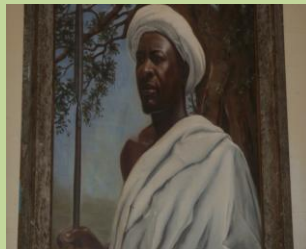




The United Republic of Tanzania

IRINGA RURAL DISTRICT COUNCIL SOCIO-ECONOMIC PROFILE 2013



December, 2013



The United Republic of Tanzania

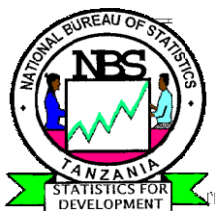
IRINGA RURAL DISTRICT COUNCIL SOCIO-ECONOMIC PROFILE, 2013

Jointly prepared by

**Ministry of Finance,
National Bureau of Statistics**

and

Iringa Rural District Council



**National Bureau of Statistics
Dar es Salaam**



**Iringa Rural District 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.

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

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

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

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

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

This Iringa Rural District 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 Rural District Council Director's Office, National Bureau of Statistics and other staff of Iringa Rural District who devoted their time to ensure the successful completion of this assignment.



Pudensiana Kisaka
District Executive 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
DPR	Desk Pupil Ratio
DPT3/HB3	Diphtheria Pertusis Tetanus 3 rd Doze/ Haemoglobin Level
ECF	East Coast Fiver
RVF	Rift Valley Fever
Govt.	Government
HIV	Human Immune Virus
IGAs	Income Generating Activities
IMR	Infant Mortality Rate
MMR	Maternal Mortality Rate
NCD	New Castle Disease
OPV3	Oral Polio Vaccine 3 rd Doze
PLHA	People Living with HIV/AIDS
PMTCT	Prevention Mother to Child Transmission
PR	Pass Rate
SACCOS	Savings and Credit Cooperative Societies

Sq. Km.	Square Kilometre
STD VII	Standard Seven
TB	Tuberculosis
TBAs	Traditional Birth Attendants
TPR	Toilet Pupil Ratio /Teacher Pupil Ratio
TT2	Tetanus Toxoid 2 nd Doze
U5MR	Under Five Mortality Rate
VCT	Voluntary Counselling and Testing
VHC	Village Health Committee
VHWs	Village Health Workers
VWC	Village Water Committee
VWF	Village Water Fund
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 Rural District. Information about ethnic groups, population distribution, size and other demographic characteristics is also given.

1.1 Geographical Location

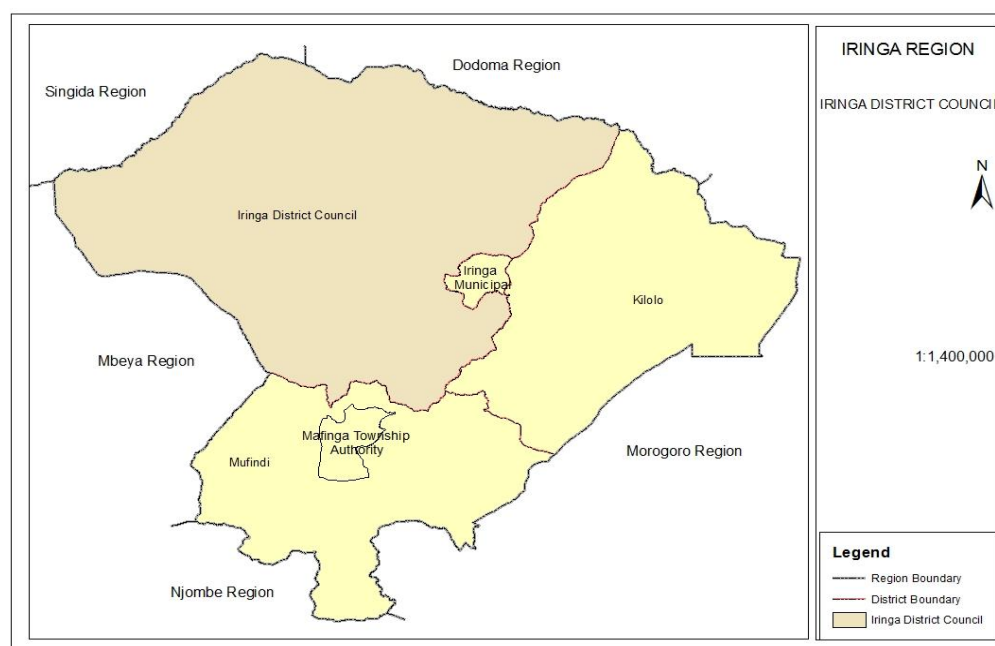


The main office of Iringa Rural District in Gangilonga street

Historically, Iringa was one of the two districts that established Iringa Region from the Southern Highland Province in 1964 . The second district was Njombe. In 1970s, the district was reduced in area by establishing Mufindi District and later in 2006 Kilolo District. The District shares borders with Mpwapwa District (Dodoma Region) in the North, Kilolo District in the East, Mufindi District on the South, Chunya District (Mbeya Region) to the west and Manyoni District to the

North West. The headquarters is located in Iringa Municipal along Dodoma Road. In terms of international identification, the District lies between latitudes 7°.0' and 8°.30' south of the Equator and between longitudes 34°.0' and 37°.0' east of Greenwich.

Map 1: Showing Geographical Location of Iringa Rural District Council; 2012



Source: National Bureau of Statistics, Cartographic Section, Field Operations Department, 2013

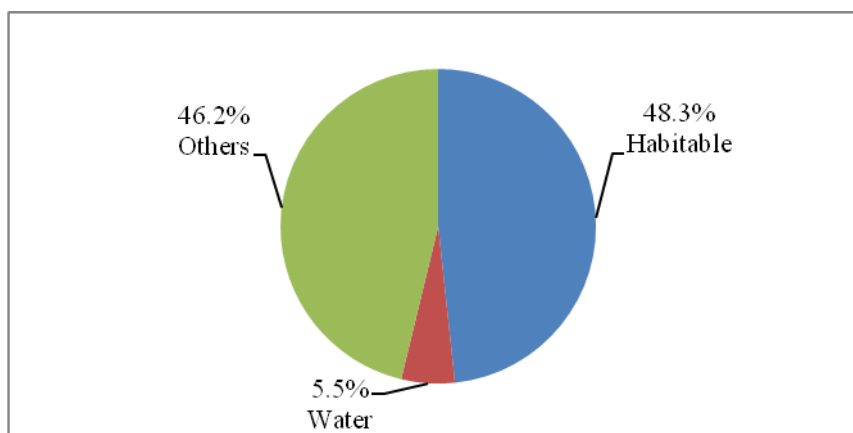
1.2 Land Area, Land Use Pattern and Administrative Units

1.2.1 Land Area and Land Use Pattern

Iringa Rural District has a total area of 20,413.98 sq. kms which is about 34.9 percent of the total area of Iringa region most of which is plain land with very few hills or valleys. Only 9,857.5 sq.km are habitable, leaving the remaining land either as national parks, rocky mountains or water bodies. About 9,437.5 sq. kms

covered by Ruaha National Park and 1,119 sq. km by water bodies. The arable land available is 479,258 hectares or about 23.5 percent of the district area. Out of the arable land in the district, only 184,465 hectares are actually cultivated annually. Figure 1 shows land use pattern of the district.

Figure 1: Land Use Pattern in Iringa Rural District; 2012

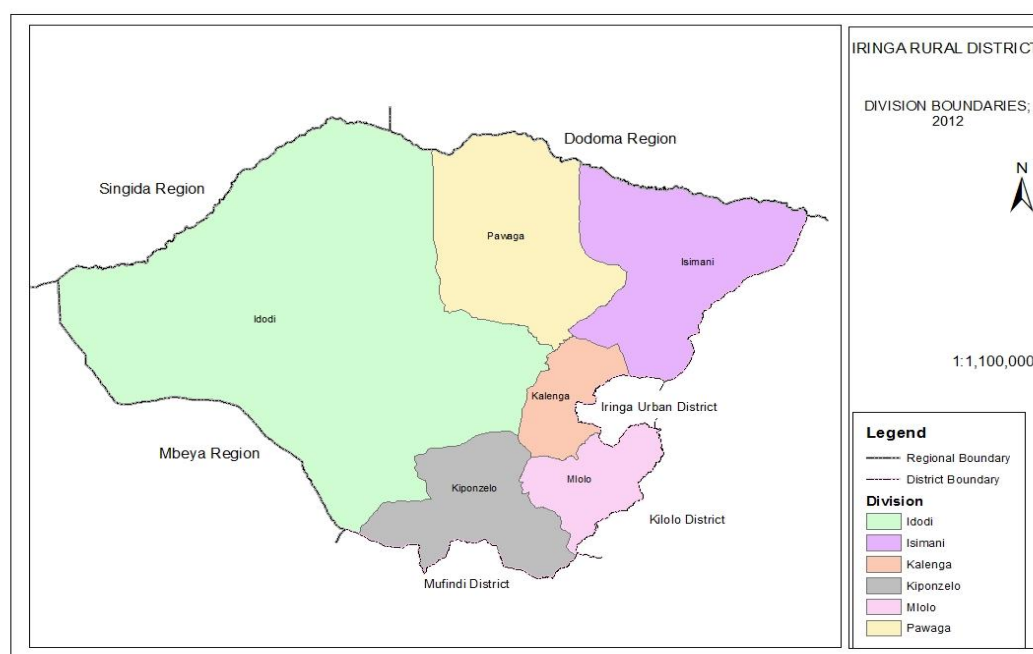


Source: Iringa Rural District Executive Director's Office –Land, Natural Resources and Environment Department, 2013

1.2.2 Administrative Units

The District is divided into 6 divisions and 25 wards with a total of 123 villages and 718 hamlets distributed unevenly as shown in Table 1.1. Isimani Division covers about 14.0 percent of total area of the district followed by Kiponzero Division with about 10.6 percent of the total area. Pawaga Division has the smallest area in the district constituting only 3.4 percent of the total district area. Idodi Division, though has the largest percentage share of district area, most of the area is occupied by the Ruaha National Park (10,411.3 sq.km) leaving only 2,427.6 sq. km. for human activities.

Map 2 : Showing Division Boundaries in Iringa Rural District Council; 2012



Source: National Bureau of Statistics, Cartographic Section, Field Operations Department, 2013

Table 1. 1: Area and Administrative Units by Division, Iringa District Council; 2012

S/No.	Division	Area (.sq kms.)	Wards	Villages	Hamlets	Percent Area
1	Kalenga	904.8	4	20	104	4.4
2	Mlolo	976.2	5	27	205	4.8
3	Kiponzelo	2,157.1	4	22	125	10.6
4	Idodi*	12,838.7	3	9	54	62.9
5	Pawaga	684.3	3	12	60	3.4
6	Isimani	2,852.9	6	33	170	14.0
	Total	20,414.	25	123	718	100.0

Source: Iringa Rural District, Land, Natural Resources and Environment Department, 2012

1.3 Climate and Soils

The district climate varies with altitude and closely associated with two distinctive landscape zones namely the midland and the lowlands.

1.3.1 The Midland Zone

This zone is found in Mlolo, Kiponzelo Kalenga divisions, Nduli and Kihogorota wards in Ismani division, characterised by an undulating topography with scattered mountain hills and plateau at an altitude of 1,200 metres and 1,600 metres above the sea level. The District experiences moderate mean rainfalls, ranging from 600 mm and 1,000 mm annually with mean temperature being 15°C – 20°C.

Most of the soils in this zone 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 main crops grown in this zone include tobacco, sunflowers, maize, simsim, vegetables such as onions, carrot, cabbages and tomatoes, beans, cowpeas, sorghum and fruits including mangoes, guava and pawpaw. The zone is also suitable for livestock keeping including dairy and beef cattle, pigs, poultry, goats and sheep.

1.3.2 The Lowland Zone

The Zone comprises of Pawaga, Idodi and Isimani divisions and lies between altitudes 900 and 1,200 metres above the sea level. It is semi-arid or commonly known as the marginal area, due to low mean rainfalls which range from 500 mm – 600 mm and relatively hot with temperatures ranging between 20°C – 25°C, of which the higher temperatures are experienced from September to October.

The zone has very rich soils suitable for agriculture but the agricultural production level is low due to unreliable rainfall. Therefore, farmers depend mainly on irrigated farms along Ruaha River and Mtera Dam using traditional and improved schemes and canals. Crops grown in this zone include paddy, cotton, millet, cassava, groundnuts, bananas, onions, tomatoes and fruits such as mangoes, oranges and pawpaw.

1.3.3 Topography

The district receives rainfall of between 600mm and 1,000mm annually, falling between the months of October or November and December and a dry season from January to February or March and a second lower peak occurs in February or March and the rains then tail off in April or sometimes May.

1.4 Drainage System

Iringa Rural District forms part of the vast central plateau of Iringa Region, an area of flat and gently undulating plains broken in places by small hills. Most parts of the District lie between 800 meters and 1,800 meters above sea level and form the main watershed separating rivers flowing from south westward into the Ruaha River to the north east.

1.5 Agro – Ecological Zones (AEZ)

Like climate, there are 2 agro-ecological zones and associated landscape zones. The main economic activities in these zones are determined by the climate, altitude and soils.

1.6 Population

1.6.1 Ethnic Groups

The main ethnic group in Iringa Rural District is the Hehe. They constitute almost 90 percent of the entire population. Their major occupation is farming while livestock keeping is practiced on a small scale. Other ethnicity groups found in the district include the Bena, Kinga, Pangwa and Wanji mainly found in and around large tobacco plantations owned by Greek settlers in the north, central and south eastern parts of the district which covers Kalenga, Mlolo, Kiponzeo, Idodi, Pawaga and Isimani divisions, while other minority tribes include, Gogo, Sukuma, Barbaig and Masaai found in the lowland zone of Pawaga, Idodi and Isimani at Izazi and Malengamkali wards. These lowlands are rich in pastures which have attracted these pastoralists to come along with their livestock and settle there. Table 1.2 shows ethnicity of indigenous people by division in Iringa Rural District.

Table 1. 2 : Ethnicity of Indigenous People by Division, Iringa District Council; 2012

S/No.	Division	Wards	Villages	Number of Ethnicity Group	Major Ethnicity Group
1	Kalenga	4	20	4	Hehe, Bena, Kinga and Pangwa
2	Mlolo	5	27	4	Hehe, Bena, Kinga and Pangwa
3	Kiponzeo	4	22	4	Hehe, Bena, Kinga, and Pangwa
4	Idodi	3	9	4	Hehe, Bena, Kinga and Pangwa
5	Pawaga	3	12	4	Hehe, Bena, Kinga and Pangwa
6	Isimani	6	33	4	Hehe, Bena, Kinga and Pangwa

Source: Iringa Rural District Executive Director's Office- District Planning Office, 2012

1.6.2 Population Size and Growth

The population of Iringa Rural District has experienced declining growth rate as shown in Table 1.3. Growth rate of the district declines from 2.2 percent during the 1978 - 1988 intercensals to 1.3 in 1988 -2002 intercensal period. According to

the 2002 Population and Housing Census the District had 363,605 people in 1988 compared to the estimated 245,033 inhabitants in 2002. The decline of the district population, among other factors, was due to the anticipated establishment of Kilolo District from Iringa Rural District. Out of the estimated district population of 245,033 persons, 138,284 or 56.4 percent were females. Table 1.3 shows the population sizes growth rates for Iringa Region and its districts for the 2002 and 2012 censuses.

Compared to other districts of Iringa Region, Iringa Rural District was the second populous rural district in the region after Mufindi Districts and contributed 27.0 percent of the regional population. Between 1988 and 2002 the district's population grew at an average annual growth rate of 1.3 percent compared to the regional growth rate of 1.6 percent and national average growth rate of 2.4 percent. Growth rates for 2002-2012 for this district and the remaining districts in the country still under computation by NBS.

Table 1.3 : Population Size and Growth by District, Iringa Region; 1988, 2002 and 2012

District	1988 Population Census		2002 Population census		2012 Population census		Growth Rate 1988 - 2002
	Number	Percent	Number	Percent	Number	Percent	
Iringa Rural	363,605	53.6	245,033	29.2	254,032	27.0	1.3
Iringa Urban	84,860	12.5	106,171	12.7	151,345	16.1	1.7
Mufindi	229,304	33.8	282,071	33.7	317,731	33.8	1.5
Kilolo	*	*	204,572	24.4	218,130	23.2	*
Regional Total	677,769	100	837,847	100	941,238	100.0	1.6

* Kilolo District did not exist in 1988 and 2002. It was part of Iringa Rural. However, it was possible to estimate its population for 2002.

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

1.6.3 Population Density

As Table 1.4 shows, the average population density of Iringa District increased slightly from 12.0 persons per sq. km in 2002 to 12.4 persons per sq. km in 2012. Iringa Rural is the least densely populated district in Iringa Region and it is below the regional average population density of 23.4 persons per sq. km in 2002 and 26.3 in 2012. Among other reasons, the relatively small population density of Iringa Rural District has been caused by its relatively large land area.

Table 1. 4: Population Density by District, Iringa Region; 2002 and 2012 Censuses

District	Area (sq. km.)	2002 Population	2012 Population	Population Density (persons per sq. km)	
				2002	2012
Iringa Rural	20,414.0	245,033	254,032	12.0	12.4
Iringa Urban	331.4	106,171	151,345	320.4	456.7
Mufindi	7,123.0	282,071	317,731	39.6	44.6
Kilolo	7,874.6	204,572	218,130	26.0	27.7
Total	35,743.0	837,847	941,238	23.4	26.3

Source: NBS, Computed Data from 1988 and 2002 Population Censuses Reports.

Table 1.5 gives the population density at division level for the census years of 2002 and 2012. In 2002, Mlolo Division with a population density of 67.1 persons per sq. km was the most densely populated division in the district; followed by Kalenga Division with 45.4 persons per sq. km. Isimani Division was the least densely populated division as it had only 19.4 persons per sq. km. In 2012, Mlolo division continued to be the most densely populated division with population density of 67.5, followed by Kalenga (45.2) and Pawaga (44.2). Isimani Division was the least populated division with 17.4 persons per sq. km. as the population density of Idodi Division had been affected by the land area of Ruaha National Park.

Table 1. 5 : Population Density by Division, Iringa Rural District; 2002 and 2012 Censuses

Division	Area (sq. km.)	Population (Number)		Population Density (Persons/ sq. km.)	
		2002	2012	2002	2012
Kalenga	904.8	41,069	40,868	45.4	45.2
Mlolo	976.2	65,515	65,923	67.1	67.5
Kiponzeo	2,157.1	42,872	43,288	19.9	20.1
Idodi	12,838.7	21,400	24,016	1.7	1.9
Pawaga	684.3	18,765	30,259	27.4	44.2
Isimani	2,852.9	55,412	49,678	19.4	17.4
Total	20,414.0	245,033	254,032	12.0	12.4

Source: NBS, Computed Data from 1988 and 2002 Population Censuses Reports.

1.6.4 Population Trend

Table 1.6 shows that from 2002 to 2012 the district population increased by about 8,999 people from 245,033 in 2002 to 254,032 in 2012. At division level, there were insignificant differences in the level of population change ranging from negative 10.3 percent (Isimani division) to 61.3 percent in Pawaga Division. The negative population increase observed in Kalenga and Isimani divisions was due to shifting of Mkoga, Mgongo, Nduli and Kigonze villages from the two divisions in Iringa Rural District to Iringa Municipal.

Table 1. 6 : Population Trend by Division, Iringa Rural District; 2002 and 2012 Censuses

Division	Area (sq. km.)	Population		Population Increase	
		2002	2012	Number	Percent
Kalenga	904.8	41,069	40,868	-201	-0.5
Mlolo	976.2	65,515	65,923	408	0.6
Kiponzeo	2,157.1	42,872	43,288	416	1.0
Idodi	12,838.7	21,400	24,016	2,616	12.2
Pawaga	684.3	18,765	30,259	11,494	61.3
Isimani	2,852.9	55,412	49,678	-5,734	-10.3
Total	20,414.0	245,033	254,032	8,999	3.7

Source: NBS, Computed Data from 1988 and 2002 Population Censuses Reports.

1.6.5 Dependency Ratio

The Age Dependency Ratio gives the number of persons aged 0 – 14 years and those aged 65 years and above for every 100 persons aged 15 – 64 years. Table 1.7 shows that in Iringa Rural District the number of dependants for every 100 persons of the active age group from 107 in 1988 to 98 in 2012. This means that while 100 persons aged 15-64 years supported 107 persons in age group 0-14 and 65 years and above in 1988, in 2002 such 100 people supported 98 people. This means that the burden for the economically active population had decreased from 107 persons to 98 persons. Similar trend has been experienced by each district. As development takes root one indicator of this progress is the reduction of the dependence ratio as indicated in Table 1.7.

Table 1. 7 : Dependency Ratio by District, Iringa Region; 1988 and 2002 Population Censuses

District	1988 Population			2002 Population		
	Number of		Dependency Ratio	Number of		Dependency Ratio
	Dependants	Economically Active		Dependants	Economically Active	
Iringa Rural	187,063	174,852	107	121,489	123,544	98
Iringa Urban	40,410	44,101	92	42,710	63,661	67
Mufindi	117,627	111,271	106	139,893	142,177	98
Kilolo	*	*	*	102,321	102,051	100
Total Region	345,100	330,224	105	406,413	431,433	94

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

Table 1.8 indicates the magnitude of dependence ratio for each division in Iringa Rural District based on the 2002 Population Census results. At Division level, Kiponzeo Division had the lowest dependency Ratio at 89 persons for every 100 persons of the active population, followed by Mlolo (90 persons), while less labour force to support dependants was experienced in Isimani, Idodi and

Kalenga divisions with 114, 104 and 101 dependants for every 100 active persons respectively.

Table 1. 8 : Dependency Ratio by Division, Iringa Region; 2002 Population Census

Division	Dependants	Economically Active	Dependence Ratio
Kalenga	21,671	21,365	101
Mlolo	29,796	33,060	90
Kiponzeo	20,015	23,544	89
Idodi	11,726	11,261	104
Pawaga	9,696	10,111	96
Isimani	27,585	24,203	114
Total District	121,489	123,544	98

Source: NBS, Computed Data from 2002 Population Census Report

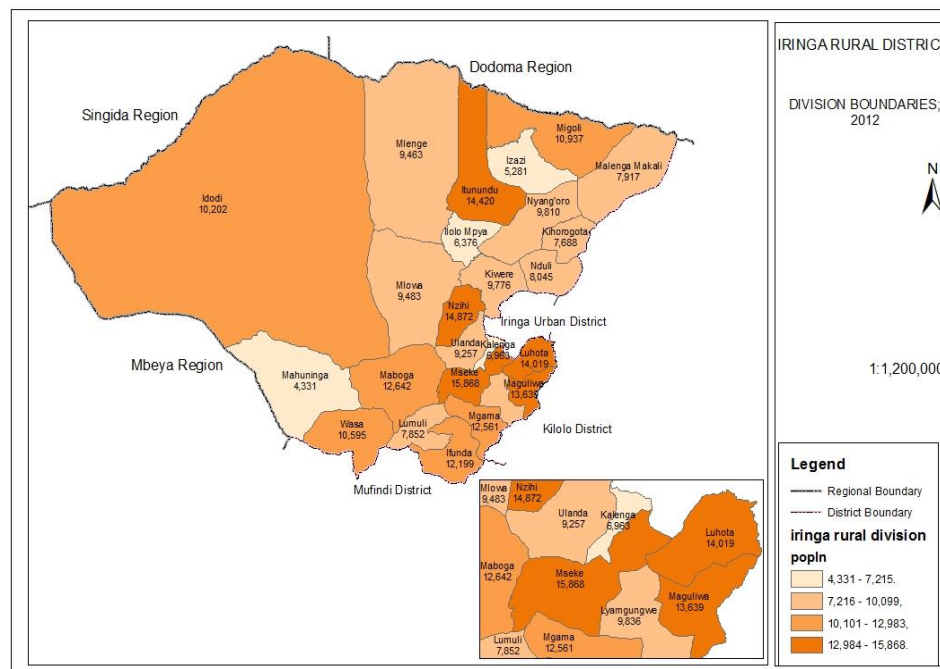
1.6.6 Population Distribution and Sex Ratio

The populations of Iringa Rural District of 1988 and 2002 are categorised as broad based population pyramid indicating high fertility with the decline or constant mortality rates. The 2002 District Profile of Iringa Rural reveals that Iringa Rural has Sex Ratio of 95 males for every 100 females. This means that, few males in Iringa Rural District are mobile. Currently, few of the males have migrated outside Iringa Rural District to look for employment in industries and other businesses.

Furthermore, the 2002 population of Iringa Rural District is considered as young population, made up of children under 19 years who were 131,281 (67,682 males and 63,599 females) or 53.6 percent of the total population, followed by the young population aged between 20 – 34 years estimated to be 56,039 persons (25,897 males and 30,142 females) or 22.9 percent of total population. Persons aged 60 years and above were 16,045 (6,756 males and 9,289 females) or 6.5 percent of the total population.

At ward level, the 2012 population census of Iringa Rural District indicated that Mseke was the most populous rural ward in the district, by having 15,868 persons (6.2percent of the total district population) followed by Nzihi ward 5.9 percent and Itunundu ward with 5.7 percent of the district population. The least populous ward was Mahuninga with a total number of 4,331 inhabitants or 1.7 percent. At division level, however, Mlolo leads with 26.6 percent followed by Ismani at 22.4 percent. The division with the smallest population is Pawaga with 7.7 percent of the total district population. Uneven distribution of Iringa Rural residents is mostly influenced by the availability of natural resources including arable land and grazing areas that is suitable for cultivation and livestock keeping as well as the accessibility of infrastructure. Table 1.8a gives the population distribution by ward according to the 2002 Population Census and 2012 population Census.

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



Source: National Bureau of Statistics, Cartographic Section, Field Operations Department, 2013

Table 1.8 a: The 2002 and 2012 Population Distribution by Ward, Iringa Rural District

S/No.	Ward	2002 Population Census		2012 Population Census	
		Number	Percent Share of Population	Number	Percent Share of Population
1	Kalenga	8,323	3.4	6,963	2.7
2	Kiwele	10,545	4.3	9,776	3.8
3	Nzihi	13,216	5.4	14,872	5.9
4	Ulanda	8,985	3.7	9,257	3.6
5	Mseke	16,998	6.9	15,868	6.2
6	Magulilwa	26,925	11.0	13,639	5.4
7	Luhota	0	0.0	14,019	5.5
8	Mgama	22,895	9.3	12,561	4.9
9	Lyamungwe	0	0.0	9,836	3.9
10	Ifunda	13,154	5.4	12,199	4.8
11	Lumuli	7,610	3.1	7,852	3.1
12	Maboga	12,357	5.0	12,642	5.0
13	Wasa	9,751	4.0	10,595	4.2
14	Mahuninga	3,832	1.6	4,331	1.7
15	Idodi	9,679	4.0	10,202	4.0
16	Mlowa	7,889	3.2	9,483	3.7
17	Itunundu	14,926	6.1	14,420	5.7
18	Mlenge	0	0.0	9,463	3.7
19	Ilolompya	3,839	1.6	6,376	2.5
20	Nduli	11,725	4.8	8,045	3.2
21	Nyang'oro	0	0.0	9,810	3.9
22	Kihorogota	17,857	7.3	7,688	3.0
23	Izazi	16,930	6.9	5,281	2.1
24	Migoli	0	0.0	10,937	4.3
25	Malengamakali	7,597	3.1	7,917	3.1
Total		245,033	100.0	254,032	100.0

Source: NBS, the 2002 and 2012 Population Censuses

1.6.7 Households and Household Size

Table 1.9 shows the distribution of households and the average household size by district in Iringa Region. In 2012, Iringa Rural District had a population of 245,032 persons and 60,484 households. It had the second largest number of households. Its average household size was 4.2 persons per household.

Table 1.9 : Distribution of Households and Average Household Size by District, Iringa Region; 2002 and 2012 Censuses

Council	2002 Census				2012 Census	
	TBukobatal Population	Number of Households	Average Household Size	Total Population	Number of Households	Average Household Size
Iringa DC	245,033	56,355	4.3	254,032	60,484	4.2
Mufindi	282,071	66,663	4.2	317,731	75,650	4.2
Iringa MC	106,371	24,601	4.3	151,345	36,035	4.2
Kilolo	204,372	45,710	4.5	218,130	50,728	4.3
Region	837,847	193,329	4.3	941,238	222,897	4.2

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

Table 1.10 shows the distribution of households and average household size by ward for Iringa Rural District based on the 2012 Census data. At ward level, Mlenge with 2,013 households was the leading ward in the district having an average household size of 4.7 persons. In total, 10 wards had average household sizes above the district value of 4.2 persons. These were Mlenge, Mlowa, Nyang'oro, Izazi, and Malengamakali, Maguliwa, Luhota, Mgama, Lyamungwe and Wasa wards. Mahuninga Ward with 3.9 persons per household had the smallest number of households (1,111).

Table 1. 10 : Population, Households and Average Household Size by Ward, Iringa Rural District; 2012

S/No.	Ward	Total Population	Total Households	Average Household Size
1	Kalenga	6,963	1,658	4.2
2	Kiwele	9,776	2,507	3.9
3	Nzihi	14,872	3,718	4
4	Ulanda	9,257	2,314	4
5	Mseke	15,868	3,778	4.2
6	Maguliwa	13,639	3,172	4.3
7	Luhota	14,019	3,186	4.4
8	Mgama	12,561	2,921	4.3
9	Lyamungwe	9,836	2,287	4.3
10	Ifunda	12,199	2,975	4.1
11	Lumuli	7,852	1,870	4.2
12	Maboga	12,642	3,010	4.2
13	Wasa	10,595	2,408	4.4
14	Mahuninga	4,331	1,111	3.9
15	Idodi	10,202	2,616	3.9
16	Mlowa	9,483	2,107	4.5
17	Itunundu	14,420	3,517	4.1
18	Mlenge	9,463	2,013	4.7
19	Ilolompya	6,376	1,518	4.2
20	Nduli	8,045	2,011	4
21	Nyang'oro	9,810	2,180	4.5
22	Kihorogota	7,688	1,875	4.1
23	Izazi	5,281	1,174	4.5
24	Migoli	10,937	2,604	4.2
25	Malengamakali	7,917	1,759	4.5
	Total	254,032	60,484	4.2

Source: NBS, 2012 Population Census Report

CHAPTER TWO

District Economy

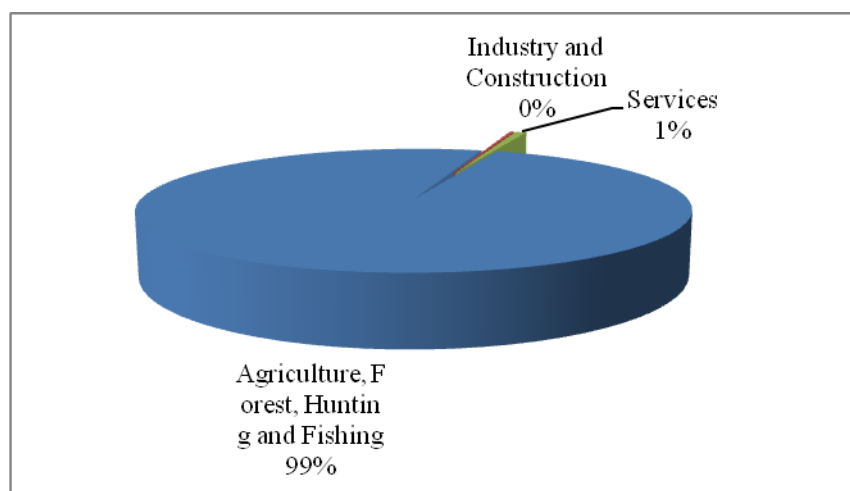
2.0 Introduction

Chapter Two highlights the economic performance of Iringa Rural District and its poverty status. The economic indicators used include the Gross Domestic Product (GDP), Per Capita Gross Domestic Product and the main sources of income for the residents of Iringa Rural District. The poverty indicators cover income and non-income indicators, including percentage of people living below poverty line, the spread of poverty, consumption pattern, health and education status, access to drinking water and housing conditions.

2.1 GDP and Per Capita GDP

Iringa Rural District economy continues to be dominated by the agriculture sector. Both cash and food crops are produced, with the latter dominating. According to the results of the 2008 Regional Gross Domestic Product Survey, agriculture sector contributes close to 99 per cent of the district's GDP, of which crop production sub sector contributed about 83.9 percent followed by livestock (14.8 percent) while hunting, forestry and fishing accounted for less than a percent. Services and industry sectors account for about 0.8 and 0.2 percent respectively. The relatively poor performance of the manufacturing sector results from a combination of factors. These include absence of large and medium scale industries, increased competition from imported manufactured goods in wake of trade liberalization and inefficiency of import substitution, inadequate working capital and high production costs. From definition the per capita GDP is affected by the population size. In 2008 the per capita GDP of Iringa Rural District was estimated to be TShs. 1,031,508.

Figure 2 : Percentage Contribution of District GDP by Broad Sector, Iringa Rural District, 2008



Source: Iringa Region GDP Report, 2011

2.2 Poverty Indicators

As stated earlier, beside GDP and per capita GDP, there are a number of indicators that portray the poverty level. These indicators include gini coefficient, poverty gap, percent of households below basic needs poverty line, main source of cash income, food consumption patterns, net 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 cooking energy.

2.2.1 Income Poverty Rate, Poverty Gap and Gini Coefficient

Iringa Rural District was not among the best 20 districts on Tanzania Mainland in regard to the least number of people living below the basic needs poverty line, and at regional level, it is considered to be one of the better districts according to the 2005 Poverty and Human Development Report. The Report indicates that as much as 31 percent of Iringa Rural District residents live below the basic needs poverty line. The best district is Iringa Urban where only 18 percent of its people

live below basic needs poverty line followed by Kilolo (29 percent) and Iringa Rural district (31percent). The district with high percentage of people living below the basic needs poverty line in Iringa Region was Mufindi at 32 percent (Table 2.1).

With respect to rate of poverty gap, Iringa Urban had the lowest poverty gap at 5 percent followed by Kilolo (7percent) and Iringa Rural (8 percent). Mufindi District had the highest (9 percent) poverty gap.

The situation is different in regard to the Gini Coefficient Rate. At 31 percent, Kilolo Districts had least inequality and variation in the distribution of wealth in Iringa Region. It was followed by Iringa Rural District at 32 percent. People in Mufindi and Iringa Urban had the highest inequality and variations in the distribution of wealth each with Gini Coefficient Rate of 35 percent. IringaUrban had the largest number of poor people per sq. km at132, but Iringa Rural had the smallest number (4) (Table 2.1).

Table 2. 1 : Selected Poverty Indicators by District, *Iringa* Region; 2005

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

Source: Poverty and Human Development Report, 2005

2.2.2 Main Sources of Cash Income

The 2007/08 National Sample Census of Agriculture Report shows that Iringa Rural District as a rural district has vast economic opportunities. Selling of annual

food crops was reported to be the main source of income of the rural agricultural households in the district. It was followed by off farm income, selling of livestock, selling of forest products, selling of permanent crops and finally other casual cash earnings and business income.

2.2.3 Health Indicators

Though the residents of Iringa Rural District are said to have relatively good access to social services like health, education and water; the HIV/AIDS pandemic is among the diseases that have had a negative impact to the health of its residents resulting in high rates of morbidity, mortality, orphanhood and widowhood. According to Table 2.2 the district had orphanhood rate of 15 percent, infant mortality rate (number of infant deaths per 1,000 infants) was 114 children per 1000 live births, children under five years mortality rate (191) and percent of population with disability was 2.5 in 2009.

Table 2. 2 : Selected Health Indicators for Iringa Rural District

Indicator	Iringa Rural District (2009)	Tanzania Mainland (2004)
Orphaned Rate (percent)	15.0	1.2
Widowed Rate (percent)	na	5.1
Infant Mortality Rate (IMR)	114	83
Children Under Five Mortality Rate (U5MR)	191	133
Percent of population with disability	2.5	

Na: Not available

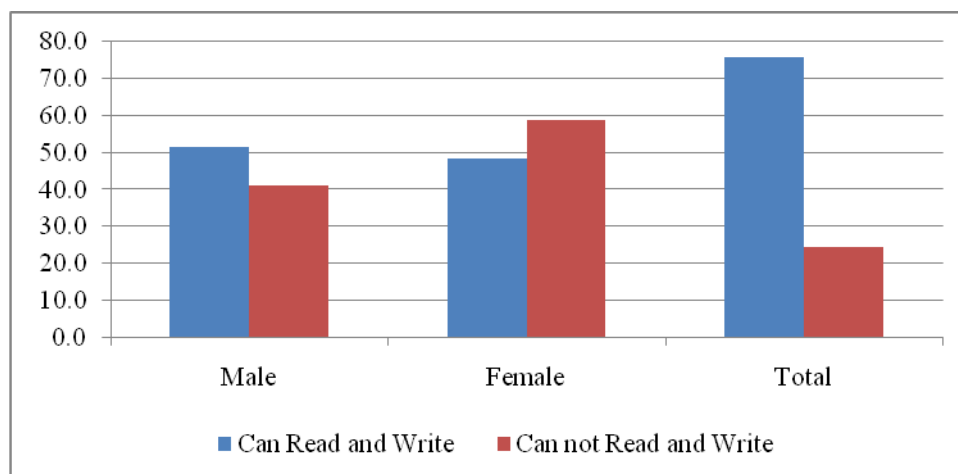
Source: NBS Compiled Data Based on: Demographic and Health Survey; Agriculture Survey 2007/08; and the 2002 Population Census Results.

2.2.4 Literacy Rate and Level of Education

According to the 2007/2008 National Sample Census of Agriculture results, the literacy rate for persons aged five years and above for Iringa Rural District was

the second smallest in Iringa Region at 69 percent. This situation is not good as it shows that literacy rate of heads of households was higher for males (51.5 percent) than females (48.5 percent) (Figure 3).

Figure 3 : Percentage Distribution of Heads of Households by Literacy Rate, Iringa Rural District, 2007/2008

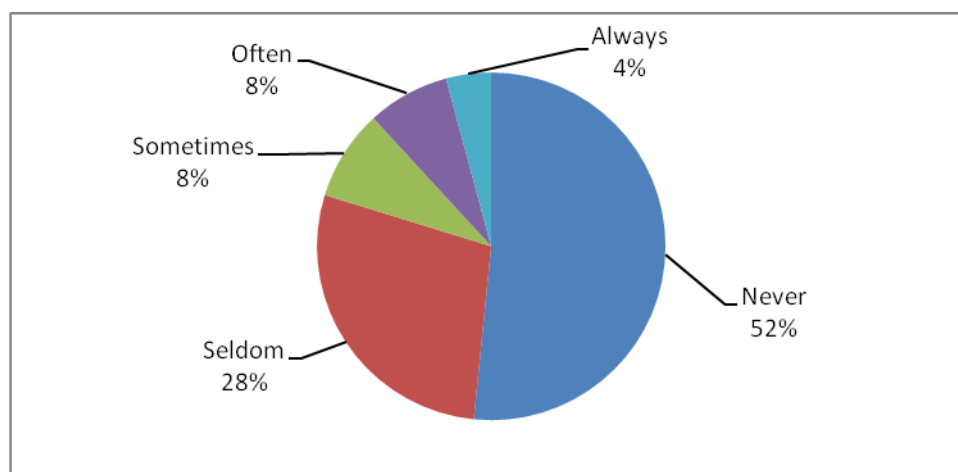


Source: NBS, National Sample Census of Agriculture, *Iringa* region, 2007/2008.

2.2.5 Food Security

In Iringa Rural District, according to the 2007/2008 National Sample Census of Agriculture, about 52 percent said they did not experience any food insufficiency, while 15,847 households (28 percent of the total households in the district) said they seldom experienced food insufficiency problems and 4,726, (8 percent) said they sometimes experienced problems. However, 8 percent often experienced problems and 4 percent always had problems in satisfying the household food requirements.

Figure 4 : Percentage Distribution of Rural Agricultural Households by Status of Food Satisfaction, Iringa Rural District, 2007/2008



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

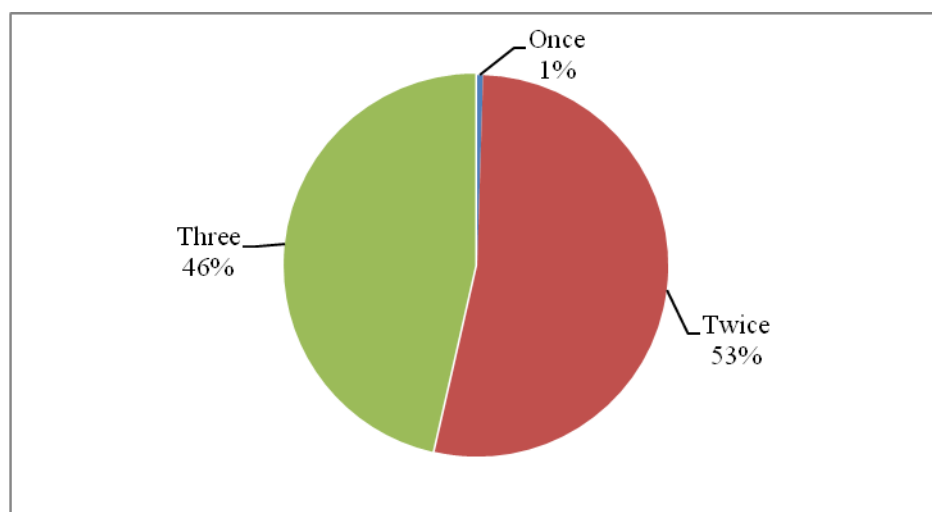
2.2.6 Food Consumption Patterns

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

2.2.6.1 Number of Meals per Day

The National Sample Census of Agriculture 2007/08 reveals that the majority of rural agricultural households in Iringa Rural District normally have two meals per day (29,888 households or 53 percent), while 26,134 households (46 percent) have two meals. Moreover, the results also indicate that very few households have one meal (278 households or a percent). Those results indicate that food insufficiency affects a very small proportion of rural households in the district.

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

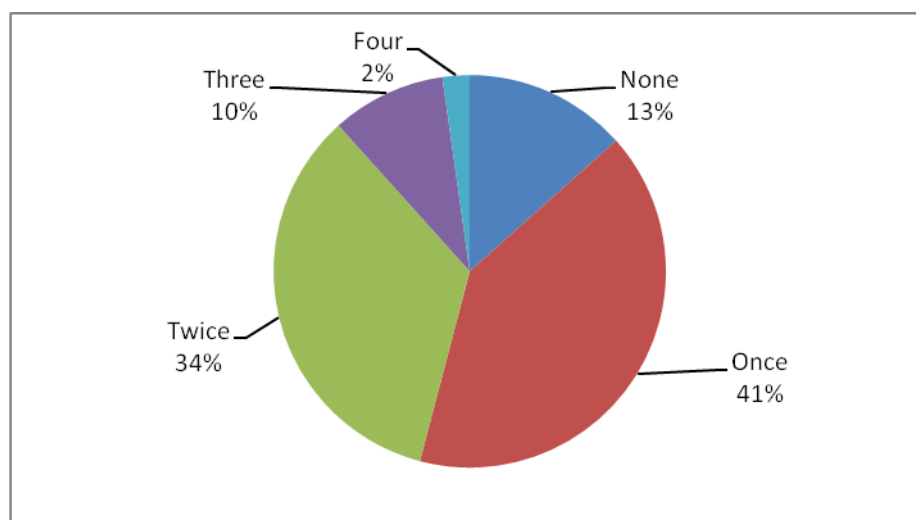


Source: NBS, National Sample Census of Agriculture, Iringa region, 2007/08.

2.2.6.2 Protein (Meat and Fish) Consumption Frequencies

Iringa Rural District had a big percentage of households that did not eat meat compared to other districts (Agricultural Sample Census 2007/2008). Figure 6 shows that most of the households ate meat once per week (22,798 households or 41 percent), followed by those that ate meat twice (19,184 households or 34 percent), then those that ate meat three times (5,282 households or 10 percent). As many as 7,507 households (13 percent) did not eat meat during the week prior to the enumeration.

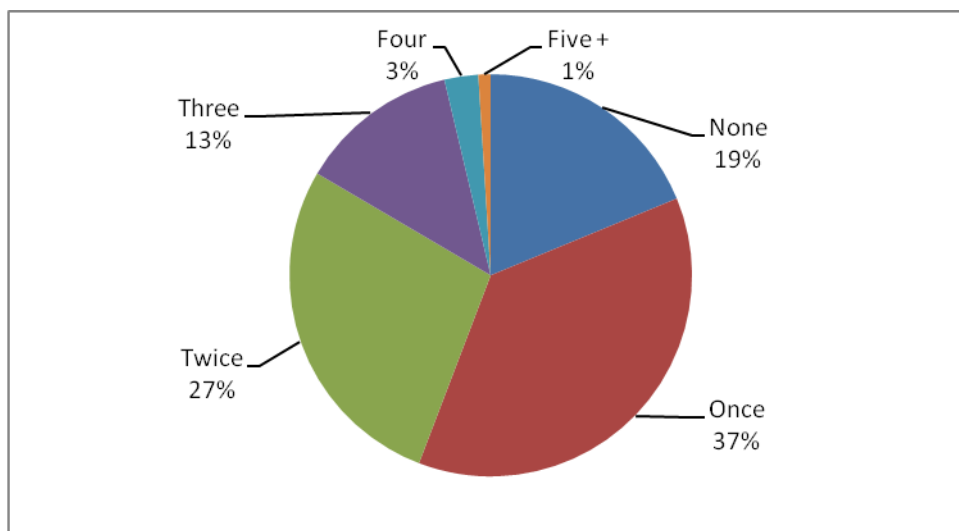
Figure 6 : Percentage Distribution of Rural Agricultural Households by Frequency of Meat Consumption per Week by Households, Iringa Rural District, 2007/2008



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

The observation was different in regard to fish consumption. Less than a quarter (about 19 percent) of households did not eat fish during the week prior to the enumeration. However, as Figure 7 shows, about 37 percent of the households ate fish once and 27 percent ate fish twice per week and those who ate fish three times per week were 13 percent. About three percent of households ate fish four times in the week while a percent ate fish five times and above per week.

Figure 7 : Percentage Distribution of Rural Agricultural Households by Frequency of Fish Consumption per Week by Household, Iringa Rural District, 2007/08

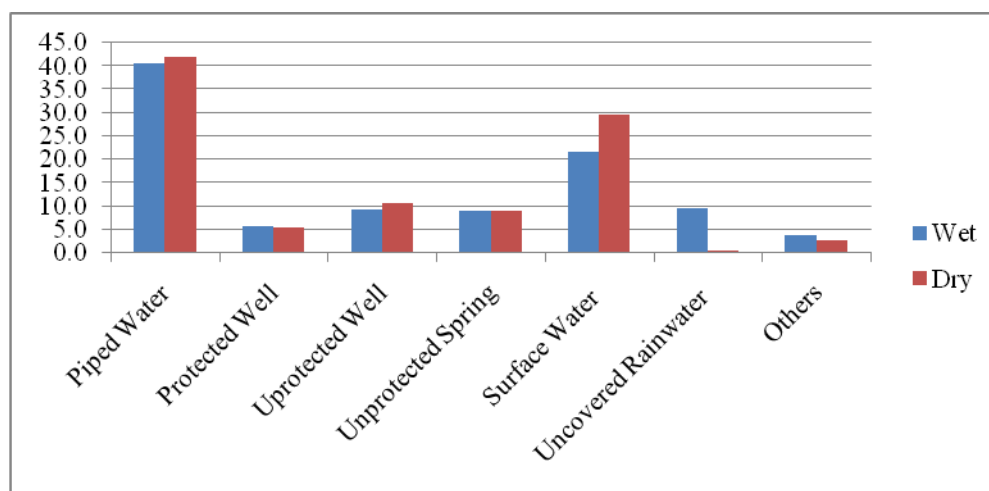


Source: NBS, National Sample Census of Agriculture, Iringa region, 2007/08

2.2.7 Access to Clean Drinking Water

The topography and existence of a permanent drainage system are the main reasons for the reliable sources of water in the district and there is insignificant variation in the sources of water during wet and dry seasons. Data from the National Sample Census of Agriculture 2007/08 show that the piped water was the main source of drinking water in Iringa Rural District (40.7 percent) followed by surface water, including rivers, dams, streams and lake (21.7 percent), unprotected well (9.6 percent), unprotect springs (9.4 percent) while a small percentage (9.1 percent) used protected well (Figure 8).

Figure 8: Percentage of Households by Type of Water Source during the Wet and Dry Seasons, Iringa Rural District, 2007/08



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

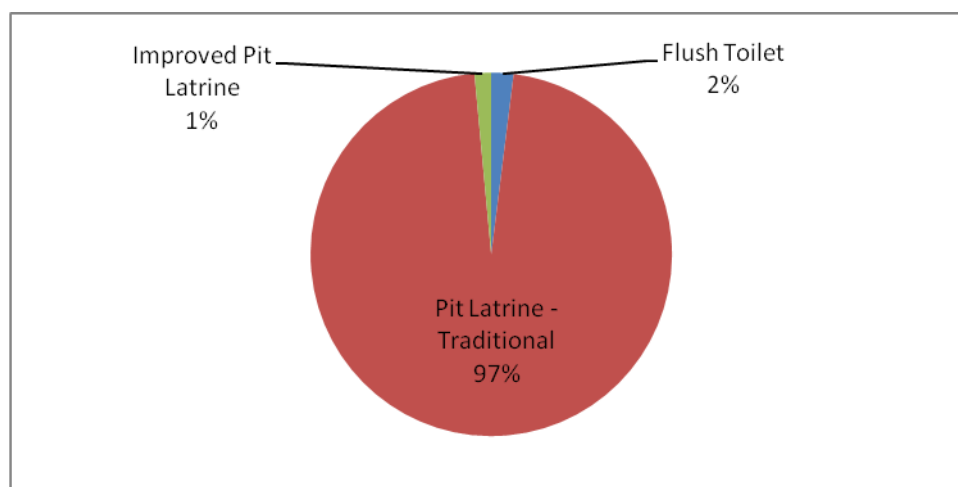
2.2.8 Types of Toilets



Traditional pit latrines are the most common toilets used in Iringa Rural District

With respect to availability of toilets, the National Sample Census of Agriculture 2007/08 reveals that almost all households in Iringa Rural District (97 percent) use traditional pit latrines followed by those with flush toilets (2.0 percent) and improved pit latrine (a percent) (Figure 9) while the District had no single households without toilet.

