



The United Republic of Tanzania

IRINGA MUNICIPALITY COUNCIL SOCIO-ECONOMIC PROFILE, 2013



December, 2013



Theresia Mahongo
Iringa Municipality Director

Vision of the Council

Iringa Municipality Council Aspires a Better and Sustainable Living Standards to its residents

Mission Statements

Iringa Municipality Council in collaborating with Stakeholders, Intends to Facilitate Efficient and Effective Provision of Sustainable Socio-Economic Services to its Residents.



The United Republic of Tanzania

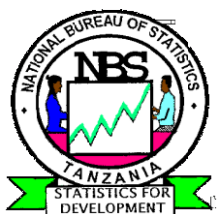
IRINGA MUNICIPALITY COUNCIL SOCIO-ECONOMIC PROFILE, 2013

Jointly prepared by

Ministry of Finance,
National Bureau of Statistics

and

Iringa Municipality Council



National Bureau of Statistics
Dar es Salaam



Iringa Municipality Council
Iringa Region

December, 2013

Foreword

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

Like other Municipality Councils in Tanzania, Iringa Municipality also faces multiple social and economic problems that 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. Unstable food prices resulted into precarious food situation to low income earners in Municipalities. Infant and maternal mortality rates are slowly decreasing, and unemployment triggers mass migration of youths from rural areas to the already overcrowded Municipalities.

Added to the above problems, is the menace posed by HIV/AIDS, the prevalence of which hinders efforts to advance in 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 other problems which cannot be ignored.

Our efforts to meet both the new and old challenges are hampered by many factors including ill-prepared development programs followed by weak implementations, 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 Municipality development process have to be addressed too. The availability of reliable, adequate and relevant qualitative and quantitative data and information at Municipality level is a prerequisite for the success of formulating, planning, implementation, monitoring and evaluation of the Municipality's development programs.

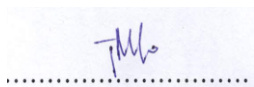
Iringa Municipal is the second Municipality to prepare a Socio-Economic Profile in the country. The publication of the Iringa Municipality Socio-Economic Profile series by the Ministry of Finance in collaboration with the National Bureau of Statistics and the Municipality Council Management Team should be viewed as a modest attempt

towards finding solutions to the existing problem of data and information gap at the Municipality level.

Iringa Municipality Socio-Economic Profile covers a wide range of statistics and information on geography, population, 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 Iringa Municipality 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 Iringa Municipality Council Director's Office, National Bureau of Statistics and other staff of Iringa Municipality who devoted their time to ensure the successful completion of this document.



Theresia Mahongo
Iringa Municipality Director
December, 2013

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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
CFR	Crude Fertility Rate
CPR	Classroom Pupil Ratio
CRDB	Community and Rural Development Bank
DPR	Desk Pupil Ratio
DPT3/HB3	Diphtheria Pertusis Tetanus 3 rd doze/ Haemoglobin Level
ECF	East Cost Fiver
RVF	Rift Valley Fever
Govt	Government
HIV	Human Immune Virus
IMR	Infant Mortality Rate
NMB	National Microfinance Bank
MP	Member of Parliament
MMR	Maternal Mortality Rate
NCD	New Castle Disease
OPV3	Oral Polio Vaccine 3 rd Doze
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
WWF	World Wildlife Foundation
WUG	Water User Group

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 Iringa Municipality. Moreover, information about ethnic groups, population distribution, size, trend and other demographic characteristics are also given.



Part of Iringa Municipality as seen from Gangilonga talking rock at Gangilonga

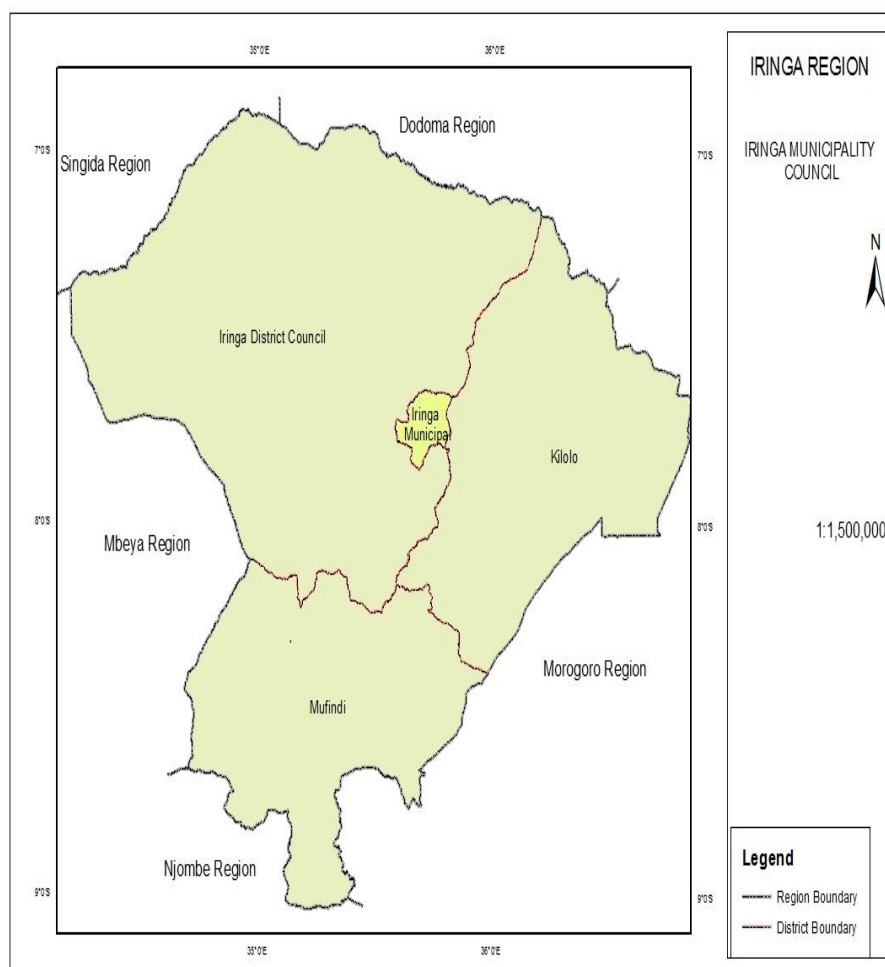
1.1 Geographical Location

Iringa Town serves as the Headquarters of both Iringa Municipality and Iringa Region. There is a long history that can be traced way back from a legacy of the German war in the 1890s.

Historically, the word 'Iringa' was derived from the Hehe word "lilinga" meaning 'Fort'. It was built during the 1890s by the German Army as a defensive base to be used against Hehe uprising led by Chief Mkwawa. The fortress and headquarters of Chief Mkwawa situated in the nearby village of Kalenga. The township stretches along a hilltop overlooking the Ruaha River to the south, and spreads along ridges and valleys to the north.

Iringa Municipal is one of the four councils in Iringa Region. It lies at the crossings of Longitudes 35°69' East of the Greenwich Meridian and Latitude 7°77' South of the Equator. The Municipality shares a common border with Iringa Rural District on the North, West and South while Kilolo District Council lies to the East.

Map 1: Geographical Location of Iringa Municipality Council; 2012



Source: National Bureau of Statistics, GIS Unit, 2013

1.2 Land Area, Land Use Pattern and Administrative Units

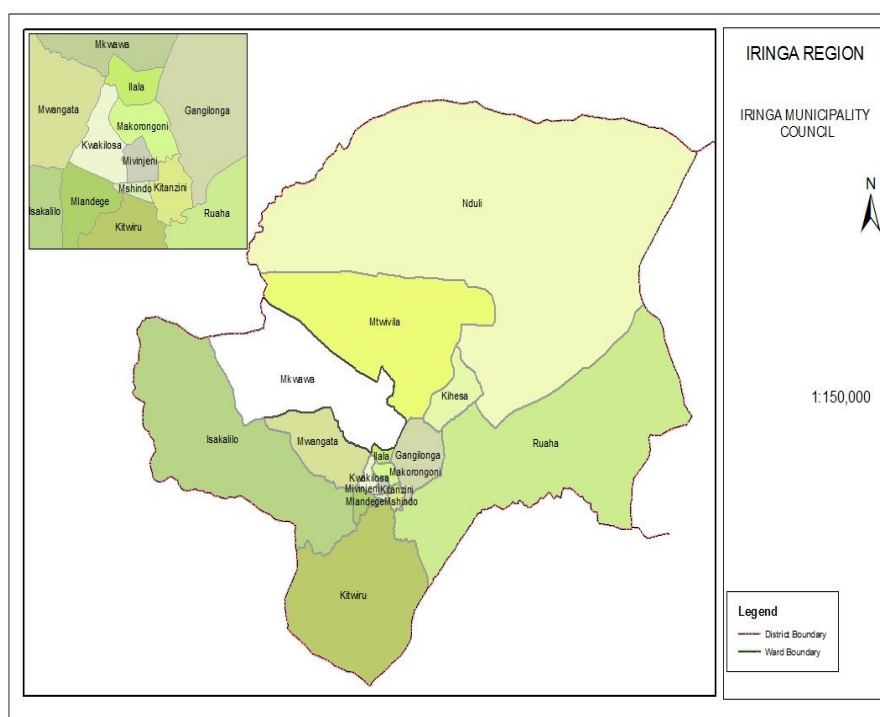
Administratively, Iringa Municipality Council is the smallest council in terms of land area in the Region. It has a total surface area of 331.4sq.kms. The Municipality covers about 0.9 percent of the total regional land area.



Iringa Township stretches along a hilltop overlooking the Ruaha River to the south.

Currently, Iringa municipality council has one division which comprises 16 wards. The wards are subdivided into 149 Streets (Mitaa) and seven villages, distributed unevenly. The seven registered villages are Itamba, Kitwiru, Igumbilo, Kigonzi, Mkoga, Mgongo and Nduli. Eight wards are situated in the peri-urban areas which are Kihesa, Mtwivila, Mkwawa, Mwangata, Kitwiru, Ruaha, Isakalilo and Nduli. Politically, the Municipality has one constituency, namely Iringa Town.

Map 2: Iringa Municipality Council Ward Boundaries based on 2012 Census



Source: National Bureau of Statistics, GIS Unit, 2013

Table 1. 1: Land Area and Administrative Units by Ward, Iringa Municipality Council, 2012

S/N	Ward	Total surface Area (Sq. Kms)	Percent Surface Area	Streets(Mitaa)
1	Kihesa	11.24	3.4	14
2	Mtwivila	36.86	11.1	18
3	Gangilonga	5.31	1.6	9
4	Kitanzini	0.68	0.2	9
5	Ruaha	51.28	15.5	14
6	Mshindo	0.33	0.1	7
7	Mavinjeni	0.27	0.1	7
8	Mlandege	1.23	0.4	12
9	Mwangata	8.6	2.6	9
10	Kwakilosa	0.86	0.3	10
11	Makongoroni	0.79	0.2	12
12	Ilala	0.52	0.2	7
13	Mkwawa	26.98	8.1	8
14	Kitwiru	26.69	8.1	8
15	Isakalilo	28.03	8.5	5
16	Nduli	131.73	39.7	0
Total Municipality		331.4	100.0	149

Source: Iringa Municipality Director's Office –Land, Natural Resources and Environment Department, 2013

1.3 Climate, Soil and Topography

With the exception of very few slopes, the topography of Iringa Municipal is relatively homogeneous with gently undulating plains intersected by seasonal streams. Iringa Municipality has two main features, namely:-the central section of the town situated on the East West escarpment, which is the Southern Highland range, the steep slopes on the east which falls into the Little Ruaha valley and surrounding this escarpment. In the extreme south, southern-east and western part of the municipality, it gives way to mountainous land covered by hard rock, commonly known as Ipogolo, Kalenga, and Wilolesi hills.

The Municipality land surface is covered by loam, sandy loam and alluvium soil. The soils vary between red lateritic earth grey sand to silt hardpan and iron crust “mbuga” along Little Ruaha River. The majorities of these soils have high nutrient contents and are considered suitable for a wide range of food and cash crops and therefore have the potential for profitable cultivation.



The western part of the council gives way to mountainous land covered by hard rock

Despite the variation of climatic conditions throughout the year, the weather is attractive because of its high altitude. Iringa Municipality experiences an average daily temperature of 19 degrees centigrade with a daily range of about 5 degrees centigrade. The highest temperature occurs in November and December, during which the mean maximum temperature is about 28 degrees centigrade. The minimum temperature occurs in June to August when the temperatures go down to between 11 and 22 degrees centigrade. The mean relative humidity is about 50 percent and decreases to 33 percent. The total average annual rainfall ranges between 452mm to 1,000mm. The Municipality receives rainfall once a year between October/December and April/May in each year.

The Seasonal Rains

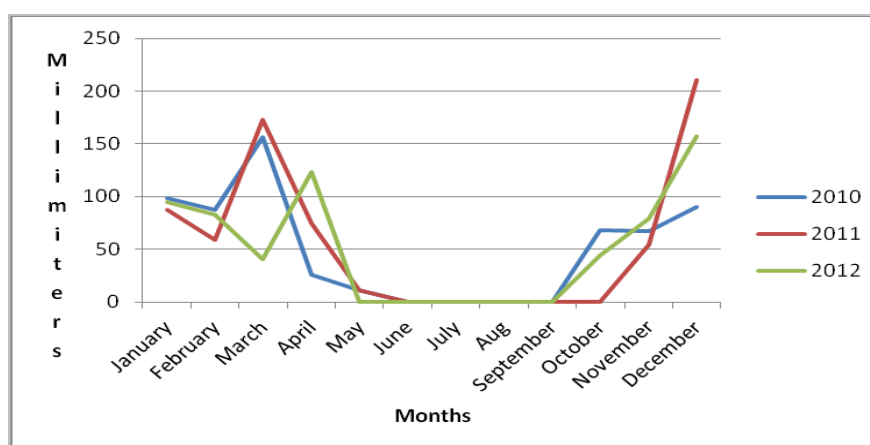
The seasonal rains range between October/December and April/May every year. The rains are usually heavy and spread throughout the Municipality (Table 1.2 and Figure 1). This is also the main crop planting season for all crops, but especially for the seasonal crops such as maize, vegetables, sunflower, sweet potatoes and beans.

Table 1. 2: Mean Annual Rainfall, by Month, Iringa Municipality Council, 2012

Month	2010		2011		2012	
	Rainfall (mm)	Days (Number)	Rainfall (mm)	Days (Number)	Rainfall (mm)	Days (Number)
January	98	15	87.2	11	95	8
February	87.5	9	59.3	11	83.1	9
March	156.7	16	173.1	19	40.5	9
April	25.7	4	74.8	13	123.2	12
May	11.3	3	11.2	2	-	-
June	-	-	-	-	-	-
July	-	-	-	-	-	-
August	-	-	-	-	-	-
September	-	-	-	-	-	-
October	67.9	2	-	-	44.4	2
November	67	2	54.6	6	78.8	6
December	90.5	9	210.3	15	157.4	10
Total	604.6	60	670.5	77	622.4	56

Source: Meteorological Department, Iringa 2013

Figure 1: Mean annual rainfall, by month, Iringa Municipality Council, 2012



Source: Meteorological Department, Iringa 2013

1.4 Drainage System

The Municipality forms part of the East-West escarpment, an area of flat and gently undulating plains broken in places by prominent hills. Most of the Municipality land lies between 1,560 and 2,000 meters above sea level. There are three main streams with several tributaries, which form a number of alluvial flood plains.

The Little Ruaha River supplements the over increasing demand of water supply for both industrial and domestic purposes in the Municipality Council. The river receives water from two streams of Hoho and Kigonzile in west and north eastern side of the Municipality.

1.5 Population

1.5.1 Ethnic Groups

The founder inhabitants of the council were mainly from the Hehe tribe. However, the composition of the current population is getting more cosmopolitan due to the influx of workers, businessmen and migrants from different regions of Tanzania, as well as from outside the country. Nevertheless, the Council has four main ethnic groups which are Hehe, Bena, Pangwa and Kinga. The majority of Hehe occupy the largest part of the council area which covers all wards, followed by Bena occupying some parts of the Municipality wards as well as the Kinga and Pangwa. In addition, the Municipal is also occupied by other small ethnic tribes including Chaga, Nyakyusa, Gogo, Ngoni and Masai.

1.5.2 Population Size and Growth

Like other districts in Iringa region, the population of Iringa Municipality Council has experienced a significant decrease in growth. The council's average annual growth rate of the population between 1978 and 1988 inter-censal period was 4.0 percent, but it has decreased to 1.7 percent between 1988 and 2002 interdecadal period, before dropping further to 1.5 percent between 2002 and 2012. According to the 1978, 1988, 2002 and 2012 Population and Housing Censuses the population of the council increased from 57,164 in 1978 to 84,860 in 1988 before reaching 106,371 in 2002 and 151,345 in 2012.

Table 1.3 shows the population size and its growth for Iringa Region and its districts for the census years of 1988, 2002 and 2012. According to table 1.3; Iringa Municipality Council is the smallest in terms of land area with the least population in the region. The Municipality contributed only 16.1 percent of the regional population in 2012 Population and Housing results. Between 2002 and 2012 the council's population grew at an average annual growth rate of 1.5 percent compared to the regional growth rate of 1.1 percent and national average growth rate of 2.7 percent.

Table 1. 3: Population Size and Growth by District, Iringa Region, 1988, 2002 and 2012 Censuses

District	Total surface Area (Sq.kms.)	1988 Pop. Census		2002 Pop. Census		2012 Pop. Census		Growth Rate (Percent)		
		Number	Percent	Numb.	%	Numb.	%	1978–1988	1988–2002	2002–2012
Iringa Urban	331.4	84,860	12.5	106,371	12.7	151,345	16.1	4.0	1.7	1.5
Iringa Rural	20,576	362,137	53.6	245,033	29.2	254,032	27.0	2.2	1.6	1.1
Mufindi	7,123	229,259	33.9	282,071	33.7	317,731	33.8	2.8	1.5	0.9
Kilolo	7,882	*	*	204,572	24.4	218,130	23.2	*	*	1.1
Total	35,912.4	676,256	100.0	838,047	100.	941,238	100.	2.6	1.6	1.1

* Kilolo District was a part of Iringa Rural district before its establishment in early 2000. Therefore its population and growth rates for the year 1978/88 are included in Iringa Rural District.

Source: National Bureau of Statistics, Computed Data from 1988 and 2002 Population Censuses Reports, Iringa region Socio-economic Profile April, 2007(pg. 11).

Looking at the ward level, Ruaha ward had the largest population in the Municipality with 14.8 percent in 1988, followed by Gangilonga 9.6 percent and Mtwivila 9.3 percent of total municipality population. The situation changed in 2002 when Mtwivila became the most populated ward with 13,519 residents or 11.5 percent of municipality residents, followed by Kihesa at 10.6 percent as indicated in Table 1.4. The table further shows that in 2012, Mtwivila ward again led by having 21,017 people or 13.9 percent followed again by Kihesa ward with 12.0 percent. Among the reasons, establishment of new settlements in these wards have been a key factor for this population dynamics.

Table 1.4: Population Distribution by Ward, Iringa Municipality Council, 1988, 2002 and the 2012 Censuses

Ward	1988 Census		2002 Census		2012 Preliminary results	
	Total	Percent of Total	Total	Percent of Total	Total	Percent of Total
Kihesa	7,313	8.3	12,417	10.6	18,196	12.0
Mtwivila	8,215	9.3	13,519	11.5	21,017	13.9
Gangilonga	8,481	9.6	9,668	8.2	9,599	6.3
Kitanzini	6,050	6.9	4,085	3.5	3,617	2.4
Ruaha	13,020	14.8	10,829	9.2	16,984	11.2
Mshindo	2,389	2.7	1,892	1.6	1,892	1.3
Mivinjeni	5,238	5.9	5,180	4.4	4,780	3.2
Mlandege	4,450	5.1	4,204	3.6	4,640	3.1
Mwangata	8,612	9.8	11,508	9.8	13,486	8.9
Kwakilosa	4,689	5.3	6,883	5.9	7,948	5.3
Makongoroni	6,416	7.3	7,247	6.2	7,790	5.1
Ilala	4,951	5.6	3,745	3.2	4,448	2.9
Mkwawa	4,691	5.3	7,996	6.8	9,673	6.4
Kitwiru	*	*	7,198	6.1	11,461	7.6
Isakalilo	903	1.0	5,518	4.7	9,188	6.1
Nduli	2,670	3.0	5,580	4.8	6,626	4.4
Total	88,088	100.0	117,469	100.0	151,345	100.0

* This ward was part of former Ruaha ward before its establishment in 2000. Therefore its population for the year 1988 is included in the former ward.

Source: National Bureau of Statistics, Computed Data from 1988, 2002 and 2012 Population Censuses Reports

1.5.3 Population Density

Having an average population density of 457 persons per sq. km, Iringa Municipality is considered to be the most densely populated Council in Iringa Region. Its population density was above the regional average population density of 26 persons per sq. km and was the most populous among the councils in the region in all three censuses. Among other reasons, the relatively large population density of Iringa Municipality has not been caused by the size of its land area but **by** the rural – urban migration within the region and the country as a whole.

Table 1. 5: The Trend of Population Density by District, Iringa Region, 1988, 2002 and 2012 Population and Housing Censuses

District	Land Area (Sq.km.)	Population			Population Density (Person per Sq.km)		
		1988	2002	2012	1988	2002	2012
Iringa Urban	331.4	84,860	106,371	151,345	256	321	457
Iringa Rural	20,576	362,137	245,033	254,032	18	12	12
Mufindi	7,123	229,259	282,071	317,731	32	40	45
Kilolo	7,882	*	204,572	218,130	*	26	28
Total	35,912.4	676,256	838,047	941,238	19	23	26

* Kilolo District was a part of Iringa Rural District before its establishment in early 2000. Therefore its population for the year 1988 is included in Iringa Rural District.

Source: National Bureau of Statistics, Computed Data from 1988, 2002 and 2012 Population Censuses Reports.

Table 1.6 gives the population density at ward level for the census years of 1988, 2002 and 2012. In 1988, Mivinjeni ward with a population density of 19,400 persons per sq. km was the most densely populated ward in the district, followed by Ilala ward with 9,521 persons per sq. km. Nduli ward was the least densely populated ward as it had only 20 persons per sq. km. In 2002 Mivinjeni ward again became the most densely populated ward with average of 19,185 persons per sq.km, followed by Makorongoni ward with 9,173 persons and Kwakilosa ward with 8,003 persons, while Nduli was the least populated ward with average of 42 persons per sq.km. In 2012 however, Mivinjeni and Makorongoni wards lead by 17,704 and 9,861 persons per sq. km respectively while Nduli ward was again the least densely populated ward by having 50 persons per sq. km. The increase in the population density of Makorongoni ward can be attributed to the decrease in the population density of wards like Kitanzini, whereby residential buildings are turned into commercial buildings, hence occupants move to Makorongoni ward which is nearby Kitanzini ward.

Table 1. 6: Population Density by Ward, Iringa Municipality Council, 1988, 2002 and 2012

Ward	Land Area (Sq.km.)	Population			Population Density (Persons per Sq.km)		
		1988	2002	2012	1988	2002	2012
Kihesa	11.24	7,313	12,417	18,196	651	1,105	1,619
Mtwivila	36.86	8,215	13,519	21,017	223	367	570
Gangilonga	5.31	8,481	9,668	9,599	1,597	1,821	1,808
Kitanzini	0.68	6,050	4,085	3,617	8,897	6,007	5,319
Ruaha	51.28	13,020	10,829	16,984	254	211	331
Mshindo	0.33	2,389	1,892	1,892	7,239	5,733	5,733
Mivinjeni	0.27	5,238	5,180	4,780	19,400	19,185	17,704
Mlandege	1.23	4,450	4,204	4,640	3,618	3,418	3,772
Mwangata	8.6	8,612	11,508	13,486	1,001	1,338	1,568
Kwakilosa	0.86	4,689	6,883	7,948	5,452	8,003	9,242
Makongoroni	0.79	6,416	7,247	7,790	8,122	9,173	9,861
Ilala	0.52	4,951	3,745	4,448	9,521	7,202	8,554
Mkwawa	26.98	4,691	7,996	9,673	174	296	359
Kitwiru	26.69	*	7,198	11,461	*	270	429
Isakalilo	28.03	903	5,518	9,188	32	197	328
Nduli	131.73	2,670	5,580	6,626	20	42	50
Total	331.4	88,088	117,469	151,345	266	354	457

Source: National Bureau of Statistics, Computed Data from 1988, 2002 and 2012 Population Censuses Reports.

1.5.4 Dependency Ratio

Dependants are persons aged 0 – 14 years and those aged 65 years and above. The economically active age group includes persons aged 15- 64 years. Table 1.7 indicates the number of dependants and economically active persons in Iringa region captured during 1988 and 2002 censuses. Referring to Table 1.7, in the two censuses, Iringa Municipality had the least number of dependants than any other district. The municipality had 40,410 dependants in 1988 and 42,710 in 2002 census. Economically active persons for the municipality were 44,101 in 1988 census and were the second least after that of Mufindi (111,271). However, further analysis of the table shows that the number of economically active persons was almost equal to the dependants giving a mere dependence ratio of one. This had no impact to the economy of the municipality since the economic resources of economically active persons mobilized in development purposes was supporting very few dependants i.e. one to one. Similar cases were noted for the remaining districts, whereby the number of economically active persons was almost equal to the number of dependants. Further analysis shows that the number of dependants as well as the number of economically active persons had increased between 1988 and 2002 in the municipality. Although the number of dependants increase by 5 percent between 1988 and 2002, and that of the economically active persons increased by 44 percent but the dependency ratio did not change.

Table 1. 7: The Dependency Ratios by District, Iringa Region, 1988 and 2002

District	1988 Population				2002 Population				Change in number of Dependants and Ec. Active 1988-2002	
	Number of				Number of					
	Dependants	Economically Active	Dependency Ratio	Total Population	Dependants	Economically Active	Dependency Ratio	Total Population	Dependants	Economically Active
Iringa Urban	40,410	44,101	1	84,860	42,710	63,661	1	106,371	2,300	19,560
Iringa Rural	187,063	174,852	1	362,137	121,489	123,544	1	245,033	-65,574	-51,308
Mufindi	117,627	111,271	1	229,259	139,893	142,177	1	282,071	22,266	30,906
Kilolo	*	*	*	*	102,321	102,051	1	204,572		
Total Region	345,100	330,224	1	676,256	406,413	431,433	1	838,047	61,313	101,209

* Kilolo District was a part of Iringa Rural District before established in early 2000. Therefore its population for the year 1988 is included in Iringa Rural District.

Dep: Dependants, Ec. Active: Economically Active

Source: National Bureau of Statistics, Computed Data from 1988 and 2002 Population Censuses Reports.

1.5.6 Population Distribution and Sex Ratio

The distribution of the population of Iringa Municipality Council of 1988 and 2002 by age and sex shows similar features of a broad-based demographic structure, indicating high fertility, mortality rates and the youth aged-structure. The 2002 District Profile of Iringa Municipality Council reveals that the council has a Sex Ratio of 88 males for every 100 females. This is partly due to the fact that, at birth, the sex ratio is below 100 indicating an excess number of females over males. Traditionally, males in Iringa Municipality council are much more mobile than females, and most of the males move to Dar es Salaam and other areas to look for employment in industries and other businesses. In addition, it is a fact that many deaths that occur in Iringa affect more men than women, although this has not yet been proved scientifically.

Furthermore, the 2002 population of Iringa council - as depicted by Table 1.8 - is considered as a young population. It is made of children under 14 years who counted 19,380 males and 20,613 females. This constitutes 37.60 percent of the total population. The age group is followed by another age-group of young population aged between 15 – 29 years, who counted 37,851 persons, comprising 16,733 males and 21,118 females or 35.6 percent of total population. The last age-group of persons aged 65 years and above counted 2,717, with 1,137 males and 1,580 females, or 2.55 percent of the total population.

Table 1. 8: Population Distribution by Broad Age Group and by Sex, Iringa Urban District, 2002

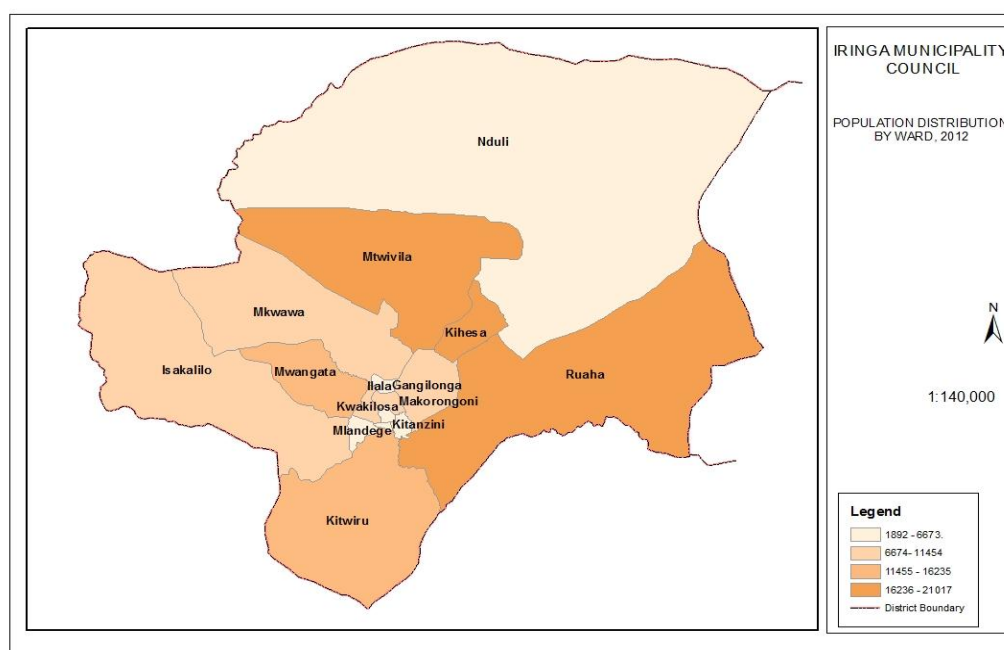
Age Group	Sex			Percent of Total
	Male	Female	Total	
0 – 14	19,380	20,613	39,993	38
15 – 29	16,733	21,118	37,851	36
30 – 49	9,772	10,575	20,347	19
50 – 64	2,697	2,766	5,463	5
65 +	1,137	1,580	2,717	3
Total District	49,719	56,652	106,371	100

Note: Iringa Urban District=Iringa Municipality

Source: The 2002 Population and Housing Census Report Volume IV

At ward level, the 2002 Population Census indicates that Mtwivila was the most populous ward in the council by having 13,519 persons (11.5 percent) of the total council population, followed by Kihesa ward with 10.6 percent of the population (12,417 persons). The least populous ward was Mshindo with a total number of 1,892 persons (1.6 percent). For the 2012 census results, Mtwivila ward again leads with 21,017 persons – (13.9 percent), followed by Kihesa ward with 12 percent (18,196 people). Mshindo ward was the least populous with only 1.3 percent of the council total. Uneven distribution of residents is mostly influenced by the availability of areas that are suitable for residing and accessibility of infrastructure and social services. Table 1.9 gives the population distribution by ward according to the 2002 Population Census and the 2012 preliminary results.

Map 3: Showing Population Distribution by Ward, Iringa Municipality; 2012



Source: National Bureau of Statistics, GIS Unit, 2013

Table 1. 9: The 2002 and 2012 Population Distribution by Ward, Iringa Municipality Council

Ward	2002 Census				2012 Census			
	Male	Female	Total	Percent of Total	Male	Female	Total	Percent of Total
Kihesa	5684	6733	12,417	10.6	8528	9668	18,196	12.0
Mtwivila	6348	7171	13,519	11.5	9768	11249	21,017	13.9
Gangilonga	4293	5375	9,668	8.2	4730	4869	9,599	6.3
Kitanzini	2007	2078	4,085	3.5	1790	1827	3,617	2.4
Ruaha	5115	5714	10,829	9.2	7918	9066	16,984	11.2
Mshindo	848	1044	1,892	1.6	852	1040	1,892	1.3
Mivinjeni	2369	2811	5,180	4.4	2265	2515	4,780	3.2
Mlandege	1933	2271	4,204	3.6	2200	2440	4,640	3.1
Mwangata	5522	5986	11,508	9.8	6421	7065	13,486	8.9
Kwakilosa	3261	3622	6,883	5.9	3785	4163	7,948	5.3
Makongoroni	3430	3817	7,247	6.2	3634	4156	7,790	5.1
Ilala	1770	1975	3,745	3.2	2110	2338	4,448	2.9
Mkwawa	3915	4081	7,996	6.8	4623	5050	9,673	6.4
Kitwiru	3224	3974	7,198	6.1	5512	5949	11,461	7.6
Isakalilo	2675	2843	5,518	4.7	4549	4639	9,188	6.1
Nduli	2730	2850	5,580	4.8	3247	3379	6,626	4.4
Total District	55124	62345	117,469	100.0	71932	79413	151,345	100.0

Source: NBS, the 2002 Village/Street Statistics Report for Iringa Urban District, 2006.

1.5.7 Number of Households and Size

Perhaps due to its relative small geographical area and population size, Iringa Municipality had an average household size of 4.1. According to the 2002 census Iringa Municipality had a population of 106,371 of which 24,601 were private households as shown in table 1.10. Having an average of 4.2 persons per household, Mufindi district council had the largest persons per household in Iringa region in 2002. The statistics further show that during the intercensal period, there was a general decrease in the average household sizes. In 1988 Iringa Municipality had the second least average household size of 4.6 persons per household compared to Iringa Rural with 5.0 persons and Mufindi with 4.8 persons per household. In 2002 however, Iringa Rural and Kilolo Districts had the least number, i.e. four persons per household. The results of the 2012 population census put Kilolo at the top with an average household size of 4.3 persons.

Table 1. 10: Distribution of Households and Average Households Size by District, Iringa Region, 1988 and 2002

District	1988 Census			2002 Census		
	Total Population	Number of Households	Average Household size	Total Population	Number of Households	Average Household Size
Iringa Municipality	84,860	18,283	4.6	106,371	24,601	4.1
Iringa Rural	362,137	72,665	5.0	245,033	56,355	4.0
Mufindi	229,259	47,327	4.8	282,071	66,663	4.2
Kilolo	*	*	*	204,572	45,710	4.0
Total Region	676,256	138,275	4.9	838,047	193,329	4.1

* Kilolo District was a part of Iringa Rural District before its establishment in early 2000. Therefore its population for the year 1988 is included in Iringa Rural District.

Source: National Bureau of Statistics, Computed Data from 1988 and 2002 Population Censuses Reports.

Table 1.11 shows the distribution of households and average household size by ward for Iringa Municipality Council based on the 2002 and 2012 population and housing censuses results. Gangilonga ward though with moderate population, had the biggest average size of 5.8 persons per household, followed by Mkwawa with 5.2 persons. Mshindo ward on the other hand had the smallest average household size of 3.7 in 2002. In 2012 however, Gangilonga ward still lead by having an average household size of 5.0 followed by Mtwivila with 4.5. Ten wards out of 16 in 2002 had their average household sizes below the council's average of 4.4 while in 2012 only eight wards out of the 16 had their average household size below the council's average of 4.2.

Table 1. 11: Population, Number of Households and Average Household Size by Ward in Iringa Municipality Council, 2002 and 2012 Population and Housing Censuses.

Ward	2002 Population			2012 Preliminary results	
	Total Population	Number of Households	Average Household Size	Total Population	Average Household Size
Kihesa	12,417	2,937	4.2	18,196	4.3
Mtwivila	13,519	3,084	4.4	21,017	4.5
Gangilonga	9,668	1,656	5.8	9,599	5.0
Kitanzini	4,085	906	4.5	3,617	4.2
Ruaha	10,829	2,695	4.0	16,984	4.1
Mshindo	1,892	511	3.7	1,892	3.8
Mivinjeni	5,180	1,358	3.8	4,780	3.7
Mlandege	4,204	1,094	3.9	4,640	4.0
Mwangata	11,508	2,701	4.3	13,486	4.4
Kwakilosa	6,883	1,608	4.3	7,948	3.9
Makongoroni	7,247	1,822	4.0	7,790	4.0
Ilala	3,745	983	3.8	4,448	3.6
Mkwawa	7,996	1,537	5.2	9,673	4.2
Kitwiru	7,198	1,620	4.5	11,461	4.3
Isakalilo	5,518	*	*	9,188	4.3
Nduli	5,580	2,964	3.9	6,626	3.9
Total District	117,469	27,476	4.4	151,345	4.2

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

CHAPTER TWO

Economy

2.0 Introduction

Chapter two entails both Social and economic Indicators of Iringa Municipality and its poverty status. The economic indicators used include the Gross Domestic Product (GDP), Per Capita Income and the main sources of income for the residents. The poverty indicators cover demographic characteristics, health, education status, access to drinking water and housing conditions. The economy of the Iringa Municipality is dominated by trade, agriculture and the allied activities as shown in Table 2.1.

Table 2. 1: Percentage distribution of Main Economic Activities; Iringa Municipality, 2002

Sector	Percentage
Trade	31.4
Agriculture	29.3
Employees - Commercial and Administration	24.8
Manufacturing	13.9
Livestock keeping	0.4
Fishing	0.2
Total	100

Source: NBS, the 2002 Population and Housing Census Report, Iringa Urban District Profile, 2004.

The major agricultural activities in the Municipality include:-

- i) Small Scale farming (food and cash crops production at subsistence farming scale),
- ii) Livestock keeping (mainly indigenous livestock) and
- iii) Traditional fishing practiced along the Kitwiru dam.

There is however growth in small capital intensive sector in Iringa Municipality whose main activities include:-

- i) Manufacturing and
- ii) Provision of services such as transportation, hotels and restaurants, petty trading and the like.

2.1 GDP and Per capita GDP

Iringa Municipality Council, like other councils of Iringa region, has never computed its GDP since it was established. Nevertheless, Iringa Municipality Council makes significant contribution to the Regional GDP and per capita GDP. The 2008 Regional GDP Survey Report shows that Iringa Municipality share of the Regional GDP was 4.2 percent equivalent to TShs. 60,479 million and ranked the least in the region. The per capita income of the municipality residents in 2008 was estimated at TShs. 429,440 which was less than that of Tanzania Mainland (Tshs. 693,470). Table 2.2 shows regional GDP, regional per capita GDP, percentage share and ranking for the councils in the region.

Table 2. 2: GDP at Current Prices, Share and Ranking; Iringa Region, Tanzania Mainland, 2008

District/ Councils	GDP (Millions TShs)	Percent Contribution to Regional GDP	Rank	Per Capita GDP	Percentage Contribution to Regional Per Capita	Rank
Iringa Municipality Council	60,479	7.6	4	429,440	14.2	3
Kilolo	80,743	10.2	3	362,841	12.0	4
Iringa District Council	274,839	34.6	2	1,031,508	34.0	2
Mufindi	377,612	47.6	1	1,206,917	39.8	1
Iringa Region	793,673	100.0		3,030,706	100.0	

Source: National Accounts of Tanzania, National Bureau of Statistics, Dar es Salaam, 2008

2.2 Poverty Indicators

There are a number of indicators that portray the poverty level. These indicators include Gini coefficient, poverty gap, and percent of households below basic needs poverty line, main source of cash income, food consumption patterns, net school (?) enrolment, adult literacy rate, health indicators, and access to safe drinking water. They also include housing conditions in terms of types of toilets, roofing materials, household's assets, and sources of lighting energy as well as sources of energy for cooking. People's experience on poverty, material deprivation and their housing circumstances are intertwined. This is because housing acts both as a charge on income and as a source of income-like flows of benefits, as well as a potential source of monetary income on itself.

2.2.1 Income Poverty Rate, Poverty Gap and Gini Coefficient

According to the 2005 Poverty and Human Development Report, Iringa Municipality was among the best 20 districts on Tanzania Mainland in regard to the number of people living below the basic needs poverty line. The Report indicates 18 percent of Iringa Municipality residents live below the basic needs poverty line and it was considered to be the best council in the region. The district with the highest percentage of people living below the basic needs poverty line in Iringa region was Mufindi at 32 percent, followed by Iringa Rural at 31 percent (Table 2.3). With respect to the rate of poverty gap, table 2.3 shows that Iringa Urban with only 5 percent was the best council in the region.

The situation is different in regards to the Gini Coefficient Rate. All councils had Gini Coefficient which shows inequality and variation of wealth in Iringa region. The best council in terms of the inequality and variations in the distribution of wealth among its people was Kilolo whose rate was 31 percent as indicated Table 2.3.

Table 2. 3: Selected Poverty Indicators by Council; Iringa Region, 2005

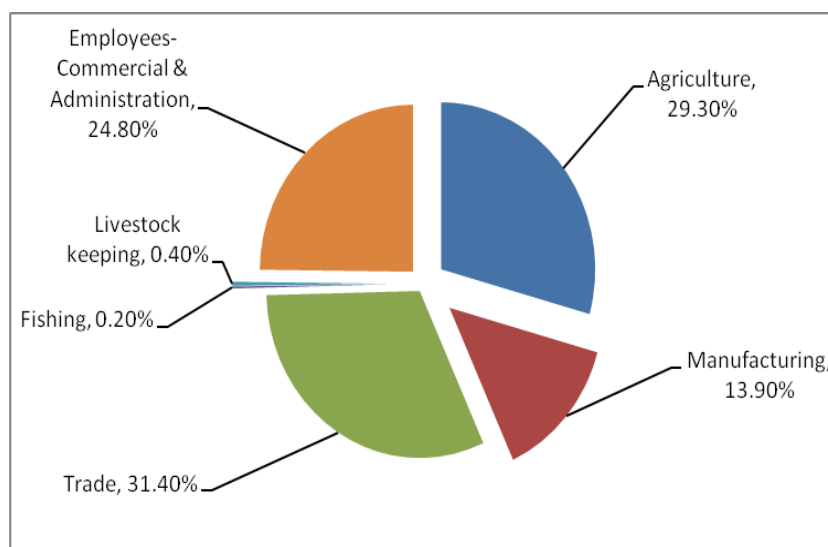
District	Percent of People live below Poverty Line	Poverty Gap	Gini Coefficient Rate	Number of Poor Per Sq. km.
Iringa Municipality	18	5	35	132
Kilolo	29	7	31	7
Iringa Rural	31	8	32	4
Mufindi	32	9	35	11

Source: Poverty and Human Development Report, 2005

2.2.2 Main Sources of Cash Income

The 2002 Population and Housing Census Report shows that Iringa Municipality Council has vast economic opportunities as shown in table 2.1 and figure 2. Agriculture sector ranked the second being reported as one of the main source of income engaging 29.3 percent of residents (aged 5 years and above in the district). The nonagricultural activities which are the major source of income generating activities constitute 45.9 percent, while employees from commercial and administrative institutions constitute 24.8 percent in total.

Figure 2: Percentage of Persons Aged 5 years and above by Employment in Iringa Municipality, 2002



Source: NBS, the 2002 Population and Housing Census Report, Iringa Urban District Profile, 2004.

According to 2002/03 Agricultural Census –Iringa Regional Report, Iringa Municipality council had the highest percentage of agricultural households with off-farm income (99%) of total agricultural households in the district (Off-farm income refers to cash generated from non-agricultural activities). Other districts with a high percent of agriculture household members with off-farm income were Iringa Rural (88%), Mufindi (81%), and Kilolo (77%). However, the 2007/08 Agricultural Census reveals a different picture. Iringa Municipality council together with Mufindi had the highest percentage of agricultural households with off-farm income (35% each). Other councils were Iringa Rural (25%) and Kilolo (20%).The

2.2.3 Health Indicators

Though the residents of Iringa Municipality Council are said to have good access to social services like health, education and water, but HIV/AIDS pandemic is among the diseases that have had a negative impact to the health status of its residents resulting in high rate of morbidity, mortality, orphanhood and widowhood. As per 2002 population and Housing Census report, the orphanhood rate at 3.8 percent was above regional average which was 2.6 percent; and that of the widowhood rate of 5.3 percent were below that of region which was 6.5 percent. The health situation of the people in Iringa Municipality can also be observed through other proxy health indicators shown in Table 2.4.

