	22	48	100
	Fisherries science Technology	169	98	267	169	72	241	-10.8
	Fisherries Management and Technology	200	53	253	161	65	226	-11.9
Weill Bugando School of Medicine	MMED(Master of Medicine)	31	16	47	55	27	82	42.7
	MD(Doctor of Medicine)	510	255	765	616	349	965	20.7
	BMLS(Bachelor of Medicine Laboratory sciences)	39	18	57	96	51	147	61.2
	School of pharmacy	66	64	130	118	107	225	42.2

	Bsc.NED(Bachelor of science in Nursing)	42	60	102	32	41	73	-39.7
	MPH(Masters in public health)	11	6	17	19	14	33	48.5
	DPS(Diploma in Pharmaceutical sciences)	105	72	177	135	103	238	25.6
	DMLS(Diploma in medical Laboratory sciences)	124	48	172	167	75	242	28.9
	DDR(Diploma in Diagnostic Radiography)	48	25	73	92	42	134	45.5
UCC(Uni versity of Dar es salaam computing Centre)	Microcomputer Applications	82	90	172	43	75	118	-45.8
	Advance Microcomputer applications	7	8	15	8	4	12	-25
	Basic graphics design	1	3	4				0
	PLANREP3	0	0	0				0
	Tally Accounting package	1	1	2	4	0	4	50
	Database Management	1	0	1	1	1	2	50
	Certificate in computing and IT	65	10	75	35	9	44	-70.5
	Diploma in computing and IT	36	16	52	37	2	39	-33.3
	CISCO NETWORKING	0	0	0	7	1	8	100
	CISA	0	0	0	2	1	3	100
	Electronic record Management	0	0	0	2	0	2	100
MOUNT MERU	Certificate in Business Administration	3	2	5	5	3	8	37.5
	Certificate in Human resource Management	16	5	21	9	5	14	-50
	Certificate in Marketing Management	3	1	4	4	2	6	33.3
	Certificate in community Development	0	0	0	4	3	7	100
	Certificate in Accountancy	0	0	0	0	0	0	0

	otel Management	2	6	8	0	0	0	0	5	5
	Tiloling	0	0	0	1	2	3	0	4	4
Igogo VTC	Motor vehicle Mechanics	49	0	49	43	0	43	21	0	21
	Auto electric	0	0	0	6	0	6	29	0	29
	IPPE Program.	0	0	0	38	0	38	16	0	16
					15					
Total		103	16	119	134	17	1	109	18	127

Source: City Director's Office (Education Department), Mwanza City Council, 2016

5.2.6 Policy Implication on Education Sector

Although there is recognizable development in both primary and secondary education, policy intervention need to take place to alleviate the few challenges observed. The City council need to put more effort in construction of girls' dormitories which will help to prevent or reduce girls' dropout due to pregnancy and also increasing pass rate for girls pupils/students. In addition to that, the on-going programme of constructing laboratories in secondary schools should be accomplished in order to provide opportunity of conducting practical of science subjects and school feeding programme is of paramount important for learning improvement in primary schools.

Since both primary and secondary schools in the City council have a critical shortage of toilet holes, more toilet holes should be constructed to satisfy the education policy of one toilet hole for 20 girls and one toilet hole for 25 boys. Likewise, the number of furniture such as desks, tables and chairs in some of primary and secondary schools should be increased to meet education targets of one desk per three pupils and one table per one student respectively.

Most of primary and secondary schools in Mwanza city council have no access to clean and safe water. Therefore, initiatives are needed to supply the schools with clean and safe water through tap water or construction of boreholes. Rain water harvest technology can also help to alleviate the water shortage problem. Moreover, if not all, boarding schools should be supplied with electricity to enhance learning environment.

5.2.7 Investment Opportunities in Education.

The challenges facing the development of education sector include; inadequacy of pre-primary schools, primary schools and secondary schools as well as school facilities like classrooms, textbooks, laboratories, toilets, learning and teaching materials and inadequacy of teachers. Therefore, investment in the supply of textbooks, laboratory equipment and materials and building materials is needed.