Figure 9 : Percentage of Households by Type of Toilet Facility, Iringa Rural District, 2007/08



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

2.2.9 Roofing Materials

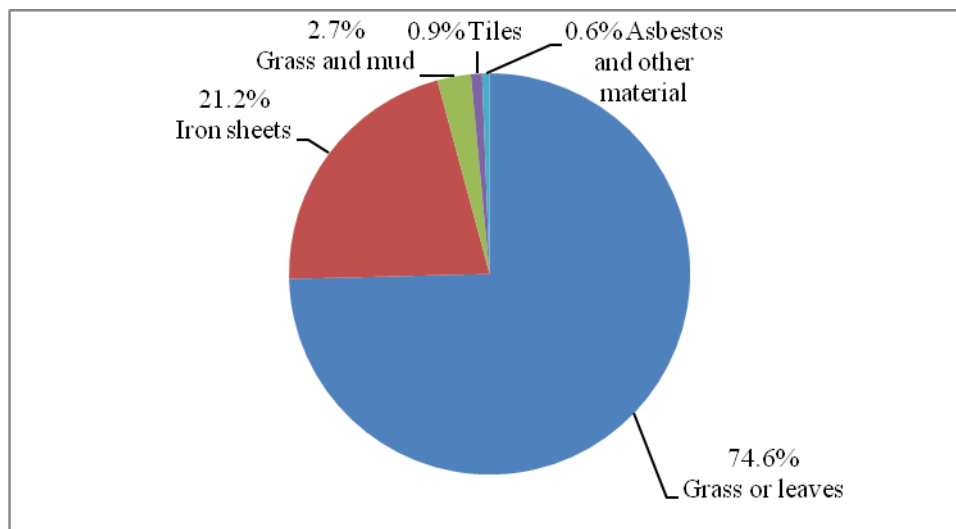


Grass and leaves are the common roofing materials in Iringa Rural District

The National Sample Census of Agriculture 2007/08 indicates that grass and leaves are the most common roofing materials in rural areas in the country. The situation is not different in Iringa Rural District where 74.6 percent of households have grass or leaves as roofing material, followed by iron sheets (21.2 percent), grass and mud (2.7 percent) while 0.9 percent goes for tiles. Each of the following

materials, concrete, asbestos and other materials were used by 0.6 percent of the households. Figure 10 shows the percentage of households by type of roofing material.

Figure 10 : Percentage of Households by Type of Roofing Material, Iringa Rural District, 2007/2008

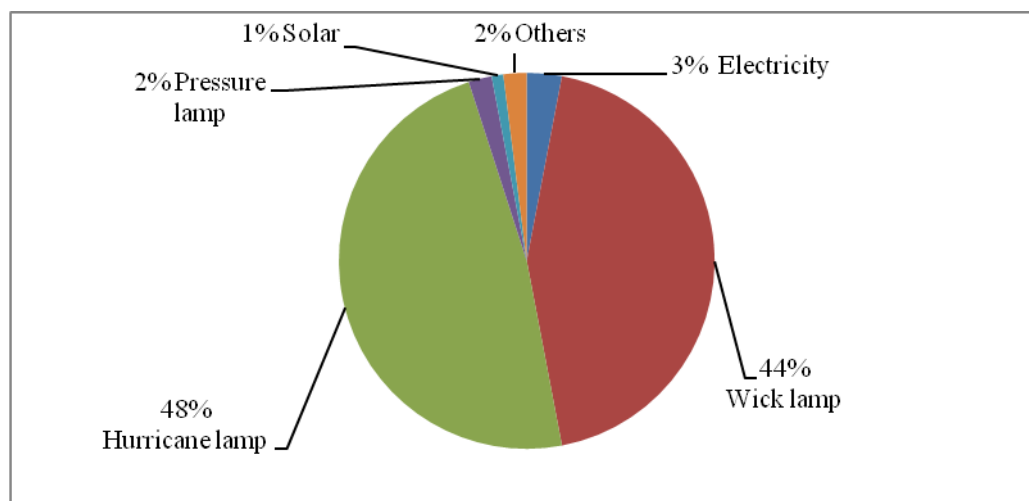


Source: NBS, National Sample Census of Agriculture, Iringa region, 2007/2008

2. 2.10 Sources of Lighting Energy

The National Sample Census of Agriculture 2007/08 reveals that only about three percent of households use electricity for lighting. Hurricane lamp was found to be the main source of lighting energy in Iringa Rural District. About 48 percent of total households use this source of energy, followed by wick lamp (44 percent), pressure lamp and others (2 percent each) and solar (1 percent). Other sources such as gas or biogas and firewood were all used 2 percent. Figure 11 shows the percentage of households by main source of energy for lighting in Iringa Rural District.

Figure 11 : Percentage of Households by Main Source of Energy for Lighting, Iringa Rural District, 2007/08

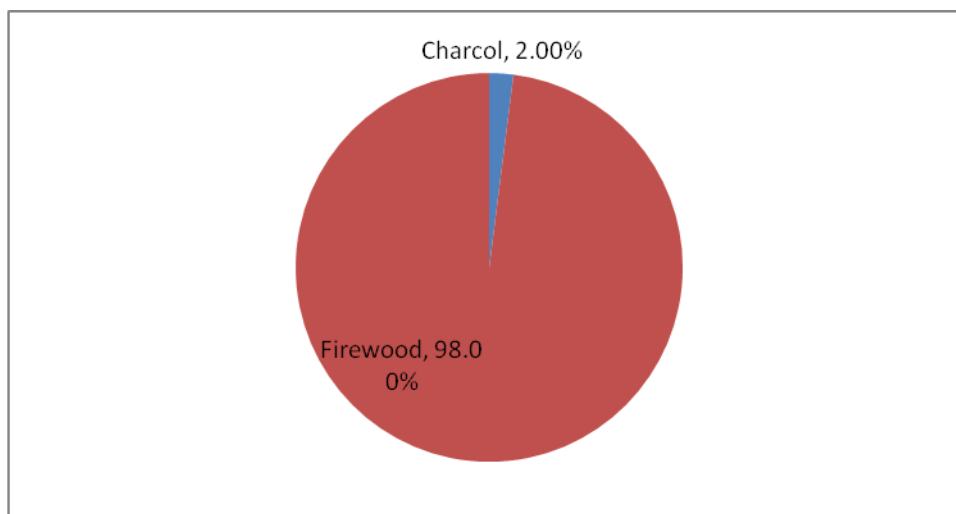


Source: NBS, National Sample Census of Agriculture, *Iringa* region, 2007/2008

2.2.11 Sources of Energy for Cooking

As reported in the Iringa Region Profile of the 2002 Population and Housing Census, firewood remains the most prevalent source of energy for cooking. This also applies to Iringa Rural District as according to the National Sample Census of Agriculture 2007/08, 98 percent of the households in the District use it, followed by charcoal (2.0 percent). An insignificant number of the households reported using modern and/or environmental friendly source of energy for cooking such as electricity, solar energy and bottled gas. If the current practice continues, deforestation and depletion of natural vegetation through using firewood and charcoal will destroy the nature and ecology of Iringa Rural District. Measures should be taken to ensure that natural vegetation and ecology of the district are restored.

Figure 12 : Percentage of Households by Main Source of Energy for Cooking, Iringa Rural District, 2007/08



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

2.2.12 Land Development

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

In the planning of farms, grazing areas and human settlements in rural areas, the village is the first step. Referring Table 2.3, by the end of 2012, Iringa Rural District had managed to survey as many as 111 villages out of which 76 villages (68.5 percent) were offered their village land certificates. More efforts should be directed at finishing the surveying of the remaining few villages and certificates should be issued to the already surveyed villages so that the villagers can obtain loans from financial institutions.

Table 2. 3: Village Land Use Planning in Rural Areas by Ward, Iringa Rural District; 2012

Ward	Number of Villages	Number of Villages Surveyed	Percentage of Villages Already Surveyed	Villages With Village Land Certificates	Percentage of Villages Offered Certificate
Kalenga	3	4	100.0	4	100.0
Kiwele	5	5	100.0	5	100.0
Nzihi	6	6	100.0	6	100.0
Ulanda	6	5	83.3	5	100.0
Mseke	6	5	83.3	4	80.0
Magulilwa	6	4	66.7	3	75.0
Luhota	5	5	100.0	4	80.0
Mgama	5	5	100.0	3	60.0
Lyamgungwe	5	4	80.0	3	75.0
Ifunda	5	5	100.0	3	60.0
Lumuli	4	4	100.0	0	0.0
Maboga	6	6	100.0	0	0.0
Wasa	7	5	71.4	0	0.0
Mahuninga	2	2	100.0	2	100.0
Idodi	4	4	100.0	4	100.0
Mlowa	3	3	100.0	3	100.0
Itunundu	4	4	100.0	4	100.0
Mlenge	4	4	100.0	4	100.0
Ilolomya	4	4	100.0	4	100.0
Nduli	6	6	100.0	5	83.3
Nyang'oro	6	4	66.7	3	75.0
Kihorogota	7	7	100.0	4	57.1
Izazi	3	2	66.7	0	0.0
Migoli	6	3	50.0	0	0.0
Malenga	5	5	100.0	3	60.0
Makali					
Total	123	111	89.5	76	68.5

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

CHAPTER THREE

Productive Sectors

3.0 Overview

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

3.1 Agriculture

3.1.1 Introduction



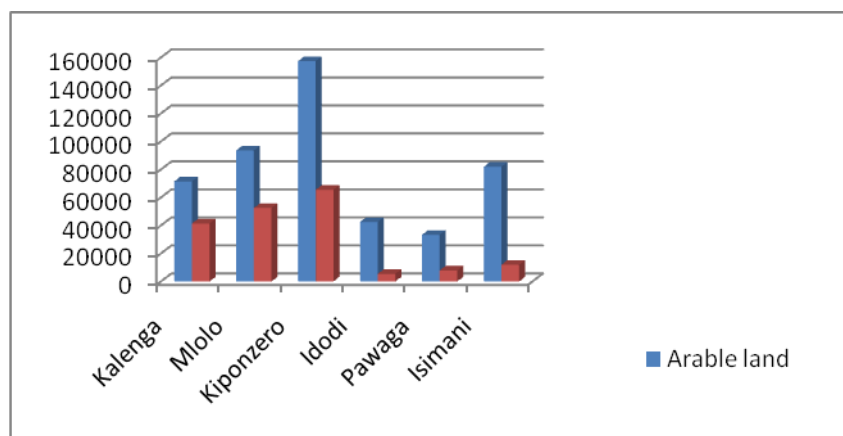
Drip irrigation in Iringa rural. The district is leading in irrigation land in Iringa Region

Agriculture is the mainstay of the district economy. It provides about 80 percent of employment and is the main contributor to the district as well as to the regional economy. Agriculture activities in the district contributed 21 percent of the Regional GDP of 1,447,270 Millions (Iringa Regional GDP Report 2008). Other activities' contributions to the regional GDP were services (1.6 percent) and Industry (1.5 percent).

Agricultural households in the district increased by 17.5 percent from 52,714 counted during Agriculture Census of 2002/03 to 61,964 households of 2007/08 Agriculture Census. Average area planted per households (during wet season) in Iringa rural district observed to decrease by 4.1 percent from 0.73 household per hectare of 2002/03 agriculture census to 0.7 household per hectare in 2007/08. This decrease is among the consequences of population growth in the district. Cereals are the main crops grown in the district with maize being the dominant, followed by paddy. Other crops grown are finger millet, sorghum and barley.

3.1.2 Distribution of Arable Land

Arable land is the land that is suitable for growing crops. Of the districts' total land area of 1,000,273 hectares (excluding Ruaha National Park), 479,158 hectares or 47.9 percent is arable land suitable for agriculture (Table 3.1). Since the district has only utilized about 38.5 percent of its total arable land, it still has arable land for agriculture. Based on the Table 3.1, the proportion of unutilized arable land for the whole District is 61.5 percent of its total arable land. At division level, Kalenga leads by having the largest proportion of arable land that is utilized at 58.8 percent, followed by Mlolo (56 percent), Kiponzero (41.6 percent), Pawaga (23.5 percent), Isimani (14.6 percent) and Idodi (12.6 percent). At ward level, Nzihi utilized most of its arable land (16,911 ha, 65.4 percent) while Migoli utilized the least at 13 ha (0.2 percent of its total arable land). There are no agriculture activities in Ruaha National Park which occupied 51 percent of districts' total land area.

Figure 13 : Total and Utilized Arable Land by Division, Iringa Rural District; 2012

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

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

Division	Ward	Total land Area (Ha)	Arable Land Area (Ha)	Percent of Arable Land	Arable Land Under Cultivation (Ha)	% of Arable Land under Cultivation
Kalenga	Kalenga	9,521	9,127	95.9	5,102	55.9
	Kiwere	30,136	20,265	67.2	11,225	55.4
	Nzihi	32,100	25,847	80.5	16,911	65.4
	Ulanda	18,720	15,195	81.2	8,156	53.7
	Sub-Total	90,477	70,434	77.8	41,394	58.8
Mlolo	Mseke	17,620	16,673	94.6	8,171	49.0
	Magulilwa	28,385	26,598	93.7	14,618	55.0
	Luhota	17,185	17,029	99.1	10,198	59.9
	Mgama	17,828	17,485	98.1	9,954	56.9
	Lyamungwe	16,602	15,812	95.2	9,497	60.1
	Sub - Total	97,620	93,597	95.9	52,438	56.0
Kiponzero	Ifunda	19,790	19,625	99.2	10,851	55.3
	Lumuli	35,990	29,094	80.8	16,180	55.6
	Maboga	89,690	57,214	63.8	22,279	38.9
	Wasa	70,240	51,469	73.3	16,177	31.4
	Sub- Total	215,710	157,402	73.0	65,487	41.6

Table 3.1 (ctd): Distribution of Total Arable Land by Ward, Iringa Rural District Council; 2012

Idodi	Mahuninga	35,410	6,083	17.2	1,021	16.8
	Idodi	37,640	17,947	47.7	3,243	18.1
	Mlowa	169,700	18,442	10.9	1,088	5.9
	Sub- Total	242,750	42,472	17.5	5,352	12.6
Pawaga	Itunundu	26,643	14,819	55.6	3,705	25.0
	Mlenge	20,347	9,515	46.8	2,482	26.1
	Ilolompya	21,440	8,950	41.7	1,650	18.4
	Sub-Total	68,430	33,284	48.6	7,837	23.5
Isimani	Nduli	31,286.37	19,281	61.6	3,784	19.6
	Nyang'oro	40,828	12,910	31.6	3,073	23.8
	Kihorogota	48,052	21,482	44.7	3,815	17.8
	Izazi	22,884	5,394	23.6	61	1.1
	Migoli	27,836	7,375	26.5	13	0.2
	Malengamakali	114,400	15,527	13.6	1,211	7.8
	Sub-Total	285,286.37	81,969	28.7	11,957	14.6
Total Wards		1,000,273.30	479,158	47.9	184,465	38.5
Ruaha National Park		1,041,125	0	0	0	0.0
Total District		2,041,398.30	479,158	23.5	184,465	38.5

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

3.1.3 Contribution of the District to the Regional Agricultural Production

Table 3.2 shows the extent to which Iringa rural district contributes to Iringa Region in terms of major food and cash crops production. In 2007/08 the contribution of the District to the production of both food and cash crops stood at 16 percent. The contribution to major food crops remained almost the same in both censuses (15.9 percent in 2002/03 and 16 percent in 2007/08) and that of cash crops dropped from 18.4 percent of 2002/03 to 16 percent in 2007/08, the district should regard this as a challenge and find out why this happened.

Table 3. 2 : District Production as a percentage of Regional Production for Selected Major Food and Cash Crops, Iringa Rural District, 2002/03 and 2007/08 Agriculture Censuses

Crop	Iringa Region Production (tonnes)		Iringa Rural District Production (tonnes)		Percentage Contribution of the District to Regional Production	
	2002/03	2007/08	2002/03	2007/08	2002/03	2007/08
Major Food Crops						
Maize	265,951	384,273	50,332	61,547	18.9	16.0
Beans	23,479	37,519	2,322	3,494	9.9	9.3
Finger Millet	1,793	3,466	35	28	2.0	0.8
Cowpeas	934	3,037	109	414	11.7	13.6
Irish potatoes	72,865	80,958	267	2,468	0.4	3.0
Sweet potatoes	1,428	2,975	12	0	0.8	0.0
Cassava	7,124	137	167	0	2.3	0.0
Paddy	8,099	17,711	7,112	15,248.7	87.8	86.1
Sorghum	1,206	4,169	619	2,429	51.3	58.2
Sub-Total	382,879	534,245	60,975	85,628	15.9	16.0
Major Cash Crops						
Tobacco	0	59	0	0	0	0
Tomatoes	18,991	32,132	3,442	4,043	18.1	12.6
Simsim	822	425	0	0	0.0	0.0
Cotton	0	0	0	0	0.0	0.0
Sunflower	7,366	21,161	2,011	4,686	27.3	22.1
Groundnuts	2,285	5,928	181	1,368	7.9	23.1
Onion	1,371	3,267	36	3	2.6	0.1
Sub-Total	30,835	62,972	5,670	10,100	18.4	16.0
Grand-Total	413,714	597,217	66,645	95,728	16.1	16.0

Source: NBS, Iringa Region Agriculture Censuses Reports, 2002/03 and 2007/08

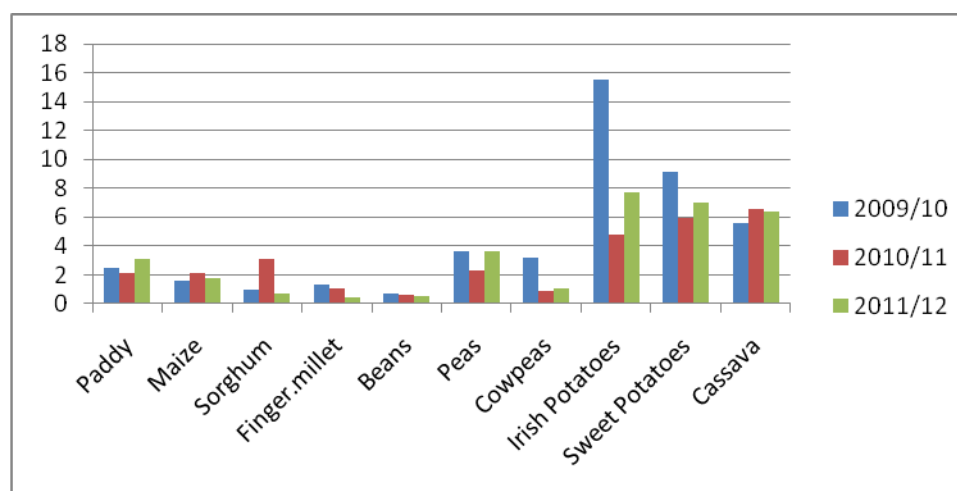
3.1.4 Food and Cash Crops Production

3.1.4.1 Food Crops Production

Maize is the most important food crop and is produced as both staple food and a cash crop. Paddy is another cereal crop planted in the district. Finger millet, beans, peas, cowpeas, Irish potatoes sweet potatoes are food crops which are normally grown during long and short rainy seasons. Drought resistance crops such as sorghum and cassava are grown during short rainy season. Table 3.3, shows that overall, the planted area for food crops fluctuated. Over the period 2009/10 – 2011/12 the area planted with major food crops decreased by 20,656 hectares (15.6 percent decrease) and then increased by 31,982 hectares (28.7 percent) from 132,224 hectares in 2009/10 to 143,550 hectares in 2011/12.

Although maize had small yield (Table 3.3), it is the leading food crop in terms of the size of area planted and production. In 2011/12 finger millet was the least important food crop as it had smallest planted area and annual production. Irish and sweet potatoes had the more yields than the remaining food crops.

Figure 14 : Tonnes per Hectare of Major Food Crops, Iringa Rural District; 2009/10 – 2011/12



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

Table 3.3 : Planted Area Production and Production per Hectare of Major Food Crops, Iringa Rural District; 2009/10 – 2011/12

Crop	2009/10			2010/11			2011/12		
	Planted Area (ha)	Production (tonnes)	Yield (t/ha)	Planted Area (ha)	Production (tonne)	Yield (t/ha)	Planted Area (ha)	Production (tonnes)	Yield (t/ha)
Maize	86,275	142,203	1.6	73,796	152,424	2.1	89,295	156,278	1.8
Sorghum	11,052	10,990	1.0	3,109	9,573	3.1	5,753	4,143	0.7
Finger .millet	674	876	1.3	470	519	1.1	306	108	0.4
Beans	16,335	11,670	0.7	14,549	8,453	0.6	21,547	10,083	0.5
Peas	1,023	3,640	3.6	1,193	2,785	2.3	3,794	13,755	3.6
Cowpeas	108	342	3.2	349	314	0.9	1,443	1,594	1.1
Irish potatoes	1,079	16,716	15.5	1,436	6,832	4.8	1,748	13,374	7.7
Sweet potatoes	2,013	18,410	9.1	2,088	12,356	5.9	2,092	14,732	7.0
Cassava	1,473	8,232	5.6	942	6,251	6.6	1,371	8,776	6.4
Paddy	12,192	30,258	2.5	13,636	28,230	2.1	16,201	49,695	3.1
Total	132,224	243,337	1.8	111,568	227,737	2.0	143,550	272,538	1.9

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

(a) Maize



Maize is the principle food crop in the district

According to the 2007/08 Agriculture Sample Census, Iringa Rural District ranked second by producing 61,546.5 tonnes of maize. The first district was Mufindi (84,850.1 tonnes of maize) and the third was Kilolo (55,891.3 tonnes). Iringa urban was the least producer at 903.5 tonnes. Table 3.3 shows that maize was the dominant food crop grown in the district in terms of area planted. The crop occupied an average of 83,122 hectares per year over the period 2009/10 – 2011/12 which was higher than any other food crop. The area planted with maize was largest in 2011/12 at 89,295 hectares. According to the Table 3.3, production of maize per hectare is incredibly low. Only an average of 1.8 tonnes per hectare was harvested against the normal yield of 6.5 tonnes of maize per hectare. The reason for such low yield should be sought. Maize is planted in every ward in the district.

(b) Paddy



Paddy is the second dominant cereal crop. It is used as both food and cash crop

During the Agriculture Sample Census of 2007/08, Iringa Rural led other districts in the Region in paddy production. In that year it produced 15,248.7 tonnes of paddy, followed by Mufindi (951 tonnes), Kilolo (57.4 tonnes) while Iringa Urban did not produce paddy. Paddy dependent on rain fed floods and hence it is grown entirely in low lying “mbuga” lands commonly known as ‘Majaruba’. It is a labour intensive crop which needs high moisture regime during the entire growth

period. The crop is normally transplanted in December and March. Table 3.3 shows the average area planted with paddy was 14,009.7 hectares per year with an annual average yield of 2.6 tonnes/hectare. Paddy commonly is grown in Idodi, Mahuninga, Mlowa, Itunundu, Mlenge and Ilolompya.

(c) Irish potatoes

The soil texture and the climate of Iringa Rural influence production of root tuber crops such as Irish potatoes. The district ranked second in Irish potatoes production after Mufindi in Iringa Region. 2,467.8 tonnes were produced in the district during the crop season of 2007/08 (Agriculture Sample Census 2007/08). With reference to Table 3.3, area planted with Irish potatoes averaged annually at 1,421 hectares and the crop had average yield of 8.7 tonnes per hectare. . Mgama, Maboga, Wasa, Lumuli, Mseke, Magulilwa and Ifunda wards are prominent wards for Irish potatoes production.

(d) Sweet potatoes

Table 3.3 also gives the number of hectares put under sweet potatoes and the quantity produced. Yield decreased from 9.1 tonnes/ha in 2009/10 to 5.9 in 2011/12 before reaching 7 tonnes/ha in 2011/12. Despite the fluctuating yield , the District are well advised to encourage her residents to increase the cultivation of this crop as it contributes to improving food security in the District. Mseke, Luhota, Kalenga, Kiwere, Ilolompya and Mlowa Wards are well known for sweetpotatoes production.

(e) Sorghum and Cassava

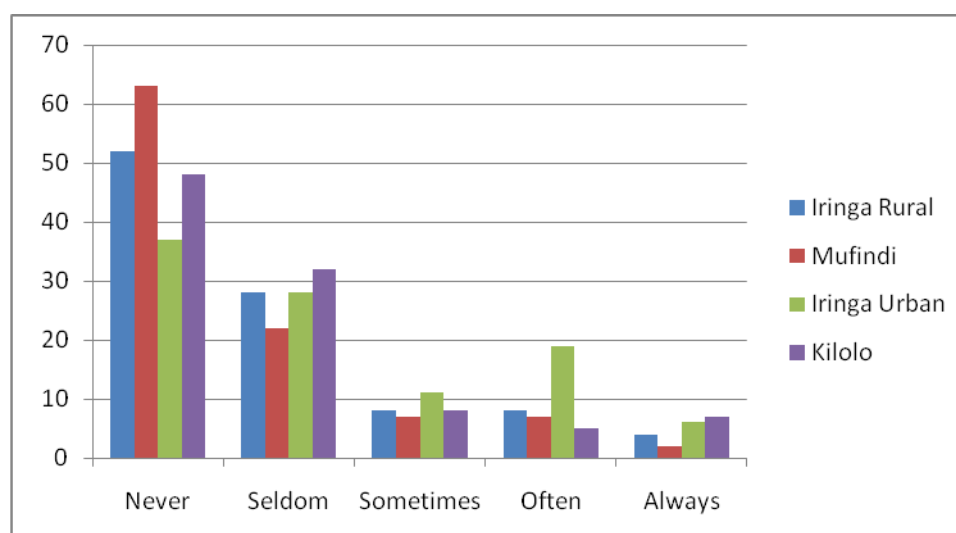
These are drought resistant crops which are grown in small scale farming. These crops though produced in small quantities help in the attainment of food adequacy in the district. Table 3.3 shows that sorghum had an average yield of 1.2 tonnes/ha and cassava 6.1 tonnes/ha.

3.1.4.2 Food Security

Most of the population in Iringa Rural District depends on grains for their staple food. Grains account for about 85 percent of starch foods available for consumption. Root crops mainly Irish potatoes, sweet potatoes and cassava take the remaining 15 percent. Food crops are also sold as cash crops in different proportions. Food adequacy according to FAO means access to sufficient food (both in terms of quantity and quality) for all people at all times to support an active and healthy life. Undernourishment significantly lowers physical ability, cognitive development and learning achievement, resulting in lower productivity.

Table 3.4 shows that a total of 29,054 households (52 percent of the agricultural households in Iringa Rural District) reported to have never experienced problems in satisfying their households with food, followed by those who experienced the problem seldomly (15,847 households, 28%), sometimes (4,726 households, 8%), often (4,309 households, 8%) and always (2,363 households, 4%). Food satisfaction status for other districts is also highlighted in the Table.

Figure 15 : Proportion in Percentage of Food Satisfaction Problems for Agricultural Households in Iringa Region, 2007/08



Source: NBS, Iringa Region Agriculture Census Report, 2007/08

Table 3.4 : Number of Agricultural Households with their Food Satisfaction Status observed during 2007/08 Agricultural Year by District, Iringa Region

District	Never		Seldom		Sometimes		Often		Always		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Iringa Rural	29,054	52	15,847	28	4,726	8	4,309	8	2,363	4	56,300	100
Mufindi	40,394	63	13,836	22	4,294	7	4,294	7	1,431	2	64,248	100
Iringa Urban	512	37	388	28	155	11	264	19	78	6	1,395	100
Kilolo	21,210	48	14,213	32	3,608	8	2,187	5	3,061	7	44,279	100
Total	91,169	55	44,284	27	12,783	8	11,053	7	6,933	4	166,223	100

Source: NBS, Iringa Region Agriculture Census Report, 20007/08

3.1.5 Major Cash Crops Production

3.1.5.1 Area Planted with Cash Crops

Table 3.5 gives the area planted with major cash crops in the District over the period of 2007/08 – 2011/12. Apart from cash crops, sold food crops such as tomatoes, groundnuts, maize and paddy also add significantly to the income of the people of Iringa Rural District.

In terms of the size of planted area, sunflower is the leading cash crop. It occupied 77.7 percent of the districts' total area planted with cash crops (Table 3.5). Barley (0.4 percent) had the least share followed by cotton (0.5 percent). Moreover, area planted with cash crops increased significantly by 88.1 percent from 21,489 hectares in 2007/08 to 40,425 hectares in 2011/12.

Table 3. 5 : Estimated Area (Ha) under Major Cash Crops, Iringa Rural District; 2007/08 – 2011/12

Crop	2007/08	2008/09	2009/10	2010/11	2011/12	Total	Yearly Average	Percent Share
Tobacco	926	2,164	1,739	2,240	2,466	9535	1907.0	6.4
Tomatoes	1,651	1,703	1,886	1,920	2,061	9,221	1844.2	6.2
Simsim	-	651	472	476	501	2100	420.0	1.4
Cotton	212	205	84	120	126	747	149.4	0.5
Sunflower	16,327	15,174	26,061	26,396	32,488	116,446	23289.2	77.7
Barley	-	-	38	207	357	602	120.4	0.4
Groundnuts	1,934	2,049	1,646	2,236	2,348	10,213	2042.6	6.8
Onion	439	345	54	75	78	991	198.2	0.7
Total	21,489	22,291	31,980	33,670	40,425	149,855	29,971.0	100.0

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

3.1.5.2 Production per Hectare of Major Cash crops

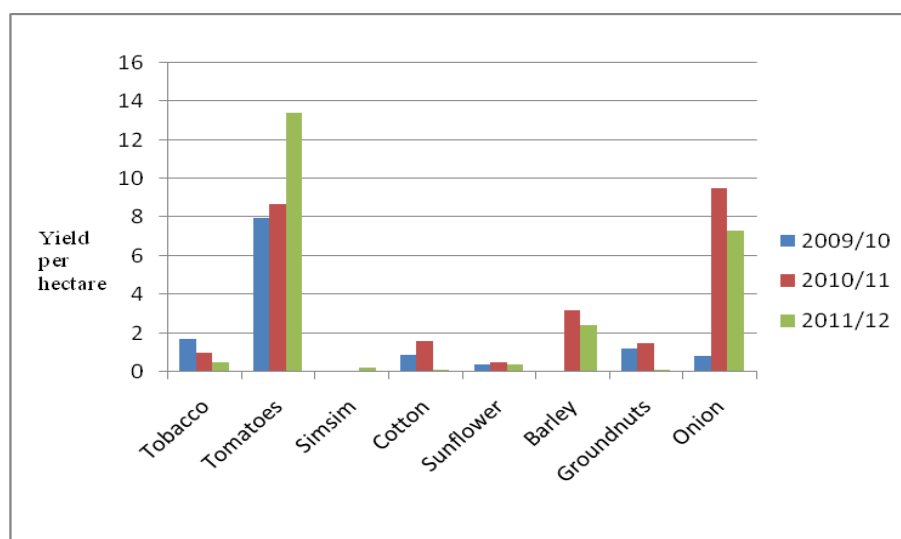


Tobacco is the dominant cash crop in the district

Table 3.6 gives production per hectare of major cash crops in the District. Despite increase in hectares planted with cash crops, yield remained stagnant at 1.1 tonnes/ha in each year from 2009/10 to 2011/12. The use of inferior agricultural inputs associated with poor extension services contributed to the low yield.

Tobacco grown on large scale farms by investors in Nzihi, Kiwele, Ulanda and Lumuli has made Iringa Rural the leading district in tobacco growing in Iringa Region. The remaining cash crops are grown on small scale farms by peasant farmers. Tomatoes are planted in low land areas through irrigation. Likewise, groundnuts and onions have become important cash crops in the district.

Figure 16 : Yield per Hectare of Major Cash Crops, Iringa Rural District; 2009/10 – 2011/12



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

Table 3. 6 : Yield of Major Cash Crops, Iringa Rural District; 2009/10 - 2011/12

Crop	2009/10			2010/11			2011/12		
	Planted Area (ha)	Production (tonnes)	Yield (t/ha)	Planted Area (ha)	Production (tonnes)	Yield (t/ha)	Planted Area (ha)	Production (tonnes)	Yield (t/ha)
Tobacco	926	1,542	1.7	1,739	1,726	1.0	2,466	1,322	0.5
Tomatoes	1,651	13,136	8.0	1,886	16,339	8.7	2,061	27,566	13.4
Simsim	-	368	-	472	21	0.0	501	112	0.2
Cotton	212	191	0.9	84	138	1.6	126	8	0.1
Sunflower	16,327	6,085	0.4	26,061	12,368	0.5	32,488	12,199	0.4
Barley	-	-	-	38	121	3.2	357	858	2.4
Groundnuts	1,934	2,311	1.2	1,646	2,532	1.5	2,348	263	0.1
Onion	439	364	0.8	54	512	9.5	78	571	7.3
Total	21,489	23,997	1.1	31,980	33,757	1.1	40,425	42,899	1.1

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

3.1.5.3 Large Scale Farming of Food and Cash Crops

Iringa Region endowment of large arable land suitable for cultivating different food and cash crops has attracted both local and foreign investors to establish large scale farming. The large scale farming to large extent help the District maintains food security and also has a surplus for the market. The surplus foods sold together with the sold cash crops contribute significantly to the economy of the District as well as reduce income poverty of the residents of Iringa Rural District. Table 3.6a shows that by 2012 a total of 6,380 hectares were owned by large scale farms. In terms of farm sizes, George Fliakos Farm at 744 hectares dominated other farms. Msungulika Farm of 53 hectares owned by local investor Mr. Joseph Mungai was the smallest large scale farm. Moreover, Pawaga Prison with 344 hectares was the only large scale farm managed by the Government. Large scale farms owned by religious institutions possessed a total of 1,017 hectares (15.9 percent of combined total hectares of large scale farms). Investors of foreign origin occupied a total of 2,155 hectares (33.8 percent). Local non religious investors possessed largest portion of the land under large scale farms shown in Table 3.6a. They had a total of 3,208 hectares equivalent to 50.3 percent of total hectares.

Table 3.6 a : Large Scale Farmers: Farmers with over 50 Hectares in Iringa Rural District; 2012

S/N.	Farm Name	Crop cultivated	Location	Area (hectare)	Distance from Iringa Municipality (Km.)	Propriator
1.	Selous Farming Ltd	Maize,Barley, Beans	Ifunda	612	39	Mark Myatt Taylor
2.	Kikongoma Farm	Tobbaco and Tomato	Mangalali	278	25	George Emanuel
3.	John Rosous Farm	Tobbaco and Tomato	Nzihi	135	28	John Rosous
4.	George Fliakos Farm	Tobbaco and Tomato	Kidamali	744	33	George Fliakos
5.	K.T. Kalogeres Farm	Tobbaco and Tomato	Nyamihuu	196	38	K.T. Kalogeres
6.	Steria Paplos Farm	Tobbaco and Tomato	Nzihi	252	28	Steria Paplos
7.	Vasilikakis Castor Farm	Tobbaco and Tomato	Magubike	216	41	Vasikakis
8.	Charles Mungai Farm	Maize and coffee	Muwimbi	180	44	Charles Mungai
9.	Ulete Parish Farm	Maize and Beans	Muwimbi	126	42	Consolatha Sisters.
10.	Kisolanza Farm	Maize Beans Flowers and Vegetables	Kibena	100	48	Mrs. Ghau
11.	Ihemi Youth centre	Maize and Beans	Ihemi	278	35	UVCCM
12.	Kibebe Dairy Farm	Maize and Beans	Wangama	479	11	Phillips
13.	Consolatha F.Farm	Maize and Beans	Mgongo	140	14	Consolatha Sisters.
14.	Asas Dairy Farm	Maize and Bananas	Igingilanyi	480	18	ASAS
15.	Materu Farm	Maize and Beans	Mfukulemb	78	59	Mr. Materu
16.	Msungulika Farm	Maize and Beans	Muwimbi	53	47	Joseph Mungai
17.	Idete Dayosisi Farm	Maize and Beans	Tosamaganga	58	16	Tosa Parish

Table 3.6 a(ctd): Large Scale Farmers: Farmers with over 50 Hectares in Iringa Rural District; 2012

S/N.	Farm Name	Crop cultivated	Location	Area (hectare)	Distance from Iringa Municipality (Km.)	Propriator
18.	Consolatha Fathers Farm	Maize and Beans	Ihemi	99	36	Consolatha Fr.
19.	African Brothers Farm	Maize and Beans	Ihemi	248	16	African brothers
20.	Mhekwa Farm	Maize and Beans	Mfukulembe	108	59	Mhekwa Ebrahim
21.	FAMARI Dairy Farm	Maize and Beans	Igingilanyi	580	19	F.M. Abri
22.	Pawaga Prison Farm	Paddy, Cassava and Bananas	Itunundu	344	87	Magereza
23.	Consolatha Sisters Farm	Maize and Beans	Makombe	86	64	Consolatha sisters
24.	Diocese of Iringa Farm	Maize and Beans	Igangidungu'	260	72	Bishop
25.	Salehe Farm	Maize and Beans	Ihemi	250	36	Salehe Malipula
Total				6,380		

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

3.1.6 Crop marketing

According to Agricultural Sample Census of 2007/08, Iringa rural was the third district in number of households that reported selling crops. The district had 31 percent of the Iringa regional's households that reported selling crops.

Table 3.6b shows the volume and value of marketed dominant food crops in the district for the year 2011/12. A combined total of 7,591,132 kg of maize and paddy worth Tshs. 3,779,646,200 were marketed. Paddy is the leading crop in earnings. The crop contributed 71.3 percent (Tshs. 2,694,600,000) while maize earned only Tshs 1,085,046,200 or 28.7 percent of the district total earning. The top three wards in maize sells were Magulilwa which earned 12.9 percent of total maize sells, followed by Maboga (12.7 percent) and Wasa (12.5 percent).

Likewise, Itunundu ward (26.3 percent of total paddy sells), Idodi (23.1 percent) and Mlengi (17.5 percent) were three wards well known for paddy marketing.

Table 3.6 b : Amount and Value of Food Crops Sold by Ward, Iringa Rural District; 2011/12

S/N	Ward	Crop	Amount Sold (Kgs)	Price per Kg (Tshs.)	Total Value in Tshs	Percent	Crop earning contribution to the District Total (%)
1	Kalenga	Maize	24,500	350	8,575,000	0.8	
2	Kiwere	Maize	47,000	350	17,150,000	1.6	
3	Nzihi	Maize	16,400	350	5,740,000	0.5	
4	Ulanda	Maize	32,000	350	11,200,000	1.0	
5	Mseke	Maize	85,300	350	29,750,000	2.7	
6	Magulilwa	Maize	398,700	350	139,545,000	12.9	
7	Luhota	Maize	375,400	350	131,390,000	12.1	
8	Mgama	Maize	358,300	350	125,405,000	11.6	
9	Lyamungwe	Maize	369,600	350	129,360,000	11.9	
10	Ifunda	Maize	253,000	350	88,550,000	8.2	
11	Lumuli	Maize	262,000	350	91,700,000	8.5	28.7
12	Maboga	Maize	394,700	350	138,145,000	12.7	
13	Wasa	Maize	386,200	350	135,170,000	12.5	
14	Nduli	Maize	24,000	350	8,400,000	0.8	
15	Nyang'oro	Maize	48,000	350	16,800,000	1.5	
16	Kihorogota	Maize	57,000	350	19,950,000	1.8	
Sub-Total			3,100,132	350	1,085,046,200	100	
17	Mahuninga	Paddy	658,000	600	394,800,000	14.7	
18	Idodi	Paddy	1,039,000	600	623,400,000	23.1	71.3
19	Mlowa	Paddy	248,000	600	148,800,000	5.5	
20	Itunundu	Paddy	1,182,000	600	709,200,000	26.3	
21	Mlengi	Paddy	786,000	600	471,600,000	17.5	
22	Ilolompya	Paddy	578,000	600	346,800,000	12.9	
Sub-Total			4,491,000	600	2,694,600,000	100	
District- Total			7,591,132		3,779,646,200		100

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

3.1.7 Irrigated Agriculture



Drip irrigation is implemented mostly to horticultural crops in some villages



Rain water harvested through man made dam is the source of water for irrigation

Iringa rural has the largest irrigable land than any other district in Iringa region. Adequate and permanent surface water from rivers and dams have been very useful for sustainability of irrigation development, though by 2012, there were still under utilization of the available irrigation potentials. As Table 3.7 reflects, in 2011/12 the district estimated to have 43,698 hectares potential for irrigation. 24,606 hectare or 56.3 percent were already put under traditional irrigation leaving 19,092 hectares or 43.3 percent of the estimated potential land for irrigation remains unutilized. Financial resources and technical constraints hold back the development of the irrigable potential. Itunundu endowed with largest potential area for irrigation at 16,250 hectares followed by Mlenge (11,395 hectares). Lack of reliable water bodies hinders irrigation agriculture in Ifunda, Nyang'oro, Kihorogota and Migoli (Table 3.7). Irrigation is mainly for horticultural crops, maize and paddy.

Table 3. 7 : Irrigation Prospects by Ward, Iringa Rural District; 2011/12

Ward	Potential Area		Irrigated Area	
	Estimated Potential Area (Ha)	Percent to the Total Potential Area	Area Under Traditional Irrigation (Ha)	Percentage of Area under Traditional Irrigation over Estimated potential Area
Kalenga	1,400	3.2	985	70.4
Kiwere	1,800	4.1	893	49.6
Nzihi	630	1.4	379	60.2
Ulanda	840	1.9	350	41.7
Mseke	780	1.8	237	30.4
Magulilwa	225	0.5	80	35.6
Luhota	468	1.1	34	7.3
Mgama	579	1.3	-	-
Lyamgungwe	153	0.4	-	-
Ifunda	-	-	-	-
Lumuli	37	0.1	-	-
Maboga	183	0.4	-	-
Wasa	158	0.4	18	11.4
Mahuninga	890	2.0	343	38.5
Idodi	2,535	5.8	2,107	83.1
Mlowa	1,625	3.7	895	55.1
Itunundu	16,250	37.2	9,565	58.9
Mlenge	11,395	26.1	6,843	60.1
Ilolompya	3,100	7.1	1,750	56.5
Nduli	150	0.3	5	3.3
Nyang'oro	-	-	-	-
Kihorogota	-	-	-	-
Izazi	250	-	107	42.8
Migoli	-	-	-	-
Malengamakali	250	0.6	15	6.0
Total	43,698	100.0	24,606	56.3

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

3.1.8 Agricultural Inputs

3.1.8.1 Introduction

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 mechanised 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.

Iringa rural like other rural 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.

3.1.8.2 Chemical/Inorganic Fertilizers

Soil infertility, plant pests and diseases are among factors which limit agricultural production in this District. Iringa Rural District soils have for many years depended on application of chemical fertilizers for optimum crop harvests. Crop such as maize demand the use of chemical fertilizers for optimum harvests. Likewise, horticultural crops such as tomatoes require the use of pesticides for control of insect infestation and plant diseases. Table 3.7a gives information on demand, supply and distribution of essential agricultural inputs in the District. Bulk of the fertilizers in use was DAP (45 percent of total tonnage of fertilizers distributed to farmers) followed by Nitrogen type fertilizers (42 percent was distributed to farmers).

Table 3.7 a: Availability of Chemical Fertilizers (Tones), Iringa rural District; 2010/11 and 2011/12

Type of Fertilizers	2010/11			2011/12		
	Demand	Supplied	Distributed	Demand	Supplied	Distributed
UREA	3,489	3,489	3,489	3,564	3,564	3,564
NPK	1,045.9	1,045.9	1,045.9	1,097	1,097	1,097
MRP	18	18	18	32	32	32
DAP	3,736	3,736	3,736	3,808	3,808	3,808
Total	8,289	8,289	8,289	8,501	8,501	8,501

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

3.1.8.3 Fungicides

Table 3.7b gives the list of fungicides used for controlling plant pests in the District. In the two crop seasons, about 80 percent of the supplied fungicides were distributed to farmers. All fungicides highlighted in the Table carried equal importance on application.

Table 3.7 b: Availability of Fungicides (in ltrs/kgs/tones), Iringa rural District; 2010/11 and 2011/12

Type Fungicides	2010/11			2011/12		
	Demand	Supplied	Distributed	Demand	Supplied	Distributed
BRAVO	210	126	89	220	132	93
RIDOMIL	312	187	130	327	196	137
DITTHANEMUS	350	210	147	367	220	154
SUMITHION	310	245	245	325	257	257
Total	1,182	768	611	1,239	805	641

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

3.1.8.4 Insecticides

Insecticides/pesticides are chemicals used for controlling insects, diseases and weeds. During the agricultural sample census of 2007/08, Iringa Rural District ranked third in the use of insecticides in Iringa Region. The District had 139 agricultural households who applied insecticides in their farms. The first district

was Kilolo (984 households) and Mufindi the second (159 agricultural households). Iringa Urban (municipal) had the least. With reference to Table 3.7c, Decisosulv was the most supplied insecticide over the crop season of 2010/11 at 28.6 percent of total distribution. Likewise, Dursban was most common in 2011/12 at 51.5 percent distribution.

Table 3.7 c : Availability of Insecticides (Ltrs/kgs/tones), Iringa Rural District; 2010/11 and 2011/12

Type of Insecticides	2010/11				2011/12			
	Demand	Supplied	Distributed	Percent of Distribution	Demand	Supplied	Distributed	Percent of Distribution
THIONEX	350	210	147	9.1	367	220	154	18.0
ACTELIC	850	425	200	12.4	892	446	210	24.6
DECISOSULV	600	462	462	28.6	630	-	-	-
DURBAN240ULV	200	140	140	8.7	210	100	50	5.9
DURBAN	540	500	419	25.9	567	525	440	51.5
QUELETOX	350	300	250	15.5	367	50	-	-
Total	2890	2037	1618	100.0	3033	1341	854	100.0

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

3.1.8.5 Improved Seeds

According to the National Sample Census of Agriculture of 2007/08, Iringa Regional report, Iringa Rural District was the second district in the region in using improved seeds. The first district was Mufindi which had 17,334 agricultural households who were using improved seeds. Iringa rural district had 12,094 agricultural households. However, Agricultural households using improved seeds in Iringa rural district increased by 18 percent between the agricultural intercensal period of 2002/03 and 2007/08.

Table 3.7d highlights the situation of availability and distribution of improved seeds in Iringa rural district during 2010/11 and 2011/12 crop seasons. Farmers in the district observed to prefer TMV 2 rather than other types of improved seeds. These seeds distributed at highest proportion at 26.7 and 26.4 percent of the total tonnage of improved seeds distributed to farmers. It was followed by DK 8053 (14.2 percent) in 2010/11 and 14.1 percent in 2011/12.

Table 3.7 d : Availability of Improved seeds (Tones) Iringa Rural District; 2010/11 and 2011/12

Type of Improved seeds	2010/11				2011/12			
	Demand	Supplied	Distributed	Distribution Proportion in Percentage	Demand	Supplied	Distributed	Distribution Proportion in Percentage
H628	48	48	48	10.7	50.4	50.4	50.4	10.6
DK8031	30	30	30	6.7	32	32	32	6.7
DK 8053	64	64	64	14.2	67	67	67	14.1
PAN 67	22	22	22	4.9	25	25	25	5.2
PAN 691	40	40	40	8.9	42	42	42	8.8
PAN 6549	26	26	26	5.8	28	28	28	5.9
TMV 2	120	120	120	26.7	126	126	126	26.4
KILIMA	30	30	30	6.7	32	32	32	6.7
STAHA	70	70	70	15.6	74	74	74	15.5
Total	450	450	450	100.0	476.4	476.4	476.4	100.0

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

3.1.8.6 Farm Implements

Table 3.7e shows type of modern farm implements which were available in the district in 2011. By supplying more than fifty percent of the demanded implements, it is an indication that the agriculture sector in the district is in the right track of implementing 'Agriculture Fist' policy through moving from hand hoe dependence to mechanized agricultural tools. Based on Table 3.7e, there were significant numbers of modern farm implements supplied in the district. Ox

plough had the largest quantity (3,767) followed by ox- shares (3,304). Moreover, farmers in the district have an opportunity of increasing land under crop cultivation, serving time spent in cultivation and even increasing crop production due to the presence of affordable number of tractors in the district. The district has 246 tractors (Table 3.7e) and 123 villages with a ratio of 2 tractors per village. Under proper management of these agricultural tools supported with improving accessibility of extension services, the district would be in a position of increasing its food surplus level as well as curb income poverty through selling the surplus food and cash crops.

Table 3.7 e : Availability of Agriculture Implements in Iringa District Council; 2012

Implement Type Type	Quantity of Implements		Percent Supplied
	Demand	Supplied	
Ox plough	3,767	3,767	100
Ox harrow	5	5	100
Oxbridge	64	64	100
Oxcart	856	856	100
Ox cultivator	22	22	100
Ox chain	1,884	1,800	95.5
Ox shares	3,767	3,304	87.7
Tractors	246	246	100
Power tillers	180	180	100
1.T. planter	17	17	100
2.Tractorboom sprayer	14	14	100
3.Combine harvester	4	4	100
4.Tractor trailer	376	376	100
5.Tractorplough	396	396	100
6.Tractor harrow	148	148	100
7.Tractor drills	6	2	33.3
8.Milling machine	590	580	98.3
9.Oil processing machine	90	90	100
10.Magoye ripper	64	64	100
11.Ox-subsoiler	20	9	45
12. Ox- planter	10	na	na

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

3.1.8.7 Staff Establishment in Agriculture sector

Staffing is the key success of agriculture sector in the district. Are the one whom under the guidance of agricultural policies the sector performance would be recognized. Iringa rural district is a lack district by having, though not sufficient, but affordable number of staff in agriculture sector whom include professionals/technicians and extension officers.

Table 3.8 highlights the district had 39 personnel in agriculture sector. Of the total, agriculture officers were two (5.1 percent) and agriculture field officers were 37 (94.9 percent of total staff). Female staffs were fewer in number (12 female, 30.8 percent of total staff) than male staff (27, 69.2 percent). Ulanda and Mseke had highest concentration of staff than other wards at 10.3 percent of the district total staff in agriculture sector.

Table 3. 8: Availability of Agriculture Personnel by Ward, Iringa Rural District; 2012

Ward	Agricultural Officers				Agricultural Field Officers				Ward Total	Percent
	Type of Agricultural Officer	Available			Type of Field Officer	Available				
		Male	Female	Total		Male	Female	Total		
Kalenga	AO	0	0	0	AFO	0	1	1	1	2.6
Kiwere	AO	0	0	0	AFO	1	0	1	1	2.6
Nzihi	AO	0	0	0	AFO	1	1	2	2	5.1
Ulanda	AO	0	1	1	AFO	3	0	3	4	10.3
Mseke	AO	0	0	0	AFO	3	1	4	4	10.3
Magulilwa	AO	0	0	0	AFO	1	0	1	1	2.6
Luhota	AO	0	0	0	AFO	1	1	2	2	5.1
Mgama	AO	0	0	0	AFO	1	0	1	1	2.6
Lyamungwe	AO	0	0	0	AFO	0	1	1	1	2.6
Ifunda	AO	0	1	1	AFO	0	1	1	2	5.1
Lumuli	AO	0	0	0	AFO	0	2	2	2	5.1
Maboga	AO	0	0	0	AFO	2	1	3	3	7.7
Wasa	AO	0	0	0	AFO	1	0	1	1	2.6

Table 3.8(ctd): Availability of Agriculture Personnel by Ward, Iringa Rural District; 2012

Ward	Agricultural Officers				Agricultural Field Officers				Ward Total	Percent
	Type of Agricultural Officer	Available			Type of Field Officer	Available				
		Male	Female	Total		Male	Female	Total		
Mahuninga	AO	0	0	0	AFO	1	0	1	1	2.6
Idodi	AO	0	0	0	AFO	1	0	1	1	2.6
Mlowa	AO	0	0	0	AFO	1	0	1	1	2.6
Itunundu	AO	0	0	0	AFO	1	0	1	1	2.6
Mlenge	AO	0	0	0	AFO	0	0	0	0	0.0
Ilolompya	AO	0	0	0	AFO	1	0	1	1	2.6
Nduli	AO	0	0	0	AFO	2	1	3	3	7.7
Nyang’oro	AO	0	0	0	AFO	2	0	2	2	5.1
Kihorogota	AO	0	0	0	AFO	1	0	1	1	2.6
Izazi	AO	0	0	0	AFO	0	0	0	0	0.0
Migoli	AO	0	0	0	AFO	1	0	1	1	2.6
Malengamakali	AO	0	0	0	AFO	2	0	2	2	5.1
District Total		0	2	2		27	10	37	39	100.0

AO: Agricultural officers

AFO: Agricultural field officers

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

3.1.9 Policy Implication in Agriculture

Agriculture sector performance in terms of food and cash crop production does not give a bright future on the status of food security as well as to the economy of the district which largely depends on agriculture. Contribution of the district to the regional food crops production being stagnant at 16 percent over the agricultural year of 2002/03 and 2007/08 is an indication the sector is not performing well. Likewise, district's cash crops shares contributed to the region decreased from 18.4 percent of 2002/03 to 16 percent of 2007/08 also evidenced poor performance of the sector. Limited access of agricultural inputs especially to peasant farmers, low price of agricultural produces against production, poor agricultural practices as well as adverse weather condition are the cause of the

district's agriculture poor performance. To revive the sector, the district need to stick on Kilimo Kwanza guidelines by improving extension services, ensure reliable supply of agricultural inputs through improving implementation procedures of National Agricultural Input Voucher Schem (NAIVS) policy in the district.