Table 2. 4: Selected Proxy Health Indicators for Iringa Municipality

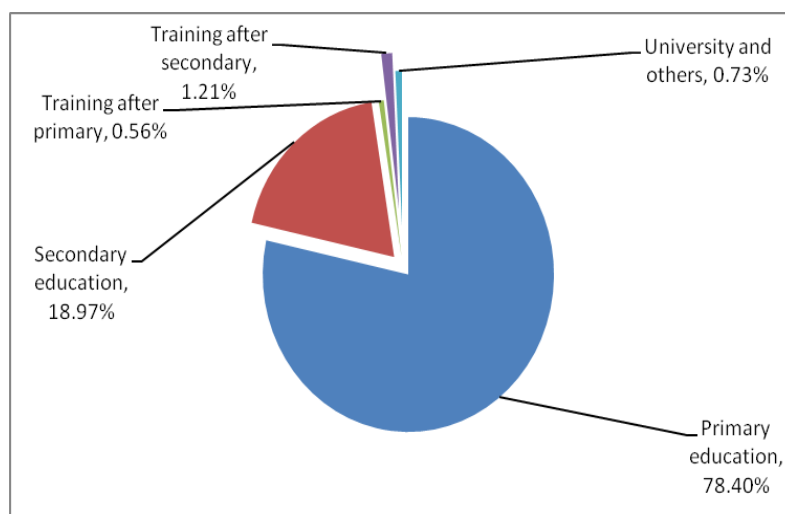
Indicator	Iringa Municipality	Regional Average
Orphaned Rate (percent) (Census 2002)	3.81	2.58
Widowed Rate (percent) (Census 2002)	5.3	6.5
Infant Mortality Rate (IMR) (Census 2002)	83	102
Children Under Five Mortality Rate (U5MR) (Census 2002)	133	166
HIV/AIDS Prevalence Rate (percent) (THMIS 2011/12 and Municipality Report)	9.1	9.1
Doctor/Population Ratio	1,645	26,203
Hospital Bed/Population Ratio	340	664

Infant Mortality Rate of 83 per 1000 infants was below regional as well as national rates which were 102 and 95 per 1000 infants respectively. The Mortality Rate of 133 per 1000 for Children under Five Years was as well below that of regional and national rates which were 166 and 153 per 1000 respectively. Iringa Municipality is among leading districts with high rate of 9.1 percent of HIV prevalence in the Iringa region, which is also above the Tanzania Mainland rate of 5.3 according to THMIS 2011/12 report.

2.2.4 Literacy Rate and Level of Education

According to the 2002 Population and Housing Census results, the literacy rate for persons aged five years and above, Iringa Municipality Council was the first in Iringa region with 87 percent (90 percent males against 85 percent females). The report further shows that of the persons who had attended school, 78.40 percent (75.28 percent males and 81.28 percent females) acquired primary education only, 18.97 percent (21.34 percent males and 16.78 percent females) attained secondary education while those who attained higher education were 0.73 percent, of which 1.17 percent were males against 0.32 percent of females (Figure 3).

Figure 3: Percentage Distribution of Population Aged 5 years and Above by Level of Education Attained, Iringa Municipality, 2002



Source: NBS, Population and Housing Census, District Profile, Iringa Municipality, May 2004.

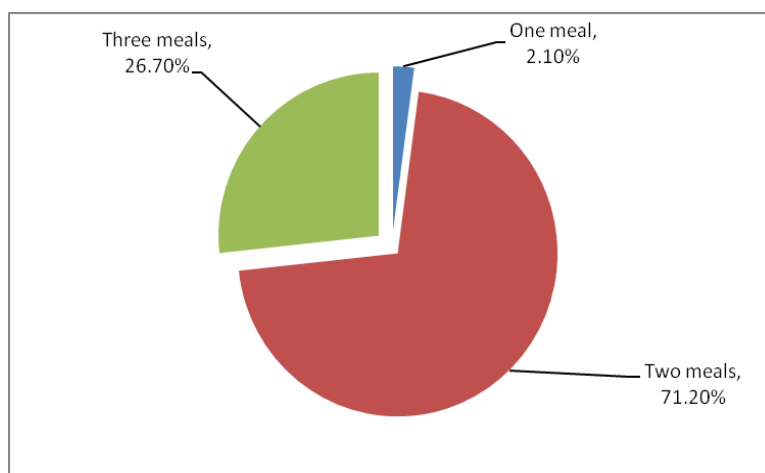
2.2.5 Food Consumption Patterns

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

2.2.5.1 Number of Meals per Day

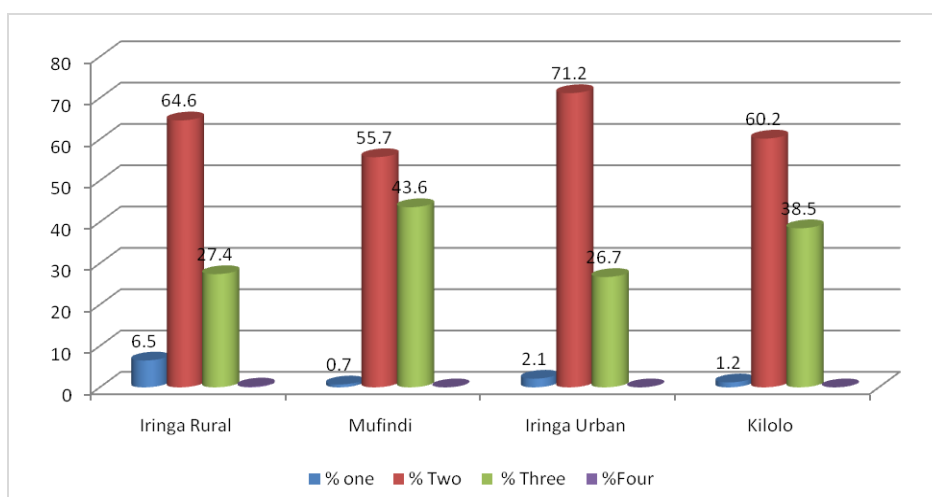
The National Sample Census of Agriculture 2002/03 reveals that the majority of households (71.2 percent) in Iringa Municipality Council normally have two meals per day, while 26.7 percent of households have three meals. Moreover, the results also indicate that 2.1 percent of households have one meal and none of households has four meals per day. Those results show that food insufficiency affects a small proportion of households in the Municipality as seen in Figure 4. The 2007/08 National Sample of Agriculture reveals a different picture. About 51 percent of the households normally have two meals per day, about 46 percent of them have three meals per day, and three percent have one meal per day while none had four meals per day. The frequency of consumption depended mainly on the season, whereby during the dry season the frequency of consumption was two to three meals per day and in the rainy season the frequency was one to two meals per day for agricultural household. A comparison of the Municipality figures with those of other councils in the region, in figure 5, shows that, eating patterns of the municipality agricultural households were taking two meals a day.

Figure 4: Percentage Distribution of Agricultural Households by Meals Taken per Day, Iringa Municipality, 2002/2003



Source: NBS, National Sample Census of Agriculture, Iringa Region Report, 2003.

Figure 5: Percentage Distribution of Agricultural Households by Meals Taken per Day by District, Iringa Region, 2007/2008.



Source: NBS, National Sample Census of Agriculture, Iringa Region Report, 2008.

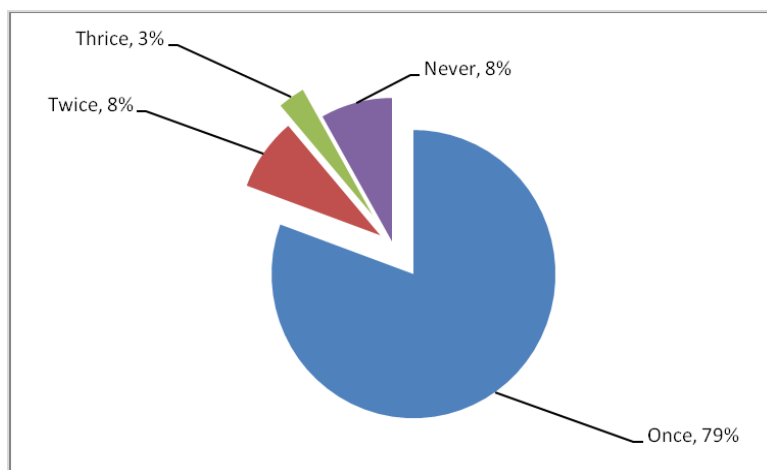
2.2.5.2 Protein (Meat and Fish) Consumption Frequencies

In Iringa Municipality there was a wide range of foods commonly consumed, especially legumes and vegetables. Most of that foods were locally produced and were rich in nutrients, especially micronutrients, and therefore if consumed in adequate amounts may help to prevent dietary-related disorders.

Moreover, Iringa Municipality had the highest percentage of households that eat meat once per day compared to other frequencies (Agricultural Sample Census 2007/08). Figure 6 shows that 79 percent of the households ate meat once per day followed by

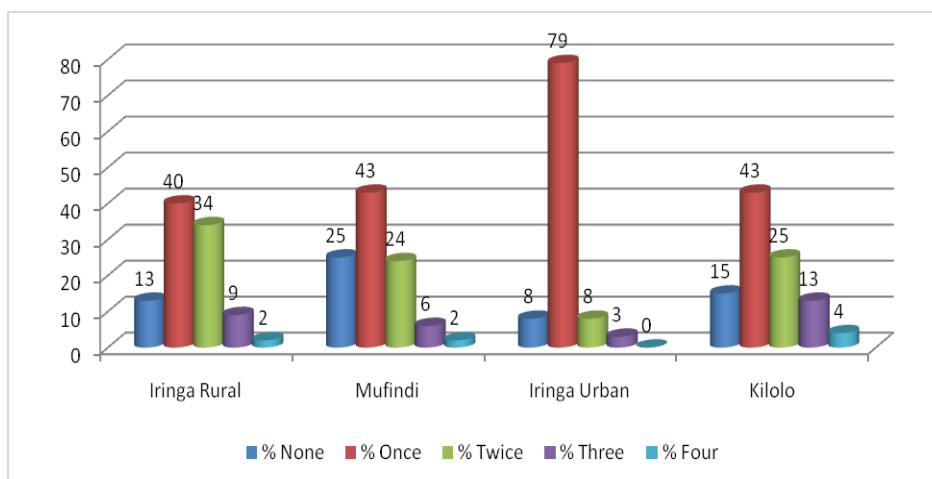
those 8 percent that ate meat twice then those that ate meat three times were 3 percent. However, 8 percent of households did not eat meat per day prior to the enumeration. In the region, Municipality households record to consume meat more frequently than other councils.

Figure 6: Percentage Distribution of Households by Frequency of Meat Consumption per Day, Iringa Municipality, 2007/08



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

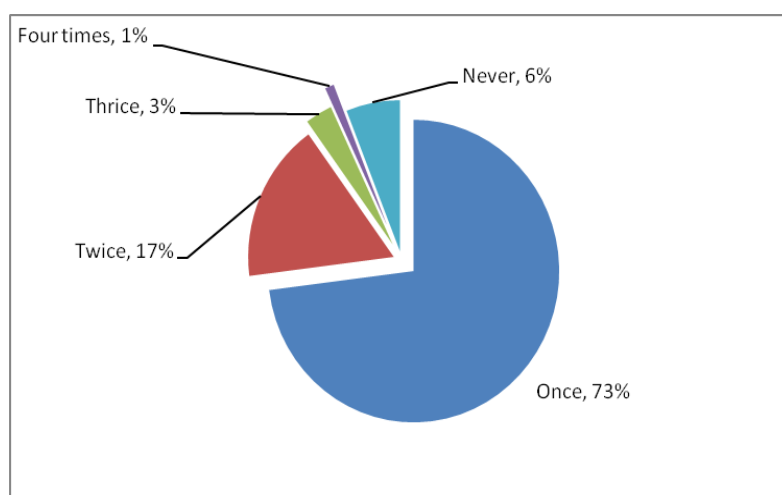
Figure 6. a: Percentage Distribution of Households by Frequency of Meat Consumption per Day by Council, Iringa Region, 2007/08



Source: NBS, National Sample Census of Agriculture, Iringa Region, 2008

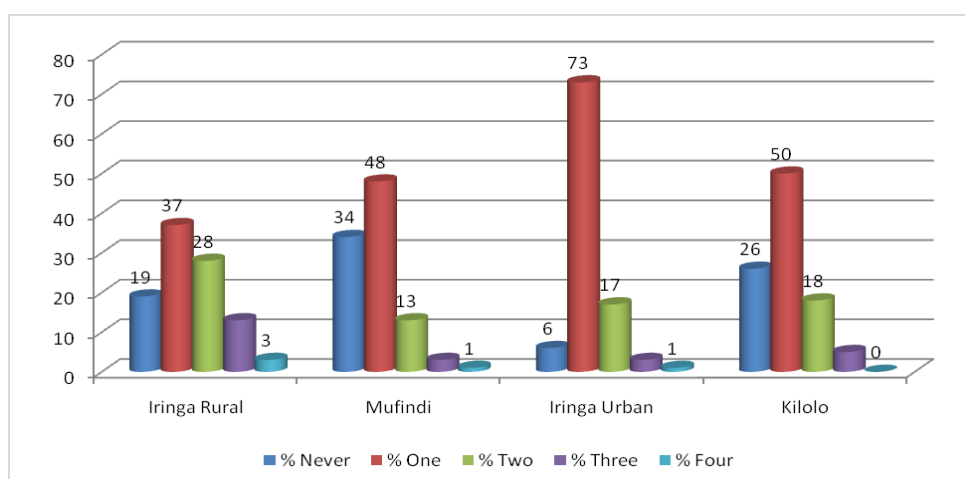
The observation was different regarding fish consumption where 6 percent of households did not eat fish during the week prior to the enumeration. However, as Figure 7 shows, about 73 percent and 17 percent of households ate fish once and twice per week, respectively; and those who ate fish thrice and four times during the week prior to the enumeration were 3 percent and 1 percent respectively. Moreover, Figure 7(a) shows that frequency of consuming fish is higher in Iringa Municipality than in other districts in the region.

Figure 7: Percentage Distribution of Households by Frequency of Fish Consumption per Week, Iringa Municipality, 2007



Source: NBS, National Sample Census of Agriculture, Iringa Region, 2008

Figure 7. a: Percentage Distribution of Households by Frequency of Fish Consumption per Week by District Iringa Region, 2007

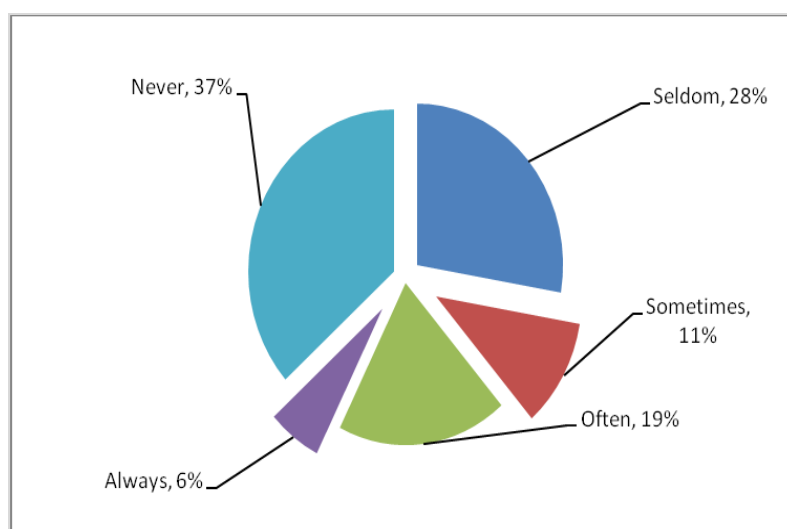


Source: NBS, National Sample Census of Agriculture, Iringa Region, 2008

2.2.5.3 Food Security

In Iringa Municipality, only 6 percent of agricultural households in the district *always* experienced problems in satisfying the household food requirement. However, 11 percent of households *sometimes* experience problems, 19 percent *often* experienced problems and 28 percent *seldom* had problems in satisfying the household food requirement. About 37 percent of households *never* experienced any food sufficiency problems.

Figure 8: Percentage Distribution of Rural Agricultural Households by Frequency of Food Satisfaction, Iringa Municipality, 2007



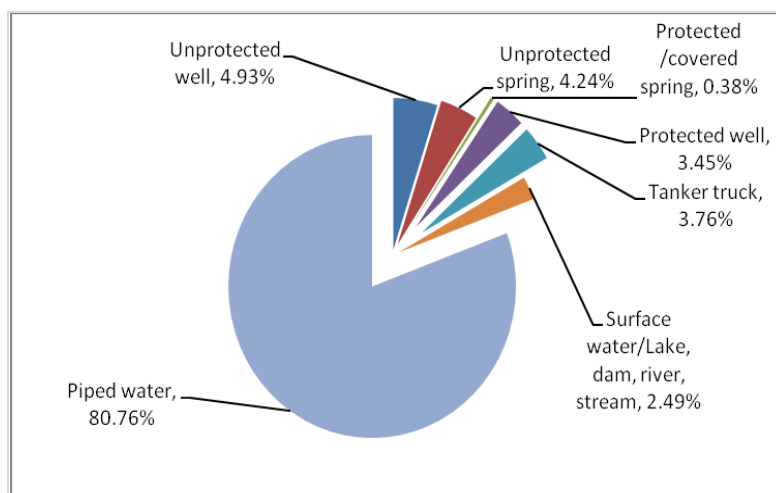
Source: NBS, National Sample Census of Agriculture, Iringa Region, 2008

2.2.6 Access to Clean Drinking Water

There is no doubt about the importance of water to human existence. People need clean water to survive and stay healthy. Lack of clean water contributes to the high mortality rates in children around the world. Water is also critical to a country's development as it is needed not only for agricultural productivity but also for industrial production.

Despite the vast amounts of fresh water available, many Tanzanians are still faced with water shortage due to insufficient capacity to access and store it both in rural and urban areas.

Figure 9: Percentage of Households by Type of Water Source, Iringa Municipality, 2002



Source: NBS, Population and Housing Census, District Profile Iringa Urban, May, 2004.

Iringa Municipality has been blessed with water resources, both on the surface and underground. The 2002 Population and Housing Census results show that 80.76 percent of households used piped water as the main source of drinking water in the Municipality, followed by unprotected wells with 4.93 percent and 4.24 percent of households used unprotected spring or streams as their main sources of drinking water. The protected wells and surface water were also used by the significant number of households in Iringa Municipality during wet and dry seasons with 3.45 percent and 2.49 percent respectively, Figure 9.



Piped water was the main source of drinking water in the Municipality

The 2007/08 Agricultural Sample Census shows through table 2.5 that, only 36 percent of surveyed agricultural households were accessible to piped water, and 34 percent were using unprotected waters sources as their main source of drinking water.

Table 2. 5: Percentage of Agricultural Households Reporting Main Source of Drinking Water - Iringa Municipality, 2007/08

Type of Water source	Percentage
Piped Water	36
Protected Well	17
Protected/Covered Spring	13
Unprotected Well	7
Unprotected Spring	12
Surface Water/Lake, Dam, River, Stream	14
Tanker Trunk	0
Other	0
Covered rain Water	0
Uncovered Rain Water Catchment	1

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

2.2.7 Types of Toilets

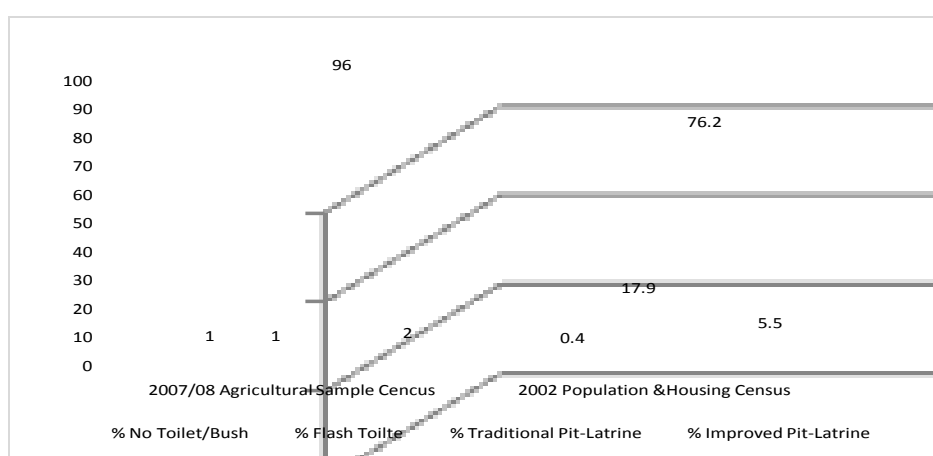
Sanitation is hygienic means of promoting health through prevention of human contact with the hazards of wastes as well as treatment and proper disposal of sewage wastewater. Sanitation facilities include toilets, sewers and wastewater treatment plants as well as more simple technologies such as latrines and septic tanks. Sanitation continues to remain one of the key health issues in the developing world. Human waste is full of dangerous bacteria that can cause diseases like cholera, typhoid, infectious hepatitis, polio, cryptosporidiosis, and ascariasis. When waste is not properly managed, it can come into contact with skin, water, insects and other things that ultimately transfer the bacteria back into the human body where it can cause sickness to people.



Three quarters of households in Iringa Municipality used traditional pit latrines

In order to address extreme poverty and global diseases, we most focus on achieving universal access to sanitation. With respect to availability of toilets, the 2002 Population and Housing Census Report indicates that 76.2 percent of households in Iringa Municipality used traditional pit latrines, followed by 17.9 percent of households which had flush toilets, improved pit latrines 5.5 percent, and only 0.4 percent of households had no toilet facility as indicated in Figure 10. The 2007/08 Agricultural Sample Census results shows that, 96 percent of agricultural households used traditional pit latrine, and 1 percent had no facility at all.

Figure 10: Percentage of Households by Type of Toilet Facility, Iringa Municipality, 2002 and 2007



Source: NBS, Population and Housing Census, District Profile Iringa Urban, May, 2004, and NBS National Sample Census of Agriculture, Iringa Region, 2008

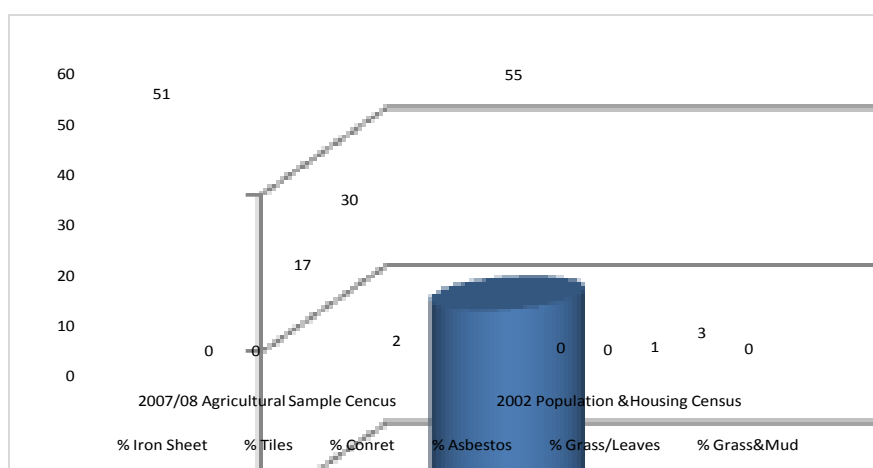
2.2.8 Roofing Materials



Iron sheets are the common roofing materials in Iringa Municipality

The 2002 Population and Housing Census report indicates that grass and thatches are the most common roofing materials in the country. In Iringa Municipality, 55 percent of households have iron sheets roofing, followed by grass and thatches with 7.4 percent and tiles or asbestos with 3.0 percent. However, the 2007/08 Agricultural Sample Census results show that, about 32 percent of the agricultural households' dwellings were roofed with grass, thatches and grass mixed with mud. Figure 11 shows the percentage of households by type of roofing material.

Figure 11: Percentage of Households by Type of Roofing Material, Iringa Municipality, 2002, 2008

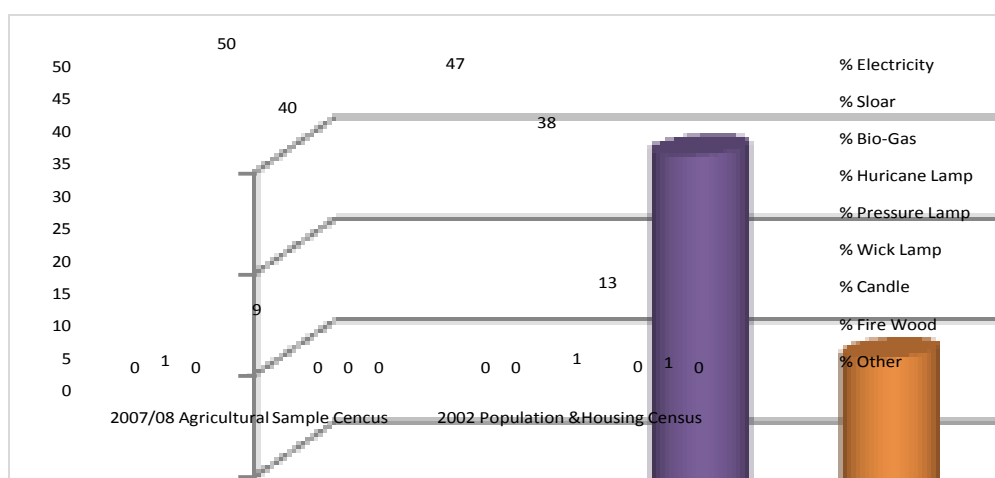


Source: NBS, Population and Housing Census, District Profile Iringa Urban, May, 2004, and NBS National Sample Census of Agriculture, Iringa Region, 2008

2.2.9 Sources of Lighting Energy

Figure 12 shows that, due to availability of national grid electricity in the municipality, the 2002 Population and Housing Census results reveal that 47 percent of households used electricity. Hurricane lamp was found to be the second main source of lighting energy in Iringa Municipality Council with 38 percent of total households; followed by wick lamp 13 percent. However, the 2007/08 Agricultural Sample Census results show that, about 50 percent of the agricultural households' dwellings were using used hurricane lamps, and 40 percent were using wick lamps, followed by 9 percent who were using candles for lighting. None had electricity from the national grid, but 1 percent of the agricultural households surveyed were using solar energy.

Figure 12: Percentage of Households by Main Source of Energy for Lighting, Iringa Municipality, 2002 and 2007



Source: NBS, Population and Housing Census, District Profile Iringa Urban, May, 2004, and NBS National Sample Census of Agriculture, Iringa Region, 2008

2.2.10 Sources of Energy for Cooking

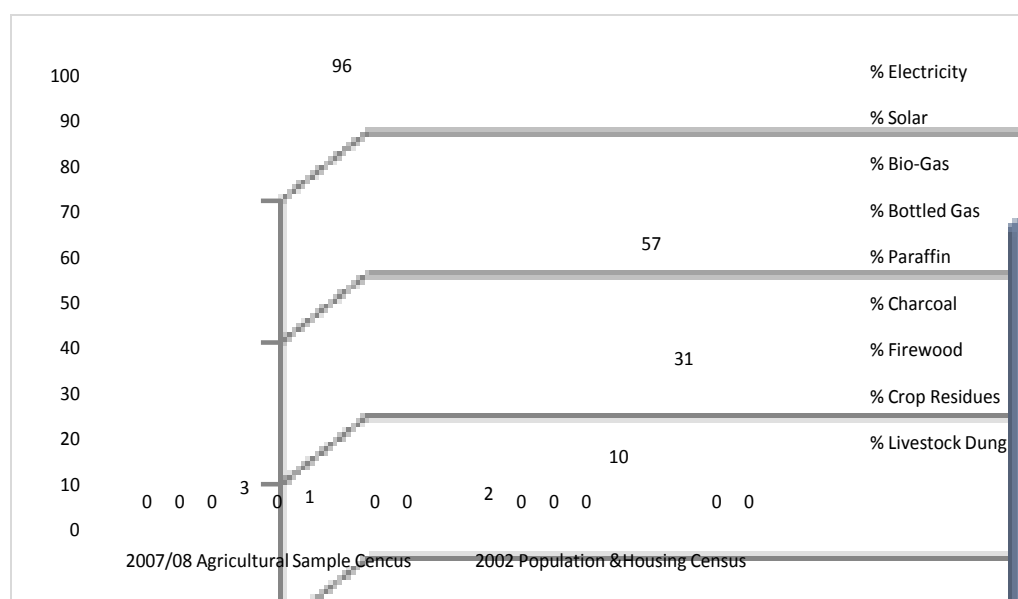


Most Urban households in the Municipality used charcoal as the main source of energy for cooking

The Iringa Municipality Council Profile of the 2002 Population and Housing Census, Iringa Regional Report and the 2007/08 Agricultural Sample Census reveal that, firewood remained the most prevalent source of energy for cooking, with 96 percent of agricultural households using the source. The case for most urban households in the Municipality is different, because 57 percent of the households use charcoal, followed by firewood and kerosene or paraffin at 31 percent and 8.4 percent respectively. A small proportion of 10 percent of the households use electricity and bottled gas as the source of energy for cooking. This result indicates that an insignificant number of the households were reported using modern and/or environmental friendly source of energy

for cooking such as electricity, bottled gas and paraffin/kerosene. If the current practice continues, deforestation and depletion of natural vegetation by using firewood and charcoal as main sources of energy will destroy the natural habitat and ecology of Iringa Municipality, and the neighbouring districts.

Figure 13: Percentage of Households by Main Source of Energy for Cooking, Iringa Municipality, 2002 and 2007



Source: NBS, Population and Housing Census, District Profile Iringa Urban, May, 2004, and NBS National Sample Census of Agriculture, Iringa Region, 2008

CHAPTER THREE

Productive Sectors

3.0

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

Agriculture



Horticulture crops like vegetables, tomatoes, sweet pepper and onions are the common crops.

Urban areas which are normally characterized by rapid expansion of human settlements and business centers, to a large extent limit the availability of cultivated land. Based on this, off-farm activities such as business activities, office work, elementary occupations and plant operations happened to be the main source of employment. Iringa Municipality had the highest percentage of agriculture households with off-farm income (99%) of total agriculture households in the district (Off-farm income refers to cash generated from non-agricultural activities). Agriculture employed 29 percent of the municipality's total population as reported during 2002 Population Census.¹ Horticulture crops like vegetables, tomatoes, sweet pepper and onions are the common

¹ National Bureau of Statistics Population and Housing Census Report, Iringa Urban District, 2002.

crops. Staple foods which include maize and paddy are also planted in some areas of the municipality though in small scale.

Distribution of Arable Land

Arable land is the land that is suitable for growing crops. Of the councils' total land area of 33,140 hectares, about 19.6 percent (6,500 hectares) was arable land (Table 3.1). The council has already exploited 96.2 percent (6254.5hectares) of its arable land for agriculture, and it is a sign that the land suitable for agriculture is under pressure.

Table 3. 1: Distribution of Total Arable Land by Ward; Iringa Municipality Council, 2012

Ward	Total land Area (Ha)	Arable Land Area (Ha)	Arable land Under Cultivation (Ha)	% of Arable land under cultivation
Mshindo	33	0	0	0.0
Mlandege	123	0	0	0.0
Mwangata	860	43	42	97.7
Gangilonga	531	0	0	0.0
Mtwivila	3,686	203	197	97.0
Makorongoni	79	0	0	0.0
Kihesa	1,124	0	0	0.0
Mivinjeni	27	0	0	0.0
Ilala	52	0	0	0.0
Kwakilosa	86	0	0	0.0
Kitanzini	68	0	0	0.0
Mkwawa	2,698	180	173	96.1
Kitwiru	2669	123	120	97.6
Ruaha	5128	362	357	98.6
Isakalilo	2803	1,462	1,327.50	90.8
Nduli	13,173	4,127	4,038	97.8
Total	33,140	6,500	6,254.5	96.2

Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Due to the fact that agriculture is not the leading economic activity in the municipality, some wards had no identified size of arable land which would be suitable for agriculture. However, the agricultural activities are more practiced in Nduli ward with 64.6 percent of all cultivated land in the Municipality; followed by Isakalilo ward with 21.2 percent, and Ruaha ward with 5.7 percent.

Contribution to Regional Agricultural Production

The municipality's contribution to regional agriculture production with regard to both food and cash crops is very small since the urban nature of the municipality mostly favours non-agriculture activities. Based on Iringa Regional Sample Census of Agriculture Reports, 2002/03 and 2007/08, the Municipality contributed the least to regional agricultural production in major food crops, maize in particular, and contributes insignificantly to cash crops production as shown in Table 3.2.

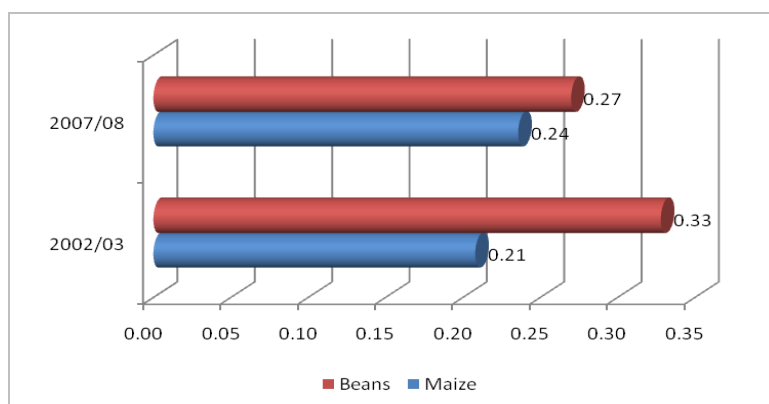
Table 3. 2: District's Share to the Regional Production of Major Food and Cash Crop Production, 2003/04 and 2007/08

Crop	Regional Production (Tonnes)		Iringa Municipality Production (Tonnes)		Percentage Contribution of the Council to the Regional Production	
	2002/03	2007/08	2002/03	2007/08	2002/03	2007/08
Major Food Crops						
Maize	289,410	383,140	602	903	0.21	0.24
Beans	23,479	37,409	77	101	0.33	0.27
Sub-Total	312,889	420,549	679	1,004	0.22	0.24
Major Cash Crops						
Sunflower	803	244	11	4	1.37	1.84
Tomatoes	18,991	32,132	162	181	0.85	0.56
Sub-Total	803	244	11	4	1.37	1.84
Grand-Total	313,692	420,793	690	1,009	0.22	0.24

Source: NBS, Agriculture Censuses Reports 2003/04 and 2007/08, Iringa Report December 2007 and July 2012

Table 3.2 and Figures 14 and 14(a) show the extent to which Iringa Municipality contributes to Iringa region in terms of major food and cash crops production. The contribution of the district during 2007/08 was almost the same as that of 2002/03. Contribution to the production of major food crops increased from 0.22 percent observed in 2002/03 to 0.24 percent in 2007/08. Observation shows that the contribution to the production of major cash crops increased from 1.37 to 1.84 percent.

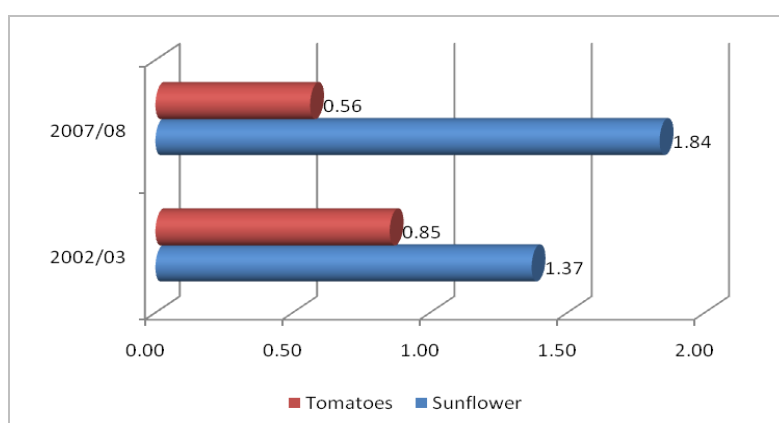
Figure 14: Percentage Contribution of the District to the Regional Agricultural Production- Major Food Crops, 2002/03 and 2007/08



Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Beans led the council major food crops contribution with 0.27 percent; while sunflower contributed 1.84 percent as the leader for cash crops contribution in Iringa region in 2007/08 Agriculture Sample Census. Maize had shown a small increase in 2007/08 as compared to the previous census in 2002/03.

Figure 14. a: Percentage Contribution of the District to the Regional Agricultural Production- Selected Cash Crops, 2002/03 and 2007/08



Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

3.1.3 Food Crops

3.1.3.2 Area under Major Food Crops Cultivation

Despite the increasing population in the municipality, crop growing has been also increasing significantly. Land under major food crops had increased by 4,507.80

hectars from 1,658.0 hectares in 2008/09 to 6,156.8 hectares in 2011/12 as indicated in table 3.3.

The table shows an overall triple increase in hectares under major food crops over the four years period 2008/09 to 2011/12. The increase of the land under food crops was attributed to increased area of Municipality in 2010 where Nduli and Isakalilo wards were added to the Municipality from Iringa Rural.

Table 3.3: Estimated Area (Ha) Under Major Food Crops; Iringa Municipality; 2008/09 – 2011/12

Crop	2008/09	2009/10	2010/11	2011/12
Maize	1224	4732	5,075	5176.5
Beans	366	675	852	869
Sweet potatoes	33	70.6	16	16.3
Vegetables	35	15.5	53.8	55
Kunde/Cow peas	0	0	0	42
Mtama/Sorghum	0	0	0	7
Total	1,658.0	5,493.1	5,996.8	6,165.8

Source: District Executive Director's Office, (Agriculture Department), Iringa Municipality, 2013

(i) Maize



Maize plantation in suburban areas of Iringa Municipal

Maize is the most important food crop and is produced as both staple food and a cash crop. Beans and sweet potatoes are other food crops which are significantly grown. As Table 3.3 shows, the area planted with maize crop has been increasing. The total area planted with maize in the municipality increased by 3,952.50 hectares from 1,224 hectares of 2008/09 to 5,176.50 hectares in 2011/12. The increase in area planted could be an evidence for surplus, which the municipality is experiencing.

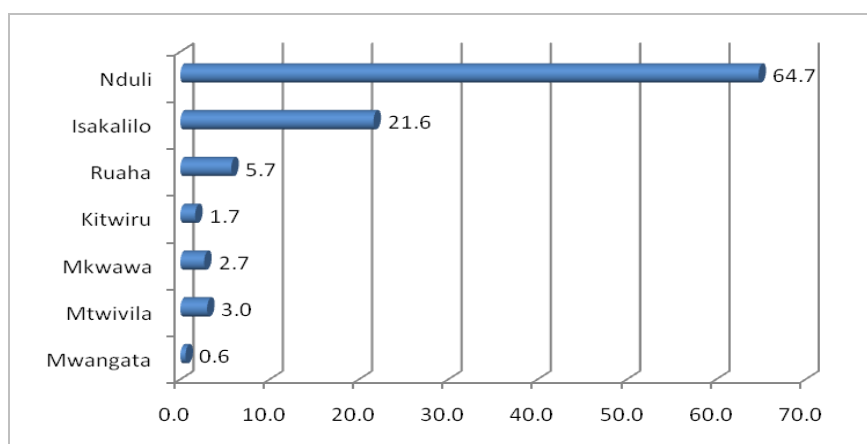
Table 3. 4: Estimated Area (Ha) Under Major Food Crops by Ward; Iringa Municipality; 2011/2012

Ward	Maize	Beans	Sweet potatoes	Vegetables	Cow peas	Sorghum	Total
Mwangata	29.9	5.7	1.4	1.5	1.5	0	40
Mtwivila	155.3	24.5	2.6	4.8	4.6	0	191.8
Mkwawa	138.4	20.3	2.5	1.6	1.7	0	164.5
Kitwiru	86.1	10.8	2.4	10.4	1.6	0	111.3
Ruaha	295.6	43.3	2.7	3.2	2.8	0	347.6
Isakalilo	1119.7	153.6	3	21.9	11.7	1.7	1311.6
Nduli	3351.5	610.8	1.7	11.6	18.2	5.3	3999.1
Total	5176.5	869	16.3	55	42.1	7	6165.9

Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

More hectares were grown with maize (64.7 percent) in Nduli ward, of all arable land under maize in the Municipality followed by Isakalilo (21.6 percent), Ruaha (5.7 percent) and Mtwivila wards (3.0 percent) compared with other wards as shown in Table 3.4 and figure 15.

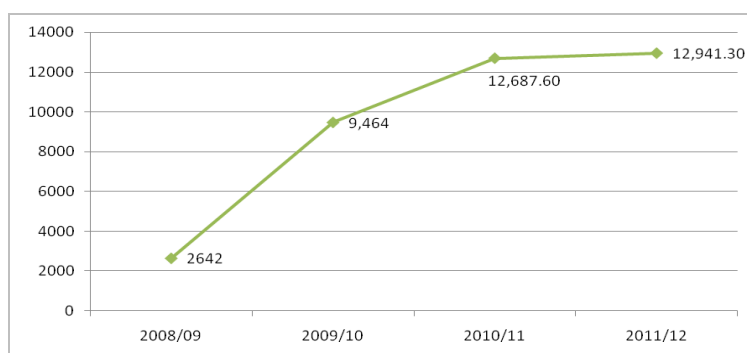
Figure 15: Percentage Area under Maize Cultivation by Ward; Iringa Municipality, 2011/12



Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Corresponding to the increase of area under maize, there was an increase in total production from 2,624 tonnes to 12,941.30 tonnes between 2008/09 and 2011/12 as shown in Table 3.5 and figure 16.

Figure 16: Time Series Data on Maize Production (Tons), Iringa Municipality; 2008/09 to 2011/12



Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Table 3.5: Estimated Production in tonnes of Major Food Crops 2008/09 to, 2011/12; Iringa Municipality, 2012

Crop	2008/09	2009/10	2010/11	2011/12
Maize	2642	9,464	1,2687.6	12,941.30
Beans	552	877	1533.6	1,564.30
Sweet potatoes	199	425.7	240	241
Vegetables	265	189.5	635.5	299.2
Cow peas	0	0	0	56
Sorghum	0	0	0	14
Total	3,658	10,956	15,096.7	15,115.80

Source: District Executive Director's Office, (Agriculture Department), Iringa Municipality, 2013

Table 3.5(a) shows that, high maize production was realized in Nduli ward with 64.7 percent of all maize produced in the Municipality, followed by Isakalilo ward with 21.6 percent. Least production was observed in Mwangata ward with 0.6 percent followed by Kitwiru ward with 1.7 percent. Looking closely at the results, maize production was directly proportional to the area under maize cultivation in the respective ward.

Table 3.5 a: Distribution of Municipality Production in tonnes of Major Food Crops by Wards; Iringa Municipality, 2011/12

Ward	Maize	Beans	Sweet potatoes	Vegetables	Cow peas	Sorghum
Mwangata	74.7	10.3	20.7	8.2	2	0
Mtwivila	388.3	44.2	38.5	26.1	6.2	0
Mkwawa	346	36.5	36.9	8.7	2.3	0
Kitwiru	215.3	19.4	35.5	56.6	2.1	0
Ruaha	739	77.9	39.9	17.4	3.7	0
Isakalilo	2799.3	276.5	44.4	119.1	15.4	3.4
Nduli	8378.7	1099.5	25.1	63.1	24.3	10.6
Total	12,941.3	1,564.3	241	299.2	56	14

Source: District Executive Director's Office, (Agriculture Department), Iringa Municipality, 2013

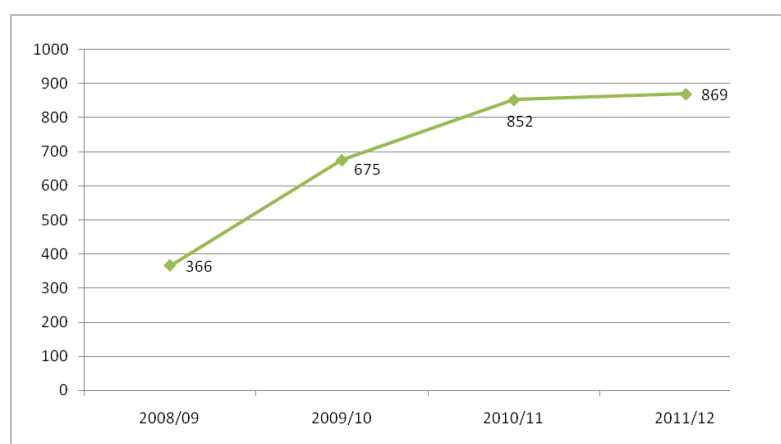
(ii) Beans

“Pulse crops” refers to a group of more than sixty different grain legume crops grown around the world. The seeds of pulse crops are important in human nutrition. They are typically made up of 20-25% protein and 40-50% starch; they are also rich in dietary fibre and usually have only small amounts of oil. The protein of pulse seeds is high in the amino acids lysine and methionine, making pulses nutritionally complementary to cereals, which are deficient in these two essential amino acids. Pulses are the main source of protein in the diet of vegetarians, and feature prominently in the traditional cuisine of virtually every region of the globe. Seeds and pods of many pulse crops are also used as fresh vegetables when the seeds are still tender. Pulses are mainly consumed as human food, but some crops such as field pea and faba bean are also used in animal feeds as a source of protein and starch. Pulses are usually consumed in the form of soup or stew, cooked directly from the whole or split dry seeds, or in canned form in some countries. Most pulses, but especially chickpea, are also prepared as flour.