5.3 Water Supply and Sanitation

5.3.0 Water Supply

Water Supply and Sanitation Sector cover rural and urban water supply in terms of water sources, schemes and technology used to supply water. Besides that, staffing situation is also highlighted especially the work of the districts' water and sanitation engineers/technicians in providing sustainable water and sanitation services. Sustainable access to clean and safe water is essential for reducing poverty and health problems. 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.

5.3.1 Rural Water Supply

The Water policy requires every person to get water within short 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 Mwanza 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.

Looking at table 5.67 shows that in 2015 the main source of water for the rural population in Mwanza city was the shallow well (64 percent) followed by bore hole (27.6 percent), rain water (8.1 percent), Piped scheme (4.2 percent), Charcoal dams (1.9 percent), dams (0.9 percent), rain water

5.6 percent, piped scheme 1.6 percent. Lake water and Charcoal dams were holding 0.8 percent. However, Shallow wells and Boreholes were the most common sources of water for the largest population of Mwanza city council.

Table 5.67 Number and Type of Rural Water Sources by Ward, Mwanza City Council; 2015

Water Source	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
Charcoal	1	100	0	0	1	0.8
Spring	0	0	0	0	0	0
Shallow wells	28	35	52	65	80	64
Rain Water Harvesting	5	71.4	2	28.6	7	5.6
Bore Holes	9	26.5	25	73.5	34	27.2
Piped Scheme	0	0	2	100	2	1.6
	Permanent	Percent	Season	Percent		
River water	0	0	0	0	0	0
Lake	1	100	0	0	1	0.8
Dam	0	0	0	0	0	0
Total	44	35.2	81	64.8	125	100

Source: Compiled data from City executive director's office, Water Department, 2016

In order to make sure that there is a fairly sufficient supply of water to the rural residents of Mwanza city council; different types of water technologies are used. Table 5.68 shows that hand pump is the leading technology used in the rural places of this council, with 98.2 percent of working sources in rural wards followed by gravity piped and electrical pump by 0.9 percent each. Electrical pump water delivery technology is used more in urban areas while hand pump is of more rural place.

Table 5.68 Number and Type of Water Delivery Technology Used in Rural Water Schemes by Ward, Mwanza City Council; 2015

Technology	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
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Wind Mill	0	0	0	0	0	0
Electrical Pump	0	0	1	100	1	0.9
Diesel Pump	0	0	0	0	0	0.0
Hand Pump	35	32.4	73	67.6	108	98.2
Gravity Piped	0	0	1	100	1	0.9
Total	35	31.8	75	68.2	110	100

Source: *Compiled data from City executive director's office, Water Department, 2016*

However, there is a great achievement in provision of safe drinking water in the Region compared to 2002. Overall, 35 percent of private households in Mwanza Region had access to piped water as the main source of drinking water in 2012 compared to 20 percent in 2002. The proportion of rural households increased from 5.1 percent in 2002 to 8.9 percent in 2012.

The percentage of people getting clean water differs from ward to another. Unfortunately Mwanza city only 90,953 people are being served with clean water and take over 52 percent of the total population from the few wards recorded receiving clean water.

Nevertheless, the 2015 Ex-post evaluation report of Japanese Grant Aid project for rural water supply in Mwanza region among other results, shows that there was poor collection of user fees because users were extremely reluctant to pay in cash the use of water, as a result most of the shallow wells and springs has been used free of charge. However, the management of water schemes in rural areas is the responsibility of village/mtaa water user groups (WUGs). The city council had managed to establish 49 water user groups with 23 being active and 35 inactive groups. Total amount of Tzs. 5,030,000 were collected from the water user groups in 2015.

5.3.2 Urban Water Supply

Urban water supply in Mwanza region is still under construction of its facilities. Though district councils develop and maintain rural water supply even at their headquarters. The 2012 Population and Housing Census shows that access of safe and clean drinking water in Mwanza region is higher (85.6 percent) in urban areas than rural areas (38.6 percent).