3.1.10 Investment Opportunities in Agriculture sector

By putting less than fifty percent of its arable land under crops cultivation and also by being blessed with good climate and soils, there is huge comparative advantage in agricultural production that could be exploited to lead the district out of poverty. Favorable climate supported with fertile soils made the district becoming potential area for agriculture investment for both food and cash crops growing. Likewise, as far as the district already succeeded to attract few large scale local and foreign investors in this agriculture sector, the remaining task is increasing their number so as making use of the vast arable land remained. Moreover, further investment is needed in development and use of existing irrigation capacity that could make a difference to the income of many household with access to the irrigation schemes. Supply of agriculture inputs such as chemical fertilizers, insecticides, improved seeds, farm implements (i.e power tillers and tractors) at affordable prices as well as increasing number of storage facilities for agriculture products during and after harvests is highly recommended.

3.2 Livestock sub sector

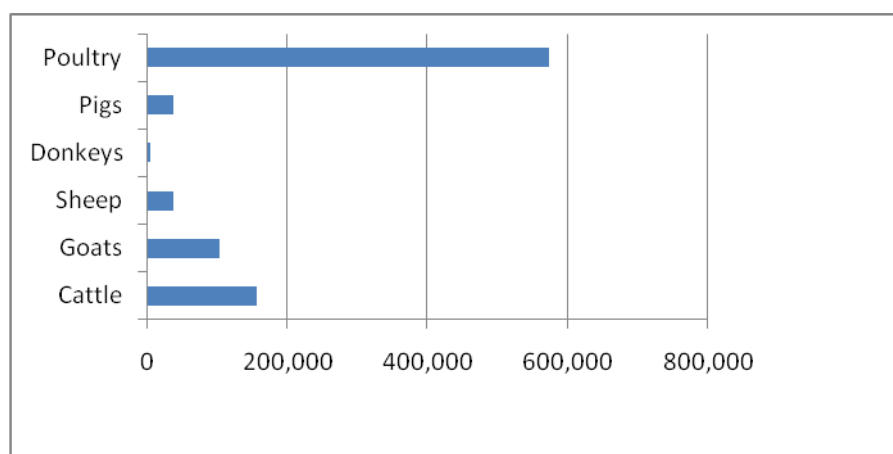
3.2.1 Intrduction

Livestock provide the population with high quality protein products such as meat, milk and eggs. Animal protein like chicken except for fish is widely supplied and consumed in most parts of the District. In all wards some livestock including cattle, goat, sheep, chicken and pig are kept.

3.2.2 Livestock population

Livestock keeping in Iringa Region is not a major economic activity. The small livestock population is predominantly of indigeneous stock. From livestock population given in Table 3.9, poultry at 573,638 was the most populous livestock in the District in 2012 followed by cattle (155,355) and goats (103,429). Donkeys were the livestock of least economic importance in the district as their number (2,796) was the smallest. Table 3.9 reveals that in 2012 Itunundu had the largest population of cattle (17,836) equivalent to 11.5 percent of cattle population in the District. Izazi led in number of goats (17,183 or 16.6 percent of all goats in the District). Wasa and Idodi had the largest population of poultry and each ward had 46,783 poultry (8.2 percent of the total). Magulilwa was leading in number of pigs (7,328, 20.3 percent), Nyang'oro outweighed other wards in sheep population at 8,491 or 23.1 percent while the Ward with the largest number of donkeys concentrated was Izazi ward at 361 (12.9 percent of all donkeys in the district).

Figure 17: Livestock Population by Type, Iringa Rural District; 2012



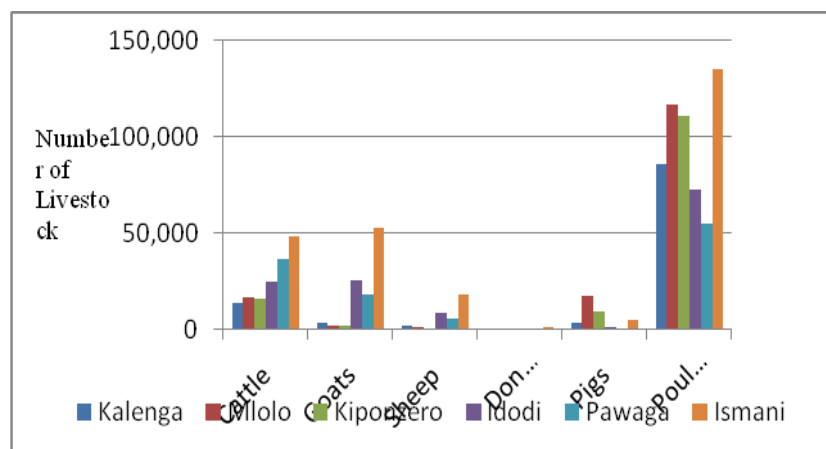
Source: District Executive Director's Office (Livestock Department), Iringa Rural District, 2013

Table 3. 9: Estimated Livestock Population by Ward, Iringa Rural District; 2012

S/N	Ward	Cattle	Goats	Sheep	Donkeys	Pigs	Poultry
1	Kalenga	1,537	781	103	11	842	14,303
2	Kiwere	4,127	1,690	657	289	607	16,785
3	Nzihi	4,564	181	1,272	46	840	42,285
4	Ulanda	3,675	955	98	55	695	11,890
5	Mseke	2,244	285	125	23	551	9,875
6	Magulilwa	4,015	234	222	57	7,328	42,285
7	Luhota	2,853	107	101	21	5,121	11,890
8	Mgama	2,982	564	411	72	3,689	9,875
9	Lyamgungwe	4,025	672	169	0	637	42,364
10	Ifunda	3,951	641	507	0	1,834	21,225
11	Lumuli	3,603	517	124	0	837	29,875
12	Maboga	4,191	243	8	12	3,314	12,377
13	Wasa	4,632	1,048	236	16	3,477	46,783
14	Mahuninga	3,449	5,073	851	57	311	12,345
15	Idodi	12,212	7,066	4,310	112	273	46,783
16	Mlowa	8,995	12,994	3,095	163	151	13,245
17	Itunundu	17,836	4,152	936	155	179	19,660
18	Mlenge	11,521	7,182	4,052	242	287	18,725
19	Ilolompya	6,771	6,408	852	80	69	16,274
20	Nduli	5,648	3,391	1,134	160	1,421	23,326
21	Nyang'oro	7,359	7,792	8,491	286	598	29,840
22	Kihorogota	5,122	3,361	2,525	103	1,771	21,881
23	Izazi	10,958	17,183	1,156	361	84	25,681
24	Migoli	14,367	12,782	4,066	163	376	23,360
25	Malengamakali	4,718	8,127	1,259	312	867	10,716
District- Total		155,355	103,429	36,760	2,796	3,615	573,648

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

Table 3.9a similar to Table 3.9, but aggregates livestock population by division. Figure 18 shows that Isimani leads other division in the number of cattle, goats, sheep, donkeys and poultry. For pigs, Mlolo was the leader.

Figure 18 : Distribution of Livestock Population by Division, Iringa Rural District; 2012

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

Table 3.9 a : Estimated Livestock Population by Division, Iringa Rural District; 2012

Division	Cattle	Goats	Sheep	Donkeys	Pigs	Poultry	Total	Percent
Kalenga	13,903	3,607	2,130	401	2,984	85,263	108,288	12
Mlolo	16,119	1,862	1,028	173	17,326	116,289	152,797	17
Kiponzero	16,377	2,449	875	28	9,462	110,260	139,451	15
Idodi	24,656	25,133	8,256	332	735	72,373	131,485	14
Pawaga	36,128	17,742	5,840	477	535	54,659	115,381	13
Ismani	48,172	52,636	18,631	1,385	5,117	134,804	260,745	29
Total	155,355	103,429	36,760	2,796	36,159	573,648	908,147	100

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

For the purpose of studying performance of the livestock sub-sector in terms of livestock population increase, comparison has been made between the livestock population counted during 2007/08 Agriculture Sample Census and livestock population data collected by the District in 2012. Table 3.10 shows that the district is doing fine as there is an increase in the livestock population. From 2007/08 to 2012 there was a general increase of livestock population by 74 percent (Table 3.10). Remarkable increase was observed in cattle, goats, sheep and donkeys which their increase was above that of the district of 73.1 percent.

With such performance, the livestock sub-sector can help reduce rural income poverty if initiatives are taken to promote the sector through finding reliable livestock markets which offer good price of the sold livestock.

Table 3. 10 : Growth of Livestock Population from 2007/08 Agricultural Year to 2012,Iringa Rural District

Type of Livestock	2007/08 (1)	2012 (2)	Change in Number of Livestock (2007/08 to 2012)	Percent Increase
Cattle	59,915	160,273	100,358	167.5
Goats	37,255	103,429	66,174	177.6
Sheep	5,839	36,760	30,921	529.6
Donkeys	1,529	2,796	1,267	82.9
Pigs	35,170	36,159	989	2.8
Poultry	384,927	573,648	188,721	49.0
Total	524,635	913,065	388,430	74.0

(1) Refers to 2007/08 Agricultural and Livestock Census

(2) Refers to Iringa Rural District Data

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

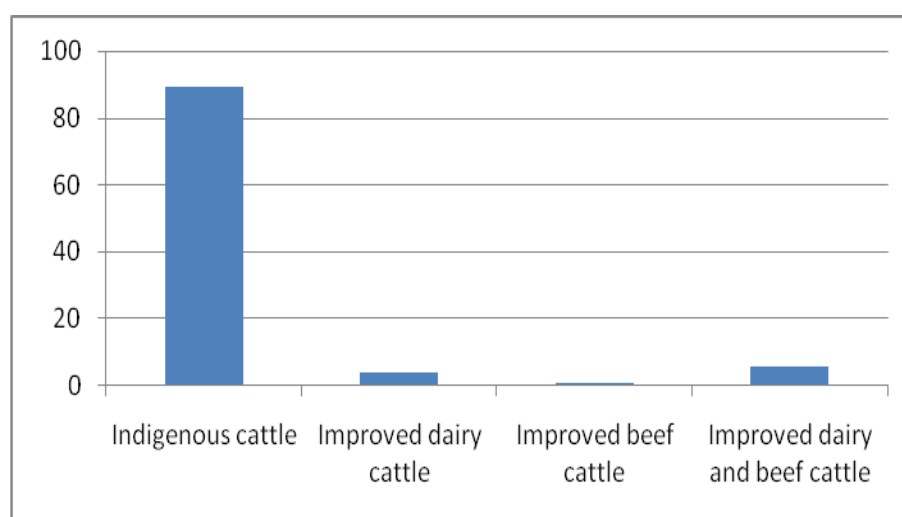
3.2.3 Cattle production



Indigenous cattle is the leading cattle population in the district

Table 3.11 shows that indigenous cattle were the most dominant cattle type in the District. They accounted for 90.2 percent of total cattle population in the District. Improved dairy cattle at 6,579 accounted for 4.1 percent of the cattle population. Improved beef cattle were the least in number at 1,253 (0.8 percent). With cattle population of 14,377 (9 percent of total cattle population in the district), Migoli led other wards in cattle population. It was followed by Mlenge (11,521 cattle, 7.2 percent), Idodi (11,202, 7.0 percent), Izazi (10,954, 6.8 percent) and Itunundu (9,904, 6.2 percent). Concentration of cattle by type and by ward was as follows; indigenous cattle were most concentrated in Migoli (14,341 indigenous cattle, 9.9 percent), improved dairy in Ulanda (1,625, 24.7 percent), improved beef cattle in Ifunda (635, 50.7 percent) and improved dairy and beef cattle in Ulanda (1,625, 20.7 percent).

Figure 19 : Percentage (Proportion) of Cattle Population by Type, 2012



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

Table 3. 11 : Population Distribution of Cattle by Type and Ward; Iringa Rural District; 2012

S/No.	Ward	Indigeneous Cattle	Improved			Total (Indigenous and Improved Cattle)	Percent
			Dairy Cattle	Beef Cattle	Sub- Total		
1	Kalenga	1537	414	-	414	2365	1.5
2	Kiwere	4127	18	-	18	4163	2.6
3	Nzihi	4564	313	5	318	5200	3.2
4	Ulanda	3,675	1,625	0	1,625	6,925	4.3
5	Mseke	2,244	71	0	71	2,386	1.5
6	Magulilwa	4,015	39	0	39	4,093	2.6
7	Luhota	2853	974	38	1012	4877	3.0
8	Mgama	2,982	867	0	867	4,716	2.9
9	Lyamgungwe	4,025	13	0	13	4,051	2.5
10	Ifunda	3,951	908	635	1,543	7,037	4.4
11	Lumuli	3,603	101	352	453	4,509	2.8
12	Maboga	4,191	0	0	0	4,191	2.6
13	Wasa	4,532	78	0	78	4,688	2.9
14	Mahuninga	2,457	0	0	0	2,457	1.5
15	Idodi	11,202	0	0	0	11,202	7.0
16	Mlowa	8,995	0	198	198	9,391	5.9
17	Itunundu	9,862	21	0	21	9,904	6.2
18	Mlenge	11,521	0	0	0	11,521	7.2
19	Ilolompya	6,945	3	0	3	6,951	4.3
20	Nduli	5,545	1,092	25	1,117	7,779	4.9
21	Nyang'oro	6,132	2	0	2	6,136	3.8
22	Kihorogota	5,122	22	0	22	5,166	3.2
23	Izazi	10,954	0	0	0	10,954	6.8
24	Migoli	14,341	18	0	18	14,377	9.0
25	Malengamakali	5,234	0	0	0	5,234	3.3
Total		144,609	6579	1253	7,832	160,273	100.0
Percent		90.2	4.1	0.8	4.9	100.0	

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

3.2.4 Large scale livestock keeping

Topograph and climate of Iringa Rural encourage large scale livestock rearing in the District. Moderate hills and lowland grasslands with flowing permanent and temporary rivers are perfect for large scale livestock keeping. Table 3.12 gives a list of large scale livestock keepers who take advantage of the district's glory land. Dairy cattle are the only livestock kept by large scale farmers. Kibebe Farm owned by Philips had the largest number of dairy cattle. The farm has 525 dairy cattle (17.2 percent of total cattle). It was followed by Selous Farming Ltd owned by Mark Taylor (446 dairy cattle, 14.6 percent) and George Emanuel: Farm (384 dairy cattle, 12.6 percent). The remaining large scale farms with their respective number of dairy cattle are shown in Table 3.12.

Table 3. 12: Large Scale Livestock Keepers: Over 50 Dairy (cattle); Iringa Rural District; 2012

S/N.	Farm Name	Owner	No. of Dairy Cattle	Percent	Distance from Iringa Town (Km)	Location
1.	Kibebe	Philips	525	17.2	11	Wangama
2.	Asas - Igingilanyi	Asas	333	10.9	18	Igingilanyi
3.	Consolata fathers -Ihemi	Consolatha Fathers	314	10.3	36	Ihemi
4.	Salehe Ihemi	Salehe Malipula	194	6.4	36	Ihemi
5.	Ulete Parish	Consolatha sisters	62	2.0	42	Muwimbi
6.	Selous Farming Ltd.	Mark Taylor	446	14.6	39	Ifunda
7.	Msughulika Ulete	Joseph Mungai	230	7.5	47	Muwimbi
8.	George Emanueli	George Emanuel	384	12.6	25	Mangalali
9.	John Rousus	John Rosous	159	5.2	28	Nzihi
10.	Idete Diocese (Kalenga)	Tosa- Parish	48	1.6	16	Tosamaganga
11.	Afrika Brothers (Tosa)	Tosa -Parish	41	1.3	16	Tosamaganga
12.	George Fliacos	George Fliacos	81	2.7	33	Kidamali
13.	Famari Igingilanyi	Abri	235	7.7	19	Igingilanyi
Total			3,052	100		

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

3.2.5 Staff Establishment in Livestock subsector

Iringa Rural is the leading district in Iringa Region for accessible extension services. . Although the available extension officers are inadequate in number, they to a large extent help crop growers and livestock keepers acquire basic knowledge on modern farming and livestock rearing.

Table 3.13 shows that on average, each ward in Iringa Rural has one livestock field officer though; Nduli, Kihorogota, Malenga makali and Itunundu were privileged in having 2 livestock field officers.

Table 3. 13 : Availability of Livestock Personnel by Ward; Iringa Rural District; 2012

S/no.	Ward	Veterinary Officers	Livestock Officers	Livestock Field Officers	Pests and Tsetse Field Officers	Livestock Auxiliary	Total
1.	Wasa	0	0	1	0	0	1
2.	Maboga	0	0	1	0	0	1
3.	Ifunda	0	0	1	0	0	1
4.	Lumuli	0	0	1	0	0	1
5.	Mgama	0	0	1	0	0	1
6.	Luhota	0	0	0	0	0	0
7.	Magulilwa	0	0	2	0	0	2
8.	Mseke	0	0	1	0	0	1
9.	Kalenga	0	0	1	0	0	1
10.	Ulanda	0	0	1	0	0	1
11.	Nzihi	0	0	0	0	0	0
12.	Kiwere	0	0	1	0	0	1
13.	Nduli	0	0	2	0	0	2
14.	Kihorogota	0	0	2	0	0	2
15.	Nyang'olo	0	0	1	0	0	1
16.	Malengamakali	0	0	2	0	0	2
17.	Mlowa	0	0	1	0	0	1
18.	Itunundu	0	0	2	0	0	2
19.	Idodi	0	0	1	0	0	1
20.	Izazi	0	0	1	0	0	1
21.	Mahuninga	0	0	1	0	0	1
22.	Lyamgungwe	0	0	1	0	0	1
23.	Migoli	0	0	1	0	0	1
24.	Ilolompya	0	0	1	0	0	1
25.	Mlenge	0	0	1	0	0	1
	Total	0	0	28	0	0	28

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

Table 3.13a further shows why the District is leading in availability of extension services in Iringa Region. There were a total of 70 agriculture and extension officers in the District. Because of the extension officers shown in Table 3.13a, provision of extension services has been fairly good compared to other districts in Iringa Region. On average, each ward is served by two extension officers. Also, at village level, one extension officer provides services in two villages. Basing on this fact and under proper management of available resources, the District has high possibility of meeting the 'Kilimo Kwanza' target of increasing livestock and crop production.

Table 3.13 a : Availability of Livestock and Agriculture Extension Officers by Ward, Iringa Rural District; 2012

S/N.	Ward	No. of Villages	Population	No. of Farmers	No. of Extension Staff			
					Agric	Irrigation	Livestock	Total
1.	Kalenga	4	9499	3049	1	0	1	2
2.	Kiwere	5	11820	3794	0	1	2	3
3.	Nzihi	6	14746	4718	3	0	1	4
4.	Ulanda	5	10022	3207	2	1	1	4
5.	Idodi	4	10603	3393	1	0	1	2
6.	Mlowa	3	8538	2732	1	0	2	3
7.	Mahuninga	2	4452	1429	1	0	1	2
8.	Mlenga	4	8121	2999	0	0	1	1
9.	Itunundu	4	10712	3428	1	0	1	2
10.	Ilolompya	4	3431	1101	1	1	1	3
11.	Izazi	3	6731	2161	0	0	1	1
12.	Migoli	6	13077	4185	1	0	1	2
13.	Nyang'olo	5	12983	4154	2	0	1	3
14.	Kihorogota	7	9173	2935	1	0	2	3
15.	Malengamakali	5	8318	2670	2	0	1	3
16.	Nduli	6	12837	4108	3	0	1	4
17.	Magulilwa	5	13821	4456	0	0	2	2
18.	Luhota	6	14548	4670	2	0	1	3

Table 3. 13a(ctd): Availability of Livestock and Agriculture Extension Officers by Ward, Iringa Rural District; 2012

S/N.	Ward	No. of Villages	Population	No. of Farmers	No. of Extension Staff			
					Agric	Irrigation	Livestock	Total
19.	Mseke	6	17461	5605	3	1	3	7
20.	Mgama	6	14802	4753	1	0	2	3
21.	Lyamungwe	4	10913	3513	1	0	1	2
22.	Ifunda	5	14852	4782	2	0	1	3
23.	Lumuli	5	8527	2814	2	0	1	3
24.	Maboga	6	11791	3785	3	0	1	4
25.	Wasa	6	10929	3617	1	0	0	1
District Total		123	272707	88058	35	4	31	70

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

Under the management of Agriculture department of Iringa Rural District, extension officers managed to establish farmers field school (FFS) listed in Table 3.14. Through these schools, extension officers have been training farmers and livestock keepers practically on better agriculture and livestock keeping practices. Over five seasons, 2007/08 – 2011/12, a total of 3,380 farmers (both livestock keepers and crop growers) were trained from a total of 203 farmer's field schools available in the district. The schools categorized into two groups, agriculture and livestock. Farmer's field schools for agriculture category were in large number (2,325 schools, equivalent to 68.8 percent of total schools in the district) than that of livestock category (1,055 schools, 31.2 percent). Average groups trained per month were 17 with a composition of 281 participants (farmers).

Table 3. 14 : Farmers Field School (FFS) Available in Iringa Rural District; 2007/08 - 2011/12

Year	FFS- Groups	FFS- Farmers	Category		Average FFS group per Month	Average FFS Participants (Farmers) per Month
2007/08	19	556	- Agriculture	421	1	46
			- Livestock	135		
2008/09	22	550	- Agriculture	463	2	46
			- Livestock	87		
2009/10	48	784	- Agriculture	568		65
			- Livestock	216	3	
2010/11	44	765	- Agriculture	466		64
			- Livestock	299	4	
2011/12	70	725	- Agriculture	407	6	60
			- Livestock	318		
District Total	203	3,380	Agriculture:2,325		17	281
			Livestock: 1,055			

Source: District Executive Director's Office (Livestock Department), Iringa Rural District, 2012

3.2.6 Grazing Land

Grazing land is defined as the land available for the grazing needs of livestock. It excludes all tsetse fly area, all wildlife and forest reserves and tree plantations. In many cases it overlaps arable land and areas for 'other use'.

Of the districts' total land area of 2,057,600 hectares, grazing land is estimated to be 99,172 hectares (Table 3.15). Some land area which is under crop production normally gets used for grazing after crop harvests. Such dualpurpose land provides additional grazing land especially during dry season. In that case, the district has ample land for livestock grazing. For reducing conflicts among livestock keepers and farmers, extension officers available in every ward in collaboration with village leaders managed to allocate grazing land shown in Table 3.15. Nevertheless, tsetse fly infestation in Idodi, Mlowa, Itunundu, Mlenge and Ilolompya limits grazing land in those wards.

Table 3. 15: Estimated Area for Grazing by Ward' Iringa rural District; 2012

S/N	Ward	Land Fit for Grazing (Ha)	Land Used for Grazing (Ha)	Percent of Land Used for Grazing	Tsetse Fly Infected Area (Ha)
1	Kalenga	1,018	987	97.0	0
2	Kiwere	2,119	2,057	97.1	0
3	Nzihi	1,482	1,452	98.0	0
4	Ulanda	1,396	1,354	97.0	0
5	Mseke	1,162	1,139	98.0	0
6	Magulilwa	942	928	98.5	0
7	Luhota	2,647	2,594	98.0	0
8	Mgama	1,405	1,381	98.3	0
9	Lyamungwe	863	852	98.7	0
10	Ifunda	1,174	1,157	98.6	0
11	Lumuli	1,794	1,759	98.0	0
12	Maboga	2,693	2,504	93.0	0
13	Wasa	1,147	1,792	156.2	0
14	Mahuninga	864	849	98.3	
15	Idodi	10,044	9,240	92.0	10,044
16	Mlowa	11,217	10,768	96.0	11,217
17	Itunundu	10,410	10,274	98.7	10,410
18	Mlenge	9,953	9,658	97.0	9,953
19	Ilolompya	6,348	6,275	98.9	6,348
20	Nduli	3,763	3,719	98.8	0
21	Nyang'oro	5,608	5,597	99.8	0
22	Kihorogota	5,159	5,089	98.6	0
23	Izazi	4,749	4,715	99.3	4,749
24	Migoli	6,373	6,297	98.8	6,373
25	Malengamakali	4,842	4,763	98.4	4,842
Total		99,172	97,200	98.0	64800

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

3.2.7 Livestock infrastructure

Situation of livestock facilities is not encouraging. There are too many facilities which though are available, but they are not working or operating (Table 3.16). In this regards, the district is limited in controlling or preventing animal diseases thus exposing animal health in danger. However, diseases affect animal health and reduce both meat quality or/and quantity of milk production and in some cases bring death to the animal affected. The delivery of livestock health services depends on facilities such as dips, veterinary health centres and water sources. Tick borne diseases are the most common causes of poor animal health in the district. These include East Coast Fever (ECF), Babesiosis, Heart Water and Anaplasmosis. Other diseases of importance are Black Quarter, Newcastle disease and Mange.

Referring Table 3.16, available number of livestock health facilities in 2012 was inadequate to deliver services to livestock population of 908,147 in the district. In addition, those available were either in poor condition or were non-operative. By 2012, there were 44 dips, 2 veterinary centres, 1 cattle trough, and 5 hides/skins 7 livestock markets/auctions and 11 charco dams which were operating. Veterinary health centres are vital for disease diagnosis and control. Lack of equipments, drugs, chemical reagents as well as adequately trained staff has been the main cause for failure to function properly of the available veterinary centres. Further to that, having only two veterinary centres providing service to 908,147 livestock population is not enough. Hence, the health of livestock are critically in danger. Therefore, the district council needs to increase number of veterinary centres as well as other livestock infrastructure for the betterment of improving the health of the livestock.

Table 3. 16 : Distribution of Livestock Infrastructure by Ward Iringa Rural District; 2012

S/N	Ward	Dips			Livestock Development Centres			Cattle trough	Hides/skin sheds	Abattoirs	Livestock market/Auction	Charco dams
		W	NW	Total	W	NW	Total					
1	Kalenga	3	-	3	-	-	-	-	1	-	-	-
2	Kiwere	1	1	2	--	-	-	-	1	-	-	-
3	Nzihi	4	2	6	-	-	-	-	-	1	-	-
4	Ulanda	-	3	3	-	-	-	-	-	-	-	-
5	Mseke	1	-	1	-	-	-	-	-	-	-	-
6	Magulilwa	1	1	2	-	-	-	-	1	-	-	-
7	Luhota	3	1	4	-	-	-	-	-	-	-	-
8	Mgama	4	-	4	-	-	-	-	-	-	-	-
9	Lyamungwe	1	-	1	-	-	-	-	-	-	-	-
10	Ifunda	4	-	4	-	1	1	-	-	-	-	-
11	Lumuli	3	-	3	-	-	-	-	-	-	--	-
12	Maboga	3	1	4	1	-	-	-	--	-	-	-
13	Wasa	4	-	4	-	-	-	-	-	-	-	-
14	Mahuninga	1	-	1	-	-	-	-	-	-	-	-
15	Idodi	-	-		--	-	-	-	-	-	-	-
16	Mlowa	1	-	1	1	-	2	-	-	-	1	1
17	Itunundu	1	-	1	-	1	-	-	-	-	1	1
18	Mlenge	-	-		-	-	-	-	-	-	-	-
19	Ilolompya	1	-	1	-	-	-	-	-	-	1	-
20	Nduli	4	-	4	-	-	-	-	1	-	1	2
21	Nyang'oro	1	1	2	-	-	1	1	1	-	1	-
22	Kihorogota	2	-	2	-	-	-	-	-	-	1	2
23	Izazi	1	-	1	-	-	-	-	-	-	1	2
24	Migoli	-	-		-	-	-	-	-	-	0	2
25	Malengamakali	-	2	2	-	-	-	-	-		0	1
Total		44	12	56	2	2	4	1	5	1	7	11

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

3.2.8 Major Livestock Diseases

The quality of livestock depends on the delivery of health services such as dips, veterinary health centres and water sources in the District. The service delivery constraints can cause poor animal health. The future in regard to the control of livestock diseases lies in preventive measures including the more effective use of dips and vaccinations. In the past four years, 2008-2011, livestock diseases caused a significant number of illhealth and even death of livestock. Tables 3.17, 3.18, 3.19 and 3.20 give the details.

3.2.9 Cattle Diseases

Table 3.17 highlights the most common diseases for cattle and these are black quarter, East Coast fever, anaplasmosis, foot and mouth disease and lump skin disease. For the four years, 2009, 2010, 2011 and 2012, a total of 29,873 morbidity cases for cattle were reported. Out of the total morbidity cases, 14,185 cattle died equivalent to 47.5 percent of the total morbidity cases reported. East Coast fever was the most dangerous cattle disease. It caused ill health to 10,398 cattle (34.8 percent) and deaths of 8,228 cattle (58 percent). Lump skin was the least dangerous cattle disease during the period.

Table 3. 17: Five Major Cattle Diseases Reported in Iringa Rural District, 2009 – 2012

Disease	Number of Morbidity Cases Reported						Number of Mortality Cases Reported					
	2009	2010	2011	2012	Total	%	2009	2010	2011	2012	Total	%
Black quarter	2,286	2,118	1,872	1,813	8,089	27.1	381	379	274	268	1,302	9.2
East Coast Fever	3,049	2,813	2,619	1,917	10,398	34.8	2,718	2,081	1,862	1,567	8,228	58.0
Anaplasmosis	1,982	1,873	1,663	1,616	7,134	23.9	973	874	778	719	3344	23.6
Foot and Mouth disease	762	755	764	744	3025	10.1	275	269	255	187	986	7.0
Lumpy skin disease	375	357	277	218	1227	4.1	103	98	73	51	325	2.3
Total cases	8,454	7,916	7,195	6,308	29,873	100.0	4450	3701	3242	2792	14185	100.0

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

3.2.10 Goat Diseases

Table 3.18 shows that goat diseases infected 18,922 goats in the period of four years. Out of these infected (morbidity) cases, 8,987 goats (47.5 percent) died. With a total of 11,922 morbidity cases (63 percent of the total morbidity cases) and 5,603 mortality cases (62.3 percent of total morbidity cases reported), Caprine contagious preuropneumonia caused more trouble to goats health and deaths than any other diseases.

Table 3. 18: Three Major Goat Diseases Reported in Iringa Rural District; 2009 – 2012

Disease	Number of Morbidity Cases Reported						Number of Mortality Cases Reported					
	2009	2010	2011	2012	Total	%	2009	2010	2011	2012	Total	%
Caprine Contagious preuropneumonia	3,239	2,931	2,918	2,834	11,922	63.0	1,519	1,477	1,379	1,228	5,603	62.3
Pneumonia	1,574	1,557	1,468	1,379	5,978	31.6	776	761	774	753	3064	34.1
Foot rot	263	268	256	235	1022	5.4	87	79	83	71	320	3.6
Total cases	5,076	4,756	4,642	4,448	18,922	100.0	2,382	2,317	2,236	2,052	8,987	100.0

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

3.2.11 Sheep Diseases

Table 3.19 shows pneumonia was the only disease which endangered sheep lives for the period of four years. The disease caused 2,022 morbidity cases for sheep from which 484 sheep (23.9 percent of all morbidity cases) died. Insufficient data concerning for this Table leads to poor analysis. It is advised that livestock department should have proper record keeping which would help to monitor and even take necessary interventions on sheep diseases.

Table 3. 19 : Three Major Sheep Diseases Reported in Iringa Rural District; 2009-2012

Disease	Number of Morbidity Cases Reported						Number of Mortality Cases Reported					
	2009	2010	2011	2012	Total	%	2009	2010	2011	2012	Total	%
Pneumonia	514	524	497	487	2022	100	114	98	118	154	484	23.9
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
Total cases	514	524	497	487	2022	100	114	98	118	154	484	-

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

3.2.12 Poultry Diseases

For the period of four years shown in Table 3.20, Newcastle emerged as the deadliest disease for poultry. It accounted for 91.7 percent of all poultry deaths. Effective vaccination helped poultry keepers in Iringa rural district reduce deaths of poultry by 40.5 percent from 25,417 mortality cases of 2009 to 22,589 in 2012.

Table 3. 20 : Three Major Poultry Diseases Reported in Iringa Rural District; 2009 – 2012

Disease	Number of Morbidity Cases Reported						Number of Mortality Cases Reported					
	2009	2010	2011	2012	Total	%	2009	2010	2011	2012	Total	%
New castle disease	29,312	24,713	21,875	18,881	94,781	85.8	23,449	22,845	19,778	16,187	82,259	91.7
Fowl typhoid	1,465	1,512	1,583	1,445	6,005	5.436	781	723	685	679	2868	3.2
Avian influenza												
coryza	2,931	2,174	2,317	2,263	9,685	8.767	1,187	1,229	918	1,224	4,558	5.1
Total cases	33,708	28,399	25,775	22,589	110,471	100	25,417	24,797	21,381	18,090	89,685	100

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

3.2.13 Marketing of Livestock and Their Products

Livestock marketing has a great contribution to the economy of the District. Presence of large scale livestock farms owned by local and foreign investors such as Asas, Phillips, and Selous Farming Ltd boosted livestock industry not only within the District, but also to the entire Region. According to Table 3.21, in the three years, a total of TShs 17,751,144,500 was generated from marketing of 57,077 livestock. Livestock market registers showed that, indigeneous cattle generated most income at TShs. 10,131,270,000 or 57.1 percent of total revenue generated in all three years. It was followed by sheep (TShs. 4,295,502,500, 24.2 percent), dairy cattle (1,023,400,000, 5.8 percent), pig (TShs. 1,843,705,000, 10.4 percent) and goat (TShs. 312,867,000, 1.8 percent). Beef cattle contributed the least amount of TShs. 144,400,000 equivalent to 0.8 percent of total revenue in all three years. In 2011, average price per unit was indigenous cattle TShs.455,000,

dairy cattle (TShs. 850,000), beef cattle (TShs. 550,000), goat (TShs. 38,500), pig (TShs. 125,000) and also for sheep (TShs. 60,000).

Further analysis of Table 3.21 shows that livestock marketed was in decreasing trend. Decreased by 39.1 percent from 23,033 marketed livestock of 2010 to 14,025 of 2012. Therefore, the district should take this decrease as a challenge and find out why this happened.

Table 3. 21 : Marketed Livestock by Type (Official Markets) and Values, Iringa Rural District; 2010 – 2012

Type of Livestock	Number of Livestock Marketed				Total Value in T.Shs			
	2010	2011	2012	Total	2010	2011	2012	Total
Indigenous cattle	8367	6,867	6,519	21753	3,903,300,000	3,261,825,000	2,966,145,000	10,131,270,000
Dairy cattle	293	349	672	1314	190,450,000	261,750,000	571,200,000	1,023,400,000
Beef cattle	93	112	127	332	32,550,000	42,000,000	69,850,000	144,400,000
Goats	3,050	3,289	1,723	8,062	106,750,000	139,782,000	66,335,000	312,867,000
Poultry	0	0	0	0	0	0	0	0
Pig	8,517	6,973	4,278	19,768	643,033,500	665,921,500	534,750,000	1,843,705,000
Sheep	2,713	2,429	706	5,848	77,320,500	9,901,500	4,208,280,500	4,295,502,500
Total	23,033	20,019	14,025	57,077	4,953,404,000	4,381,180,000	8,416,560,500	17,751,144,500

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

3.2.14. Marketing of Hides and Skins

Marketed hides and skins create alternative source of income for livestock keeping households. Unfortunately, lack of data unable to quantify how far such kind of business was able to contribute to the district revenue as well as for individual residence of the district. It is important for the district council to design data collection mechanism which will capture number of hides and skin produced with their respective prices.

3.2.15 Milk Marketing

Over the period of 2010-2012 a total of 50,667,273 litres of milk valued at Tshs 30,492,021,400 were marketed in the district (Table 3.22). Quantity of milk marketed showed an increasing trend. It increased by 16.5 percent from

15,502,724 litres in 2010 to 18,060,339 litres in 2012. Likewise, amount of money earned increased by 52.7 percent from Tshs 7,751,362,000 of 2009 to Tshs. 11,836,203,400 of 2011. Average price per litre was Tshs. 600.

Table 3. 22 : Production of Milk, Iringa Rural District, 2010 – 2012

Types of Livestock	Total Number of Liters				Total Value in T. Shs			
	2010	2011	2012	Total	2010	2011	2012	Total
Indigenous Cattle	9,695,273	10,512,603	11,112,516	31,320,392	4,847,636,500	6,307,561,800	6,673,509,600	17,828,707,900
Dairy cattle	5,698,195	6,472,731	6,785,256	18,956,182	2,849,097,500	3,883,638,600	4,071,153,600	10,803,889,700
Dairy Goats	109,256	118,876	152,567	380,699	54,628,000	713,255,600	91,540,200	859,423,800
Total	15,502,724	17,104,210	18,060,339	50,667,273	7,751,362,000	10,904,456,000	11,836,203,400	30,492,021,400

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

3.2.16 Policy Implication in Livestock sub sector

The Iringa rural district is doing fine in terms of increasing the quantity of livestock population (cattle, goats, sheep, donkeys, pigs and poultry). From Agriculture Sample Census year of 2007/08 to 2011/12 livestock population increased by 73.1 percent. This was a great achievement. Unfortunately, increase in livestock population does not match with increasing livestock extension officers as well as the available infrastructures responsible for providing livestock health services. The district has inadequate number of livestock officers whom were 31 working in 123 villages. On average, one livestock officer in Iringa rural district provides livestock services in four villages. Likewise, there was a critical shortage of operating veterinary centres. In 2012, the whole district had only two operating veterinary centres on the ratio of one centre provide health services to livestock from 61 villages. Other livestock infrastructures such as livestock markets/auctions, charcoal dams were also in big shortage. Therefore, for sustainable development of this sector, the district needs to have policy or bylaws which will be its guidelines towards managing and improving livestock extension services. Through implementing such policies/by laws, the district will manage to have high quality livestock population which will be achieved by first employing

more livestock extension officers, secondly, supply enough livestock medicines, rehabilitating those livestock infrastructures which are not operating and constructing the old ones.

The district also needs to look on increasing number of veterinary officers to cater the shortage. This will help the district livestock diseases and hence, reducing livestock morbidity and mortality. Moreover, grazing land though is inadequate, the district needs to put in place well stipulated and implementable proper land use planning as preparation of overcoming high grazing land pressure caused by observed high increase in livestock population. This will help avoiding conflicts among pastures and farmers that might happen in near future.

3.2.17 Investment Opportunities in Livestock sub sector

Iringa rural district has inadequate livestock infrastructures which are operating such as dips, health centres, water points, slaughter houses etc. Therefore, construction of livestock infrastructures might be a priority area of investing in livestock sub sector. Other areas which need investors are dairy farming and livestock processing industries such as milk processing, leather tanning and meat canning. Moreover, due to critical shortage of veterinary services and pharmaceuticals mostly in remote areas of the district, investment is also recommended for animal pharmaceutical shops and veterinary centres having qualified veterinary and livestock officers who can offer consultancy services.

3.3 Natural Resources

Land and forest resources are the main natural endowments of Tanzania and Iringa rural district specifically. However, it has been noticed that the country's forest area has been declining. Iringa rural district being part of Tanzania also experiences the same problem. Environmentally the forestry subsector plays an important role in maintaining ecological balance, soil protection from erosion and

the conservation of water and wildlife. Forests are a source of domestic energy and industrial raw materials. Forests also provide useful non-wood products mainly honey and beeswax. Failure to maintain or improve forest resources eventually leads to problems of unsustainable livelihood. Examples of the types of forest found in the district are Miombo and savana woodlands.

3.3.1 Natural Resources Personnel

Iringa rural district being bestowed with a wide range of natural resources needs affordable number of staff who can take care of the resources. By the end of 2012 there was 20 staff working in natural resources sector. Distribution of staff among sub-sectors was as follows; in forest (5 staff), beekeeping (3), fisheries (3) and wildlife (9 staff). Of the total staff male was 13 (65 percent) and female (7 staff, 35 percent).

3.3.2 Forestry

The district's forests are at great risk from total destruction as demands for fuel wood soar with the increasing population. The District is living on its forestry resources capital so that every year sees the dwindling of the area under forest cover. A concerted and determined effort at afforestation is the only way to save these forests and ensure sustainable supply of fuelwood. A tripling of the area now being planted with trees would do for a start.



The district still has abundant natural forests

Table 3.23 shows status of forest reserves in the District. According to the Table, in 2012 the District had a total of 167,372 hectares of forest reserves. Nyang'oro forest reserve at 118,700 hectares is the largest followed by forest found in Idodi and Itunundu wards which had a total area of 17,930 hectares. The third in size is the forest located in Kiwere ward of 17,909 hectares. The size of the remaining forests are shown in the Table. So far illegal harvests is at insignificant level and normally caused by charcoal burning, firewood collection and lumbering.

Table 3. 23 : Status of Forest Reserves, by Ward' Iringa Rural District; 2012

Ward	Name of Forest Reserve	Size in Hectares	Illegal Harvesting level	Size of Encroached Area (Ha)
Kiwere	Kidundaknyave	4,904	Fair	-
	Gangalamtumba	6,065	fair	-
	Mlimamosi	561	fair	-
	Igundalimwe	180	fair	-
	Manyambuma	2,500	fair	-
	Kitapilimwa	3,699	fair	-
	Sub-Total	17,909		
Nzihi	Magubike	1,300	fair	-
	Ilalasimba	750	fair	-
	Sub-Total	2,050		

Table 3. 23(ctd): Status of Forest Reserves, by Ward' Iringa Rural District; 2012

Ward	Name of Forest Reserve	Size in Hectares	Illegal Harvesting level	Size of Encroached Area (Ha)
Ulanda	Ibangamoyo	420	fair	-
	Kibebe	364	fair	-
	Mangalali	341	fair	-
	Sub-Total	1,125		
Maboga	Kilimadinde	2,500	fair	-
	Ilenga	1,650	fair	-
	Nguvukazi	1,200	fair	-
	Kihosamino	2,400	fair	-
	Sub-Total	7,750		
Idodi	Msimbi	15,780	fair	-
Itunundu	Mboliboli	950	fair	-
	Itunundu	1,200	fair	-
	Sub-Total	17,930		
Ilolompya	Luganga	1,100	fair	-
	Ilolompya	670	fair	-
	Sub-Total	1,770		
Nduli	Ngongwa	138	fair	-
Nyang'oro				-
Kihorogota				
Izazi	Nyang'oro	118,700	fair	
Migoli				
Total		167,372		-

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

Table 3.24 shows the status of forest cover by division. Forest cover in Ismani Division is the largest at 116,638 hectares equivalent to 72.7 percent of District's total forest cover. Kalenga forest cover was the next covering 10.8 percent, followed by Idodi forest (15,780 ha, 9.8 percent) and Kiponzelo (6,750 ha, 4.2 percent). Pawaga Division had the smallest forest cover (3,920ha, 2.4 percent). Unfortunately, the size of forest covers in Mlolo Division not known.

Table 3. 24: Status of Forest Cover by Division Iringa Rural District; 2012

Division	Total Land Area (ha)	Percent	Natural Forest Reserve area (ha)	Forest Plantation area (km2)	Game Reserve Area (ha)*	Game Controlled Area (ha)	Forest Cover on Public/ village land (ha)	National Park Area (sq. km)
Kalenga	17,385	10.8	-	-	-	-	Unknown	20,226
Mlolo	-	-		-	-	-	“	-
Kiponzelo	6,750	4.2		-	-	-	“	-
Idodi	15,780	9.8		-	-	-	“	-
Pawaga	3,920	2.4		776.65	-	-	“	-
Isimani	116,638	72.7		-			“	-
Total	160,473	100		776.65				20,226

*Game Reserve areas outside Forest Reserve area.

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

Public awareness of environmental issues and the importance of trees is the key to sustainability of various afforestation programmes. Plantation forests have been and are being established in the District in order to offset deforestation from indiscriminate tree cutting for various reasons including-farm expansion and fuel wood utilization. Therefore, extra efforts should be made to plant trees to cater for the fuel needs.

Over the period of two years 2010/11 and 2011/12 various individuals and institutions were involved in both raising and planting trees in adversely affected areas. The extent of raising tree seedlings by ward is highlighted in Table 3.25. A total of 1,411,490 tree seedlings averaging to 705,745 annually were planted. In two years, Ifunda Ward raised the highest proportion of tree seedlings at 25.6 percent followed by Mgama at 23.2 percent and Nzihi (12.3 percent). Other interested parties shown in Table 3.26 planted a total of 1,116,042 tree seedlings an average of 558, 021 seedlings per year.

Table 3. 25 : Tree Seedlings Raised by Ward'; Iringa Rural District; 2010/11 and 2011/12

S/N	Ward	2010/11	2011/12	Total	Annual Average	Percent
1	Kalenga	13,000	20,500	33,500	16,750	2.4
2	Kiwere	124,800	25,000	149,800	74,900	10.6
3	Nzihi	33,000	140,050	173,050	86,525	12.3
4	Ulanda	10,000	30,000	40,000	20,000	2.8
5	Mseke	29,300	26,000	55,300	27,650	3.9
6	Magulilwa	46,740	96,200	142,940	71,470	10.1
8	Mgama	142,210	185,600	327,810	163,905	23.2
10	Ifunda	210,489	151,330	361,819	180,909.5	25.6
11	Lumuli	-	11,418	11418	5,709	0.8
12	Maboga	1,237	3,516	4,753	2,376.5	0.3
13	Wasa	-	5,100	5100	2,550	0.4
14	Mahuninga	20,000	-	20,000	10,000	1.4
15	Idodi	44,000	-	44,000	22,000	3.1
16	Mlowa	42,000	-	42,000	21,000	3.0
	Total	716,776	694,714	1,411,490	705,745	100.0

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

Table 3. 26 : Tree Seedlings Raised by Institutions; Iringa Rural District; 2010/11 and 2011/12

Institution	2010/11	2011/12	Total	Annual Average
District Council	447,674	400,000	847,674	423837
Village Government	-			0
Schools	135,820	132,548	268,368	134184
Total	583,494	532,548	1,116,042	558,021

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

3.3.3 Natural Resources Products

3.3.3.1 Forest Products

Forest products such as timber, poles and charcoal earn revenue for the government through permits and taxes. Table 3.27 shows number of bags and amount of revenue earned from charcoal for the year 2012. In the respective year, the District collected a total of TShs. 2,112,000 as revenue from sold 352 charcoal bags. Good management of forest products supported with restrictions imposed in charcoal burning helped the District to protect its forests as well as reduce charcoal business.

Table 3. 27 : Quantity (bags) and Value of Charcoal Sold by Ward; Iringa Rural District; 2012

S/N	Ward	Number of bags sold	Total value TShs
1	Kalenga	-	-
2	Kiwere	352	2,112,000
3	Nzihi	-	-
4	Ulanda	-	-
5	Mseke	-	-
6	Magulilwa	-	-
7	Luhota	-	-
8	Mgama	-	-
9	Lyamgungwe	-	-
10	Ifunda	-	-
11	Lumuli	-	-
12	Maboga	-	-
13	Wasa	-	-
14	Mahuninga	-	-
15	Idodi	-	-
16	Mlowa	-	-
17	Itunundu	-	-
18	Mlenge	-	-
19	Ilolompya	-	-
20	Nduli	-	-
21	Nyang'oro	-	-
22	Kihorogota	-	-
23	Izazi	-	-
24	Migoli	-	-
25	Malengamakali	-	-
	Total	352	2,112,000

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

3.3.2.2 Beekeeping



Tradition beehives dominates beekeeping industry in Iringa Rural District



For increasing production of honey and beeswax, Modern beehives like this one is recommended

Beekeeping in Iringa Rural District is undertaken as a part-time economic activity. Its contribution to the District economy is insignificant compared to other economic activities such as food or cash crop production. Natural forests and forests plantations available in the district have great potential for beekeeping. Besides those endowments, beekeeping sub-sector is still under developed due to lack of know-how and use of modern technology. As Table 3.28 shows, traditional beehives totalling at 46,887 (87.1 percent of districts' total beehives of 53,832) were more than modern beehives (6,945, 12.9 percent of the total beehives). This situation led to low production of honey and bee wax within in the District. Nduli had the highest share of beehives at 18.9 percent followed by Mahuninga (16.8 percent) and Nyang'oro (10 percent). However, if the beekeeping industry is transformed from traditional to modern beekeeping which is more productive, has a chance of reducing unemployment of rural population in the District.

Table 3. 28 : Number of Traditional and Modern Beehives by Ward Iringa Rural District; 2009 – 2012

Ward	Traditional					Morden					Total	Percent
	2009	2010	2011	2012	Total	2009	2010	2011	2012	Total		
Kalenga	-	-	-	85	85	17	17	43	106	183	268	0.5
Kiwere	482	482	1200	1,600	3764	100	100	146	146	492	4256	7.9
Nzihi	-	-	-	108	108	10	10	10	115	145	253	0.5
Ulanda	60	60	148	560	828	-	-	-	120	120	948	1.8
Mseke	-	-	-	-	-	-	-	-	-	-	0	0.0
Magulilwa	-	-	-	-	-	-	-	-	-	-	0	0.0
Luhota	-	-	-	-	-	-	-	-	-	-	0	0.0
Mgama	-	-	-	112	112	-	40	40	140	220	332	0.6
Lyamgungwe	-	-	-	-	-	-	100	100	100	300	300	0.6
Ifunda	210	249	249	249	957	-	-	140	140	280	1237	2.3
Lumuli	-	-	-	139	139	-	28	28	42	98	237	0.4
Maboga	-	-	-	160	160	-	30	30	30	90	250	0.5
Wasa	-	-	-	-	-	-	56	56	56	168	168	0.3
Mahuninga	2,230	2,330	2,255	2,215	9,030	-	-	-	-	-	9030	16.8
Idodi	100	240	672	672	1684	95	95	95	95	380	2064	3.8
Mlowa	70	100	170	170	510	14	14	14	14	56	566	1.1
Itunundu	109	19	109	109	346	10	36	30	30	106	452	0.8
Mlenge	-	-	-	-	-	-	20	20	26	66	66	0.1
Ilolompya	843	1,115	1,115	1,115	4188	70	70	110	122	372	4560	8.5
Nduli	1832	1832	1915	1,915	7494	358	358	978	1,008	2702	1019	18.9
Nyang'oro	1257	1354	1354	1,354	5319	19	19	19	19	76	5395	10.0
Kihorogota	335	1013	1013	1,338	3699	66	66	101	157	390	4089	7.6
Izazi	152	152	210	210	724	1	5	5	5	16	740	1.4
Migoli	279	279	297	297	1152	64	91	91	91	337	1489	2.8
Malengamakali	1499	1499	1741	1,849	6588	87	87	87	87	348	6936	12.9
Total	9458	10724	12448	14257	46887	911	1242	2143	2649	6945	53832	100

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

3.3.2.3 Beekeeping Products

Table 3.29 shows that over a three year period, beekeeping sub sector produced a total of 114,466 litres of honey valued at TShs 538,000,000. In the same period; 9,450 kg of beewax worth TShs 30,125,000 were also produced. Data given in the Table is evidence that bee-keeping industry could contribute significantly to the District economy if initiatives are taken to promote this subsector. Moreover, bee-keeping production levels could be raised if bee-keepers are given assistance to enable them move from traditional to 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 Districts' 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 other economic activities such as farming and livestock keeping without much loss of time and labour.