Beans dominate the production of pulse crops in Iringa Municipality. The area planted with beans in the Municipality had increased by 503 hectares from 366 hectares in 2008/09 to 869 hectares in 2011/12 respectively as shown in table 3.3. Figure 17 shows an increasing trend of area under beans crop for the period of 2008/09 to 2011/12.

Beans were grown in more hectares in Nduli ward at 70.3 percent of all arable land in the Municipality, followed by Isakalilo (17.3 percent), Ruaha (5.0 percent) and Mtwivila wards (2.8 percent) compared with other wards as shown in table 3.4.

Figure 17: Estimated Area (Ha) under Beans Crop; Iringa Municipality; 2008/09 to 2011/12

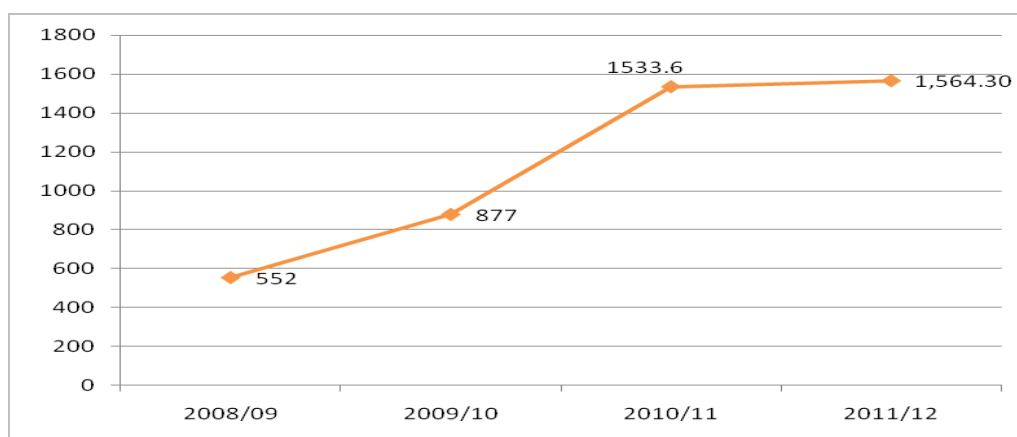


Source: Municipality Director’s Office, (Agriculture Department), Iringa Municipality, 2013

Table 3.5(a) shows that high beans production was realized in Nduli ward at 70.3 percent of all beans produced in the Municipality, followed by Isakalilo ward at 17.3 percent. Least production was observed in Mwangata ward at 0.7 percent followed by Kitwiru ward at 1.2 percent. Looking closely at the results, maize production was directly proportional to the area under maize cultivation in the respective ward.

There was an increase in total production of beans by 1,012.3 tonnes from 552 tonnes in 2008/09 to 1,564.3 tonnes in 2011/12 as shown in Table 3.5(a) and figure 18. Beans production in Iringa Municipality had increased dramatically.

Figure 18 : Time Series Data on Beans Production (Tons), Iringa Municipality 2008/09 to 2011/12



Source: Municipality Director's Office, (Agriculture Department), Iringa Municipality, 2013

3.1.4.3 Area under Major Cash Crops Cultivation

Although the municipality land is very suitable for cultivation of cash crops of various types, land scarcity associated with the urban nature of the municipality is the limiting factor for large scale farming. Small scale farming of sunflower and tomatoes had been observed in some wards of the municipality as Table 3.6 indicates. According to the table, from 2009/10 to 2012/13 the area averaged annually at 88.1 hectares was used for planting cash crops.



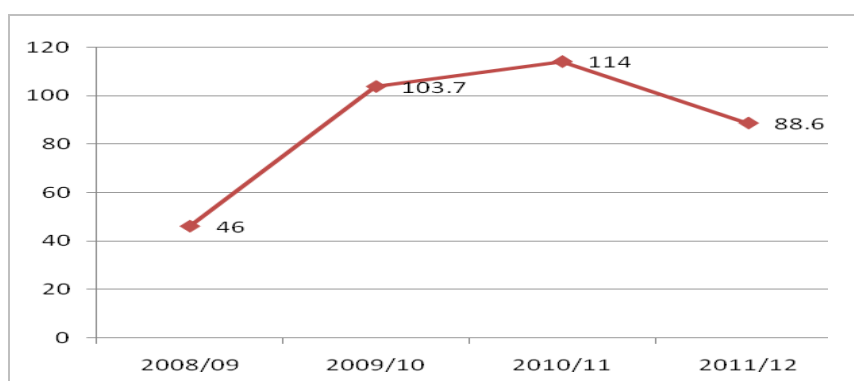
Tomatoes are grown much in Kitwiro ward

Table 3. 6: Estimated Area (Ha) under Major Cash Crops by Ward; Iringa Municipality; 2008/09-2011/12

Crop	2008/09	2009/10	2010/11	2011/12
Tomatoes	30	37.2	54	55.1
Sunflower	16	45	40.5	13.6
Soya	0	21.5	19.5	19.9
Total	46	103.7	114	88.6

Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Figure 19: Estimated Area (Ha) under Major Cash Crops; Iringa Municipality; 2008/09 to 2011/12



Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Figure 19 shows a slight increase of the area from 2009/09 to 2010/11, and then it dropped in year 2011/12. The decrease was observed in the areas under sunflowers and soya, which was attributed by insufficient market for the crops.

Table 3.6 a: Estimated Area (Ha) Under Major Cash Crops by Ward; Iringa Municipality; 2011/2012

Ward	Tomatoes	Sunflower	Soya	Total
Mwangata	1.4	0.2	0.4	2
Mtwivila	2.8	1.6	0.8	5.2
Mkwawa	5.6	2.3	0.6	8.5
Kitwiru	8	0.3	0.4	8.7
Total	17.8	4.4	2.2	24.4

Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Cash crops were grown mostly in Kitwiru ward, followed by Mkwawa and Mtwivila wards. Tomatoes are grown much in Kitwiru ward, and sunflower is well grown in Mkwawa ward; while soya cultivation is practiced a bit well in Mtwivila and Mkwawa wards.

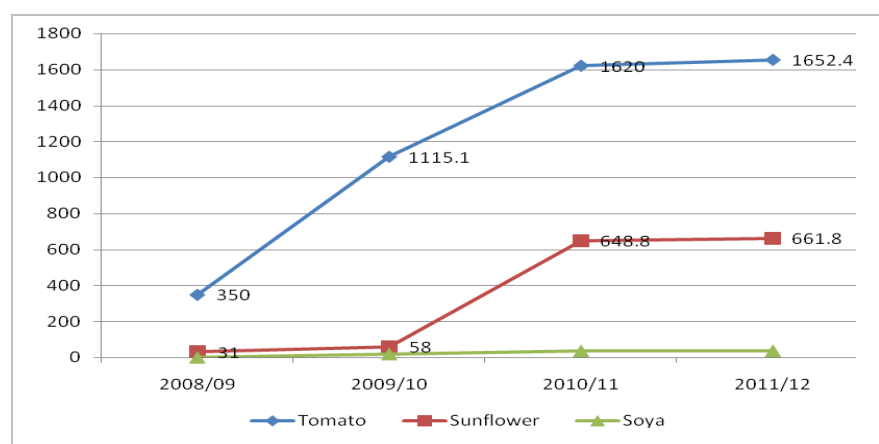
Table 3.7: Estimated Municipality Production in tonnes of Major Cash Crops; Iringa Municipality, 2008/09 to 2011/12

Crop	2008/09	2009/10	2010/11	2011/12
Tomato	350	1115.1	1620	1652.4
Sunflower	31	58	648.8	661.8
Soya	0	19.4	35.1	35.8
Total	381	1,192.5	2,303.9	2,350

Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Production of cash crops had increased significantly by 1,969 tonnes from 381 tonnes in 2008/09 to 2,350 tonnes in 2011/12 as indicated in Table 3.7 and figure 20.

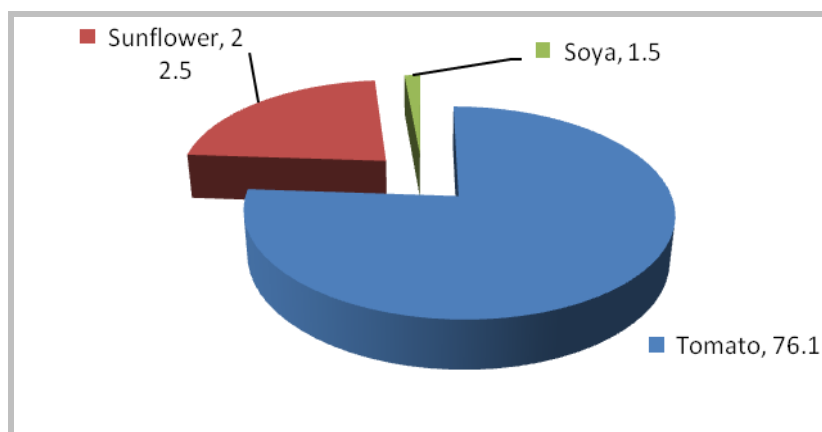
Figure 20: Time Series Data on Cash Crop Production (Tons), Iringa Municipality; 2008/09 to 2011/12



Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Over a period of four seasons 2008/09 to 2011/12, tomato is a leading cash crop in Iringa Municipality by 76.1 percent of all production of such crops in that period, followed by sunflower at 22.5 percent, while soya was the least crop, contributing only 1.5 percent of total cash production in the Municipality in that period as shown in figure 20.

Figure 21: Percentage Iringa Municipality Total Production of Major Cash Crops; Iringa Municipality, 2008/09 to 2011/12



Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

Tomato is the most important cash crop and is produced as both food and a cash crop. Table 3.7(a) shows that, high tomato production was realized in Nduli ward at 40.5 percent of all tomatoes produced in the Municipality in 2011/12, followed by Isakalilo ward at 15.8 percent and Kitwiru at 14.5 percent. Least production was observed in Mwangata ward at 2.5 percent followed by Mtwivila ward at 5.1 percent.

Table 3.7 a: Distribution of Municipality Production in tonnes of Major Cash Crops by Ward; Iringa Municipality, 2011/12

Ward	Tomatoes	Sunflower	Soya
Mwangata	42	9.7	0.7
Mtwivila	84	77.9	1.4
Mkwawa	167.9	111.9	1.1
Kitwiru	239.9	14.6	0.7
Ruaha	188.9	73	2.9
Isakalilo	260.9	155.7	7.2
Nduli	668.8	219	21.8
Total	1,652.4	661.8	35.8

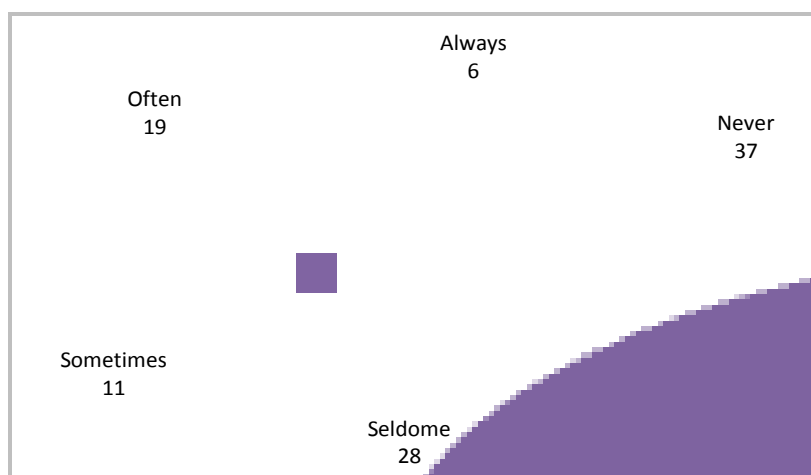
Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013

(i) Food Situation

According to the Iringa region report of the 2007/08 Agriculture census, a total of 512 agricultural households were interviewed and as per figure 22, 37 percent reported to have never experience food shortage, 28 percent seldom experienced, 11 sometimes experienced, 11 percent often experienced and 6 percent always experienced food shortage.

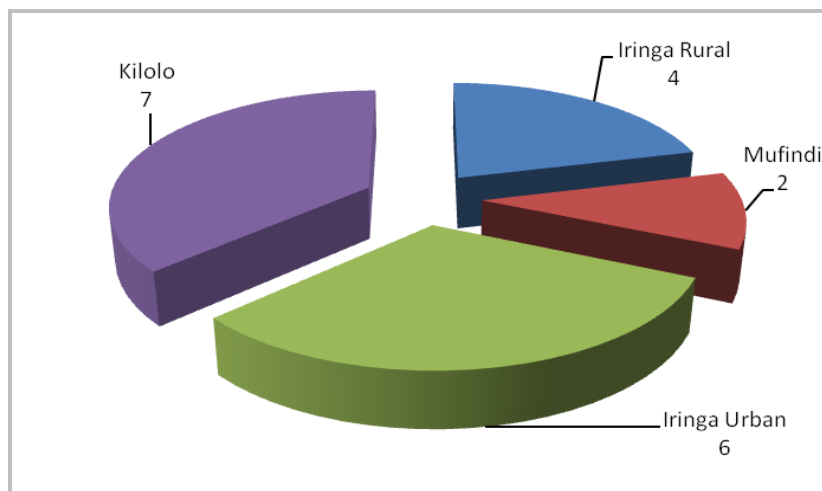
Iringa Municipality and other districts were having between 0-7 percent of households reported always experiencing food shortage as shown by figure 22 (a). Iringa Municipality was the second in the region by having high percentage of such households which always were experiencing food shortage. The Municipality managed to curb food shortage by encouraging her residents to cultivate drought resistant crops and those of shorter gestation period. Such crops are cassava, sweet potatoes and composite beans etc. Irrigation agriculture though practiced in very few wards in small scale farming, contributes somehow to making the district a bit secure in terms of food security in Iringa Municipality.

Figure 22: Percentage number of Agricultural Households Reporting the status of food satisfaction of the household during the preceding year, Iringa Municipality; 2007/08 Agricultural Year



Source: NBS- 2007/08 Agriculture Sample Census, Iringa Regional report, July 2012

Figure 22. a: Percentage number of Agricultural Households reporting the status of Always Experiencing Food Shortage during the Preceding Year by District, Iringa Region; 2007/08 Agricultural Year



Source: NBS- 2007/08 Agriculture Sample Census, Iringa Regional report, July 2012

3.1.4 Irrigation Prospects



Irrigation observed in lower land areas of Kitwiro

Irrigation farming in Iringa municipality is not very common although, it is feasible due to availability of rivers such as Little Ruaha river supplying water in Isakalilo ward, Mawelewele spring in Mwangata ward, and Kitumbuka spring in Kitwiro ward. Out of the total land area of 527 hectares suitable for traditional irrigation; only 100 hectares (22.7 percent) were already under irrigation (Table 3.8). Mostly preferable crops for irrigation were maize and horticultural crops.

Table 3. 8: Irrigation Prospects by Ward - Iringa Municipality, 2011/12

Ward	Estimated Potential Area (Ha)	Area Under Irrigation (Ha)	Percentage Area Under Irrigation	Major crops
Mwangata/Mkwawa	100	25	25.0	Kale, Chinese cabbage, amaranths, African egg plant
Kitwiru	100	40	40.0	Chinese cabbage, maize, amaranths, kale (figili), sweet pepper, tomatoes, African egg plant
Isakalilo (mkoga)	240	25	25	Chinese cabbage, maize, cucumber.
Other areas including Mtwivila and Ruaha	87	10	10	Chinese cabbage, amaranthus, Swisschard, Kale, Tomatoes.
Total	527	100	100	

Source: Director's Office, (Agriculture Department), Iringa Municipality, 2013



Chinese cabbage are also grown in the valleys of Iringa Municipality

According to the 2007/08 Agriculture Sample Census, hand bucket/watering cans were the most common means of getting water for irrigation with 80 percent of the total households engaged in irrigation in the Municipality. This was followed by gravity method which had 20 percent of all households engaged in irrigation in the Municipality.

3.1.6 Farm Inputs

Reducing rural poverty by delivering appropriate agricultural inputs and improving output markets for Tanzanian farmers are among the objectives of "Kilimo Kwanza" (Agriculture First) in Tanzania. In Kilimo Kwanza, priority is given in transforming traditional agriculture which depends on hand hoe to mechanized agriculture and

improving agriculture extension services through employing more extension officers. Further to that, distribution of chemical fertilizers including establishing credit facilities for farmers, and setting up storage through a warehouse receipt system was introduced to reinforce crops production.

For Iringa Municipality, like other districts in Tanzania; the implementation of ‘Kilimo Kwanza’ has led to the increase in availability of agricultural inputs especially chemical fertilizers and improved seeds among small scale farmers. However, scientific research is needed to investigate the impact of “Kilimo Kwanza” on crops productivity.

The 2007/08 Agricultural Sample Census results show that, Iringa Municipality has a smallest planted area with improved seed in Iringa region and use of implements was the lowest. The use of fertilizer and irrigation in the district was also the lowest in the region.

Poor accessibility, high prices and untimely delivery of these inputs have hampered the development of agriculture in the Municipality, especially in sub urban areas where agriculture activities are more active than in urban areas. Furthermore, the low use of farms inputs is attributed by low income and insufficient knowledge on inputs use.

3.1.6.1 Farm Implements

Agricultural implements are a necessary for efficient production. Table 3.9 shows type of modern farm implements available in Iringa Municipality. The table shows that, in 2011/12 season there were significant numbers of modern farm implements in the municipality. For 16 wards of the municipal and 25 tractors available; each ward had an average of one tractor. Moreover, although the number of implements was not sufficient (overall supply is only 6.6 percent) to meet the demand. Under proper management the district would be in a position to increase the crop production and get food surplus as well as curb income poverty through selling the surplus food and cash crops.

Table 3. 9: Availability of Agriculture Implements in Iringa Municipality;2011/12

Type of Implements	Demand	Supplied	Shortfall/ Excess	Percentage Supplied
Ox plough	232	13	219	5.6
Ox harrow	232	2	230	0.9
Oxcart	232	14	218	6.0
Ox chain	232	14	218	6.0
Ox shares	232	17	215	7.3
Tractors	35	18	17	51.4
Power tillers	10	7	3	70.0
Zege Pumps	30	21	9	70.0
All	1235	106	1129	8.6

Source: District Executive Director's Office (Agriculture Department), 2013

3.1.6.2 Chemical/Inorganic Fertilizers

The use of fertilizers for growing crops in the Municipality is relatively low compared to other councils in Iringa region annually. The 2007/08 Agricultural Census reports that, the area using inorganic fertilizer in Iringa Municipality was only 611 ha (0.6 percent in the region) and with regard to organic fertilizer use, Iringa Urban was last in the region by having only 28 hectors, (0.1percent).

Table 3.10 and figure 23 (a) highlight the shortage of fertilizers as the quantity distributed to farmers decreased by 35.5 percent with respect to the demand, although quantity distributed had increased by 2,460.7 tons from 436 tonnes in 2008/09 to 2,896.7 tonnes in 2011/12. Supply by type of fertilizer was relatively good; though there was a remarkable increase in demands of chemical fertilizers observed over the crop season of 2008/09 to 2011/12, which was a good indication of the increase of awareness among farmers about the use of chemical fertilizers for better crop yields.

The difference shown from 2007/08 Agricultural Sample Census and supply of fertilizers by the Municipality may be attributed by the fact that, some of the supplied farmers were from the neighbouring districts, such as Iringa Rural and Kilolo, since Iringa Municipality is the main shopping centre for the three councils.

Table 3. 10: Availability of Chemical Fertilizers (Tones) by Type: 2008/09 to 2011/12

Type of Fertilizers	2008/09		2009/10		2010/11		2011/12	
	Demand	Distributed	Demand	Distributed	Demand	Distributed	Demand	Distributed
DAP	221.6	218	811.4	233.75	781.3	485	587.2	575.5
UREA	221.6	218	703	679.25	676.3	451	669.5	670.7
COMPOSIT	0	0	100	75	0	0	3,352.2	1650.5
Total	443.2	436	1614.4	988	1457.6	936	4608.9	2896.7

Source: District Executive Director's Office (Agriculture Department), 2013

Figure 23: Percentage supply (Availability) of Chemical Fertilizers (Tones) by Type: 2008/09 to 2011/12

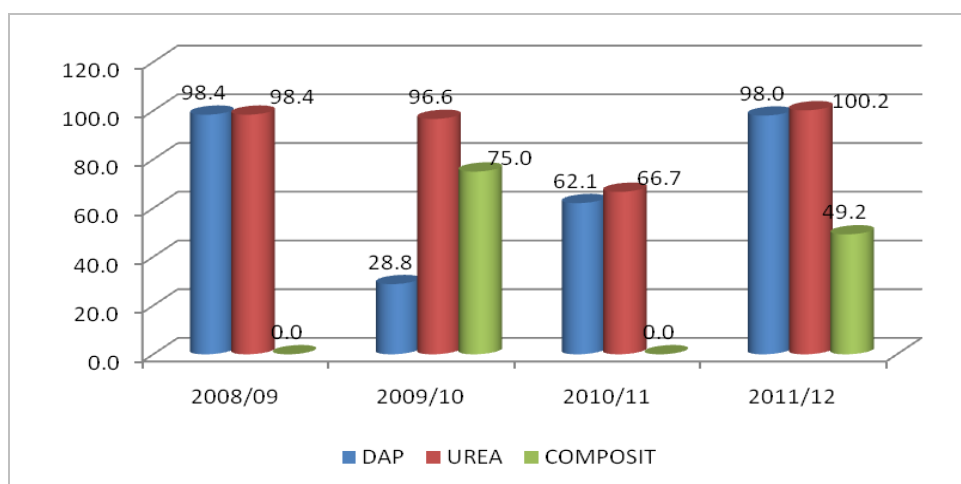
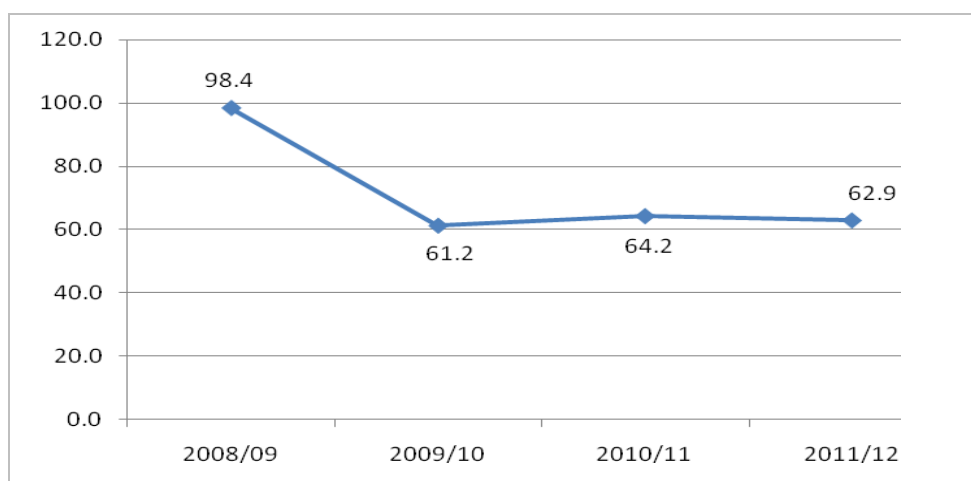


Figure 23. a: Percentage of Total Supply (Availability) of Chemical Fertilizers (Tones): 2008/09 to 2011/12



Source: District Executive Director's Office (Agriculture Department), 2013

3.1.6.4 Pesticide and Herbicides Use

Plant pests and diseases are among factors which limit agriculture production. Crops such as tomatoes and other horticulture crops demand the use of pesticides for control of insect infestation and plant diseases for optimum crop harvests. Pesticides and fungicides are chemicals used for controlling insects and diseases, while herbicides are used to control weeds.

Figure 24: Distribution trend of Fungicides (in tonnes); Iringa Municipality; 2008/09 - 2011/12

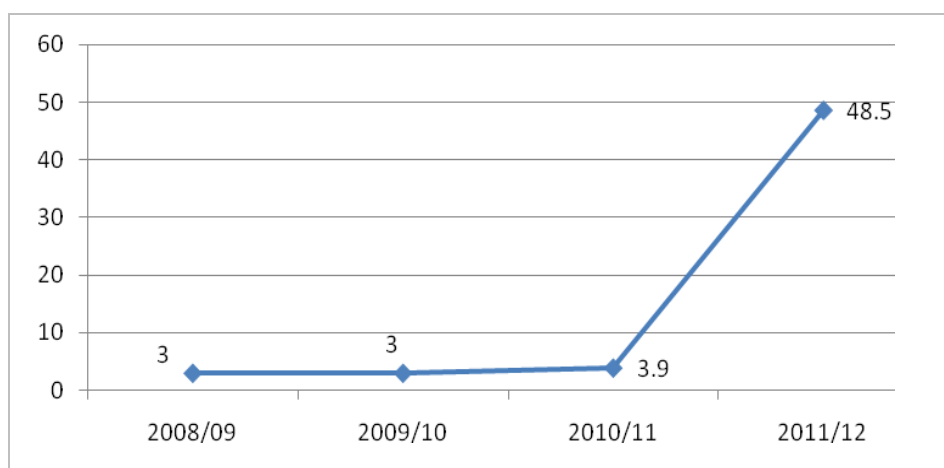
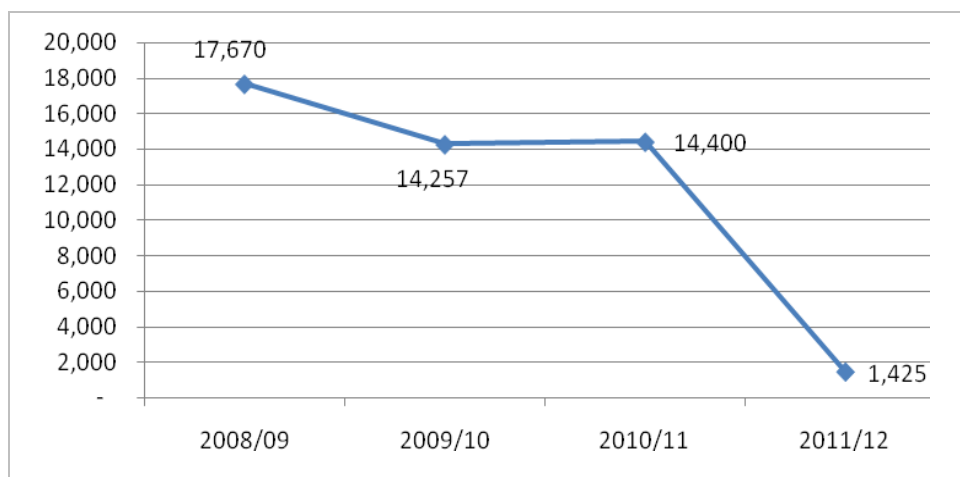


Figure 24. a: Distribution trend of Insecticides (in litres); Iringa Municipality; 2008/09 - 2011/12



Source: District Executive Director's Office (Agriculture Department), 2013

Iringa Municipality reported to have the smallest percentage of pesticides and herbicides usage in the surveyed Agricultural households during the 2007/08 Agricultural Sample Census. Figure 23(a) depicts a drastic drop in distribution of insecticides; while fungicides, though had increasing trend, the amount distributed was very little in the period of four years just after the Agricultural census.

3.1.7 Policy Implication in Agriculture

Agriculture sector performance in terms of food and cash crop production was not good. The decline in agricultural production is associated with the increase of infertile land caused by poor agricultural practices as well as adverse weather condition. However, failure in implementing policy or bylaws governing proper land use is the cause of destruction of soil fertility. Policies/bylaws governing proper management of natural vegetation should be adhered to for sustainable weather condition. In addition, National Agricultural Input Voucher Scheme (NAIVS) policy implementation procedures should stick to guidelines for better agriculture production in the district.

3.1.8 Agricultural Extension

Table 3. 11: Availability of Agriculture personnel (Officers) by Ward - Iringa Municipality; 2011/12

Ward	Demand	Available		Total	Deficit
		Male	Female		
Mshindo	0	0	0	0	0
Mlandege	1	0	1	1	0
Mwangata	1	0	1	1	0
Gangilonga	1	0	0	0	1
Mtwivila	1	0	1	1	0
Makorongoni	1	0	1	1	0
Kihesa	1	0	1	1	0
Mivinjeni	1	1	0	1	0
Ilala	0	0	0	0	0
Kwakilosa	1	1	0	1	0
Kitanzini	0	0	0	0	0
Mkwawa	2	1	1	2	0
Kitwiru	1	0	0	0	1
Ruaha	2	2	0	2	0
Isakalilo	1	1	0	1	0
Nduli	3	3	0	3	0
Total	17	9	6	15	2

Source: District Executive Director's Office (Agriculture Department), 2013

Agricultural extension describes the services that provide rural people with the access to knowledge and information they need to increase productivity and sustainability of their production systems and improve their quality of life and livelihoods. It includes, but is not limited to, the transfer of knowledge generated by agricultural research.

In recent years more attention has been paid to the capacity of extension organizations, particularly those in the public sector, regarding, for instance, their incentive systems,

learning capacity, range of expertise (including marketing and farmer facilitation) and relationships with other related stakeholders, such as research organizations, non-government organizations (NGOs) and agricultural service providers in the private sector.

Since 2003, the Government of Tanzania and development partners have been working closely to develop a strategy and implementation plan to strengthen agricultural services, in support of the Agricultural Sector Development Strategy and its operationalisation Programme (ASDS/ASDP). A unified agricultural services programme that ensure close integration of the various elements of agricultural services, in particular research, extension, training as well as information and Communication have been developed. One of the implementation of the programme, in line with 'Kilimo Kwanza', was distribution of agricultural officers to each ward, where they work closely with farmers through 'shamba darasa's training, consultation and other technical support. Availability of agriculture personnel is one of the important aspects in attainment of 'Kilimo Kwanza' target, not only in Iringa Municipality, but to the whole country.

According to the National Sample Census of Agriculture 2007/08 in Iringa Municipality district, 80 percent of the surveyed households received crop advice and other services from agriculture extension officers; of whom 89.7% received from Government extension officers and 18.2% received such services from NGOs and Development Project officers.

Table 3.11 shows that, Iringa Municipality has managed to station agricultural officers in most wards with availability of such officers at 88.2 percent of all required field officers in the district. Nduli ward had 3 officers and Mkwawa ward had 2 agricultural officers; the rest had either one officer or none. Efforts are needed to extend distribution of agricultural officers to all wards and to lower levels for better effectiveness of agricultural extension services to improve agricultural production.

3.1.9 Investment Opportunities in Agriculture Sector

Due to urban nature and the culture of Iringa municipality residents being more active in non-agriculture activities, the municipality found to have limited investment opportunities in agriculture sub sector such as:-

Large scale horticultural crops production (vegetables, tomatoes and sweet pepper) for export to neighbouring regions,

By being the region's business and financial hub, agricultural inputs or implements can be brought in the municipality and sold to other districts at affordable prices. Further to that, with the geographical position favouring easy accessibility by road network, Iringa municipality can be a reliable place for assembling agricultural mechanical equipment and distributing them to other regions; and

Food processing industries and fruits canning: The municipality is an ideal place for such industries to make use of agricultural products flocking in the municipality from nearby districts such as Kilolo, Iringa Rural, Mufindi and other regions.

3.2 Livestock

3.2.1 Introduction

The Urban nature of the Municipality has made livestock keeping not much of an economic activity. Also, shortage of grazing land and by laws introduced by Municipality's in the country which prevent massive livestock keeping are among the reasons for the Municipality to have the lowest percent of households involved in livestock keeping in the region. However, cattle, goat, sheep, pigs and poultry are some of the livestock kept under zero grazing in the Municipality.

3.2.2 Livestock Population

Table 3.12 displays estimated livestock population by ward in Iringa Municipality in 2012. Poultry with 82,896 population was the dominant livestock which accounted for 84.99 percent of the total livestock population. Cattle was the second popular livestock (6,245 cattle; 6.40 percent), pigs ranks the third (4,031; 4.13 percent), followed by goats (3,263 goats; 3.35 percent). However, sheep and donkeys are the least populated livestock.

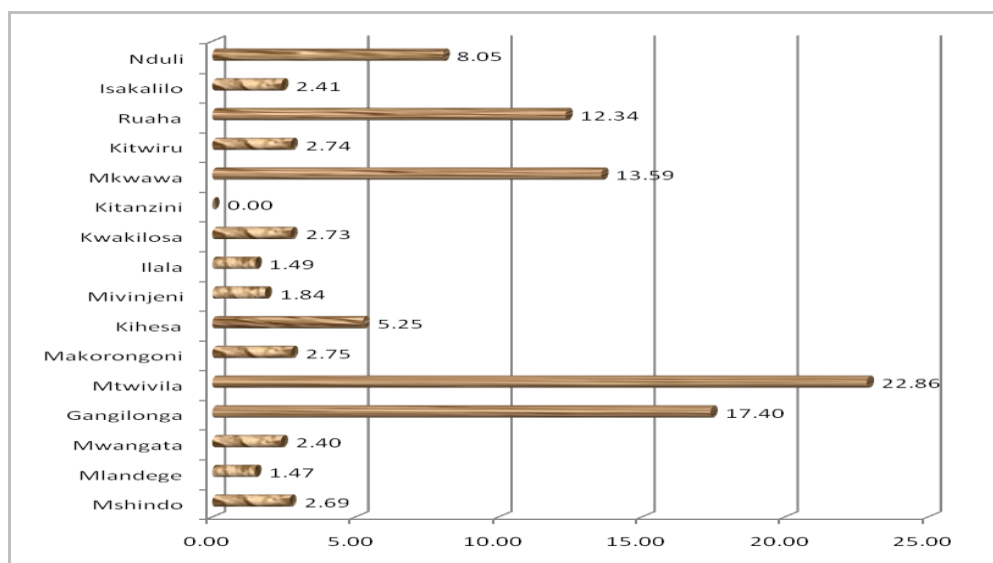
Table 3. 12: Estimated Population Distribution of Livestock by Ward, Iringa Municipality, 2011/2012

Ward	Cattle	Goats	Sheep	Donkeys	Pigs	Poultry	Dogs
Mshindo	7	15	0	0	11	2587	98
Mlandege	17	8	1	0	42	1365	109
Mwangata	585	182	42	2	74	1452	107
Gangilonga	208	109	0	0	250	16,404	364
Mtwivila	346	264	2	32	392	21,264	320
Makorongoni	36	43	4	0	0	2,603	133
Kihesa	42	25	0	0	250	4,803	200
Mivinjeni	0	0	0	0	13	1778	73
Ilala	10	2	0	0	30	1408	90
Kwakilosa	10	68	18	0	12	2557	62
Kitanzini	0	0	0	0	0	0	0
Mkwawa	442	648	259	26	679	11201	431
Kitwiru	544	48	43	0	649	1387	170
Ruaha	1024	314	162	12	746	9777	680
Isakalilo	793	250	64	0	317	928	100
Nduli	2181	1287	420	16	566	3382	388
Total	6245	3263	1015	88	4031	82896	3,325

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

Distribution of livestock population by ward as illustrated in figure 25 revealed that Mtwivila had the highest concentration of livestock of all types (22,300, 22.86 percent of total livestock in the Municipality) and Mlandege ward had the least number of livestock (1,433, 1.47 percent), while Kitanzini had none. Further analysis of the table indicates that the largest number of poultry was found in Mtwivila ward (21,264; 25.65 percent of all poultry in the Municipality), followed by Gangilonga (16,404; at 19.79 percent). Nduli ward had the highest concentration of cattle (2,181; 34.92 percent of all cattle in the Municipality) followed by Ruaha ward (1,024; 16.40 percent). Ruaha ward had the largest number of pigs (747; 18.51 percent of all pigs in the Municipality) followed by Mkwawa ward (679; 16.84 percent).

Figure 25: Percentage Distribution of Livestock Population by Ward; Iringa Municipality, 2012



Source: District Executive Director's Office (Livestock Department), 2013

3.2.3 Cattle Population



The largest number of cattle (indigenous and dairy) was found in Nduli ward of Iringa Municipality

Table 3.13 shows that indigenous and improved dairy cattle were the only cattle type at 46.1 percent and 53.9 percent respectively in the Municipality in 2012. The ward with the largest number of cattle was Nduli which had about 2,181 cattle (34.9percent of the total cattle in the Municipality). This was followed by Ruaha ward (1,024 cattle, 16.4percent), and Isakalilo ward (703 cattle, 11.3 percent. Least number of cattle was in Mshindo ward (7 cattle, 0.1percent); Ilala and Kwakilosa each had 10 cattle (0.2 percent each). Nduli ward had the largest number of dairy cattle in the Municipality (55.1 percent of all dairy cattle in the Municipality) followed by Mkwawa ward (10.4

percent), and Ruaha ward (8.3 percent). Indigenous cattle were mainly found in Ruaha ward (25.9 percent of all indigenous cattle in the Municipality), followed by Isakalilo ward (20.9 percent), and Mwangata (16.8 percent).

Table 3. 13: Distribution of Cattle Population by Type and Ward; Iringa Municipality; 2012

Ward	Indigenous Cattle	Improved Dairy Cattle	Total	Percentage of cattle by ward Total
Mshindo	4	3	7	0.1
Mlandege	4	13	17	0.3
Mwangata	484	101	585	9.4
Gangilonga	18	190	208	3.3
Mtwivila	211	135	346	5.5
Makorongoni	4	32	36	0.6
Kihesa	28	104	132	2.1
Ilala	3	7	10	0.2
Kwakilosa	0	10	10	0.2
Mkwawa	91	351	442	7.1
Kitwiru	356	188	544	8.7
Ruaha	746	278	1024	16.4
Isakalilo	602	101	703	11.3
Nduli	325	1856	2181	34.9
Total	2876	3369	6245	100.0
Percentage by Type	46.1	53.9	100.0	

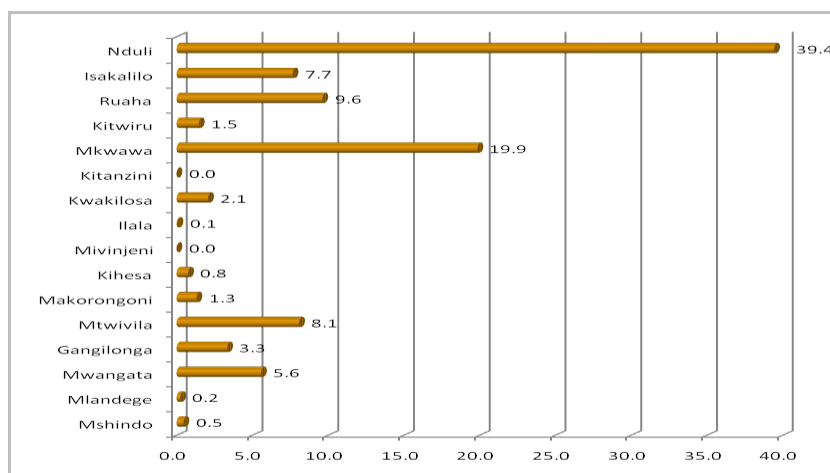
Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

3.2.4 Goat population

Goat rearing was the fourth most important livestock keeping activity in Iringa Municipality. Table 3.14 shows that, the ward with the largest number of goats was Nduli which had about 39.4 percent of the total goats in the Municipality. This was followed by Mkwawa ward (19.9 percent) and Mtwivila ward (11.3 percent). Other wards were as shown in figure 25 and Table 3.12

The 2007/08 Agricultural Sample Census results shows that, goat husbandry in the Municipality was dominated by the indigenous breeds that constituted 59.6 percent of the surveyed total goats in Municipality, while Improved dairy goats constitute 40.4 percent. Indigenous goats were 915 goats and improved dairy goats were 620.

Figure 26: Percentage Distribution of Goats by Ward, Iringa Municipality, 2012



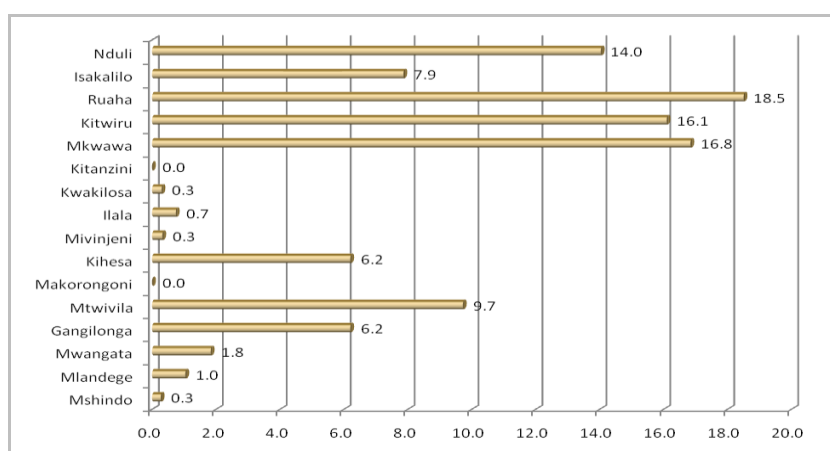
Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

3.2.5 Pig Production

Pigs play an increasingly important role in the livelihood of both urban and sub urban communities. In other areas of the country, community organizations have been practising pig keeping purposely for improving their livelihood.

Pigs were the third important livestock in the Iringa Municipality after poultry and cattle. The ward with the largest number of pigs was Ruaha ward with 18.5% of the total pigs' population in the Municipality, followed by Mkwawa 16.8 percent, Kitwiru ward 16.1percent, and Nduli ward with 14.0 percent. Other wards were as shown in table 3.12 and figure 27.

Figure 27: Percentage Distribution of Pigs by Ward, Iringa Municipality, 2012



Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

3.2.5 Poultry farming



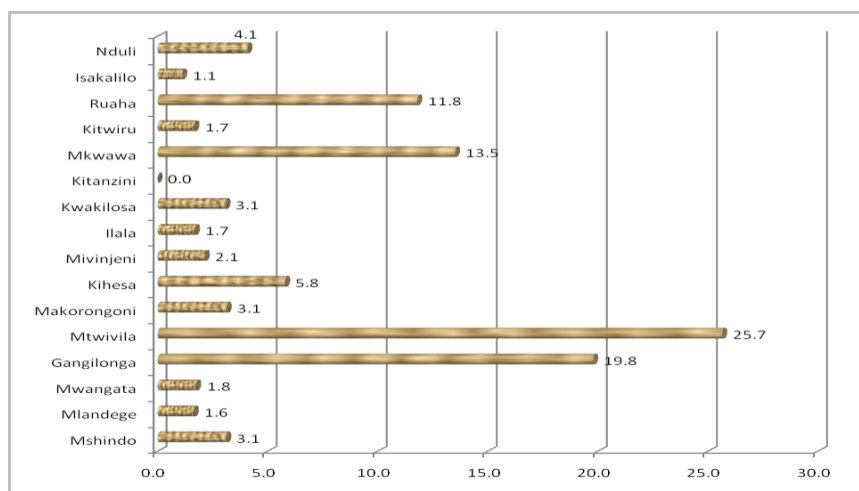
Poultry keeping is practiced by many residents of Iringa Municipality

Poultry is by far the largest livestock group and is estimated to be about 14 000 million, consisting mainly of chickens, ducks and turkeys in the world (FAO 1999). In total, poultry products (eggs and meat) constitute 30% of all animal protein consumed worldwide. Within the last 10 years, this proportion has increased from 20% to 30% of all animal protein and is predicted to increase to 40% before the year 2015 (IFPRI 2000).