Looking on technology used to ensure sufficient water supply in urban areas, the existing water sources in the city were mostly use (98.5 percent) hand pump machines followed by gravity piped (1.5 percent). Unfortunately wind mill, electricity pump and diesel pump were not recorded to be used mostly in the city council. However, the council through water department should put more effort in introducing more water scheme technologies to reach the target of serving each population with clean water. (Table 5.69)

Table 5.69 Number of Water Schemes by Type of Technology by Ward; Mwanza City Council; 2015

Technology	Working	Percent Working	Not Working	Percent Not Working	Total	Percent Source
Wind mill	0	0	0	0	0	0
Electricity Pump	0	0	0	0	0	0
Diesel pump	0	0	0	0	0	0
Hand Pump	30	46.9	34	53.1	64	98.5
Gravity Piped	1	100	0	0	1	1.5
Total	31	47.7	34	52.3	65	100

Source: *Compiled data from City executive director's office, Water Department,, 2016*

5.3.3 Sanitation

Mwanza region does not have good waste disposal system; therefore there are no proper ways of disposing solid and water waste. Very few households have septic tanks and the most common way of disposing human waste is through pit latrines. Moreover, with lack of cesspool emptier and inadequate solid waste dump trucks, over flooding sewage and uncollected garbage pollute the environment of the City.

However, the 2012 Population and Housing Census Report shows a slight decrease in households with no toilet facility from 12.2 percent in 2002 to eight (8.3) percent in 2012. Also the use of traditional pit latrines in Mwanza region decreased from 81.7 percent in 2002 to 68.3 percent in 2012, while households with flush toilets increased from 3.6 percent to 20.8 percent in the same period.

Table 5.70 shows the status of sanitation in Mwanza city council at the end of 2015. Whereas 112,733 out of 121,268 households had toilet facilities which equals to 93 percent of the total population. And only 7 percent in the council had no toilets, henceforth education should be given to this group to prevent out break of diseases and have clean environment

Table 5.70 Total Number of Households with Toilet Facilities by Ward; Mwanza City Council; 2015

Ward	Total Number of Households	Total Number of Households with Toilets	% of Households with Toilets	Total Number of Households without Toilets	% of Households without Toilets
Buhongwa	11,358	9,578	84.3	1,780	15.7
Lwanhima	1,932	1,764	91.3	168	8.7
Mkolani	5,295	5,174	97.7	121	2.3
Luchebele	5,493	3,543	64.5	1,950	35.5
Butimba	8,216	7,625	92.8	591	7.2
Nyegezi	3,143	3,114	99.1	29	0.9
Igogo	6,010	5,994	99.7	16	0.3
Mkuyuni	10,867	10,680	98.3	187	1.7
Pamba	12,824	12,735	99.3	89	0.7
Nyamagana	5,414	5,304	98.0	110	2.0
Mirongo	382	388	101.6	-	0.0
Isamilo	4,595	4,595	100.0	-	0.0
Mabatini	5,860	5,352	91.3	508	8.7
Mbugani	11,633	10,205	87.7	1,428	12.3
Mahina	5,774	5,561	96.3	213	3.7
Mhandu	6,151	5,779	94.0	372	6.0
Igoma	10,137	9,980	98.5	224	2.2
Kishiri	6,184	5,362	86.7	822	13.3
Total	121,268	112,733	93.0	8,535	7

Source: Compiled data from City executive director's office, Water Department,, 2016

5.3.5 Policy Implication on Water sector

Poor accessibility of clean and safe water is a very common problem in Mwanza region. Lack of reliable and enough permanent water sources is believed to be the corner stone of the problem. To alleviate the situation, extensive research is needed to make sure the problem is alleviated by investing heavily to tap lake water or by drilling boreholes and tapping rain water harvesting.

5.3.6 Investment Opportunities in Water Supply

Mwanza city council is endowed with various types of water sources. However, 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 and more water personnel are needed in the council to improve the service of water department.

CHAPTER SIX

Other Development Issues

6.0 Introduction

This chapter discusses other development issues including gender empowerment such as day care centres, women economic groups, youth economic groups, cooperative development (SACCOS) and other cooperative activities as well as women's participation in managerial, political, professional and technical fields.

6.1 Gender Empowerment

Women are one of the most disadvantaged groups in Mwanza City Council. Women in the district suffer from a high degree of social inferiority influenced by customs and low status in the family circles. The absence of women in leadership position at community, ward and district level demonstrates this. The practice of high bride prices reduces women to economic objects for ownership by the highest bidder. Thus the huge majority of women in the district are restricted to their traditional roles of child minders, family cooks and housekeepers, firewood and water collectors, farm labourers and even house builders.