Table 3. 29 : Quantity and Value of Beekeeping Products Harvested; Iringa Rural District; 2010 – 2012

Year	Honey			Bee-Wax		Total Value of Honey and BeeWax	
	Litres	TShs.	Percent	Kgs.	TShs.	TShs.	Percent
2010	34,000	136,000,000	25.3	2770	8,310,000	144,310,000	25.4
2011	48,216	241,000,000	44.8	3130	9,390,000	250,390,000	44.1
2012	32,250	161,000,000	29.9	3550	12,425,000	173,425,000	30.5
Total	114,466	538,000,000	100.0	9450	30,125,000	568,125,000	100.0

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

3.3.2.4 Fisheries

Fishing in Iringa Rural District mainly takes place at Mtera Dam in Migoli Ward. The district has no large water bodies apart from Mtera Dam on which sizeable fishing activities are carried out and contribute significantly to Iringa Rural

District's economy. Dropping of water level at Mtera Dam which started in 2008/09, to large extent affected fishing industry as well as revenue of the District. Large scale irrigated farms operated by foreign investors in Mbarali District in Mbeya Region were the main reason for dropping of water level in Mtera Dam. The farms are irrigated mostly by water from Ruaha River which is the main source of water of the Dam. For the purpose of boosting the economy of Iringa Rural District, the Government should control irrigation farming in Mbarali.

Table 3.30 gives indications of the magnitude of the fishing industry in the District based on the data from Migoli Ward where Mtera Dam is situated. The Table also shows that, there were 975 fishermen and fish weighing 1,781,590 kg valued at TShs. 5,344,770,000 were caught and sold. The average price was TShs 3,000 per kilogram.

Table 3. 30 : Fishery Resources and Revenue collected from Fishing, Iringa Rural District; 2011/12

Ward	Number of Fishery Resources		Fish Production		
	Licences	Fishermen	Registered Fishing Vessels	Weight (Kg)	Value (TShs.)
Migoli	925	975	975	1,781,590	5,344,770,000

Source: District Executive Director's Office (Natural resource Department), Iringa Rural District, 2013

3.3.2.5 Wildlife



Ruaha National Park and Runda Mkwambi Game controlled area have significant number of lion population

Wildlife represents a most valuable resource in Tanzania from a point of view being the country's major tourist attractor hence a major source of foreign exchange earnings. Iringa Rural is the luckiest district in Iringa Region by being the leading district in the region endowed with many and fairly large wildlife conservation areas that support a diversity of wildlife species. Ruaha National Park and Runda Mkwambi Game Controlled Area are the home of wildlife species in the District. Apart from elephant, buffalo and lions, kudu happens to be the most unique wildlife animal found only in Ruaha National Park. Photographic, tourism, researching and camping are the only activities permitted in national parks. Hunting, is only permitted in game controlled and reserve areas.



Lion in Ruaha National Park in Iringa Rural District

3.3.2.6 Poaching

Poaching is the unlawful or illegal taking of wild plants or animals, such as through hunting, harvesting, fishing, or trapping. By contrast, stealing or killing domestic animals (such as "cattle rustling") or crops are considered to be theft, not poaching.

Poaching has been known to take place in national parks, game controlled and reserve areas. This endangers the sustainability of wildlife resources in the country. Poachers normally kill wild animals especially elephant for trophies.

Table 3.31 gives the number poachers arrested over the period of five years. In that period, a total of 392 poachers were arrested in Ruaha National Park. In 2008 the park caught the largest number of poachers at 118 or 30.1 percent of total poachers caught in five years. The least number of poachers were arrested in 2011 at 51 (13 percent). However, failure of the National Park to provide data on how many poachers were taken to court and those who were jailed somehow shows lack of close follow up of court cases by the Ruaha National Park management team. In that sense, for showing their seriousness in managing the wildlife resources, we anticipate the management team to have good plans in future for collecting data relating to court cases and their outcomes.

Table 3. 31 :Number of Poachers Arrested in Ruaha National Park, Iringa Rural District; 2007-2012

Year	2008	2009	2010	2011	2012	Total
Number	79	118	71	73	51	392
Percent	20.2	30.1	18.1	18.6	13.0	100.0

Source: Ruaha National Park Management; May 2013

3.3.2.7 Tourism

3.3.2.7.1 Wildlife Tourism



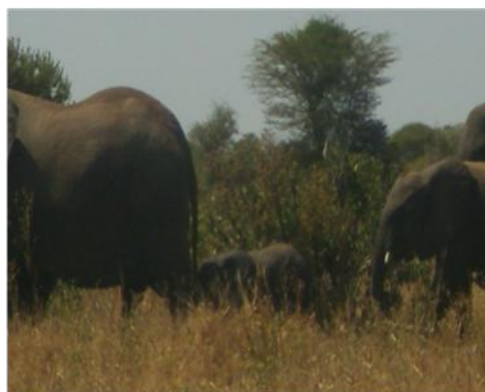
History of Ruaha National Park: With Ruaha National Park, Iringa Rural District is among the best tourist circuit in Tanzania. Ruaha National Park is the largest national park in Tanzania. It covers an area of about 22,000 km². It is located in the middle of Tanzania about 130 km from Iringa Municipality. The Park is part of a more extensive ecosystem which includes Rungwa Game Reserve, Usangu Game Reserve and several other protected areas.

The name of the park is derived from the Great Ruaha River, which flows along its south-eastern margin and is the focus for game-viewing. The park can be reached by car via Iringa and there is an airstrip at Msembe park headquarters. The creation of a national park in this area was first proposed in 1949 by the Senior Game Ranger in Mbeya, George Rushby. In 1951 it was gazetted by the British colonial authorities as an extension of the neighbouring Rungwa Game Reserve. People living in the new protected area were subsequently forced to move out. In 1964 it was separated from the game reserve and elevated to full park status. In 2008 it was extended to incorporate the former Usangu Wildlife Management Area, in the upper Ruaha catchment, making Ruaha the largest National Park in Africa.

Wildlife: Kudu is the unique wild animal specie found only in Ruaha National Park. Most of tourists coming in this park to watching this unique specie. Paper silly tree is the reason for Kudu living nowhere else than in this national park. The tree is the favourable food for Kudu and is only available in this national park.



Uniqueness of Ruaha National Park is the presence of Kudu. This animal is only available in this national park in Tanzania



Elephants moving in large groups is another unique feature of Ruaha National Park

Apart from other national park, Ruaha National park is famous for its large population of Elephants who normally move together in large groups. Presently about 10,000 are roaming the park. Ruaha National Park is also a true birdwatchers paradise: 436 species have been identified of an estimated total of 475. Among the resident birds are different species of Hornbills, Kingfishers and Sunbirds. Also many migrants visit Ruaha like the White Stork. Other special animals in Ruaha are: Lion, buffalo, the African Wild Dog and Sable Antelope. The best time to visit for predators and large mammals is the dry season (May–December) and for birds and flowers, the wet season (January–April).

Environmental Change in Ruaha National Park: The Park is currently facing a significant environmental challenge caused by the drying up of the Great Ruaha River. The river used to flow all year round, but since 2006 there have been long dry periods in which it has dried up completely. Expansion of irrigation schemes for rice cultivation in Mbarali in Mbeya Region and increased livestock keeping in the Usangu wetland which feeds the Great Ruaha River are hypothetically belived to cause the drying of Great Ruaha River. Among the consequences of the drying river are; animal deaths and at some point the animals endanger people's lives in villages close to the park when they go searching for water.



Drying of Great Ruaha River causes death of many wild species living in the Ruaha National Park

Table 3.32 gives the number of tourists both local and foreigners who visited the Ruaha National Park in Iringa Rural District. Over the five year period, 2008-2012 a total of 107,319 tourists visited the national park. Most of them were foreigners who accounted for 59.1 percent of total tourists. Local tourists were only at 40.9 percent. Table 3.32 further shows that, the number of tourists fluctuated with the largest number being received in 2011 (23,671 tourists, 22.1 percent of all tourists received from 2008 to 2012). The Smallest number of tourists visited the park in 2010 (19,079, 17.8 percent). Since local tourists are far less than foreigners, local people should further sensitized into visiting the national park. Sensitization can be achieved through informing the local people of the lower entrance fees for local visitors, cheaper providing hotels and food which they can afford as well as advising them to bring their fourwheel drive vehicles instead of renting park vehicles which are expensive.

Table 3. 32 : Number of Tourist Who Visited Ruaha National Park; 2008-2012

Year	Local	Foreign	Total	Percent
2008	8,082	13,953	22,035	20.5
2009	8,151	11,630	19,781	18.4
2010	8,039	11,040	19,079	17.8
2011	9,868	12,885	22,753	21.2
2012	9,721	13,950	23,671	22.1
Total	43,861	63,458	107,319	100.0
Percent	40.9	59.1	100.0	

Source: Ruaha National Park Management; May 2013

3.3.2.7.2 Historical Siteviwing Tourism

Historical places are other tourists' attractions which make Iringa Rural District attract many tourists. The district has a a number of historical places to visit such as the Ismila Stone Age Site, Kalenga, Kikongoma, Mlambalasi and Tosamaganga.

Ismila Stone Age Site: The site which lies about 20 km (12 miles) to the southwest of Iringa Rural District has astonishing free-standing natural rock pillars formed by millions of years of weathering. This is one of Africa's most important sites for exploring the relics of the Acheulean Age (about 300,000 years ago) and the site is littered with hand axes, hammers, cleavers and stone picks. Also the site contains archeological artifacts, particularly stone tools, from human habitation many years ago.

Kalenga, Kikongoma and Mlambalasi: These historical sites are linked with the Hehe's Chief Mkwawa. He was the chief who several times fought the German colonial authorities. The Hehe's Chief built a 8 km long and 12 meter high stockade in an attempt to fight off the advance of German colonization. The German suffered a humiliating defeat despite of the poorly armed Hehe soldiers

who depended on spears other traditional weapons and few rifles and still they ambushed a German battalion. Latter on, Germans with more sophisticated weapons than the spears, bows and arrows the Hehe soldiers had, managed to attack the Hehe fortress at Kalenga in October 1894 and Chief Mkwawa successfully managed to escape and engaged in the German forces in guerrilla warfare for a number of years before he committed suicide. In 1898, after nine years of harassing the Germans in a series of guerrilla skirmishes, Mkwawa was cornered by the German troops, and on realizing that he was about to be arrested, he committed suicide rather than being caught red handed by the colonial German troops. As the German troops advanced, they found him dead and cut off his head which was sent to Germany.

Kalenga Museum: built in 1954 in Kalenga Village during British colonial rule. It is in this museum where the skull of Chief Mkwawa is kept after being repatriated back to the then Tanganyika Territory in 1954 during British colonial rule. Mkwawa's skull now forms one of the main exhibits of the Mkwawa Memorial. Furthermore, letters which Mkwawa wrote to Germany authority, spears and other fiercely traditional weapons and few rifles which Mkwawa and his soldiers had used can also be observed in this museum. Besides, there are traditional tools used with traditional medicines which the Chief Mkwawa had used as '**satellite**' for watching enemies as well as monitoring the behavior of his 62 wives if they cheating on him.



Photo of Chief Mkwawa. The most famous chief during German colonialism in Tanganyika (i.e Tanzania)



Kalenga Museum built in 1954 in Kalenga village where Chief Mkwawa had lived



The skull of Chief Mkwawa in Kalenga Museum. The skull returned from German in 1954



Traditional weapons and few rifles used by Mkwawa soldiers. One of the rifle Mkwawa used it to kill himself

Kikongoma: It is the hamlet within Malangali village. This hamlet is famous for two main things. First it is the place where the mother of Chief Mkwawa killed herself. She killed herself to avoid being caught by Mkwawa enemies who forced her to disclose the traditional whichcraft which made his son (Chief Mkwawa) powerful. She refused, and threw herself in Ruaha River at a place where the river is believed to be more than 50 metre deep. Secondly, Kikongoma is famous for having ‘God Bridge’ or natural built bridge.



Under these huge stones Ruaha river is passing. The stones form Natural bridge or commonly known as 'God bridge' which enables people cross the river even during heavy rainy seasons



It is this place in Ruaha River in Kikongoma where Chief Mkwawa's mother threw in and killed herself

Mlambalasi: This is a place where Chief Mkwawa killed himself in 1898 after he successfully managed to escape from German forces.

Behind these huge stones there is three caves used by Chief Mkwawa. The first cave was used as a store for keeping weapons, second cave was Chief Mkwawa's bodyguards room and the third cave which has a capacity of accommodating 50 people was a conference hall of the Chief



This is a grave of Chief Mkwawa who popularly known as Mkwavinyika. The memorial tower stands close to the grave is for remembering the death of the Chief



3.3.2.8 Eco Tourism



Ruaha cottage in the Ruaha National Park. Its price is affordable even to local tourists. Accommodation per night is Tshs. 35,000 for local and USD 50 for foreigners



Ruaha River Lodge in the Ruaha National Park is among the preferred lodge by foreigners. Accommodation per night including breakfast, lunch and supper is USD 140

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

Accommodation facilities are important in attracting tourists. Therefore, information about hotels, camp sites and lodges is vital for the tourists, as it helps them to choose type of accommodation they like as well as compare the quality against prices charged. The recommended hotels and lodgings in Iringa Town (where the Iringa Rural District headquarters are located) include the MR Hotel, Hilltop Hotel, Lutheran Lodge Centre and New Ruaha International Guest House to mention a few. Within the Ruaha National Park there are six lodges: Tandala Tented Camps, Mwagusi Safari Camp, Mdonya Old River Camp, Ruaha River Lodge, Kwihale and Jongomero Camp and Cotage Lodge. Cotage Lodge is the property of the National Park (i.e government property) and is the most affordable lodge. The remaining lodges are owned by investors and their prices are higher than the one owned by the government.

Banking services and bureau de changes in the District are only available at the district headquarters which is located in Iringa Region town centre. Telecommunication services especially mobile phone coverage, is very good at the district's headquarters. As you farther go away from the district's headquarters, some difficulties in mobile phone coverage accessibility arise. Mobile phone services offered by Airtel and Vodacom companies are best accessed at a wider range of coverage in remote areas of the district. Besides, road network towards all tourists attractions are good and passable through out a year.

3.4.1 Environment Conservation

Development and use of Iringa rural area is expected to increase, creating economic opportunities as well as putting unprecedented pressure on both the people of Iringa rural district and the resources. To maximize benefits of current and future development, careful shorefront planning guided by clear principles and backed by enforceable practices is necessary. Shorefront planning seeks to balance competing users for land and natural resources, resolve conflicts among users, and balance national and local interests. The District should therefore encourage individuals, NGOs and other institutions embark environment conservation programs essence for sustainable environment use and who can also support the government in managing implementation of environment laws/bylaws.

3.4.2 Investment Opportunities in Natural Resources

(i) Agro-forestry

Sustainable agro-forestry is an area of which the district can take advantage of. This includes the promotion of commercial beeswax and honey production also afforestation programmes.

(ii) Environmental conservation

Iringa rural district faces depletion of its forest cover due to firewood, charcoal and overgrazing. The district has to embark upon afforestation which will counterbalance with the rate of deforestation. More over control of animal stock movement into forest areas is essential in balancing depletion with regeneration of vegetation. Investment therefore is needed in the supply and planting of tree seedlings, education in agro forestry and proper management of the forest resources.



Tree nursery is important for controlling depreciation of forest cover

(iii) Beekeeping

Availability of abundant natural forests such as miombo woodlands provides the district with a great range of beekeeping potentials. People organized in groups such as the one observed in Nzihi ward would considerably made beekeeping sub sector as part-time activity and also alternative source of income to low income earners of the rural population of the district. However, investments in this sub sector can be made;

- (a) Medium scale investors; these are private companies or individuals with adequate resources who can invest profitably in this sub sector by using

modern technology. These kinds of investors should be encouraged so as to tap the full potential of this sector.

- (b) Smallscale bee keepers; these include individual households in the district. They could be developed by being trained in modern bee-keeping, a practice which involves the use of modern beehives instead of the traditional ones which are currently predominant in the district. Likewise, the Government and other development stakeholders in the district should think of introducing micro-credit schemes to bee-keepers so as to enable them purchase modern beehives and other necessary gear for this important economic activity.

(iv) Fisheries



Remarkable decrease of water level in Mtera dam caused by drying of Great Ruaha River has much affected fishing activities taking place in the dam. The picture above shows international fish market in Migoli ward which due to decreasing of fishing activities, the multi million market remain idle and loss to the district. Strong measures are therefore needed to rescue Great Ruaha River.

In the previous years before recognisable drying of Mtera dam, fishing was among the main source of income and proteins for large population especially those living close to the dam. It is therefore necessary for the government in collaboration with the district council to take dropping of water level of Mtera dam as an economic and social welfare disaster. Large scale paddy irrigation schemes introduced in Mbarali should be controlled to enable Great Ruaha River which pour water into Mtera dam is not much disturbed. In addition to that, rural households living along the Mtera dam and even those who do fishing on the available small water dams constructed by the district, are provided with dynamic and well funded fisheries program that would help them transform their income and nutrition status.

(v) Tourism

Presence of Ruaha national park and Runda Mkwambi game reserve, Chief Mkwawa historical sites, God bridge and hot water natural spring in Kikongoma can further make the district an important tourist destination in future if more initiatives are taken to promote those attractions. For instance, the number of tourists (63,458) who visited the national park from 2007 to 2012 would be more than that if enough promotion of tourists' attractions available in the district is made. On the other hand, people should be encouraged to invest in construction of quality accommodation facilities as well as restaurants. Banking services also needs to be improved to meet the increasing demand. Tour guide operators are another area where they can make advantage of the growing tourism sector. In this regards, affordable number of tour guide operators is needed to cater the shortage.

3.5 Miniral Resources

Mining is not an economic activity. So far, there is no miniral deposits identified in the district.

3.6 Policy Implication on Natural resources

Natural resources is a productive sector which can, at least potentially, generate its own income if properly managed and if the laws and regulations permit and support sectoral self-financing. In many countries natural resources sector is actually a net contributor to the state treasury.

Exploitation of natural resources in Iringa rural district though still at insignificant level, is triggered by combination of factors such as poverty of Iringa rural residents and un awareness of the people on the policy/laws or by laws governing this sector. Illegal forests harvests, encroachment of forest reserves due to grazing and agricultural expansion are activities which somehow endangers natural resources in the district. Other activities are poaching of wildlife animals in Ruaha National Park. So far the district has bylaws guiding the protection and management of natural resources. However, proper implementation of bylaws and follow up is lacking/missing. Alternatively or the best approach of protecting natural resources is by the beneficiaries whom are the community living close to the respective natural resources are involved on deciding the best approach of sustainable utilization, management and protection of natural resources. In addition to that, environmental benefits would be substantial if there is joint effort among the beneficiaries (the community) and authorities responsible for controlling and managing natural resources.

Beekeeping being part of the natural resources has a large potential to contribute to the district economy. Through transforming the existing situation of 87.1 percent dominance of traditional beehives into modern beehives, beekeeping

industry would help to improve the income of low income family earners in the district. Fish industry can also be an alternative source of income to people of Iringa rural district; hence, plans should be put in place to rescue drying of Mtera dam in order to revamp fishing activities taking place in this dam. The government needs to come up with policy/bylaws which would provide guidance on proper use of the water of Ruaha Great River. By doing so, Mtera dam would be rescued from drying. Providing people with fish production management skills and soft loans would contribute in improving the livelihood of Iringa rural district residence.

3.7 Industrial Development

3.7.1 Introduction

As the informal sector continues to grow both in urban and rural areas of the country, there is a decline or stagnation in the growth of formal employment (Dr.Marios Obwana, Enhancing Contributions of the Informal Sector to the National Development). In Tanzania, the informal sector's contribution to the countrys' GDP was at 40 percent in 2010 (Tanzania Economic and Social Research Foundation, Policy Brief series no. 012-2010). Furthermore, informal sectors in Tanzania consist of mainly the unregistered groups/individuals such as small scale traders, farmers, small scale manufactures as well as many small scale businesses. Increasing employment opportunities and reducing income poverty is the main target of informal sector in the country.

Iringa rural district like other rural areas of the county, informal sector plays a recognisable role in alleviating income poverty as well as improving social wellbeing of the people of Iringa rural district. According to Iringa Region GDP Report of 2008, industry activity in Iringa rural district contributed 5.7 percent to the regional GDP in 2008. Small and middle scale was only available industrial types in the district. However, by 2012, there were ten small scale sunflower oil processing industries and two maize milling machines in Ifunda. Drinking

portable water industry found in Kidamali is the only middle scale industry in the district. Unfortunately, unreliable electricity power supply in remote areas of the district, lack of skills/technology among informal sector operators contributes slow growth of this sector in the district.

3.8 Policy Implication on Industrial sector

It was observed that agriculture activity is the main economic base and also the source of establishment of many industries in the district. This means that improvement of agriculture sector through ‘Agriculture First Policy’ will have direct impact on industrial sector development in Iringa rural district. This would be achieved through introducing mechanized agriculture which will make use of the still available plent of arable land supported with favorable climate.

3.9 Investment in Industrial sector

The basis for industrial development in Iringa rural district has been agriculture products. There is still room for establishment of small and medium scale agro-based industries such as milling, jiggery and sawmilling of forest timber and the establishment carpentry and joinery workshops. Promotion of commercial honey production is another area of investment.

CHAPTER FOUR

Economic Infrastructures

4.0 Introduction

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



50.2 percent of the total road network in the district is earth road

4.1 Road Network by Type

Roads like blood arteries in the body are very instrumental in stimulating social and economic development of any district. Thus, for a successful economic management, the District Authority and the Government in particular, need to place more emphasis on road improvement. In Iringa Rural District, road transportation is the major type of transportation for people and goods within and outside the District. It is one of the key sub-sectors that are responsible for sustainable development and poverty reduction initiatives in the District. The

District is served by trunk, regional, District and feeder roads. Table 4.1 shows the length of road network by ward and by type. The District had network of 1,580 kms in 2012.

The roads that are maintained by the central government are classified as trunk or regional roads, while those that are maintained by the district council are called district or feeder roads; the rest of the roads are called peripheral roads and are mostly maintained by Village/Mitaa communities. Table 4.1 shows that about 152 kilometres (9.6 percent of total road network) were trunk roads; regional roads were 268 kilometres (17 percent) and district roads 825.4 kilometers, (52.2 percent). Feeder roads which are the true arteries of the economy constituted 335 kilometres or 21.2 percent of all roads in the District. Table 4.1 further reveals that Maboga Ward had the largest share of the road network (104 km, equivalent to 6.6 percent of total road network in the District) while Ilolompya had the smallest share (15 km, 0.9 percent).

Table 4. 1 : Road Networks by Types and by Ward, Iringa Rural District; 2012

S/N	Ward	Type(km)						Percent
		Trunk	Regional	District	Feeder	Urban	Total	
1	Kalenga	0	13	9	23	0	45	2.9
2	Kiwere	0	46	16	18	0	80	5.0
3	Nzihi	0	16	43	17	0	76	4.8
4	Ulanda	0	8	30	26	0	64	4.1
5	Mseke	24	0	52	0	0	76	4.8
6	Magulilwa	0	6	32	26	0	64	4.0
7	Luhota	0	20	32	12	0	64	4.0
8	Mgama	7	19	42	21	0	89	5.6
9	Lyamungwe	0	9	19	27	0	55	3.5
10	Ifunda	8	0	36	8	0	52	3.3
11	Lumuli	13	0	43	0	0	56	3.6

Table 4. 1 (ctd): Road Networks by Types and by Ward, Iringa Rural District; 2012

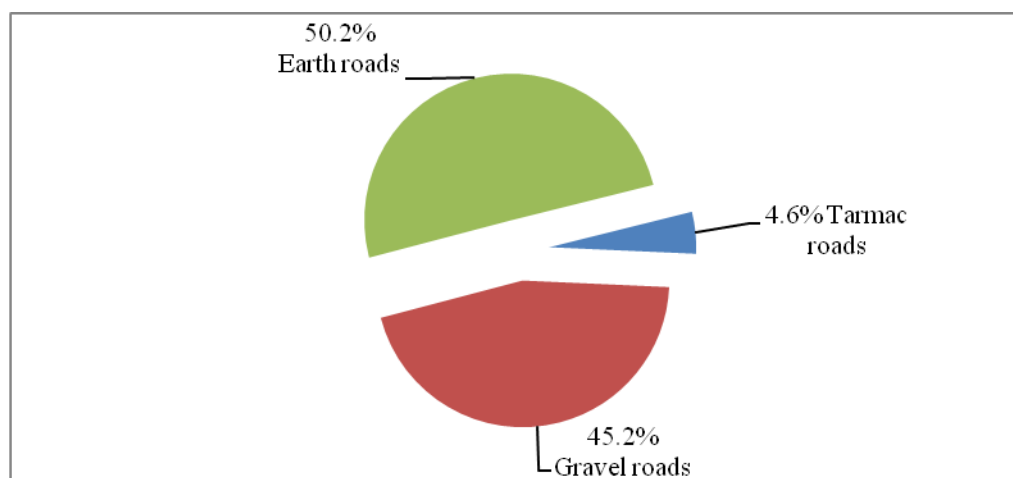
S/N	Ward	Type(km)						Percent
		Trunk	Regional	District	Feeder	Urban	Total	
12	Maboga	0	0	59	45	0	104	6.6
13	Wasa	0	0	58	12	0	70	4.4
14	Mahuninga	0	49	31	0	0	80	5.1
15	Idodi	0	28	7	0	0	35	2.2
16	Mlowa	0	18	38	0	0	56	3.5
17	Itunundu	0	13	39	0	0	52	3.3
18	Mlenge	0	8	37	10	0	55	3.5
19	Ilolompya	0	15	0	0	0	15	0.9
20	Nduli	21	0	36	12	0	69	4.4
21	Nyang'oro	28	0	37	34	0	99	6.3
22	Kihorogota	10	0	45	17	0	72	4.5
23	Izazi	23	0	27	12	0	62	3.9
24	Migoli	18	0	12	0	0	30	1.9
25	Malengamakali	0	0	45	15	0	60	3.8
	District Total	152	268	825	335	0	1580	100.0
	Percent	9.6	17.0	52.2	21.2	0.0	100.0	

Source: Iringa Rural District Council (Works Department), 2013

4.1.1 Road Classification by Grade of Road Surface

The grade of road surface to a large extent refers to the improvement of the road to guarantee the durability and passability in all seasons. Under this aspect, further analysis has been made on surface condition of the roads in terms of tarmac, gravel and earth. Table 4.2 shows the length of road network by grade of road surface in Iringa Rural District. The Table reveals that in the District, tarmac roads cover the least distance of 72 kilometres (4.6 percent of total road length in the District). About 715 kilometers (45.2 percent) are gravel roads and 794 kilometers (50.2 percent) are earth roads. Since half of the road network in Iringa Rural District is earth roads, the responsible authorities should take immediate measures to improve the road conditions to enable reliable communication within the District and with its neighbors.

Figure 20 : Proportion in Percentage of Road Network by Type of Surface Condition, Iringa DC, 2012



Source: Iringa Rural District Council (Works Department), 2013

Table 4. 2: Road Network Surface Condition by Ward, Iringa Rural District; 2012

S/N	Ward	Type(km)				Percent
		Tarmac	Gravel	Earth	Total	
1	Kalenga	7	3	35	45	2.9
2	Kiwere	0	46	34	80	5.0
3	Nzihi	0	16	60	76	4.8
4	Ulanda	0	23	42	64	4.1
5	Mseke	24	13	39	76	4.8
6	Magulilwa	0	28	36	64	4.0
7	Luhota	0	36	28	64	4.0
8	Mgama	7	35	47	89	5.6
9	Lyamgungwe	0	9	46	55	3.5
10	Ifunda	8	23	21	52	3.3
11	Lumuli	13	16	27	56	3.6
12	Maboga	0	27	77	104	6.6
13	Wasa	0	32	38	70	4.4
14	Mahuninga	0	18	62	80	5.1
15	Idodi	0	28	7	35	2.2
16	Mlowa	0	18	38	56	3.5

Table 4.2 (ctd): Road Network Surface Condition by Ward, Iringa Rural District; 2012

S/N	Ward	Type(km)				Percent
		Tarmac	Gravel	Earth	Total	
17	Itunundu	0	13	39	52	3.3
18	Mlenge	0	28	27	55	3.5
19	Ilolompya	0	15	0	15	0.9
20	Nduli	13	0	56	69	4.4
21	Nyang'oro	0	99	0	99	6.3
22	Kihorogota	0	72	0	72	4.5
23	Izazi	0	62	0	62	3.9
24	Migoli	0	30	0	30	1.9
25	Malengamakali	0	25	35	60	3.8
	District Total	72	715	794	1580	100.0
	Percent	4.6	45.2	50.2	100	

Source: Iringa Rural District Council (Works Department), 2013

4.1.2 Road Passability

Roadworthiness during the rainy season is the measure of the effectiveness of the road network. Table 4.3 shows that 78.3 percent of the district's total road network is passable throughout the year while 21.7 percent is passable greater part of the year. Apart from tarmac and gravel roads, earth roads with sand soil texture of low water retention capacity are also passable even during rainy season.

Table 4. 3: Passability of Road Network in kilometres, Iringa Rural District; 2012

S/N	Ward	Passable throughout the year	Passable greater part of the year	Not Passable throughout the year	Total Road Network	Total Passable (Columns 2+3)	Percent Passable
	1	2	3	4	5		
1	Kalenga	45	0	0	45	45	100
2	Kiwere	62	18	0	80	80	100
3	Nzihi	59	17	0	76	76	100
4	Ulanda	38	26	0	64	64	100

Table 4. 3(ctd): Passability of Road Network in kilometres, Iringa Rural District; 2012

S/N	Ward	Passable through out the year	Passable greater part of the year	Not Passable through out the year	Total Road Network	Total Passable (Columns 2+3)	Percent Passable
	1	2	3	4	5		
5	Mseke	52	24	0	76	76	100
6	Magulilwa	38	26	0	64	64	100
7	Luhota	52	12	0	64	64	100
8	Mgama	61	28	0	89	89	100
9	Lyamungwe	28	27	0	55	55	100
10	Ifunda	44	8	0	52	52	100
11	Lumuli	56	0	0	56	56	100
12	Maboga	59	45	0	104	104	100
13	Wasa	58	12	0	70	70	100
14	Mahuninga	80	0	0	80	80	100
15	Idodi	35	0	0	35	35	100
16	Mlowa	56	0	0	56	56	100
17	Itunundu	52	0	0	52	52	100
18	Mlenge	45	10	0	55	55	100
19	Ilolompya	15	0	0	15	15	100
20	Nduli	57	12	0	69	69	100
21	Nyang'oro	65	34	0	99	99	100
22	Kihorogota	55	17	0	72	72	100
23	Izazi	50	12	0	62	62	100
24	Migoli	30	0	0	30	30	100
25	Malengamakali	45	15	0	60	60	100
District Total		1237	343	0	1580	1580	0
Percent		78.3	21.7	0.0	100.0		

Source: Iringa Rural District Council (Works Department), 2013

4.1.3 Major Road Connections

Table 4.4 highlights road connections and road links which connect the Iringa Rural District with the vicinity. Although the roads quality is mostly ranked well,

the majority of them are earth roads and hence regular repair is important to easy transportation of goods and services to rural areas of the District. Road of 52 km connecting Mapogoro and Msembe is the longest road link while road of 4 km connecting Ifunda and Isupilo is the shortest.

Table 4. 4: Major Road Connections and Road Links, Iringa Rural District; 2012

S/N	Ward	Road connection	Length of the road (km)	Quality of Surface	Type of road
1	Kalenga	Isakalilo - Kalenga	7	good	Regional
2	Kiwere	Mgera - Luganga	42	good	Regional
3	Nzihi	Lukwambe - Nyamahana	18	good	Regional
		Lukwambe - Magubike-Kidamali	18	good	District
4	Ulanda	Kalenga - Lukwambe	7	good	Regional
		Ibangamoyo - Weru	19	good	District
5	Mseke	Ugwachanya - Ihemi	22	good	Trunk
6	Magulilwa	Igula - Ndiwili	6	good	Regional
7	Luhota	Tagamenda - Igula	15	good	Regional
		Kitayawa - Ng'enza	21	good	District
8	Mgama	Mgama - Lupembelwasenga	28	good	Regional
		Ng'enza - Lupembelwasenga	7	good	District
9	Lyamungwe	Lupembelwasenga - Mawambala	5	good	Regional
10	Ifunda	Ihemi - Muwimbi	8	good	Trunk
		Ifunda - Udumuka	24	good	District
11	Lumuli	Isupilo - Kiponzelo	10	good	District
		Isupilo - Muwimbi	29.5	fair	District
12	Maboga	Weru - Kiponzelo	16	good	District
		Kiponzelo - Usengelindete	14	good	District
		Ifunda - Isupilo	4	good	District

Table 4.4(ctd): Major Road Connections and Road Links, Iringa Rural District; 2012

S/N	Ward	Road connection	Length of the road (km)	Quality of Surface	Type of road
13	Wasa	Usengelindete - Ikungwe	26	good	District
14	Mahuninga	Tungamalenga - Mahuninga	18	good	District
15	Idodi	Mapogoro - Msembe	52	good	Regional
16	Mlowa	Nyamahana - Mapogoro	26	good	Regional
17	Itunundu	Mbuyuni - Itunundu	12	good	Regional
18	Mlenge	Mbuyuni - Mlowa	42	good	Regional
19	Ilolompya	Luganga - Mkombilenga	16	good	Regional
20	Nduli	Nduli - Kising'a	18	good	Trunk
21	Nyang'oro	Kising'a - Izazi	32	good	Trunk
22	Kihorogota	Kihorogota - Igula	10	good	District
		Isimani - Ilambilole -Kising'a	36	good	District
23	Izazi	Izazi - Migoli	18	good	Trunk
24	Migoli	Migoli - Mtera	22	good	Trunk
25	Malengamaka li	Igula - Mkulula -Isaka	37	good	District
Total			685.5		

Source: Iringa Rural District Council (Works Department), 2013

4.1.4 Agricultural Productivity of the Road Network

The economy of Iringa Rural District is based on agricultural production. The economic effectiveness of the road network is therefore best assessed against agricultural production. It is agricultural productivity of the network that justifies its existence. Iringa Rural District's road network covered agricultural production at 199.6 tonnes of food and cash crops per kilometer of road. This means that during the crop season of 2011/12, on average, one kilometer of the road network in the District facilitated transportation of 199.6 tonnes of both food and cash crops. Therefore, for improving the economy of rural population at significant

level, construction of more roads is important to easy transportation of agricultural products and other goods/services within and outside the District.

Table 4. 5 : Agricultural Productivity of the Road Network, Iringa Rural District; 2011/12

Total Road Length (km)	Agricultural Production (tonnes)			Tonnes/km
	Food crops	Cash crops	Total	
1,580.4	272,538	42,899	315,437	199.6

Source: Iringa Rural District Council (Works Department), 2013

4.2 Railway Services

Iringa Rural District is a bit unlucky since there is no railway line passing through the District. The nearby railway line is Tanzania Zambia Railway Line (Well known as TAZARA Railway Line). This Railway line through Makambako Railway Station which is about 150 km from the district's headquarters would give the district an affordable and alternative means of transport for heavy and bulk goods. Good can be transported from Makambako to Dar es Salaam, Mbeya and even to Zambia through this railway line.

4.3 Air Services

There is no airport in Iringa Rural District. Air services are provided by Nduli Airport, the region's airport which is about 15 km from the District's headquarters. Further to that, one airstrip in Ruaha National Park is for tourism purposes.

4.4 Telecommunications

The district enjoys internet and telephone services (both cellular phone and land line telephone services). Due to lack of customers, the Tanzania Posts Services (TPC) closed its sub post office which was operating in Kalenga. District headquarters located in Iringa town centre is the only privileged area in the

district as it is well access all the available services highlighted above. Peripheral areas access cellular phone services though with network coverage difficulties. Unfortunately, there are no television and radio stations operating/stationed in the district. Moreover, famous Tanzania Local Television channels like Independent Television (ITV), Channel Ten, Tanzania National Broadcasting Television (TBS) and so many others are accessed in the district.

4.5 Energy Sector Development

Various sources of energy are being used in the district for domestic and commercial purposes. These include electricity, solar, firewood and charcoal. Electricity is available in very few wards that have urban or semi-urban characteristics.

4.5.1 Electricity

Electricity as energy is very important and much needed for economic development and where it is lacking, it becomes very difficult to engage in meaningful industrial development. TANESCO has continued to be the sole supplier of electricity in urban areas of the district. Other few rural areas source their electricity power from solar power and generators. The last comprehensive electricity coverage survey was carried out in 2002 and 2012 through the population census conducted by the National Bureau of Statistics. A detailed analytical report of the 2012 Census will show electricity coverage when it is disseminated. The 2002 census reports shows that during 2002, 2.27 percent of total private households in Iringa Rural District used electricity as their main source of energy for lighting. In urban areas electricity was used by 8 percent of the households and in rural areas 2.10 percent of the households used electricity. Other sources of energy were used for lighting as follows hurricane lamp (34.44 percent of total private households) pressure lamp (1.95 percent), firewood (4.60 percent), candle (0.08 percent), wick lamp (56.36 percent), solar (0.09 percent)

and other (0.22 percent). When the 2012 detailed analytical report is out the district will be able to compare the two census results and know how far the use of electricity by private households has increased.

4.5.2 Fuel wood

Woodfuel is the major source of energy for domestic use. The main use of fuel wood has been for cooking and lighting and this makes wood consumption very high in the district. Data on energy consumption are normally captured during the conduct of population and housing censuses. Since the 2012 Census results are not yet out, the 2002 census data have been used instead. The 2002 Population and Housing Census, revealed that the proportion of households using firewood as their main source of energy for cooking was 96 percent. About 12 percent of all households in the district used charcoal which is also a product of wood as the main source of energy for cooking.

4.5.3 Biogas and Solar Energy

Biogas is not being used in the district, but can be used as an alternative source of energy in order to reduce the excessive use of fuel wood and charcoal for cooking purposes. On the other hand, solar energy is now used as alternative source of energy in some parts of Iringa Rural District. To date there is no accurate data on the number of use of solar energy. It is important for the District to continue encouraging people to use such kind of sources of energy as alternatives to fuel wood and charcoal in order to reduce the pressure being exerted on forests.

4.5.4 Fossil Fuel

The 2002 Population and Housing Census indicated that 0.78 percent of the households in Iringa Rural District used kerosene/paraffin for cooking in the District. The results further revealed that the percentage of households that used the various sources of energy for lighting was categorized as follows: electricity

(2.27 percent), hurricane lamp (34.44 percent), wick lamp (56.36 percent), and pressure lamps (1.95 percent), candle (0.08 percent) and solar (0.09 percent).

4.6 Policy Implication on Economic Infrastructures

With 50.2 percent of total road length of the district being earth roads, improvement of road infrastructures is recommended. The improved road will have multiplier effect such as increase transportation of goods and social services and improve social welfare of the people in Iringa Rural District. Moreover, as majority of Iringa Rural population use firewood and charcoal for cooking and with only 2.27 percent (2002 Census data) using electricity for lighting, initiatives are needed to find alternative source of energy for cooking so as reducing destruction rate of forest cover. Addition to that, electricity costs have to be further reduced especially in rural areas to increase number of electricity users.

CHAPTER FIVE

Social Services

5.0 Introduction

This Chapter discusses the status of social services that are available in Iringa Rural District and cover the development of health sector in terms of preventive and curative measures against 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 discussed in this Chapter. It highlights education performance based on the increase of school facilities; pre-primary, primary and secondary educations, enrolment performance; school infrastructure and quality of education are also discussed.

Water supply and sanitation is also discussed in this Chapter. Performance of water supply for both rural and urban areas of Iringa Rural district highlighted in terms of sources, technology and capacity of water supply. However, sanitation level at the District is also briefly explained.

5.1 Health Sector

5.1.1 Health Facilities

The status of health services in any district can easily be visualised through health infrastructures, availability and commitments of health practitioners, implementation of preventive and curative measures and availability of medicines. The main objective of any local government authority and the nation as a whole is to ensure provision of quality and timely health services to the community. In terms of health infrastructure, the number increased from 38 in 1988 to 47 in 2008 and reached 77 in 2012. As a result, Iringa Rural District has

managed to raise its ratio of facilities per ward from 1.9 in 2008 to 3.1 in 2012 while the pressure of villages on facilities was reduced from 2.6 villages per facility in 2008 to 1.6 in 2012 (Table 5.1).

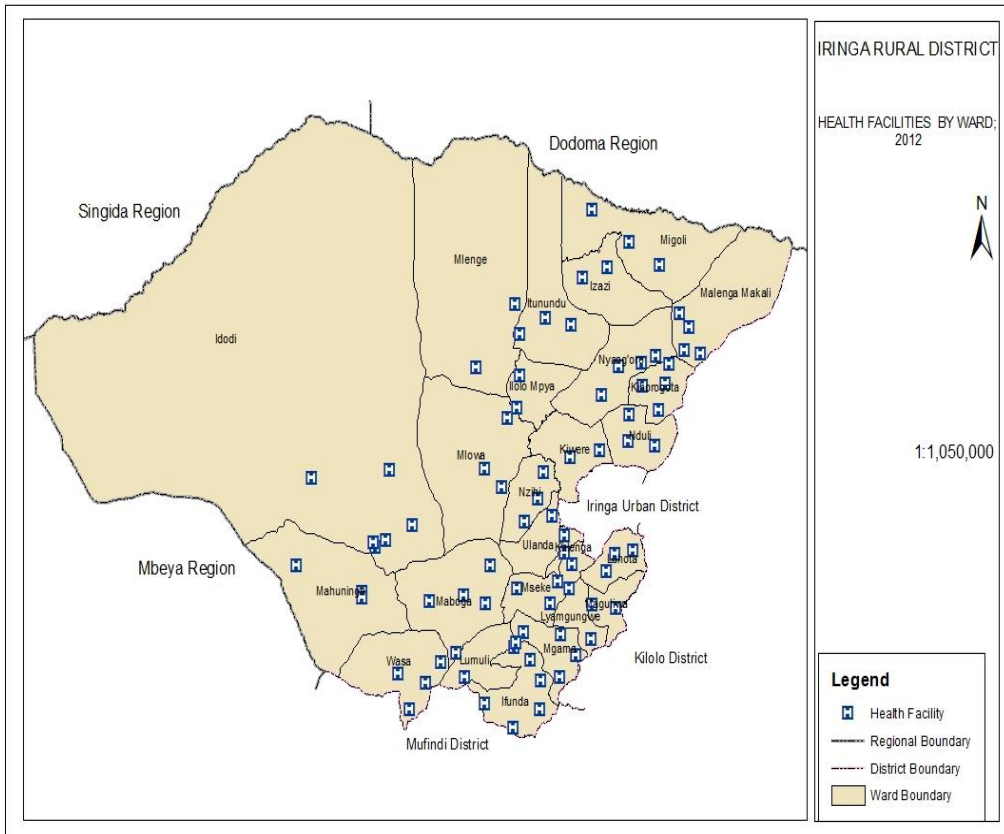
Table 5. 1: Growth and Distribution of Health Facilities by Division, Iringa Rural District, 1988, 2008 and 2012

Division	Wards	Villages	Total Health Facilities			Facilities per Ward		Villages per Facility	
			1988	2008	2012	2008	2012	2008	2012
Kalenga	4	20	5	5	8	1.3	2.0	4.0	2.5
Mlolo	5	27	8	8	13	1.6	2.6	3.4	2.1
Kiponzeo	4	22	6	11	17	2.8	4.3	2.0	1.3
Idodi*	3	9	6	7	12	2.3	4.0	1.3	0.8
Pawaga	3	12	3	4	7	1.3	2.3	3.0	1.7
Isimani	6	33	10	12	20	2.0	3.3	2.8	1.7
Total	25	123	38	47	77	1.9	3.1	2.6	1.6

Source: Iringa Rural District Executive Director's Office

Table 5.1a indicates that Iringa Rural District has a hospital, 8 health centres and 68 dispensaries, of which Ipamba hospital has been designated as the District Referral Centre-receiving patients from peripheral health facilities within and outside the District. Despite efforts made by the District Authority, the District still has shortages of health centres and dispensaries which cause unnecessary loss of peoples' lives through preventable diseases. Ulanda is the most affected ward with a ratio of 6 villages per dispensary followed by Kalenga, Mseke and Magulilwa (3 Villages per dispensary each). Only Ifunda and Mlolwa wards had the best ratio of one village per dispensary. The District has a long way to go to implement fully the national policy of one health centre per ward and a dispensary per village.

Map 3 : Showing Distribution of Health Facilities by Ward, Iringa Rural District Council; 2012



Source: National Bureau of Statistics, Cartographic Section, Field Operations Department, 2013

Table 5.1 a : Availability of Health Facilities and Ratio of Villages per Dispensary by Ward, Iringa Rural District, 2012

Ward	Number of Village	Hospital	Health Centres	Dispensaries	Total	Villages per Dispensary
Kalenga	3	1	0	1	2	3.0
Kiwere	5	0	0	2	2	2.5
Nzihi	6	0	0	3	3	2.0
Ulanda	6	0	0	1	1	6.0
Mseke	6	0	1	2	3	3.0
Magulilwa	6	0	0	2	2	3.0
Luhota	5	0	0	3	3	1.7
Mgama	5	0	0	3	3	1.7
Lyamgungwe	5	0	0	2	2	2.5
Ifunda	5	0	1	5	6	1.0
Lumuli	4	0	0	2	2	2.0
Maboga	6	0	1	4	5	1.5
Wasa	7	0	0	4	4	1.8
Mahuninga	2	0	1	2	3	1.0
Idodi	4	0	1	5	6	0.8
Mlowa	3	0	0	3	3	1.0
Itunundu	4	0	1	2	3	2.0
Mlenge	4	0	0	2	2	2.0
Ilolompya	4	0	0	2	2	2.0
Nduli	6	0	0	3	3	2.0
Nyang'oro	6	0	0	4	4	1.5
Kihorogota	7	0	1	3	4	2.3
Izazi	3	0	0	2	2	1.5
Migoli	6	0	1	2	3	3.0
Malengamakali	5	0	0	4	4	1.3
Total	123	1	8	68	77	1.6

Source: District Executive Director's Office

5.1.2 Population per Health Facility

Looking at population against health facilities, the District managed to reduce the mean average population per facility from 5,834 people in 2002 to 3,299 people in 2012. The reduction has been achieved by increasing health facilities from 42 in 2002 to 77 in 2012. In regard to health facilities per 10,000 people, the ratio has increased from 1.7 in 2002 to 3.0 in 2012.

At divisional level, Pawaga Division had the smallest mean average persons per facility (3,128) in 2002 followed by Idodi (3,567) and Kiponzeo (5,359). Similar trend of uneven distribution of population per health facility and facilities per 10,000 people were observed in 2012, when Idodi Division had the smallest mean average population per facility (2,001) followed by Isimani (2,484) and Kiponzeo (2,546). On the other hand, Kalenga had the largest mean average population per facility in both 2002 and 2012 (Table 5.2).

Table 5. 2 : Relating Health Facilities to the Population by Division, Iringa Rural District, 2002 and 2012

Division	2002				2012			
	Total Population	Total Number of h.f.s	Mean Average Population Per h.f.s	H.f.s / 10,000 people	Total Population	Total Number of h.f.s	Mean Average Population Per h.f.s	H.f.s /10,000 people
Kalenga	41,069	6	6,845	1.5	40,868	8	5,109	2.0
Mlolo	65,515	6	10,919	0.9	65,923	13	5,071	2.0
Kiponzeo	42,872	8	5,359	1.9	43,288	17	2,546	3.9
Idodi	21,400	6	3,567	2.8	24,016	12	2,001	5.0
Pawaga	18,765	6	3,128	3.2	30,259	7	4,323	2.3
Isimani	55,412	10	5,541	1.8	49,678	20	2,484	4.0
Total	245,033	42	5,834	1.7	254,032	77	3,299	3.0

Source: District Executive Director's Office

As the available official health facilities were not enough to serve the ever growing population of Iringa Rural District, primary rural health centres were established to complement the existing official health infrastructure. These centres

are operated by Village Health Workers (VHWs) assisted by Traditional Birth Attendants (TBAs) under supervision of Village Health Committees (VHCs). Table 5.3 shows that in 2012, the District had 139 trained Traditional Birth Attendants, 224 Village Health Workers and 112 Village Health Committees.

Table 5.3 also shows that in 2012 the average number of Trained Traditional Birth Attendants per village was 1.1 and that of Village Health Workers per Village was 1.8. However, Table 5.3 also shows the average number of health carders per village for each division. Pawaga Division had the best ratio (2.8) for TBAs, while Idodi Division had the best ratio (2.0) for VHWs. As it can be seen in Table 5.3, there is still a shortage of the complementary rural health facilities in the District.

Table 5. 3 : Distribution of Complementary Rural Health Facilities by Division, Iringa Rural District, 2012

Division	No. of Village	Total Trained TBAs	Ratio of TBAs per Village	No. of VHWs	Ratio of VHWs per Village	No. of VHC	No. of TMP (Registered)
Kalenga	20	35	1.8	38	1.9	19	1
Mlolo	27	34	1.3	50	1.9	25	4
Kiponzeo	22	21	1.0	40	1.8	20	9
Idodi	9	2	0.2	18	2.0	9	1
Pawaga	12	34	2.8	22	1.8	11	0
Isimani	33	13	0.4	56	1.7	28	0
Total	123	139	1.1	224	1.8	112	15

TMP: Traditional Medical Practitioners

Source: District Executive Director's Office

5.1.3 Population per Doctor and Hospital Bed Ratios



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

Table 5.4 shows average population per hospital bed and doctor. Involvement of private sector in the provision of health services in Iringa Rural District has increased the number of hospital beds from 248 in 2008 to 289 in 2012. In 2012, Mlolo Division had the worst access to the hospital bed at 4,329 persons per bed followed by Kiponzeo Division which had 3,296 persons per bed, while Kalenga Division (204 persons per bed) had the best access due to the number of beds in the a district hospital and health centre.

Table 5.4 also indicates that the District Council had a serious problem with the availability of practitioners. The district had only 10 doctors to the district population of 254,032, with an average of 25,403 persons per doctor. Mlolo was the worst division with no doctor followed by Kiponzeo (65,923 persons per doctor) and Isimani (49,679 persons per doctor). However, Kalenga Division was the best division with a ratio of 6,811 persons per doctor followed by Idodi division (24,016 persons per doctor).