Poultry farming plays a significant role in rural and urban people's life and contributes significantly to poverty alleviation and improvement of food security with high nutrition. In Iringa Municipality, poultry farming is an emerging industry and hygienic poultry production can pave way to better income and sustainable development. Moreover, growth of this industry involves a lot of women and thus provides a strong base for women empowerment in this area. Due to poverty, high population density and many landless people, special effort is required to reach the poor and landless. Simple changes in the management of villages, chickens can significantly improve production and the living conditions of many rural families in terms of enhanced nutrition and income generation through the sale of surplus chickens or eggs. The poultry sector in Iringa Municipality was dominated by chicken production.

In 2011/12, the ward with largest number of chicken was Mtwivila with 21,264 chickens (25.7 percent of the total chicken in the Municipality) followed by Gangilonga ward (16,404 chicken, 19.8percent), Mkwawa ward (384,927 chickens, 13.5 percent) and Ruaha ward (9,777 chicken, 11.8 percent). Other wards were as shown in table 3.12 and figure 28.

Figure 28: Percentage Distribution of Poultry by Ward, Iringa Municipality, 2012



Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

3.2.7 Grazing Land Area

Grazing land is defined as the land that is available for the grazing needs of livestock. It excludes all tsetse fly infested areas, all wildlife and forest reserves also tree plantations, but it includes game controlled areas. In many cases it overlaps arable land and areas for 'other use'. Due to urban characteristic there is a serious shortage of grazing land in the municipality. Zero grazing, however, happens to be the only means of livestock keeping and feeding.

3.2.8 Livestock Infrastructure



An ultra-modern abattoir being built in the Iringa Municipality

Livestock quality improvement is limited due to difficulties in accessing facilities capable of controlling or preventing animal diseases. Diseases affect animal health and

reduce both meat and milk production in terms of quality and quantity and in some cases because death to the animal affected. Delivery of livestock health services depends on facilities such as dips, veterinary health centres and water sources. Table 3.14 depicts livestock infrastructure which were observed in the Iringa Municipality in 2012. The infrastructures seemed to be inadequate as most of the wards lack the facilities.

Table 3. 14: Distribution of Livestock Infrastructure by Ward, Iringa Municipality, 2012

Ward	Working dips	Crushes	Hides/skin sheds	Abattoirs	Slaughter house	Livestock development centre(LDC)
Mwanga ta	1	0	2	1	1	0
Kihesa	0	0	0	0	3	0
Kitwiru	1	0	0	0	0	0
Ruaha	1	0	1	0	1	0
Nduli	3	3	0	0	0	3
Total	6	3	3	1	5	3

Source: Director's Office, (Livestock Department), Iringa Municipality, 2012

3.2.9 Marketing Livestock Products

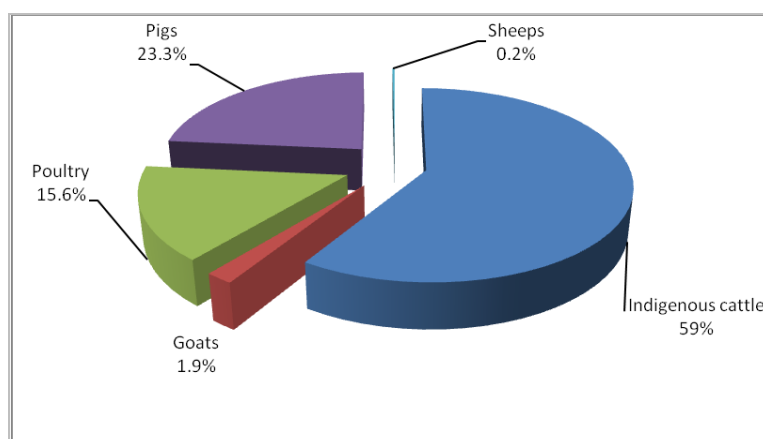
Increased private sector participation in marketing of livestock products in recent years have increased marketing channels for the livestock sub-sector. Due to high demand and good transportation infrastructure, urban areas provide reliable marketing place for livestock products than rural areas. Likewise, livestock products in Iringa Municipality are of high demand than in other rural districts in Iringa Region.

Table 3.15 and figure 29 gives quantity and value of dominant livestock products marketed in the Municipality in 2010/11 and 2011/12. The Iringa Municipality earned a total of Tshs. 9,759,834,000 from selling cattle, goats, pigs and poultry meats respectively in the period of two years, 2010/11 to 2011/12. Highest earnings were from cattle meats at Tshs. 5,757,444,000 which was equivalent to 59.0 percent of total revenue earned from selling of livestock products in the Municipality. It was followed by pigs meats (Tshs. 2,276,430,000; 23.3 percent) and poultry meats (Tshs. 1,522,224,000; 15.6 percent). Sheep meats earned the least amount of money which summed to Tshs. 15,132,000 or 0.2 percent. Moreover, during the same period one kilogram of cattle meat was sold at an average price of Tshs. 6000, goat meat (Tshs.6500/1kg), pigs meat (Tshs. 6,500/kg), sheep meats (shs 6,500/kg) and the average price per poultry meat was Tshs. 8,000/1kg.

Table 3. 15: Marketed Livestock products by Type (Official Markets) and Revenue Earned; Iringa Municipality; 2010/11 and 2011/12

Type of livestock	Total Number of livestock Slaughtered		Total No. of Meats Sold (Kgs)		Annual Revenue collected (TShs.)			Percentage (%) Total Revenue.
	2010/2011	2011/2012	2010/2011	2011/2012	2010/2011	2011/2012	Total revenue	
Indigenous cattle	1,608	8,057	733,040	886,270	439,824,000	5,317,620,000	5,757,444,000	59
Goats	1608	2,019	12,864	16,152	83,616,000	104,988,000	188,604,000	1.9
Poultry	55,761	96,452	69,701.30	120,565	557,704,000	964,520,000	1,522,224,000	15.6
Pigs	2,261	3,127	146,965	203,255	955,272,500	1,321,157,500	2,276,430,000	23.3
Sheep	135	156	1080	1,248	7,020,000	8,112,000	15,132,000	0.2
Total	61,373	109,811	963,650	1,227,490	2,043,436,500	7,716,397,500	9,759,834,000	100

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

Figure 29: Percentage Revenue Earned from Marketed Livestock products by Type (Official Markets); Iringa Municipality; 2010/11 and 2011/12

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

3.2.10 Milk Production

Milk is an important livestock product which contributes significantly to income generation to both urban and rural population. By knowing the role of milk in health improvement and reduction of poverty, the government of Tanzania always emphasizes on dairy cattle keeping for increasing milk production. According to Table 3.16, dairy cattle were the main and only producer of milk than indigenous cattle. The table also reveals that milk production stood at 674,556 litres in 2010/11 and increased to 1,885,822 litres in 2011/12. Revenue collected in 2011/12 increased more than twice by Tshs. 1,255,112,140 from Tshs. 630,709,860 collected in 2010/11 to Tshs 1,885,822,000 collected in 2011/12. Average price per litre of dairy cattle milk in the whole two years ranges between Tshs 935 and Tshs 1,000.

Table 3. 16: Number of liters of milk from Dairy Cattle marketed; Iringa Municipality; 2010/11 and 2011/12

Year	Total Number of Litres	Total Revenue in T. Shs.	Average Price per Litre
2010/11	674,556	630,709,860	935
2011/12	1,885,822	1,885,822,000	1000
Total	2,560,378	2,516,531,860	1.935

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

3.2.11 Major Livestock Diseases

The livestock industry is extremely important to the economy of Iringa Municipality and includes not only commercial producers of meat or milk, but also purebred breeders and small producers with a few animals. The success of any type of livestock operation is closely related to the disease level of the animals. Losses due to disease originate in many ways. Some are obvious, such as death, medication costs, and condemnations at the processing plant. Others are sometimes less obvious, such as poor growth, poor production, poor feed conversion, and downgrading.

3.2.11.1 Cattle Diseases

Table 3.17 highlights that, East Coast Fever (ECF), Foot Mouth Diseases (FMD), Worms and Anaplasmosis were the source of cattle illnesses and deaths in the Municipality. As the table shows, over the whole three years morbidity cases totalled at 4,672, marking 97.8 percent of all reported case and mortality cases summed at 105 reported or 2.2 percent of all reported cases in the livestock department of the Municipality.

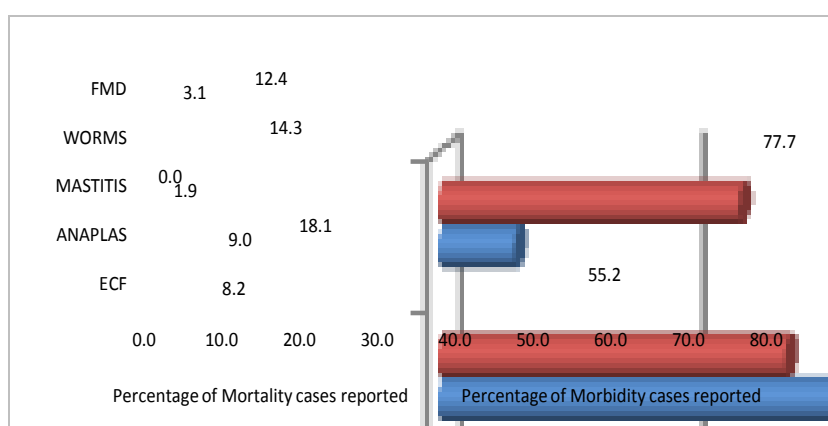
Table 3. 17: Five Major Cattle Diseases which Caused Morbidity and Mortality; Iringa Municipality; 2010 to2012

Disease	Number of Morbidity cases reported				Number of Mortality cases reported			
	2010	2011	2012	Total	2010	2011	2012	Total
East Coast Fever (ECF)	171	154	58	383	22	24	12	58
Anaplasmosis	145	152	122	419	2	9	8	19
Mastitis	31	28	32	91	0	0	0	0
Worms	1335	1055	1242	3632	0	15	0	15
Foot and Mouth Disease (FMD)	40	32	75	147	6	4	3	13
Total cases	1,722	1,421	1,529	4,672	30	52	23	105

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

However, efforts made by the municipality in fighting against those diseases managed to reduce the number of cattle morbidity and mortality cases. From 2010 to 2012 morbidity was reduced by 193 cases (11.2 percent reduction) from 1,722 cases in 2010 to 1,529 in 2012. Mortality was reduced by 7 cases (7 percent reduction) from 30 cases in 2010 to 23 in 2012, although it was high in 2011. According to figure 29, by causing a total of 383 morbidity and 58 (55.2 percent of all) mortality cases, ECF happened to be the most dangerous disease in the municipality, followed by Anaplasmosis which caused 19 mortality cases and worms cause 15 mortality cases.

Figure 30: Cattle Diseases with Morbidity and Mortality Percentage Cases Reported; 2010-2012



Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

3.2.11.2 Goat Diseases

With reference to Table 3.18 Worms, CCPP and Foot rot contributed to poor health and even deaths of goats in the municipality. A total of 632 morbidity and 6 mortality cases pertaining to goats were reported. Ratio of total mortality and morbidity cases indicates that on average, one goat died in every eighteen morbidity cases reported in year 2010/11. By causing illness to 4 goats and deaths of 4 goats, CBPP was the most dangerous goat disease which occurred during the period under review. Although there were only two mortality cases reported, worms, was a troubling disease on the goats' health as it caused 610 morbidity cases in the referenced period.

Table 3.18: Three Major Goat Diseases which Caused Morbidity and Mortality; Iringa Municipality; 2012

Disease	Number of Morbidity cases reported				Number of Mortality cases reported			
	2010	2011	2012	Total	2010	2011	2012	Total
Worms (Helminthes)	0	96	514	610	0	2	0	2
CCPP (Caprine contagious preuropneumonia).	0	4	0	4	0	4	0	4
Foot Rot	0	10	8	18	0	0	0	0
Total cases	0	110	522	632	0	6	0	6

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

Looking at the cases of mortality, the veterinary department of the Municipality to a large extent had managed to control goat diseases in the district.

3.2.11.3 Sheep Diseases

Table 3.19 indicates that worms and Foot rot are common diseases that affect sheep in the municipality. The table further reveals that morbidity cases amounted to 89 and caused deaths to 6 sheep in 2011. Most of the sheep illness and mortality were due to worms in the whole period of two years. The disease was the source of 76 sheep illnesses (85.4 percent of all morbidity cases reported) and 6 mortality cases.

Table 3.19: Two Major Sheep Diseases which Caused Morbidity and Mortality; Iringa Municipality; 2010/11 to 2011/12

Disease	Number of Morbidity Cases Reported				Number of Mortality cases reported			
	2010	2011	2012	Total	2010	2011	2012	Total
Worms (Helminths)	0	40	36	76	0	6	0	6
Foot Rot	0	8	5	13	0	0	0	0
Total cases	0	48	41	89	0	6	0	6

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

Initiatives taken by the livestock department in the municipality managed to reduce sheep morbidity by 7 cases from 48 cases in 2010/11 to 41 in 2011/12. Mortality was eliminated from 6 cases in 2010/11 to 0 in 2011/12

3.2.11.4 Poultry Diseases

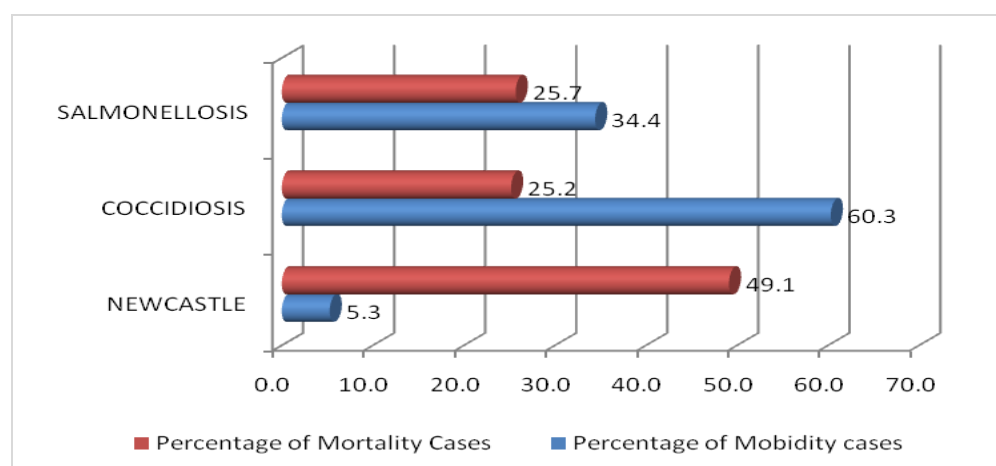
Development and sustainability of poultry industry in the municipality is under threat due to a number of reasons. Among the reasons, diseases are leading. Based on Table 3.20, New castle, Salmonellosis and Coccidiosis were the three common poultry diseases identified in the municipality. In the period of 2010/11 and 2011/12 about 1,879 and 294 poultry morbidity and mortality cases respectively were reported. Coccidiosis disease with a total of 2,234 morbidity and 102 mortality cases caused most of poultry illnesses. Most deaths were caused by Newcastle disease with a total 195 morbidity cases and 195 mortality cases; which was 49.1 percent of all mortality cases reported in the municipality in the period of two year as shown in figure 31.

Table 3. 20: Three Major Poultry Diseases which Caused Morbidity and Mortality; Iringa Municipality; 2012

Disease	Number of Morbidity cases reported				Number of Mortality cases reported			
	2010	2011	2012	Total	2010	2011	2012	Total
Newcastle	0	114	81	195	0	114	81	195
Coccidiosis	0	1213	1021	2234	0	60	40	100
Salmonellosis	0	552	723	1275	0	51	51	102
Total cases	0	1879	1825	3704	0	225	172	397

Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

Figure 31: Poultry Diseases with Percentage Morbidity and Mortality Cases Reported; 2010/11-2011/12



Source: Director's Office, (Livestock Department), Iringa Municipality, 2013

Initiatives taken by the livestock department in the municipality managed to reduce chicken morbidity by 54 cases from 1,879 cases in 2010/11 to 1,825 cases in 2011/12. Mortality was reduced by 53 cases from 225 cases in 2010/11 to 172 cases in 2011/12.

3.2.12 Investment Opportunities in Livestock sub sector

Investment in this sub sector can focus in dairy farming and livestock processing industries such as milk processing, leather tanning and meat canning. Precisely, the municipality needs to look at the following possibilities:-

1. **Meat processing:** The municipality needs to have modern abattoir. The abattoir however can be used as slaughtering and meat processing. It can also act as local market for livestock keepers.
2. **Animal feeds:** Supplement feeds can be manufactured and sold to farmers. Fodder can also be planted and the selling hay or seeds that can improve range land in the municipality and
3. **Animal services and Pharmaceuticals:** Animal pharmaceutical shops and veterinary centres where qualified veterinary and livestock officers can offer consultancy services especially in sub urban areas of the municipality.



Cattle dips are an important veterinary service in Iringa Municipality

3.3 Natural Resources

The country's natural resources sector, which is comprised of forestry, fisheries, beekeeping and wildlife sub sectors increased at 2.4 percent in 2012 in the country's economy compared to 3.5 percent in the year 2011. The sector contributed 2.5 percent to country's GDP in 2012 (Economic Survey Report, 2012). This is a significant role.

The sector is very important in the contribution to social and economic development of the municipality. It also plays an important role in the maintenance of climate stability, conservation of water sources, soil fertility, controlling land erosion, and

providing source of wood fuel, industrial materials and non-wood products such as honey and bee-wax.

3.3.1 Forestry



Forests are a source of industrial raw materials and provide wood and non-wood products

The forestry sector plays an important role in maintaining ecological balance, soil protection from erosion and conservation of water, wildlife and our livelihood. Moreover, forests are a source of industrial raw materials and provide wood and non-wood products such as honey and beeswax. Thus, failure to maintain or improve forest resources eventually will lead to problems of unsustainable livelihood.

So far, there are 16 forest reserves covering 8,727.94 hectares. Table 3.21 shows status of forest reserves in the ward. Ugele Forest Reserve has the largest size at 19.0 percent of the whole forest cover in Iringa Municipality, followed by Mkwawa forest reserve at 16.7 percent of the forest cover in the ward. On the other hand, Ward councils need to take strong measures to control illegal harvesting taking place in forest reserves. Human activities had stopped since 2011.

Table 3. 21: Forest Reserves by Ward; Iringa Municipality; 2011 and 2012

Ward	Name of Forest Reserve	2011			2012
		Size in Hectares	Illegal Harvesting level	Size of Encroached Area (Ha)	Size in Hectares
Mshindo	Mshindo	8.1	Fair	2.2	8.1
Mlandege	Mlandege	24.3	Fair	9.5	24.3
Mwangata	Mwangata	24.1	Fair	8.4	24.1
Gangilonga	Gangilonga	29.5	Fair	7	29.5
Mtwivila	Ugele	1654.8	Fair	661.92	1654.8
Makorongoni	Mwembetogwa	27.34	Insignificant	8.202	27.34
Kihesa	Iringa Local Authority Reserve	233.1	Severe	209.79	233.1
Kihesa	Mafifi	22.3	Severe	16	22.3
Ilala	Ilala	11.6	Insignificant	0.2	11.6
Kwakilosa	Kwakilosa	24	Severe	19	24
Kitanzini	Kitanzini	28.6	Fair	9	28.6
Mkwawa	Mkwawa	1460	Fair	590	1460
Kitwiru	Kitwiru	973.4	Fair	272.552	973.4
Ruaha	Igumbilo	1230	Fair	393.6	1230
Isakalilo	Mkoga	1030	Fair	350	1030
Nduli	Mgongo	1946.8	Fair	778.72	1946.8
Total	-	8727.94	Fair	3110.294	8727.94

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

3.3.2 Forest Plantation

Different groups of people do participate in raising and planting seedlings in the municipality namely, schools, Government institutions, individuals, wards and various communities. With regard to Table 3.22, in 2012 Institutions raised the highest number of seedlings (432,200 seedlings), followed by wards individuals (124,805 seedlings) during the same period.

Table 3. 22: Number of Tree Seedlings Raised by Institutions by Ward; Iringa Municipality; 2011 and 2012

Ward	Institution	2011	2012
Ruaha	Municipality Council	580,418	251,200
Gangilonga	NGO's	37,250	40,000
Mtwivila and Kihesa	CBOs	129,400	141,000
Total		749,068	432,200

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

Table 3.22 a: Number of Tree Seedlings Raised by Individuals by Ward; Iringa Municipality; 2011 and 2012

Ward	2011	2012
Gangilonga	-	205
Mtwivila	-	24,600
Makorongoni	-	3,000
Kihesa	-	40,000
Kitwiru	-	12,000
Ruaha	-	45,000
Total	-	124,805

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2012

3.3.3 Environment Conservation

Environment conservation basically focuses on the carrying capacity of a natural biological system which is determined by its maximum sustainable yield, and this in turn is the product of its size and regenerative powers. The regenerative powers varies widely, for instance, grasslands and forests in humid areas have greater regenerative capacities and hence greater carrying capacities than those in semi-arid areas. The climate of Iringa municipality has high humidity hence grasslands and forests have large regenerative capacities. However, expansion of human settlements and agricultural activities observed in some areas of the municipality such as in Mgongo, Ugele and Kitwiru wards destroys the natural biological system at a severe level. There are some encouraging moves done by different organizations and institutions shown in Table 3.23 for preserving forests and the environment in general.

Table 3. 23: NGO's Involved in Environmental Conservation by Ward; Iringa Municipality; 2009

Ward	2011		2012	
	Number of NGOs	Number of Development Partners	Number of NGOs	Number of Development Partners
Gangilonga	2	1	3	1
Mtwivila	0	1	0	0
Kihesa	1	0	1	0
Ilala	0	1	0	1
Total	3	3	4	2

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

3.3.4 Natural Resources Products

3.3.4.1 Forest Products

Due to scarcity of heavy forests, the municipality council does not earn revenue from timber and poles. Revenue from charcoal is the only one which at least the council benefits from forest products.

3.3.4.2 Beekeeping



Beekeeping using modern beehives is practiced in Iringa Municipality

Beekeeping is not an economic activity in the municipality due to lack of forests in most parts that reduce potentiality of the municipality in bee-keeping industry. According to Table 3.24, bee-keeping has been practiced in some wards and all of the beehives were modern. The number of modern beehives increased from 132 in 2011 and reached 224 in 2012. With a total of 137 beehives, Nduli ward was leading in bee-keeping followed by Mkwawa (46 beehives) and Mtwivila (15 beehives). Ruaha had the least number of beehives (5).

Table 3. 24: Number of Traditional and Modern Beehives by Ward; Iringa Municipality; 2011 and 2012

Ward	Traditional	Modern	Traditional	Modern
	Traditional 2011	Modern 2011	Traditional 2012	Modern 2012
Mtwivila	0	3	0	15
Ilala	0	6	0	14
Mkwawa	0	25	0	46
Kitwiru	0	0	0	5
Ruaha	0	18	0	5
Isakalilo	0	4	2	4
Nduli	0	76	2	135
Municipality Total	0	132	4	224

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

3.3.2.3 Beekeeping Products

Table 3.25 indicates that over a two year period, beekeeping sub sector produced a total of 5,116 kilograms of honey valued at Tshs 40,928,000.00 which was 99.7 percent of all beekeeping products value in the Municipality. In the same period; 21 kg of bee-wax worth Tshs 105,000.00 was also produced which is 0.3 percent of beekeeping production in the Municipality.

Table 3. 25: Beekeeping Products and Value (Tshs), Iringa Municipality; 2011 – 2012

Year	Honey		Bee-wax	
	Kgs.	TShs.	Kgs.	TShs.
2011	1,408	11,264,000	6	30,000
2012	3,708	29,664,000	15	75,000
Total	5,116	40,928,000	21	105,000

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

Bee-keeping production levels in Iringa Municipality could be raised if bee-keepers are given assistance to enable them increase modern beehives which are more efficient in honey production. This could be achieved through improved extension services and where possible provision of micro-credits to bee-keepers as seed money. Moreover, the wards' work-force living in areas which are favourable to bee-keeping, especially those living in close proximity to forest reserves could be encouraged to engage in this important off-farm economic activity. Bee-keeping has an advantage of being carried out alongside with other economic activities such as farming and livestock keeping without much loss of time and labour.

3.3.4.3 Fishery

Fishing is not a usual economic activity in Iringa Municipality due to a limited number of water bodies. However, most of the fish consumed in the municipality are imported from Dar es Salaam, Mwanza, Ifakara and Ludewa. Small scale fishing is carried out in Kitwiro ward by individuals who were organized in a group and establish a fishing pond project.

Table 3. 26: Fishery Resources and Production - Kitwiro Ward, 2011 – 2012

Ward	Type of Fishing Resources			Fish Production	
	No. of Fishing licenses	No. of Fishermen	No. of Registered Fishing Vessels	Weight (kg)	Value (Tshs)
2011	0	19	0	240	1,680,000
2012	0	19	0	240	1,680,000

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

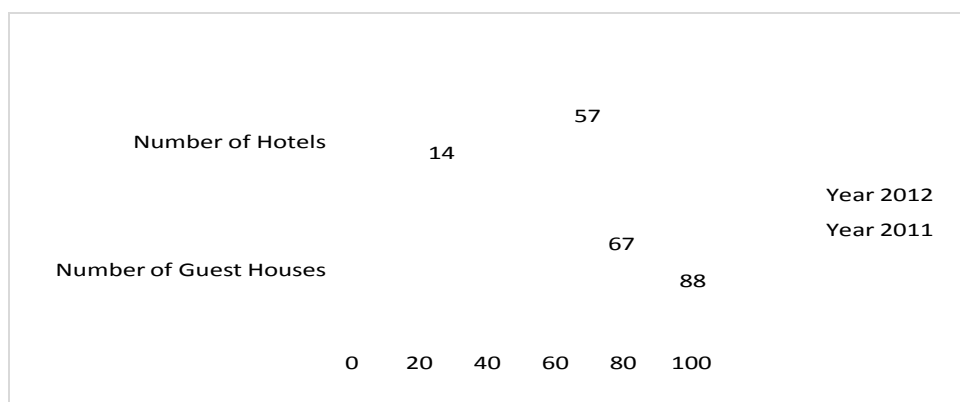
3.3.5 Eco Tourism

Availability of good infrastructure such as accommodation facilities, telecommunication services, roads, banking/bureau de change services and tour operators are important ingredients for the development of a competitive tourism industry.



One of the modern accommodation facilities available in Iringa Municipality

Figure 32: Number of Accommodation facilities; Iringa Municipality: 2011 and 2012



Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

Iringa Municipality being the hub of Iringa Region has an adequate number of financial intermediaries such as bureau de change shops and banks. Easy accessibility of such services is essential for promotion of tourism industry. Currency conversion and cash transactions are all made possible through availability of those financial facilities. On the other hand, accommodation facilities are important in attracting tourists. Therefore, information about hotels, guest houses, camp sites and lodges is vital for the tourists as it helps them to make a choice on the type of accommodation they prefer as well as compare the quality of services delivered against prices charged. Iringa Municipality

has a remarkable number of accommodation facilities ranging from guest houses to hotels as Table 3.27 and figure 31 indicates. The table also shows that in 2012 the municipality had a total of 67 guest houses and 57 hotels. The highest number of hotels was found in Gangilonga ward (13 hotels) and Kitanzini ward had the largest number of guest houses (16 guest houses).

Table 3. 27: Accommodation facilities by Ward: 2011 and 2012

Ward	2011		2012	
	Number of Guest Houses	Number of Hotels	Number of Guest Houses	Number of Hotels
Mshindo	7	0	2	4
Mlandege	4	0	4	0
Mwangata	1	0	4	0
Gangilonga	7	3	3	13
Mtwivila	4	0	1	5
Makorongoni	14	0	2	12
Kihesa	12	1	3	0
Mivinjeni	3	0	14	3
Ilala	2	0	1	1
Kwakilosa	7	0	0	7
Kitanzini	16	10	16	10
Mkwawa	3	0	2	0
Kitwiru	1	0	1	1
Ruaha	5	0	12	1
Isakalilo	1	0	1	0
Nduli	1	0	1	0
Total	88	14	67	57

Source: Director's Office, (Natural Resources Department), Iringa Municipality, 2013

Regarding to telecommunication services, the whole municipality is well accessed by land line and cellular phone service providers like Tigo, Airtel, Zantel and Vodacom. Moreover, municipality headquarters and peripheral areas are connected by tarmac and gravel roads which are passable throughout the year. The municipality is also connected by all large cities in Tanzania with tarmac roads. The availability of those infrastructures brings the municipality closer to Northern tourist circuit (Arusha and Kilimanjaro regions) and Southern tourist circuits of Mbeya, Njombe, Katavi and Rukwa regions.

3.3.6 Investment Opportunities in Natural Resources

(i) Agro-forestry and Beekeeping

Afforestation programmes can be established for environmental sustainability.

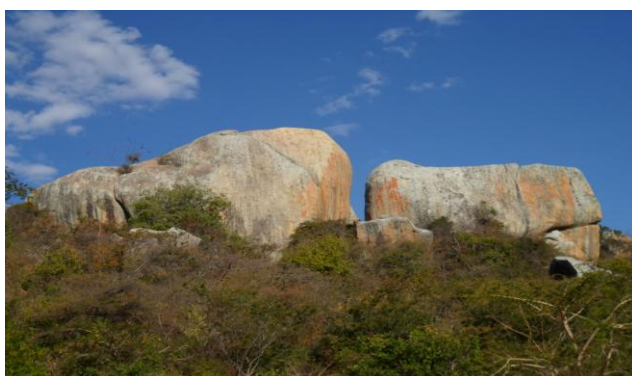
(ii) Beekeeping

By making consultations with Sokoine University of Agriculture Department of Forests and Natural Conservation, the municipality can improve and transform beekeeping into a part-time economic activity. Natural forests available in Ugele and few available planted forests can be used as potential areas for investing in beekeeping.

(iii) Tourism

Historical sites

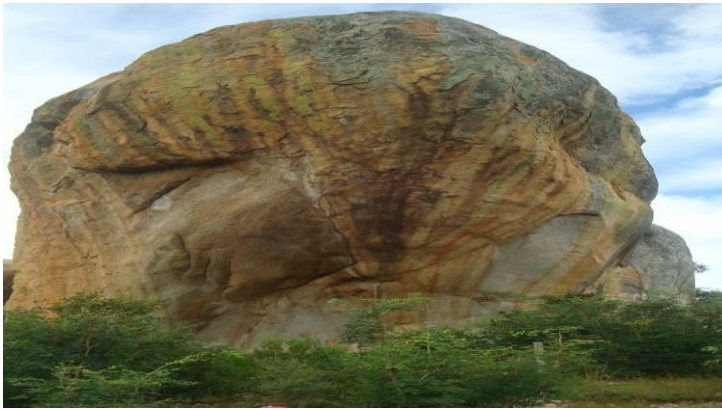
The presence of historical sites in Iringa is expected to increase the municipality's income and its people through tourism. The available historical sites include Old Germany building and Gangilonga Stone, all located in Gangilonga ward; 'Kitanzi' at Kitanzini and other historical sites highlighted in Table 3.28.



Gangilonga Rock (Talking stone).

Gangilonga Rock (The talking stone, a description in Hehe tribe), a site just outside of the town, is a legendary spot where the Hehe Chief at that time, met with senior Hehe tribesmen to mediate on how to fight the Germans. Today, the rock provides an excellent view of the town and the surrounding countryside. Historically, Iringa was also the site of several battles during the first and second world wars, and commonwealth war graves are located just at the town centre.

Igeleke Mountains is another historical site in Iringa Municipality. There are ancient paints beneath the rocks. A group of youth known as 'Kikundi cha Utunzaji Mazingira cha Kihasa-Kilolo (KIUMAKI) currently is working on protecting and conserving the Igeleke Mountains ecosystem and forest resources with different varieties of natural vegetation and historical site of Igeleke Rock Art.



Igeleke Rock

This is a God's miracle creation rock at Igeleke Mountain. Under this Rock you will find the Rock paints. This rock was used as a place to Ask God and place for prayers. Not everybody was allowed to come to this place.



Igeleke Paintings

Table 3. 28: Other Potential Areas for Tourism by Ward, Iringa Municipality; 2009

Type of Historical Heritage Available	Village/Mtaa	Ward
-Gangilonga Stone	Gangilonga	Gangilonga
-Commonwealth Graves		
-First world war Icon		
-German building		
Igeleke Paints	Igeleke	Mtwivila
Kitanzini	Kitanzani	Kitanzini
Itamba Pillars	Itamba	Mkwawa
Manyafifi caves	Kitwiru	Kitwiru
Ruaha river	Ipogolo	Ruaha
Igumbiro Pillars	Igumbiro	
Kitasengwa Pillars	Mkoga	Isakalilo
Pillars and Caves	Kigonzi, Mgongo na Nduli	Nduli

Source: Director's Office, (Trade Department), Iringa Municipality Council, 2012

3.3.7 Mineral Resources

Mining in Iringa municipality is not a known economic activity and therefore mining sector has insignificant contribution to the municipality economy. Mining activities include extraction of gravels and sand and stone for construction purposes.

3.4 Industrial Sector



Industry sector is increasing drastically in Iringa Municipality

Industrial sector is very important in the economy. It is a foreign exchange earner and the main source of employment, especially in urban areas. In Iringa municipality, industrial sector is increasing drastically. The distribution of industry activity share by

district in Iringa region shows that, Iringa Municipality had 44 percent for the year 2008; being the highest contribution among the four districts in the region. Small and medium industries mostly involved in welding and metal fabrication, carpentry and food processing are emerging. Table 3.29 shows the distribution of the industries by ward and by type of industry in Iringa Municipality in 2012.

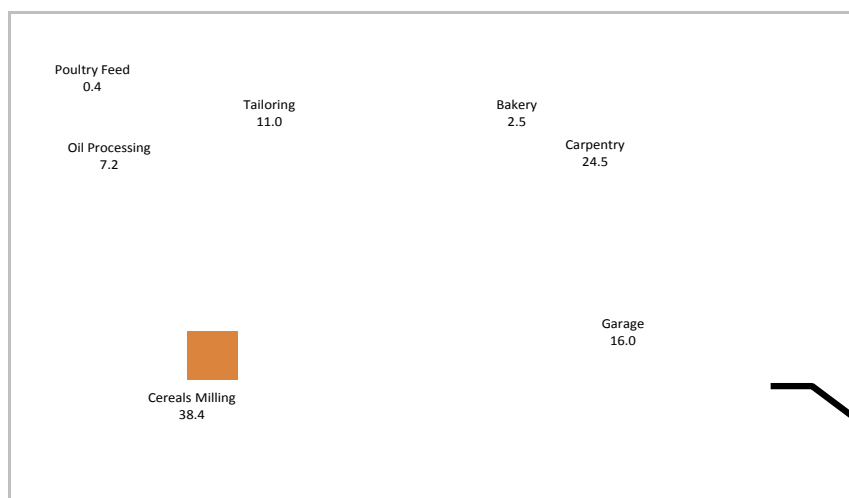
Table 3.29: Number of Small Scale Industries by Ward and Type of Industry - Iringa Municipality 2012

Ward	Bakery	Carpentry	Garage	Milling Machine	Oil Processing	Poultry Feed	Tailoring	Total
Gangilonga	1	11	13	0	3	0	0	28
Ilala	0	0	0	1	0	0	0	1
Isakalilo	0	0	0	1	0	0	0	1
Kihesa	1	5	0	9	0	0	14	29
Kitanzini	0	0	0	4	1	0	12	17
Kitwiro	0	0	4	7	3	1	0	15
Kwakilosa	0	6	9	16	0	0	0	31
Makorongoni	0	3	0	8	1	0	0	12
Mivinjeni	0	18	4	3	0	0	0	25
Mkwawa	0	0	0	6	0	0	0	6
Mlandege	0	0	4	2	0	0	0	6
Mshindo	0	7	0	1	0	0	0	8
Mtwivila	2	2	0	11	6	0	0	21
Mwangata	0	0	1	4	1	0	0	6
Nduli	0	0	0	7	2	0	0	9
Ruaha	2	6	3	11	0	0	0	22
Total	6	58	38	91	17	1	26	237

Source: Director's Office, (Trade Department), Iringa Municipality Council, 2013

Table 3.29 shows that in 2012 the Municipality had a total of 237 small scale industries which were operating. Kwakilosa ward had the highest number of industries (31) followed by Kihesa ward (29) and Gangilonga ward (28). Isakalilo and Ilala wards had the least number of industries as had one industry each. The leading type of industries was Cereals milling at 38.4 percent, followed by carpentry at 24.5

Figure 33: Percentage distribution of Small Scale Industries by Type of Industry; Iringa Municipality; 2012



Source: Director's Office, (Trade Department), Iringa Municipality, 2013

Apart from small-scale industries, Iringa Urban had medium-scale industries which were concentrated in Kitwiru and Ruaha wards. Table 3.30 depicts the distribution of industries by type.

Table 3. 30: Number of Medium Scale Industries by Ward and Type; Iringa Municipality, 2012

Industry	Kitwiru	Ruaha	Total
Bakery	1	2	3
Biscuit Processing	1	0	1
Charcoal	0	0	0
Confecionary	2	0	2
Crispo	1	0	1
Fruit and Vegetable Canning	1	1	2
Milk Processing	1	0	1
Bottle Manufacturing	1	1	2
Tank Manufacturing	0	1	1
Total	8	5	13

Source: Director's Office, (Trade Department), Iringa Municipality Council, 2013

Factors attributed to the rapid growth of industrial sector in the municipality are:

Reliable infrastructure/Tarmac roads

Iringa municipality is linked with the biggest commercial city in Tanzania (Dar es Salaam) by good tarmac road. Nevertheless, the municipality is also linked with other big cities in Tanzania like Mbeya, Morogoro and Dodoma by tarmac roads.



A section of the road that leads to Iringa Municipality center

Easy accessibility of Resources

Although the municipality is not endowed with a diversity of natural resources, its geographical location enables easy access of resources from other places in the country. Raw materials can be transported from other regions in the country to the municipality through the tarmac highways.

Availability of Markets

Availability of improved or modern technology makes it easy to produce goods of high quality that can compete in both local and foreign markets.

3.5 Investment Opportunities in Trade and Industries

Iringa Municipality is among the fast developing municipalities in the country. It has a relatively well developed infrastructure and financial services that support a wide range of economic activities. The municipality has better investment opportunities through an enabling environment that has been created on provision of proactive support for private sector operators. Potential areas for investment which can be exploited by the Municipality Council itself or in collaboration with private sectors include:

Construction of “Logistic Centre house” which would be used for quality control of the products imported within the Region. Construction of the “Re Export Centre” for the products acquired within the Region and those imported so as to export to the other nearby regions.

Construction of warehouses for whole sale trade so that whole sellers can manage to buy and re sale the products to retailers; this is double increase of revenue within the Municipality.

Processing and Manufacturing Industries, Assembling plants, Agricultural Machinery, Shopping Centres, Real Estates, Financial Buildings, Sports and Game centres. This can be done by using the enforceable law to determine, identify and re allocate possible areas which were left idle.

3.5.1.1 Iringa Bus Terminal



The Iringa bus terminal is probably the best business strategic area in the Iringa Municipality

Iringa bus terminal is probably the best business strategic area in the Iringa Municipality. It will be a point where thousands of bus travellers from all regions in the country and some neighbouring countries converge. The area has attracted a substantial amount of local investors from all over the country and some from neighbouring countries due to its commercial strength and improved social economic services which will be in the area. At the moment, a consultant is working hand in hand with the municipality management team to make necessary improvements to the area so that it would be capable of attracting many investors in future. However, investments can be made on:

Establishment of accommodation facilities, hotels, business offices.
Supermarkets/shopping malls,
Banking services and ATM machines to meet the demand,
Establishment of recreation, cultural and entertainment centres

3.5.2 Status of Trade and Industries Personnel

Department of trade and industry at the municipality by the end of 2012 had at total of six (6) staff of whom five (5) were men and one a female. Their responsibilities include managing all matters concerning commerce and trade operating within the municipality boundaries. However, due to rapid increase of commercial activities and industries, the municipality council needs to employ more staff for better management of activities in trade and industries department.

CHAPTER FOUR

Economic Infrastructures

4.0 Introduction

Chapter four describes the existing economic infrastructure in Iringa Municipality. It covers the road network in terms of road classification, type of road surface condition and passability. Others include telecommunication; which covers postal services, internets, mobile phones, radio calls, radio stations and television transmission. In the energy sector developments, the services of hydro-electricity, biogas, solar power, fuel wood and fossil fuels are examined.



About half of the total road network in the Municipality is earth road

4.1 Road Network

Road network comprises of trunk/regional roads, district/urban and feeder roads. The roads that are maintained by the central government are classified as trunk and regional roads, while those that are maintained by the Municipality council are called district, feeder and urban roads; the rest of the roads are called peripheral or community roads and are mostly maintained by Mitaa community. Iringa like many municipalities in Tanzania road is a major means of transport for the people and goods within and outside the municipality. Road network is one of the key sectors in development of the country. In municipality where people are highly populated and busy with daily economical activities road network is very important for easy movements of people from one point to another and easy delivery of good hence increase the income among the people.

Table 4.1 and 4.1 (a) show the length of road network by ward and by type in Iringa Municipality for the period 2011 - 2012. Iringa Municipality had a total road network of 378.34 kilometres in 2011 which increased to 414.38 kilometres in 2012. Iringa Municipality has a total of 18 trunk roads, 28 regional roads and for district roads the municipality has been able to increase its district roads from 378.34 kilometres in 2011 to 414.38 kilometres in 2012. There are no feeder roads in the municipality area.

Table 4. 1: Road Networks by Types and by ward in Iringa Municipality, 2011

Ward	Grade (Kms)				
	Trunk	Regional	District/Urban	Feeder	Total
Mshindo	1	0	2.11	0	3.11
Mlandege	0	1.5	3.65	0	5.15
Mwangata	0	2	39.45	0	39.45
Gangilonga	2	0	34.36	0	36.36
Mtwivila	0	0	56.95	0	56.95
Makorongoni	0	1	9.66	0	9..66
Kihesa	5	0	10.5	0	15.5
Mivinjeni	0	0	7.43	0	7.43
Ilala	0	0.8	7.17	0	7.97
Kwakilosa	0	0	10.95	0	10.95
Kitanzini	1	0.2	4.22	0	5.42
Mkwawa	0	2	21.21	0	21.21
Kitwiru	0	4	33	0	37
Ruaha	9	9	28.68	0	46.68
Isakalilo	0	7.5	26	0	33.5
Nduli	0	10	32	0	42
Total	18	28	332.34	0	378.34

Source: Iringa Municipality Council (Infrastructure Department), 2013



Road network is one of the key sectors in development of the country

Table 4.1 a: Road Networks by Types and by ward in Iringa Municipality, 2012

Ward	Grade (Kms.)				Total
	Trunk	Regional	District/Urban	Feeder	
Mshindo	1	0	2.11	0	3.11
Mlandege	0	1.5	3.65	0	5.15
Mwangata	0	2	37.45	0	39.45
Gangilonga	2	0	44.78	0	46.78
Mtwivila	0	0	64.63	0	64.63
Makorongoni	0	1	8.66	0	9.66
Kihesa	5	0	15.4	0	20.4
Mivinjeni	0	0	7.43	0	7.43
Ilala	0	0.8	7.17	0	7.97
Kwakilosa	0	0	10.95	0	10.95
Kitanzini	1	0.2	6.41	0	7.41
Mkwawa	0	2	19.21	0	21.21
Kitwiru	0	4	34.55	0	38.55
Ruaha	9	9	28.68	0	46.68
Isakalilo	0	7.5	26	0	33.5
Nduli	5	0	46.5	0	51.5
Total	23	28	363.58	0	414.38

Source: Iringa Municipality Council (Infrastructure Department), 2013

4.1.1 Road Classification by Grade of Road Surface

The durability and passability of road is determined by road surface whether is tarmac, gravel or earth. Grade of road surface to a large extent examines the improvement of the road to guarantee the durability and passability in all seasons. Table 4.2 and 4.2 (a) show the length of road network by grade of road surface in Iringa Municipality for the year 2011 and 2012. The data reveals that tarmac roads increased by 35.71km which is equivalent to 9.44 percent from 378.34km in 2011 to 414.05kms in 2012. The whole Municipality had a total road network of 414.05 Kms, of which earth roads were the dominant with 60.5 percent. Ward wise the most disadvantaged wards in terms of tarmac roads were the Mtwivila and Kwakilosa with zero percent of tarmac roads. Generally only 39.63 percent of roads (surfaced with tarmac and gravel) in Iringa Municipality are good and fair. The responsible authority should therefore take immediate measures to improve the road condition so as to enable reliable communication within the Municipality and its neighbors.