Gender empowerment aims at ensuring that all sexes, particularly women, fully participate in policy and decision making processes and in all aspects of economic, socio-cultural and political life. Various measures had already been taken to minimize time spent by women and girls in attending to home activities and thus countenance them more time to be used in the above mentioned activities. These measures include the use of family planning, opening and operating of day care centres, establishment of women economic groups, participation in SACCOS, CBOs and other cooperative activities.

6.2 Day Care Centres

Table 6.1 shows that there were 11 centres in Mwanza city council 2013. Mkuyuni ward, Pamba ward and Mironko ward had 2 day care centres each while Butimba ward, Nyamagana ward, Isamilo ward, Mahina ward and Igoma ward had 1 day care centre each. In 2015 the number of day care centres decreased to 10 centres. Whereas all the number of centres in each ward remained the same as in 2013 except Mironko ward reduced to 1 day care centre.

Conversely, the followings are wards with no day care centres; Buhongwa ward, Mkolani ward, Nyegezi ward, Igogo ward, Mbugani ward, Lwanhima ward, Luchebele ward, Mabatini ward, Mhandu ward and Kishiri. Where by Lwanhima, Luchebele, Mabatini, Mhandu and Kishiri are new established wards.

Table 6.1 Distribution of Day Care Centers by Ward; Mwanza City Council; 2013 and 2015

Ward	2013		2015		Change of Pupils	
	Number of Centres	Number of pupils	Number of Centres	Number of pupils	Number	Percent
Buhongwa	0	0	0	0	0	0
Lwanhima*	0	0	0	0	0	0
Mkolani	0	0	0	0	0	0
Luchebele*	0	0	0	0	0	0
Butimba	1	66	1	69		0
Nyegezi	0	0	0	0	0	0
Igogo	0	0	0	0	0	0
Mkuyuni	2	92	2	97	5	5.4
Pamba	2	85	2	90	5	5.9
Nyamagana	1	54	1	59	5	9.3
Mirongo	2	166	1	112	-54	-32.5
Isamilo	1	55	1	58	3	5.5
Mbugani	0	0	0	0	0	0
Mabatini*	0	0	0	0	0	0
Mahina	1	58	1	61	3	5.2
Mhandu*	0	0	0	0	0	0
Igoma	1	48	1	50	2	4.2
Kishiri*	0	0	0	0	0	0
Total	11	624	10	596	-28	-4.5

Source: Compiled data from City executive director's office, 2016

6.3 Vulnerability

Vulnerability refers to exposure to contingencies and stress and difficult in coping with them. It is the result of not only individual mishap, but also the social condition which follow from systematic differences in the flow of resources and opportunities which

themselves influences capabilities. However, all children and especially young children are vulnerable simply because of their ages depend on others to provide for their basic needs.

Increasing physical and mental maturity usually leads to growing capability for self-provisioning, but during the period of childhood and adolescence, children and young people continue to need special care and support. While most children in Tanzania are cared for and protected by their families and communities, many are not so fortunate. Aspects of child vulnerability include: Child mortality and malnutrition; Children in household headed by children or household with elderly adults only; Orphan hood and HIV/AIDS; Education and child labour; and gender abuse,

Various research results indicate that, orphaned children are poorer than children who are not orphaned. Data collected from Mwanza city council shows that the council has the total number of 9,134 vulnerable children aged 0-17 where by results show that there high percent of orphan children compared to non orphans since 84.8 percent of MVC are orphans and 15.2 percent are non orphans. Results also illustrates that boys' orphans were more 3,534 (51.4 percent) than 3,339 girls' orphans (48.6 percent). This indicates that special care is needed for both boys and girls who are in vulnerable condition.

6.4 Women Groups

The establishment of women groups for economic emancipation also provides fora for women solidarity and the discussion of gender issues which affect the development of women. In long run society has to accord women their rightful role as independent and equal decision maker.

In order to help the development of women each council has established a Women Loan Fund to assist women economic groups. However this will be a spur to the growth of region's economy. Mwanza city council had 54 economic groups in 2013 and increased up to 135 economic groups in 2015 distributed in most of its wards. Table 6.2 shows that most economic groups were in Igogo ward with 17 groups with no loan received in 2015,

followed by Butimba, Isamilo and Igoma with 12 groups and each ward received loan of Tsh. 4,500,000/=,Tsh.2,800,000/= and Tsh. 500,000/= correspondingly.Mahina ward had 11 groups with loan of Tsh. 1000,000/=,Nyamagana ward had 9 groups didn't receive any loan in 2015.