Table 5. 4 : The Number of Hospital Beds, Doctors, Average Population per Bed and Doctor by Division, Iringa Rural District, 2012

Division	2012 Population	Number of Beds			Population/ Bed, 2012	No. of Doctors	Population / Doctor
		2008	2010	2012			
Kalenga	40,868	169	169	200	204	6	6,811
Kiponzeo	65,923	20	20	20	3,296	1	65,923
Mlolo	43,288	0	10	10	4,329	0	*
Idodi	24,016	17	17	17	1,413	1	24,016
Pawaga	30,259	22	22	22	1,375	1	30,259
Ismani	49,678	20	20	20	2,484	1	49,678
Total	254,032	248	258	289	879	10	25,403

*There is no Doctor, MO, AMO in the Division

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

5.1.4 Status of Health Personnel

The provision of quality health service depends on, among others, the availability of qualified practitioners, hospital equipment and medicines. Table 5.5 shows that the availability of medical personnel for the 2012 was uneven and in favour of females. Out of 318 medical staffs, 68.6 percent were females with large numbers in nursing and medical attendant, cadres. The District had shortage of specialist doctors, dental surgeons, assistant dental surgeons and radiologists in 2012.

Table 5. 5: Type and Number of Medical Personnel, Iringa Rural District, 2012

Medical Personnel	Number of Medical Personnel			
	Male	Female	Percent Female	Total
Specialist Doctors	0	0	0.0	0
Medical Officer	5	0	0.0	5
Ass. Medical Officers	9	2	18.2	11
Clinical Officers	40	17	29.8	57
Ass. Clinical Officers	12	5	29.4	17
Dental officer	1	0	0.0	1
Ass. Dental Officer	1	0	0.0	1
Dental Therapist	0	1	100.0	1
Pharmacists	2	0	0.0	2
Pharmaceutical Technologist	1	1	50.0	2
Pharmaceutical Assistant	1	2	66.7	3
Laboratory Technicians	2	1	33.3	3
Laboratory Assistants	3	6	66.7	9
Physiotherapist	1	0	0.0	1
Nutritionist	1	0	0.0	1
Assistant Environmental Health Officer	5	4	44.4	9
Nursing Officers	1	12	92.3	13
Trained Nurse/NM/PHN	1	107	99.1	108
Assistant Nurse Officer	0	7	100.0	7
Medical Attendants	5	50	90.9	55
Assistant social Welfare Officer	0	1	100.0	1
Health Assistants	0	0	0.0	0
Health Secretaries	1	1	50.0	2
Other Medical Carders	8	1	11.1	9
Total	100	218	68.6	318

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

5.1.5 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 reported causes of illnesses are those given in Table 5.6.

5.1.5.1 Out-patients

Out of 174,966 out-patients recorded in 2010, 78.8 percent were suffering from one or the other of the first five illnesses. ARI ranked first as a cause of morbidity in Iringa Rural District. Pneumonia ranked second and the third disease in ranking was malaria. The fourth and fifth diseases were diarrhoea and skin infection respectively.



ARI was ranked first cause of morbidity in Iringa Rural District

Observations made in 2012 were almost similar to those of 2011 in regard to the first five diseases except the number of reported cases. The report again reveals that ARI came first with a total of 33,494 (42.9 percent) of out - patients, followed by malaria (14.9 percent of out - patients) and diarrhoea (11.4 percent) ranked

third. The fourth and fifth diseases were pneumonia and skin diseases (9.6 percent of cases) and (6.8 percent of cases), respectively.

Table 5. 6 : List of the Ten Most Commonly Reported Causes of Morbidity (Out Patients Only), Iringa Rural District, 2011 and 2012

S/No	2011			2012		
	Disease	Number of Occurrence	Percent Share	Disease	Number of Occurrence	Percent Share
1	ARI	69,575	39.8	ARI	33,494	42.9
2	Pneumonia	18,365	10.5	Malaria	11,637	14.9
3	Malaria	19,573	11.2	Diarrhoea	8,937	11.4
4	Diarrhoea	17,543	10.0	Pneumonia	7,499	9.6
5	Skin Infection	12,884	7.4	Skin diseases	5,343	6.8
	Sub Total	137,940	78.8		66,910	85.7
6	Minor surgical condition	12,805	7.3	Intestinal worms	5,189	6.6
7	Intestinal worms	9,997	5.7	Eye conditions	2,010	2.6
8	Eye Infection	5,554	3.2	Ear conditions	1,440	1.8
9	UTI	5,491	3.1	Genital discharge	1,527	2.0
10	Ear Infection	3,179	1.8	Oral condition	983	1.3
	Total	174,966	100.0	Total	78,059	100.0

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

5.1.5.2 In-patients

A similar trend was observed for in-patients though there was a slight difference in the ranking and magnitude of cases. Out of 6,672 in patients recorded in 2010, 80.3 percent were suffering from one of the first five illnesses. In 2012 the first five causes of morbidity accounted to 76.2 percent of 4,139 in-patients. Moreover, the health data for in-patients in 2010 reveals that anaemia illness ranked first, pneumonia second, ARI third while and malaria ranked fourth and UTI fifth cause of morbidity in Iringa Rural District, while the first five diseases causing morbidity in 2012 were pneumonia, diarrhoea, malaria, ARI and UTI (Table 5.7).

HIV/AIDs and TB diseases were ranked eighth and tenth causes of morbidity in 2010, but were in seventh and ninth positions respectively in 2012 indicating an increase of their prevalence in the District.

Table 5. 7 : List of the Ten Most Commonly Reported Causes of Morbidity (In - Patients Only), Iringa Rural District, 2011 and 2012

S/No.	2011			2012		
	Disease	No. of Occurrence	Percent Share	Disease	No. of Occurrence	Percent Share
1	Anaemia	2,317	34.7	Pneumonia	961	23.2
2	Pneumonia	1,126	16.9	Diarrhoea	910	22.0
3	ARI	676	10.1	Malaria	504	12.2
4	Malaria	672	10.1	ARI	404	9.8
5	UTI	564	8.5	UTI	376	9.1
	Sub Total	5,355	80.3	Sub Total	3,155	76.2
6	Skin Infection	390	5.8	Fractures	281	6.8
7	Diarrhoea	388	5.8	HIV/AIDs	217	5.2
8	HIV/Aids	210	3.1	Anaemia	205	5.0
9	Fracture	198	3.0	TB	147	3.6
10	Tuberculosis	131	2.0	Cardiac Failure	134	3.2
	Total	6,672	100.0	Total	4,139	100.0

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

5.1.6 Mortality

The dominant cause of mortality for inpatients of all ages in 2010 was HIV/AIDs (Table 5.8). Table 5.8 shows that out of 211 reported deaths in 2010, 76.8 percent were caused the first five diseases, of which clinical was accounted for 26.5 percent, followed by pneumonia (16.1 percent),), cardiac failure (12.8 percent), diarrhoea (11.4 percent) and Anaemia (10.0 percent).

In 2012, the main cause of mortality for inpatients of all ages was diarrhoea (25.4 percent) followed by clinical Aids (23.1 percent), pneumonia (15.4 percent), cardiac failure and TB (6.7 percent each). Lack of information besides hospital records at ward level leads to wrong information on death toll at grass – root level which is advocated by the Decentralisation by Devolution Policy (D by D Policy) and limit the sector department to understand the performance of health sector on curative and preventive measures done at grass – root level. Therefore, there is a need of strengthening the data collection system of health (MTUHA).

Table 5.8 : List of the Ten Most Commonly Reported Causes of Mortality in Iringa Rural District (In Patients Only), 2011 and 2012

S/No.	2011			2012		
	Disease	No of Occurrence	Percent Share	Disease	No. of Occurrence	Percent Share
1	HIV/AIDs	56	26.5	Diarrhoea	76	25.4
2	Pneumonia	34	16.1	HIV/AIDs	69	23.1
3	Cardiac failure	27	12.8	Pneumonia	46	15.4
4	Diarrhea	24	11.4	Cardiac Failure	20	6.7
5	Anaemia	21	10.0	TB	20	6.7
	Sub Total	162	76.8	Sub Total	231	77.3
6	PEM	15	7.1	PEM	19	6.4
7	Malaria	10	4.7	Anaemia	15	5.0
8	ARI	9	4.3	Peptic Ulcers	12	4.0
9	Hypertension	9	4.3	Malaria	11	3.7
10	Non gastro Enteritis	6	2.8	Respiratory disease	11	3.7
	Total	211	100.0	Total	299	100.0

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

5.1.6.1 HIV/AIDS Infections

The modern health problem of HIV/AIDS is the single most important cause of morbidity a threat to the survival of the human race. In the country, AIDS has now caught up with malaria and tuberculosis as the greatest causes of death among in-patients. The big problems of malaria and tuberculosis are virtually static while that of HIV/AIDS is on the upsurge. Hence, the assessment of HIV/AIDS prevalence along with its control is the single greatest challenge to the health delivery system in the District and country at large.

Though it is not known when the first HIV/AIDS case was diagnosed, the available data indicates that first HIV/AIDS case in Iringa Rural District was reported in early 1990s. Since then, the number of new AIDS cases being reported each year has been on the fluctuating with no sign of stagnating or reversal. Figure 21 shows HIV/AIDS prevalence among sexes in Iringa Rural District. It shows that in the period referred to more women than men were infected.

Figure 21 : New AIDS Cases Diagnosed from Family Blood Donors, Iringa Rural District, 2009-2011



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

Although there are a number of ways that can be used to measure the extent and trend of HIV prevalence among the people, the ones used in Iringa Rural District are testing family blood donors, prevalence among VCT and expected mothers participating in the PMTCT Service.

Though hospital records are not exhaustive since they exclude unreported incidents, they can provide indicative information on HIV/AIDs prevalence at district level. Table 5.9 shows that out of 93,251 screened persons from 2010 to 2012, 4,773 (equivalent to 5.1 percent) were reported to be HIV positive. Table 5.9 also indicates that HIV infection has been fluctuating, 2,943 out of 74,182 persons tested in 2010 or 4.0 percent were positive. The percentage of affected persons increased to 11.1 percent out in 2011 and then dropped to 8.1 percent in 2012. Females were more affected than males in the referred to period as Table 5.9, shows.

Table 5. 9 : HIV Infections among Family Blood Donors, Iringa Rural District, 2010-2012

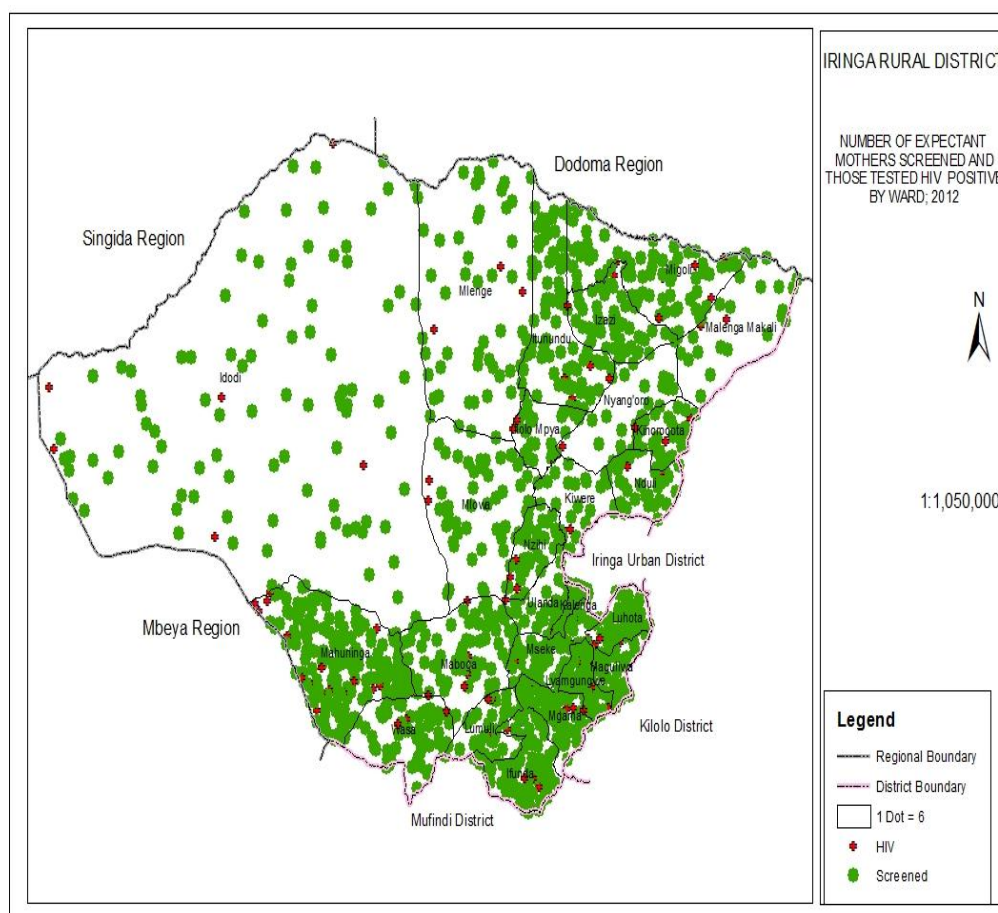
Year	No. Persons Tested			No. Persons with HIV+			Percent of HIV+		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2010	66,624	7,558	74,182	1,388	1,555	2,943	2.1	20.6	4.0
2011	3,978	5,735	9,713	435	638	1,073	10.9	11.1	11.0
2012	4,200	5,156	9,356	308	449	757	7.3	8.7	8.1
Total	74,802	18,449	93,251	2,131	2,642	4,773	2.8	14.3	5.1

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

The prevalence of HIV/AIDS can also be estimated through PMTCT Service. Table 5.10 reveals that out of 7,727 expectant mothers who participated in that service and were screened, 7.6 percent of them were found to be HIV positive. Kalenga ward had the highest rate of infection (10.3 percent) among expectant mothers. Mahuninga was the second most affected ward with the affected

accounting for 10.0 percent of the screened expectant mothers. It was followed by Limuli (8.7 percent) and Izazi (8.6 percent), while Mlowa had smallest percentage (5.1 percent) of expectant mothers who were HIV positive. Table 5.10 also shows that 96.9 percent of HIV positive expectant mothers were given Niverapine in Iringa Rural District.

Map 4 : Showing Number of Expectant mothers Sreened and those Tested HIV positive by Ward; 2012



Source: National Bureau of Statistics, Cartographic Section, Field Operations Department, 2013

Table 5.10 : Expectant Mothers who Participated in the PMTCT Service by Ward, Iringa Rural District, 2012

S/NO.	Ward	No of ANC Attendants	No Screened	No of HIV+	% of HIV+	No Given Niverapine ACT	% Given Niverapine ACT
1	Kalenga	1,112	996	103	10.3	101	98
2	Kiwere	152	127	9	6.2	9	100
3	Nzihi	261	248	19	7.6	18	94.7
4	Ulanda	127	104	6	5.8	6	100
5	Mseke	360	291	19	6.5	17	89.4
6	Magulilwa	195	190	13	6.7	12	92.3
7	Luhota	239	238	19	7.9	19	100
8	Mgama	367	368	28	7.6	27	96.4
9	Lyamungwe	507	499	37	7.4	36	97.2
10	Ifunda	513	501	39	7.6	37	94.8
11	Lumuli	205	183	16	8.7	16	100
12	Maboga	369	357	26	7.2	25	96.1
13	Wasa	349	333	24	7.2	23	95.8
14	Mahuninga	156	150	15	10.0	15	100
15	Idodi	594	573	36	6.2	34	94.4
16	Mlowa	301	274	14	5.1	14	100
17	Itunundu	516	473	26	5.4	25	96.1
18	Mlenge	287	275	18	6.5	18	100
19	Ilolompya	167	159	11	6.9	11	100
20	Nduli	221	198	14	7.0	13	92.8
21	Nyang'oro	180	104	7	6.7	7	100
22	Kihorogota	301	204	17	8.3	16	94.1
23	Izazi	328	276	24	8.6	24	100
24	Migoli	490	480	40	8.2	39	97.5
25	Malengamakali	279	126	10	7.9	10	96.9
Total		8,576	7,727	590	7.6	572	96.9

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

the extent and significance of HIV prevalence in Iringa Rural District since it involves moral Establishment of VCT services in remote areas provide a reliable source of data on and willingness of inhabitants to be screened. Table 5.11 shows that out of 6,030 males screened 13.5 percent were affected with HIV/AIDS and 16.0 percent of the 6,693 females tested were HIV positive.

Table 5.11 : Group of VCT Volunteers Who Screened for HIV and Those Subsequently Treated with ARV by Sex and Ward, Iringa Rural District, 2012

S/N	Ward	No of Screened		No. of HIV+		Percent of HIV+		No of Treated with ARV	
		Male	Female	Male	Female	Male	Female	Male	Female
1	Kalenga	557	422	138	159	24.7	37.6	144	182
2	Kiwere	130	108	2	2	1.5	1.8	2	5
3	Nzihi	793	843	63	98	7.9	11.6	336	402
4	Ulanda	278	211	69	79	24.8	37.0	118	141
5	Mseke	279	449	34	70	12.0	15.6	202	242
6	Magulilwa	211	363	20	26	9.0	7.0	71	101
7	Luhota	132	150	16	22	12.0	14.6	30	47
8	Mgama	241	331	29	55	12.0	16.6	166	206
9	Lyamgungwe	434	490	28	25	6.5	5.0	20	41
10	Ifunda	220	253	39	65	17.7	25.7	21	34
11	Lumuli	171	193	34	43	19.9	22.2	33	68
12	Maboga	386	143	41	41	10.6	28.7	131	160
13	Wasa	126	157	20	23	15.9	14.6	87	106
14	Mahuninga	105	153	21	23	20.0	18.0	75	103
15	Idodi	133	287	32	46	24.0	16.0	164	187
16	Mlowa	111	25	3	0	2.7	0.0	18	42
17	Itunundu	190	326	16	34	8.4	10.6	20	31
18	Mlenge	94	110	12	19	1.1	17.2	5	11
19	Ilolompya	82	89	5	8	6.1	8.6	13	18
20	Nduli	105	126	12	16	11.4	12.6	29	43
21	Nyang'oro	120	171	15	20	12.5	11.7	57	80
22	Kihorogota	422	505	48	63	11.4	12.5	145	154
23	Izazi	226	253	40	45	17.7	17.8	157	172
24	Migoli	452	506	81	91	17.9	17.9	202	278
25	Malengamakali	32	29	0	0	0.0	0.0	49	71
Total		6,030	6,693	818	1,073	13.5	16.0	2,295	2,925

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

5.1.6.2 The Impact of HIV/AIDS

The socio-economic assessment of Iringa Rural District 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 a leading cause of mortality for the working age group since its advent at the end of 1987. The other reason for discussing the epidemic stems from the role it plays in impoverishing families and generating widows, orphans and vulnerable children due to the loss of bread-winners.

The report from the District Medical Office (DMO) qualifies Iringa Rural as among few districts with ever increasing rates of HIV/AIDS prevalence in Iringa Region. There are socio-economic factors that account for the rapid spread of the epidemic. Economically, Iringa Rural people are migrant labourers and industrialists who do business in various parts of the country, which makes it easy for them to engage in romantic relationships. Other reasons include the traditional practice of prolonged drinking and unsafe sexual practices, polygamy as well as poverty. The poor, especially young girls who migrate to urban centres end up being domestic workers for sometime before resorting to prostitution for survival.

(i) The Increase of Widows

Understanding the status of HIV/AIDS prevalence in Iringa Rural is very difficult since many people die before reaching the hospital. With exception of 2009, lack of VCT in remote areas where people can be tested in order to know their health status is a problem. Therefore, it is possible people to live with the HIV/AIDS virus without knowing that they have it.

One of the indication of a high prevalence rate in the District is the increasing number of widows. The data gathered in 2002 population census showed that 7.0

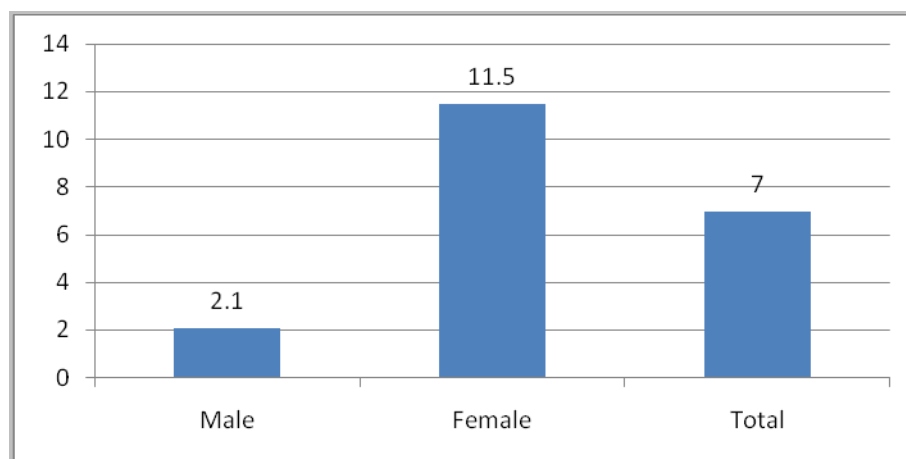
percent of person aged 10 years and above were widowed. The proportion of the widowed was higher for women (11.5 percent) than men (2.1 percent) Table 5.12, There is a need of conducting a study that will gather information from the widowed and their problems in order to come up with appropriate measures and solutions.

Table 5. 12: Total Population 10 Years and Above by Marital Status and Sex, Iringa Rural District, 2002

Marital Status	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Single/Never Married	44,688	32,468	77,156	55.3	36.9	45.7
Married/Living Together	32,937	42,130	75,067	40.8	47.9	44.5
Divorced/Separated	1,505	3,146	4,651	1.9	3.6	2.8
Widowed	1,696	10,136	11,832	2.1	11.5	7.0
Total	80,826	87,880	168,706	100.0	100.0	100.0

Source: The 2002 Population and Housing Census (Vol. IV), Iringa Rural District Profile Report, 2004

Figure 22 : The Percentage of Widows by Sex, Iringa Rural District, 2002

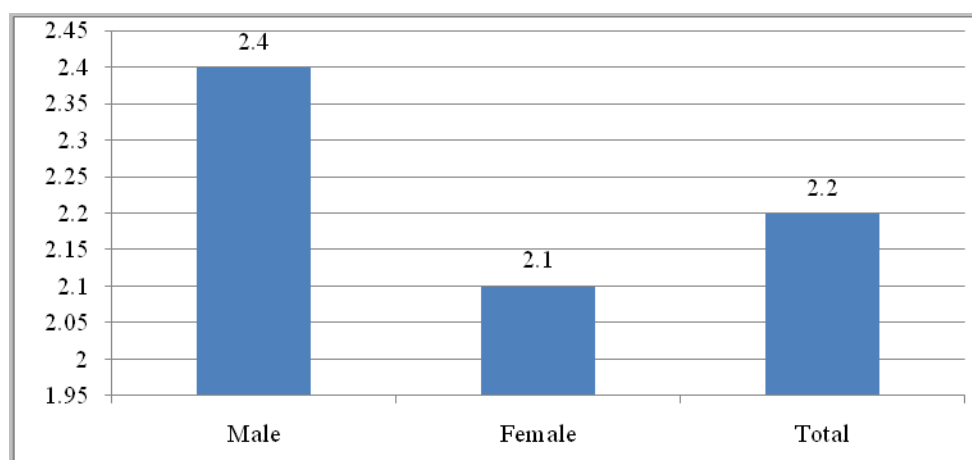


Source: The 2002 Population and Housing Census (Vol. IV), Iringa Rural District Profile Report, 2004

(ii) The Increase of Orphaned Children

Orphans are considered to be persons for whom both parents, mother and father, are dead or persons with a single parent; whether father or mother. Data on survival of parents collected in the 2002 Census were used to determine the extent of orphanhood in Iringa Rural District as Figure 23 shows. According to the 2002 Census, 2.2 percent of children aged 0 – 17 years were orphans. Comparing sexes, the incidence of orphanhood was higher among boys (2.4 percent) than girls (2.1 percent) (Figure 23).

Figure 23 : Percentage Distribution of Child Orphans by Sex, Iringa Rural District, 2002



Source: The 2002 Population and Housing Census (Vol. IV), Iringa Rural District Profile Report, 2004

(iii) Child Labour

Since the economy of Iringa Rural District is dominated by peasant agriculture, most families face hardship and, cannot afford school contributions and expenses to meet basic needs for their families due to family size. As a result, children from these families opt to work in order to sustain their lives and those of other siblings.

Poverty compounded with other difficulties have led to the weakening of extended family system. The break down of extended families which acted as a safety net for children who had no parents, causes orphans to find alternative means of survival such as engaging in the prostitution for young girls and work for boys. Therefore children move out of their homes to search for food and shelter. Parental negligence by some parents due to alcohol, drug abuse, desertion and general laxity; and attractions due to peer pressure from those who return home motivate some children to join the labour market.

The magnitude of child labour is unknown because their employment is illegal but some studies confirm that Iringa Rural District experiences an ever increasing problem of child labour. The experiences have identified the causes of childlabour as the poverty that persist in the District mostly in the rural areas, deaths of parents/guardians, parental negligence, the changing family culture, peer presure, gender imbalance and rural – urban linkages. The indicative information for children who were abandoned by their parents are those found in urban centers such as Mafinga, Iringa, Mbeya, Morogoro and Dar es Salaam who were in one way or another engaged in child labour, prostution and street children. Nevertheless, District Authority should conduct a study/survey to understand the magnitude of child labour and street children who are rooming in urban centres including Iringa Rural Bus Stand.

5.1.6.3 Malaria Prevalence

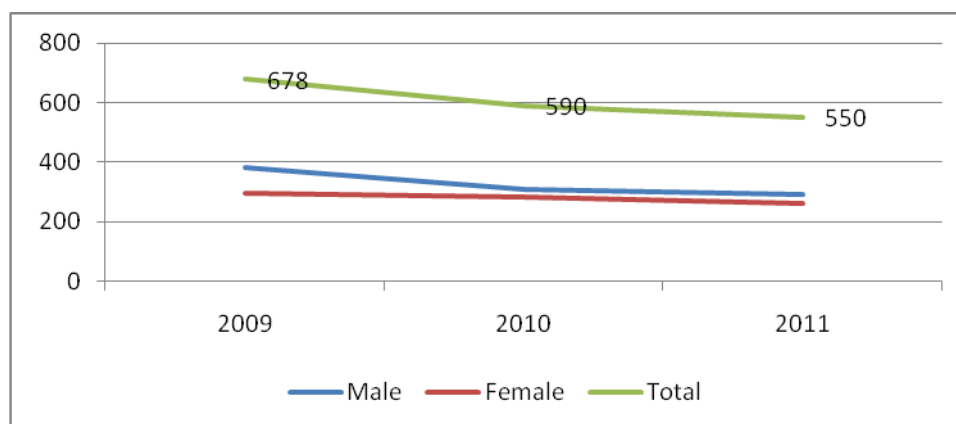
Malaria is the most killer disease in the country and also considered as the major cause of death for people living with HIV/AIDs in the country. Based on this fact, the government decided to combat malaria along with HIV/AIDs disease. Until 1995, the District considered malaria as a major disease. Iringa Rural like other districts in the country has decided to use methods similar to those used by the whole nation to fight against malaria. Data shows a successful effort done by the

district to reduce malaria prevalence. To date, malaria is no more a major disease as reported by health services. In 2010, malaria was ranked fourth as a cause of morbidity and it ranked third in 2011. Deaths caused by malaria were few compared to other diseases and were ranked seventh and ninth killer disease in Iringa Rural District. The number of people who died because of malaria was 10 out of 211 deaths in 2011 and decreased a bit to 11 out of 299 deaths in 2012.

5.1.6.4 Tuberculosis Prevalence

Tuberculosis is a known disease in Iringa Rural District, but very few morbidity cases were reported before the advent of HIV/AIDS. The effort of government to combat tuberculosis in Iringa Rural District has shown successes since the available data indicate that the number of new tuberculosis cases has decreased in the last decade. Figure 24 shows that tuberculosis prevalence decreased from 678 in 2009 and reached to 590 in 2010 before it dropped further to 550 in 2011.

Figure 24 : Distributions of New Tuberculosis Cases by Sex in Iringa Rural District, 2009-2011



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

The magnitudes of tuberculosis prevalence among sexes differ slightly from year to year, but males were more affected than females in the reference period. Table

5.13 shows that percentages of affected males were more than females. Nevertheless, data also signifies that relapse cases of tuberculosis were declining throughout the referred to period compared to the reported ones in 2009.

Table 5. 13 : Distributions of New Tuberculosis Relapse Cases by Sex in Iringa Rural District, 2009 – 2011

Years	Male		Female		Total	Change of Cases	
	No.	Percent	No.	Percent	No.	No.	Percent
2009	382	56.3	296	43.7	678		
2010	308	52.2	282	47.8	590	-88	_13.0
2011	289	52.5	261	47.5	550	-40	_6.8

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

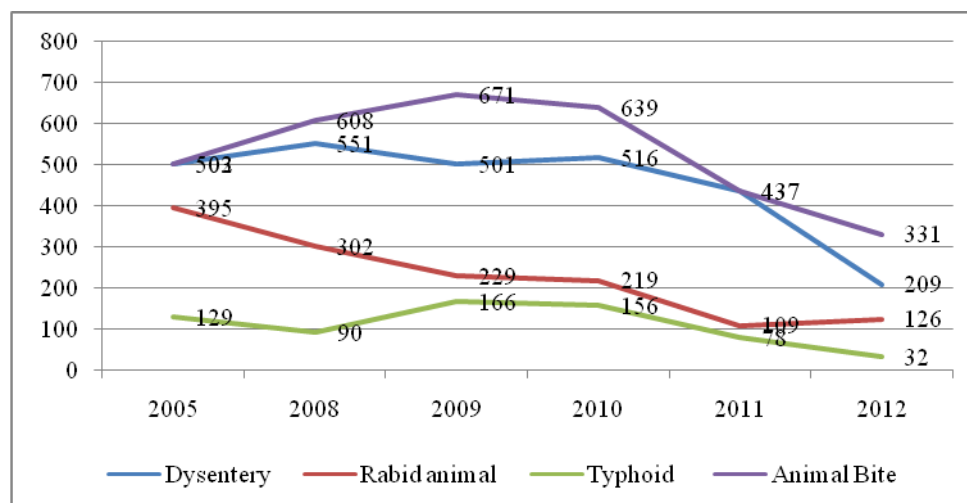
5.1.6.5 Reportable Communicable Diseases

The epidemic of reportable communicable diseases in Iringa Rural District occurs occasionally especially during rainy seasons. Table 5.14 shows that animal bite was the most dominant communicable disease followed by dysentery and rabit animal. Animal bite threatened the lives of people in 2009, when 671 cases were reported compared to 503 cases in 2005, but dropped to 331 cases in 2012. Number of cases to other communicable diseases fluctuated from year to year, but most of them were prevented earlier as indicated in Table 5.14.

Table 5. 14 : Number of Reported Cases of Reportable Communicable Diseases in Iringa Rural District, 2005 - 2012

Disease	Number of Cases					
	2005	2008	2009	2010	2011	2012
Dysentery	502	551	501	516	437	209
Rabid Animal	395	302	229	219	109	126
Typhoid	129	90	166	156	78	32
Meningitis	0	0	0	0	0	0
Animal Bite	503	608	671	639	437	331

Source: District Executive Director's Office, Iringa Rural District; 2013

Figure 25 : Trend of Reportable Communicable Diseases, Iringa Rural District, 2005 - 2012

Source: District Executive Director's Office, Iringa Rural District; 2013

5.1.7 Child Nutrition

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

Though the district was unable to provide nutrition data disaggregated to ward level, the summary given in Table 5.15 highlight nutrition status for children under one year for the entire district in three consecutive years, 2010-2012. The Table shows that severe malnutrition is still a major problem for under one year children. This is because though the trend of weighed children was decreasing, percentage of children who were severely underweight was increasing. It increased from 0.5 percent in 2010 to 1.9 percent in 2011 and reach 4.9 percent in 2012. Culture and taboos which prevent some parents feeding their children with some nutritious food like eggs as well as poverty are the main cause of severe malnutrition in the district.

Table 5. 15 : Malnutrition Status (Percentage) for Children under One Year; Iringa Rural District; 2010, 2011 and 2012

Status	2010	2011	2012
Moderately Underweight	9.7	10.6	13.1
Severely Underweight	0.5	1.9	4.9
Total Weight(number)	9,281	6,362	7,633

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

5.1.7.1 Mother and Child Health Care

Protection of expectant/lactating mothers and children from measles, tuberculosis through immunisation programme (CSPD) supported by development partners has to large extent reduced the risk of their being infected. This is evidenced by the decline of all mortality ratios related to mothers and children in 2008. Infant Mortality rate reached 60 per 1,000 persons, deaths of under five years children was estimated to be 340 per 1,000 persons and estimated maternal mortality rate was reported at 35 per 100,000 mothers.

Reduction of deaths among children and their mothers is attributed to the massive coverage of immunisation campaigns done in the District. The number of expectant mothers who were vaccinated with TT2 increased from 6,312 in 2009 to 7,771 in 2010 but decreased to 6,279 in 2011. In terms of percentages, the percentage vaccinated with TT2 increased from 66.4 percent in 2009 to 82.8 percent in 2010 before dropping to 74.4 percent in 2011. Kihorogoto Ward had the highest percentage of vaccinated expectants (597.2) in 2009 and Nzihi has the highest percentage in 2010 at 321.7 percent and also in 2011 with 230.6 percent of vaccinated expectant mothers. Wasa had the lowest coverage in 2009 (2.8 percent) and Idodi had the lowest coverage in 2010 (27.6 percent) while Ifunda had the lowest in 2011 with 9.6 percent of expectant mothers vaccinated (Table 5.16).

Table 5. 16 : Percentage of Expectant Mothers Vaccinated TT2 by Ward, Iringa Rural District, 2009, 2010 and 2011

Ward	2009			2010			2011		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kalenga	231	90	39.0	227	282	124.2	231	82	35.5
Kiwere	288	302	104.9	284	302	106.3	288	102	35.4
Nzihi	124	198	159.7	120	386	321.7	124	286	230.6
Ulanda	154	125	81.2	150	213	142.0	154	213	138.3
Mseke	433	527	121.7	429	391	91.1	433	191	44.1
Magulilwa	323	131	40.6	319	493	154.5	323	493	152.6
Luhota	289	309	106.9	285	355	124.6	289	355	122.8
Mgama	747	384	51.4	743	651	87.6	747	651	87.1
Lyamungwe	558	72	12.9	534	375	70.2	538	175	32.5
Ifunda	987	303	30.7	983	179	18.2	826	79	9.6
Lumuli	265	110	41.5	261	468	179.3	265	435	164.2
Maboga	119	324	272.3	115	190	165.2	119	90	75.6
Wasa	709	20	2.8	705	302	42.8	509	302	59.3
Mahuninga	136	322	236.8	132	198	150.0	136	198	145.6
Idodi	457	82	17.9	453	125	27.6	357	125	35.0
Mlowa	300	102	34.0	296	527	178.0	300	527	175.7
Itunundu	189	286	151.3	185	131	70.8	189	131	69.3
Mlenge	799	213	26.7	795	309	38.9	599	309	51.6
Ilolompya	199	191	96.0	195	384	196.9	199	384	193.0
Nduli	468	493	105.3	464	172	37.1	368	72	19.6
Nyang'oro	582	355	61.0	577	303	52.5	482	303	62.9
Kihorogota	109	651	597.2	104	169	162.5	109	110	100.9
Izazi	459	175	38.1	454	324	71.4	359	324	90.3
Migoli	167	79	47.3	162	220	135.8	167	20	12.0
Malengamakali	432	468	108.3	418	322	77.0	332	322	97.0
TOTAL	9,504	6,312	66.4	9,390	7,771	82.8	8,443	6,279	74.4

Source: District Executive Director's Office, Iringa Rural District; 2013

Measles vaccination for children under one year in Iringa Rural District, like in other districts in the country, was performed to protect them against measles. At district level coverage was 105 percent in 2010 but dropped to 90.6 percent of targeted children in 2011 and 90.1 percent in 2012. The children vaccinated were 8,541 in 2010, 7,696 in 2011 and 6,685 in 2012. In 2010 the best performers at ward level were Malengamakali and Itunundu (116 percent), in 2011 it was Mahuninga (172.3 percent) and in 2012 it was also Mahuninga (194.0 percent). The performances of other wards were ranged from 83 percent in Mlowa to 116 percent (Itunundu and Malengamakali) in 2010 while the variation in 2012 was from 39.8 percent in Kiwere to 194.0 percent in Mahuninga ward (Table 5.17).

Table 5. 17 : Percentage of Children Under One Year Vaccinated Measels by Ward, Iringa Rural District, 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
Kalenga	208	200	96	230	129	56.2	181	189	104.5
Kiwere	303	312	103	329	233	70.7	274	109	39.8
Nzihi	385	398	103	432	500	115.7	417	500	120.0
Ulanda	237	267	113	260	269	103.4	249	301	120.7
Mseke	452	499	110	465	204	43.8	453	399	88.1
Magulilwa	384	389	101	389	338	86.9	243	265	109.1
Luhota	390	397	102	385	327	84.9	518	440	85.0
Mgama	312	301	96	316	288	91.2	491	404	82.2
Lyamgungwe	190	200	105	187	159	84.9	341	401	117.6
Ifunda	362	397	110	380	299	78.7	517	339	65.6
Lumuli	189	206	109	223	220	98.6	278	300	107.9
Maboga	388	396	102	415	309	74.5	406	500	123.2
Wasa	278	301	108	327	288	88.2	320	310	97.0
Mahuninga	108	109	101	116	200	172.3	113	220	194.0

Table 5. 17(ctd): Percentage of Children Under One Year Vaccinated Measels by Ward, Iringa Rural District, 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
Idodi	271	298	110	277	200	72.2	268	111	41.4
Mlowa	252	209	83	256	305	119.3	249	109	43.7
Itunundu	550	637	116	554	600	108.2	329	209	63.4
Mlenge	265	285	108	250	301	120.3	232	300	129.2
Ilolompya	125	126	101	142	200	140.6	116	209	180.0
Nduli	290	304	105	306	199	65.0	193	100	51.9
Nyang'oro	325	357	110	338	283	83.9	280	199	71.1
Kihorogota	538	486	90	549	437	79.6	252	182	72.2
Izazi	507	539	106	544	607	111.7	124	100	80.5
Migoli	547	601	110	551	699	126.9	302	300	99.2
Malengama kali	283	327	116	277	102	36.8	271	189	69.8
Total	8,138	8,541	105	8,498	7,696	90.6	7,417	6,685	90.1

Source: District Executive Director's Office, Iringa Rural District; 2013

There has been a steady growth in the number of children under one year who receive BCG vaccination in the District. The number of vaccinated children increased from 6,602 in 2008 to 6,893 children in 2010, but dropped slightly to 6,817 in 2012. At district level vaccination coverage were 91.3 percent in 2008 and 2010 but increased to 103.4 percent in 2012. At ward level, in 2008, the vaccination coverage was uneven ranging from 37.5 percent in Kiwere to 178.6 percent in Mlowa Ward. In 2010, Mahuninga Ward had the best coverage of 193.8 percent of targeted children followed by Malengamakali (136.4 percent). Itunundu had the worst coverage of 41.8 percent. In 2012, vaccination coverage varied ranging from 32.7 percent in Migoli Ward to 198.4 percent in Mahuninga ward.

Table 5.18 : Percentage of Children under One Year Vaccinated BCG by Ward, Iringa Rural District, 2008, 2010 and 2012

Ward	2008			2010			2012		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kalenga	185	200	108.2	204	201	98.5	161	100	62.2
Kiwere	270	101	37.5	293	288	98.4	243	167	68.7
Nzihi	342	220	64.3	384	294	76.6	370	200	54.0
Ulanda	210	111	52.8	231	248	107.3	222	281	126.8
Mseke	402	327	81.4	414	388	93.8	402	300	74.6
Magulilwa	342	400	117.1	346	300	86.8	216	299	138.4
Luhota	346	308	88.9	342	295	86.2	460	381	82.8
Mgama	278	300	108.1	281	199	70.9	437	502	114.9
Lyamgungwe	169	121	71.7	166	142	85.3	303	400	131.9
Ifunda	322	209	65.0	338	299	88.6	459	491	106.9
Lumuli	168	100	59.5	198	201	101.3	247	305	123.4
Maboga	345	299	86.7	369	366	99.2	361	389	107.8
Wasa	247	166	67.2	290	209	72.0	284	302	106.3
Mahuninga	96	79	82.3	103	200	193.8	101	200	198.4
Idodi	241	300	124.6	246	301	122.2	238	398	166.9
Mlowa	224	400	178.6	227	300	132.0	222	300	135.4
Itunundu	489	500	102.3	493	206	41.8	293	302	103.1
Mlenge	235	305	129.7	222	111	49.9	206	299	144.9
Ilolompya	111	200	179.9	126	109	86.2	103	99	95.9
Nduli	258	190	73.8	272	300	110.3	171	207	120.9
Nyang'oro	289	138	47.8	300	300	100.0	249	304	122.2
Kihorogota	478	379	79.2	488	407	83.4	224	200	89.3
Izazi	450	500	111.0	483	393	81.3	110	99	89.7
Migoli	486	600	123.4	490	500	102.1	269	88	32.7
Malengamakali	251	149	59.3	246	336	136.4	241	204	84.7
Total	7,234	6,602	91.3	7,554	6,893	91.3	6,593	6,817	103.4

Source: District Executive Director's Office, Iringa Rural District; 2013

The trend of DPT3/HB3 vaccination for children under one year shows an increase in the number of children vaccinated between 2008 and 2012. At district level the percentage of targeted children under one year who were vaccinated are: 2008 (89 percent), 2010 (93 percent) and 2012 (96 percent).

Table 5.19 shows that wards with high coverage were Mahuninga (117 percent), Ulanda (108 percent) and Ilolompya (107 percent) in 2008, and Malengamakali (130 percent). Lyamgungwe (111 percent) and Ulanda (103 percent) in 2010. Nzihi had the lowest coverage (71 percent) in 2010. Table 5.19 also shows an increase percentage of children vaccinated in 2012. Malengamakali and Mahuninga had highest coverage (109 percent each) followed by Mlowa (104 percent) and Maboga (102 percent), while Kalenga Ward had the lowest coverage of 84 percent.

Table 5. 19 : Percentage of Children Under One Year Vaccinated DPT3/HB3 by Division, Iringa Rural District, 2008, 2010 and 2012

Ward	2008			2010			2012		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kalenga	231	229	99	255	220	86	201	169	84
Kiwere	337	299	89	366	309	84	304	294	97
Nzihi	428	387	90	480	339	71	463	401	87
Ulanda	263	284	108	289	299	103	277	263	95
Mseke	502	436	87	517	496	96	503	455	90
Magulilwa	427	366	86	432	401	93	270	267	99
Luhota	433	339	78	428	431	101	575	509	89
Mgama	347	212	61	351	345	98	546	521	95
Lyamgungwe	211	175	83	208	231	111	379	366	97
Ifunda	402	320	80	422	400	95	574	557	97
Lumuli	210	169	80	248	245	99	309	300	97
Maboga	431	369	86	461	408	89	451	460	102
Wasa	309	311	101	363	333	92	355	339	95
Mahuninga	120	140	117	129	131	102	126	137	109
Idodi	301	308	102	308	299	97	298	287	96
Mlowa	280	199	71	284	198	70	277	288	104
Itunundu	611	598	98	616	596	97	366	349	95
Mlenge	294	192	65	278	248	89	258	231	90
Ilolompya	139	149	107	158	149	94	129	119	92
Nduli	322	309	96	340	304	89	214	209	98
Nyang'oro	361	300	83	375	369	98	311	309	99
Kihorogota	598	581	97	610	599	98	280	274	98
Izazi	563	507	90	604	559	93	138	130	94
Migoli	608	599	99	612	500	82	336	309	92
Malengamakali	314	299	95	308	401	130	301	327	109
Total	9,042	8,077	89	9,442	8,810	93	8,182	7,870	96

Source: District Executive Director's Office, Iringa Rural District; 2013

There has been a negative growth in the number of children under one year who receive OPV3 vaccination in the District. At district level the number of vaccinated children dropped from 8,498 in 2008 to 8,127 children in 2010 and reached 7,022 in 2012. In percentages children vaccinated in 2008 were 94 percent of the target but dropped to 86 percent in 2010 and reached 85.2 percent in 2012.

In 2008, the Ward with the highest coverage was Izazi (102 percent), followed by Nduli, Idodi and Ifunda (100 percent) then Mseke, Mlenge, Ilolompya, and Migoli (99.0 percent each) while in 2010, Mahuninga had highest coverage (155.0 percent) followed by Kihorogota (116 percent) and Migoli (115.0 percent). Izazi had the lowest coverage of 36.0 percent in 2010. In 2012, vaccination coverage ranged from 58.9 percent in Wasa to 144.9 percent in Izazi (Table 5.20).

Table 5. 20 : Percentage of Children under One Year Vaccinated OPV3 by Ward, Iringa Rural District, 2008, 2010 and 2012

Ward	2008			2010			2012		
	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage	Total Targeted	Total Vaccinated	Percent Coverage
Kalenga	231	113	49	255	247	97	201	199	99
Kiwere	337	279	83	366	326	89	304	239	78.6
Nzihi	428	399	93	480	477	99	463	361	78
Ulanda	263	208	79	289	199	69	277	199	71.8
Mseke	502	499	99	517	489	95	503	493	98
Magulilwa	427	417	98	432	379	88	270	162	60
Luhota	433	422	97	428	369	86	575	433	75.3
Mgama	347	301	87	351	286	81	546	479	87.7
Lyamungwe	211	200	95	208	198	95	379	299	78.9
Ifunda	402	401	100	422	389	92	574	467	81.4
Lumuli	210	200	95	248	179	72	309	298	96.4
Maboga	431	418	97	461	392	85	451	387	85.8
Wasa	309	300	97	363	299	82	355	209	58.9
Mahuninga	120	102	85	129	200	155	126	108	85.7
Idodi	301	300	100	308	254	82	298	225	75.5
Mlowa	280	209	75	284	209	74	277	227	81.9
Itunundu	611	599	98	616	577	94	366	400	109.3
Mlenge	294	291	99	278	181	65	258	219	84.9
Ilolompya	139	138	99	158	109	69	129	130	100.8
Nduli	322	322	100	340	298	88	214	209	97.7
Nyang'oro	361	333	92	375	207	55	311	274	88.1
Kihorogota	598	561	94	610	709	116	280	202	72.1
Izazi	563	577	102	604	220	36	138	200	144.9
Migoli	608	600	99	612	703	115	336	403	119.9
Malengamakali	314	309	98	308	231	75	301	200	66.4
Total	9,042	8,498	94	9,442	8,127	86	8,241	7,022	85.2

Source: District Executive Director's Office, Iringa Rural District; 2013

5.1.8 Investment Opportunities for Health Sub-Sector

This sub-sector faces many problems including prevalence of diseases such as pneumonia, malaria, diarrhoea, clinical AIDS, e.t.c; shortage of health centres/dispensaries is a bottleneck for development of the sector. The district authority has seen these shortcomings and taken them into consideration.

5.2. Education Sector

5.2.0 An Overview

The quality of human capital remains the most important asset in achieving sustainable development in today's world. Human capital is the stock of skills, competences, knowledge and personality attributes which enhances the efficiency of labour. Human capital development has proven to be a key ingredient in the overall socio-economic development of nations and is one of the key considerations by investors when selecting potential investment locations.

Education sector in Iring Rural District covers both formal and informal education. Formal education includes pre-primary, primary and secondary school education. Informal education covers colleges/vocational education and adult education. Therefore, the development of the sector in Iringa Rural District 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-primary 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 Rural District. Most of such schools annexed to government primary school compounds.

As Table 5.21 shows, the district managed to increase the number of pre-primary school classes from 114 in 2009 to 135 in 2012. From a total of 123 villages the district has, each village has an average of one classroom attached to a primary school for pre-primary school pupils. This ratio indicates that the district has

succeded in implementing the government call of making sure that there is adequate number of pre-primary school classes. All pre-primary school classes shown in Table 5.21 were owned by the government. Luhota, Lyamungwe, Mlenge, Nyang'oro and Migoli were new wards which established in 2010 that is why they don't have pre-primary schools classess in 2009.

Table 5. 21 : Number of Pre-Primary School Classes by Ownership and Ward, Iringa Rural District; 2009-2012

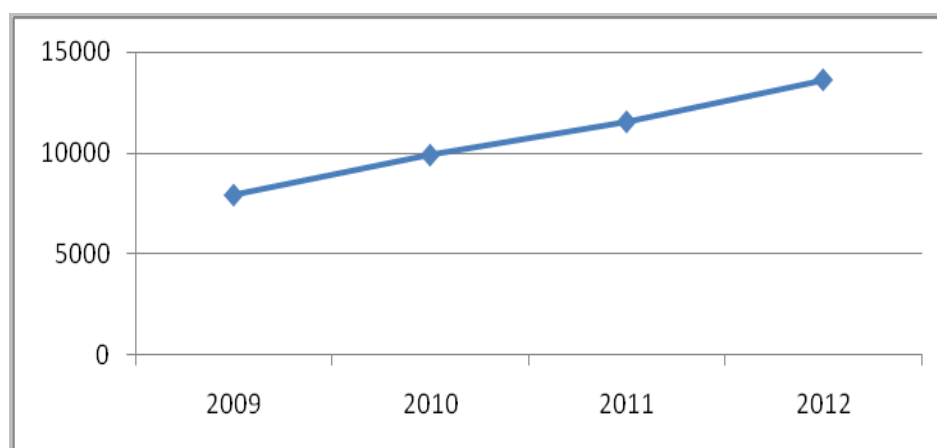
S/N	Ward	2009		2010		2011		2012	
		Public	Private	Public	Private	Public	Private	Public	Private
1	Kalenga	5	0	5	0	5	0	5	0
2	Kiwere	5	0	6	0	6	0	6	0
3	Nzihi	6	0	6	0	6	0	6	0
4	Ulanda	5	0	6	0	6	0	6	0
5	Mseke	5	0	7	0	7	0	7	0
6	Magulilwa	11	0	14	0	6	0	6	0
7	Luhota	0	0	0	0	8	0	8	0
8	Mgama	8	0	11	0	6	0	6	0
9	Lyamungwe	0	0	0	0	4	0	4	0
10	Ifunda	5	0	6	0	6	0	6	0
11	Lumuli	5	0	5	0	5	0	5	0
12	Maboga	5	0	6	0	6	0	6	0
13	Wasa	5	0	5	0	5	0	5	0
14	Mahuninga	5	0	2	0	2	0	2	0
15	Idodi	5	0	5	0	5	0	5	0
16	Mlowa	2	0	6	0	6	0	6	0
17	Itunundu	5	0	9	0	5	0	5	0
18	Mlenge	0	0	0	0	4	0	4	0
19	Ilolompya	7	0	4	0	4	0	4	0
20	Nduli	6	0	6	0	6	0	6	0
21	Nyang'oro	0	0	0	0	6	0	6	0
22	Kihorogota	6	0	13	0	6	0	6	0
23	Izazi	8	0	8	0	3	0	3	0
24	Migoli	0	0	0	0	7	0	7	0
25	Malengamakali	5	0	5	0	5	0	5	0
Total		114	0	135	0	135	0	135	0

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

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. Enrolment increased each year and reached 13,639 pupils in 2012. The enrolment increased by 25.1 percent from 7,907 pupils in 2009 to 9,895 pupils in 2010. Pupil's enrolment increased further by 16.8 percent between 2010 and 2011 and thereafter, increased by 18.0 percent between 2011 and 2012. Table 5.22, shows that in 2012, Izazi Ward had the largest share (11.7 percent) of total enrolment and Mlenge Ward had the smallest share (0.9 percent). Moreover, significant increase in enrolment is attributed to the increase in the awareness of the importance and usefulness of the pre-primary education among parents and also easy accessibility of pre-primary schools. Luhota, Lyamungwe, Mlenge, Nyang'oro and Migoli were new wards which established in 2010 that is why they had no pupils enrolled in 2009.