Table 4. 2: Length of Road Network by Type of Road Surface and By Ward, Iringa Municipality; 2011

Ward	Type of Surface (km.)				
	Tarmac	Gravel	Earth	Total	Percent tarmac
Mshindo	1	2.11	0	3.11	1.8
Mlandege	1.5	2.5	1.15	5.15	2.7
Mwangata	2	7.45	30	39.45	3.6
Gangilonga	7.05	27.31	2	36.36	12.9
Mtwivila	0	12.8	44.15	56.95	0
Makorongoni	2.26	4	3.4	9.66	4.1
Kihesa	6	7	2.5	15.5	10.9
Mivinjeni	0	6	1.43	7.43	0
Ilala	0.8	5.55	1.62	7.97	1.5
Kwakilosa	0	6.76	4.19	10.95	0
Kitanzini	4.2	1.22	0	5.42	7.7
Mkwawa	2	9.24	9.97	21.21	3.6
Kitwiru	4	16	17	37	7.3
Ruaha	11.5	12	23.18	46.68	21.0
Isakalilo	7.5	0.8	25.2	33.5	13.7
Nduli	5	0	37	42	9.2
Total	54.81	120.74	202.79	378.34	100
Percent	14.5	31.9	53.6	100	

Source: Iringa Municipality Council, 2013



The durability and passability of road is determined by road surface whether is tarmac, gravel or earth

Table 4.2 a: Length of Road Network by Type of Road Surface and By Ward, Iringa municipality 2012

Ward	Type of Surface (Kms.)				
	Tarmac	Gravel	Earth	Total	Percent
Mshindo	1.15	1.96	0	3.11	0.75
Mlandege	1.5	3.65	0	5.15	1.24
Mwangata	2	3.65	33.8	39.45	9.52
Gangilonga	7.05	21.61	18.12	46.78	11.29
Mtwivila	0	20.06	44.57	64.63	15.60
Makorongoni	2.26	5.1	2.3	9.66	2.33
Kihesa	7.1	5.55	7.75	20.4	4.92
Mivinjeni	0.53	3.72	3.18	7.43	1.67
Ilala	1.35	6.15	0.47	7.97	1.92
Kwakilosa	0	3.7	7.25	10.95	2.64
Kitanzini	5.01	2.6	0	7.61	1.84
Mkwawa	2	3.95	15.26	21.21	5.20
Kitwiru	4	7.25	27.3	38.55	9.30
Ruaha	11.5	13.48	21.7	46.68	11.27
Isakalilo	7.5	3.4	22.4	33.3	8.08
Nduli	5	0.3	46.2	51.5	12.43
Total	57.95	106.13	250.30	414.38	100.00
Percent	13.98	25.61	60.41	100.0	

Source: Iringa Municipality Council, 2013

4.1.2 Road Links

Major road connections and road links which connect Iringa municipality with other councils are shown in Table 4.3. The table shows that most of the roads are in poor conditions which are not passable during rainy seasons. In this respect, the roads need regular repairs for improvement so as to ease transportation of goods and services to the peril-urban population in the district.

Table 4. 3: Major Road Connections and Road Links: Iringa Urban, 2012

Major Inter - District Road Connections	Road links	Length of Road link in Kms	Quality of road surface	Type of Road
Iringa-Pawaga Road	Kitanzini, Makorongoni, Ilala na Mkwawa	4	Fair	Tarmac/Gravel
Tazama Highway	Ruaha na Kitwiru	12	Good	Tarmac
Iringa-Dodoma Road	Ruaha, Kitanzini, Mshindo, Gangilonga, Kihesa and Nduli.	15	Fair	Tarmac/Gravel
Iringa-Kilolo Dabaga Road	Ruaha	9	Fair	Tarmac/Gravel
Iringa-Kalenga Road	Mlandege, Mwangata na Isakalilo	11	Fair	Tarmac/Gravel

Source: Iringa Municipality Council Infrastructure Department), 2013

4.2 Air Services

The Municipality has only one airstrip located in Nduli ward. However, there are no reliable data or records in terms of services provided and this is attributed to not having scheduled flights since the operation is performed occasionally by individuals.

4.3 Telecommunications

Communications sector has expanded to a large extent in most of the urban areas of Tanzania. Iringa Municipality is served by telecommunication networks such as landline telephones, cellular phones internet cafes and postal services. According to Table 4.4, Iringa Municipality had five cellular phone services that are operating namely Tigo, Zantel, Voda, Airtel and TTCL mobile. The municipality is well accessed by the mentioned mobile service providers in all the wards. Iringa municipality has one television and six local radio stations that are operating and some are even accessible to nearby regions like Mbeya region. Furthermore; there are seven internet cafes mostly in Kitanzini and Gangilonga wards, one post office and one sub post office.

Table 4. 4: Telecommunications Services in Iringa Municipality 2012

No. of Tel. Lines (Land line)	No. of Television Stations	No. of Radio Stations	No. of Internet Centres	Accessibility of Mobile Phone Services		No. of Post Offices	No. of Sub- Post Offices
				Name	Estimated Coverage (%)		
1	1	6	7	Tigo	100	1	1
				Voda	100		
				Airtel	100		
				TTCL(Mobile)	100		
				Zantel	100		

Source: Iringa Municipality Council, 2013

4.4 Energy Sector Development

Various sources of energy are being used in the municipality for cooking, lighting and running of various machines in industries and commercial businesses. These include hydroelectricity, solar, thermal, biogas, fossil and fire wood. In Iringa Municipality, electricity is available in all wards.

4.4.1 Electricity

TANESCO has continued to be the sole supplier of electricity in the council. Table 4.5 below indicates that TANESCO has increased its supply of electricity from 40,299,437 KWH in 2011 to 42,367,840 KWH in 2012 and it has managed to increase its customers from 39,102 domestic customers in 2011 to 41,615 domestic customers in

2012. This means that, in 2011 only 12.5 percent of the population was served with electricity while 28.6 percent of the population was served with electricity in 2012. Commercial customers were increased from 900 in 2011 to 1,680 in 2012.

Table 4. 5: Electricity Supply in Iringa Municipality; 2012

Electricity Supply							
2011				2012			
Demand (MW)	Supply (KWH)	No. of Customers		Demand (MW)	Supply (KWH)	No. of Customers	
		Domestic	Commercial			Domestic	Commercial
8.3	40,299,437	39,102	900	8	42,367,840	41,615	1,680

Source: Regional Manager Tanesco Iringa, 2013

4.4.2 Charcoal

Charcoal is a dominant source of energy for cooking in most household in Iringa municipality even though most of the households in the municipality have electricity. Data on the number of households using charcoal as the main source of cooking were not provided for the year 2012 but the 2002 Population and Housing Census, Iringa Municipality profile revealed that about 59.61 percent of households in the urban part used charcoal as their main source of energy for cooking while in the rural part 95.8 percent of household used firewood as the main source of energy for cooking. This consumption level threatens the existence of forests since it exceeded the regenerative capacity of existing forests. Gas could serve as alternative source of energy if the Government authorities could reduce the price of gas to make it affordable by many people.

4.4.3 Biogas and Solar Energy

Biogas has not yet been fully exploited in the Municipality, but it can be used as an alternative source of energy in order to reduce the excessive use of charcoal for cooking purposes. Likewise, solar energy is now used as alternative source of energy for lightning in some parts of Iringa Municipality. To date there is no accurate data on the number of solar and generator users, however, it is estimated that there was at least a solar panel and privately owned generators in many households in the Municipality in 2012. Responsible authorities like district council (Natural resource department) could provide education on the use of biogas to serve deforestation and for conservation of environment.

CHAPTER FIVE

Social Services

5.0 Introduction

This chapter dwells on the status of social services that are available in Iringa Municipality and cover the development of health sector in terms of preventive and curative measures through morbidity, mortality, and reportable communicable diseases. It also covers preventive measures on HIV/AIDS prevalence, tuberculosis, mother and child health as well as health facilities.

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

Water supply and sanitation is also discussed in this chapter. Performance of water supply for both rural and urban areas of the municipality is highlighted in terms of sources, technology and capacity of water supply. Moreover, sanitation level at the municipality is also briefly discussed.

5.1 Health Sector

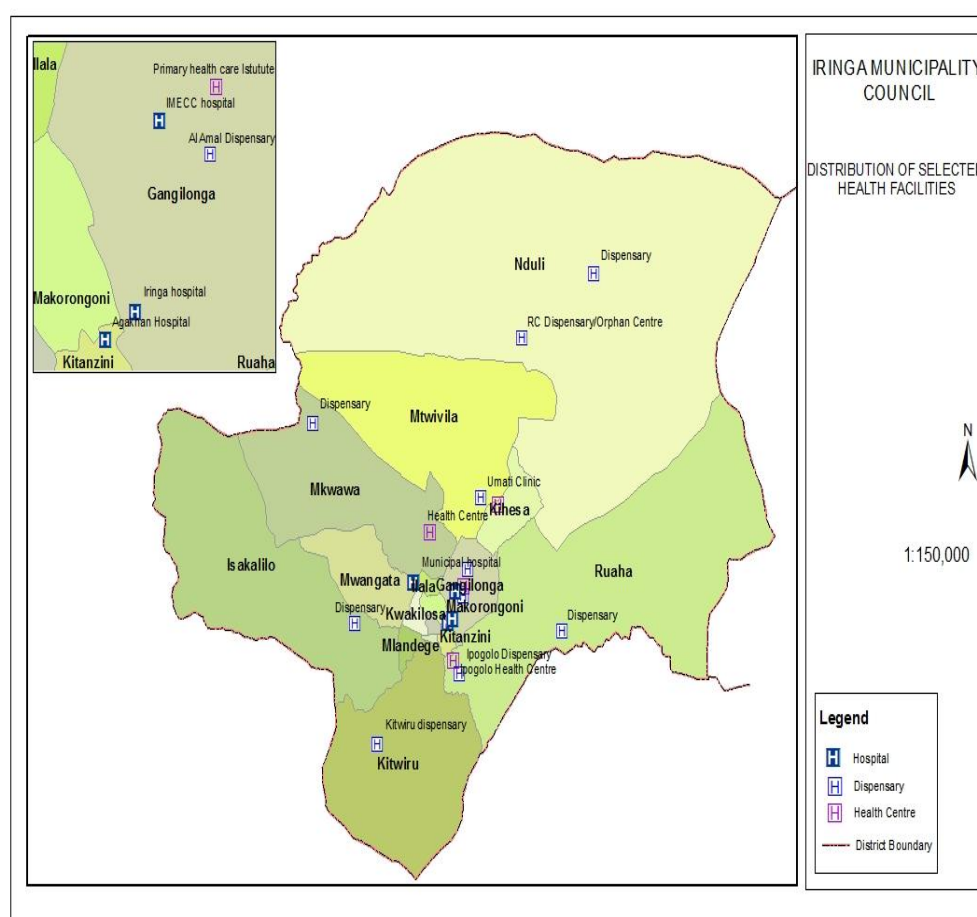
5.1.1 Health Facilities



The new maternity wing of the Iringa Municipality Council

The status of public health services in Iringa municipality can be visualized among others, through the health infrastructure, availability and commitments of health practitioners, implementation of preventive and curative measures and availability of medical supplies. Looking at Table 5.1 the municipality had a total of 39 health facilities which most of them are skewed towards Gangilonga and Kitanzini wards. Distribution of health facilities by type indicates that there were three hospitals and four health centres, 23 dispensaries and nine mobile clinics. Classification by ownership shows that, out of the total health facilities, 21 (53.8 percent) were owned by the public and 18 (46.2 percent) were privately owned. Majority of the facilities were dispensaries (23) followed by health centres (four) and hospitals at three.

Map 4: Showing Distribution of Health Facilities by Ward, Iringa Municipality; 2012



Source: National Bureau of Statistics, GIS Unit, 2013

Table 5. 1: Availability of Health Facilities by Ownership and by Ward; Iringa Municipality; 2012

Ward	Type of Facility								Total Health Facilities
	Hospitals		Health Centres		Dispensaries		Mobile /Outreach Clinics		
	Govt	Non Govt	Govt	Non Govt	Govt	Non Govt	Govt	Non Govt	
Kihesa	0	0	1	0	0	1	0	0	2
Mtwivila	0	0	0	0	0	0	1	0	1
Gangilonga	1	1	0	0	2	5	0	0	9
Kitanzini	0	0	0	1	2	3	0	0	6
Ruaha	0	0	1	0	1	1	1	0	4
Mshindo	0	0	0	0	0	0	0	0	0
Mivinjeni	0	0	0	0	0	1	0	0	1
Mlandege	0	0	0	0	0	1	0	0	1
Mwangata	0	0	0	0	0	0	1	0	1
Kwakilosa	1	0	0	0	0	0	0	0	1
Makongoroni	0	0	0	0	0	1	0	0	1
Ilala	0	0	0	0	0	0	0	0	0
Mkwawa	0	0	1	0	1	0	0	0	2
Kitwiru	0	0	0	0	1	0	1	0	2
Isakalilo	0	0	0	0	1	0	2	0	3
Nduli	0	0	0	0	1	1	1	2	5
Total	2	1	3	1	9	14	7	2	39

Source: Executive Director's Office (Medical's Office), Iringa Municipality, 2013

Private sector plays significant role in supporting the government in improving health services in the country including Iringa Municipality. Number of non-government health facilities portrayed in Table 5.2 was higher than that those owned by the government in 2012 (Table 5.3). Moreover, Table 5.2 shows that total number of non-government health facilities increased from 8 in 2002 to 12 in 2008 before reaching 16 in 2012. Gangilonga and Kitanzini are more privileged than other wards by having significant number of health facilities.

Table 5. 2: Growth Status and Distribution of Non-Government Health Facilities by Ward; Iringa Municipality; 2002, 2008 and 2012

Ward	Hospitals			Health Centres			Dispensaries			Total Facilities		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Kihesa	0	0	0	0	0	0	0	0	1	0	0	1
Mtwivila	0	0	0	0	0	0	0	1	0	0	1	0
Gangilonga	1	1	1	0	0	0	2	2	5	3	3	6
Kitanzini	0	0	0	1	1	1	2	2	3	3	3	4
Ruaha	0	0	0	0	0	0	1	1	1	1	1	1
Mshindo	0	0	0	0	0	0	0	0	0	0	0	0
Mivinjeni	0	0	0	0	0	0	0	1	1	0	1	1
Mlandege	0	0	0	0	0	0	0	1	1	0	1	1
Mwangata	0	0	0	0	0	0	0	0	0	0	0	0
Kwakilosa	0	0	0	0	0	0	0	0	0	0	0	0
Makongoroni	0	0	0	0	0	0	0	1	1	0	1	1
Ilala	0	0	0	0	0	0	0	0	0	0	0	0
Mkwawa	0	0	0	0	0	0	0	0	0	0	0	0
Kitwiru	0	0	0	0	0	0	0	0	0	0	0	0
Isakalilo	0	0	0	0	0	0	0	0	0	0	0	0
Nduli	0	0	0	0	0	0	1	1	1	1	1	1
Total	1	1	1	1	1	1	6	10	14	8	12	16

Source: Executive Director's Office (Medical's Office), Iringa Municipality, 2013

Table 5. 3: Growth Status and Distribution of Government Health Facilities by Ward; Iringa Municipality; 2002, 2008 and 2012

Ward	Hospitals			Health Centres			Dispensaries			Total Facilities		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Kihesa	0	0	0	1	1	1	0	0	0	1	1	1
Mtwivila	0	0	0	0	0	0	0	0	0	0	0	0
Gangilonga	1	1	1	0	0	0	2	2	2	3	3	3
Kitanzini	0	0	0	0	0	0	2	2	2	2	2	2
Ruaha	0	0	0	0	0	1	1	1	1	1	1	2
Mshindo	0	0	0	0	0	0	0	0	0	0	0	0
Mivinjeni	0	0	0	0	0	0	0	0	0	0	0	0
Mlandege	0	0	0	0	0	0	0	0	0	0	0	0
Mwangata	0	0	0	0	0	0	0	0	0	0	0	0
Kwakilosa	0	0	1	0	0	0	0	0	0	0	0	1
Makongoroni	0	0	0	0	0	0	0	0	0	0	0	0
Ilala	0	0	0	0	0	0	0	0	0	0	0	0
Mkwawa	0	0	0	1	1	1	1	1	1	2	2	2
Kitwiru	0	0	0	0	0	0	0	1	1	0	1	1
Isakalilo	0	0	0	0	0	0	0	1	1	0	1	1
Nduli	0	0	0	0	0	0	1	1	1	1	1	1
Total	1	1	2	2	2	3	7	9	9	10	13	14

Source: Executive Director's Office (Medical's Office), Iringa Municipality, 2013

5.1.1.1 Health Facility Ratios

Health sector development can also be evaluated by comparing health facility ratio. Table 5.4 shows that in 2002 the municipality had an average of one health facility per 18.41 sq. Kms or 5 health facilities per 100 sq. Kms. The situation changed to one health facility per 11.05 sq. Kms or an average of 9 health facilities per 100 sq. Kms in 2012.

Table 5. 4: The Number of Health Facilities in Relationship to Land Area by Ward; Iringa Municipality; 2002 and 2012

Ward	2002				2012			
	Total Land Area (sq.kms)	Total Number of hfs.	Average Land Area in sq. kms Per hfs.	Mean Average hfs per 100 sq. kms.	Total Land Area (sq.kms)	Total Number of hfs.	Average Land Area in sq.kms. Per hfs.	Mean Average hfs per 100 sq. kms.
Kihesa	11.24	1	11.24	8.90	11.24	2	5.62	17.79
Mtwivila	36.86	0	0	0.00	36.86	0	0	0.00
Gangilonga	5.31	6	0.89	112.99	5.31	9	0.59	169.49
Kitanzini	0.68	5	0.14	735.29	0.68	6	0.11	882.35
Ruaha	51.28	2	25.64	3.90	51.28	3	17.09	5.85
Mshindo	0.33	0	0	0.00	0.33	0	0	0.00
Mivinjeni	0.27	0	0	0.00	0.27	1	0.27	370.37
Mlandege	1.23	0	0	0.00	1.23	1	1.23	81.30
Mwangata	8.6	0	0	0.00	8.6	0	0	0.00
Kwakilosa	0.86	0	0	0.00	0.86	1	0.86	116.28
Makongoroni	0.79	0	0	0.00	0.79	1	0.79	126.58
Ilala	0.52	0	0	0.00	0.52	0	0	0.00
Mkwawa	26.98	2	13.49	7.41	26.98	2	13.49	7.41
Kitwiru	26.69	0	0	0.00	26.69	1	26.69	3.75
Isakalilo	28.03	0	0	0.00	28.03	1	28.03	3.57
Nduli	131.73	2	65.87	1.52	131.73	2	65.87	1.52
Total	331.4	18	18.41	5.43	331.4	30	11.05	9.05

Source: Executive Director's Office (Medical's Office), Iringa Municipality, 2013

5.1.1.2 Population per Doctor Ratio

Basing on the increase of number of doctors from 16 in 2002 to 92 in 2012, the quality of health services delivered in Iringa Municipality may be regarded to be improving compared to previous years before 2002 (Table 5.5). Table 5.5 also shows that the distribution of doctors for 2012 was uneven and mostly favoured Gangilonga and

Ruaha wards. However, the presence of regional government hospital in Gangilonga made the ward have the largest number of doctors (40) in 2012. The municipality's average population per doctor was 7,342 in 2002 which improved to 1,645 in 2012. At ward level, Table 5.5 thoroughly highlights that population per doctor was better in 2012 than it was in 2002.

Table 5.5: Distribution of Doctors among Population by Ward Iringa Municipality; 2002 and 2012

Ward	2002			2012		
	Total Population	Total Doctors	Average Population Per Doctor	Total Population	Total Doctor	Average Population Per Doctor
Kihesa	12417	2	6,209	18,196	13	1,407
Mtwivila	13519	0	0	21,017	0	0
Gangilonga	9668	6	1,611	9,599	40	240
Kitanzini	4085	0	0	3,617	11	329
Ruaha	10829	8	1,354	16,984	14	1,213
Mshindo	1892	0	0	1,892	0	0
Mivinjeni	5180	0	0	4,780	0	0
Mlandege	4204	0	0	4,640	0	0
Mwangata	11508	0	0	13,486	0	0
Kwakilosa	6883	0	0	7,948	0	0
Makongoroni	7247	0	0	7,790	0	0
Ilala	3745	0	0	4,448	0	0
Mkwawa	7996	0	0	9,673	9	1075
Kitwiru	7198	0	0	11,461	1	11,461
Isakalilo	5518	0	0	9,188	2	4,594
Nduli	5580	0	0	6,626	2	3,313
Total	117469	6	9,173	151,345	92	1,645

Source: Executive Director's Office (Medical's Office), Iringa Municipality, 2013

5.1.1.3 Population per Hospital Beds Ratio



The proportion of beds per population gives an indication of health facility availability

Table 5.6 shows average population per hospital bed including health centres' bed. The table shows that in 2002 the average population per hospital bed was 753 but in 2012 the situation improved to 340. This is was due to the fact that most hospitals, including the Iringa Regional referral hospital and health centres within the municipality render health services to most people coming from nearby rural districts who come to the municipality for better health services. By looking at ward level, the situation is worse. While in 2002 only two wards out of 16 had hospital/health centre beds, in 2012 four wards had hospital/health centre beds. Most of the health facilities available at ward level face difficulties in attending large number of patients.

Table 5.6: Number of Hospital Beds and Average Population per Bed by Ward, Iringa Municipality; 2002 and 2012

Ward	2002			2012		
	Total Population	Total Number of Beds	Average Population Per Bed	Total Population	Total Number of Beds	Average Population Per Bed
Kihesa	12,417	2	6,209	18,196	32	568.6
Mtwivila	13,519	0	0	21,017	0	
Gangilonga	9,668	154	63	9,599	388	24.7
Kitanzini	4,085	0	0	3,617	0	0
Ruaha	10,829	0	0	16,984	24	707.7
Mshindo	1,892	0	0	1,892	0	0
Mivinjeni	5,180	0	0	4,780	0	0
Mlandege	4,204	0	0	4,640	0	0
Mwangata	11,508	0	0	13,486	0	0
Kwakilosa	6,883	0	0	7,948	0	0
Makongoroni	7,247	0	0	7,790	0	0
Ilala	3,745	0	0	4,448	0	0
Mkwawa	7,996	0	0	9,673	0	0
Kitwiru	7,198	0	0	11,461	0	0
Isakalilo	5,518	0	0	9,188	0	0
Nduli	5,580	0	0	6,626	0	0
Total	117,469	156	753	151,345	444	340.9

Source: Executive Director's Office (Medical's Office), Iringa Municipality, 2013

5.1.1.4 Primary Health Facilities

The available official health facilities were not enough to serve the ever growing population of Iringa municipality. The shortage is supplemented by rural health centers to complement the existing facilities. These centers were operated by Village Health Workers (VHWs) assisted by Traditional Birth Attendants (TBAs) under supervision of Village Health Committees (VHCs).

Table 5.7 shows that by 2012 the municipality had no trained Traditional Birth Attendants, five Village Health Workers and no Traditional Medical Practitioners who were registered. The table also shows that even those Village health workers were located in only four wards, namely Ruaha, Kitwiru, Isakalilo and Nduli.

Table 5.7: Distribution of Complementary Rural Health Facilities by Ward; Iringa Municipality; 2012

Ward	TBAs	VHWs	TMP
	Number	Number	Number
Ruaha	0	1	0
Kitwiru	0	1	0
Isakalilo	0	2	0
Nduli	0	1	0
Total	0	5	0

Source: Executive Director's Office (Medical's Office), Iringa Municipality, 2013

5.1.1.5 Status of Health Personnel



Table 5.8 shows that in 2012 the municipality had a total of 246 medical personnel of different cadres. Medical attendants who accounted for 22.8 percent of the total medical personnel constituted the highest proportion followed by Trained Nurses/NM/PHN (22.4 percent) and Clinical Officers (15.0 percent). Critical shortage was observed for Pharmaceutical Assistants, radiologists and radiographers as well as MCHA as no one was found over that period. Nevertheless, in order to meet World Health Organization standard of one doctor per 10 people, the municipality needs to collaborate with Iringa Regional Medical Officer (RMO) and the Ministry of Health and Social Well Fare (MoHSW) to increase number of specialist and medical doctors (summed at 246) Table 5.8.

Table 5. 8: Type and Number of Medical Personnel, Iringa Municipality, 2012

Type of Medical Personnel	Male	Female	Total	Percent of the Total
Specialist Doctors	3	0	3	1.2
Medical doctors	3	0	3	1.2
Ass. Medical Officers	5	2	7	2.8
Clinical Officers	21	16	37	15.0
Ass. Clinical Officers	5	2	7	2.8
Dental Surgeon	2	0	2	0.8
Ass. Dental Officer	0	1	1	0.4
Dental Therapist	1	2	3	1.2
Pharmacists	2	1	3	1.2
Pharmaceutical Technicians	1	0	1	0.4
Pharmaceutical Assistant	0	0	0	0.0
Laboratory Technicians	3	9	12	4.9
Laboratory Ass.	2	5	7	2.8
Radiologist	0	0	0	0.0
Radiographer	0	0	0	0.0
Radiographic Assistant	0	0	0	0.0
Nursing Officers	2	11	13	5.3
Trained Nurse/NM/PHN	2	53	55	22.4
MCHA	0	0	0	0.0
Medical Attendants	8	48	56	22.8
Health Officers	6	4	10	4.1
Health Assistants	1	0	1	0.4
Health Secretaries	2	0	2	0.8
Other Medical Carders	13	10	23	9.3
Total staff	82	164	246	100.0

Source: Municipality Executive Director's Office (Medical's Office), 2013

5.1.2 Morbidity

The health sector aims at solving the problem of morbidity or sicknesses along with mortality and these are the key targets of any health service development effort. In order to take care of morbidity, the government must have an inventory of these health problems. The inventory shows that the ten most commonly reported causes of illnesses are those given in Table 5.9.

Out-patients

Table 5.9 shows the ten most common reported causes of morbidity for outpatients in the municipality for the year 2008 and 2012. On average 89 percent of all outpatients who got treatment in all municipality hospitals were suffering from the first five diseases highlighted in the table. In the given years, malaria was the leading source of

illness for outpatients. Other diseases with their respective number of people affected (i.e. reported cases) are given in the table.

Table 5. 9: List of the Ten Most Commonly Reported Causes of Morbidity (Out Patients), Iringa Municipality; 2008 and 2012

Rank	Disease	2008		2012		
		Cases	Percent	Disease	Cases	Percent
1	Malaria	2,368	80.4	Malaria	47948	39.8
2	Non infection Gastrointestinal	928	31.5	ARI	28,672	23.8
3	Skin disease	150	5.1	Diarrhea diseases	7827	6.5
4	Pneumonia	117	4.0	UTI	7,736	6.4
5	Diarrhea	65	2.2	Skin diseases	6984	5.8
	Sub total	3,628	123.2		99167	82.4
6	ARI	65	2.2	Pneumonia	6517	5.4
7	Schistosomiasis	48	1.6	Minor Surgical condition	5730	4.8
8	UTI	25	0.8	Worm infestation	4568	3.8
9	Eye deficiency	19	0.6	Normal Skin Fungal	3028	2.5
10	Genital Ulcer	16	0.5	Eye condition	1379	1.1
Total	Total	2,945	100.0		120,389	100.0

Source: Municipality Executive Director's Office (Medical's Office), 2013

In-patients



Malaria, Anaemia, Pneumonia and Diarrhoea were the top four diseases in Iringa Municipality

With regards to Table 5.9 (a), Malaria, HIV/AIDS related illness, Anaemia, Pneumonia, and Diarrhoea were the top five diseases responsible for most of illnesses in the municipality in 2008. In 2009 the same diseases with the exception of Anaemia and HIV/AIDS related illness happened to cause most of poor health of municipality residents. Moreover, in all years, Malaria was the dominant and was the leading source of illness for outpatients. Other diseases with their respective number of people affected (i.e. reported cases) are given in the table.

Cause for morbidity while Diarrhoea and pneumonia were most commonly reported cause of morbidity. The rank for other diseases is as given in Table 5.9 (a) respectively.

Table 5.9 a : List of the Nine Most Commonly Reported Causes of Morbidity (In Patients), Iringa Municipality; 2008 and 2012

Rank	2008			2012		
	Disease	Cases	Percent	Disease	Cases	Percent
1	Malaria	458	30.6	Malaria	887	31.9
2	HIV/AIDS related illness	318	21.3	Pneumonia	640	23.0
3	Anemia	242	16.2	Diarrhea diseases	509	18.3
4	Pneumonia	172	11.5	ARI	180	6.5
5	Diarrhea diseases	111	7.4	Respiratory Disease	121	4.3
Sub Total		1,301	87.0		2,337	84.0
6	STI	82	5.5	Burn	111	4.0
7	Worm infest	36	2.4	Non infection Gastrointestinal	103	3.7
8	Eye infections	33	2.2	TB	101	3.6
9	Skin diseases	26	1.7	Fractures	76	2.7
10	Ear infections	18	1.2	Anemia	55	2.0
Total		1,496	100.0		2,783	100.0

Source: Municipality Executive Director's Office (Medical's Office), 2013

5.1.2.1 Mortality

The dominant cause of mortality for inpatients of all ages in 2008 was Pneumonia and Cardiovascular diseases (Table 5.10). The table shows that out of 394 reported deaths in 2008, Pneumonia and cardiovascular diseases constituted 82 cases each equivalent to 20.8 percent of all deaths and were the most killer diseases in the municipality. HIV/AIDS related illness came second with 71 deaths or 18.0 percent. Gastro intestine killed the least inpatients in 2008 by accounting for 0.5 percent of all deaths. In 2012, deaths due to Pneumonia (32) were less than half to those observed in 2008 (82 cases). This evidenced that the government through Ministry of Health and Social Welfare (MOHSW) needs to increase preventive measures against pneumonia not only in Iringa municipality but also to other parts of the country where pneumonia takes a large number of peoples' lives. By causing 31 deaths (28.1 percent), cardiovascular disease was the second killer in 2012 and malaria stood third (12 death cases, 10.9 percent) respectively.

Table 5. 10: List of the Ten Most Commonly Reported Causes of Mortality, Iringa Municipality; 2008 and 2012

2008			2012		
Disease	Cases	Percent	Disease	Cases	Percent
Pneumonia	82	20.8	Pneumonia	32	29.1
Cardiovascular diseases	82	20.8	Cardiovascular diseases	31	28.2
HIV/AIDS related illness	71	18.0	Malaria uncompleted	12	10.9
Diarrhoea	66	16.8	ARI	8	7.3
ARI	29	7.4	Burns	7	6.4
Malaria	24	6.1	Tuberculosis	6	5.5
Burns	18	4.6	Severe Malaria	5	4.5
UTI	16	4.1	UTI	5	4.5
Anaemia	4	1.0	Measles	3	2.7
Gastro intestine	2	0.5	Diarrhoea Disease	1	0.9
Total	394	100.0	Total	110	100.0

Source: Municipality Executive Director's Office (Medical's Office), 2013

HIV/AIDS Infections

There are a number of ways that can be used to measure the extent and trend of the HIV prevalence among the people. Family blood donors, expected mothers participating in the PMTCT service and Voluntary Counselling and Testing (VCT) are common methods employed in measuring prevalence rate of HIV/AIDS to residents of Iringa municipality.

Table 5.11 shows the cumulative cases of HIV/AIDS cases reported in 2010, 2011 and 2012 in the municipality. However, despite all efforts made by the government, NGOs and other stakeholders in sensitizing people to take preventive measures against HIV/AIDS, still there is mushrooming of HIV/AIDS infections in the municipality. According to Table 5.11, between

2010 and 2011 people infected with HIV/AIDS increased by 970 (6.9 percent increase) from 14064 in 2010 to 15034 in 2011. Infections grew at a smaller rate over the period of 2011 and 2012. It grew by 5.3 percent (797 people infected).

Table 5.11 also evidenced the fact that women are in higher risk of being infected with HIV/AIDS than men if they are not using preventive measures. Over the three years period, 2010, 2011 and 2012 more women than men were infected with such disease in the municipality. They accounted for 52.2 percent of all people infected in 2010, about 51.9 percent in 2011 and 50.8 percent in 2012. Further to that the table presents that Gangilonga and Kitanzini wards which are the hub of business and economic activities

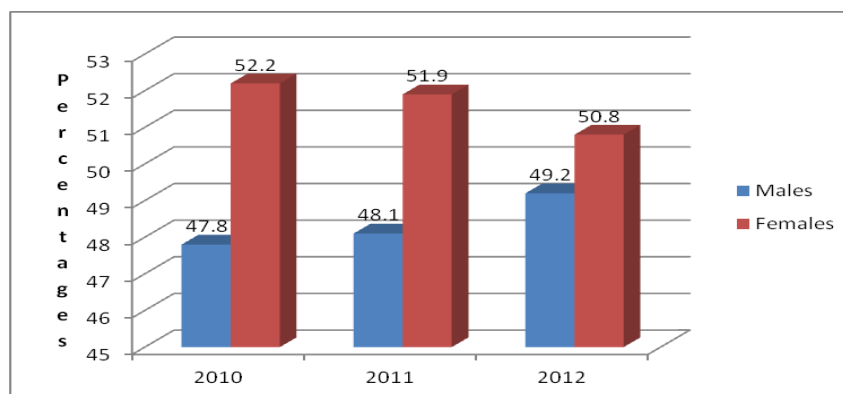
in the municipality were leading in HIV/AIDS infected people. Gangilonga had a total of 19,575 infected people (43.6 percent of all people with HIV/AIDS) in all three years followed by Kitanzini (12,067 infected people, 26.9 percent) and Mtwivila (8,153 infected people, 18.1 percent). Mkwawa with 789 infected people (1.8 percent of the total infected in all three years) had the smallest number of HIV/AIDS infected people over the given time.

Table 5. 11: Number of People Tested HIV/AIDS Positive by Ward, Iringa Municipality; 2010–2012

Ward	2010			2011			2012			Total 2010– 2012
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Kihesa	175	227	402	160	220	380	146	183	329	1,111
Mtwivila	1,148	1,035	2,183	900	693	1,593	2,249	2,128	4,377	8,153
Gangilonga	2,305	3,233	5,538	3,477	3,749	7,226	3,174	3,637	6,811	19,575
Kitanzini	2,195	1,661	3,856	2,269	2,526	4,795	1,810	1,606	3,416	12,067
Ruaha	764	1,049	1,813	328	456	784	279	358	637	3,234
Mshindo	0	0	0	0	0	0	0	0	0	0
Mavinjeni	0	0	0	0	0	0	0	0	0	0
Mlandege	0	0	0	0	0	0	0	0	0	0
Mwangata	0	0	0	0	0	0	0	0	0	0
Kwakilosa	0	0	0	0	0	0	0	0	0	0
Makongoroni	0	0	0	0	0	0	0	0	0	0
Ilala	0	0	0	0	0	0	0	0	0	0
Mkwawa	130	142	272	104	152	256	126	135	261	789
Kitwiru	0	0	0	0	0	0	0	0	0	0
Isakalilo	0	0	0	0	0	0	0	0	0	0
Nduli	0	0	0	0	0	0	0	0	0	0
Total	6,717	7,347	14,064	7,238	7,796	15,034	7,784	8,047	15,831	44,929
Percent	47.8	52.2	100.0	48.1	51.9	100.0	49.2	50.8	100.0	

Source: Municipality Executive Director's Office (Medical Office), 2013

Figure 34: HIV/AIDS reported cases by Sex, Iringa Municipality; 2010 – 2012



Source: Municipality Executive Director's Office (Medical Office), 2013



Modern laboratories help in examining diseases in Iringa Municipality

Regarding the number of new HIV/AIDS cases, Table 5.12 gives the new cases relative to the population size. The number of new cases increased from 1,835 in 2010 to 2,271 in 2012 and the number of new cases per 100,000 persons increased from 0.018 in 2010 to 0.023 in 2012 resulting in 23 per cent increase in a three years period. With 630 increases in new cases from 2010 to 2012, Gangilonga was the most affected ward. Concentration of people from different places for example students at RUCO, etc. might be one of the reasons for high HIV/AIDS infections rate at Gangilonga ward.

Table 5. 12: The Rate of New AIDS Cases by Ward, Iringa Municipality; 2010 and 2012

Ward	2010			2012			Percent Change in Rate 2010-2012
	Total Population	No. of New AIDS Cases	Cases per 100,000 Persons	Total Population	No. of New AIDS Cases	Cases per 100,000 Persons	
Kihesa	18,498	89	0.0009	18,196	65	0.0007	-27.0
Mtwivila	20,200	125	0.0013	21,017	178	0.0018	42.4
Gangilonga	9,941	1,196	0.0120	9,599	1,826	0.0183	52.7
Kitanzini	5,165	179	0.0018	3,617	115	0.0012	-35.8
Ruaha	15,909	235	0.0024	16,984	78	0.0008	-66.8
Mshindo	2,775	0	0	1,892	0	0	0
Mavinjeni	7,872	0	0	4,780	0	0	0
Mlandege	6,312	0	0	4,640	0	0	0
Mwangata	10,500	0	0	13,486	0	0	0
Kwakilosa	9,799	0	0	7,948	0	0	0
Makongoroni	10,691	0	0	7,790	0	0	0
Ilala	5,560	0	0	4,448	0	0	0
Mkwawa	12,391	11	0.0001	9,673	9	0.0001	-18.2
Kitwiru	9,914	0		11,461	0		0
Isakalilo	8,222	0	0	9,188	0	0	0
Nduli	6,447	0	0	6,626	0	0	0
Municipality Total	16,0196	1,835	0.0184	151,345	2,271	0.0227	23.8

Source: Municipality Executive Director's Office (Medical Office), 2013

Introduction of VCT service in the municipality has made the screening of volunteers possible since 2010. Table 5.13 reveals that in 2012, about 15,831 volunteers of both sexes were screened and the results show that more women than men were HIV positive. The rate of infection was 59.7 per cent for women and 40.3 per cent for men. With a total of 2,271 HIV positive people, Gangilonga ward had the highest infection rate while Mkwawa area had the least number of infected people (6 HIV positive people). Nevertheless, until the end of 2012, about 10,883 HIV infected people were using ARV in the municipality. The high number of HIV infected people using ARV was attributed by the awareness of the people that using ARV gives them more life than dependence on traditional medicines.

Table 5. 13: VCT Volunteers Screened for HIV and Those Subsequently Using ARV by Sex and Ward, Iringa Municipality, 2012

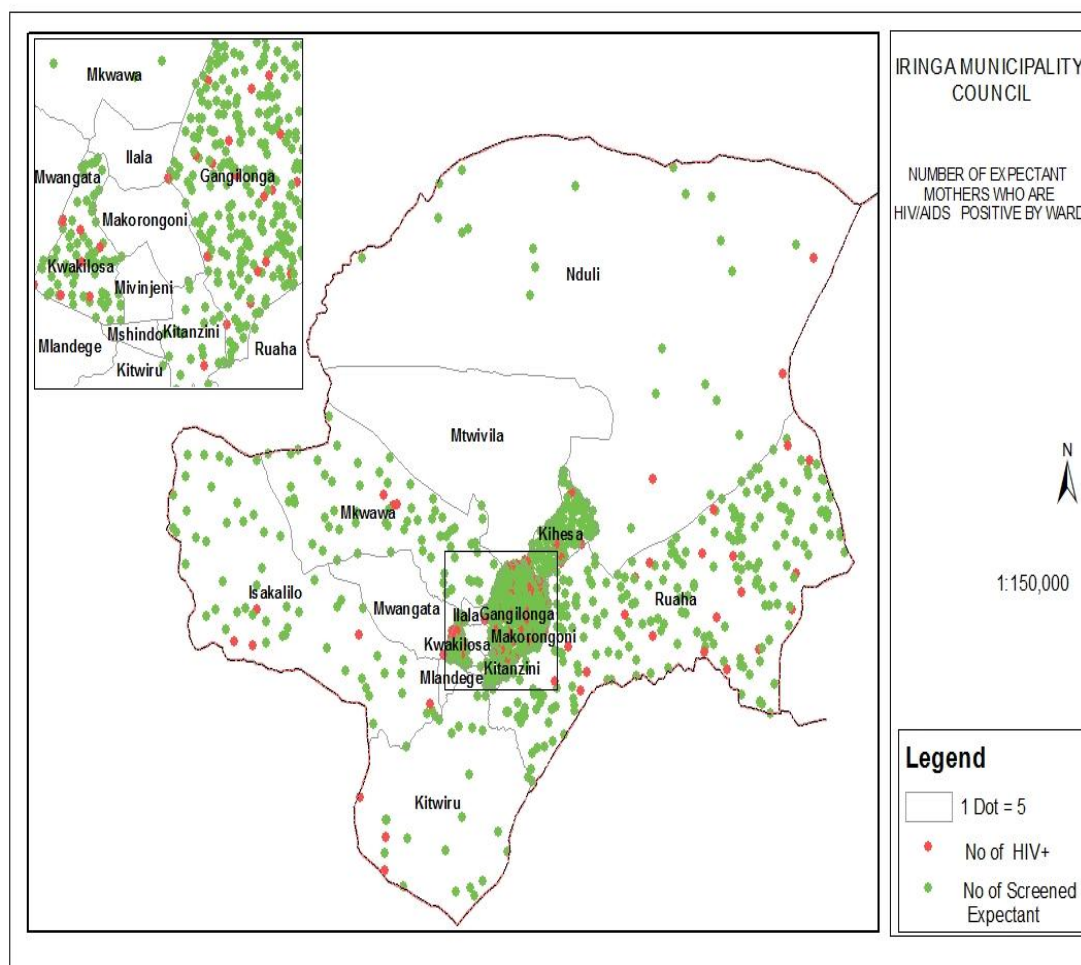
Ward	Screened			Number of HIV+			Using ARV	Percent Using ARV
	Male	Female	Total	Male	Female	Total	Total	
Kihesa	146	183	329	24	41	65	380	3.5
Mtwivila	2,249	2,128	4,377	61	117	178	0	0.0
Gangilonga	3,174	3,637	6,811	745	1,081	1,826	9,557	87.8
Kitanzini	1,810	1,606	3,416	42	73	115	0	0.0
Ruaha	279	358	637	41	37	78	928	8.5
Mshindo	0	0	0	0	0	0	0	0.0
Mivinjeni	0	0	0	0	0	0	0	0.0
Mlandege	0	0	0	0	0	0	0	0.0
Mwangata	0	0	0	0	0	0	0	0.0
Kwakilosa	0	0	0	0	0	0	0	0.0
Makongoroni	0	0	0	0	0	0	0	0.0
Ilala	0	0	0	0	0	0	0	0.0
Mkwawa	118	143	261	3	6	9	18	0.2
Kitwiru	0	0	0	0	0	0	0	0.0
Isakalilo	0	0	0	0	0	0	0	0.0
Nduli	0	0	0	0	0	0	0	0.0
Total	7,776	8,055	15,831	916	1,355	2,271	0	0.0
Percent	49.1	50.9	100.0	40.3	59.7	100.0	10,883	

Source: Municipality Executive Director's Office (Medical Office), 2013

The prevalence of HIV/AIDS can also be learnt from report on PMTCT service. Table 5.14 reveals that out of 6,611 expectant mothers who participated in that service and hence screened, 486 women (9.5 per cent of total screened expectant mothers) found to be HIV positive.