Buhongwa ward 8 groups received loans of Tsh. 1,600,000/=, Mkolani ward and Mbugani ward had 7 groups each with Tsh.1, 000,000/= and Tsh. 2,000,000/= received loans correspondingly, Mirongo ward with 6 groups and receive loan of Tsh. 2,500,000/=, Mhandu ward 5 groups ,Luchebele ward 4 groups and both didn't receive any loan.Moreover, Kishiri ward and Mabatini ward had 3 groups each but they also didn't receive any loan in 2015. While Lwanhima which is among the new established ward had no any economic group.The situation implies that more awareness is needed in the establishment of economic groups to reach the target of women economic empowerment.

Table 6.2 Number of Women Economic Groups by Ward;Mwanza City Council; 2013 and 2015

Ward	2013					2015			
	No. of Registered Group	Total Members	No. of Groups Assisted		Total Loaned Tshs(000)	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs.(000)
Buhongwa	4	0	0		0	8	5	1	1,600,000
Lwanhima*	0	0	0		0	0	0	0	0
Mkolani	3	0	0		0	7	10	2	1,000,000
Luchebele*	0	0	0		0	4	0	0	0
Butimba	6	15	3		3,800,000	12	15	3	4,500,000
Nyegezi	0	0	0		0	4	0	0	0
Igogo	7	0	0		0	17	0	0	0
Mkuyuni	4	0	0		0	8	10	2	1,500,000
Pamba	5	5	1		400,000	7	5	1	5,500,000
Nyamagana	3	0	0		0	9	0	0	0
Mirongo	3	5	1		1,400,000	6	10	2	2,500,000
Isamilo	5	10	2		2,400,000	12	10	2	2,800,000
Mbugani	6	0	0		0	7	15	3	2,000,000

Mabatini*	0	0	0	0	3	0	0	0
Mahina	5	5	1	600,000	11	10	2	1,000,000
Mhandu*	0	0	0	0	5	0	0	0
Igoma	3	0	0	0	12	5	1	500,000
Kishiri*	0	0	0	0	3	0	0	0
Total	54	40	8	8600000	135	95	19	22,900,000

Source: *Compiled data from City executive director's office, 2016*

6.4.1 Women Participation in Decision Making

Among the goals and targets of National Vision 2030 and Strategic Development Goals (SDGs) is to empower women by involving them in decision making at various levels. This goal has not yet reached in Mwanza City council since men are still dominating most levels of decision making by far than women. Only 8 percent of 200 political posts, including Commissioners, members of parliament and councillors were held by women and 46.3 percent of 121 managerial posts available in the council were held by women and 45.1 percent of 2863 professionals and technicians' posts were held by women as shown table 6.3.

More efforts are needed to motivate women to join in the political and managerial levels in order to attain equal opportunities between men and women as stipulated in the SDGs.

Table 6.3 Participation in Managerial, Political, Professional and Technical Personnel by gender and by Ward; Mwanza City Council; 2015

Ward	Managerial			Professionals/ Technicians			Politicians (MPs, DC, Councillors)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Buhongwa	6	60.0	15	83	49.1	163	19	5	20
Lwanhima*	5	44.4	9	86	35.8	134	18	5.3	19
Mkolani	3	50.0	6	162	46.9	305	11	0	11
Luchehele*	4	20.0	5	97	43.3	171	10	0	10
Butimba	2	60.0	5	145	53.7	313	8	11.1	9
Nyegezi	4	20.0	5	31	73.5	117	8	11.1	9
Igogo	4	20.0	5	64	41.8	110	9	0	9
Mkuyuni	5	44.4	9	87	40.0	145	7	22.2	9
Pamba	4	42.9	7	263	38.7	429	11	8.3	12
Nyamagana	3	40.0	5	26	55.2	58	5	16.7	6