Figure 26 : Pre-primary school Pupils Enrolment in Iringa Rural District; 2009-2012



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

Table 5. 22 : Pre-Primary Schools Enrolment by Ownership and Ward, Iringa Rural District; 2009 - 2012

S/N	Ward	2009		2010		2011		2012			
		Pub	Pri.	Pub	Pri.	Pub	Pri.	Pub	Pri	Total	Percentage
1	Kalenga	132	0	159	0	179	0	274	0	274	2.0
2	Kiwere	251	0	396	0	410	0	505	0	505	3.7
3	Nzihi	561	0	682	0	657	0	752	0	752	5.5
4	Ulanda	512	0	532	0	558	0	653	0	653	4.8
5	Mseke	398	0	467	0	499	0	594	0	594	4.4
6	Magulilwa	765	0	996	0	1004	0	1,099	0	1,099	8.0
7	Luhota	0	0	0	0	521	0	612	0	612	4.5
8	Mgama	564	0	649	0	669	0	764	0	764	5.6
9	Lyamungwe	0	0	0	0	167	0	174	0	174	1.3
10	Ifunda	154	0	176	0	185	0	280	0	280	2.1
11	Lumuli	198	0	235	0	298	0	393	0	393	2.9
12	Maboga	184	0	191	0	164	0	259	0	259	1.9
13	Wasa	589	0	611	0	651	0	746	0	746	5.5
14	Mahuninga	138	0	167	0	179	0	274	0	274	2.0
15	Idodi	453	0	507	0	529	0	624	0	624	4.6
16	Mlowa	152	0	198	0	170	0	265	0	265	1.9
17	Itunundu	365	0	432	0	483	0	578	0	578	4.2
18	Mlenge	0	0	0	0	97	0	123	0	123	0.9
19	Ilolompya	169	0	136	0	149	0	244	0	244	1.8
20	Nduli	468	0	638	0	653	0	748	0	748	5.5
21	Nyang'oro	0	0	0	0	287	0	303	0	303	2.2
22	Kihorogota	598	0	769	0	786	0	881	0	881	6.5
23	Izazi	897	0	1529	0	1500	0	1,595	0	6,595	11.7
24	Migoli	0	0	0	0	343	0	379	0	379	2.8
25	Malengamakali	359	0	425	0	416	0	520	0	520	3.8
Total		7907	0	9895	0	11554	0	13639	0	13,639	100.0

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

5.2.3 Primary Education

Primary school education is a basic right of every Tanzanian child of school going age (7-13 years). 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 5.23, all primary schools in the district are owned by the government. The district through the government of Tanzania managed to extend the availability of primary school to every village. This is evidenced by Table 5.23 which shows that every village in Iringa Rural District has an average of one primary school. Mlowa Ward had the highest concentration of primary schools at an average of 2.3 schools per village while Lyamkungwe had the lowest (0.8 percent) in 2012. By having a primary school in each village, the District succeeded in implementing the government call of making sure primary school pupils walk shorter distances to/from school.

Table 5. 23: Number of primary Schools, Villages and Number of primary schools per Village by Ward, Iringa Rural District; 2010-2012

S/N	Ward	2010			2011			2012		
		Public Pri.Schools	No.of Villages	Primary Schools per Village	Public Pri.Schools	No.of Villages	Primary Schools per Village	Public Pri.Schools	No.of Villages	Primary Schools per Village
1	Kalenga	5	3	1.7	5	3	1.7	5	3	1.7
2	Kiwere	6	5	1.2	6	5	1.2	6	5	1.2
3	Nzihi	9	6	1.5	9	6	1.5	9	6	1.5
4	Ulanda	7	6	1.2	7	6	1.2	7	6	1.2
5	Mseke	8	6	1.3	8	6	1.3	8	6	1.3
6	Magulilwa	6	6	1.0	6	6	1.0	6	6	1.0
7	Luhota	8	5	1.6	8	5	1.6	8	5	1.6
8	Mgama	6	5	1.2	6	5	1.2	6	5	1.2
9	Lyamgungwe	4	5	0.8	4	5	0.8	4	5	0.8
10	Ifunda	6	5	1.2	6	5	1.2	6	5	1.2
11	Lumuli	5	4	1.3	5	4	1.3	5	4	1.3
12	Maboga	8	6	1.3	8	6	1.3	8	6	1.3
13	Wasa	6	7	0.9	6	7	0.9	6	7	0.9
14	Mahuninga	2	2	1.0	2	2	1.0	2	2	1.0
15	Idodi	5	4	1.3	5	4	1.3	5	4	1.3
16	Mlowa	7	3	2.3	7	3	2.3	7	3	2.3
17	Itunundu	5	4	1.3	5	4	1.3	5	4	1.3
18	Mlenge	4	4	1.0	4	4	1.0	4	4	1.0
19	Ilolompya	4	4	1.0	4	4	1.0	4	4	1.0
20	Nduli	6	6	1.0	6	6	1.0	6	6	1.0
21	Nyang'oro	6	6	1.0	6	6	1.0	6	6	1.0
22	Kihorogota	7	7	1.0	7	7	1.0	7	7	1.0
23	Izazi	3	3	1.0	3	3	1.0	3	3	1.0
24	Migoli	6	6	1.0	6	6	1.0	6	6	1.0
25	Malengamakali	6	5	1.2	6	5	1.2	6	5	1.2
Total		145	123	1.2	145	123	1.2	145	123	1.2

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

According to Table 5.23a, in 2012, Iringa Rural District had an average of 0.7 primary schools per 100 sq. kms of land area or 0.7 schools within walking distance. In terms of population, the average was 0.7 schools per 1,752 people. The range between wards for an average number of schools within walking distances varied from 0.4 schools in Mlowa ward to 4.7 schools in Luhota ward. Migoli, Ifunda, Mseke, Nzihi and Idodi wards are classified as mixed (rural and urban) wards while the remaining 20 wards also shown in Table 5.23a are considered to be rural wards. Of the rural wards, Mlowa ward had the worst coverage at 0.4 schools within walking distance. The average population per school ranged from 1,098 people for Kihorogota ward to 2,884 people for Itunundu ward.

Table 5.23a: Coverage of Primary schools by Land area, by Population and by Ward, Iringa Rural District; 2012

S/N	Ward	Land Area in sq.kms	Population Census 2012	No. of Primary Schools	Average Number of Schools per 100 sq.kms	Average Population per School
1	Kalenga	95	6,963	5	5.3	1393
2	Kiwere	301	9,776	6	2.0	1629
3	Nzihi	321	14,872	9	2.8	1652
4	Ulanda	187	9,257	7	3.7	1322
5	Mseke	176	15,868	8	4.5	1984
6	Magulilwa	284	13,639	6	2.1	2273
7	Luhota	172	14,019	8	4.7	1752
8	Mgama	178	12,561	6	3.4	2094
9	Lyamungwe	166	9,836	4	2.4	2459
10	Ifunda	198	12,199	6	3.0	2033
11	Lumuli	360	7,852	5	1.4	1570
12	Maboga	897	12,642	8	0.9	1580
13	Wasa	702	10,595	6	0.9	1766
14	Mahuninga	354	4,331	2	0.6	2166
15	Idodi	10,788	10,202	5	0.0	2040

Table 5.23a(ctd): Coverage of Primary schools by Land area, by Population and by Ward, Iringa Rural District; 2012

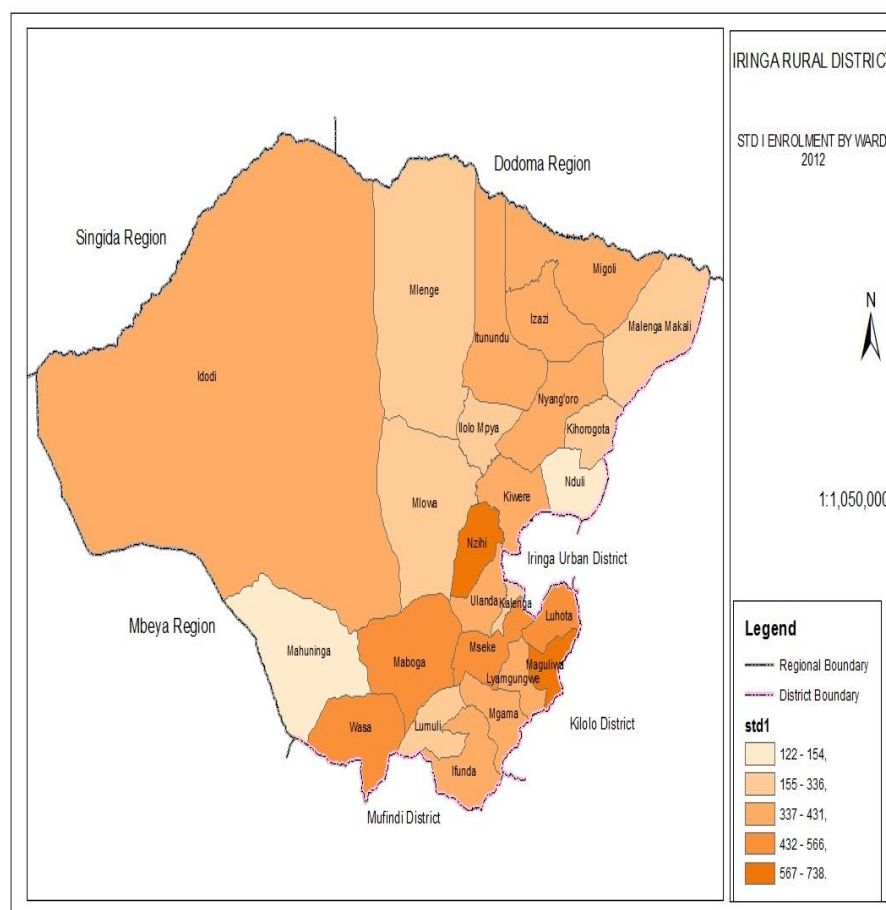
S/N	Ward	Land Area in sq.kms	Population Census 2012	No. of Primary Schools	Average Number of Schools per 100 sq.kms	Average Population per School
16	Mlowa	1,697	9,483	7	0.4	1355
17	Itunundu	267	14,420	5	1.9	2884
18	Mlenge	204	9,463	4	2.0	2366
19	Ilolompya	214	6,376	4	1.9	1594
20	Nduli	313	8,045	6	1.9	1341
21	Nyang'oro	408	9,810	6	1.5	1635
22	Kihorogota	481	7,688	7	1.5	1098
23	Izazi	229	5,281	3	1.3	1760
24	Migoli	278	10,937	6	2.2	1823
25	Malengamakali	1,144	7,917	6	0.5	1320
Total		20,414	254,032	145	0.7	1752

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

5. 2.3.1 Standard One Enrolment

Over a period of three years 2010-2012 Iringa Rural District implemented successfully the call of the Government to increase enrolment in primary schools. As Table 5.24 shows Standard One pupils' enrolment increased by 10.6 percent from 8,440 pupils enrolled in 2010 to 9,336 pupils in 2011 and then increased by 5.6 percent to reach 9,856 pupils in 2012. The district had an average standard one pupil's enrollment per school of 58, 64 and 68 in 2010, 2011 and 2012 respectively. Over the whole three year period (2010-2012), the ward with the highest Standard One enrolment was Izazi ward (Table 5.24). The ward had Standard One pupil enrolment per school of 204, 144 and 124 in 2010, 2011 and 2012 respectively. Increased Standard One enrolment in the district was influenced by the increase of pre-primary school pupils observed in Table 5.24.

Map 5: Showing Standard I Pupuls Enrolment by Ward; Iringa Rural District, 2012



Source: Natiaonal Bureau of Statistics, Cartographic Section, Field Operations Department, 2013

Table 5. 24: Standard I Enrolment in Public Primary Schools by Ward, Iringa Rural District; 2010 - 2012

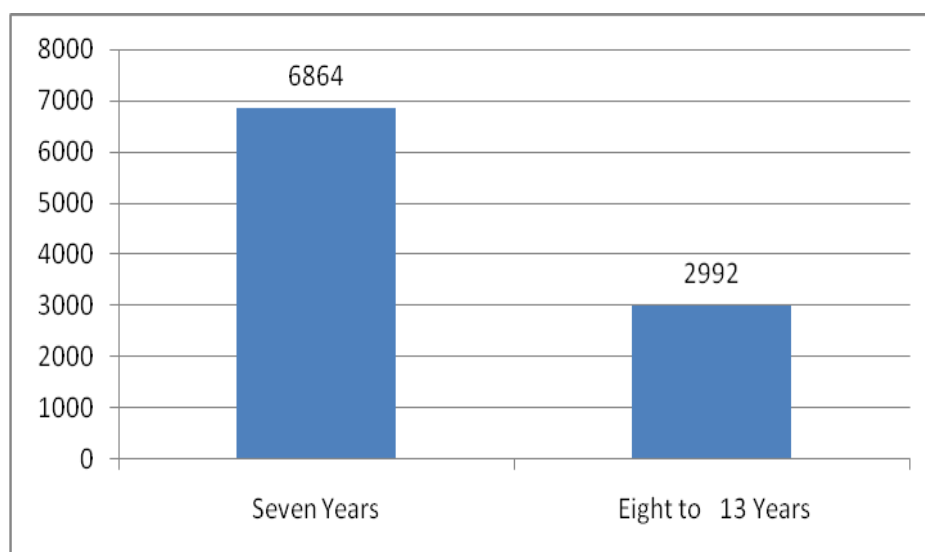
S/N	Ward	2010			2011			2012		
		Total Enrolment	No.of Schools	Enrolment per School	Total Enrolment	No.of Schools	Enrolment per School	Total Enrolment	No.of Schools	Enrolment per School
1	Kalenga	270	5	54	303	5	61	297	5	59
2	Kiwere	320	6	53	332	6	55	367	6	61
3	Nzihi	663	9	74	614	9	68	738	9	82
4	Ulanda	370	7	53	398	7	57	398	7	57
5	Mseke	560	8	70	448	8	56	530	8	66
6	Magulilwa	960	6	160	346	6	58	676	6	113
7	Luhota	0	8	0	364	8	46	516	8	65
8	Mgama	652	6	109	474	6	79	402	6	67
9	Lyamungwe	0	4	0	201	4	50	431	4	108
10	Ifunda	518	6	86	478	6	80	372	6	62
11	Lumuli	251	5	50	296	5	59	268	5	54
12	Maboga	362	8	45	525	8	66	566	8	71
13	Wasa	278	6	46	529	6	88	507	6	85
14	Mahuninga	132	2	66	120	2	60	122	2	61
15	Idodi	338	5	68	434	5	87	414	5	83
16	Mlowa	190	7	27	214	7	31	335	7	48
17	Itunundu	504	5	101	389	5	78	407	5	81
18	Mlenge	0	4	0	198	4	50	274	4	69
19	Ilolompya	254	4	64	205	4	51	274	4	69
20	Nduli	393	6	66	405	6	68	154	6	26
21	Nyang'oro	0	6	0	395	6	66	421	6	70
22	Kihorogota	445	7	64	484	7	69	336	7	48
23	Izazi	612	3	204	432	3	144	372	3	124
24	Migoli	0	6	0	487	6	81	413	6	69
25	Malengamakali	368	6	61	265	6	44	266	6	44
Total		8,440	145	58	9,336	145	64	9,856	145	68

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

According to Universal Primary Education (UPE), school going age is seven years. Table 5.25 shows that in 2012 children enrolled in Standard One at the age of seven years accounted for 69.6 percent of the total enrolment while children

aged eight to thirteen years accounted for 30.4 percent. At the age of seven years, more girls (52.8 percent) were enrolled than boys (47.2 percent). Pupils enrolled at the age of eight to thirteen years, more boys were registered (54.3 percent) than girls (45.7 percent). As Figure 27 shows most of children in the District were enrolled in Standard One at the age of seven years.

Figure 27: Standard I Enrolment by Age Group, Iringa Rural District; 2012



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

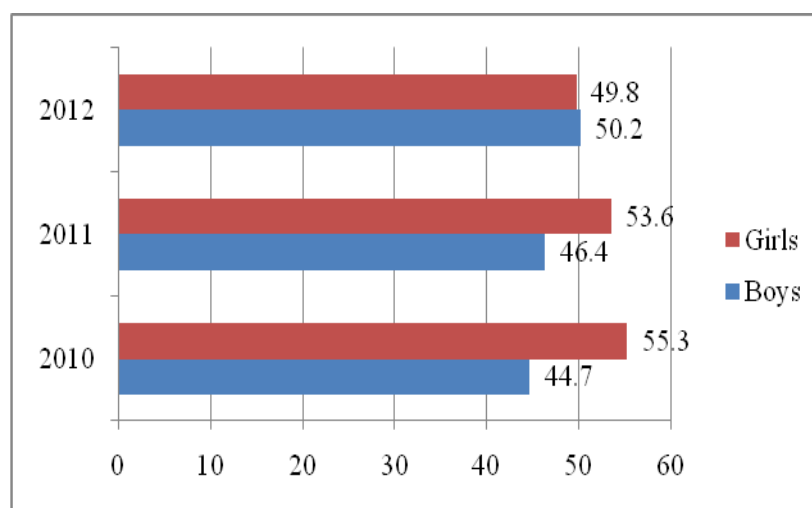
Table 5. 25 : Standard I Enrolment by Age Group, Iringa Rural District; 2012

Sex	Seven Years	Percent Enrolled	Eight to 13 Years	Percent Enrolled	Total
Boys	3,241	66.6	1,626	33.4	4867
Girls	3,623	72.6	1,366	27.4	4989
Total	6,864	69.6	2,992	30.4	9856

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

In 2010 and 2011 more girls than boys were enrolled in primary schools (Table 5.26 and Figure 28). In 2010 girls accounted for 55.3 percent of the total enrolment and in 2011 they accounted for 53.6 percent of the total enrolment. Boys on the other hand, accounted for 44.7 percent of total enrolment in 2010 and 46.4 percent in 2011. In 2012, more boys than girls were enrolled in primary schools.. The slight 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 5.27 further shows that primary schools located in Magulilwa ward led in pupil's enrolment in two consecutive years; 2010 (5,350 pupils enrolled, 9.1 percent of total enrolment) and in 2011 (5,277 pupils enrolled, 7.6 percent). Primary schools in Mseke Ward were the leading with 3,747 pupils (6.2 percent) in 2012. Mahuninga Ward had the smallest share of total enrolment in all three consecutive years at 1.4, 1.1 and 1.5 percent.

Figure 28 : Standard (STD I-VII) Enrolment in Public Primary Schools by Sex, Iringa Rural District; 2010- 2012



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

Table 5. 26: Total (Std I - VII) Enrolment in Public Primary Schools by Sex and by Ward, Iringa Rural District; 2010-2012

Ward	2010			2011			2012			Percent of the Total Enrolment		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	2010	2011	2012
Kalenga	1195	1093	2288	1,159	1,058	2,217	1,446	1,079	2,525	3.9	3.2	4.2
Kiwere	1233	1308	2541	1,197	1,273	2,470	1,092	1,157	2,249	4.3	3.6	3.7
Nzihi	1785	2654	4439	1,749	2,619	4,368	1,435	1,530	2,965	7.6	6.3	4.9
Ulanda	1214	1199	2413	1,178	1,164	2,342	1,202	1,130	2,332	4.1	3.4	3.9
Mseke	1807	2007	3814	1,771	1,612	3,383	1,842	1,905	3,747	6.5	4.9	6.2
Magulilwa	1562	3788	5350	1,526	3,751	5,277	1,707	1,699	3,406	9.1	7.6	5.6
Luhota	0	0	0	1,653	1543	3196	1,745	1,834	3,579	0.0	4.6	5.9
Mgama	1713	2992	4705	1,667	2,957	4,624	1,587	1,651	3,238	8.0	6.7	5.4
Lyamungwe	0	0	0	962	735	1697	1,138	1,092	2,230	0.0	2.4	3.7
Ifunda	1476	1772	3248	1,440	1,737	3,177	1,645	1,571	3,216	5.5	4.6	5.3
Lumuli	1025	1040	2065	989	1,005	1994	1,026	1,003	2,029	3.5	2.9	3.4
Maboga	1461	1665	3126	1,425	1,630	3,055	1,732	1,636	3,368	5.3	4.4	5.6
Wasa	598	685	1283	562	650	1212	1,425	1,488	2,913	2.2	1.7	4.8
Mahuninga	415	424	839	369	389	758	450	475	925	1.4	1.1	1.5
Idodi	1104	1194	2298	1,158	1,159	2,317	1,116	1,197	2,313	3.9	3.3	3.8
Mlowa	896	871	1767	860	836	1696	1,043	1,054	2,097	3.0	2.4	3.5
Itunundu	1987	1861	3848	1,951	1,829	3,780	1,428	1,427	2,855	6.6	5.5	4.7
Mlenge	0	0	0	987	675	1662	497	549	1046	0.0	2.4	1.7
Ilolompya	654	655	1309	618	623	1241	616	687	1303	2.2	1.8	2.2
Nduli	1493	1789	3282	1,457	1,757	3,214	1,000	979	1,979	5.6	4.6	3.3
Nyang'oro	0	0	0	1,508	1486	2994	1,275	1,293	2,568	0.0	4.3	4.3
Kihorogota	1879	2261	4140	1,864	2,229	4,093	1,015	882	1,897	7.1	5.9	3.1
Izazi	1684	2154	3838	1,669	2,122	3,791	612	545	1157	6.6	5.5	1.9
Migoli	0	0	0	1,471	1411	2882	1,133	1,180	2,313	0.0	4.2	3.8
Malengamakali	991	970	1961	977	933	1910	1,046	1,033	2,079	3.3	2.8	3.4
Total	26,172	32,382	58,554	32,167	37,183	69,350	30,253	30,076	60,329	100.0	100.0	100.0
Percent by Sex	44.7	55.3	100.0	46.4	53.6	100.0	50.2	49.8	100.00			

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

5. 2.3.2 Primary School 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 primary education cycle irrespective of whether they sit for the final examination or not. According to Table 5.27, the District somehow managed to control pupils drop outs caused by different reasons as among 10,127 of the cohort pupils registered in primary schools in 2005, 9,190 pupils or 90.7 percent managed to complete Standard Seven in 2011. Table 5.27 also shows that more girls (4,692, 51.1 percent) than boys (4,498, 48.9 percent) completed primary school education cycle (Standard Seven) in 2011. Comparison of completion rate for pupils of the same sex, Table 5.27 shows that 89.8 percent of total boys who registered into primary schools in 2005 succeeded in completing primary school education cycle in 2011. Likewise, 91.7 percent of total girls registered into primary schools in 2005 completed education cycle in 2011. Luhota, Lyamgungwe, Mlenge, Nyang'oro and Migoli were the five wards established in 2010 hence they had no data on pupils enrolled in primary schools in 2005. However, pupils who completed Standard Seven observed in the five wards did registration in primary schools in the wards where the new wards originated. Regarding to that we can say that primary schools in Luhota ward was leading in number of pupils who completed education cycle in 2011 at 589 pupils (6.4 percent). Mahuninga had the lowest number of pupils (123, 1.3 percent) who completed such education level.

Table 5. 27: Number of Pupils Enrolled in Std I in 2005 and Completed Std VII in 2011 by Ward in Iringa Rural District

2005 to 2011									
Ward	Enrolled 2005			Completed 2011			Completion Rate by Sex		Percent: Completion by Ward to the District Total
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
Kalenga	243	226	469	169	155	324	69.5	68.6	3.5
Kiwere	269	269	538	172	206	378	63.9	76.6	4.1
Nzihi	233	294	527	147	249	396	63.1	84.7	4.3
Ulanda	222	266	488	129	192	321	58.1	72.2	3.5
Mseke	337	335	672	236	307	543	70.0	91.6	5.9
Magulilwa	164	348	512	271	283	554	165.2	81.3	6.0
Luhota	0	0	0	277	312	589	0.0	0.0	6.4
Mgama	313	334	647	229	268	497	73.2	80.2	5.4
Lyamungwe	0	0	0	152	204	356	0.0	0.0	3.9
Ifunda	389	353	742	291	285	576	74.8	80.7	6.3
Lumuli	181	321	502	126	234	360	69.6	72.9	3.9
Maboga	346	307	653	289	234	523	83.5	76.2	5.7
Wasa	288	284	572	202	221	423	70.1	77.8	4.6
Mahuninga	141	137	278	54	69	123	38.3	50.4	1.3
Idodi	359	195	554	255	131	386	71.0	67.2	4.2
Mlowa	228	283	511	149	116	265	65.4	41.0	2.9
Itunundu	311	185	496	222	126	348	71.4	68.1	3.8
Mlenge	0	0	0	137	119	256	0.0	0.0	2.8
Ilolompya	171	174	345	80	109	189	46.8	62.6	2.1
Nduli	208	239	447	158	165	323	76.0	69.0	3.5
Nyang'oro	0	0	0	181	153	334	0.0	0.0	3.6
Kihorogota	201	231	432	147	169	316	73.1	73.2	3.4
Izazi	166	175	341	84	115	199	50.6	65.7	2.2
Migoli	0	0	0	178	161	339	0.0	0.0	3.7
Malengamakali	241	160	401	163	109	272	67.6	68.1	3.0
District Total	5011	5116	10127	4498	4692	9190	89.8	91.7	100.0
Percent	49.5	50.5	100.0	48.9	51.1	100.0	90.7		

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

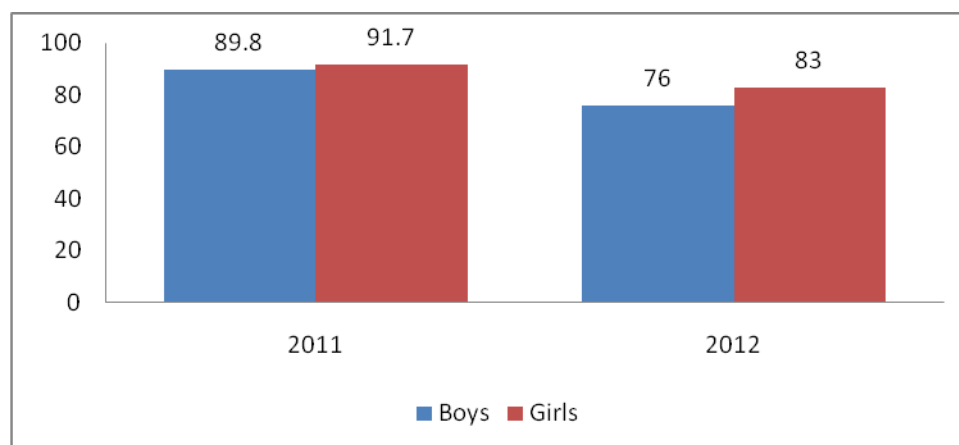
Primary school completion rate was lower in 2012 than in 2011. According to Tables 5.27 and 5.27a, the completion rate in 2012 was 79.3 percent compared to 90.7 percent in 2011. Comparison of completion rate for pupils of the same sex, Table 5.28a shows that at district level, 75.8 percent of all the boys admitted into primary schools in the district in 2006 completed Standard Seven in 2012. For girls, 82.8 percent percent of those admitted in 2006 completed primary education in 2012. At ward level, with a total of 466 pupils (6.7 percent of all pupils completed in primary education in 2012) Mseke Ward was leading in number of pupils completing Standard Seven in 2012. As it was in 2011, Mahuninga Ward with 76 pupils (1.1 percent) completing primary education in 2012, had the least number of pupils who completed Standard Seven in 2012.

Table 5.27 a: Number of Pupils Enrolled in Std I in 2006 and Completed Std VII in 2012 by Ward in Iringa Rural District

Ward	2006 to 2012								Percent: Completion by Ward to the District Total
	Enrolled 2006			Completed 2012			Completion Rate by Sex		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
Kalenga	172	174	346	125	145	270	72.7	83.3	3.9
Kiwere	168	175	343	129	143	272	76.8	81.7	3.9
Nzihi	249	241	490	206	209	415	82.7	86.7	5.9
Ulanda	170	154	324	126	121	247	74.1	78.6	3.5
Mseke	274	255	529	243	223	466	88.7	87.5	6.7
Magulilwa	194	199	393	152	170	322	78.4	85.4	4.6
Luhota	217	248	465	172	220	392	79.3	88.7	5.6
Mgama	210	226	436	167	197	364	79.5	87.2	5.2
Lyamgungwe	188	177	365	144	145	289	76.6	81.9	4.1
Ifunda	256	248	504	217	215	432	84.8	86.7	6.2
Lumuli	177	181	358	134	155	289	75.7	85.6	4.1
Maboga	182	195	377	137	166	303	75.3	85.1	4.3
Wasa	189	164	353	145	132	277	76.7	80.5	4.0
Mahuninga	83	72	155	37	39	76	44.6	54.2	1.1
Idodi	190	184	374	145	156	301	76.3	84.8	4.3
Mlowa	160	161	321	115	128	243	71.9	79.5	3.5
Itunundu	179	179	358	136	149	285	76.0	83.2	4.1
Mlenge	140	132	272	96	102	198	68.6	77.3	2.8
Ilolompya	109	115	224	65	85	150	59.6	73.9	2.1
Nduli	180	163	343	142	129	271	78.9	79.1	3.9
Nyang’oro	188	197	385	145	167	312	77.1	84.8	4.5
Kihorogota	165	154	319	121	121	242	73.3	78.6	3.5
Izazi	84	92	176	40	59	99	47.6	64.1	1.4
Migoli	149	151	300	103	118	221	69.1	78.1	3.2
Malengamakali	146	148	294	107	135	242	73.3	91.2	3.5
District Total	4,419	4,385	8,804	3,349	3,629	6,978	75.8	82.8	100.0
Percent	50.2	49.8	100.0	48.0	52.0	100.0	79.3		

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

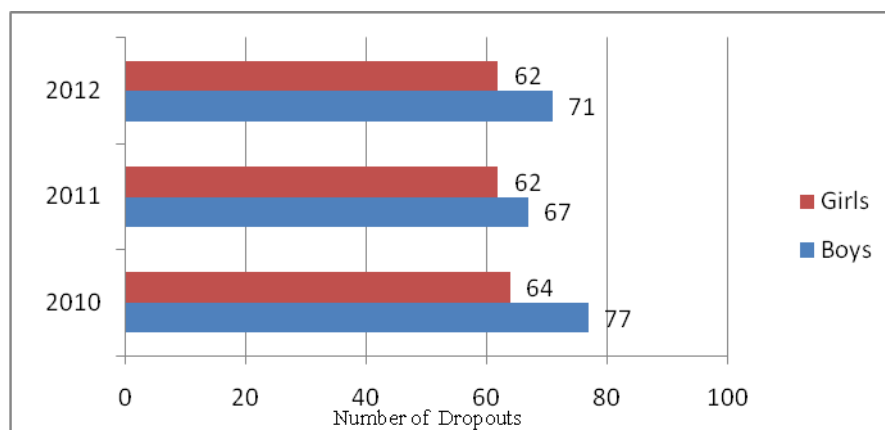
Figure 29 : Rates of Completion of Primary Education in Iringa Rural District, 2011 and 2012.



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

5. 2. 3.3 Primary School Dropout Rate

Table 5.28 summarizes the situation of primary school dropouts in three years; 2010-2012 in Iringa Rural District. Of the total enrolment of 58,554 pupils, 0.24 dropped out of school in 2010. 0.19 percent of the total enrolment in 2011 and 0.22 percent of the enrolment in 2012 were also dropped out of school. The massive number of dropouts was 141 pupils observed in 2010 and the lowest was 129 pupils in 2011. Total number of dropouts for boys was higher (215, 53.3 percent of total dropouts in three years) than for girls (188, 46.7 percent). The main cause of dropouts was truancy (73.0 percent), followed by pregnancy (13.4 percent) and death (3.0 percent). Table 5.28 and Figure 30 show that in each year there was a slight difference in number of boys and girls who dropped out of school.

Figure 30: Primary School Pupil Dropouts by Sex, Iringa Rural District; 2010-2012


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

Table 5. 28: Drop Outs by Reasons, Iringa Rural District; 2010 – 2012

Reason	2010			2011			2012			Total Dropouts 2010-2012			Percentage
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Truancy	68	39	107	57	35	92	58	37	95	183	111	294	73.0
Pregnancy		16	16	0	20	20	0	18	18	0	54	54	13.4
Death	3	0	3	4	0	4	5	0	5	12	0	12	3.0
Other	6	9	15	6	7	13	8	7	15	20	23	43	10.7
Total dropouts	77	64	141	67	62	129	71	62	133	215	188	403	100.0
Total Enrolment	26,172	32,382	58,554	32,167	37,183	69,350	30,253	30,076	60,329				
Percent to the Enrolment	0.29	0.20	0.24	0.21	0.17	0.19	0.23	0.21	0.22				

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

5.2.3.4 Pass Rate in Primary Schools

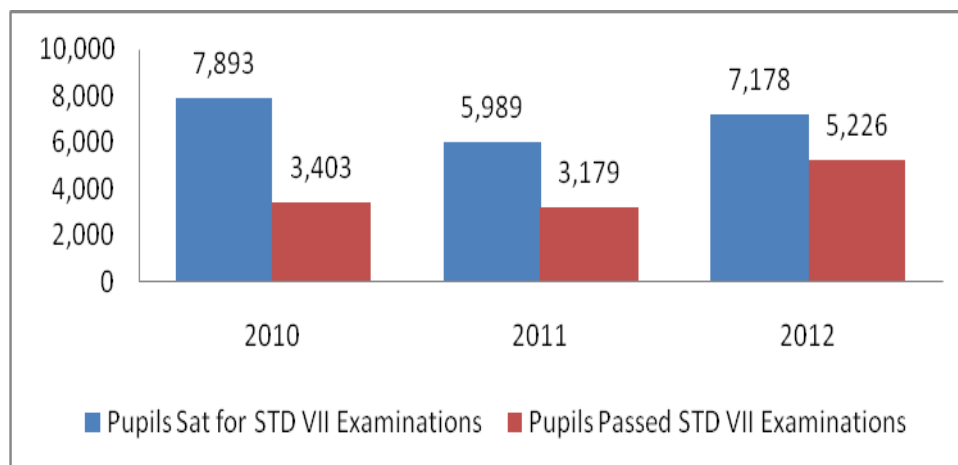
Pass rate refers to the percentage of pupils who passed Standard Seven examinations out of the total pupils who sat for the examinations. From 2010 to 2012 pass rate for Standard Seven pupils was increasing. It increased from 43.1 percent in 2010 to 53.1 percent in 2011 and then 72.8 percent in 2012. Of the 21,060 total pupils who sat for Standard Seven examinations in all three years boys accounted 49.4 percent and girls 50.6 percent. Similarly, out of 11,808 pupils who passed Standard Seven examinations in all three years, the boys (6,020, 51.0 percent) were higher than the girls (5,788, 49.0 percent). By comparing pupils of the same sex Table 5.29 indicates that 57.9 percent of total boy's pupils who sat for the examination in all three years passed examinations while for girl's pupils, 54.3 percent passed the examinations. 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. Likewise, girls dropouts due to pregnancy and truancy attributes to lower number of girls who sat for Standard Seven examinations as well as those who passed.

Table 5.29: Number of Pupils Who Sat and Passed STD VII Examinations in Public Primary Schools, Iringa Rural District; 2010 - 2012

Year	Pupils Sat for STD VII Examinations			Pupils Passed STD VII Examinations			Percentage of Pupils Who passed STD VII Examinations		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2010	3,911	3,982	7,893	1,823	1,580	3,403	46.6	39.7	43.1
2011	2,984	3,005	5,989	1,730	1,449	3,179	58.0	48.2	53.1
2012	3,504	3,674	1,178	2,467	2,759	5,226	70.4	75.1	72.8
Total	10,399	10,661	21,060	6,020	5,788	11,808	57.9	54.3	56.1
Percent	49.4	50.6	100.0	51.0	49.0	100.0			

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

Figure 31: Number of Pupils Who Sat and Passed STD VII Examinations in Public Primary Schools, Iringa Rural District; 2010 - 2012



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

Table 5.30 shows that from 2009-2012 the number of pupils who joined Form One fluctuated and was lowest in 2011 when 102 percent of those selected joined. Total pupils who joined Form One were equivalent to 107 percent of all pupils who were selected. More boys (9,251, 51.7 percent) than girls (8,631, 48.3 percent) joined Form One (Table 5.30). Year 2012 was the best year with highest number of pupils who joined form one at 5,602 pupils while 2010 was the worst with 3,347 pupils.

Table 5.30 : Number of Pupils Who were Selected and Joined Form I in Public and Private Secondary Schools, Iringa Rural District; 2009 to 2012

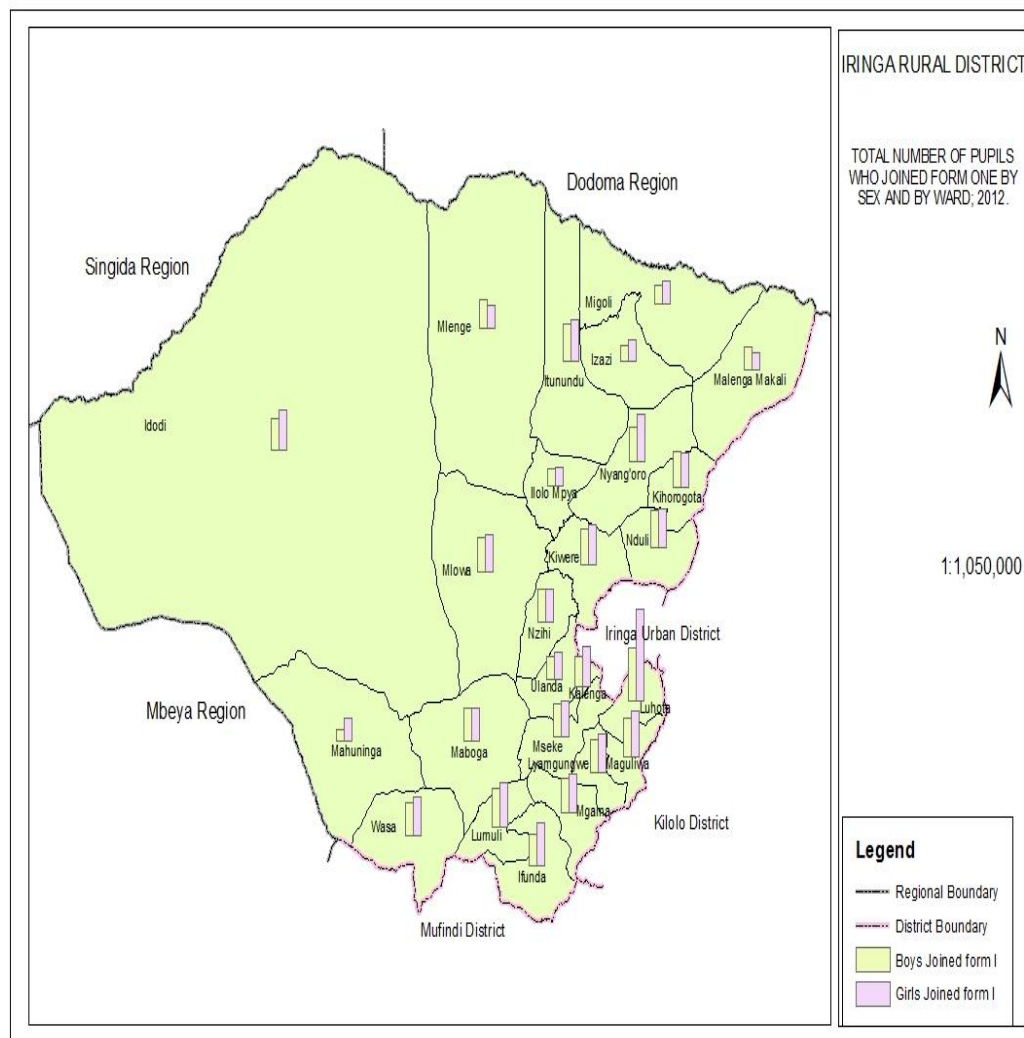
Year	No. of Pupils Selected			No. of Pupils Joined Form I									Percent of Pupils Who Joined Form I
				in Public Sec. Schools			in Private Sec. Schools			In Public and Private Secondary schools			
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
2009	1,823	1,580	3,403	1,823	1,580	3,403	78	63	141	1,901	1,643	3,544	104
2010	1,730	1,449	3,179	1,730	1,449	3,179	98	70	168	1,828	1,519	3,347	105
2011	2,794	2,482	5,276	2,794	2,482	5,276	59	54	113	2,853	2,536	5,389	102
2012	2,466	2,760	5,226	2,466	2,760	5,226	203	173	376	2,669	2,933	5,602	107
Total	8,813	8,271	17,084	8,813	8,271	17,084	438	360	798	9,251	8,631	17,882	105

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

Table 5.30a shows that 78 percent of pupils who sat for Standard Seven examinations in 2012 joined public or private secondary schools in Iringa Rural District. There was a big difference between the number of pupils who joined Form One in public Secondary Schools and those who joined Form one in Private Secondary Schools. Those who joined Form One in Public Schools were 5,226 pupils (equivalent to 93.3 percent) compared to only 376 (6.7 percent) who joined private secondary schools. The small number of private secondary schools (4) compared to 28 public secondary schools was the main cause of big disparity between the number of pupils who joined Form One in the two school types.

Table 5.30a shows that a higher number of girls (2,933, 52.4 percent) than boys (2,669, 47.6 percent) joined Form One in 2012 in the District. At ward level, the percentage of pupils who joined Form One against examinees was the highest at 114 percent in Migoli Ward while Mseke had the lowest percentage of 47 percent. Nevertheless, if we consider absolute numbers more pupils joined Form One in Ifunda Ward at 356 pupils and the smallest number was in Mahuninga ward at 75 pupils.

Map 6 : Showing Total number of Pupils who Joined Form One by Sex and by Ward;Iringa Rural District; 2012



Source: Natiaonal Bureau of Statistics, Cartographic Section, Field Operations Department, 2013

Table 5.30 a: Number of Pupils Who Joined Form I in Public and Private Secondary Schools by Sex, Iringa Rural District; 2012

Ward	Pupils Sat for Std VII Examinations			Pupils Who Joined Form I in;							
	Boys	Girls	Total	Public Sec. Schools			Private Sec. Schools			Total	Pupils Joined as % of Examinees
				Boys	Girls	Total	Boys	Girls	Total		
Kalenga	131	147	278	102	131	233	0	0	0	233	83.8
Kiwere	135	145	280	114	128	242	0	0	0	242	86.4
Nzihi	212	211	423	104	108	212	0	0	0	212	50.1
Ulanda	132	123	255	76	88	164	0	0	0	164	64.3
Mseke	249	225	474	106	117	223	0	0	0	223	47.0
Magulilwa	158	172	330	104	126	230	21	23	44	274	83.0
Luhota	178	222	400	124	132	256	52	45	97	353	88.3
Mgama	173	199	372	112	124	236	0	0	0	236	63.4
Lyamungwe	150	147	297	104	124	228	0	0	0	228	76.8
Ifunda	223	217	440	104	142	246	60	50	110	356	80.9
Lumuli	140	157	297	127	144	271	0	0	0	271	91.2
Maboga	143	168	311	112	111	223	0	0	0	223	71.7
Wasa	151	134	285	106	124	230	0	0	0	230	80.7
Mahuninga	43	41	84	36	39	75	0	0	0	75	89.3
Idodi	151	158	309	104	132	236	0	0	0	236	76.4
Mlowa	121	130	251	117	126	243	0	0	0	243	96.8
Itunundu	142	151	293	121	134	255	0	0	0	255	87.0
Mlenge	102	104	206	93	74	167	0	0	0	167	81.1
Ilolompya	71	87	158	56	62	118	0	0	0	118	74.7
Nduli	148	131	279	124	127	251	0	0	0	251	90.0
Nyang'oro	151	169	320	114	156	270	0	0	0	270	84.4
Kihorogota	127	123	250	119	114	233	0	0	0	233	93.2
Izazi	46	61	107	51	67	118	0	0	0	118	110.3
Migoli	109	120	229	62	74	136	70	55	125	261	114.0
Malengamakali	118	132	250	74	56	130	0	0	0	130	52.0
District Total	3,504	3,674	7,178	2,466	2,760	5,226	203	173	376	5602	78.0

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

5.2.3.5 Primary School Facilities

A teacher may be the single most important factor in the development of primary education. Next to teachers are school facilities such as classrooms, toilets, teachers' houses, desks, teachers' offices etc.

(i) Classrooms

According to Tanzania education system, the use of each classroom in primary and secondary schools is, according to the national standard, for accommodating 45 pupils/students only. However, due to inadequate infrastructure, most schools especially in rural areas like Iringa Rural District fail to meet the recommended pupils classroom ratio of one classroom per 45 pupils/students (i.e CPR 1:45). Table 5.31 shows that the District which overall had a CPR of 1:55 in 2012 experienced a serious shortage of classrooms in primary schools and required a total of 1,532 classrooms instead of the available 1,097. At ward level, primary schools in Lumuli, Mlenge and Kihorogota with CPR of 1:41, 1:45 and 1:39 respectively, were the only ones which met the national standard of CPR at 1:45. Moreover, four wards Ulanda, Mseke, Ifunda and Mlowa had marginal deficits of classrooms. They had CPR of 1:46 or 1:47. Table 5.31 also highlights classrooms requirement per ward.

Table 5. 31 : Availability of Classrooms in Primary Schools by Ward, Iringa Rural District; 2012

Ward	Number of Schools	Total Pupils	Available Classrooms	Classroom Pupils Ratio (CPR)	Required Classrooms
Kalenga	5	2,525	43	1:59	63
Kiwere	6	2,249	36	1:62	56
Nzihi	9	2,965	60	1:49	74
Ulanda	7	2,332	51	1:46	58
Mseke	8	3,747	82	1:46	94
Magulilwa	6	3,406	47	1:72	85
Luhota	8	3,579	61	1:59	85
Mgama	6	3,238	48	1:67	81
Lyamungwe	4	2,230	38	1:59	58
Ifunda	6	3,216	70	1:46	80
Lumuli	5	2,029	49	1:41	51
Maboga	8	3,368	52	1:65	84
Wasa	6	2,913	52	1:56	73
Mahuninga	2	925	17	1:54	23
Idodi	5	2,313	50	1:46	58
Mlowa	7	2,097	45	1:47	52
Itunundu	5	2,855	41	1:70	71
Mlenge	4	1046	23	1:45	54
Ilolompya	4	1303	22	1:59	33
Nduli	6	1,979	42	1:47	49
Nyang'oro	6	2,568	33	1:78	64
Kihorogota	7	1,897	49	1:39	47
Izazi	3	1157	19	1:61	29
Migoli	6	2,313	30	1:77	58
Malengamakali	6	2,079	37	1:56	52
Total	145	60,329	1097	1:55	1,532

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

(ii) Pitlatrine



Due to toilet deficit in primary schools the district has a long way to go attain required national standard of Pupils Toilet Ratio of 1: 24 for boys and 1:20 for girls

All primary schools in the District had a total of 1,763 pitlatrines in 2012 (Table 5.32). Basing on the standard set by the Government of Tanzania, of pupils pitlatrine ratio at 1:20 for girls and (1:25) for boys, Table 5.32 shows that there was a shortage of pitlatrines in primary schools as one pitlatrine was used by 34 pupils in 2012. Primary schools in Kiwere Ward with the ratio of 1:20 had schools which met the standard. Primary schools in the remaining wards had serious shortage with Mgama (ratio 1:65) leading.

Table 5. 32: Availability of Pit Latrines in Primary Schools by Ward, Iringa Rural District; 2012

Ward	Total Pupils	Available Pit Latrines	Pit Latrine Pupils Ratio	Required Pit Latrines	Deficit of Pit Latrines
Kalenga	2,525	60	1:42	115	55
Kiwere	2,249	112	1:20	107	-5
Nzihi	2,965	126	1:24	135	9
Ulanda	2,332	87	1:27	106	19
Mseke	3,747	156	1:24	170	14
Magulilwa	3,406	70	1:49	155	85
Luhota	3,579	116	1:31	163	47
Mgama	3,238	50	1:65	147	97
Lyamungwe	2,230	44	1:51	106	62
Ifunda	3,216	77	1:42	146	69
Lumuli	2,029	98	1:21	92	-6
Maboga	3,368	75	1:45	153	78
Wasa	2,913	104	1:28	132	28
Mahuninga	925	22	1:42	42	20
Idodi	2,313	47	1:49	105	58
Mlowa	2,097	65	1:32	95	30
Itunundu	2,855	61	1:47	130	69
Mlenge	1046	28	1:37	99	71
Ilolompya	1303	36	1:36	59	23
Nduli	1,979	58	1:34	90	32
Nyang'oro	2,568	53	1:48	117	64
Kihorogota	1,897	69	1:27	86	17
Izazi	1157	26	1:45	53	27
Migoli	2,313	46	1:50	105	59
Malengamakali	2,079	77	1:27	95	18
Total	60,329	1763	1:34	2803	1,040

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

(iii) Staff Houses



More teachers' houses are needed to curb a deficit of 805 houses in the district

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 5.33 reveals that Iringa Rural District had a total of 417 teachers' houses compared to the requirement of 1,528 houses. If we consider the required official house teacher ratio (HTR) of 1:1, Iringa Rural District had a deficit of 805 houses (equivalent to 65.9 percent deficit) based on HTR.

Table 5.33 also shows that there is no ward with a surplus of houses. Wards with percentage shortage higher than that of the district average of 65.9 percent are considered to have a critical shortage. In that sense, out of the total 25 wards, 14 wards have a critical shortage of teachers' houses.