Gangilonga ward lead in number of expectant mothers with HIV positive (217) followed by Ruaha (102) and Kwakilosa ward (47). Nevertheless, Gangilonga ward had the highest number of HIV positive expectant mothers who were given Niverapine as indicated in Table 5.14.

Map 5: Showing number of Expectant Mothers who are HIV/AIDS positive by Ward; Iringa Municipal Council; 2012



Source: National Bureau of Statistics, GIS Unit; 2013

Table 5. 14: Expectant Mothers Participated in the PMTCT Services and Tested for HIV/AIDS by Ward, Iringa Municipality; 2012

Ward	No. of ANC Attendants	No. Screened	No. HIV+	Percent of HIV+	Number Given Niverapine
Kihesa	773	670	44	6.6	10
Mtwivila	0	0	0	0	0
Gangilonga	2743	2066	217	10.5	119
Kitanzini	125	103	7	6.8	1
Ruaha	1403	1097	102	9.3	3
Mshindo	0	0	0	0.0	0
Mivinjeni	0	0	0	0.0	0
Mlandege	0	0	0	0.0	0
Mwangata	0	0	0	0.0	0
Kwakilosa	381	350	47	13.4	0
Makongoroni	0	0	0	0.0	0
Ilala	0	0	0	0.0	0
Mkwawa	544	321	16	5.0	0
Kitwiru	161	108	16	14.8	0
Isakalilo	313	275	24	8.7	
Nduli	168	121	13	10.7	1
Total	6,611	5,111	486	9.5	134

Source: Municipality Executive Director's Office (Medical Office), 2013

5.1.3.1 The Impact of HIV/AIDS

The socio-economic assessment of Iringa municipality is not complete without discussing the extreme challenges caused by the HIV/AIDS and the effect of efforts so far made by various local and international organisations in combating the epidemic. HIV/AIDS is highlighted in this document, because it is a major health problem and one of the leading cause of mortality since its advent at the end of 1987. The other reason for discussing the epidemic stems from the role it plays in shortening lives of families and generating widows, orphans and vulnerable children due to the loss of bread-winners in their families.

Experience has shown that Iringa municipality is among few places in the region with ever increasing rates of HIV/AIDS prevalences. There are socio-economic factors that account for the rapid spread of the epidemic. Economically, the municipality is the centre of economic activities in the region so many people are coming from various parts of the country for business and working who sometimes engage in unsafe sexual relationships with the residents. Other reasons include the traditional practice of

prolonged drinking and unsafe sexual practices, polygamy as well as poverty. Moreover, highways connecting the municipality with Mbeya, Ruvuma, Rukwa and Dodoma regions and not forgetting Malawi and Zambia, expose the municipality to more HIV/AIDS infections due to high number of passengers and lorry drivers flocking in the municipality.

(i) The Increase of Widows

One of the indications of a high prevalence rate in the municipality is the increasing number of widows. The data gathered in 1988 and 2002 population censuses show that the number of persons widowed increased from 2,181 in 1988 to 4,233 in 2002. The proportion of the widows is more for women than men in both years. In 1988, about 5.3 percent of the women were widowed compared to 1.9 percent of the men and in 2002 the corresponding figures were 8.2 percent for women against 1.9 percent for men. There is a need of conducting a study that will gather information of widowed and their problems in order to come up with appropriate measures and solutions.

Table 5. 15: Marital Status by Sex, Iringa Municipality; 1988 and 2002

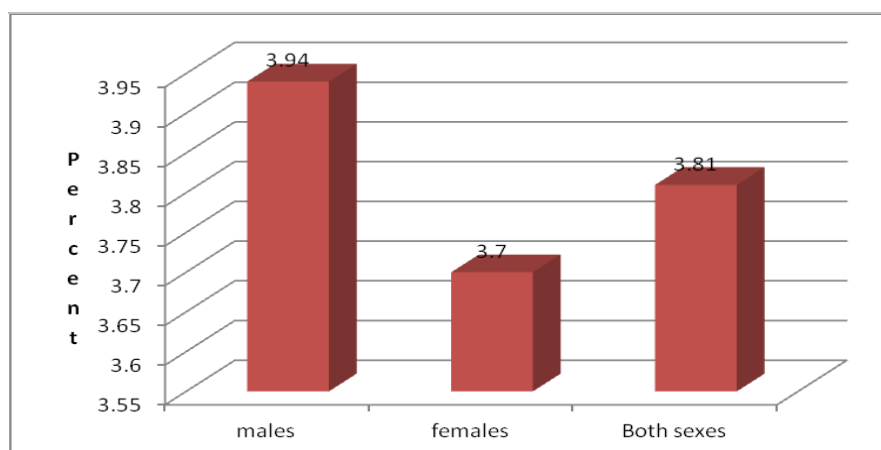
Marital Status	1988			2002		
	Men	Women	Total	Men	Women	Total
Single/Never Married	13,990	12,943	26,933	21,737	22,463	44,200
Married/Living Together	12,640	15,444	28,084	13,691	15,868	29,559
Divorced/Separated	510	1,138	1,648	518	1,340	1,858
Widowed	532	1,649	2,181	686	3,547	4,233
Total	27,672	31,174	58,846	36,632	43,218	79,850
Percent Widowed	1.9	5.3	3.7	1.9	8.2	5.3

Source: NBS, URT, 1988 and 2002 Population and Housing Census

(ii) The Increase of Orphaned Children

Orphans are classified as persons whose both parents, mother and father are dead. According to the 2002 Population and Housing Census data, Iringa Urban Report, 3.81 percent of children aged 0 – 17 years were orphans in Iringa municipality. Comparing sexes, the incidence of orphanhood was higher among boys (3.94 percent) than girls (3.70 percent).

Figure 35: Percentage Distribution of Orphans (Age 0-17 Years) by Sex; Iringa Municipality; 2002



Source: 2002 Population and Housing Census, Iringa Urban Report (Volume IV)

(iii) Malaria Prevalence

Though Malaria is not associated directly with HIV/AIDS, the number of deaths caused by Malaria has been increasing since the outbreak of HIV/AIDS in the municipality. This is however, authenticated by data received from the municipality health department depicting that 458 patients who suffered from malaria in 2008, about 24 of them (6.1 percent) died. In 2012, malaria cases were higher than it was in 2008 as 887 people admitted to the hospital due to such disease and among them, 17 (15.4 percent) died.



HIV/AIDS epidemic has increased the number of deaths from associated diseases like malaria.

(iv) Pneumonia Prevalence

Pneumonia is another disease for which the number of people admitted in municipality hospitals has increased in recent years since the outbreak of HIV/AIDS in the municipality. Under normal circumstances, pneumonia affects children and old people

who have weak body immune and this happens mostly in highlands areas where the weather is cold and humid. Although the municipality has cold climate in May to August, pneumonia cases are rampant and happen to people of all ages including youths due to the increase of HIV/AIDS prevalence. Report from the municipality highlights that 172 people suffered from pneumonia in 2008 of whom 82 people died. In 2012 pneumonia cases reached 640 and 32 people (29.1 percent) died.

(v) Tuberculosis Prevalence

Tuberculosis cases have been increasing in recent years since the outbreak of HIV/AIDS infections in Iringa municipality. However, TB was observed to be among the top ten killer diseases in the municipality.

Data from the municipality shows that Tuberculosis cases summed at 1,500 registered in the two years. From the total cases, the table further indicates that 539 cases were reported in 2010 which dropped to 467 in 2011 before rising again to 496 cases in 2012. Makorongoni ward led in the number of cases of Tuberculosis in the three years. In 2010 there were 154 cases before dropping to 143 cases in 2011 but again rose to 167 cases in 2012 as Table 5.16 shows.

Table 5.16: Cumulative Number of People Reported with Tuberculosis (TB) Cases by Ward, Iringa Municipality; 2010– 2012.

Ward	2010			2011			2012			Total 2010 - 2012
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Kihesa	21	20	41	52	30	82	47	14	61	184
Mtwivila	2	2	4	0	8	8	0	3	3	15
Gangilonga	2	4	6	6	2	8	6	5	11	25
Kitanzini	30	16	46	24	35	59	31	30	61	166
Ruaha	42	30	72	47	42	89	49	30	79	240
Mshindo	10	3	13	0	0	0	1	4	5	18
Mavinjeni	4	3	7	4	1	5	4	5	9	21
Mlandege	10	5	15	2	7	9	7	5	12	36
Mwangata	3	72	75	0	6	6	11	9	20	101
Kwakilosa	50	9	59	2	1	3	5	8	13	75
Makongoroni	80	74	154	79	64	143	85	82	167	464
Ilala	5	2	7	5	5	10	3	5	8	25
Mkwawa	11	10	21	12	15	27	14	11	25	73
Kitwiru	5	1	6	5	3	8	7	3	10	24
Isakalilo	3	5	8	3	1	4	4	4	8	20
Nduli	1	4	5	3	3	6	1	3	4	15
Total	279	260	539	244	223	467	275	221	496	1,502
Percent	18.6	17.3	35.9	16.2	14.8	31.1	18.3	14.7	33.0	

Source: Municipality Executive Director's Office (Medical's Office), 2013

5.1.4 Childhood Mortality Rate

Lack of nutritious food, poor health care and inability of accessing vaccinations are among the factors that accelerates childhood mortality rate in the country. According to National Bureau of Statistics Infant and Child Mortality Report of 2006, high childhood mortality levels were found in areas that had a high proportion of people engaged in agricultural activities than non-agricultural occupations. Also women with high education levels and thus in non-agricultural occupations are expected to be aware of the various options that best save the lives of infants and children under five years of age. However, the fact given in this NBS report is also evidenced in Iringa municipality which has low childhood mortality rate compared to other rural districts of the region. Within the municipality, few women engaged in agricultural occupations and also educated women are higher in number than those in rural areas of the region, therefore, have ample time of taking care of their infants and children aged less than five years, great awareness of the importance of nutritious food and vaccinations as well as having other best options of saving lives of their children.

Table 5.17 shows that Iringa urban had the lowest level of IMR than any other rural districts of the region. IMR in the municipality observed to be 83/1000 in 2002; however for 1988 it could not be determined as it was part of Iringa rural district.

Table 5. 17: Status of Infant Mortality Rate by District; Iringa Region; 1988 and 2002

District	IMR		Percentage change 1988 - 2002
	1988	2002	
Iringa Rural	141	114	-19.1
Kilolo	141	103	-27
Mufindi	116	98	-15.9
Iringa Urban	-	83	-

Source: NBS, Censuses Reports, 1988 and 2002

5.1.4.1 Child Nutrition



Nutritional food intake much influences child health

Children, from the stage of foetus 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 is underweight 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. Data given in Table 5.18 indicate that the problem of severe malnutrition in Iringa municipality is moderately high. It was 15.8 percent in 2010, decreased to 15.0 percent in 2011 and decreased further to 14.3 percent in 2012.

All Ward level, Table 5.18 shows that in 2010, the highest severe malnutrition was reported in Kihesa ward (39.0 percent) followed by Ruaha ward (20.0 percent) and Gangilonga ward (19.3 percent). In 2011 and 2012, the highest percentages of children with severe malnutrition were reported again in Kihesa ward at 24.8 and 32.1 percent respectively.

Table 5.18: Percentage of Severe Malnutrition for Children under One Year by Ward, Iringa Municipality, 2010, 2011 and 2012

Ward	2010			2011			2012		
	Total Weighed	Percent of Moderately Underweight	Percent of Severely Underweight	Total Weighed	Percent of Moderately Underweight	Percent of Severely Underweight	Total Weighed	Percent of Moderately Underweight	Percent of Severely Underweight
Mshindo	0	0	0	0	0	0	0	0	0
Mlandege	0	0	0	0	0	0	0	0	0
Mwangata	0	0	0	0	0	0	0	0	0
Gangilonga	22768	19.3	4.5	30170	16.7	4.7	32830	14.7	1.6
Mtwivila	0	0	0	0	0	0	0	0	0
Makorongoni	0	0	0	0	0	0	0	0	0
Kihesa	10729	39.2	1	12960	24.8	1.4	14620	0	2.4
Mivinjeni	0	0	0	0	0	0	0		0
Ilala	0	0	0	0	0	0	0		0
Kwakilosa	0	0	0	0		0	4512	9.8	1.8
Kitanzini	3290	4.3	0.4	4880	4.2	0.5	5720	5.4	0.7
Mkwawa	7870	7.1	3.7	9878	7.3	4.1	12770	7	3.4
Kitwiru	3836	8.3	2	5670	7.1	2.7	8191	2.7	3
Ruaha	17740	20	3	21570	18.6	4.8	25650	18.9	5.3
Isakalilo	4080	10.1	3	5429	5.7	3	7201	4.3	2.5
Nduli	3841	8.3	2	8320	11.2	5.2	10010	8.5	4.8
Total	76164	116.6	19.6	100888	95.6	26.4	123516	71.3	25.5

Source: Compiled data from All District Socio-economic Profiles of Iringa Region, 2013

5.1.4.2 Mother and Child Health Care

The society wellbeing status can be assessed on the level by which mothers, infant and child mortality are reduced. According to the 2002 census data, infant and child mortalities are declining steadily in Iringa municipality (formally known as Iringa Urban district). Protection of expectant/lactating mothers and children from measles, tuberculosis, etc. through immunisation programme (CSPD) supported by international organizations has to a large extent reduced the risk of infections to children.

Reduction of deaths among children and their mothers is attributed to the massive coverage of immunisation campaigns done in the municipality. According to Table 5.19, number of expectant mothers who were vaccinated with TT2 increased from 5,287 expectant mothers in 2010 to 6,014 expectants in 2011 before increasing further to 6,950 in 2012. The table further depicts that in each ward; more than 89 percent of expectant mothers were vaccinated. High rate of immunisation coverage in the municipality is attributed by awareness made by immunisation programmes supported by international organisations.

Table 5. 19: Percentage of Expectant Mothers Vaccinated TT2 by Ward, Iringa Municipality, 2010, 2011 and 2012

Ward	2010			2011			2012		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kihesa	385	311	80.8	515	465	90.3	459	437	95.2
Mtwivila	384	310	80.7	485	475	97.9	574	494	86.1
Gangilonga	390	349	89.5	539	608	112.8	444	418	94.1
Kitanzini	473	277	58.6	318	307	96.5	474	456	96.2
Ruaha	370	346	93.5	315	374	118.7	476	469	98.5
Mshindo	370	324	87.6	295	285	96.6	446	437	98
Mavinjeni	361	349	96.7	447	373	83.4	509	478	93.9
Mlandege	381	336	88.2	432	425	98.4	372	294	79
Mwangata	357	318	89.1	415	375	90.4	475	462	97.3
Kwakilosa	303	303	100	422	301	71.3	534	518	97
Makongoroni	362	350	96.7	412	409	99.3	509	486	95.5
Ilala	380	357	93.9	377	273	72.4	309	279	90.3
Mkwawa	273	383	140.3	345	341	98.8	516	507	98.3
Kitwiru	376	314	83.5	398	379	95.2	442	431	97.5
Isakalilo	383	298	77.8	515	349	67.8	259	248	95.8
Nduli	363	362	99.7	408	275	67.4	559	536	95.9
Municipality Total	5,911	5,287	89.4	6,638	6,014	90.6	7,357	6,950	94.5

Source: Municipality Executive Director's Office (Medical's Office), 2013



The success of immunisation depends mostly on the awareness of its benefits by women

DPT3 Vaccination

The trend of DPT3 vaccination for children less than one year shows an increase in the number of children vaccinated between 2010 and 2011. According to Table 5.20, about 4,358 children were vaccinated in 2010 and 4,353 in 2012. All 16 wards available in the municipality vaccinated more than 90 percent of children aged less than a year in 2010.

In 2011 however, all wards with the exception of Ilala ward vaccinated over 90 percent of the children aged less than one year. In 2012 things were not good as over four wards had their vaccination below 90 percent. This trend is not good at all. The authority should look at this matter more seriously.

Table 5. 20: Percentage of Children under One Year Vaccinated DPT3 by Ward, Iringa Municipality; 2010, 2011 and 2012

Ward	2010			2011			2012		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kihesa	264	269	101.9	300	600	200.0	511	418	81.8
Mtwivila	349	354	101.4	300	400	133.3	423	350	82.7
Gangilonga	284	289	101.8	615	790	128.5	186	522	280.6
Kitanzini	203	207	102.0	212	197	92.9	124	103	83.1
Ruaha	277	283	102.2	300	350	116.7	385	374	97.1
Mshindo	228	248	108.8	191	187	97.9	61	80	131.1
Mivinjeni	288	293	101.7	212	198	93.4	264	320	121.2
Mlandege	235	238	101.3	202	200	99.0	186	190	102.2
Mwangata	258	263	101.9	203	190	93.6	423	451	106.6
Kwakilosa	255	260	102.0	200	190	95.0	284	170	59.9
Makongoroni	287	292	101.7	180	194	107.8	186	451	242.5
Ilala	276	281	101.8	150	120	80.0	151	127	84.1
Mkwawa	327	332	101.5	220	200	90.9	234	233	99.6
Kitwiru	261	266	101.9	210	201	95.7	244	180	73.8
Isakalilo	253	257	101.6	190	187	98.4	191	194	101.6
Nduli	221	226	102.3	150	151	100.7	256	190	74.2
Municipality Total	4,266	4,358	102.2	3,835	4,355	113.6	4,109	4,353	105.9

Source: Municipality Executive Director's Office (Medical's Office), 2013

BCG Vaccination

Awareness among parents triggered the rapid growth in the number of children under one year who receive BCG vaccination in the municipality. According to Table 5.21, the number of vaccinated children increased from 10,323 in 2010 to 10,355 in 2011 before reaching 10,380 children in 2012. At ward level vaccination coverage was over

100 percent in all wards in all the three years with the exception of Nduli ward in 2012 where it was 97.7 percent. In Gangilonga ward the coverage was 1,133.9 percent in 2012. This is quite astonishing but the health department of the Iringa Municipality defends the figure by saying that it is possible because many expectant mothers prefer to deliver in the health facilities located in this ward. This figure should be looked at cautiously.



Immunisation Campaigns reduces deaths of Infants and children of under Five years in the Municipality

Table 5. 21: Percentage of Children under One Year Vaccinated BCG by Ward, Iringa Municipality; 2010, 2011 and 2012

Ward	2010			2011			2012		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kihesa	185	526	284.3	300	900	300.0	481	1413	293.8
Mtwivila	296	787	265.9	300	776	258.7	511	1400	274.0
Gangilonga	265	956	360.8	615	1295	210.6	186	2109	1,133.9
Kitanzini	201	592	294.5	212	400	188.7	124	417	336.3
Ruaha	381	673	176.6	300	657	219.0	385	1001	260.0
Mshindo	290	681	234.8	191	647	338.7	61	100	163.9
Mavinjeni	259	650	251.0	212	560	264.2	198	700	353.5
Mlandege	283	674	238.2	202	773	382.7	186	200	107.5
Mwangata	239	620	259.4	203	780	384.2	423	500	118.2
Kwakilosa	300	691	230.3	200	600	300.0	284	711	250.4
Makongoroni	267	647	242.3	180	647	359.4	264	800	303.0
Ilala	243	534	219.8	150	200	133.3	151	400	264.9
Mkwawa	323	714	221.1	220	501	227.7	234	626	267.5
Kitwiru	240	631	262.9	210	650	309.5	244	502	205.7
Isakalilo	205	397	193.7	190	500	263.2	191	251	131.4
Nduli	187	550	294.1	150	469	312.7	256	250	97.7
Municipality Total	4,164	10,323	247.9	3,835	10,355	270.0	4,179	11,380	272.3

Source: Municipality Executive Director's Office (Medical Office), 2013

Measles Vaccination

Measles vaccination for children under one year old in Iringa municipality, like in other places in the country, is undertaken for the aim of protecting children against measles. Adequate number of health centres for measles service delivery and sensitization campaigns helped the municipality to meet the targets set in most of the wards. Referring to Table 5.22, the number of measles vaccinated children increased from 5,654 in 2010 to 6,386 children in 2009 before reaching 7,426 in 2012. All the 16 wards achieved more than 100percent vaccination coverage as Table 5.22 indicates with the exception of Isakalilo and Mshindo wards which had more than 90 percent but less than 100percent in 2010.

Table 5. 22: Percentage of Children under One Year Vaccinated Measles by Ward, Iringa Municipality; 2010, 2011 and 2012

Ward	2010			2011			2012		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kihesa	264	365	138.3	300	641	213.7	481	564	117.3
Mtwivila	349	408	116.9	300	465	155.0	511	571	111.7
Gangilonga	284	687	241.9	615	798	129.8	186	928	498.9
Kitanzini	203	308	151.7	212	278	131.1	124	313	252.4
Ruaha	277	373	134.7	300	679	226.3	385	840	218.2
Mshindo	228	217	95.2	191	285	149.2	61	93	152.5
Mavinjeni	288	296	102.8	212	247	116.5	198	464	234.3
Mlandege	235	277	117.9	202	296	146.5	186	430	231.2
Mwangata	258	316	122.5	203	301	148.3	423	464	109.7
Kwakilosa	255	375	147.1	200	287	143.5	284	682	240.1
Makongoroni	287	298	103.8	180	267	148.3	264	370	140.2
Ilala	276	318	115.2	150	261	174.0	151	270	178.8
Mkwawa	327	473	144.6	220	456	207.3	234	311	132.9
Kitwiru	261	348	133.3	210	318	151.4	244	364	149.2
Isakalilo	253	249	98.4	190	417	219.5	191	329	172.3
Nduli	221	346	156.6	150	390	260.0	256	433	169.1
Municipality Total	4,266	5,654	132.5	3,835	6,386	166.5	4,179	7,426	177.7

Source: Municipality Executive Director's Office (Medical's Office), 2013

5.1.5 Investment Opportunities in the Health Sub-Sector

This sub-sector faces many problems including prevalence of diseases such as pneumonia, malaria, diarrhoea, clinical Aids; the shortage of workers and drugs. Investment is needed in regards to the construction of more health facilities, provision of instruments/drugs and training of health/medical personnel.

EDUCATION SECTOR

5.2.0 An Overview

Education sector covers both formal and informal education. Formal education includes pre-primary, primary and secondary school education. Informal education covers colleges/vocational education. Therefore, the development of the sector in Iringa Municipality Council involves improvements in all the above mentioned areas.

5.2.1 Pre-Primary Education



The availability of nursery schools in the district is yet another feature depicting the level of development of education system. Pre-schools are meant for children aged 3-6 years. 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 Iringa Municipality Council. Most of such schools annexed to government primary school compounds.

As Table 5.23 shows the district managed to increase the number of pre-primary schools from 43 in 2010 to 52 in 2012. The distribution of pre-primary schools was not even as it skewed towards urban center wards and also those with large populations like Gangilonga, Mtwivila, Kitwiru, Mkwawa, and Kwakilosa. Gangilonga ward, being near the urban centre with high settlement had the largest number of pre-primary schools (8). Kitanzini and Mivinjeni wards though being in the urban center are very small in size and mostly business areas had no pre-primary schools.

Table 5. 23: Number of Pre-Primary School Classes by Ownership and Ward, Iringa Municipality; 2009-2011

Ward	2010			2011			2012		
	Pub	Pri	Total	Pub	Pri	Total	Pub	Pri	Total
Kihesa	1	0	1	1	0	1	3	3	6
Mtwivila	5	1	6	5	1	6	5	1	6
Gangilonga	4	4	8	4	4	8	4	4	8
Kitanzini	0	0	0	0	0	0	0	0	0
Ruaha	4	1	5	4	1	5	5	5	10
Mshindo	1	0	1	1	0	1	1	1	2
Mivinjeni	0	0	0	0	0	0	0	0	0
Mlandege	2	0	2	2	0	2	2	2	4
Mwangata	2	1	3	2	1	3	1	1	2
Kwakilosa	3	0	3	3	0	3	3	3	6
Makorongoni	1	0	1	1	0	1	1	1	2
Ilala	2	0	2	2	0	2	2	0	2
Mkwawa	1	3	4	1	3	4	2	2	4
Kitwiru	3	1	4	3	1	4	3	3	6
Isakalilo	2	0	2	2	0	2	3	3	6
Nduli	2	0	2	2	0	2	2	0	2
Total	32	11	43	32	11	43	37	37	74

Pub = Public, Pri = Private

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2012

5.2.2 Enrolment in Pre-Primary Schools

The motive behind introducing pre-primary schools classes in government primary schools all over the country was to increase enrolment of children aged 3-6 years in such schools. In Iringa Municipality enrolment increased by 5.2 percent from 2,836 pupils in 2010 to 2,984 in 2011 and increased further by 3.0 percent between the period of 2011 and 2012 (Table 5.24). The significant increase in enrolment is attributed to the increase in the number of eligible pupils to join pre-primary schools and parent's awareness to the education system. However, among 16 wards, two wards Mivinjeni and Kitanzini were marginalized in pre-primary school education services. The two wards being thinly populated in the business area, the district opted to locate such services in one nearby wards.

Table 5. 24: Pre-Primary Schools Enrolment by Ownership and Ward, Iringa Municipality; 2010–2012

Ward	2010			2011			2012		
	Pub	Pri	Total	Pub	Pri	Total	Pub	Pri	Total
Kihesa	54	0	54	60	0	60	188	0	188
Mtwivila	449	21	470	254	28	282	246	16	263
Gangilonga	243	461	704	272	386	658	200	473	673
Kitanzini	0	0	0	0	0	0	0	0	0
Ruaha	378	130	508	418	129	547	415	108	523
Mshindo	38	0	38	50	0	50	32	0	32
Mivinjeni	0	0	0	0	0	0	0	0	0
Mlandege	100	0	100	138	0	138	71	0	71
Mwangata	54	40	94	54	43	97	51	45	96
Kwakilosa	117	0	117	189	0	189	181	112	293
Makorongoni	52	0	52	72	0	72	60	0	60
Ilala	164	0	164	194	0	194	120	0	120
Mkwawa	33	76	109	75	84	159	95	98	193
Kitwiru	225	15	240	245	20	265	219	69	288
Isakalilo	0	0	0	158	0	158	137	0	137
Nduli	186	0	186	115	0	115	137	0	137
Total	2,093	743	2,836	2,294	690	2,984	2,152	921	3,074

Pub = Public Pri = Private

*New ward

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

5.2.3 Primary Education



Primary school 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 it available to every child. To achieve this goal, the first task was to have reliable number of primary schools which would make enrolment increase possible.

According to Table 5.25, majority of the primary schools in the district were owned by the government. By increasing the number of primary schools from 42 in 2010 to 43 in 2012 the district showed positive attitude by giving every child of school going age a chance of being enrolled into standard one. With the exception of two wards Kitanzini and Mivinjeni, each ward had a primary school in 2012. Furthermore, Table 5.25 reveals that Mtwivila had the highest number of primary schools (nine) followed by Gangilonga (eight) whilst Mshindo and Makorongoni wards had the least number, each with one school.

Table 5. 25: Number of Primary Schools by Ownership and by Ward, Iringa Municipality; 2010 - 2012

Ward	2009			2010			2011		
	Pub	Pri	Total	Pub	Pri	Total	Pub	Pr	Total
Kihesa	3	0	3	3	0	3	3	0	3
Mtwivila	8	1	9	8	1	9	8	1	9
Gangilonga	5	3	8	5	3	8	5	3	8
Kitanzini	0	0	0	0	0	0	0	0	0
Ruaha	4	0	4	4	0	4	5	0	5
Mshindo	1	0	1	1	0	1	1	0	1
Mivinjeni	0	0	0	0	0	0	0	0	0
Mlandege	2	0	2	2	0	2	2	0	2
Mwangata	1	1	2	1	1	2	1	1	2
Kwakilosa	3	0	3	3	0	3	3	0	3
Makorongoni	1	0	1	1	0	1	1	0	1
Ilala	2	0	2	2	0	2	2	0	2
Mkwawa	2	0	2	2	0	2	2	0	2
Kitwiru	4	1	5	4	1	5	4	1	5
Isakalilo	2	0	2	2	0	2	3	0	3
Nduli	3	0	3	3	0	3	3	0	3
Total	42	6	48	42	6	42	43	6	48

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

5.2.3.1 Standard one enrolment

Over the period of three years 2010, 2011 and 2012 the Iringa Municipality council implemented successfully the call of the government to increase enrolment in primary schools. As Table 5.26 indicates, the enrolment increased at a rate of 118.3 from 2010 to 2011 before dropping by 54.9 percent from 2011 to 2012. In regard to enrolment trend at ward level, Ilala ward did well in 2011 as the enrolment increased by 73 children or 31.2 percent which was the highest among all the wards. Likewise, Mwangata ward did well in 2012 with an increase of 10 children or an increase of 13.9 percent in enrolment. With a decrease in enrolment of 13.2 percent, Makorongoni ward had the worst enrolment in 2011 while Mshindo ward had the worst enrolment in 2012 as it decreased by 42.7 percent. The Drop of enrolment in some wards is attributed to the fact that some households favour to enroll their children in some schools of their choice.

Table 5.26: Standard I Enrolment in Public Primary Schools by Ward, Iringa Municipality; 2010-2012

Ward	2010	2011	2012	Change in Enrolment		Percentage Change in Enrolment	
				2010-2011	2011-2012	2010-2011	2011-2012
Kihesa	387	442	449	55	7	14.2	1.6
Mtwivila	466	451	476	-15	25	-3.2	5.5
Gangilonga	447	459	441	12	-18	2.7	-3.9
Kitanzini	0	0	0	0	0	0.0	0.0
Ruaha	460	570	569	110	-1	23.9	-0.2
Mshindo	83	89	51	6	-38	7.2	-42.7
Mivinjeni	0	0	0	0	0	0.0	0.0
Mlandege	310	386	352	76	-34	24.5	-8.8
Mwangata	70	72	82	2	10	2.9	13.9
Kwakilosa	349	321	339	-28	18	-8.0	5.6
Makorongoni	76	66	65	-10	-1	-13.2	-1.5
Ilala	234	307	223	73	-84	31.2	-27.4
Mkwawa	117	132	133	15	1	12.8	0.8
Kitwiru	279	285	275	6	-10	2.2	-3.5
Isakalilo	172	209	220	37	11	21.5	5.3
Nduli	226	225	226	-1	1	-0.4	0.4
Total	3,676	4,014	3,901	338	-113	118.3	-54.9

*New ward

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

According to Universal Primary Education (UPE), school going age is seven years. Based on Table 5.27, in 2012 children enrolled in standard one at the age of seven years accounted for 77.0 percent of the total enrolment while children aged eight years accounted for 16.5 percent and those aged more than eight years were only 6.5 percent. At the age of seven years more boys (49.2 percent) were enrolled than girls (27.8 percent). Table 5.27 also reveals that more girls (8.8 percent) than boys (7.7 percent) were registered into standard one at the age of eight years and more than eight years more boys than girls were enrolled.

Table 5. 27: Standard I Enrolment by Age Group, Iringa Municipality; 2012

Sex	Seven Years	Percent Enrolled	Eight Years	Percent Enrolled	More than Eight Years	Percent Enrolled	Total enrolment
Boys	2,067	49.2	323	7.7	164	3.9	2554
Girls	1,171	27.8	370	8.8	110	2.6	1651
Total	3,238	77	693	16.5	274	6.5	4205

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

With reference to Table 5.28, total enrolment for boys was slightly higher than that of girls. Insignificant difference in the number of boys and girls enrolled was a result of the district's efforts to implement national objective of ensuring girls get equal opportunity as boys in primary school education. Table 5.28 further indicates that primary schools located in Mtwivila ward lead in pupil's enrolment in 2010 (13.0 percent) but in 2011 and 2012 Ruaha ward lead by having 14.4 and 14.1 percent respectively. Population density favoured by better social services compared to other wards are among the factors that enable Mtwivila and Ruaha wards to lead other wards in pupil's enrolment. Unfortunately, Mshindo ward registered the least number of pupils because it is a small ward and in addition it is dominated by more business premises than residential.

Table 5. 28: Total (Std I - VII) Enrolment by Sex And by Ward, Iringa Municipality; 2010-2012

Ward	2010			2011			2012			Percent of the Total Enrolment		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	2010	2011	2012
Kihesa	1,275	1,304	2,579	1,377	1,251	1,252	1,282	1,415	2,697	10.8	5.4	11.4
Mtwivila	1,547	1,544	3,091	1,478	1,468	2,946	1,376	1,429	2,805	13.0	12.6	11.9
Gangilonga	1,341	1,460	2,801	1,414	1,492	2,906	1,440	1,531	2,971	11.8	12.5	12.6
Kitanzini	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Ruaha	1,366	1,384	2,750	1,669	1,685	3,354	1,638	1,680	3,318	11.5	14.4	14.1
Mshindo	197	223	420	183	169	352	181	160	341	1.8	1.5	1.4
Mivinjeni	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Mlandege	841	872	1,713	1,073	1,152	2,225	928	995	1,923	7.2	9.6	8.2
Mwangata	274	439	713	269	304	573	231	267	498	3.0	2.5	2.1
Kwakilosa	762	743	1,505	1,018	1,062	2,080	1,030	1,033	2,063	6.3	8.9	8.8
Makorongoni	279	316	595	237	228	465	423	236	659	2.5	2.0	2.8
Ilala	1,042	1,105	2,147	983	1,024	2,007	673	596	1,269	9.0	8.6	5.4
Mkwawa	371	414	785	416	400	816	377	378	755	3.3	3.5	3.2
Kitwiru	1,030	1,000	2,030	788	813	1,601	752	748	1,500	8.5	6.9	6.4
Isakalilo	606	607	1,213	666	646	1,312	628	646	1,274	5.1	5.6	5.4
Nduli	741	751	1,492	688	712	1,400	739	755	1,494	6.3	6.0	6.3
Total	11,672	12,162	23,834	10883	12,406	23,289	11,698	11,869	23,567	100.0	100.0	100.0
Percent by sex	49.0	51.0	100.0	46.7	53.3	100.0	49.6	50.4	100.0			

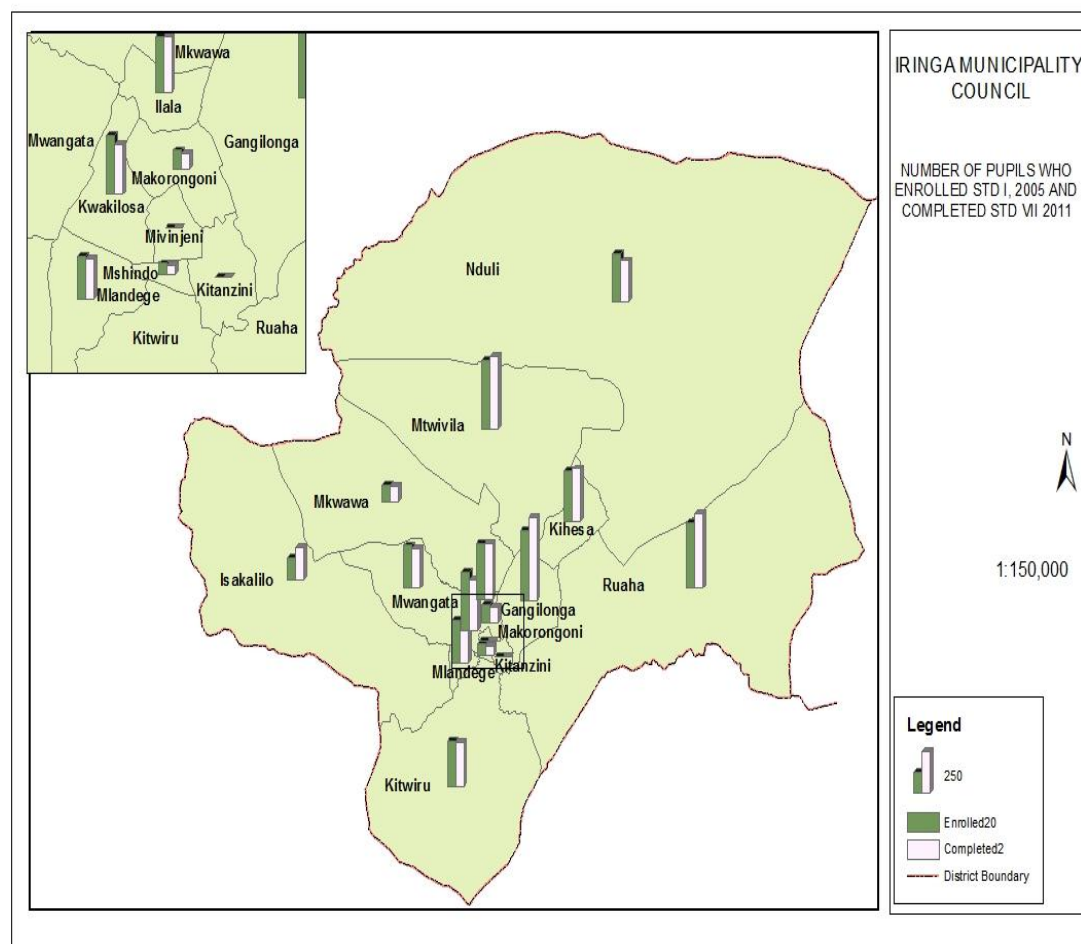
*New ward

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

5. 2.3.2 Completion Rate

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. According to Table 5.29, the district somehow managed to control pupils drop outs caused by different reasons as among 3,666 of the cohort pupils registered in standard one in 2005, all of them (3,722 pupils or 101.5 percent) managed to complete standard seven in 2011. More girls (103.4 percent) than boys (99.5 percent) completed that education level. Gangilonga ward had the largest number of pupils who completed primary school education cycle while Mshindo had the least (Table 5.29). Poor completion rate observed in some wards may due to the fact that most households living in those wards are more business oriented hence their children tend to do businesses than concentrate on education.

Map 6: Showing Total number of Pupils who completed STD VII by Ward; Iringa Municipal Council; 2011



Source: National Bureau of Statistics, GIS Unit, 2013

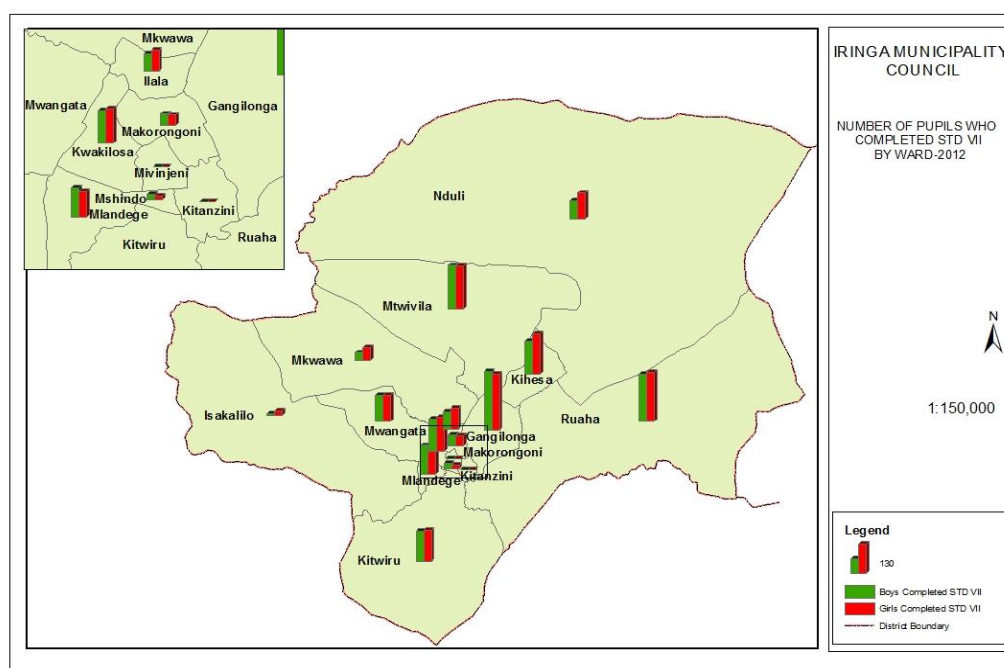
Table 5. 29: Number of Pupils Enrolled in Std I in 2005 and Completed Std VII in 2011 by Ward, Iringa Municipality

Ward	2005 to 2011								
	Enrolled 2005			Completed 2011			Completion Rate by Sex		Percent Completion by Ward to the District Total
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
Kihesa	142	156	298	138	171	309	97.2	109.6	8.3
Mtwivila	209	198	407	210	222	432	100.5	112.1	11.6
Gangilonga	204	214	418	223	269	492	109.3	125.7	13.2
Kitanzini	0	0	0	0	0	0	0.0	0.0	0.0
Ruaha	188	198	386	240	205	445	127.7	103.5	12.0
Mshindo	36	31	67	24	29	53	66.7	93.5	1.4
Mivinjeni	0	0	0	0	0	0	0.0	0.0	0.0
Mlandege	117	137	254	99	138	237	84.6	100.7	6.4
Mwangata	117	137	254	99	138	237	84.6	100.7	6.4
Kwakilosa	154	194	348	146	153	299	94.8	78.9	8.0
Makorongoni	62	50	112	49	45	94	79.0	90.0	2.5
Ilala	145	186	331	143	191	334	98.6	102.7	9.0
Mkwawa	56	45	101	47	44	91	83.9	97.8	2.4
Kitwiru	122	145	267	119	143	262	97.5	98.6	7.0
Isakalilo	72	63	135	101	93	194	140.3	147.6	5.2
Nduli	142	146	288	120	123	243	84.5	84.2	6.5
District Total	1766	1900	3666	1758	1964	3722	99.5	103.4	100.0

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

Performance of primary schools in terms of completion rate was better in 2011 than 2012. Pupils who completed primary school education cycle in 2011 exceeded those of 2012 by 532 pupils. This was a 16.7 percent decrease over a total of 3,722 pupils of 2011. Moreover, more girls (1,964) completed education cycle in 2011 than in 2012 (1,643). Out of 1,900 girls who started standard one in 2011 about 1,964 completed standard seven in 2011, whereas of the 1,766 boys who started standard one in 2005 only 1,758 completed standard seven in 2011. This indicates that school dropout problem was more serious for boys than for girls during that education cycle. Table 5.29 (a) shows the situation in the cycle of 2006- 2012. Here, out of 1,674 girls who were enrolled in 2006, about 1,643 completed standard seven in 2012. For boys the same picture was noted, whereby out of 1,580 enrolled in 2006 1,547 completed standard seven in 2012. The municipality authority needs to find out why boys dropouts have increased in the district. At ward level in 2011, Gangilonga, Ruaha, and Mtwivila with shares of 13.2, 12.0 and 11.6 percent of pupils who completed education cycle were the best wards while Mshindo (1.4percent), Mkwawa and Makorongoni (each with 2.4 percent) had the smallest shares. The same picture was also observed in 2012 with the exception of Isakalilo ward which had 0.9 percent.