Mirongo	2	50.0	4	65	33.0	97	4	20	5	
Isamilo	4	50.0	8	113	37.2	180	12	7.7	13	
Mbugani	1	80.0	5	38	50.0	76	7	0	7	
Mabatini*	2	66.7	6	47	58.8	114	7	0	7	
Mahina	6	0.0	6	84	36.4	132	10	0	10	
Mhandu*	4	42.9	7	50	46.8	94	11	8.3	12	
Igoma	4	33.3	6	86	35.3	133	14	17.6	17	
Kishiri*	2	75	8	46	50.0	92	13	13.3	15	
Total	65		56	121	1573	1290.0	2863	184	16	200
Percent	53.7	46.3	100	54.9	45.1	100	92	8	100	

Source: *Compiled data from City executive director's office, 2016*

6.4.2 Youth Economic Groups

Youth is an economic group which most communities pay attention to its needs. Youths in Mwanza city council are mainly involved in small scale activities like plumbing, fishing, driving bodaboda, street vends (Machingas) and small businesses. Self-employment in these sectors needs some preparation and some capital input. However, Mwanza city council seem to encourage this group to form economic groups, as they can develop their potential and contribute to the regional economy and eradicate poverty.

Table 6.4 shows the number of economic groups for youths, membership and the amount of money loaned to these groups. The table also shows that there was an increase in number of economic groups registered in 2013 from 5 groups up to 22 registered groups in 2015. The increase in number of groups in the council also made to increase of members from 43 in 2013 to 302 in 2015, of which male members were 201 and 101 females. As it is known that working together in economic groups increase the chances of youths to grow together economically through accessing credit funds, by the end of 2015 out of 22 groups 20 managed to get loans amounting to TZS.17, 900,000.

Table 6.4 Youth Economic Groups and Total Money Loaned by Ward, Mwanza City Council; 2013 and 2015

Ward	2013				2015			
	Total	Total Members	No. of	Total	Total no.	Total Members	No.	Total

	no. of Regist ered group s				Group s Assiste d	Amount of Funds Loaned(Tshs)	of Groups				of Gro ups Assi sted	Amount of Funds Loaned(T shs)
		Male	Female	Total				Male	Female	Total		
Buhongwa	0	0	0	0	0	0	1	7	2	9	1	500,000
Lwanhima*	0	0	0	0	0	0	0	0	0	0	0	0
Mkolani	1	8	4	12	1	2,000,000	0	0	0	0	0	0
Luchehele*	0	0	0	0	0	0	0	0	0	0	0	0
Butimba	2	2	0	2	2	1,600,000	7	23	23	46	6	6,500,000
Nyegezi	0	0	0	0	0	0	0	0	0	0	0	0
Igogo	0	0	0	0	0	0	1	4	5	9	1	1,000,000
Mkuyuni	0	0	0	0	0	0	0	0	0	0	0	0
Pamba	2	20	9	29	2	2,400,000	0	0	0	0	0	0
Nyamagana	0	0	0	0	0	0	4	85	24	109	3	3,600,000
Mirongo	0	0	0	0	0	0	4	36	32	68	4	2,600,000
Isamilo	0	0	0	0	0	0	1	19	4	23	1	900,000
Mbugani	0	0	0	0	0	0	2	2	0	2	2	1,000,000
Mabatini*	0	0	0	0	0	0	0	0	0	0	0	0
Mahina	0	0	0	0	0	0	1	12	4	16	1	1,000,000
Mhandu*	0	0	0	0	0	0	0	0	0	0	0	0
Igoma	0	0	0	0	0	0	1	13	7	20	1	800,000
Kishiri*	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	30	13	43	5	6,000,000	22	201	101	302	20	17,900,000

Source: *Compiled data from City executive director's office, 2016*

6.5 Savings and Credit Cooperative Societies (SACCOS)

The existence of Savings and Credit Cooperative Societies (SACCOS) in the city council is among the factors contributing to development especially for low income families and individuals. SACCO's members have access to financial resources because financial institutions in Tanzania prefer to channel loans to these groups or individuals through their SACCOS.

In Mwanza City, 13wards had number of SACCOS as people in the council have positively responded to the call to form of this cooperative group. Looking at table 6.5 shows the distribution of SACCOS in Mwanza city council by ward. It also shows number of active

and dormant groups, funds, number of members in the city by sex as well as the amounts loaned to members.