Table 5. 33 : Availability of Primary School Teachers' Houses by Ward, Iringa Rural District; 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
					No.	Percent		
Kalenga	61	71	61	12	49	80.3	-59	-83.1
Kiwere	60	40	60	9	51	85.0	-31	-77.5
Nzihi	88	90	88	22	66	75.0	-68	-75.6
Ulanda	68	53	68	16	52	76.5	-37	-69.8
Mseke	99	112	99	38	61	61.6	-74	-66.1
Magulilwa	76	55	76	24	52	68.4	-31	-56.4
Luhota	92	73	92	27	65	70.7	-46	-63.0
Mgama	83	67	83	26	57	68.7	-41	-61.2
Lyamgungwe	60	53	60	13	47	78.3	-40	-75.5
Ifunda	89	64	89	13	76	85.4	-51	-79.7
Lumuli	52	52	52	14	38	73.1	-38	-73.1
Maboga	79	58	79	25	54	68.4	-33	-56.9
Wasa	59	43	59	12	47	79.7	-31	-72.1
Mahuninga	19	15	19	10	9	47.4	-5	-33.3
Idodi	66	43	66	11	55	83.3	-32	-74.4
Mlowa	58	29	58	22	36	62.1	-7	-24.1
Itunundu	47	45	47	27	20	42.6	-18	-40.0
Mlenge	28	21	28	16	12	42.9	-5	-23.8
Ilolompya	33	28	33	10	23	69.7	-18	-64.3
Nduli	58	43	58	16	42	72.4	-27	-62.8
Nyang'oro	55	33	55	10	45	81.8	-23	-69.7
Kihorogota	56	47	56	10	46	82.1	-37	-78.7
Izazi	26	15	26	6	20	76.9	-9	-60.0
Migoli	62	40	62	9	53	85.5	-31	-77.5
Malengamakali	54	32	54	19	35	64.8	-13	-40.6
Total	1528	1222	1528	417	1111	72.7	-805	-65.9

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

(iv) Furniture(Desks)



Pupils Desk Ratio of 1:4 shows primary schools in the district have desks deficit

The average number of pupils per desk is an important indicator of the provision of favourable and conducive learning environment for the pupils. For primary and secondary schools, the national standard pupils' desk ratio (DPR) is three pupils/students per one desk (1:3). Table 5.34 shows that most primary schools in the District a DPR of four pupils per desk (1:4) and a deficit of 13,063 desks (78.7 percent deficit) thus fail to comply with the national standard. With a DPR of six pupils per desk (1:6) Migoli primary schools were leading in desks shortage. It was followed by Maboga, Itunundu and Nyang'oro each with a DPR of 1:5. Table 5.34 further shows that only primary schools in 11 wards with DPRs of 1:2 or 1:3 had met standard. With 60,329 pupils registered in 2012, Iringa Rural District needed about 29,656 desks so as making all primary schools in the district comply with the official Desk Pupils Ratio (DPR) of 1:3.

Table 5. 34 : Availability of Desks in Primary Schools by Ward, Iringa Rural District; 2012

Ward	Total Pupils	Available Desks	Desk Pupils Ratio	Required Desks	Deficit of Desks	
					No.	Percent
Kalenga	2,525	580	1:4	1,263	683	117.8
Kiwere	2,249	676	1:3	1,125	449	66.4
Nzihi	2,965	932	1:3	1,483	551	59.1
Ulanda	2,332	689	1:3	1,166	477	69.2
Mseke	3,747	1,109	1:3	1,874	765	69.0
Magulilwa	3,406	772	1:4	1,703	931	120.6
Luhota	3,579	982	1:4	491	-491	-50.0
Mgama	3,238	739	1:4	1,789	1,050	142.1
Lyamgungwe	2,230	726	1:3	1,165	439	60.5
Ifunda	3,216	903	1:4	1,608	705	78.1
Lumuli	2,029	867	1:2	1,015	148	17.1
Maboga	3,368	716	1:5	1,684	968	135.2
Wasa	2,913	756	1:4	1,457	701	92.7
Mahuninga	925	214	4	467	253	118.2
Idodi	2,313	726	1:3	1,157	431	59.4
Mlowa	2,097	635	1:3	1,048	413	65.0
Itunundu	2,855	598	1:5	1,428	830	138.8
Mlenge	1046	460	1:2	1,084	624	135.7
Ilolompya	1303	332	1:4	652	320	96.4
Nduli	1,979	497	1:4	989	492	99.0
Nyang'oro	2,568	527	1:5	1,284	757	143.6
Kihorogota	1,897	740	1:3	949	209	28.2
Izazi	1157	291	1:4	579	288	99.0
Migoli	2,313	420	1:6	1,157	737	175.5
Malengamakali	2,079	706	1:3	1,039	333	47.2
Total	60,329	16,593	1:4	29,656	13,063	78.7

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

(v) Accessibility of Water

Iringa Rural District supplies water to some of her primary schools through water tanks and tap water (Table 5.35). Tap water is the most common water source for most primary schools in the district. It accounted for 92.3 percent of all sources in 2011 and 92.6 percent in 2012. Nevertheless, for reducing water shortage, rain water harvests done through water tanks also happened to be among sources of water in primary schools. It accounted for 7.7 percent of all sources in 2011 and 7.4 percent in 2012. Despite efforts done to alleviate poor accessibility of clean and safe water through tap water in primary schools in the District, the situation was still bad. This is because out of a total of 145 primary schools in the district only 25 had tap water in 2012. This is an average of one tap water source for every six (6) schools. This signifies the district has long way to go to improve availability of clean and safe water to primary school pupils.

Table 5. 35: Accessibility of Water in Public Primary Schools by Ward, Iringa Rural District; 2011 and 2012

Ward	2011				2012			
	No. of Pri. Schools with Operating:			Total No. of Water Sources	No. of Pri. Schools with Operating:			Total No. of Water Sources
	Water Tanks	Water wells	Tap water		Water Tanks	Water wells	Tap water	
Kalenga	2	0	2	4	2	0	2	4
Kiwere	0	0	0	0	0	0	0	0
Nzihi	0	0	3	3	0	0	3	3
Ulanda	0	0	0	0	0	0	0	0
Mseke	0	0	2	2	0	0	2	2
Magulilwa	0	0	2	2	0	0	3	3
Luhota	0	0	1	1	0	0	1	1
Mgama	0	0	2	2	0	0	2	2
Lyamungwe	0	0	0	0	0	0	0	0
Ifunda	0	0	2	2	0	0	2	2
Lumuli	0	0	2	2	0	0	2	2
Maboga	0	0	2	2	0	0	2	2

Table 5.35(ctd): Accessibility of Water in Public Primary Schools by Ward, Iringa Rural District; 2011 and 2012

Ward	2011				2012			
	No. of Pri. Schools with Operating:			Total No. of Water Sources	No. of Pri. Schools with Operating:			Total No. of Water Sources
	Water Tanks	Water wells	Tap water		Water Tanks	Water wells	Tap water	
Wasa	0	0	2	2	0	0	2	2
Mahuninga	0	0	0	0	0	0	0	0
Idodi	0	0	0	0	0	0	0	0
Mlowa	0	0	0	0	0	0	0	0
Itunundu	0	0	2	2	0	0	2	2
Mlenge	0	0	0	0	0	0	0	0
Ilolompya	0	0	1	1	0	0	1	1
Nduli	0	0	1	1	0	0	1	1
Nyang'oro	0	0	0	0	0	0	0	0
Kihorogota	0	0	0	0	0	0	0	0
Izazi	0	0	0	0	0	0	0	0
Migoli	0	0	0	0	0	0	0	0
Malengamakali	0	0	0	0	0	0	0	0
Total	2	0	24	26	2	0	25	27
Percent	7.7	0.0	92.3	100.0	7.4	0.0	92.6	100.0

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

(vi) Teachers

The teacher to pupil ratio is an important indicator of the quality of education provided in schools. The national standard requirement is that one teacher should serve a class of 45 pupils (1:45). Table 5.36 indicates that primary schools in Iringa Rural District had an overall teachers pupils ratio (TPR) of one teacher per 49 pupils (1:49). This is beyond the national standard and hence, there is shortage of primary school teachers. At ward level, primary schools in seven (7) wards, Kalenga, Nzihi, Ulanda, Mseke, Lyamgungwe, Lumuli and Kihorogota had a teachers' pupils ratio of 1:45 and or below and thus complied with the national

standard. Primary schools in the remaining 18 wards failed to meet the national standard. With TPR of 1:77 primary schools in Izazi Ward had the worst situation of one teacher teaching 77 pupils in a classroom.



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 Rural District; 2012

Ward	Total Pupils	Teachers Required	Available Teachers	Deficit	Percent of Deficit	Teacher Pupils Ratio (TPR)
Kalenga	2,525	63	71	-8	-12.7	1:35
Kiwere	2,249	56	40	16	25.4	1:56
Nzihi	2,965	74	90	-16	-25.4	1:33
Ulanda	2,332	58	52	6	9.5	1:45
Mseke	3,747	94	112	-18	-28.6	1:34
Magulilwa	3,406	85	55	30	47.6	1:62
Luhota	3,579	85	73	12	19.0	1:49
Mgama	3,238	81	67	14	22.2	1:48
Lyamgungwe	2,230	58	55	3	4.8	1:41
Ifunda	3,216	80	64	16	25.4	1:50
Lumuli	2,029	51	52	-1	-1.6	1:39
Maboga	3,368	84	58	26	41.3	1:58

Table 5. 36(ctd): Availability of Primary School's Teachers (Grade A, B, Diploma and Degree) by Ward, Iringa Rural District; 2012

Ward	Total Pupils	Teachers Required	Available Teachers	Deficit	Percent of Deficit	Teacher Pupils Ratio (TPR)
Wasa	2,913	73	43	30	47.6	1:68
Mahuninga	925	23	15	8	12.7	1:62
Idodi	2,313	58	43	15	23.8	1:54
Mlowa	2,097	52	29	23	36.5	1:72
Itunundu	2,855	71	45	26	41.3	1:63
Mlenge	1046	54	21	33	52.4	1:50
Ilolompya	1303	33	28	5	7.9	1:47
Nduli	1,979	49	43	6	9.5	1:46
Nyang'oro	2,568	64	45	19	30.2	1:57
Kihorogota	1,897	47	47	0	0.0	1:40
Izazi	1157	29	15	14	22.2	1:77
Migoli	2,313	58	35	23	36.5	1:66
Malengamakali	2,079	52	32	20	31.7	1:65
Total	60,329	1,532	1,230	302	479.4	1:49

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

5.2.3.6 Secondary School Education

Table 5.37 shows that in 2012 the District had 32 secondary schools (public and private). Public secondary schools were 28 (87.5 percent of total secondary schools) and private secondary schools were four (12.5 percent). Ifunda Ward was leading in number of secondary schools by having four schools. Table 5.37 also reveals that there were more public (28) than private (4) secondary schools. In the same year, 2012, Ifunda Ward was leading in number of public secondary schools (4) while Magulilwa, Luhota, Lumuli and Migoli were the only wards with each having one private secondary school. Absence of secondary schools in Mahuninga, Mlenge and Izazi wards should be taken as a challenge which the district should work on to meet the target set by the government of each ward having one secondary school.

Table 5. 37 : Number of Secondary Schools by Ownership and by Ward, Iringa Rural District; 2010 - 2012

Ward	2010			2011			2012			Percent
	Public	Private	Total	Public	Private	Total	Public	Private	Total	
Kalenga	2	0	2	2	0	2	2	0	2	6.3
Kiwere	1	0	1	1	0	1	1	0	1	3.1
Nzihi	2	0	2	2	0	2	2	0	2	6.3
Ulanda	1	0	1	1	0	1	1	0	1	3.1
Mseke	1	0	1	1	0	1	1	0	1	3.1
Magulilwa	1	1	2	1	1	2	1	1	2	6.3
Luhota	1	1	2	1	1	2	1	1	2	6.3
Mgama	1	0	1	1	0	1	1	0	1	3.1
Lyamungwe	1	0	1	1	0	1	1	0	1	3.1
Ifunda	3	1	4	3	1	4	4	0	4	12.5
Lumuli	1	0	1	1	0	1	1	1	2	6.3
Maboga	2	0	2	2	0	2	2	0	2	6.3
Wasa	1	0	1	1	0	1	1	0	1	3.1
Mahuninga	-	0	0	-	0	0	0	0	0	0.0
Idodi	1	0	1	1	0	1	1	0	1	3.1
Mlowa	1	0	1	1	0	1	1	0	1	3.1
Itunundu	1	0	1	1	0	1	1	0	1	3.1
Mlenge	-	0	0	-	0	0	0	0	0	0.0
Ilolompya	1	0	1	1	0	1	1	0	1	3.1
Nduli	1	0	1	1	0	1	1	0	1	3.1
Nyang'oro	-	0	0	-	0	0	1	0	1	3.1
Kihorogota	1	0	1	1	0	1	1	0	1	3.1
Izazi	-	0	0	-	0	0	0	0	0	0.0
Migoli	1	1	2	1	1	2	1	1	2	6.3
Malengamakali	1	0	1	1	0	1	1	0	1	3.1
Total	26	4	30	26	4	30	28	4	32	100.0

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

With reference to Table 5.37a, Iringa Rural District's population of 2010, 2011 and 2012 gave the district an average population per secondary school of 9,089.9, 9,181.4 and 7,938.5 in the three consecutive years. Dropping of population per secondary school from 9,181.4 of 2011 to 7,938.5 in 2012 is a positive altitude of the district towards making sure that more secondary schools are constructed to

meet the demand of increasing population in the district. In 2012 the population per secondary school varied from 3,049.8 in Ifunda to 15,868 in Mseke ward. For development planning, priority in secondary school construction should be given to Mseke ward in order to reduce the students overcrowding due to its high Population per Secondary School.

Table 5.37 a : Population Growth versus Increase in Secondary Schools by Ward, Iringa Rural District; 2010 - 2012

S/N	Ward	2010			2011			2012		
		Total Population	No.of School	Population per School	Total Population	No.of School	Population per School	Total Population	No.of School	Population per School
1	Kalenga	9,729	2	4864.5	9,839	2	4919.5	6,963	2	3481.5
2	Kiwere	11,781	1	11781	11,905	1	11905	9,776	1	9776
3	Nzihi	14,805	2	7402.5	14,968	2	7484	14,872	2	7436
4	Ulanda	10,024	1	10024	10,123	1	10123	9,257	1	9257
5	Mseke	17,419	1	17419	17,574	1	17574	15,868	1	15868
6	Magulilwa	29,831	2	14915.5	30,099	2	15049.5	13,639	2	6819.5
7	Luhota	0	2	0	0	2	0	14,019	2	7009.5
8	Mgama	25,311	1	25311	25,520	1	25520	12,561	1	12561
9	Lyamungwe	0	1	0	0	1	0	9,836	1	9836
10	Ifunda	14,850	4	3712.5	15,001	4	3750.25	12,199	4	3049.8
11	Lumuli	8,414	1	8414	8,481	1	8481	7,852	2	3926
12	Maboga	13,712	2	6856	13,834	2	6917	12,642	2	6321
13	Wasa	10,739	1	10739	10,836	1	10836	10,595	1	10595
14	Mahuninga	4,298	0	-	4,356	0	-	4,331	0	-
15	Idodi	10,966	1	10966	11,094	1	11094	10,202	1	10202
16	Mlowa	8,869	1	8869	8,968	1	8968	9,483	1	9483
17	Itunundu	16,754	1	16754	16,929	1	16929	14,420	1	14420
18	Mlenge	0	0	-	0	0	-	9,463	0	-
19	Ilolompya	4,297	1	4297	4,339	1	4339	6,376	1	6376
20	Nduli	13,070	1	13070	13,211	1	13211	8,045	1	8045
21	Nyang'oro	0	0	-	0	0	-	9,810	1	9810
22	Kihorogota	19,985	1	19985	20,182	1	20182	7,688	1	7688
23	Izazi	19,361	0	-	19,617	0	-	5,281	0	-
24	Migoli	0	2	0	0	2	0	10,937	2	5468.5
25	Malengamakali	8,482	1	8482	8,565	1	8565	7,917	1	7917
Total		272,697	30	9089.9	275,441	30	9181.4	254,032	32	7938.5

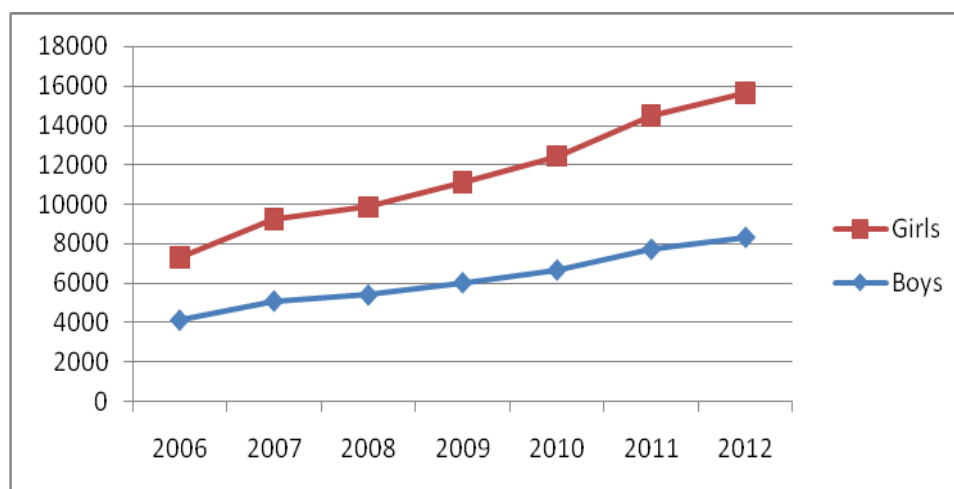
Source: District Executive Director's Office (Education Department), Iringa Rural District, 2013

5.2.3.7 Secondary School Enrolment

The enrolment of students in Iringa Rural District increased with the increase of the school infrastructure. Table 5.38, shows that from 2006-2012 there was a remarkable increase in secondary school students' enrolment in the District. Students enrolling into secondary schools in the District increased by 114.2 percent from 7,313 students in 2006 to 15,661 students in 2012. This achievement was attained because of much emphasis placed on expansion of secondary education by the fourth Tanzanian government under the leadership of President Dr. Mrisho Jakaya Kikwete and close follows up by the former Prime Minister Honorable Edward Lowassa. The government put much effort in the construction of a secondary school in each ward. This policy of each ward having a secondary school, resulted into many districts in the country having adequate number of classrooms in public secondary schools to accommodate the increasing number of primary school pupils who passed Standard Seven Examination. Many pupils in Iringa Rural District and the country in general joined secondary education.

Compared to other years, 2007 was the best year by attaining highest increase in enrolment of 26.9 percent while 2008 had the smallest increase of 6.5. In regard to enrolment by sex, Table 5.38 shows that over the seven year period from 2006 to 2012 more boys (43,233 equivalent to 53.9 percent of total students enrolled) than girls (36,955, 46.1 percent) were enrolled in secondary schools. Moreover, after successfully increasing general enrolment in secondary schools, the remaining task is for the District to put more effort in increasing number of girls enrolled in secondary schools so as to achieve equal opportunity for boys and girls.

Figure 32: Form (I-IV) Enrolment Trend in Public Secondary Schools, Iringa Rural District; 2006-2012



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

Table 5. 38: Total Form (I-IV) Enrolment in Public Secondary Schools by Sex, Iringa Rural District; 2006-2012

Year	Boys		Girls		Total Enrolment	Percentage Total Enrolment		Total Enrolment Percentage Change
	Number	Percentage	Number	Percentage		Boys	Girls	
2006	4,112	9.5	3,201	8.7	7,313	56.2	43.8	na
2007	5,080	11.8	4,200	11.4	9,280	54.7	45.3	26.9
2008	5,385	12.5	4,502	12.2	9,887	54.5	45.5	6.5
2009	6,006	13.9	5,102	13.8	11,108	54.1	45.9	12.3
2010	6,650	15.4	5,801	15.7	12,451	53.4	46.6	12.1
2011	7,700	17.8	6,788	18.4	14,488	53.1	46.9	16.4
2012	8,300	19.2	7,361	19.9	15,661	53.0	47.0	8.1
Total	43,233	100.0	36,955	100.0	80,188	53.9	46.1	
Percent	53.9		46.1		100			

Na: not available

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

Table 5.38a shows that secondary school student population per school was fluctuating and had its peak at 489.4 students in 2012. This means that much concentration of students in secondary schools was in 2012 than in previous years

shown in Table 5.38a . The increasing students population per school ratio with the highest being that of 2012 should be taken as an indication that more secondary schools are needed to meet the increasing demand for secondary education. Nevertheless, the District needs to also encourage individuals and non-government institutions to invest in secondary school education to support the government in curbing the problem of student congestion that has cropped up in the District.

Table 5.38 a: Secondary School Students Population per School, Iringa Rural District; 2008 – 2012

Year	Total Students Enrolled	Total No. of Secondary Schools (Both Public and Private)	Student Population per Secondary School
2008	9,887	26	380.3
2009	11,108	30	370.3
2010	12,451	30	415.0
2011	14,488	32	452.8
2012	15,661	32	489.4

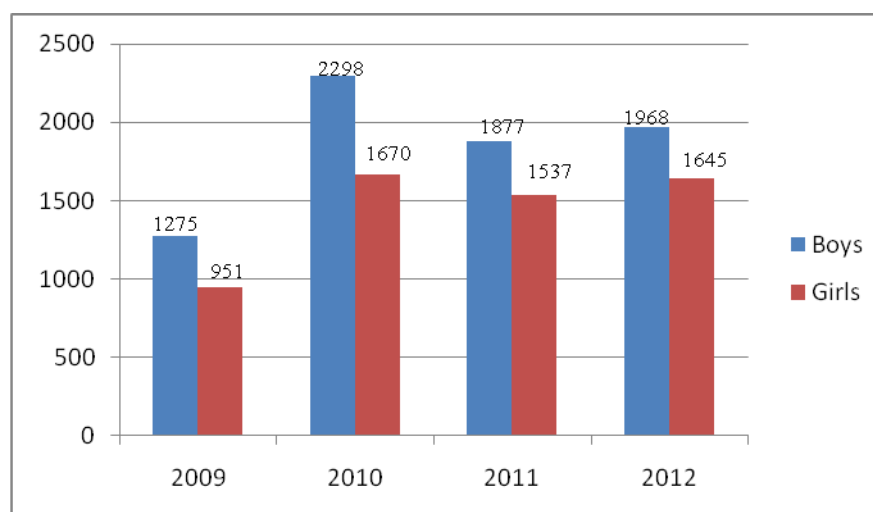
Source: District Executive Director's Office (Education Department), Iringa Rural District, 2013

Table 5.39 shows the number of students who completed secondary school education in public secondary schools in Iringa Rural District. Table 5.39 shows that from 2009 to 2012, a total of 13,221 students completed Form IV education. The share of students who completed such education was 56.1 percent for boys and 43.9 percent for girls. The massive number of those who completing Form IV was 3,968 students in 2010 which was an increase of 78.2 percent over those completing in 2009. The lowest number of 2,226 students completed form IV education in 2009. There was a decrease of 14 percent in the number of students who completed Form IV in 2011. For sustainable development of secondary school education, it is important for the Iringa Rural District Council to find out why there was a drop in the number completing Form IV in 2011.

Table 5.39 : Students Completed Form IV in Public Secondary Schools by Sex, Iringa Rural District;2009 – 2012

Year	Boys		Girls		Total Boys and Girls	Proportion (%)		Percentage Increase in Students who Completed
	Number	Percent	Number	Percent		Boys	Girls	
2009	1,275	17.2	951	16.4	2,226	57.3	42.7	
2010	2,298	31.0	1,670	28.8	3,968	57.9	42.1	78.3
2011	1,877	25.3	1,537	26.5	3,414	55.0	45.0	-14.0
2012	1,968	26.5	1,645	28.3	3,613	54.5	45.5	5.8
Total	7,418	100.0	5803	100.0	13,221	56.1	43.9	
Percent	56.1		43.9		100			

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

Figure 33 : Number of Students who Completed Form IV in Public Secondary Schools by Sex, Iringa Rural District; 2009-2012

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

Performance of education at high school level was good in terms of the number of students who enrolled. Table 5.40 shows an increasing trend in the number of students enrolled into high school education. They increased by 609 students (64.6 percent increase) from 943 students of 2009 to 1,552 students in 2012. As in

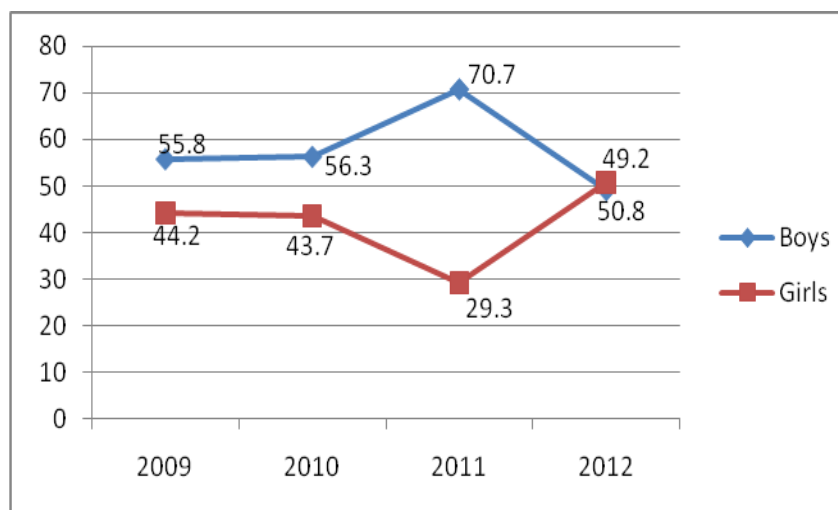
secondary schools, there were more boys registered than girls. Boys accounted 58 percent of total enrolment in high school for the period 2009 to 2012 while girls accounted for 42 percent only. Highest number of boys (975) was enrolled into high school education in 2011 while for girls the highest number was 789 students in 2012.

Table 5. 40 : Total Form (V and VI) Enrolment in Public Secondary Schools by Sex, Iringa Rural District; 2009 – 2012

Year	Boys		Girls		Total Boys and Girls	Percent of the Total Enrolmet		Percentage change in Students who Enrolled
	Number	Percent	Number	Percent		Boys	Girls	
2009	526	18.6	417	20.4	943	55.8	44.2	
2010	561	19.9	435	21.3	996	56.3	43.7	5.6
2011	975	34.5	405	19.8	1380	70.7	29.3	38.6
2012	763	27.0	789	38.6	1552	49.2	50.8	12.5
Total	2825	100.0	2046	100.0	4871	58.0	42.0	
Percent	58.0		42.0		100			

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

Figure 34 : Percentage by Sex of Form (V and VI) Students Enrolment in Public Secondary Schools, Iringa Rural District; 2009 – 2012



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

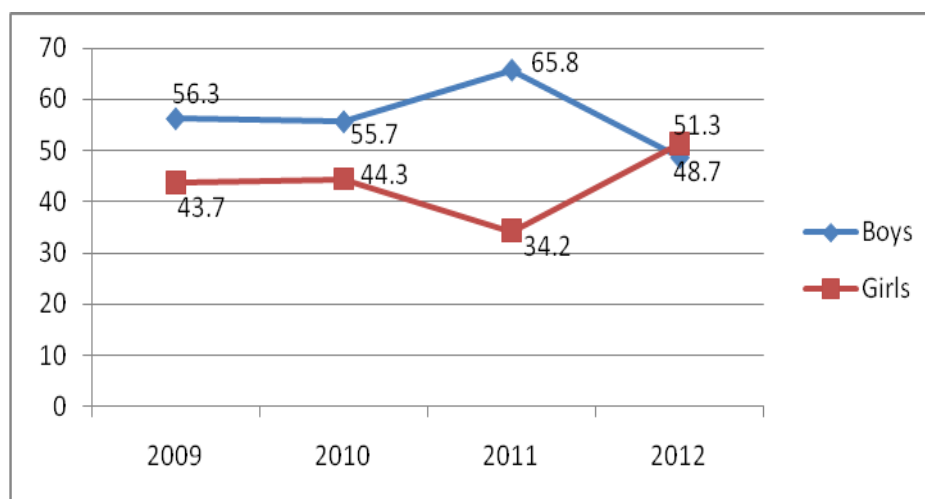
Table 5.41 shows the number of students who completed high school education by sex in Iringa Rural District. According to the Table, the number completing is increasing. It increased by 6.1 percent from 890 students in 2009 to 944 students in 2010. Similarly, from 2010 to 2011 the number increased by 16.1 percent and increased by 52.3 percent from 2011 to 2012. The proportion of students who completed high school during the four years (2009-2012) was higher for boys (55.7 percent) than girls (44.3 percent). The big difference (523 students) between the number of boys and girls who completed high school should be taken as a challenge by the District on what should be done to increase number of girls who acquire and complete higher secondary education level.

Table 5.41 : Number of Students Who Completed ‘A’-Level Education in Public Secondary Schools by Sex, Iringa Rural District; 2009 – 2012

Year	Boys		Girls		Total Boys and Girls	Percentage of the Total Completed		Percentage Change in Students who Completed
	Number	Percent	Number	Percent		Boys	Girls	
2009	501	19.6	389	19.1	890	56.3	43.7	
2010	526	20.5	418	20.5	944	55.7	44.3	6.1
2011	721	28.2	375	18.4	1096	65.8	34.2	16.1
2012	813	31.7	856	42.0	1669	48.7	51.3	52.3
Total	2561	100.0	2038	100.0	4599	55.7	44.3	
Percent	55.7		44.3		100			

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

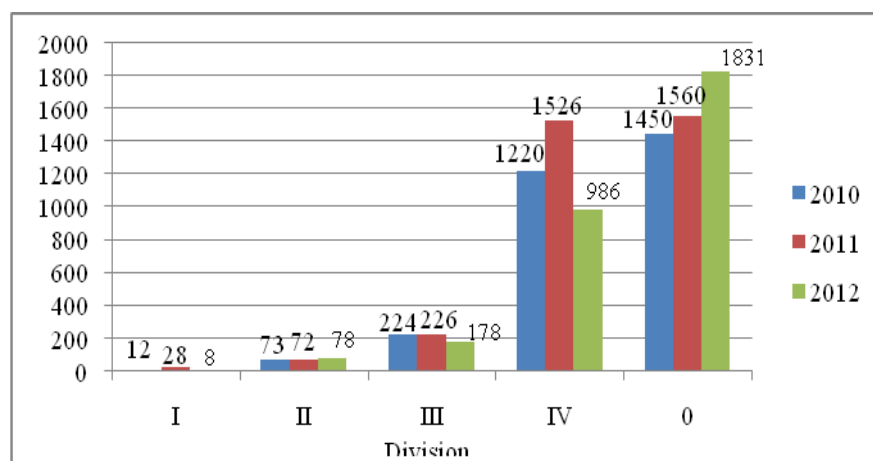
Figure 35 : Percentage by Sex of students who completed ‘A’ Level in Public Secondary Schools, Iringa Rural; 2009-2012



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

5.2.3.8 Pass Rates in Secondary Schools

Performance of Form IV examinees over the period of three years (2010-2012) in Iringa Rural District was not good as out of a total of 9,472 students who sat for the examinations about half of them (4,841 students, 51.1 percent) failed by scoring Division Zero. Those who scored Division IV were 3,732 students (39.4 percent), Division III (628 students, 6.6 percent), Division II (223 students, 2.4 percent) And Division I (48 students, 0.5 percent). Among the failures (those who scored Division Zero) boys were more at 2,877 students (59.4 percent) than girls (1,964 students, 40.6 percent). Moreover, yearly analysis of Table 5.42 shows that 2011 had the largest number of examinees of 3,412 students (36 percent of total examinees) and the year with the smallest number was 2010 with 2,979 students (31.5 percent). On top of that 2010 was the only year when girls had the largest number of examinees (1,677 students, 56.3 percent). Remaining two years, 2011 and 2012, boys examinees were the majority.

Figure 36 : Students Performance (Number) in Form IV Examinations in Public Secondary schools, Iringa Rural District; 2010-2012

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

Table 5. 42 : Students Performance (Number) in Form IV Examinations in Public Secondary Schools by Sex, Iringa Rural District; 2010 - 2012

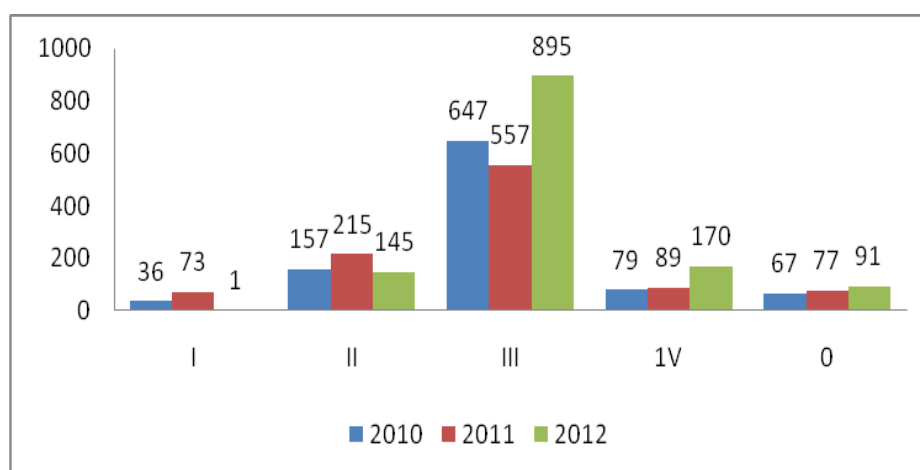
Division	2010			2011			2012			District Total			Percent
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
I	12	0	12	3	25	28	8	0	8	23	25	48	0.5
II	70	3	73	68	4	72	70	8	78	208	15	223	2.4
III	150	74	224	166	60	226	122	56	178	438	190	628	6.6
IV	220	1000	1220	986	540	1526	560	426	986	1766	1966	3732	39.4
0	850	600	1450	1000	560	1560	1027	804	1831	2877	1964	4841	51.1
Total	1302	1677	2979	2223	1189	3412	1787	1294	3081	5312	4160	9472	100.0
Percent	43.7	56.3	100	65.2	34.8	100.0	58.0	42.0	100	56.1	43.9	100.0	

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

Table 5.43 shows students performance in Form VI examinations. Pass is divided into divisions with division I being the highest pass. Unlike Form IV examinations performance, Form VI performance was encouraging as 92.9 percent of students who sat for those examinations from 2010 to 2012 passed leaving only 7.1 percent of examinees as failures. Students who passed with Division III were the majority at 63.6 percent, followed by Division II (15.7 percent), Division IV (10.2 percent), Division zero (7.1 percent) and the least students scored Division I (3.3 percent).

As in the case of Form IV examinations results boys (2,469 students, 74.8 percent) were more than girls (830 students, 25.2 percent). Nevertheless, a higher proportion of boys (94.6 percent) passed the examination than girls (87.7 percent). Besides, there was such a big difference between the number of boys and the number of girls who sat Form VI Examinations. District Council put more effort in sensitizing for more girls alert to join high school education and attain good results.

Figure 37 : Students Performance (Number) in Form VI Examinations in Public Secondary schools, Iringa Rural District; 2010-2012



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

Table 5. 43 : Students Performance (Number) in Form VI Examinations in Public Secondary Schools by Sex, Iringa Rural District; 2010 - 2012

Division	2010			2011			2012			District Total			Percent
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
I	30	6	36	65	8	73	1	0	1	96	14	110	3.3
II	111	46	157	197	18	215	130	15	145	438	79	517	15.7
III	490	157	647	384	173	557	706	189	895	1580	519	2099	63.6
IV	61	18	79	67	22	89	94	76	170	222	116	338	10.2
0	15	52	67	50	27	77	68	23	91	133	102	235	7.1
Total	707	279	986	763	248	1011	999	303	1302	2469	830	3299	100.0
Percent	71.7	28.3	100.0	75.5	24.5	100.0	76.7	23.3	100.0	74.8	25.2	100	

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

5.2.3.9 State of Secondary School Facilities

The most common are teachers and facilities like classrooms, teachers' offices, toilets, staff quarters, libraries, laboratories, dormitories and desks.

(i) Teachers

In 2012 there were 548 teachers in public secondary schools in Iringa District (Table 5.44). Of the total teachers, diploma holders were the majority at 51.1 percent, followed by degree holders (48.7 percent) and teachers possessing master degree were the minority at 0.2 percent. The secondary schools in Ifunda ward had the largest share of teachers at 20.3 percent.

Table 5. 44 : Availability of Public Secondary School's Teachers by Qualification and by Iringa Rural District; 2012

Ward	Number of Teachers with					Percent of Total Teachers	
	Certificate	Diploma	Degree	Masters	Others		
							Total
Kalenga	0	32	19	0	0	51	9.3
Kiwere	0	8	8	1	0	17	3.1
Nzihi	0	22	13	0	0	35	6.4
Ulanda	0	14	12	0	0	26	4.7
Mseke	0	18	7	0	0	25	4.6
Magulilwa	0	8	5	0	0	13	2.4
Luhota	0	13	8	0	0	21	3.8
Mgama	0	8	9	0	0	17	3.1
Lyamgungwe	0	10	30	0	0	40	7.3
Ifunda	0	49	62	0	0	111	20.3
Lumuli	0	11	13	0	0	24	4.4
Maboga	0	7	2	0	0	9	1.6
Wasa	0	8	6	0	0	14	2.6
Mahuninga	0	0	0	0	0	0	0.0

Table 5. 44(ctd) : Availability of Public Secondary School's Teachers by Qualification and by Iringa Rural District; 2012

Ward	Number of Teachers with					Total	Percent of Total Teachers
	Certificate	Diploma	Degree	Masters	Others		
Idodi	0	22	8	0	0	30	5.5
Mlowa	0	8	4	0	0	12	2.2
Itunundu	0	12	14	0	0	26	4.7
Mlenge	0	0	0	0	0	0	0.0
Ilolompya	0	0	0	0	0	0	0.0
Nduli	0	7	6	0	0	13	2.4
Nyang'oro	0	3	3	0	0	6	1.1
Kihorogota	0	6	11	0	0	17	3.1
Izazi	0	0	0	0	0	0	0.0
Migoli	0	9	21	0	0	30	5.5
Malengamakali	0	5	6	0	0	11	2.0
Total	0	280	267	1	0	548	100.0
Percent	0	51.1	48.7	0.2	0	100	

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

Table 5.44a indicates that in 2012 the majority of secondary school teachers in Iringa Rural District were arts teachers who accounted for 70.5 percent of all teachers. Science teachers were very few at 29.5 percent. On of the availability of science teachers, Ifunda was better off than other wards by having more science teachers (56) than arts teachers (47). Mahuninga, Mlenge and Izazi had no science teachers. In order to encourage more students to take science subjects, the District is urged to find ways of increasing number of science teachers in secondary schools and also find ways of retaining those teachers. This will improve the learning of science subjects and even increase students taking science subjects in secondary schools in the District.

Table 5.44 a : Number of Science and Arts Teachers in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	Number of Teachers:			Percentage of Science Teachers
	Teaching Science Subjects	Teaching Arts Subjects	Total	
Kalenga	12	41	53	22.6
Kiwere	4	14	18	22.2
Nzihi	10	27	37	27.0
Ulanda	6	23	29	20.7
Mseke	4	19	23	17.4
Magulilwa	1	12	13	7.7
Luhota	4	13	17	23.5
Mgama	8	13	21	38.1
Lyamungwe	12	28	40	30.0
Ifunda	56	47	103	54.4
Lumuli	1	17	18	5.6
Maboga	1	7	8	12.5
Wasa	7	8	15	46.7
Mahuninga	0	0	0	
Idodi	2	28	30	6.7
Mlowa	7	5	12	58.3
Itunundu	6	19	25	24.0
Mlenge	0	0	0	
Ilolompya	12	28	40	30.0
Nduli	4	13	17	23.5
Nyang'oro	3	4	7	42.9
Kihorogota	3	14	17	17.6
Izazi	0	0	0	
Migoli	5	22	27	18.5
Malengamakali	4	9	13	30.8
Total	172	411	583	29.5
Percent	29.5	70.5	100	

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

(ii) Administration blocks

Administration blocks are important facilities for provision of quality education. Therefore, inadequacy of administration blocks to a large extent prohibits provision of quality education. Table 5.45 shows that in 2012 there were 17

public secondary schools with administration blocks and 11 schools without administration blocks in the District. Ifunda had the largest number of administration blocks (3).

Table 5. 45 : Availability of Administration Blocks in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	No. of Public Sec. Schools with Administration Blocks	No. of Public Sec. Schools without Administration Blocks	Total no. of Public Sec. Schools	Percent of Public Sec. Schools with Administration Blocks
Kalenga	1	1	2	50
Kiwere	1	0	1	100
Nzihi	2	0	2	100
Ulanda	1	0	1	100
Mseke	0	1	1	0
Magulilwa	0	1	1	0
Luhota	1	0	1	100
Mgama	1	0	1	100
Lyamungwe	0	1	1	0
Ifunda	3	1	4	75
Lumuli	0	1	1	0
Maboga	1	1	2	0
Wasa	0	1	1	0
Mahuninga	0	0	0	0
Idodi	1	0	1	100
Mlowa	0	1	1	0
Itunundu	2	0	2	100
Mlenge	0	0	0	0
Ilolompya	0	0	0	0
Nduli	0	1	1	0
Nyang'oro	0	1	1	0
Kihorogota	1	0	1	100
Izazi	0	0	0	0
Migoli	1	0	1	100
Malengamakali	1	0	1	100
Total	17	11	28	59.3
Percent	60.7	39.3	100.0	

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

(iii) Staff Quarters

According to the Ministry of Education, each school house needs to accommodate one teacher. Because of critical shortage of teacher houses, in many areas in the country especially in rural areas, one house accommodates several teachers. Besides shortage of teachers which this document highlighted earlier, Table 5.46 shows that the District experiences the shortage of teachers' houses. Since the district has Teacher House Ratio (THR) below one, this means the District suffers from a critical shortage of houses and a deficit of 206 teachers' houses. The district authority should remember that the provision of staff houses is a basic incentive for teacher retention and promotion of effective teaching. Therefore, efforts to improve performance of education system in the District, apart from focusing on employing more teachers, should also focus on building more teachers' houses.

Table 5. 46 : Availability of Teachers Houses in Public Secondary Schools by Ward; Iringa Rural District; 2012

Ward	Required	Houses Available	Houses Required	Deficit	House Teacher Ratio
Kalenga	2	29	52	23	26
Kiwere	18	9	12	3	0.7
Nzihi	32	2	14	12	0.4
Ulanda	30	5	28	23	0.9
Mseke	20	1	11	10	0.6
Magulilwa	7	1	8	7	1.1
Luhota	18	1	5	4	0.3
Mgama	9	2	6	4	0.7
Lyamungwe	32	4	0	-4	0.0
Ifunda	150	23	86	63	0.6
Lumuli	17	0	0	0	0.0
Maboga	27	12	16	4	0.6
Wasa	17	2	5	3	0.3

Table 5. 46 (ctd) : Availability of Teachers Houses in Public Secondary Schools by Ward; Iringa Rural District; 2012

Ward	Required	Houses Available	Houses Required	Deficit	House Teacher Ratio
Mahuninga	0	0	-		-
Idodi	41	12	26	14	0.6
Mlowa	10	0	7	7	0.7
Itunundu	12	7	5	-2	0.4
Mlenge	0	0	-		-
Ilolompya	13	1	6	5	0.5
Nduli	15	1	15	14	1.0
Nyang'oro	0	0	-	-	-
Kihorogota	12	8	16	8	1.3
Izazi	0	0	-	-	-
Migoli	30	16	17	1	0.6
Malengamakali	18	4	11	7	0.6
Total	530	140	346	206	0.7

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

(iv) Classrooms

According to the Ministry of Education each classroom in secondary schools in the country should accommodate 45 students or secondary schools should have classroom student ratio of 1:45 (i.e CSR of 1:45). Based on this standard, with classroom student ratio of 1:37 Iringa Rural District had no deficit of classrooms at district level. However, at ward level, the following wards with CSRs greater than 1:45 had classroom deficits; Luhota (CSR of 1:50), Lyamungwe (CSR of 1:55), Idodi (CSR of 1:56) and Malengamakali (CSR of 1:53).

Table 5. 47 : Availability of Classrooms in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	Required	Available	Total Students	Student Classroom Ratio
Kalenga	32	27	972	36
Kiwere	20	16	508	32
Nzihi	32	26	932	36
Ulanda	16	14	551	39
Mseke	17	14	508	36
Magulilwa	16	14	513	37
Luhota	18	15	748	50
Mgama	16	14	514	37
Lyamkungwe	23	19	1037	55
Ifunda	91	90	3285	37
Lumuli	16	15	347	23
Maboga	16	7	182	26
Wasa	16	13	378	29
Mahuninga	0	0	0	0
Idodi	20	20	1121	56
Mlowa	16	12	203	17
Itunundu	32	21	574	27
Mlenge	0	0	0	0
Ilolompya	0	0	0	0
Nduli	16	12	422	35
Nyang'oro	16	6	167	28
Kihorogota	20	20	685	34
Izazi	0	0	0	0
Migoli	24	24	824	34
Malengamakali	16	12	634	53
Total	489	411	15105	37

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

(v) Pit Latrines

Secondary schools in the District required 956 pit latrines in 2012 but only 630 were available leaving a shortage of 326 pit latrines (34.1 percent deficit). Table 5.48 shows that only Ulanda Ward had adequate number of pit latrines. Lyamkungwe Ward was the most affected with a deficit of 42.4 percent, followed by Nzihi (33.3 percent), Itunundu and Nduli (each with 29.3 percent deficit).

Nyang'oro Ward although it had one secondary school, the number of pitlatrines required and available were not given.

Table 5. 48 : Availability of Pit Latrines in Secondary Schools by Ward, Iringa Rural District; 2012

Ward	No. of Schools	Number of Pit Latrines			Percent Deficit
		Required	Available	Deficit	
Kalenga	2	99	75	24	24.2
Kiwere	1	20	20	0	0.0
Nzihi	2	61	28	33	33.3
Ulanda	1	16	16	0	0.0
Mseke	1	36	13	23	23.2
Magulilwa	2	32	16	16	16.2
Luhota	2	32	24	8	8.1
Mgama	1	33	8	25	25.3
Lyamgungwe	1	92	50	42	42.4
Ifunda	4	180	187	-7	-7.1
Lumuli	2	14	20	-6	-6.1
Maboga	2	53	23	30	30.3
Wasa	1	22	10	12	12.1
Mahuninga	0	0	0	0	0.0
Idodi	1	46	54	-8	-8.1
Mlowa	1	11	9	2	2.0
Itunundu	1	42	13	29	29.3
Mlenge	0	0	0	0	0.0
Ilolompya	1	32	9	23	23.2
Nduli	1	45	16	29	29.3
Nyang'oro	1	0	0	0	0.0
Kihorogota	1	36	16	20	20.2
Izazi	0	0	0	0	0.0
Migoli	2	24	8	16	16.2
Malengamakali	1	30	15	15	15.2
Total	32	956	630	326	34.1

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

(vi) Dormitories

Dormitories help students to solve the problem of walking long distances, give students enough time for self study, reduces truancy and girls students drop outs due to pregnancies. The 32 secondary schools which the District had in 2012, required 135 dormitories but had 62 only. Ifunda Ward had the largest number of secondary schools in the district, and was also leading in dormitories shortage. The ward had a shortage of 22 dormitories (38.6 percent deficit). It was followed by secondary schools in Kalenga with a deficit of 5 dormitories (41.7 percent deficit). Next were secondary schools in Kiwere, Nzihi, Ulanda, Lyamgunwe and Maboga with each having a deficit of 4 dormitories (33.3 percent deficit). By having one school Mlowa Ward had the least deficit of one dormitory.

Table 5. 49 : Availability of Dormitories/Hostels in Secondary Schools by Ward; Iringa Rural District; 2012

Ward	No. of Schools	Number of Domitories/Hostels			Percent Deficit
		Required	Available	Deficit	
Kalenga	2	12	7	5	41.7
Kiwere	1	8	4	4	33.3
Nzihi	2	4	0	4	33.3
Ulanda	1	4	0	4	33.3
Mseke	1	2	0	2	16.7
Magulilwa	2	2	0	2	16.7
Luhota	2	2	0	2	16.7
Mgama	1	2	0	2	16.7
Lyamgungwe	1	6	2	4	33.3
Ifunda	4	57	35	22	38.6
Lumuli	2	2	0	2	16.7
Maboga	2	4	0	4	33.3
Wasa	1	2	0	2	16.7
Mahuninga	0	0	0	0	0.0
Idodi	1	4	2	2	16.7
Mlowa	1	2	1	1	8.3

Table 5. 49(ctd) : Availability of Dormitories/Hostels in Secondary Schools by Ward; Iringa Rural District; 2012

Ward	No. of Schools	Number of Domitories/Hostels			
		Required	Available	Deficit	Percent Deficit
Itunundu	1	4	4	0	0.0
Mlenge	0	0	0	0	0.0
Ilolompya	1	2	0	2	16.7
Nduli	1	2	0	2	16.7
Nyang'oro	1	2	0	2	16.7
Kihorogota	1	4	1	3	25.0
Izazi	0	0	0	0	0.0
Migoli	2	4	4	0	0.0
Malengamakali	1	4	2	2	16.7
Total	32	135	62	73	54.1

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

(vii) Libraries

The library facility is considered essential but not crucial for the development of knowledge and skills of a student. According to the standards set by the Ministry of Education and Vocation Training, every secondary school should have a library to enable students borrow and use supplementary books besides textbooks. Table 5.50 shows that only four secondary schools in four wards had libraries. Ifunda being the ward with many secondary schools had the worst deficit of 3 libraries. Nzihi and Maboga followed each with a deficit of 2 libraries. In view of these deficits, it is important for the local authorities to include the provision of libraries in their school development plans to meet the increasing demand.

Table 5. 50: Availability of Libraries in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	No. of Schools	Number of Libraries			
		Required	Available	Deficit	Percent Deficit
Kalenga	2	2	1	1	50
Kiwere	1	1	0	1	100
Nzihi	2	2	0	2	100
Ulanda	1	1	0	1	100
Mseke	1	1	0	1	100
Magulilwa	1	1	0	1	100
Luhota	1	1	0	1	100
Mgama	1	1	0	1	100
Lyamgungwe	1	1	0	1	100
Ifunda	4	4	1	3	75
Lumuli	2	1	0	1	100
Maboga	2	2	0	2	100
Wasa	1	1	0	1	100
Mahuninga	0	0	0	0	0
Idodi	1	1	1	0	0
Mlowa	1	1	0	1	100
Itunundu	1	1	0	1	100
Mlenge	0	0	0	0	0
Ilolompya	1	1	0	1	100
Nduli	1	1	0	1	100
Nyang'oro	1	1	0	1	100
Kihorogota	1	1	0	1	100
Izazi	0	0	0	0	0
Migoli	1	1	1	0	0
Malengamakali	1	1	0	1	100
Total	28	28	4	24	85.7

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

(viii) Desks

Table 5.51 shows that secondary school students totaling 15,105 required 19,063 desks/tables to eliminate the deficit of 2,058 desks/tables in 2012. Ifunda by having largest number of secondary schools has also a largest deficit of 553 desks/tables. Table 5.51 further indicates there was no deficit of desks/tables in Kiwere and Lumuli because number of desks/tables available in the two wards was greater than the required.

Table 5. 51: Availability of Desks/Tables in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	Required	Available	Total Students	Deficit
Kalenga	1290	1095	972	195
Kiwere	554	700	508	-146
Nzihi	1025	980	932	45
Ulanda	570	455	551	115
Mseke	800	720	508	80
Magulilwa	552	460	513	92
Luhota	816	791	748	25
Mgama	650	580	514	70
Lyamgungwe	1050	1040	1037	10
Ifunda	4233	3680	3285	553
Lumuli	413	573	347	-160
Maboga	240	240	182	0
Wasa	640	529	378	111
Mahuninga	0	0	0	0
Idodi	1250	1200	1121	50
Mlowa	210	200	203	10
Itunundu	880	800	574	80
Mlenge	0	0	0	0
Ilolompya	0	0	0	0
Nduli	600	562	422	38
Nyang'oro	640	200	167	440

Table 5. 51(ctd): Availability of Desks/Tables in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	Required	Available	Total Students	Deficit
Kihorogota	900	700	685	200
Izazi	0	0	0	0
Migoli	1050	850	824	200
Malengamakali	700	650	634	50
Total	19063	17005	15105	2058

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

(ix) Laboratories

The laboratory is a necessary facility for students majoring in science subjects. The standard set by the Government is that each school should have at least three laboratories for physics, chemistry and biology subjects. Table 5.52 shows that in 2012, a total of 173 laboratories were required out of which 36 were available. This left a deficit of 79.2 percent or 137 laboratories. The most desperate wards in this regard were those with 100 percent deficit shown in Table 5.52.