Map 7: Showing Total number of Pupils by Sex and Ward who completed STD VII in Iringa Municipal Council; 2012

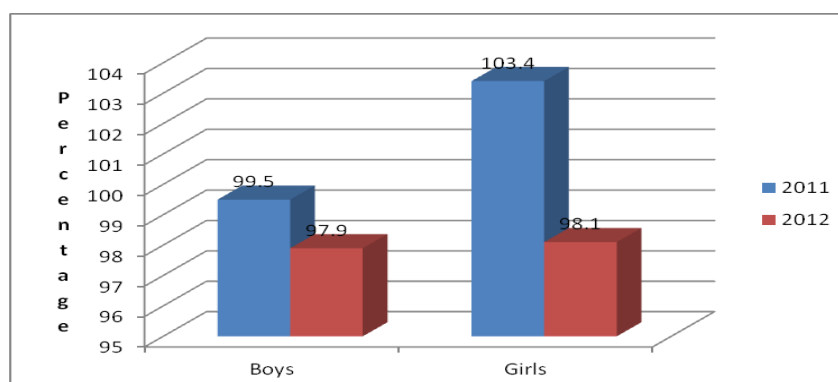


Source: National Bureau of Statistics, GIS Unit, 2013

Table 5.29 a: Number of Pupils Enrolled Std I in 2006 and Completed Std VII in 2012 by Ward; Iringa Municipality

Ward	2006 to 2012								
	Enrolled 2006			Completed 2012			Completion Rate by Sex		Percent completion by Ward to the District Total
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
Kihesa	159	156	315	140	169	309	88.1	108.3	9.7
Mtwivila	197	166	363	185	182	367	93.9	109.6	11.5
Gangilonga	220	232	452	250	241	491	113.6	103.9	15.4
Kitanzini	0	0	0	0	0	0	0.0	0.0	0.0
Ruaha	166	182	348	201	209	410	121.1	114.8	12.9
Mshindo	29	44	73	25	18	43	86.2	40.9	1.3
Mivinjeni	0	0	0	0	0	0	0.0	0.0	0.0
Mlandege	115	126	241	123	108	231	107.0	85.7	7.2
Mwangata	111	112	223	111	113	224	100.0	100.9	7.0
Kwakilosa	166	157	323	139	147	286	83.7	93.6	9.0
Makorongoni	60	50	110	49	45	94	81.7	90.0	2.9
Ilala	83	123	206	74	91	165	89.2	74.0	5.2
Mkwawa	64	75	139	34	57	91	53.1	76.0	2.9
Kitwiru	114	106	220	128	130	258	112.3	122.6	8.1
Isakalilo	9	21	30	9	21	30	100.0	100.0	0.9
Nduli	87	124	211	79	112	191	90.8	90.3	6.0
District Total	1580	1674	3254	1547	1643	3190	97.9	98.1	100.0

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

Figure 36: Rates of Completion of Primary Education in Iringa Municipality, 2011 and 2012

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

5. 2. 2.3 Primary School Dropout rate

Table 5.30 summarizes the situation of primary school pupil's dropout in three consecutive years; 2010, 2011 and 2012 in Iringa Municipality. Out of the total 23,834 pupils enrolled into primary school education in 2010, about 34 of them could not finish schooling of which 16 were boys and 18 girls. In the following year, out of 25,500 enrolled, a total of 39 pupils could not finish, out of which 20 were boys and 19 were girls. In 2012 however, the number dropped to 23, out of which boys were 15 while girls were only 8. The causes included truancy, pregnancy, death or other reasons. With 65.6 percent of the total dropouts, truancy happened to be the most serious problem for primary school pupils in completing standard seven.

Table 5. 30: Drop Outs by Reasons, Iringa Municipality Council; 2010 – 2012

Reason	2010			2011			2012			Total dropouts 2010-2012	Percent
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total		
Truancy	9	14	23	11	7	18	15	7	22	63	65.6
Pregnancy		0	0	0	3	3	0	0	0	3	3.1
Death	3	3	6	5	6	11	0	1	1	18	18.8
Other	4	1	5	4	3	7	0	0	0	12	12.5
Total dropouts	16	18	34	20	19	39	15	8	23	96	100.0
Total Enrolment	11,672	12,162	23,834	12,643	12,857	25,500	11,698	11,869	23,567	72,901	
Percent	47.1	52.9	100.0	51.3	48.7	100.0	65.2	34.8	100.0		

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

5. 2. 2.4 Pass Rate

Pass rate refers to the percentage of pupils who passed standard seven examinations out of the total pupils who sat for the examinations. From 2010 to 2012 pass rate for standard seven pupils was increasing. It increased from 77 percent in 2010 to 88 percent

in 2011 and then attained 94 percent in 2012. Girls had lower pass rates than boys except in 2011 and 2012. 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. Therefore, to improve the girls' pass rate the municipality in collaboration with other stakeholders is urged to construct dormitories for girls. These dormitories would give them enough time for self-study.

Table 5. 31: Number of Pupils Who Sat and Passed STD VII Examinations in Public Primary Schools, Iringa Municipality; 2010 to 2012

Year	Pupils sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percentage of Pupils by Sex who Passed STD VII Examinations		Percent of the Total Pupils who Passed STD VII exams
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
2010	1446	1509	2955	1,187	1,098	2,285	82	73	77
2011	1,572	1,769	3341	1,384	1,549	2,933	88	88	88
2012	1,528	1,617	3145	1,425	1,520	2,945	93	94	94

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

In a period of three years, 2010, 2011 and 2012 a total of 8,363 pupils were selected to join Form one but only 6,849 (81.9 percent) of those pupils who were selected joined (Table 5.31 (a)). Of the selected pupils, more girls (85.0 percent) than boys (78.6 percent) joined form one. Further Table 5.31 (a) shows that pupils joined Form One dropped drastically from 140 percent in 2010 to 105 percent in 2011 before rising to 113 in 2012. Due to income poverty from which parents/guardians suffer, some pupils, although 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. This however, was the main reason for the decrease in pupils who joined form one in 2011.

Table 5.31 a: Number of Pupils Who were Selected and Joined Form I in Public and Private Secondary Schools, Iringa Municipality; 2010 to 2012

Year	No. of Pupils Selected			No. of Pupils Joined Form I						Total No. of Pupils Joined Form I in both Public and Private Sec. Schools			Percent of Pupils who Joined Form I
				in Public Sec. Schools			in Private Sec. Schools						
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
2010	1187	1098	2,285	1104	1140	2244	383	572	955	1487	1712	3199	140
2011	1384	1549	2,933	990	1084	2074	418	591	1009	1408	1675	3083	105
2012	1528	1617	3,145	1129	1402	2531	414	624	1038	1543	2026	3569	113
Total	4099	4264	8,363	3223	3626	6849	1215	1787	3002	4438	5413	9851	118

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

Table 5.31 (b) reveals that, out of 3,698 pupils who sat for Standard VII examination, more than three quarters (3,182 pupils) equivalent to 86 percent joined form one in 2012 in public secondary schools. The table, however, shows that there is an increase in the number of girl pupils who joined Form One more than that of boys. A smaller number of boys (1,476 or 46.4 percent) than girls (1,706 or 53.6 percent) joined form one. Gangilonga ward lead other wards in the number of pupils who joined form one in public secondary schools.

Table 5.31 b: Number of Pupils who joined Form I by sex and ward in Public and Private Secondary Schools, Iringa Municipality; 2012

Ward	Pupils Sat for Std VII Examinations			Pupils Who joined Form I in Public Sec. School			Percent of Pupils Who joined Form I in Public Sec. Schools
	Boys	Girls	Total	Boys	Girls	Total	
Kihesa	138	171	309	130	159	289	94
Mtwivila	210	222	432	163	169	332	77
Gangilonga	223	269	392	221	268	489	125
Kitanzini	0	0	0	0	0	0	0
Ruaha	240	205	445	191	177	368	83
Mshindo	24	29	53	22	26	48	91
Mivinjeni	0	0	0	0	0	0	0
Mlandege	99	138	237	80	122	202	85
Mwangata	99	138	237	80	122	202	85
Kwakilosa	146	153	299	116	144	260	87
Makorongoni	89	78	167	31	15	46	28
Ilala	143	191	334	133	174	307	92
Mkwawa	47	44	91	41	37	78	86
Kitwiru	119	143	262	102	119	221	84
Isakalilo	101	93	194	88	75	163	84
Nduli	120	123	243	78	99	177	73
Total	1798	1997	3695	1476	1706	3182	86

Pub: Public, **Pr:** Private

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

5.2.2.5 Primary School Facilities

It is the duty of educational authorities like the Ministry of Education to collaborate with beneficiaries (the community) to make sure that teachers and basic education facilities such as classrooms, toilets, staff houses, furniture, libraries, bookstores and textbooks are in place.

(i) Classrooms

According to Tanzania education system, the use of each classroom in primary and secondary schools should follow with the national standard of accommodating 45 pupils/students only. Due to inadequate infrastructure most schools like Iringa Municipality failed to meet the requirement of pupils classroom ratio of one classroom per 45 pupils/students (i.e. CPR 1:45). At CPR of 1:51 in 2012, the Municipality experienced a serious shortage of classrooms in primary schools which led to the demand of 111 classrooms. Primary schools located in four wards of Ilala, Makorongoni, Mshindo and Mtwivila were the only ones which met the national standard at CPR of 1:45 or less. Primary schools in Mwangata, Kihesa and Ruaha at CPR of 1: 95, 1:66 and 1:65 respectively had critical shortage of classrooms (Table 5.32).



Pupils attending classes in Iringa Municipality

Table 5. 32: Availability of Classrooms in Primary Schools by Ward, Iringa Municipality; 2012

Ward	Number of Schools	Total Pupils	Available Classrooms	Classroom Pupils Ratio (CPR)	Required Classrooms	Deficit of classrooms	
						Number	Percent
Kihesa	3	2,697	41	66	60	19	31.7
Mtwivila	8	2,805	78	36	62	-16	-25.8
Gangilonga	5	2,971	58	51	66	8	12.1
Kitanzini	0	0	0	0	0	0	0.0
Ruaha	5	3,318	51	65	74	23	31.1
Mshindo	1	341	13	26	8	-5	-62.5
Mivinjeni	0	0	0	0	0	0	0.0
Mlandege	2	1,923	30	64	87	57	65.5
Mwangata	1	473	5	95	11	6	54.5
Kwakilosa	3	2,063	43	48	46	3	6.5
Makorongoni	1	479	13	37	11	-2	-18.2
Ilala	2	1,269	29	44	29	0	0.0
Mkwawa	2	755	15	50	17	2	11.8
Kitwiru	3	1,500	30	50	33	3	9.1
Isakalilo	3	1,274	22	58	28	6	21.4
Nduli	3	1,494	26	57	33	7	21.2
Total	42	23,362	454	51	565	111	19.6

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

(ii) Pit latrine



There is a need of building more toilets in primary schools to alleviate a shortage.

All primary schools in the district had a total of 669 pit latrines in 2012 (Table 5.33). Basing on the standard set by the Government of Tanzania, the standard pupils pit latrine ratio is 1:20 for girls and (1:25) for boys .Table 5.33 indicates that there was a serious shortage of pit latrines in primary schools as one pit latrine was used by 35 pupils in 2012. Five wards whose primary schools experienced remarkable shortages (i.e. wards with pupils pit latrine ratio far above that of district) were Nduli (1:63), Ilala

(1:60), Mwangata(1:47), Ruaha(1:40), Kiheha (1:38), Gangilonga (1:37), and Isakalilo(1:36). Nevertheless, with pupils' pit latrine ratio of 1:24, 1:20 and 1:13 primary schools in Mkwawa, Makorongoni and Mshindo were better off than other schools (Table 5.33).

Table 5.33: Availability of Pit Latrine in Primary Schools by Ward, Iringa Municipality; 2012

Ward	Total Pupils	Available Pit Latrine	Pit Latrine Pupils Ratio	Required Pit Latrine	Deficit of Pit Latrine
Kiheha	2,697	71	38	135	64
Mtwivila	2,805	84	33	140	56
Gangilonga	2,971	81	37	149	68
Kitanzini	0	0	0	0	0
Ruaha	3,318	82	40	166	84
Mshindo	341	27	13	17	-10
Mivinjeni	0	0	0	0	0
Mlandege	1,923	56	34	96	40
Mwangata	473	10	47	24	14
Kwakilosa	2,063	76	27	103	27
Makorongoni	479	24	20	24	0
Ilala	1,269	20	63	64	44
Mkwawa	755	32	24	38	6
Kitwiru	1,500	46	33	75	29
Isakalilo	1,274	35	36	64	29
Nduli	1,494	25	60	75	50
Total	23,362	669	35	1,170	501

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

(iii) Staff Houses



Staff quarters is among important incentive for the teachers

Of the various teaching incentives, the provision of staff quarters is very crucial as it facilitates the retention of teachers and also promotes teaching morale. Table 5.34

reveals that Iringa Municipality had a total of 493 teachers' houses compared to actual requirement of 2,121 houses. If we look at the required official House Teacher Ratio (HTR) of 1:1, Iringa Municipality had a deficit of 3,165 houses (equivalent to 79 percent deficit) based on HTR.

Table 5.34 shows that there is no ward with a surplus of houses. Almost all wards suffered from a critical shortage of houses almost all with a deficit of more than 50 percent. Kihesa ward was the most affected (93.3 percent). With its urban nature and big population and better infrastructure, Kihesa has better social services compared to other wards. As a result, most of the teachers prefer to work in this ward rather than other wards and this causes the ward to lead in teachers' houses shortage.

Table 5. 34: Availability of Primary School Teachers' Houses by Ward, Iringa Municipality; 2012

Ward	Required Teachers	Number of Available Teachers	Actual Requirement of Houses	Available Houses	Deficit of Houses		Surplus/ Deficit Based on HTR	Percent of Deficit Based on HTR
					Number	Percent		
Kihesa	60	80	60	4	56	93.3	76	95
Mtwivila	62	146	62	25	37	59.7	121	82.9
Gangilonga	66	108	66	5	61	92.4	103	95.4
Kitanzini	0	0	0	0	0	0.0	0	0.0
Ruaha	33	54	33	9	24	72.7	45	83.3
Mshindo	8	18	8	2	6	75.0	16	88.9
Mivinjeni	0	0	0	0	0	0.0	0	0.0
Mlandege	43	48	43	4	39	90.7	44	91.7
Mwangata	11	11	11	1	10	90.9	10	90.9
Kwakilosa	46	68	46	11	35	76.1	57	83.8
Makorongoni	11	29	11	2	9	81.8	27	93.1
Ilala	29	41	29	4	25	86.2	37	90.2
Mkwawa	17	21	17	6	11	64.7	15	71.4
Kitwiru	33	54	33	9	24	72.7	45	83.3
Isakalilo	28	34	28	6	22	78.6	28	82.4
Nduli	33	27	33	5	28	84.8	22	81.5
Total	480	739	480	93	387	80.6	646	87.4

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

(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 23,362 pupils registered in 2012, Iringa Municipality needed about 11,595 desks so as to comply with the official Desk Pupils Ratio of 1:3. The District, therefore, had a shortage of 4,321 desks or a 37.3 percent of the deficit. The most affected wards were Mlandege (54.1 percent), Kihesa (47.6 percent), Mshindo (46.2 percent), Mwangata (45.6 percent) and Isakalilo (43.2 percent). The remaining wards met the official Desk Pupil Ratio of 1:3 (Table 5.35).

Table 5. 35: Availability of Desks in Primary Schools by Ward, Iringa Municipality; 2012

Ward	Total Pupils	Available Desks	Desk Pupils Ratio	Required Desks	Deficit of Desks		Deficit Based on DPR	Percent of Deficit Based on DPR
					No.	Percent		
Kihesa	2,697	707	4	1,349	642	47.6	192	27.2
Mtwivila	2,805	1,100	3	1,402	302	21.5	-165	-15.0
Gangilonga	2,971	903	3	1,396	493	35.3	87	9.7
Kitanzini	0	0	0	0	0	0.0	0	0.0
Ruaha	3,318	1,040	3	1,659	619	37.3	66	6.3
Mshindo	341	92	4	171	79	46.2	22	23.6
Mivinjeni	0	0	0	0	0	0.0	0	0.0
Mlandege	1,923	442	4	962	520	54.1	199	45.0
Mwangata	473	129	4	237	108	45.6	29	22.2
Kwakilosa	2,063	669	3	1,032	363	35.2	19	2.8
Makorongoni	479	160	3	240	80	33.3	0	-0.2
Ilala	1,269	400	3	635	235	37.0	23	5.8
Mkwawa	755	239	3	378	139	36.8	13	5.3
Kitwiru	1,500	484	3	750	266	35.5	16	3.3
Isakalilo	1,274	362	4	637	275	43.2	63	17.3
Nduli	1,494	547	3	747	200	26.8	-49	-9.0
Total	23,362	7,274	3	11,595	4,321	37.3	513	7.1

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

(v) Accessibility of Water

Iringa Municipality has managed to supply water to some of her primary schools through water wells and tap water. Since there is no water shortage, rain water harvests which is done through water tanks is not a very common source of water in Iringa Municipality primary schools. However, a few of the wards had no water in schools implying that only few primary schools have an access of piped water.

(vi) Teachers

The teacher to pupil ratio is an important indicator which shows the quality of education provided in schools. The standard requirement is that one teacher should serve a class of 45 pupils (1:45). Iringa Municipality had an average TPR of 1:31.

Based on Table 5.36, with the exception of primary schools in Nduli and Mlandege wards, all other primary schools in the remaining wards in 2012 met the Tanzania National Primary Standard of TPR of 1: 45 or below. Primary schools in Nduli ward had TPR of 1:55 and for Mlandege ward had TPR of 1:51 and they had shortages of six and five teachers respectively. The Municipality authority should look at this matter seriously noting that transferring of teachers from one ward to another within the municipality does not involve funds.



The teacher pupil ratio is an important indicator for quality education

Table 5. 36: Availability of Primary School's Teachers (Grade A, B, Diploma and Degree) by Ward, Iringa Municipality; 2011

Ward	Total Pupils	Teachers Required	Available Teachers	Deficit	Percent of Deficit	Teacher Pupils Ratio	Deficit Based on TPR	Percent Deficit Based on TPR
Kihesa	2,697	60	80	-20	-33	34	60	100
Mtwivila	2,805	62	146	-84	-135	19	62	101
Gangilonga	2,971	66	108	-42	-64	28	66	100
Kitanzini	0	0	0	0	0	0	0	0
Ruaha	3,318	74	83	-9	-12	40	74	100
Mshindo	341	8	18	-10	-125	19	8	95
Mivinjeni	0	0	0	0	0	0	0	0
Mlandege	1,923	43	38	5	12	51	43	99
Mwangata	473	11	11	0	0	43	11	96
Kwakilosa	2,063	46	68	-22	-48	30	46	100
Makorongoni	479	11	29	-18	-164	17	11	97
Ilala	1,269	29	41	-12	-41	31	28	97
Mkwawa	755	17	21	-4	-24	36	17	99
Kitwiru	1,500	33	54	-21	-64	28	33	101
Isakalilo	1,274	28	34	-6	-21	37	28	101
Nduli	1,494	33	27	6	18	55	33	101
Total	23,362	521	758	-237	-45	31	519	100

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

5.2.3 Secondary Education



One of the many secondary schools in Iringa Municipality Council

The development of secondary education in Iringa Municipality Council is at an advanced stage due to its historical context although there are some hindrances as a result of a weak economy. Consequently, until 2010, the municipality had 13 public secondary schools and the number has remained the same until 2012 (Table 5.37). With exception of Mshindo, and Mivinjeni, other wards shown in Table 5.37 at least each had a secondary school whether private or public. In addition, Makorongoni, Isakalilo and Nduli had no public secondary schools. Priority now should be to establish a secondary school in each of the five wards so as to make the municipality comply with the government policy of having a public secondary school in each ward.

Table 5. 37: Number of Secondary Schools by Ownership and by Ward, Iringa Municipality Council 2010-2012

Ward	2010			2011			2012		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Kihesa	1	0	1	1	0	1	1	0	1
Mtwivila	1	0	1	1	0	1	1	0	1
Gangilonga	3	2	5	3	2	5	3	2	5
Kitanzini	1	0	1	1	0	1	1	0	1
Ruaha	1	1	2	1	1	2	1	1	2
Mshindo	0	0	0	0	0	0	0	0	0
Mavinjeni	0	0	0	0	0	0	0	0	0
Mlandege	1	0	1	1	0	1	1	0	1
Mwangata	1	0	1	1	0	1	1	0	1
Kwakilosa	1	0	1	1	0	1	1	0	1
Makorongoni	0	1	1	0	1	1	0	1	1
Ilala	1	0	1	1	0	1	1	0	1
Mkwawa	1	2	3	1	2	3	1	2	3
Kitwiru	1	1	2	1	4	5	1	4	5
Isakalilo	0	1	1	0	2	2	0	2	2
Nduli	0	1	1	0	1	1	0	1	1
Total	13	9	22	13	13	26	13	13	26

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

5.2.3.1 Secondary School Enrolment

The enrolment of students in Iringa Municipality Council increased with the increase of school infrastructures constructed through people's participation and parents' awareness of the importance of education to their children. Table 5.38 shows that student's enrolment increased by 3.8 percent between 2010 and 2011 and by 4.9 percent between 2011 and 2012.

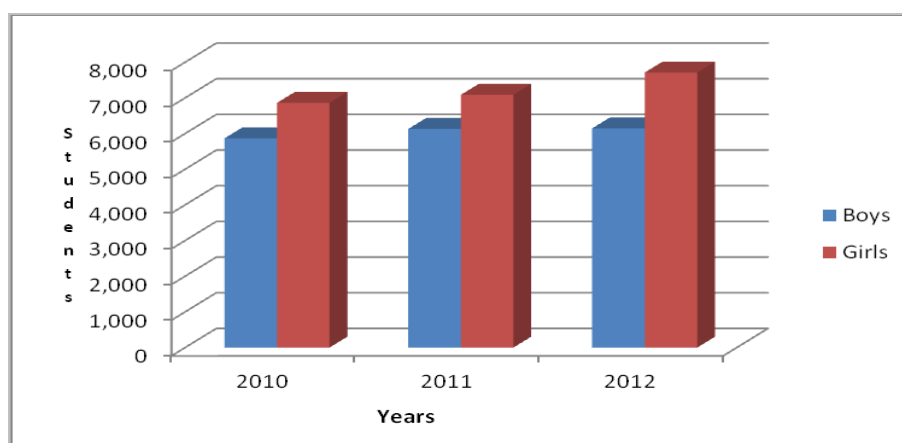
Comparing enrolment between sexes in the last three years, the selection of girl students was more than that of boy students in all years. Table 5.38 shows that in 2010 the boys account for 46.1 percent of the total enrolment compared to 53.9 percent for girls. The girls' enrolment dropped slightly to 53.6 percent in 2011 before rising sharply to 55.6 percent in 2012. The increase of girls' enrolment and decrease of boys' enrollment conforms to the aim of reaching gender balance of 1:1 by the year 2015.

Table 5. 38: Total (Form I – IV) Enrolment by Sex, Iringa Municipality Council; 2010-2012

Year	Boys		Girls		Total	Percent Increase
	Number	Percent	Number	Percent		
2010	5,866	46.1	6,862	53.9	12,728	
2011	6,131	46.4	7,087	53.6	13,218	3.8
2012	6,148	44.4	7,712	55.6	13,860	4.9
Total	18,145	45.6	21,661	54.4	39,806	

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

Figure 37: Total Enrolment in Secondary Schools, by Sex, 2010, 2011 and 2012



Source: Municipality Director's Office (Education Department), Iringa Municipality Council 2013

Table 5. 39: Number of students completed Secondary School Education by Sex, Iringa Municipality Council 2009- 2012

Year	Boys		Girls		Total	Percent Increase
	Number	Percent	Number	Percent		
2009	1,178	40.1	1,759	59.9	2,937	
2010	1,325	41.8	1,846	58.2	3,171	8.0
2011	1,439	47.5	1,593	52.5	3,032	-4.4
2012	1,672	45.7	1,984	54.3	3,656	20.6
Total	5,614	43.9	7,182	56.1	12,796	

Source: District Executive Director's Office (Education Department), Makete District, 2011

The enrolment of students in high schools in Iringa Municipality as for the enrolment in secondary schools; increases with the increase of school infrastructures constructed through people's participation and parents' awareness of the importance of education to their children. Table 5.39 shows that student's enrolment increased at an average annual growth of 8 percent per annum between 2009 and 2010, but then dropped at a faster rate of 4 percent between 2010 and 2011 before rising by 17 percent between 2011 and 2012. In 2009 about 2,937 students completed secondary education in Iringa Municipality, out of these 60 percent were girls. The percentage decreased to 58 in 2010 before dropping further to 53 percent in 2011. However, the percentage of girls who completed secondary education increased a bit to 54 percent in 2012. While the percentage of girls who completed secondary education was dropping, that of boys was rising.

Table 5. 40: Total (Form V – VI) Enrolment “A” Level by Sex, Iringa Municipality, 2009-2012

Year	Boys		Girls		Total	Percent Increase
	Number	Percent	Number	Percent		
2009	563	37.5	939	62.5	1,502	
2010	453	36.0	807	64.0	1,260	-16.1
2011	173	28.7	430	71.3	603	-52.1
2012	257	27.5	676	72.5	933	54.7
Total	1,446	33.6	2,852	66.4	4,298	

Source: District Executive Director's Office (Education Department), Iringa Municipality, 2013

Unlike in the enrolment of girls in secondary schools, enrolment in girls in high schools rose from 62.5 percent in 2009 to 64 percent in 2010 and then rose sharply to 72.5 percent in 2012. For boys it was the opposite where the percentage dropped from 37.5 percent in 2009 to 36 percent in 2010 before dropping further to 27.5 in 2012. This is very encouraging on the side of girls. The authority should make sure that the trend is maintained.

5.2.3.2 Pass Rates



Part of Ipongolo Secondary School students in classroom

Table 5.41 shows the number of students who completed high school education by sex in Iringa Municipality. In 2009, out of 822 students who completed form VI, about 551 of them or 67 percent were girls and 33 percent boys. The number of girls increased to 72.9 percent in 2010 while the number of boys decreased to 27.1 percent. In 2011 the percentage of girls completing form VI increased from 72.9 to 78 percent while that of boys decreased from 27.1 to 22 percent. In 2012 however, the situation changed; showing that while the percentage of girls who completed form VI decreased that of boys increased. Unlike in completion of secondary education, the situation in this case is not good. Overall, the number of form VI leavers has been decreasing year after year in Iringa Municipality. It can be observed that between 2009 and 2010 the number of form VI leavers increased from 822 to 943 or 14.7 percent but between 2010 and 2011 the number decreased from 943 to 699, a decrease of about 26 percent before decreasing further to 18.7 percent in 2012.

Table 5. 41: Number of students completed “A” Level Education by Sex, Iringa Municipality Council, 2009 - 2012

Year	Boys		Girls		Total	Percent Increase
	Number	Percent	Number	Percent		
2009	271	33.0	551	67.0	822	
2010	256	27.1	687	72.9	943	14.7
2011	154	22.0	545	78.0	699	-25.9
2012	200	35.2	368	64.8	568	-18.7
Total	881	29.1	2,151	70.9	3,032	

Source: District Executive Director’s Office (Education Department), Iringa Municipality Council, 2013

5.2.3.2 Quantity and State of School Facilities

The quantity and quality of facilities for the secondary school system in Iringa Municipality Council are below the standards set by the educational authorities. The most common facilities are classrooms, toilets, staff quarters, libraries, laboratories, dormitories, desks and teachers offices. However, the following discussion only aims at indicating quantitative adequacy of the facilities in the Municipality and not the quality of the items.

(i) Teachers

Expansion of secondary education should always go hand in hand with the increase in the number of teaching staff. By the end of 2011, Iringa Municipality Council had a total of 445 teachers distributed in 13 public secondary schools. This gives an average School Teachers Ratio of 1:34. At ward level, only five wards out of 11 with secondary schools had at least 34 teachers per school. These wards were Mwangata, Gangilonga, Mtwivila, Ilala and Kitanzini which had established secondary schools with all four classes (Form I – IV). The required teachers were 475; therefore the district experienced a shortage of 38 teachers or eight percent (Table 5.42). Kwakilosa with 17 percent deficit, Kitwiru with 16 percent deficit and Kihesa with a 13 percent deficit were the most affected wards.

Table 5. 42: Availability of Public Secondary School's Teachers by Ward, Iringa Municipality Council, 2011

Ward	Number of School	Required Teachers	Available Teachers	Deficit of Teachers		School Teachers Ratio
				Number	Percent	
Kihesa	1	30	26	4	13	26
Mtwivila	1	35	43	0	0	43
Gangilonga	3	157	145	12	7.6	48
Kitanzini	1	38	38	0	0	38
Ruaha	1	30	27	3	10	27
Mshindo	0	0	0	0	0	0
Mivinjeni	0	0	0	0	0	0
Mlandege	1	21	19	2	9.5	19
Mwangata	1	45	41	4	8.9	41
Kwakilosa	1	18	15	3	16.7	15
Makorongoni	0	0	0	0	0	0
Ilala	1	38	36	2	5.3	36
Mkwawa	1	31	28	3	9.7	28
Kitwiru	1	32	27	5	15.6	27
Isakalilo	0	0	0	0	0	0
Nduli	0	0	0	0	0	0
Total	13	475	445	38	8	34

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

(ii) Staff Quarters



Teachers houses is one of the incentives for teachers' retention

Besides the shortage of teachers, the Municipality also experienced a shortage of staff quarters in all wards. Table 5.43 shows that, the Municipality required 340 houses based on 2012 demand whereas only ten houses were available living a deficit of 316 houses or 92.9 percent deficit. This is a very big gap between demand and availability. The badly affected wards are Kihesa, Ruaha, Ilala and Mkwawa with 100 percent deficit.

The Local Authorities at ward level 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. 43: Availability of Teachers' Houses in Public Secondary Schools by Ward, Iringa Municipality Council, 2012

Ward	Number of Available Teachers	Estimated Teachers	Actual	Available Houses	Deficit of Houses		Surplus/	Percent of Deficit Based on HTR
			Requirement of Houses		No.	Percent	Deficit Based on HTR	
Kihesa	26	30	23	0	23	100.0	30	130.4
Mtwivila	43	35	31	1	30	96.8	34	109.7
Gangilonga	145	157	105	16	89	84.8	141	134.3
Kitanzini	38	38	32	1	31	96.9	37	115.6
Ruaha	27	30	29	0	29	100.0	30	103.4
Mshindo	0	0	0	0	0	0	0	0.0
Mivinjeni	0	0	0	0	0	0	0	0.0
Mlandege	19	21	6	1	5	83.3	20	333.3
Mwangata	41	45	36	3	33	91.7	42	116.7
Kwakilosa	15	18	18	1	17	94.4	17	94.4
Makorongoni	0	0	0	0	0	0	0	0.0
Ilala	36	38	10	0	10	100	38	380.0
Mkwawa	28	31	27	0	27	100	31	114.8
Kitwiru	27	32	23	1	22	95.7	31	134.8
Isakalilo	0	0	0	0	0	0	0	0.0
Nduli	0	0	0	0	0	0	0	0.0
Total	445	475	340	24	316	92.9	451	132.6

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

(iii) Classrooms

Table 5.44 shows that the required number of classrooms at the Municipality had 6.7 percent deficit. At ward level, all the 16 wards registered shortages ranging from zero percent to 25 percent. Gangilonga, Mlandege, Kwakilosa and Mkwawa were the most affected wards with deficits of 25 percent, 11.8 percent and 6.3 percent, respectively. Mtwivila ward had excess of six classrooms or 37.5 percent while Kitanzini, Mwangata, Ilala and Kitwiru had the required number of classrooms in 2012.

Table 5. 44 : Availability of Classrooms in Public Secondary Schools by Ward, Iringa Municipality Council, 2012

Ward	No. of School	Number of Classroom			Percent Deficit
		Required	Available	Deficit	
Kihesa	1	17	17	0	0.0
Mtwivila	1	16	22	-6	-37.5
Gangilonga	3	72	54	18	25.0
Kitanzini	1	18	18	0	0.0
Ruaha	1	21	20	1	4.8
Mshindo	0	0	0	0	0.0
Mavinjeni	0	0	0	0	0.0
Mlandege	1	17	15	2	11.8
Mwangata	1	26	26	0	0.0
Kwakilosa	1	16	15	1	6.3
Makorongoni	0	0	0	0	0.0
Ilala	1	19	19	0	0.0
Mkwawa	1	16	15	1	6.3
Kitwiru	1	16	16	0	0.0
Isakalilo	0	0	0	0	0.0
Nduli	0	0	0	0	0.0
Total	13	254	237	17	6.7

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

(iv) Toilets



Toilet facilities are an important requirement in schools

The Municipality schools toilet requirements were 469 toilets in 2012 but only 297 were available leaving a shortage of 172 toilets (36.7 percent deficit). Table 5.45 shows that no ward had enough toilets in 2012. Kitwiru ward was the most affected with a deficit of 57.9 percent, followed by Ilala (46.2 percent), Kihesa (42.9 percent), Kwakilosa (41.7 percent) and Gangilonga (41.6 percent).

Table 5.45: Availability of Students' Toilets in Public Secondary Schools by Ward, Iringa Municipality Council, 2012

Ward	No. of School	Number of Toilet Holes			Percent Deficit
		Required	Available	Deficit	
Kihesa	1	49	28	21	42.9
Mtwivila	1	35	23	12	34.3
Gangilonga	3	137	80	57	41.6
Kitanzini	1	38	23	15	39.5
Ruaha	1	36	30	6	16.7
Mshindo	0	0	0	0	0.0
Mavinjeni	0	0	0	0	0.0
Mlandege	1	22	24	-2	-9.1
Mwangata	1	35	26	9	25.7
Kwakilosa	1	24	14	10	41.7
Makorongoni	0	0	0	0	0.0
Ilala	1	39	21	18	46.2
Mkwawa	1	16	12	4	25.0
Kitwiru	1	38	16	22	57.9
Isakalilo	0	0	0	0	0.0
Nduli	0	0	0	0	0.0
Total	13	469	297	172	36.7

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

(v) Dormitories



Dormitories are essential facilities in peripheral areas of Iringa Municipality

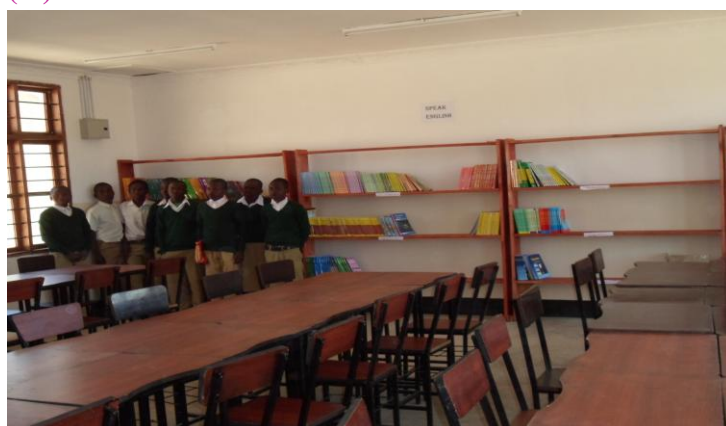
Construction of dormitories in peripheral areas is essential due to the geographic nature of Iringa Municipality Council and distribution of human settlements. The availability of dormitories can help students solve the problem of walking long distances and reduce the rates of dropouts, pregnancies and truancy. Out of the 11 wards which have secondary schools, only one had a dormitory facility, and even this had a shortage of one dormitory or 6.3 percent. As mentioned earlier in chapter one, eight of the 16 wards are situated in the peri-urban areas and even these none of them had a dormitory.

Table 5. 46: Availability of Dormitories in Public Secondary Schools by Ward, Iringa Municipality Council, 2012

Ward	No. of School	Number of Dormitories			Percent Deficit
		Required	Available	Deficit	
Gangilonga	3	16	15	1	6.3
Total	3	16	15	1	6.3

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

(vi) Libraries



A library is a critical facility for the development of knowledge and skills of a student

The library facility is considered as an essential but not a crucial facility for the development of knowledge and skills of a student. According to the standards set by the Ministry of Education and Vocation Training, every secondary school should have a library to enable students to borrow and use supplementary books besides textbooks. Data from education department shows that only one ward had a library at the end of 2012. This implies that no supplementary books were available for renting to students in the other 10 wards of Iringa Municipality which had a secondary school. The observed situation is probably due to the fact that the Municipality is in the regional headquarters where a Regional Library is available. But it is important for the local authorities to include the provision of libraries in their school development plans in the future.

Table 5. 47 : Availability of Libraries in Public Secondary Schools by Ward, Iringa Municipality Council, 2012

Ward	No. of School	Number of Libraries			Percent Deficit
		Required	Available	Deficit	
Kihesa	1	1	0	1	100
Mtwivila	1	1	0	1	100
Gangilonga	3	3	3	0	0
Kitanzini	1	1	0	1	100
Ruaha	1	1	0	1	100
Mshindo	0	0	0	0	0
Mavinjeni	0	0	0	0	0
Mlandege	1	1	0	1	100
Mwangata	1	1	0	1	100
Kwakilosa	1	1	0	1	100
Makorongoni	0	0	0	0	0
Ilala	1	1	0	1	100
Mkwawa	1	1	0	1	100
Kitwiru	1	1	0	1	100
Isakalilo	0	0	0	0	0
Nduli	0	0	0	0	0
Total	13	13	3	10	76.9

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

(vii) Desks



Availability of desks in any school is necessary for students to concentrate

Table 5.48, shows the shortage and excess of desks in many schools. By the end of 2012, the Municipality had an excess of 267 desks (2.6 percent) out of the required 10,228. At ward level, there were shortages of 91 desks (14.2 percent) in Kwakilosa ward, 86 desks (11.4 percent) in Kitanzini ward and 46 desks (8.4 percent) in Mkwawa ward. Six wards which had excess desks are Ruaha 253 desks (29.7 percent), Kihesa

124 desks (11.3 percent), Mtwivila 69 desks (9.4 percent), Mwangata 50 desks (3.2 percent) and Gangilonga 33 desks (1.2 percent).

Table 5.48: Availability of Desks in Public Secondary Schools by Ward, Iringa Municipality Council, 2012

Ward	No. of School	Number of Desks			Percent Deficit
		Required	Available	Deficit	
Kihesa	1	1,100	1,224	-124	-11.3
Mtwivila	1	731	800	-69	-9.4
Gangilonga	3	2,847	2,880	-33	-1.2
Kitanzini	1	756	670	86	11.4
Ruaha	1	851	1,104	-253	-29.7
Mshindo	0	0	0	0	0.0
Mivinjeni	0	0	0	0	0.0
Mlandege	1	467	482	-15	-3.2
Mwangata	1	900	950	-50	-5.6
Kwakilosa	1	640	549	91	14.2
Makorongoni	0	0	0	0	0.0
Ilala	1	857	811	46	5.4
Mkwawa	1	546	500	46	8.4
Kitwiru	1	533	525	8	1.5
Isakalilo	0	0	0	0	0.0
Nduli	0	0	0	0	0.0
Total	13	10,228	10,495	-267	-2.6

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

(viii) Laboratories

The laboratory is a necessary facility for students taking science subjects. The specifications set by the government are that each school should have at least three laboratories, one for each of the following subjects, physics, chemistry and biology. Table 5.49 shows that in 2012, the Municipality had only 10 laboratories out of 39 required located at Gangilonga ward (six), Mwangata ward (two), Mtwivila and Kihesa wards one each. The remaining wards had no laboratories at all. The Municipality authorities should take this matter seriously as the shortages of this item will hinder the progress of students taking science subjects.



A laboratory is a necessary facility for students taking science subjects

Table 5. 49: Availability of Laboratories in Public Secondary Schools by Ward, Iringa Municipality Council, 2009

Ward	No. of School	Number of Laboratories			Percent Deficit
		Required	Available	Deficit	
Kihesa	1	3	1	2	66.7
Mtwivila	1	3	1	2	66.7
Gangilonga	3	9	6	3	33.3
Kitanzini	1	3	0	3	100.0
Ruaha	1	3	0	3	100.0
Mshindo	0	0	0	0	0.0
Mavinjeni	0	0	0	0	0.0
Mlandege	1	3	0	3	100.0
Mwangata	1	3	2	1	33.3
Kwakilosa	1	3	0	3	100.0
Makorongoni	0	0	0	0	0.0
Ilala	1	3	0	3	100.0
Mkwawa	1	3	0	3	100.0
Kitwiru	1	3	0	3	100.0
Isakalilo	0	0	0	0	0.0
Nduli	0	0	0	0	0.0
Total	13	39	10	29	74.4

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

5.2.4 Universities/Colleges and Vocational Training Schools/Centres

Iringa Municipality Council is endowed with four universities, namely Mkwawa University College of Education commonly known as MUCE, Tumaini University College of Iringa, Ruaha University College (RUCO) and the Open University of Iringa. MUCE is situated in Mkwawa ward, RUCO and the Open University of Iringa

at Gangilonga ward, while Tumaini University is in Kihesa ward. The municipality also has a teachers training college known as Kleruu Teachers Training College in Gangilonga ward. In addition, the Municipality has two Vocational Training Centres, Don Bosco and Iringa VETA.

5.2.4.1 Universities

Mkwawa University College of Education

The Mkwawa University College of education (MUCE) is located in Mkwawa ward, about 3 Kilometres from the town centre. MUCE was established as a constituent college of the University of Dar es Salaam (UDSM) on the 1st of September 2005 by upgrading the former Mkwawa High School, in response to the growing demand of teachers. Mkwawa High School was first established as an ‘O’ level school in 1959 and was called St. Michael and St. George’s School. However, in 1961, when Tanganyika became independent, the plan to establish the Girl’s school was abandoned, and what was in place became a co-education school. In 1964 it became a High School, officiated by the First President of the United Republic of Tanzania, the late Mwalimu Julius K. Nyerere. In 1977 it became a teachers college offering certificate and diploma programmes in teacher education. Again in 1992 it became a High School and operated up to March 2003, when it was upgraded to a constituent college of UDSM, by order under section 55 (1) of the University of Dar es Salaam Act No. 12 of 1970 and published on 22nd July 2005 on Government Notice No. 2003.

Iringa University College of Tumaini University (IUC)

Iringa University College of Tumaini University is an institution of higher learning organized under the Evangelical Lutheran Church of Tanzania. The college is dedicated to develop dynamic and entrepreneurial leaders who will engage and realize their full potential and that of their community, their country and the world at large.

Iringa University College was established in 1994. It is providing a combination of liberal arts, education, specific technical training and practical experience. The University offers students a healthy balance between social and academic activities including lectures, discussions, research, paper writing and presentations, internships and placements, public lectures by renowned speakers, social welfare, cultural and sporting activities.

Iringa University College has the status of full accreditation by the Higher Education Accreditation Council (HEAC). It has established five faculties and one institute offering first and higher degrees, diplomas and certificates.

Keen to develop an international orientation as well, the university maintains cooperative links with a number of institutions outside the country. Currently they include the universities of the Evangelical Lutheran Church of America (ELCA), the University of Joensuu in Finland, the Maastricht School of Management and the University of Amsterdam in the Netherlands. Faculty from these institutions come and serve as visiting lecturers/professors to reinforce our 100 strong full-time faculty and several part time lecturers from sister universities in the country. Current enrolment is 3,000, and to-date about 1,500 students have graduated and are serving the nation in various capacities while some have proceeded to undertake postgraduate studies.

Ruaha University College (RUCO)

Ruaha University College (RUCO) is a private and secular institution of higher learning that is open to all regardless of their faith or religious affiliation.

It was established by the Tanzania Episcopal Conference (TEC) under its Trust Deed of the Registered Trustees of Ruaha University College who are the trustees of SAUT, through the generous support of well-wishers (friends of RUCO) within and outside the country.

The College is governed and administered in accordance with the Catholic Church Policy on Higher Education Institutions – Ex Corde Ecclesia and the provisions of the constitution establishing a constituent college of the St. Augustine University of Tanzania (SAUT).

The Open University of Tanzania Iringa Branch

The Open University of Tanzania offers certificates, diplomas, degrees and postgraduate courses. At the moment the Open University of Tanzania consists of the following Faculties, Institutes and Directorates: Arts and Social Sciences. Education, Science, Technology and Environmental Studies, Law, Business Management Institute of Continuing Education, Institute of Educational Technology. The Open University of Tanzania conducts its operations through Regional Centres and Study Centres. Currently there are 25 Regional Centres and 69 Study Centres. At each Regional centre there are study centres to service distance study students. Within each region several institutions with adequate facilities have been identified to serve as study centre. For example Secondary schools, Colleges and Institutes. Study centres serve as general points for project work, interaction with other students, attending seminars and tutorials, practical work and demonstrations and for using reference materials.

Table 5.50 highlights the number of students enrolled into public and private colleges situated at Iringa Municipality. According to the Table, more male than female students

were admitted into colleges in the academic year 2011/12, while for the academic year 2012/13 more females were admitted than males.