In the year 2015 a total of 37 SACCOS were registered in Mwanza city council (15active, 22 dormant). The total numbers of members in 2015 were 12,860 members (7,232 males, 5,628 females). Total value of shares owned by all members was Tzs.1,498,417,848, while a total amount of Tzs. 9,469,983,304were loaned to members in 2015. Table 6.6 also shows that 41.1 percent of loaned money(Tzs.3,893,734,308) was recovered by the end of the year 2015. This implies that loan recovery was good in the city and this assuring the sustainability of their economic activities in the council. Atward level, Mkolani ward had the highest rate of loan recovery of 55.8 percent including the agreed interests respectively followed by Mkuyuni ward with 55.2 percent and Mabatini ward had the lowest loan recovery of 8.4 percent. There is a need of providing awareness to the society especially women on the benefits of eganging themselves in SACCOs groups.

Table 6.5 Active SACCOS by Ward, Mwanza City Council; 2015

Ward	No. of SACCOS		Members		Total Value of Money(Tshs) as at 31.12.2015			Percent Recovered
	Active	Dormant	Male	Female	Shares(Tshs)	Loaned to Members	Loans recovered	
Buhongwa	0	1	419	282	24,627,000	0	0	0
Lwanhima*	0	0	0	0	0	0	0	0
Mkolani	1	0	747	711	163,744,000	2,343,167,226	1,308,057,917	55.8
Luchebele*	0	0	0	0	0	0	0	0
Butimba	0	0	0	0	0	0	0	0
Nyegezi	0	0	0	0	0	0	0	0
Igogo	0	1	63	37	3,234,000	0	0	0
Mkuyuni	1	0	67	64	20,012,000	144,166,216	79,586,730	55.2
Pamba	3	5	1,710	1,539	945,931,260	3,690,108,828	1,575,345,393	42.7
Nyamagana	6	5	756	343	111,419,550	2,106,975,091	592,436,271	28.1
Mirongo	1	2	230	386	83,096,403	68,211,450	20,270,750	29.7
Isamilo	1	2	137	218	35,640,000	551,566,823	69,783,712	12.7
Mbugani	0	0	0	0	0	0	0	0
Mabatini*	1	2	1597	1014	34,946,255	19,566,000	1,648,550	8.4
Mahina	0	2	45	47	0	0	0	0
Mhandu*	0	2	31	21	1,388,300	0	0	0
Igoma	1	0	1430	966	74,379,080	546,221,670	246,604,985	45.1

Kishiri*	0	0	0	0	0	0	0
Total	15	22	7,232	5,628	1,498,417,848	9,469,983,304	3,893,734,308
							41.1

Source: *Compiled data from City executive director's office, 2016*

6.7 Financial Institutions

A number of financial institutions are operating in Mwanza city council. There were 25 financial institutions that were providing financial services in the council in 2015. This is an indication that the demand for financial services is increasing in the city due to increasing number of formal and informal small scale businesses.

On top of that, the economic growth attributed to increased social and economic activities provided, suitable business environment in financial and even non-financial institutions to operate. The following are the financial institutions found in the city council; NMB, TPB, CRDB, Exim, Barclays Bank T. Ltd, Access, Postal Bank T. Ltd, FBME, Azania Bank, Bank of Africa (BOA BANK), Commercial Bank of Africa (CBA), BARODA, Kenya Commercial Bank (KCB), National Bank of Commerce (NBC), MKOMBOZI BANK, Diamond Trust Bank (DTB), Amana Bank, Equit Bank, Bank M, LETSHEGO BANK, STANDARD CHARTERED BANK, NIC BANK, TWIGA BANK, I&M BANK, TANZANIA INVESTMENT BANK, STANBIC BANK, Eco Bank.

6.8 Crime Statistics

6.8.1 Introduction

The growth of towns, population increase, the development of science and technology has increased the erosion of morals in the country. The statistics on the rate of crimes and the type of offences committed reveal that the erosion of morals within the society has been increasing day by day. Mwanza city council like other councils in Mwanza region and in the country also experiences an increase in crime as well as erosion of morals.

6.8.2 Crime Statistics

A total of 33586 crime cases were reported in Mwanza city at the end of 2015. The most common crime was violent crimes with 68.4 percent of reported cases; property crimes reported were 31.4 percent and drug crime accounted for 0.2 percent of the reported cases. Of the total 630 persons were prosecuted and jailed 411 (65.2 percent) were jailed due to property crimes and 219 persons (34.8 percent) due to drug crimes. No data were provide for the number of of procecuted and jailed persons due to drug crime cases.

6.8.3 Motorcycle Operators (BodaBoda)

BodaBoda business like any other informal sector contributes in reducing youth unemployment as well as reducing income poverty. Visible on nearly every mtaa/street corner in Mwanza City, the number of Boda Boda riders has skyrocketed in recent years, making it one of the fastest growing businesses in Tanzania. This influx has caused some Mwanza residents to wonder if the Boda market has reached a saturation point in which the supply of riders outpaces passenger demand. Despite the swelling number of riders, most people agree that the Boda Boda business is still fairly profitable.

Most riders in Mwanza City can take home at least Shs12, 000 per day and Shs 251,000/= per month in profit, while ambitious, hardworking, and lucky drivers can earn even more. “It depends on how lucky the rider is because bodaboda business is all about hunting. Lucky riders that find passengers who pay more than they should can earn up to Shs100, 000 per day. Table 6.10 demonstrates the number of Bodaboda operators in Mwanza citycouncil where by Igoma ward lead to have 363 bodaboda operators in 2015 followed by Kishiri312. Mkoloani and Butimba ward had 31 bodaboda operators in each ward. Whilstly, awareness and support should be given to some groups of youths especially in rural wards about self employment.

Table 6.6 Number of Motorcycle Operators (BodaBoda) by Ward/Business centre, Mwanza City Council; 2015

Ward	Number of Bodaboda operators	Estimated Income earned per Bodaboda operator in a month (Tshs)
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Buhongwa	74	300,000
Lwanhima	84	400,000
Mkolani	31	200,000
Luchehele	52	300,000
Butimba	31	350,000
Nyegezi	26	170,000
Igogo	107	210,000
Mkuyuni	35	220,000
Pamba	33	250,000
Nyamagana	296	200,000
Mirongo	34	200,000
Isamilo	47	250,000
Mabatini	37	50,000
Mbugani	38	130,000
Mahina	67	300,000
Mhandu	71	320,000
Igoma	363	400,000
Kishiri	312	275,000
Total	1738	Average; 251,389

Source: *Compiled data from City executive director's office, 2016*

6.8.4 Accidents

Road traffic accidents (RTAs) are one of the major causes of injuries, deaths and disabilities in fact it has a great impact on the disability-adjusted life years (DALYS) as a result it is now a public health problem particularly in developing countries. Tanzania is one among developing countries which is highly affected: hence the magnitude of RTAs suggests the unseen epidemic. Previously accidents were regarded as inevitable events which results into injuries and deaths, but looking at the etiological related factors which include, carelessness of the driver, condition of the vehicle or motor bike, poor condition of roads, risky behaviour of the driver, misuse of roads by pedestrians, driving under the effluence of alcohol or drugs abuse, most of these factors can be prevented to some extent.

In Mwanza city council the number of motor vehicle and motor cycle has increased to some extent while the roads condition and number are still the same. Several accidents were reported in 2015 in the council. Out of reported 58 accidents occurred in Mwanza City council 63.8 percent were caused by motor vehicle versus motor cycle only whereas 26 victims died and 2 of the victims got injured, followed by motor vehicle and motorcycles versus pedestrians (29.3 percent) where by 18 of the victims died and 1 got injured, motorcycles only (6.9 percent) with 26 victims died and 2 got injured. Motor vehicles only had 1.7 percent of total accidents with 3 died victims and 4 injured victims occurred in 2015.

6.8.5 Theft Cases

A total of 4 theft cases were reported in Mwanza City (Officer Command District) in 2015. Livestock stealing happened to be the most common theft cases occurred 2015 with 1 case of stolen motor cycle. No data were provided for the prosecuted thieves of motor cycles, motor vehicles and bicycles stealing.

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Vision

Mwanza is Developed City Capable of delivering equitable and quality Social Services with competitive Economy for Sustainable Growth of the Society by the year 2025.

Mission

Mwanza City Council through the Community, other stakeholders and proper utilization of available resources intends to provide quality social and economic services that address the needs of all social groups.