Table 5. 50: Total Number of Students Available in Public and Private University Colleges and Institutes by Sex, Iringa Municipality, 2011/12 and 2012/13

Name of Institution	Number of Students in 2011/12			Number of Students in 2012/13		
	Male	Female	Total	Male	Female	Total
MUCE	1,297	1,015	2,312	1,609	959	2,568
R UCO	3,032	1,819	4,851	1,520	2,257	3,777
IUC	2,150	1,635	3,785	2,552	1,733	4,285
Open University	187	90	277	278	152	430
Total	6,666	4,559	11,225	5,959	5,101	11,060

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

5.2.4.2 Colleges and Institutes

Iringa municipality council has one Teachers Training College and one Health Institute. Kleruu Teachers' College is a state-funded teacher training college located in Iringa municipality. Established in 1970 with financial assistance from the Danish government and officially opened by the late, honourable Julius K. Nyerere, Kleruu TC stands unique amongst higher education institutions in Tanzania due to its focus on producing graduates who specialise in the teaching of scientific disciplines.



In recent years the college introduces courses leading to Diploma in Secondary Education (Science), Diploma in Technical Education or Diploma in Physical Education.

In addition to the Kleruu Teachers College, Iringa Municipality has an institution called Iringa Primary Health Care Institute (Iringa PHCI) which offers Diploma in Health Promotion, Clinical Medicine, District Health Management and Certificate in Nursing.

Table 5. 51: Total Number of Students available in other institutions/colleges by Sex, Iringa Municipality, 2011 and 2012

Institute/Collage	Number of Students in 2011			Number of Students in 2012		
	Male	Female	Total	Male	Female	Total
Kleruu TTC	450	125	575	244	93	337
Iringa PCHI	25	25	50	27	31	58
Total	475	150	625	271	124	395

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

5.2.4.2 Vocational Education

As it has been mentioned above, there is only one Vocational Training College in Iringa Municipality which is publicly owned and two privately owned. Vocational training is very crucial to a nation like Tanzania where there are many primary and secondary school leavers who fail to access higher learning facilities.

Table 5. 52: List of Vocational Public and Private Training Schools/Centres, Iringa Municipality, 2012

Public Vocational Schools/Centres	Location/Ward
1. Iringa VETA	Mlandege
2. Don Bosco VTC	Kwakilosa
3. Mgongo VTC	Nduli

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

Table 5.53 shows that the total number of students admitted in the vocational centres decreased over the period of 2011 and 2012. The table further shows that there were more boys than girls enrolled in 2011 as well as in 2012. Iringa VETA at 354 students in 2011 and 305 in 2012 enrolled the largest number of students than other vocational centres. The VTCs offer courses in Printing, Tailoring, Motor Vehicle Mechanics, Welding, Plumbing, Food Production, Secretarial and Computing, etc.

Table 5. 53: Total Number of Students Available in Public and Private Vocational Training Schools/Centres by Sex, Iringa Municipality, 2011 and 2012

Vocational Centres	Number of Students in 2011			Number of Students in 2012		
	Boys	Girls	Total	Boys	Girls	Total
Iringa VETA	227	127	354	209	96	305
Don Bosco VTC	78	41	219	197	38	235
Mgongo VTC	20	0	20	24	0	24
Total	325	168	593	430	134	564

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

5.2.5 Adult Education

Iringa Municipality Council has made remarkable improvement in the eradication of illiteracy since the 1970's. Along with the expansion of primary and secondary education, the Municipality has also expanded the education for the over aged children using primary schools as centres with the head teachers becoming in-charge of the adult education campaigns through the MEMKWA programme. The Municipality has a centre by the name of "Matumaini Centre" meaning Centre of Hopes which was established in 2010 to support under age pregnant girls and single mothers in Iringa.

As Table 5.54 shows, that out of the 16 wards only four wards had this programme and that the number of over aged children schooling in Iringa Municipality has been increasing year after year. In 2010 there were 86 children schooling under MEMKWA programme in the Municipality, out of these, 41 were boys and 45 were girls. In 2011 the number of children increased to 107 with 59 boys and 48 girls. In 2012 the picture was different as the number went up further to 114 out of which 60 were boys and 54 girls. In all years, Gangilonga had the largest number of over-aged children under MEMKWA program. .

Table 5. 54: Number of Recruitment of Over-Age Children into MEMKWA Primary Education by Ward, Iringa Municipality, 2010, 2011 and 2012

No.	Ward	2010			2011			2012		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Kihesa	3	2	5	5	6	11	7	5	12
2	Mtwivila	0	0	0	0	0	0	0	0	0
3	Gangilonga	21	16	37	32	19	51	33	21	54
4	Kitanzini	0	0	0	0	0	0	0	0	0
5	Ruaha	0	0	0	0	0	0	0	0	0
6	Mshindo	0	0	0	0	0	0	0	0	0
7	Mavinjeni	0	0	0	0	0	0	0	0	0
8	Mlandege	7	9	16	17	9	26	12	14	26
9	Mwangata	0	0	0	0	0	0	0	0	0
10	Kwakilosa	0	0	0	0	0	0	0	0	0
11	Makorongoni	0	0	0	0	0	0	0	0	0
12	Ilala	10	18	28	5	14	19	8	14	22
13	Mkwawa	0	0	0	0	0	0	0	0	0
14	Kitwiru	0	0	0	0	0	0	0	0	0
15	Isakalilo	0	0	0	0	0	0	0	0	0
16	Nduli	0	0	0	0	0	0	0	0	0
Total		41	45	86	59	48	107	60	54	114

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

Table 5.55 shows that in 2010 the district had 10 adult education centres. The recruitments of adults into adult training centres and the MEMKWA programme in 2010 were 86. Adult enrolment into centres increased tremendously to 666 in 2011 and again increased further to 746 in 2012. The number of adult persons joining the centres is expected to increase even further in the coming years due to the on-going massive campaigns by Municipality authority.

Table 5. 55: Number of Adult Education Centres by Ward, Iringa Municipality, 2010, 2011 and 2012

No.	Ward	Number of centres			Total enrolment		
		2010	2011	2012	2010	2011	2012
1	Kihesa	0	9	2	5	117	93
2	Mtwivila	0	0	0	0	0	0
3	Gangilonga	4	21	7	37	274	326
4	Kitanzini	1	0	0	0	0	0
5	Ruaha	3	0	0	0	0	0
6	Mshindo	0	0	0	0	0	0
7	Mivinjeni	0	0	0	0	0	0
8	Mlandege	1	13	4	16	171	186
9	Mwangata	0	0	0	0	0	0
10	Kwakilosa	0	0	0	0	0	0
11	Makorongoni	0	0	0	0	0	0
12	Ilala	0	08	3	28	104	141
13	Mkwawa	0	0	0	0	0	0
14	Kitwiru	0	0	0	0	0	0
15	Isakalilo	1	0	0	0	0	0
16	Nduli	0	0	0	0	0	0
Total		10	51	16	86	666	746

Source: Municipality Director's Office (Education Department), Iringa Municipality Council, 2013

Matumaini Centre.



Some of the goods produced and sold at the Matumaini Centre in Iringa Municipality

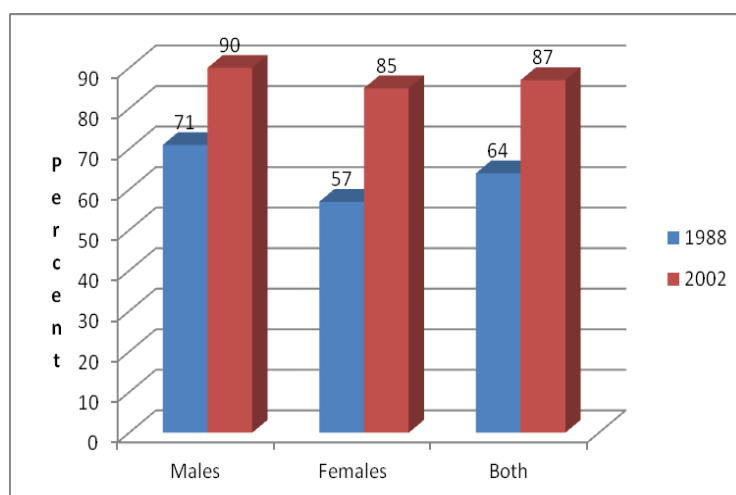
In Tanzania, under age pregnant girls barely stand a chance as they are automatically expelled from school and many of them leave their parents' home and live vulnerable life. Matumaini centre in the municipality gives these teenage mothers a chance of improving their living conditions by providing them free education as well as vocational training/skills such as tailoring, weaving, pottery, knitting and stitching as well as English, Mathematics, Health Care, typing and general computer skills. The teenage mothers graduate as certified tailors and the acquired skills give them

opportunity to start their own business and become self- sufficient in supporting their families.

5.2.5.1 Literacy Rate

As reported earlier, there has been an improvement in the literacy rates in Iringa Municipality Council since 1988. In 1988 only 64 percent of the population aged 5 years and above were literate compared to 87 percent in year 2002. When comparing both sexes, the literacy rate was lower among the female population (85 percent) than among the male population (90 percent).

Figure 38: Comparison of Literacy Rates by sex, Iringa Municipality Council, 1988 and 2002



Source: 2002 Population and Housing Census Report, Iringa Urban District Profile, 2004

Age-wise, the data depicts the actual improvement in education sector since the colonial period. Table 5.56 shows that the literacy rates are skewed towards the young population, of which the highest rate recorded, is at middle aged population (20 – 29 years, 97 percent) before declining gradually towards the older population. The lowest literacy rate (36 percent) is for those aged 80 years and above.

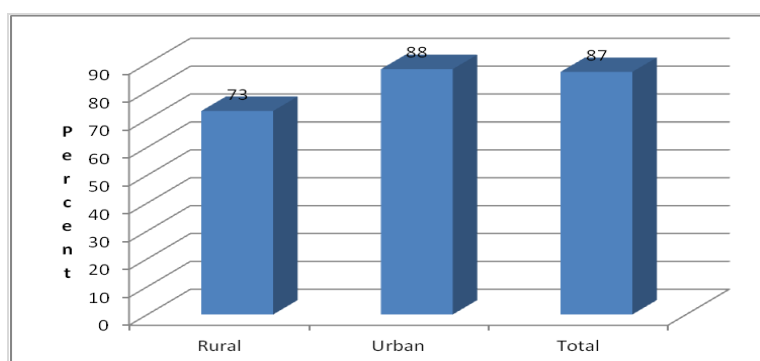
Table 5. 56: Distribution of Population by Age Groups, Literacy and Sex, Iringa Municipality Council, 2002

Age Group	Population			Literacy Rates		
	Male	Female	Total	Male	Female	Total
5 – 9	6,502	6,775	13,277	60	63	62
10 – 14	6,415	7,066	13,481	97	95	96
15 – 19	6,028	7,147	13,175	97	94	96
20 – 24	4,704	6,291	10,995	97	97	97
25 – 29	4,118	5,183	9,301	99	95	97
30 – 34	3,290	3,684	6,974	99	94	96
35 – 39	2,683	2,897	5,580	99	89	93
40 – 44	1,924	2,189	4,113	96	79	87
45 – 49	1,555	1,614	3,169	92	76	84
50 – 54	1,101	1,171	2,272	93	68	80
55 – 59	863	796	1,659	89	53	72
60 – 64	602	756	1,358	83	45	62
65 – 69	414	488	902	79	43	59
70 – 74	377	459	836	81	36	56
75 – 79	174	250	424	78	31	50
80+	161	311	472	69	19	36
Total	40,911	47,077	87,988	90	85	87

Source: 2002 Population and Housing Census, Iringa Urban District Profile, 2004

Comparing rural – urban literacy, the district portrays the same picture of literacy as any other district in Tanzania. Literacy is higher in the urban population (88 percent) than in the rural population (73 percent) (Figure 39).

Figure 39: Literacy Rates by Location, Iringa Municipality Council, 2002



Source: 2002 Population and Housing Census Report, Iringa Urban District Profile, 2004

Water Supply and Sanitation

Introduction

Availability and adequate supply of clean potable water for the residents of Iringa Municipality are of utmost importance. According to the Population and Housing Census results for year 2002, about 81 percent of the total private households in Iringa Municipality used piped water as their main source of drinking water; 1.01 percent of the rural households and about 85 percent of the urban households were using piped water. By year 2012 a total of 114,237 people were being served with piped water compared to 90,084 people in 2010. This is equivalent to an increase of about 26.8 percent.



Ruaha River is the main source of water supply to the Municipality for domestic usage

5.3.1 Urban Water Supply

The situation in regard to water supply in the urban areas is shown in Tables 5.57 and 5.58. Table 5.57 shows the number and type of urban water sources by ward. Based on the two tables, piped water was the dominant water type used in the municipality followed by bore holes and rain water. Piped water was most accessed in urban localities than sub-urban areas.

Table 5. 57: Number and Type of Urban Water Sources by Ward; Iringa Municipality; 2012

Ward	Source of Water									Total
	Charco/ Dam	Spring	Shallow Wells	Rain Water harvest dams	Boreholes	River Water	Lake Water	Dam	Piped water scheme	
Kihesa	1	0	1	0	0	0	0	0	0	2
Mtwivila	0	1	1	1	2	0	0	0	0	6
Gangilonga	0	0	0	0	0	0	0	0	0	1
Kitanzini	0	0	0	0	0	0	0	0	0	1
Ruaha	0	0	0	1	1	1	0	0	1	4
Mshindo	0	0	0	0	0	0	0	0	0	1
Mivinjeni	0	0	0	0	0	0	0	0	0	1
Mlandege	0	0	0	0	0	0	0	0	0	1
Mwangata	0	1	0	1	1	0	0	0	0	4
Kwakilosa	0	0	0	1	0	0	0	0	1	2
Makongoroni	0	0	0	0	0	0	0	0	0	1
Ilala	0	0	0	0	0	0	0	0	0	1
Mkwawa	0	0	1	0	0	0	0	0	0	2
Kitwiru	0	1	0	0	0	0	0	0	1	2
Isakalilo	0	0	0	1	0	0	0	0	0	2
Nduli	0	0	0	0	1	0	0	0	0	2
Total	1	3	3	5	5	1	0	0	3	21

Source: Municipality Director's Office (Water Supply and Sanitation Department), Iringa Municipality Council, 2013

Table 5.58 shows the number of urban water schemes by type of technology by ward in Iringa Municipality. Like in other urban areas, water supply by gravity pipes was the most used technology in almost all wards. The table also shows that almost all wards in the Municipality had water schemes operated by electricity pump and gravity piped type of technology with the exception of Ruaha ward which in addition uses wind mill.



The common technology used in Iringa Municipality is electricity pump

Table 5. 58: Number of Urban Water Schemes by Type of Water Delivery Technology and by Ward; Iringa Municipality, 2012

Ward	Type of Technology					Total
	Wind	Electricity Pump	Diesel Pump	Hand Pump	Gravity piped	
Kihesa	0	0	0	0	1	1
Mtwivila	0	0	0	2	1	3
Gangilonga	0	0	0	0	1	1
Kitanzini	0	0	0	0	1	1
Ruaha	1	1	0	0	1	3
Mshindo	0	0	0	0	1	1
Mivinjeni	0	0	0	0	1	1
Mlandege	0	0	0	0	1	1
Mwangata	0	0	0	0	1	1
Kwakilosa	0	0	0	0	1	1
Makongoroni	0	0	0	0	1	1
Ilala	0	0	0	0	1	1
Mkwawa	0	0	0	0	1	1
Kitwiru	0	1	0	0	1	2
Isakalilo	0	0	0	1	1	2
Nduli	0	1	0	0	1	2
Total	1	3	0	3	16	23

Source: Municipality Director's Office (*Water Supply and Sanitation Department*), Iringa Municipality Council, 2013

The situation in regard to water supply in the urban areas is shown in Table 5.59. According to the data supplied by the Water Department of the Iringa Municipality Council, by 2002, about 66.9 percent of the urban population in Iringa Municipality had been supplied with water. The percentage increased to 86.5 percent in 2010 and reached 87.5 percent in 2012.

Table 5. 59: Urban Water Supply Coverage by Ward, Iringa Municipality, 2002, 2010, and 2012`

Ward	2002			2010			2012		
	Est Pop	EstPop Covered	% Covered	Est Pop	EstPop Covered	% Covered	Est Pop	EstPop Covered	% Covered
Kihesa	12,417	8862	71.4	18498	16321	88.2	18196	16321	89.7
Mtwivila	13,519	9804	72.5	20200	17862	88.4	21017	17862	85.0
Gangilonga	9,668	5508	57.0	9941	9741	98.0	9599	9441	98.4
Kitanzini	4085	2917	71.4	5165	4802	93.0	3617	3402	94.1
Ruaha	10829	5128	47.4	15909	13250	83.3	16984	15250	89.8
Mshindo	1892	1602	84.7	2775	2454	88.4	1892	1754	92.7
Mivinjeni	5180	3714	71.7	7872	6671	84.7	4780	4571	95.6
Mlandege	4204	2108	50.1	6312	5168	81.9	4640	4168	89.8
Mwangata	11508	9402	81.7	10500	9804	93.4	13486	12804	94.9
Kwakilosa	6883	5971	86.7	9799	9351	95.4	7948	6351	79.9
Makongoroni	7247	4167	57.5	10691	10061	94.1	7790	6512	83.6
Ilala	3745	3476	92.8	5560	4517	81.2	4448	4117	92.6
Mkwawa	7996	5351	66.9	12391	10928	88.2	9673	9228	95.4
Kitwiru	7198	3202	44.5	9914	9378	94.6	11461	9378	81.8
Isakalilo	0	0	0.0	8222	5323	64.7	9188	8323	90.6
Nduli	0	0	0.0	6447	2932	45.5	6626	2932	44.2
Total	106371	71212	66.9	160196	138563	86.5	151345	132414	87.5

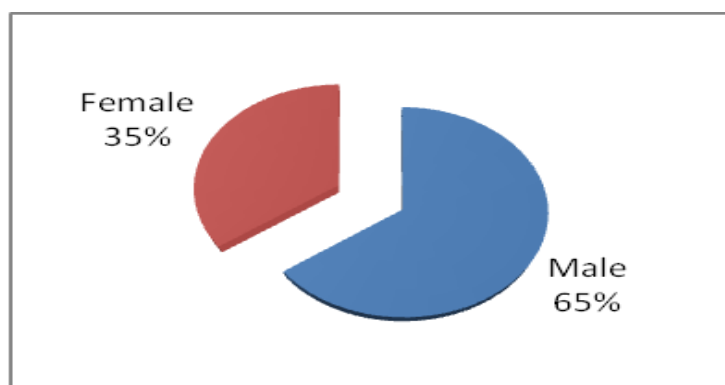
Source: Municipality Director's Office (Water Supply and Sanitation Department), Iringa Municipality Council, 2013

Table 5. 60: Village Water Committees, Village Water Funds and Funds in the VWFs by Ward Iringa Municipality Council as at 31.12 2012

Ward	Water Committee	Village Water Committees members			Village Water Fund (VWF)/Water Users Group Committees Total funds in Tshs
		Male	Female	Total	
Isakalilo	2	15	6	21	4,588,650
Nduli	3	13	9	22	4,681,350
Total	5	28	15	43	9,270,000

Source: Municipality Director's Office (Water Supply and Sanitation Department), Iringa Municipality, 2013

**Figure 40 : Number of Village Water Committees by Gender
Iringa Region; 2012**



Source: Municipality Director's Office (Water Supply and Sanitation Department), Iringa Municipality, 2013

Figure 40 shows women participation in Water Committees in Iringa Municipality. Female participation is of concern as the issues of water supply to women are very essential.

5.3.2 Sewerage and Sanitation

Sanitation facilities in Iringa Municipality are fairly well spread. With reference to Table 5.61, a total of 30,923 households (97.2 percent) of the population of Iringa Municipality were using toilets of one type or the other in 2008. In 2012, about 35,495 households (99 percent) were using toilets of one type or the other. At ward level, Kihesa had the lowest proportion (93.9 percent) of its population having toilet facilities while in 2012 Nduli ward had the lowest proportion at 92.9 percent respectively.

Table 5. 61: Number of Households with Sanitation Facilities (Toilets) by Ward, Iringa Municipality; 2008 and 2012

Ward	2008					2012				
	Est. No. of Households	Number of Hhs with Toilet Facilities	% of Households with Toilet Facility	No. of Hhs without Toilet Facility	% of Households without Toilet Facility	Est. No. of Households	Number of Hhs with Toilet Facilities	No. of Hhs with Toilet Facility	No. of Hhs without Toilet Facility	% of Households without Toilet Facility
Kihesa	4,069	3,819	93.9	250	6.1	4,232	4,223	99.8	9	0.2
Mtwivila	4,244	4,039	95.2	205	4.8	4,670	4,567	97.8	103	0
Gangilonga	1,580	1,580	100.0	0	0.0	1,920	1,920	100.0	0	0
Kitanzini	1,056	1,056	100.0	0	0.0	861	861	100.0	0	0
Ruaha	3,676	3,616	98.4	60	1.6	4,142	4,126	99.6	16	0
Mshindo	688	685	99.6	3	0.4	498	498	100.0	0	0
Mivinjeni	1,097	1,077	98.2	20	1.8	1,291	1,291	100.0	0	0
Mlandege	1,492	1,486	99.6	6	0.4	1,160	1,160	100.0	0	0
Mwangata	3,784	3,594	95.0	190	5.0	3,065	3,065	100.0	0	0
Kwakilosa	2,103	2,063	98.1	40	1.9	2,035	2,035	100.0	0	0
Makongoroni	2,466	2,455	99.6	11	0.4	1,948	1,948	100.0	0	0
Ilala	1,347	1,338	99.3	8	0.6	1,236	1,235	99.9	1	0
Mkwawa	2,182	2,154	98.7	28	1.3	2,303	2,278	98.9	25	0.1
Kitwiru	2,041	1,961	96.1	80	3.9	2,665	2,652	99.5	13	0.5
Isakalilo	0	0	0.0	0	0.0	2,137	2,057	96.3	80	3.7
Nduli	0	0	0.0	0	0.0	1,699	1,579	92.9	120	7.1
Total	31,825	30,923	97.2	901	2.8	35,862	35,495	99.0	367	0.6

Source: Municipality Director's Office (Water Supply and Sanitation Department), Iringa Municipality Council, 2013

5.3.3 Investment Opportunities in Water Supply

Urban localities in the municipality have better access of tap water than sub-urban areas. Therefore, supply of tap water to sub-urban areas would be a priority area of investment in water supply. Dip water wells also can be the best alternative water sources to supplement tap water shortages especially in those marginalized areas of the municipality like Nduli, Kwakilosa and Kitwiru wards.

CHAPTER SIX

Other Development Issues

6.0 Introduction

Other development issues includes youth economic groups, Gender empowerment such as day care centers, women economic groups, cooperative development (SACCOS) as well as women's participation in managerial, political, professional and technical fields.

6.1 Gender Empowerment

The load in the social and family welfare is big as they bear the load of housekeeping and attending home activities, at the same time they are expected to produce economically in order to increase the economy of their family. Challenges like poverty and HIV/AIDS affect women more than men since they are the ones who take the responsibility of taking care of the sick ones. In that aspect, various measures have been in place to minimize the time spent by women and girls in attending home activities. Gender empowerment initiatives are meant to enable women to participate fully in policy and decision making as well as participate in economic activities. Measures that are taken include establishment of daycare centers, establishment of women economic groups, establishment of SACCOS and other cooperatives groups.

6.1.1 Day Care Centers

Day care centers are important for looking after children aged three to four before they join pre-primary school. Day care is important because they keep children away from their mothers and hence give them opportunities to participate in economic activities and hence improve their social economic status. Unfortunately, there is no day care centres observed in Iringa municipality.

6.1.2 Women Economic Groups

The emancipation of women from poverty and economic discrimination is something women themselves can do with some help from an understanding government and society. The formation of economic groups for women is the strategy towards this emancipation. The groups also serve the additional purpose of providing a forum for the discussion of gender issues leading to women equality and equity between genders.

According to Table 6.1, women economic groups increased remarkably from 46 groups in 2011 to 295 in 2012. Group members were also in increase. They increased by 1,586 members (177 percent) from 895 in 2011 to 2,481 in 2012. Twelve out of thirteen groups received loans in 2011 while all eleven groups received loans in 2012 respectively. The largest share of loans (Tshs. 3,000,000 equivalent to 30 percent) in 2011 went to women economic groups in Gangilonga ward whereby in 2012 the lion share of 2 million (18.5 percent of total amount of money loaned in 2012) went to women economic groups in Makorongoni ward.

Table 6. 1: Number of Women Economic Groups by Ward, Iringa Municipality; 2011 and 2012

Ward	2011				2012			
	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs.	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned Tshs.
Mshindo	-	-	-	-	9	90	-	-
Mlandege	-	-	1	1,000,000	18	162	1	1,000,000
Mwangata	6	152	1	-	25	225	-	-
Gangilonga	-	-	2	3,000,000	23	184	-	-
Mtwivila	6	180	2	2,000,000	18	162	1	800,000
Makorongoni	5	130	-	-	22	176	2	2,000,000
Kihesa	5	125	-	-	26	260	1	1,000,000
Mivinjeni	-	-	-	-	12	84	1	1,000,000
Ilala	-	-	-	-	15	120	1	1,000,000
Kwakilosa	7	210	2	1,000,000	16	112	1	1,000,000
Kitanzini	11	68	1	1,000,000	15	121	1	1,000,000
Mkwawa	-	-	-	-	19	171	-	-
Kitwiru	-	-	1	1,000,000	28	140	-	-
Ruaha	6	30	3	1,000,000	25	225	1	1,000,000
Isakalilo	-	-	-	-	13	117	-	-
Nduli	-	-	-	-	11	132	1	1,000,000
Total	46	895	13	10,000,000	295	2481	11	10,800,000

Source: District Executive Director's Office (Community Development unit), Iringa Municipality, 2013

6.1.3 Women's Participation in Policy and Decision-Making

The most acquired posts that are going to be discussed here are Managerial, Professional and Political posts, Table 6.2 and 6.2 (a) reveals the participation of each gender in 2011 and 2012. In all years professional/technical posts occupied about 90 percent of all the post, (90.0 percent and 91 percent respectively). Political posts were occupied by 8.6 percent in 2011 and 7.6 percent in 2012. Female participation in managerial posts was low in both years where as for professional posts female

participation was higher than that of male. Furthermore, the two Tables below indicate there was improved participation of female in all the posts from 45.6 percent in 2011 to 54.2 percent in 2012. At ward level, Mlandege ward showed a good example of involving women in political posts by having 42 females against 30 males in all the years. The remaining wards had higher male participation than female.

Table 6. 2: Participation in Managerial, Political, Professional and Technical Personnel by Gender and by Ward, Iringa Municipality; 2011

Ward	2011											
	Managerial			Professionals/ Technicians			Politicians (MPs, DC)			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mshindo	1	0	1	1	2	3	7	2	9	9	4	13
Mlandege	1	1	2	11	9	20	30	42	72	42	52	94
Mwangata	1	0	1	9	3	12	7	2	9	17	5	22
Gangilonga	11	7	18	1267	1262	2529	7	3	10	1285	1272	2557
Mtwivila	0	2	2	60	24	84	14	6	20	74	32	106
Makorongoni	1	1	2	9	11	20	10	3	13	20	15	35
Kihesa	1	0	1	12	7	19	6	4	10	19	11	30
Mivinjeni	1	0	1	4	3	7	4	3	7	9	6	15
Ilala	1	0	1	6	1	7	5	4	9	12	5	17
Kwakilosa	1	0	1	4	8	12	9	2	11	14	10	24
Kitanzini	12	0	12	182	50	232	6	5	11	200	55	255
Mkwawa	1	0	1	7	7	14	9	0	9	17	7	24
Kitwiru	1	0	1	6	4	10	8	3	11	15	7	22
Ruaha	1	0	1	7	11	18	16	6	22	24	17	41
Isakalilo	1	0	1	4	4	8	10	0	10	15	4	19
Nduli	1	0	1	6	1	7	35	19	54	42	20	62
Total	36	11	47	1595	1407	3002	183	104	287	1814	1522	3336
Percent by Gender	76.6	23.4		53.1	46.9		63.8	36.2		54.4	45.6	
Percent by participation			1.4			90			8.6			

Source: District Executive Director's Office (Community Development unit), Iringa Municipality, 2013

Table 6.2 a: Participation in Managerial, Political, Professional and Technical Personnel by Gender and by Ward, Iringa Municipality 2012

Ward	2012											
	Managerial			Professionals/ Technicians			Politicians (MPs, DC)			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mshindo	1	0	1	1	2	3	7	2	9	9	4	13
Mlandege	0	1	1	3	4	7	30	42	72	33	47	80
Mwangata	1	0	1	4	5	9	7	2	9	12	7	19
Gangilonga	12	6	18	1172	1780	2952	7	3	10	1191	1789	2980
Mtwivila	0	2	2	60	26	86	14	6	20	74	34	108
Makorongoni	2	1	3	9	11	20	10	3	13	21	15	36
Kihesa	1	0	1	12	7	19	6	4	10	19	11	30
Mivinjeni	1	0	1	3	3	6	4	3	7	8	6	14
Ilala	1	0	1	6	2	8	5	4	9	12	6	18
Kwakilosa	1	0	1	4	8	12	9	2	11	14	10	24
Kitanzini	12	0	12	195	53	248	6	5	11	213	58	271
Mkwawa	1	0	1	7	7	14	9	0	9	17	7	24
Kitwiru	9	0	9	6	4	10	8	3	11	23	7	30
Ruaha	1	0	1	7	11	18	16	6	22	24	17	41
Isakalilo	1	0	1	4	4	8	10	0	10	15	4	19
Nduli	1	0	1	6	1	7	35	19	54	42	20	62
Total	45	10	55	1499	1928	3427	183	104	287	1727	2042	3769
Percent by Gender	81.8	18.2		43.7	56.3		63.8	36.2		45.8	54.2	
Percent precipitation by	1.5			91			7.6					

Source: District Executive Director's Office (Community Development unit), Iringa Municipality, 2013

6.2 Youth Economic Groups



Economic groups manned by youths are important in reduction of youth poverty and unemployment

Youth economic groups are important in the reduction of youth poverty and unemployment. Through these groups, youth can have easy access of loans for establishment of small scale businesses or for farming activities. There are no youth economic groups in Iringa Municipality; as a result initiatives towards supporting them are somehow hindered. In this regards, the Municipality should take this as a challenge and find out strategies that can encourage youth formulate economic groups.

6.3 Vulnerable Children and Orphanhood

An orphan is a child aged below 18 years who has lost one or both parents. According to UNICEF, a child who has lost one parent is termed as 'single orphan' and who has lost both parents is a 'double orphan'. Table 6.3 shows the magnitude of vulnerability for the Iringa Municipality of which, out of 31,886 children aged 0-17 years, 6,107 children (19.2 percent) were living vulnerable life. More girls at 3,195 (52.3 percent) than boys (2,912, 47.7 percent) were living vulnerable life in the municipality in 2012..At ward level,Kihesa had the highest number of vulnerable children (941, 15.4 percent) followed by Ruaha (725, 11.9percent), Mtwivila (699, 11.4 percent), Mwangata (528, 8.6 percent) while the least number of vulnerable children were in Kitanzini (128, 2.1 percent).

Table 6.3: Number of Vulnerable Children by Ward, Iringa Municipality; 2012

Ward	Total Children Aged 0 - 17	Vulnerable Children					Percent
		Orphans and Non-Orphans					
		Girls	Girls Percent	Boys	Boys Percent	Total	
Mshindo	475	73	51.8	68	48.2	141	2.3
Mlandege	1875	171	69.0	77	31.0	248	4.1
Mwangata	2539	272	51.5	256	48.5	528	8.6
Gangilonga	533	170	75.6	55	24.4	225	3.7
Mtwivila	2799	354	50.6	345	49.4	699	11.4
Makorongoni	1779	173	44.4	217	55.6	390	6.4
Kihesa	2760	462	49.1	479	50.9	941	15.4
Mivinjeni	1833	75	52.4	68	47.6	143	2.3
Ilala	1664	169	72.8	63	27.2	232	3.8
Kwakilosa	441	109	48.0	118	52.0	227	3.7
Kitanzini	2577	67	52.3	61	47.7	128	2.1
Mkwawa	2103	194	49.2	200	50.8	394	6.5
Kitwiru	1665	234	48.5	248	51.5	482	7.9
Ruaha	4674	362	49.9	363	50.1	725	11.9
Isakalilo	2235	203	54.7	168	45.3	371	6.1
Nduli	1934	107	45.9	126	54.1	233	3.8
Total	31,886	3195	52.3	2912	47.7	6107	100

Source: District Executive Director's Office (Community Development unit), Iringa Municipality 2013

6.4 Savings and Credit Cooperative Societies (SACCOS)



SACCOS are important in enabling members to get loans which help them in starting small businesses

A total of 31 SACCOS were registered in Iringa Municipality of which 22 were active and 9 were dormant. The SACCOS had more male members (2,853) than female (2,109). Total value of money loaned to members was Tshs 571,755,296/= for the period January to December 2012. This amount was about twice the value of the shares and savings as at the end of the year. The total loans recovered were Tshs. 207,203,070/= and amount outstanding was TShs. 2,682,076,641/= for the same period. Gangilonga ward had the highest number of active SACCOS (9) and the highest number of members (2253) while Makorongoni ward had the second highest members (1422).

Table 6. 4: Active SACCOS by Ward, Iringa Municipality; 2012

Ward	No. of SACCOS (Registered)		Total Members			Total Value of Shares (Tshs) as at 31.12.2012	Total Savings as at 31.12.2012	Total Money loaned to members Jan-Dec 2012 (Tshs)	Total loans recovered from members Jan - Dec 2012 (Tshs)	Total Outstanding Loans
	Active	Dormant	Male	Female	Total					
Mshindo	-	-	-	-	-	-	-	-	-	-
Mlandege	1	-	62	12	74	23,500,000	274,440,550	95,400,000	85,801,500	486,490,600
Mwangata	-	-	-	-	-	-	-	-	-	-
Gangilonga	9	4	1,192	1,061	2253	182,644,394	771,396,832	396,980,736	65,966,942	1,294,806,416
Mtwivila	1	-	23	13	36	1,335,000	7,120,000	445,000	4,370,000	4,370,000
Makorongoni	1	3	897	525	1422	53,844,365	362,966,902	2,650,000	25,169,600	717,841,300
Kihesa	2	-	104	81	185	8,756,560	81,336,175	41,229,560	5,958,306	27,719,087
Mivinjeni	1	-	236	148	384	13,087,600	175,010,799	350,000	2,554,222	47,843,888
Ilala	-	-	-	-	-	-	-	-	-	-
Kwakilosa	1	-	20	28	48	-	3,400,000	850,000	3,800,000	390,000
Kitanzini	2	-	123	89	212	6,825,000	49,830,500	9,500,000	11,745,200	80,413,100
Mkwawa	2	0	72	38	81	3,090,000	8,227,600	11,200,000	1,120,000	-
Kitwiru	1	-	35	24	59	3,261,228	5,315,598	2,350,000	717,300	8,485,750
Ruaha	1	2	89	90	179	10,680,000	8,729,500	10,800,000	0	13,716,500
Isakalilo	-	-	-	-	-	-	-	-	-	-
Nduli	-	-	-	-	-	-	-	-	-	-
Total	22	9	2853	2,109	4933	307,024,147	1,747,774,458	571,755,296	207,203,070	2,682,076,641

Source: Iringa Municipality Director (Cooperative unit) 2013

6.5 Savings and Credit Cooperative Groups (SACCOG)

There were five Savings and Credit Cooperative Groups in Iringa Municipality (Table 6.5). Women accounted for 76.2 of the total members as compared to 23.8 percent of male members. These groups were in Mlandege, Makorongoni, Ilala, Kitanzini and Mkwawa wards.

Table 6. 5: Service and Credit Cooperative Groups (SACCOG) by Ward, Iringa Municipality 2012

Ward	Number of Groups	Members			Percent	
		Male	Female	Total Members	Male	Female
Mshindo	-	-	-	-		
Mlandege	1	8	14	22	36.4	63.6
Mwangata	-	-	-	-		
Gangilonga	-	-	-	-		
Mtwivila	-	-	-	-		
Makorongoni	1	0	88	88	0.0	100.0
Kihesa	-	-	-	-		
Mivinjeni	-	-	-	-		
Ilala	1	4	31	35	11.4	88.6
Kwakilosa	-	-	-	-		
Kitanzini	1	20	25	45	44.4	55.6
Mkwawa	1	23	18	41	56.1	43.9
Kitwiru	-	-	-	-		
Ruaha	-	-	-	-		
Isakalilo	-	-	-	-		
Nduli	-	-	-	-		
Total	5	55	176	231	23.8	76.2

Source: Iringa Municipality Director (Cooperative unit) 2013

6.5 Financial Institutions

Remarkable development in social economic activities such as growth of industrial activities, increasing number of higher learning institutions as well as cropping up of formal and informal small scale businesses resulted high demand of financial institutions in the municipality. As Table 6.6 shows, up to the end of 2012 there were six banks operating in the municipality. Moreover, inadequate number of financial institutions in rural areas increases more pressure to banks/financial institutions operating in the municipality. Bank branches and Automatic Teller Machines (ATMs) allocated in different places within the municipality to a large extent improved availability of financial services not only to urban population within the municipality but also to other rural population of the Iringa region.

Table 6. 6: Financial institution, Iringa Municipality; 2012

2009	2010	2011	2012
NMB	NMB	NMB	NMB
CRDB	CRDB	CRDB	CRDB
TPB	TPB	TPB	TPB
NBC	NBC	NBC	NBC
BACLAYS	BACLAYS	BACLAYS	BACLAYS
-	EXIM	EXIM	EXIM

Source: District Executive Director's Office (Community Development unit) Iringa Urban 2013

6.6 Crime statistics

6.6.1 Introduction

The growth of towns, population increase, the development of science and technology and the increase of crimes are the sources and catalyst to 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 after day. Iringa Municipality Council like other parts of the country also experiences an increase in crime as well as erosion of morals.

6.6.2 Crime cases reported

A total of 3,478 crime cases were reported in Iringa Municipality in the period 2010 - 2012 (Table 6.7). Property crimes cases was leading by having 95.5 percent of all crimes which from these cases, 298 people (89.8 percent) were jailed. 34 people (10.2 percent of all jailed) were due to the reported drug crimes. The number of Police officers in the Municipality is about 1,464. These police officers are required to cop up with the increasing number of crimes associated with rapid population growth of the Municipality.

Table 6. 7: The total number of Crimes reported in the office of the OCD and the number of people jailed from January 2010 to December, 2012

Year	Total no. of Police in the Municipality	Total number of reported			Total Crimes	Total number of people jailed			Total jailed
		Violent Crimes	Property Crimes	Drug Crimes		Violent Crimes	Property Crimes	Drug Crimes	
2010	417	-	207	54	261	-	110	12	122
2011	514	-	1643	37	1680	-	99	8	107
2012	533	1	1471	66	1537	-	89	14	103
Total	1464	1	3321	157	3478	0	298	34	332
Percent		0.0	95.5	4.5	100.0	0	89.8	10.2	100

Source: Officer Commanding District Iringa Urban 2013

6.6.3 Accidents

Table 6.8 indicates the number of accidents reported and the number of people died/injured for the three years from January 2010 to December 2012. The total number of accidents occurred in the three year period was 724 out of which 516 people died and 215 injured. More accidents were of motor vehicle and motor cycles versus pedestrian (34 percent), followed by motor vehicles versus motorcycles (33 percent), motor vehicle only (27 percent) and motor cycle only (6 percent).

The table shows that there were more people who died in the accidents than those who were injured. The table below shows that the total number of people who died in motor vehicles accidents versus pedestrian was 26 percent and those injured was 12 percent. In motor vehicle versus motor cycle, 23 percent died and 9 percent were injured while for motor vehicle only 19 percent died and 11 percent injured. In totality, in all types of accidents about 70.6 percent of people died while 29.4 percent injured.

Table 6. 8: The number of accidents reported in the office of the OCD and the number of people injured/died by type of accident from January 2010-December; 2012

Year	Total Number of Accidents involving					Total number of people Died/Injured from Accidents involving										
	Motor vehicles only	Motor vehicle Versus Motor Cycles	Motor Cycles only	Motor vehicle and Motor cycles versus Pedestrian	Total	Motor vehicles only		Motor vehicle Versus Motor Cycles		Motor Cycles only		Motor vehicle and motor Cycles versus pedestrian		Sub Total		Grand Total
						D	I	D	I	D	I	D	I	D	I	
2010	71	81	10	83	245	58	11	64	18	6	7	69	28	197	64	261
2011	65	77	12	80	234	40	58	47	18	7	10	50	36	144	72	216
2012	58	80	22	85	245	43	12	54	27	11	15	67	25	175	79	254
Total	194	238	44	248	724	141	81	165	63	24	32	186	89	516	215	731
Percent	27	33	6	34	100	19	11	23	9	3	4	26	12	70.6	29.4	10

D: Died, I: Injured

Source: Officer Commanding District Iringa Urban 2013

Theft Cases

At total of 642 theft cases were reported in Iringa Municipality in the three year period (Table 6.9). The number of cases decreased in 2011 and rose again in 2012. In all years, most cases were due to cattle stealing whereby for the three years cattle stealing accounted for 81.9 percent of the total theft cases. It was followed by bicycle stealing (11.7 percent) and motor cycles stealing (5.6 percent). Motor vehicles stealing cases increased from one vehicle in 2010- 2011 to three vehicles in 2012. Many people were jailed due to stealing of cattle (60 percent) and bicycle (33.3 percent) while there was only one person who was jailed due to stealing of motor cycle (6.7 percent).

Table 6. 9: Number of Cases reported in the Office of the OCD and the number of People jailed from January 2010 to December 2012

Year	Number of Police in the district	Total number of				Total number of people jailed due to stealing					
		Motor vehicles stolen	Motor cycles stolen	Bicycles stolen	Cattle stolen	Total	Motor vehicles	Motor cycles	Bicycles	Cattle	Total
2010	417	1	9	16	288	314	-	1	5	9	15
2011	514	1	7	23	108	139	-	-	12	7	19
2012	533	3	20	36	130	189	-	-	17	3	20
Total	1464	5	36	75	526	642	-	1	34	19	54
Percent		0.8	5.6	11.7	81.9	100	-	6.7	33.3	60.0	100.0

Source: Officer Commanding District Iringa Urban 2013

6.6.3 Motorcycle Operators (BodaBoda)



Bodaboda business is one of the informal sectors that has reduced youth unemployment

Informal sector such as bodaboda business contributes in reducing youth unemployment as well as reducing income poverty.

The challenge of poor infrastructure, high expenses of hiring motor vehicles have provided a way for Bodaboda to serve as a means of transportation in almost all wards of Iringa municipality with poor road network. Most people opt for bodaboda as they are cheap and can reach places that are difficult to reach with vehicles. With reference to Table 6.10, by the end of 2012 Iringa Municipality had 19 bodaboda operators whereby 11 are allocated at Mtwivila junction, six at Mwang'ingo and two at Mkwawa University. Bodabodas have provided employment to youths in the municipality and raised their family income. One bodaboda operator earns between Tshs 420,000 – 560,000 per months which is a good income for the operators.

Table 6. 10: Number of Motorcycle Operators (BodaBoda) in Iringa Municipality; 2012

Common/Local name of their business centre	Number of Bodaboda operators	Estimated Income earned per Bodaboda operator in a month (Tshs.)
Mtwivila junction	11	420,000 -560,000
Mkwawa University	2	420,000 -560,000
Mwang'ingo	6	420,000 -560,000
Total	19	

Source: District Executive Director's Office (Business unit), Iringa Municipality 2013

6.6.4 Policy Implication on Other Development Issues



Informal sector is now playing a big part in youths and women employment in Iringa Municipality

Policy formulation on youths and women is important in order to deal with new challenges of unemployment and gender equalities. Informal sector is now playing a big part in youths and women employment therefore policies have to focus on enabling youths to employ themselves and to empower them so as establish economic groups for easy access of loans. Formulation of women economic groups is practically implemented in Iringa Municipality but with a failure in establishment of youth groups. A significant number of women occupy profession/technical posts than other posts. Impetus should now be directed towards maintaining number of women occupying such posts as well as under technical support of the Municipality, youths need to formulate economic groups.