Table 5. 52: Availability of Laboratories in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	Number of Laboratories			
	Required	Available	Deficit	Percent Deficit
Kalenga	11	1	10	90.9
Kiwere	5	0	5	100
Nzihi	10	0	10	100
Ulanda	18	5	13	72.2
Mseke	5	0	5	100
Magulilwa	5	0	5	100
Luhota	5	0	5	100
Mgama	5	0	5	100
Lyamungwe	6	3	3	50
Ifunda	42	17	25	59.5

Table 5.52(ctd): Availability of Laboratories in Public Secondary Schools by Ward, Iringa Rural District; 2012

Ward	Number of Laboratories			Percent Deficit
	Required	Available	Deficit	
Lumuli	5	0	5	100
Maboga	5	0	5	100
Wasa	5	0	5	100
Mahuninga	0	0	0	0
Idodi	5	2	3	60
Mlowa	5	0	5	100
Itunundu	10	0	10	100
Mlenge	0	0	0	0
Ilolompya	0	0	0	0
Nduli	5	0	5	100
Nyang'oro	5	0	5	100
Kihorogota	6	3	3	50
Izazi	0	0	0	0
Migoli	5	3	2	40
Malengamakali	5	2	3	60
District Total	173	36	137	79.2

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

(x) Electricity Power

Solar power by being the source electricity for 18 public secondary schools was the main source of electricity in most secondary schools in Iringa Rural District. It was followed by national grid (six schools). The generator was on insignificant source of electricity in secondary schools as only two schools got electricity from this source. Ifunda being leading in number of secondary schools was also leading in the number of secondary schools with electric power. The ward had four secondary schools with electric power, followed by Ulanda, Idodi, and Itunundu each with two schools with electric power. On the other hand, secondary schools in Mahuninga, Mlenge, Ilolompya, Nyang'oro and Izazi had no electric power.

Table 5. 53: Availability of Electric Power in Secondary Schools by Ward and Type of Power, Iringa Rural District; 2012

Ward	National Grid	Biogas	Solar Power	Generator	Other Sources	Total
Kalenga	1	0	0	0	0	1
Kiwere	0	0	1	0	0	1
Nzihi	0	0	1	0	0	1
Ulanda	1	0	1	0	0	2
Mseke	1	0	0	0	0	1
Magulilwa	0	0	1	0	0	1
Luhota	0	0	1	0	0	1
Mgama	0	0	1	0	0	1
Lyamungwe	0	0	1	0	0	1
Ifunda	2	0	2	0	0	4
Lumuli	0	0	1	0	0	1
Maboga	0	0	1	0	0	1
Wasa	0	0	0	1	0	1
Mahuninga	0	0	0	0	0	0
Idodi	0	0	1	1	0	2
Mlowa	0	0	1	0	0	1
Itunundu	0	0	2	0	0	2
Mlenge	0	0	0	0	0	0

Table 5.53(ctd): Availability of Electric Power in Secondary Schools by Ward and Type of Power, Iringa Rural District; 2012

Ward	National Grid	Biogas	Solar Power	Generator	Other Sources	Total
Ilolompya	0	0	0	0	0	0
Nduli	0	0	1	0	0	1
Nyang'oro	0	0	0	0	0	0
Kihorogota	0	0	1	0	0	1
Izazi	0	0	0	0	0	0
Migoli	1	0	0	0	0	1
Malengamakali	0	0	1	0	0	1
Total	6	0	18	2	0	26
Percent	23.1	0.0	69.2	7.7	0	100

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

(xi) Water

Rain water harvests should be emphasized in schools to alleviate water shortage

Availability of adequate supply of clean potable water for the secondary school students is of utmost importance. In 2011, Iringa Rural District provided water through water tanks to 17 secondary schools. Five secondary schools depended on water from water wells and 9 secondary schools accessed tap water in 2011. Moreover, in 2012 the number of secondary schools accessing water through water tanks increased by one to be 18 and those depending on water wells dropped to two. Secondary schools accessing tap water remained the same (9) as it was in the previous year.

Table 5. 54: Accessibility of Water in Public Secondary Schools by Ward, Iringa Rural District; 2011 and 2012

Ward	2011			2012		
	Number of Sec. Schools with Operating:			Number of Sec. Schools with Operating:		
	Water Tanks	Water Wells	Tap Water	Water Tanks	Water Wells	Tap Water
Kalenga	1	0	1	1	0	1
Kiwere	1	0	0	1	0	0
Nzihi	1	0	1	1	0	1
Ulanda	1	0	1	1	0	1
Mseke	1	0	0	1	0	1
Magulilwa	1	0	0	1	0	1

Luhota	1	0	0	1	0	0
Mgama	0	1	0	1	0	0
Lyamgungwe	0	1	0	1	0	0
Ifunda	1	0	1	1	0	1
Lumuli	1	0	0		0	0
Maboga	0	1	0	1	0	0
Wasa	0	0	1	1	0	0
Mahuninga	0	0	0	0	0	0
Idodi	1	0	1	0	0	0
Mlowa	1	0	0		0	0
Itunundu	1	0	1	1	0	1
Mlenge	0	0	0	0	0	0
Ilolompya	0	0	0	0	0	0
Nduli	1	0	1	1	0	1
Nyang'oro	1	0	0	1	0	0
Kihorogota	1	0	0	1	0	0
Izazi	0	0	0	0	0	0
Migoli	1	1	0	1	1	0
Malengamakali	1	1	1	1	1	1
Total	17	5	9	18	2	9

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

5.2.4 Adult Education

Table 5.55 shows that in 2011 and 2012 the district had 19 and 16 centres for MUKEJA programme respectively. Due to poor awareness among the community on MUKEJA programme no enrolment were done in this programme in 2011 and 2012. A few adults (21 and 19) were registered in 2011 and 2012 respectively in MEMKWA (Colbert) programme. Because of poor enrolment in the two adult learning programmes, regular sensitization campaigns are recommended for sustainability of the two programs.

Table 5. 55: Number of Adult Education Centers and Enrolments by Ward, Iringa Rural District; 2011 and 2012

Ward	Number of Centres (MUKEJA) - ICBAE		Centres enrolment (MUKEJA) - ICBAE		MEMKWA (Colbert) Enrolment	
	2011	2012	2011	2012	2011	2012
Kalenga	2	2	0	0	0	0
Kiwere	2	2	0	0	7	6
Nzihi	0	0	0	0	0	0
Ulanda	0	0	0	0	1	1
Mseke	0	0	0	0	2	1
Magulilwa	0	0	0	0	0	0
Luhota	7	7	0	0	0	1
Mgama	0	0	0	0	0	1
Lyamgungwe	0	0	0	0	2	2
Ifunda	1	1	0	0	0	0
Lumuli	1	0	0	0	0	0
Maboga	0	0	0	0	0	0
Wasa	0	0	0	0	0	0
Mahuninga	0	0	0	0	0	0
Idodi	2	2	0	0	3	1
Mlowa	0	0	0	0	0	0
Itunundu	2	1	0	0	0	0
Mlenge	0	0	0	0	0	0

Table 5.5(ctd): Number of Adult Education Centers and Enrolments by Ward, Iringa Rural District; 2011 and 2012

Ward	Number of Centres (MUKEJA) - ICBAE		Centres enrolment (MUKEJA) - ICBAE		MEMKWA (Colbert) Enrolment	
	2011	2012	2011	2012	2011	2012
Ilolompya	1	0	0	0	0	0
Nduli	0	0	0	0	0	0
Nyang'oro	0	0	0	0	3	3
Kihorogota	0	0	0	0	0	0
Izazi	0	0	0	0	0	0

Migoli	1	1	0	0	2	2
Malengamakali	0	0	0	0	1	1
Total	19	16	0	0	21	19

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

5.2.5 Special Education

The issue of disability has of late gained recognition worldwide. This is due to the fact that the level of disability appears to be on the increase in most societies. Hence, it is important to prepare programmes for the disabled pupils to get special education according to their type of impairment. Table 5.56 shows that in 2012, there were 105 disabled pupils in primary schools and 25 in secondary schools in Iringa Rural District. The majority of pupils and students had handicap disabilities of whom 56 were in primary schools and 20 in secondary schools. The big difference between the number of disabled pupils (105) in primary schools and secondary schools (25) is an indication that most of disabled pupils fail to acquire secondary and higher education. Lack of support financially or materially might be among the reasons why. Therefore, Iringa District Council is urged to have a proper programme of supporting disabled children not only in education matters but also in other social economic activities.

Table 5.56 : Number of Pupils Enrolled by Type of Impairment; Iringa Rural District; 2012

Type of Impairment	Number of Pupils Enrolled					
	In Primary schools			In Secondary Schools		
	M	F	Total	M	F	Total
Visual impairment	15	12	27	4	1	5
Intellectual impairment	9	8	17	0	0	0
Handicap	32	24	56	13	7	20
Deaf	4	1	5	0	0	0
Total	60	45	105	17	8	25
Percent	57.1	42.9	100.0	68	32	100

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

5.2.6 Colleges and Vocation Training Schools

Table 5.57 provides a list of vocational training schools/centres available in Iringa rural district in 2012. The available schools/centres are of great importance in equipping youths with self reliance skills. Such skills are very helpful to youths in self employment and even in increasing their chances of getting employed. According to Table 5.57, at the end of 2012 the District had 11 vocational training centres.

Table 5. 57: List of Vocational Public and Private Training Schools/Centres, Iringa Rural District; 2012

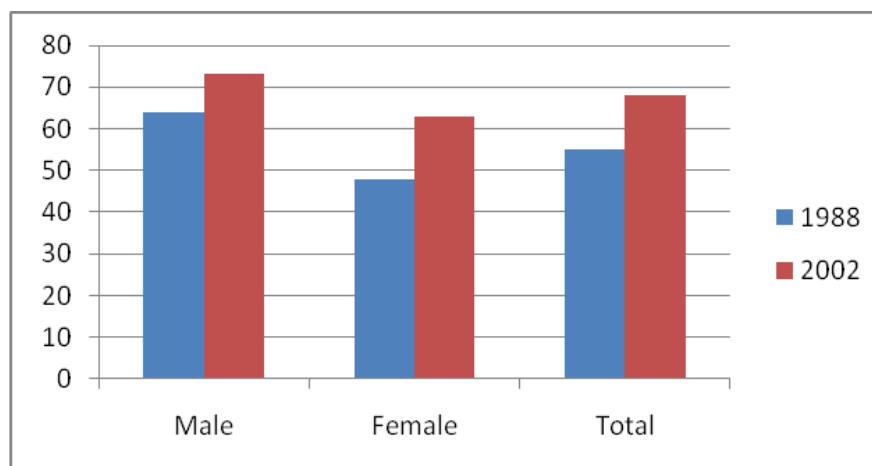
District	List of centres	Skills Taught
Iringa DC	1: Tanangozi Vocational Training Centre	Carpertry, tailoring, masonry, electricity, computer
	2: Kalenga VTC	Motor Vehicle Mechanics, Welding, Plumbing, and Food Production
	3: Masumbo VTC	
	4: Migoli VTC	
	5: Isimani VTC	
	6: Tosamaganga VTC	
	7: Nyabula VTC	
	8: Ulete VTC	
	9: Masumbo VTC	
	10: Wasa VTC	
	11: Kitanewa VTC	

Source: Education department, Iringa Rural District, 2013

5.2.7 Literacy Rate

Literacy is the ability to read and write with understanding a short simple statement on everyday life. It excludes the ability to only write or sign one's own name or write memorized phrases. The ability to read and write may be in any language. Tables 5.58 and 5.58a show that 55 percent and 68 percent of the population aged 5 years and above were literate in at least one language in 1988 and 2002 respectively. Literacy rate was the highest among those aged 15 to 19 and 10 to 14 in 1988 and 2002 respectively. There has been slight improvement in the literacy rate in Iringa Rural District since 1988. In 1988 55 percent of the population aged 5 years and above were literate compared to 68 percent in year 2002. The literacy rate was lower among the female population (48 percent) than among the male population (64 percent) in 1988 while in 2002 literacy rate for female was 63 percent compared to and 73 percent for males. Figure 38 compares the levels of literacy between sexes in 1988 and 2002.

Figure 38 : Comparison of Literacy Rates by Sex, Iringa Rural District; 1988 and 2002



Source: 2002 Population and Housing Census Report, Iringa Rural District

Age-wise, the data depicts the actual picture of improvement in education sector since the colonial period. Table 5.58 shows that the literacy rates are skewed towards the young population, of which the highest rate recorded was 90 percent (15 – 19 years) before declining gradually towards the old age. The lowest literacy rate (12 percent) recorded is for those aged 80 years and above. Table 5.58a shows that in 2002 the literacy rates are also skewed towards the young age, of which the highest rate recorded was 88 percent, (10 – 14 years) before declining gradually towards the old age. The lowest literacy rate (22 percent) recorded is for the aged people of 80 years and above. Male were more literate at 73 percent than female (63 percent).

Table 5. 58: Distribution of Population by Age Group, Literacy and Sex, Iringa Rural District; 1988

Age Group	Population			Literate			Literacy Rates		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5 – 9	30924	30750	61674	3586	4148	7734	12	13	13
10 – 14	25714	25785	51499	20340	21811	42151	79	85	82
15 – 19	19093	18348	37441	17397	16121	33518	91	88	90
20 – 24	12831	17663	30494	11932	13914	25846	93	79	85
25 – 29	11247	16621	27868	9664	8806	18470	86	53	66
30 – 34	8663	10931	19594	6896	4914	11810	80	45	60
35 – 39	7498	9337	16835	5884	3422	9306	78	37	55
40 – 44	4791	6334	11125	3473	1471	4944	72	23	44
45 – 49	4842	5292	10134	3545	1042	4587	73	20	45
50 – 54	3463	5230	8693	2166	582	2748	63	11	32
55 – 59	2911	3698	6609	1563	286	1849	54	8	28
60 – 64	2717	3340	6057	1379	163	1542	51	5	25
65 – 69	2309	2238	4547	1073	123	1196	46	5	26
70 – 74	1604	1982	3586	480	143	623	30	7	17
75 – 79	939	735	1674	306	61	367	33	8	22
80+	1614	1523	3137	347	31	378	21	2	12
Not	194	388	582	31	61	92	16	16	16
Total	141354	160195	301549	90062	77099	16716	64	48	55

Source: 1988 Population and Housing Census

Table 5.58 a: Distribution of Population by Age Groups, Literacy and Sex, Iringa Rural District; 2002

Age Group	Population			Literate			Literacy Rates		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5 – 9	19,429	18,401	37,830	6,900	7,323	14,223	36	40	38
10 – 14	17,890	16,319	34,209	15,390	14,546	29,936	86	89	88
15 – 19	11,952	9,001	20,953	10,382	7,797	18,179	87	87	87
20 – 24	7,146	9,208	16,354	6,176	7,831	14,007	86	85	86
25 – 29	7,165	9,779	16,944	6,196	8,086	14,282	86	83	84
30 – 34	6,265	8,328	14,593	5,513	6,738	12,251	88	81	84
35 – 39	5,442	6,324	11,766	4,852	4,607	9,459	89	73	80
40 – 44	4,378	5,536	9,914	3,685	2,932	6,617	84	53	67
45 – 49	3,729	4,394	8,123	2,983	1,940	4,923	80	44	61
50 – 54	2,857	3,992	6,849	2,110	1,301	3,411	74	33	50
55 – 59	2,042	2,788	4,830	1,434	790	2,224	70	28	46
60 – 64	2,161	2,578	4,739	1,437	368	1,805	66	14	38
65 – 69	1,660	2,176	3,836	1,097	270	1,367	66	12	36
70 – 74	1,257	1,947	3,204	692	175	867	55	9	27
75 – 79	944	1,131	2,075	513	83	596	54	7	29
80+	1,152	1,671	2,823	474	134	608	41	8	22
Total	95,469	103,573	199,042	69,834	64,921	134,755	73	63	68

Source: 2002 Population and Housing Census, Iringa Rural District

5.2.8 Policy Implication on Education sector

Athough there is recognizable development in both primary and secondary education, policy intervention need to take place to alleviate the few challenges observed. The District needs to put more effort in construction of girls' dormitories which will help to prevent or reduce girls' dropouts due to pregnancy and also increasing pass rate for girls' pupils/students. In addition to that, for learning improvement in primary schools, the school feeding programme is of paramount importance.

Since both primary and secondary schools in the district have a critical shortage of toilet holes, more toilet holes should be constructed to satisfy the education policy of one toilet hole for 20 girls and one toilet hole for 24 boys. Likewise, the number of desks in some of primary and secondary schools should be increased to meet education policy of one desk per three pupils/students.

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

5.2.9 Investment Opportunities in Education

Further investment is required in both secondary and primary education so that quality education is available. Quality education can be attained when there is sufficient investment in all school facilities including qualified teachers, staff quarters, classrooms, laboratories, libraries, dormitories, school pit latrines, learning and teaching materials.

5.3 Water Supply and Sanitation

5.3.0 An Overview

Water Supply and Sanitation Sector cover rural and urban water supply in terms of water sources, schemes and technology used to supply water. Besides that, the staffing situation is also highlighted especially the work of the districts' water and sanitation engineers/technicians in providing sustainable water and sanitation services.

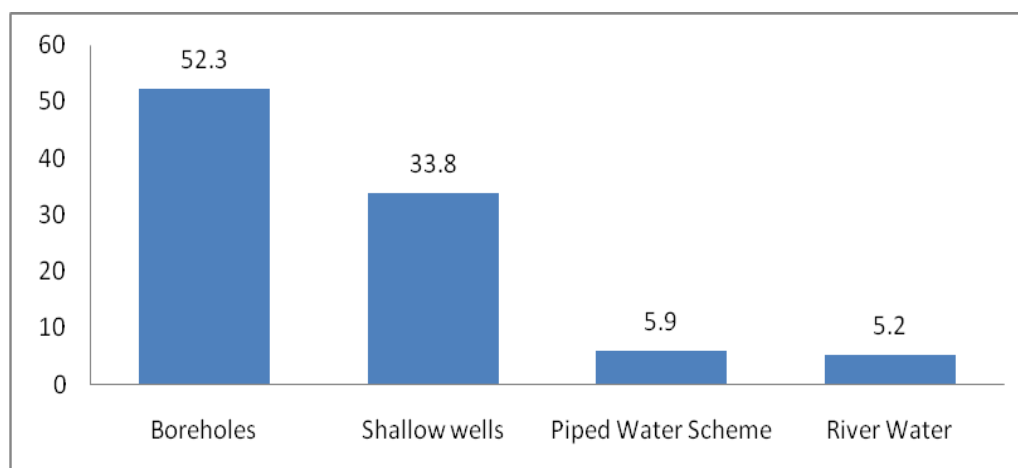
5.3.1 Water Supply

Availability of adequate supply of clean and safe water for the residents of Iringa Rural District is of utmost importance. This is because water is very useful to human beings, livestock and agriculture. Access to drinking water in Iringa Region was improved for the 32 percent of total agriculture households who were using piped water during Agriculture Sample Census of 2002/03 to the 37 percent during the 2007/08 Agriculture Sample Census. Iringa Rural District being part of the Region also benefited. Moreover, 2007/08 Agriculture Sample Census also showed that in Iringa region, the unprotected well was the second most important source of water and a source of water for 22 percent of agriculture households in the Region. This was followed by surface water (17 percent), unprotected spring (12 percent) and protected well (8 percent).

5.3.2 Rural Water Supply

By 2012 there were a total of 331 water sources for use by the rural population of the District. Of these, 287 sources (86.7 percent) were working/operating and 44 sources (13.3 percent) were not working (Table 5.59). Operating water sources consisted of boreholes at 150(52 percent of all operating water sources) and the main source of water for rural population. These were followed by operating shallow wells numbering 97, operating piped water scheme (17) and permanent river sources (15). However, water sources were not equitably distributed among the wards. For instance, bore holes were mostly dependable water source in Ifunda and Maboga each with 25 operating boreholes and Lumuli (20 boreholes). Shallow wells were also dependable water source in Ifunda (41 shallow wells), Lumuli (19) and Ulanda (10). Piped water scheme was the only water source which was evenly distributed among the wards. This is evident in Table 5.59 where out of a total 25 wards available in the District, 17 wards had access to working piped water scheme in 2012. Figure 39 shows percentage of main water sources used by the rural population of the District.

Figure 39: Proportion in Percentage of the Working Main Rural Water sources, Iringa Rural District; 2012



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

Table 5. 59 : Number and Type of Rural Water Sources by Ward, Iringa Rural District; 2012

Ward	Charco dams		Spring		Shallow Well		Rain water Harvest Tanks		Bore holes		River water		Lake water		Dam		Piped Scheme		Sub-Total		Grand Total
	W	NW	W	NW	W	NW	W	NW	W	NW	P	S			P	S	W	NW	W	NW	
Kalenga	0	0	1	0	0	0	0	0	2	0	1	0	0	0	0	0	1	0	5	0	5
Kiwere	0	0	0	0	4	0	0	0	2	10	0	0	0	0	0	0	1	0	7	10	17
Nzihi	0	0	0	0	1	1	0	0	4	1	1	0	0	0	0	0	1	0	7	2	9
Ulanda	0	0	0	0	10	0	0	0	20	7	1	0	0	0	0	0	1	0	32	7	39
Mseke	0	0	0	0	1	0	0	0	3	1	1	0	0	0	0	0	1	0	6	1	7
Magulilwa	0	0	0	0	5	0	0	0	12	2	0	0	0	0	0	0	0	0	17	2	19
Luhota	0	0	0	0	7	0	0	0	7	3	1	0	0	0	0	0	1	0	16	3	19
Mgama	0	0	0	0	5	0	0	0	8	0	1	0	0	0	0	0	1	0	15	0	15
Lyamungwe	0	0	0	0	4	0	0	0	5	0	0	0	0	0	0	0	1	0	10	0	10
Ifunda	0	0	2	0	41	6	0	0	25	6	1	0	0	0	0	0	1	0	70	12	82
Lumuli	0	0	0	0	19	0	0	0	20	1	0	0	0	0	0	0	0	0	39	1	40
Maboga	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	1	0	26	0	26
Wasa	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3	0	3
Mahuninga	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Idodi	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	1	0	4	0	4
Mlowa	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3	0	3
Itunundu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
Mlenge	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	3

Table 5. 59(ctd): Number and Type of Rural Water Sources by Ward, Iringa Rural District; 2012

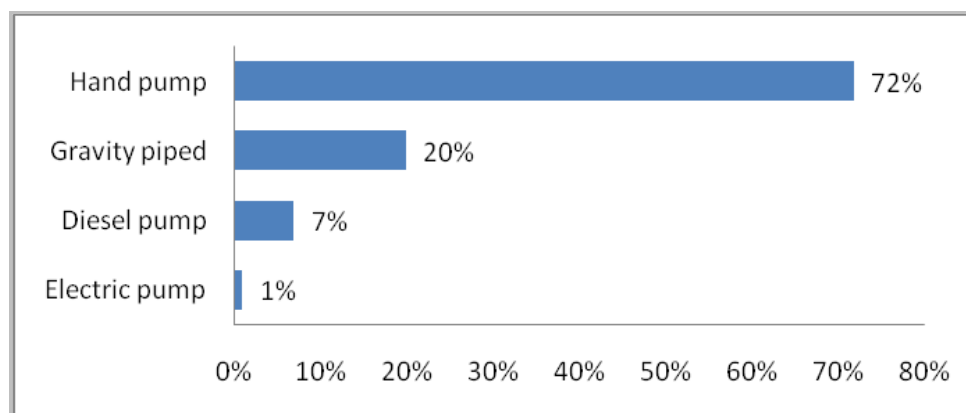
Ward	Charco dams		Spring		Shallow Well		Rain water Harvest Tanks		Bore holes		River water		Lake water	Dam		Piped Scheme		Sub-Total		Grand Total	
	W	NW	W	NW	W	NW	W	NW	W	NW	P	S		P	S	W	NW	W	NW		
Ilolompya	0	1	0	0	0	0	0	0	0	0	1	0		0	0	0	1	0	2	1	3
Nduli	0	0	0	0	0	0	0	0	3	0	1	0		0	0	0	1	0	5	0	5
Nyang'oro	0	1	0	0	0	0	0	0	3	0	0	0		0	0	0	1	0	4	1	5
Kihorogota	0	0	0	0	0	0	0	0	0	0	1	0		0	0	0	1	0	2	0	2
Izazi	1	1	0	0	0	0	0	0	1	0	0	0		0	0	0	0	0	2	1	3
Migoli	1	1	0	0	0	0	0	0	3	2	0	0		0	1	0	0	0	5	3	8
Malengamakali	0	0	0	0	0	0	0	0	0	0	1	0		0	1	0	0	0	2	0	2
District Total	3	4	3	0	97	7	0	0	150	33	15	0		0	2	0	17	0	287	44	331

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

Source: District Executive Director's Office (Water Supply and Sanitation n Department), Iringa Rural District, 2013

In order to make sure that there is a fairly sufficient supply of water to the residents of Iringa rural district, different types of water delivery technologies have been used. Table 5.60 shows that out of 173 total applications of water delivery technologies in 2012 in the District, 143 or 83 percent were working and the remaining 30 (17 percent) were not working. Of the working applications, 103 or 72 percent were hand pumps. They were followed by 29 (20 percent) gravity piped, 10 (7 percent) diesel pumps and 1 (1 percent) electric pump. Wards where boreholes were the main source of water, the prevalent water delivery technology was the hand pump. Nevertheless, those wards having gravity piped schemes as their main water source, gravity piped scheme was the preferred delivery technology.

Figure 40 : Number of Working Water Delivery Technology Used in Rural Water Schemes, Iringa Rural District; 2012



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

Table 5. 60: Number and Type of Technology Used in Rural Water Schemes by Ward; Iringa Rural District; 2012

Ward	Type of Technology												Grand Total
	Wind Mill		Electric Pump		Diesel Pump		Hand Pump		Gravity Piped		Total		
	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	
Kalenga	0	0	0	0	0	0	0	0	1	0	1	0	1
Kiwere	0	0	0	0	3	0	2	10	1	0	6	10	16
Nzihi	0	0	0	0	0	0	2	0	6	0	8	0	8
Ulanda	0	0	0	0	0	0	10	0	3	0	13	0	13
Mseke	0	0	0	0	0	0	0	0	1	0	1	0	1
Magulilwa	0	0	0	0	1	0	12	0	1	0	14	0	14
Luhota	0	0	0	0	0	0	7	3	2	0	9	3	12
Mgama	0	0	0	0	0	0	5	0	1	0	6	0	6
Lyamgungwe	0	0	0	0	0	0	5	0	1	0	6	0	6
Ifunda	0	0	1	0	0	0	8	11	1	0	10	11	21
Lumuli	0	0	0	0	0	0	18	3	0	0	18	3	21
Maboga	0	0	0	0	0	0	24	3	1	0	25	3	28
Wasa	0	0	0	0	0	0	0	0	1	0	1	0	1
Mahuninga	0	0	0	0	0	0	0	0	1	0	1	0	1

Table 5. 60(ctd): Number and Type of Technology Used in Rural Water Schemes by Ward; Iringa Rural District; 2012

Ward	Type of Technology												Grand Total
	Wind Mill		Electric Pump		Diesel Pump		Hand Pump		Gravity Piped		Total		
	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	
Idodi	0	0	0	0	0	0	0	0	1	0	1	0	1
Mlowa	0	0	0	0	0	0	0	0	1	0	1	0	1
Itunundu	0	0	0	0	4	0	0	0	1	0	5	0	5
Mlenge	0	0	0	0	0	0	3	0	0	0	3	0	3
Ilolompya	0	0	0	0	0	0	1	0	1	0	2	0	2
Nduli	0	0	0	0	0	0	3	0	1	0	4	0	4
Nyang’oro	0	0	0	0	0	0	3	0	1	0	4	0	4
Kihorogota	0	0	0	0	0	0	0	0	1	0	1	0	1
Izazi	0	0	0	0	1	0	0	0	0	0	1	0	1
Migoli	0	0	0	0	1	0	0	0	0	0	1	0	1
Malengamakal	0	0	0	0	0	0	0	0	1	0	1	0	1
i													
District Total	0	0	1	0	10	0	103	30	29	0	143	30	173
Percent of Working Technology	0	0	0.6		5.8		59.5	17.3	16.8		82.7	17.3	100

Source: District Executive Director's Office (Water Supply and Sanitation Department), Iringa Rural District, 2013.



Hand pump is the most common used water delivery technology in the district

The existing water supply infrastructure supplies clean water to 68 percent of total population of the district (Table 5.61). The percentages of people getting clean water differ from one division/ward to another. At division level, Idodi had the highest percentage (88 percent) of people getting clean water followed by Kalenga (76 percent), Ismani (74 percent), Mlolo (68 percent), Kiponzero (59 percent) and Pawaga Division had the smallest percentage (44 percent) of people who got clean water. At ward level, the Ward providing clean water to the smallest proportion of its people was Mlenga. It provided clean water only 18 percent of its population. It was followed by Luhoba and Itunundu wards each providing clean water to 44 percent of its population. In the process of improving accessibility to clean water to her population the district should give priority these three wards as they have poor access to clean water than the remaining wards.

Table 5. 61: Percentage of Rural Population Served with Clean Water by Division/Ward Iringa Rural District; 2012

Division	Ward	Percentage Population		
		Total Rural Population	Population Served with Clean Water	Served With Clean Water
Kalenga	Kalenga	6,963	5,981	86
	Kiwere	9,776	8,210	84
	Nzihi	14,872	8,946	60
	Ulanda	9,257	8,106	88
	Sub-Total	40,868	31,243	76
Mlolo	Mseke	15,868	14,604	92
	Magulilwa	13,639	8,827	65
	Luhota	14,019	6,174	44
	Mgama	12,561	8,719	69
	Lyamungwe	9,836	6,505	66
	Sub-Total	65,923	44,829	68
Lumuli	Ifunda	12,199	7,154	59
	Lumuli	7,852	5,554	71

**Table 5.61(ctd): Percentage of Rural Population Served with Clean Water by Division/Ward
Iringa Rural District; 2012**

Division	Ward	Percentage Population		
		Total Rural Population	Population Served with Clean Water	Served With Clean Water
Kiponzero	Maboga	12,642	6,530	52
	Wasa	10,595	6,172	58
	Sub-Total	43,288	25,410	59
	Mahuninga	4,331	3,441	79
	Idodi	10,202	9,937	97
Idodi	Mlowa	9,483	7,837	83
	Sub-total	24,016	21,215	88
	Itunundu	14,420	6,373	44
	Mlenge	9,463	1,710	18
Pawaga	Ilolompya	6,376	5,311	83
	Sub-total	30,259	13,394	44
	Nduli	8,045	5,826	72
	Nyang'oro	9,810	7,501	76
	Kihorogota	7,688	5,894	77
Isimani	Izazi	5,281	4,833	92
	Migoli	10,937	6,658	61
	Malengamakali	7,917	5,939	75
	Sub-Total	49,678	36,651	73
District-Total		254,032	172,742	68

Source: District Executive Director's Office (Water Supply and Sanitation n Department), Iringa Rural District, 2013.

In order to facilitate provision of water to the population of Iringa Rural District sustainably, the District established the management of rural water supply schemes by introducing Village Water Committees (VWCs), Village Water Funds (VWFs) as well as Water User Associations (WUAs) so that the problem of water supply can be tackled efficiently. This is in accordance with the National Water Policy. Table 5.62 shows that village water committees had a total of 175 members. Proportion of male members was higher (107 males,

61.1 percent of total members) than that of female members (68 females, 38.9 percent). Isimani Division had the largest number (50) of village committee members. Pawaga Division had the smallest number (18). Moreover, funds amounting to TShs. 32,000,000 were accumulated by village water committees, village water funds and water user associations. Water user association operating in Kalenga Division was the most wealth by accumulating TShs. 21,500,000 (equivalent to 67.2 percent of total funds in the District). The funds cover minor operational costs of water projects.

Table 5. 62 : Number of Village Water Committee Members, Village Water Funds and Funds in the VWFs by Ward, Iringa Rural District Council, as at 31.12 2012

Division	Ward	Village Water Committee Members			Village Water Fund (VWF), Water User Association(WUA)	Total Funds in TShs
		Male	Female	Total		
Kalenga	Kalenga	4	3	7	WUA-Tanangozi	20,000,000
	Kiwere	4	2	6	-	-
	Nzihi	3	2	5	WUA-Magubike	1,500,000
	Ulanda	5	3	8	WUA- Tanangozi - Kalenga	-
	Sub-Total	16	10	26		21,500,000
Mlolo	Mseke	5	4	9	WUA- Tanangozi - Kalenga	-
	Magulilwa	4	2	6	VWF	-
	Luhota	3	3	6	VWF	1,000,000
	Mgama	4	3	7	VWF	
	SUB TOTAL	16	12	28		1,000,000
Kiponzero	Ifunda	5	3	8	VWF	1,200,000
	Lumuli	5	2	7	VWF	-
	Maboga	5	3	8	VWF	2,000,000
	Wasa	5	3	8	VWF	600,000
	SUB TOTAL	20	11	31		3,800,000

Table 5. 62(ctd) : Number of Village Water Committee Members, Village Water Funds and Funds in the VWFs by Ward, Iringa Rural District Council, as at 31.12 2012

Division	Ward	Village Water Committee Members			Village Water Fund (VWF), Water User Association(WUA)	Total Funds in TShs
		Male	Female	Total		
Idodi	Mahuninga	5	3	8	VWF	800,000
	Idodi	5	2	7	VWF	750,000
	Mlowa	4	3	7	VWF	1,100,000
	SUB TOTAL	14	8	22		2,650,000
Pawaga	Itunundu	3	2	5	WUA-Pawaga	800,000
	Mlengi	3	2	5	WUA-Pawaga	-
	Ilolo mpya	5	3	8	WUA-Pawaga	-
	SUB TOTAL	11	7	18		800,000
Ismani	Nduli	4	3	7		
	Nyang'oro	5	3	8	WUA-Ismani	1,800,000
	Kihorogota	6	4	10	WUA-Ismani	-
	Izazi	6	3	9	VWF	450,000
	Migoli	5	4	9	VWF	-
	Malengamakali	4	3	7	VWF	-
		30	20	50		2,250,000
Grand Total	Sub Total	107	68	175		32,000,000

Note: WUA: Water Users Associations, **VWF:** Village Water Funds

Source: District Executive Director's Office (Water Supply and Sanitation n Department), Iringa Rural District, 2013.

5.3.3 Staff Establishment

For ensuring that of water and sanitation services are accessible to the majority of Iringa Rural residents, equipping water and sanitation department with required number of staff, and necessary working facilities, is vital.

As long as water and sanitation department has a shortage of five (5) staff shortage (Table 5.63), the district has a long way to go achieve the millenium development goal of supplying clean and safe water to significant number to her residents. Therefore, for promising future in provision of water and sanitation services, initiatives are needed to solve staffing shortage highlighted in Table 5.63.

Table 5. 63 : Staff in Water Sub-sector, Iringa Rural District; 2012

Type of Professionals	Demand	Actual	Deficit/Surplus
Engineers	2	1	1
Technicians	16	13	3
Plumber	2	1	1
Pump attendant	0	0	0
Pump mechanics	3	2	1
District-Total	23	17	6

Source: District Executive Director's Office Iringa Rural District, 2013

5.3.4 Sewage and Sanitation

For good health and favourable living environment in any society, sanitation facilities are essential. However, the district council has no reliable data showing number of households with and without toilet facilities. As sewage and sanitation services is important for reducing the risk of people being infected from unhygienic environment, there is a need for Iringa District Council have in place procedure of collecting data households with and without toilet facilities. In addition to that, the Iringa Rural District Authority have the responsibility of advocating the importance of toilet facilities so as making sure that all households have toilet facilities. This will help the district get rid of communicable diseases like diarrhoea and water borne diseases.

5.3.5 Policy Implication on Water sector

Accessibility of clean and safe water in the District is still poor especially in rural areas where boreholes are the main source of water. Through increasing budget and number of staff (whom were in deficit) in water sector the district stands at a good chance of making use of the adequate surface water it has and improving accessibility of clean and safe water to her people. Nevertheless, the district lack sewage systems in urban areas and as a result, urban population is at risk of

getting water borne diseases and diarrhoea. It is therefore important for the District Council put in place strategies which will enable the District to have sewage systems in urban areas.

5.3.6 Investment Opportunities in Water Supply

Since there is significant number of malfunctioning water delivery equipment such as electricity pump, diesel and hand pumps, immediate opportunity for investment is in the establishment of workshop for repairing and maintenance of this equipment. Shops for selling spare parts and even new pumps have also a good chance to prosper. Supply of water infrastructures like pipes, drilling machines as well as construction of clean/safe water and sewage system is of outmost important once.

CHAPTER SIX

Other Development Issues

6.0 Introduction

Chapter six discusses other development issues including gender empowerment through day care centres, women economic groups, Savings and Credit Cooperative Societies youth economic groups, cooperative development (SACCOSs) as well as women's participation in managerial, political, professional and technical fields.

6.1 Gender Empowerment

The load of women in the development of Tanzania is a heavy one. Women do most of the work in agricultural production by working long hours, sometimes without assistance from men folk where pastoralism, food and cash crops growing are practiced. Women also bear the load of house keeping. Additionally, poverty and now the scourge of HIV/AIDS affect women more than men and the status of women in the society is a lowly one and women are kept there by traditions and customs which are hostile towards women's attempt to reach equality or equity with men. In that respect, various measures are now put in place to minimize the time spent by women and girls in attending home and field activities. Gender empowerment initiatives aims at empowering women to participate fully in policy and decision making as well as participate in economic activities. Measures taken include the use of family planning, opening and operating day care centres, establishment of women economic groups, participation in SACCOS, CBOs and other cooperative activities.

6.1.1 Day Care Centers

Day care centres are important for looking after children aged 3 to 4 before they join pre-primary school education. Day care is important because it keeps children away from their mothers and hence gives them time to participate in economic activities and improve their social economic status. Table 6.1 gives number of day care centres available with their respective number of pupils. Day care centres increased from 61 in 2011 to 71 in 2012. Number of pupils also increased by 1,202 pupils (37.8 percent) from 3,180 of 2011 to 4,382 pupils in 2012. Migoli Ward had the largest number of pupils in both years with 593 in 2011 and 547 in 2012.

Table 6. 1 : Distribution of Day Care Centres and Pupils by Ward, Iringa Rural District; 2011 and 2012

Ward	2011			2012		
	Number of Centres	Number of Pupils	Percent of Pupils	Number of Centres	Number of Pupils	Percent of Pupils
Kalenga	0	0	0	2	150	3.4
Kiwere	2	206	6.5	2	103	2.4
Nzihi	0	0	0	0	0	0.0
Ulanda	0	0	0	4	209	4.8
Mseke	0	0	0	6	326	7.4
Magulilwa	1	45	1.4	0	0	0.0
Luhota	3	255	8.0	6	246	5.6
Mgama	0	0	0	0	0	0.0
Lyamgungwe	0	0	0	2	305	7.0
Ifunda	3	93	2.9	4	206	4.7
Lumuli	0	0	0	2	51	1.2
Maboga	0	0	0	5	300	6.8
Wasa	0	0	0	4	132	3.0
Mahuninga	0	0	0	0	0	0.0
Idodi	0	0	0	0	0	0.0
Mlowa	7	187	5.9	6	201	4.6

Table 6. 1(ctd): Distribution of Day Care Centres and Pupils by Ward, Iringa Rural District; 2011 and 2012

Ward	2011			2012		
	Number of Centres	Number of Pupils	Percent of Pupils	Number of Centres	Number of Pupils	Percent of Pupils
Itunundu	2	83	2.6	5	331	7.6
Mlenge	4	125	3.9	4	319	7.3
Ilolompya	5	208	6.5	6	361	8.2
Nduli	13	428	13.5	3	114	2.6
Nyang'oro	4	144	4.5	0	0	0.0
Kihorogota	7	323	10.2	0	0	0.0
Izazi	5	490	15.4	4	328	7.5
Migoli	5	593	18.6	4	547	12.5
Malengamakali	0	0	0	2	153	3.5
Total	61	3180	100	71	4382	100.0

Source: District Executive Director's Office (Community Development unit), Iringa Rural District, 2013

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 with men. Table 6.2 shows that in 2011 in Iringa Rural District there were a total of 75 women economic groups with members totalling 508. Number of groups increased to reach 107 with 666 members in 2012. Loan averaged annually at Tshs. 804,000 was received by each group in 2012. Itunundu women were more proactive in organizing themselves in groups as the ward had highest number of women economic groups (11). Effort to sensitize women join in economic groups should be directed to those wards with no groups shown in Table 6.2.

Table 6. 2: Number of Women Economic Groups by Ward, Iringa Rural District; 2011 and 2012

Ward	2011		2012				
	Total no. of Groups	Total Members	Total no. of Groups	Total Members	No. of Groups Assisted	Total Loaned TShs.	Loan (TShs) Received per Group
Kalenga	10	73	9	59	6	4,730,000	788,333
Kiwere	15	97	6	39	5	4,840,000	968,000
Nzihi	4	23	3	15	3	2,090,000	696,666
Ulanda	1	28	0	0	0	0	0
Mseke	2	10	2	10	2	1,320,000	660,000
Magulilwa	0	0	4	22	1	660,000	660,000
Luhota	0	0	3	37	2	1,210,000	605,000
Mgama	0	0	1	7	1	660,000	660,000
Lyamungwe	0	0	19	95	1	550,000	550,000
Ifunda	0	0	0	0	0	0	0
Lumuli	0	0	1	5	1	550,000	550,000
Maboga	0	0	0	0	0	0	0
Wasa	0	0	0	0	0	0	0
Mahuninga	0	0	0	0	0	0	0
Idodi	0	0	3	15	1	550,000	550,000
Mlowa	3	16	3	16	1	550,000	550,000
Itunundu	18	94	25	129	11	8,800,000	800,000
Mlenge	7	42	5	23	3	2,200,000	733,333
Ilolompya	4	35	7	55	6	5,170,000	861,667
Nduli	2	34	3	40	3	4,290,000	1,430,000
Nyang'oro	1	6	2	19	1	550,000	550,000
Kihorogota	1	14	2	18	2	1,870,000	935,000
Izazi	0	0	0	0	0	0	0
Migoli	0	0	2	21	2	1,100,000	550,000
Malengamakali	7	36	7	41	3	2,530,000	843,333
Total	75	508	107	666	55	44,220,000	804,000

Source: District Executive Director's Office (Community Development unit), Iringa Rural District, 2013

6.1.3 Women's Participation in Policy and Decision-Making

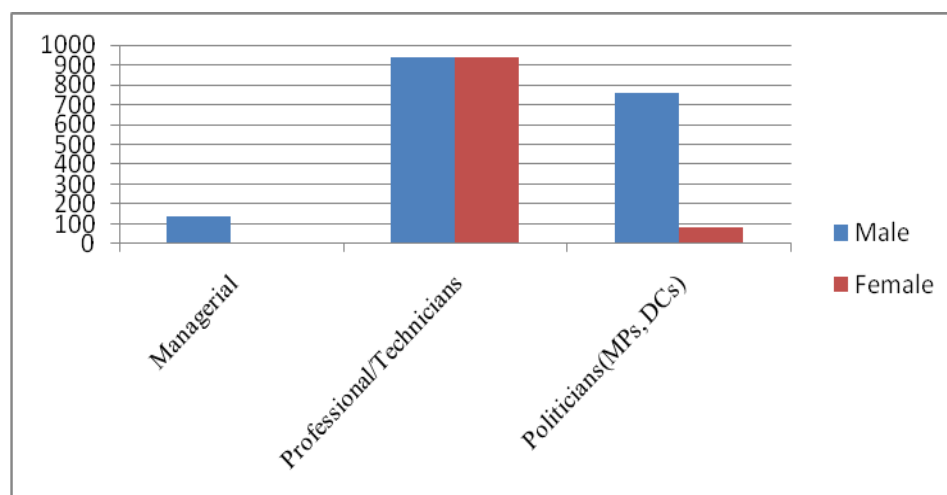
Table 6.3 reveals level of female participation in managerial, professional, political and technical posts in Iringa Rural District. In 2012, a total of 2,867 people held three types of posts highlighted in the Table. In 2012 females held 36 percent of all the posts. Female participated more in professional/technical posts by holding 50.1 percent of all the available posts (Table 6.3). Unfortunately, female participation was worst (6.2 percent) in managerial posts. Table 6.3 also reveals that proportion of participants was highest for professional/technical participants (1,880, 65.6 percent) followed by political posts participants (842, 29.4 percent) and managerial participants had the smallest share (145 participants, 5.1 percent). Proportion of participants by ward was the highest in Ifunda with 201 participants (7 percent of total participants of all three posts) while Mahununga had the least participants (39, 1.4 percent).

Table 6. 3: Managerial, Political, Professional/Technical Personnel by Sex; 2012

Ward	Managerial			Professionals/ Technicians			Politicians (MPs, DC)			Total		GrandTotal	Percent
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female		
Kalenga	2	2	4	63	91	154	15	6	21	80	99	179	6.2
Kiwere	6	0	6	27	23	50	24	3	27	57	26	83	2.9
Nzihi	7	0	7	51	68	119	42	2	44	100	70	170	5.9
Ulanda	7	0	7	42	40	82	37	2	39	86	42	128	4.5
Mseke	7	0	7	55	80	135	31	8	39	93	88	181	6.3
Magulilwa	6	1	7	40	32	72	46	1	47	92	34	126	4.4
Luhota	6	0	6	39	51	90	45	5	50	90	56	146	5.1
Mgama	6	0	6	28	58	86	43	0	43	77	58	135	4.7
Lyamungwe	4	1	5	29	34	63	33	1	34	66	36	102	3.6
Ifunda	5	0	5	84	78	162	32	2	34	121	80	201	7.0
Lumuli	4	1	5	39	29	68	20	4	24	63	34	97	3.4
Maboga	7	0	7	56	44	100	53	5	58	116	49	165	5.8
Wasa	6	1	7	43	50	93	32	1	33	81	52	133	4.6
Mahuninga	3	0	3	13	7	20	16	0	16	32	7	39	1.4
Idodi	5	0	5	37	32	69	26	4	30	68	36	104	3.6
Mlowa	4	0	4	29	22	51	22	0	22	55	22	77	2.7
Itunundu	5	0	5	31	29	60	25	3	28	61	32	93	3.2
Mlenge	5	0	5	22	5	27	24	3	27	51	8	59	2.1
Ilolompya	4	1	5	21	18	39	19	1	20	44	20	64	2.2
Nduli	7	0	7	24	37	61	35	6	41	66	43	109	3.8
Nyang'oro	7	0	7	23	19	42	35	5	40	65	24	89	3.1
Kihorogota	7	1	8	51	44	95	29	9	38	87	54	141	4.9
Izazi	4	0	4	14	8	22	21	1	22	39	9	48	1.7
Migoli	6	1	7	42	24	66	30	6	36	78	31	109	3.8
Malengamakali	6	0	6	36	18	54	25	4	29	67	22	89	3.1
Total	136	9	145	939	941	1880	760	82	842	1835	1032	2867	100.0
Percent by Sex	93.8	6.2	100.0	49.9	50.1	100.0	90.3	9.7	100.0	64.0	36.0	100.0	
Percent by Participation	5.1	65.6	29.4	100.0									

Source: District Executive Director's Office (Community Development unit), Iringa Rural District, 2013

Figure 41 : Male and Females by Number of Managerial, Political, Professional/Technical Posts Held; 2012



Source: District Executive Director's Office (Community Development unit), Iringa Rural District, 2013

6.2 Youth Economic Groups

In an effort to reduce youth unemployment, youths in Iringa Rural District were encouraged to organize themselves in income generating groups. According to Table 6.4, all 27 registered youth economic groups received loans. Youth economic groups in Nduli Ward received the largest loan at TShs. 6,500,000, followed by Ulanda ward (TShs. 6,000,000). However, money budgeted by Iringa rural district was the source of funds for the loans. Of the total 25 wards in the district, only 11 wards managed to sensitize youths to form economic groups. It is important for the District Council to encourage more youths to organize themselves in economic groups.

Table 6. 4: Youth Economic Groups and Total Money Loaned by Ward, Iringa Rural District; 2011/2012

Ward	Total Number of Registered Groups	Total Number of Members	No. of Groups got Loans in 2011	Total Loaned 2011 (TShs)	Total Loans of 2011 Recovered as at 31 Dec. 2012(TShs)	Total Loans not Recovered as at 31 Dec. 2012(TShs)
Kalenga	2	10	2	1,000,000	1,000,000	0
Kiwere	-	-	-	-	-	-
Nzihi	-	-	-	-	-	-
Ulanda	10	52	10	6,000,000	6,000,000	0
Mseke	1	5	1	500,000	500,000	0
Magulilwa	1	5	1	500,000	500,000	0
Luhota	-	-	-	-	-	-
Mgama	2	10	2	1,500,000	1,500,000	0
Lyamungwe	2	10	2	1,000,000	1,000,000	0
Ifunda	1	5	1	500,000	500,000	0
Lumuli	-	-	-	-	-	-
Maboga	-	-	-	-	-	-
Wasa	-	-	-	-	-	-
Mahuninga	-	-	-	-	-	-
Idodi	-	-	-	-	-	-
Mlowa	-	-	-	-	-	-
Itunundu	1	5	1	500,000	500,000	0
Mlenge	-	-	-	-	-	-
Ilolompya	-	-	-	-	-	-
Nduli	4	20	4	6,500,000	6,500,000	0
Nyang'oro	-	-	-	-	-	-
Kihorogota	1	6	1	1,000,000	1,000,000	0
Izazi	-	-	-	-	-	-
Migoli	-	-	-	-	-	-
Malengamakali	2	11	2	1,000,000	1,000,000	0
Total	27	139	27	20,000,000	20,000,000	0

Source: District Executive Director's Office (Community Development unit), Iringa Rural District, 2013

6.3 Vulnerable Children and Orphanhood

An orphan is a child aged below 0-17 years who has lost one or both parents. According to UNICEF, child who has lost one parent is termed as ‘single orphan’ and who has lost both parents is a ‘double orphan’. A study to estimate the magnitude of vulnerability for 25 wards conducted by District Council in 2012, revealed that among a population of 122,374 children aged 0-17 years in the 25 wards, 11,661 children (9.5 percent) were vulnerable. Table 6.4 further shows that most of the children who were vulnerable were not orphans and their number was 7,265 (5.9 percent of the population of children aged 0-17 years in the 25 wards). Orphaned vulnerable children were 4,396 (3.6 percent). Of the vulnerable boys, 2,235 were orphans and 3,456 were non orphans. The magnitude of vulnerability at district level was higher for girls (5,970) than boys (5,691).

Table 6.5 also gives the number of vulnerable children by ward. The five most affected wards in terms of the number of vulnerable children (both orphans and non orphans) were Mseke (928 vulnerable children, 8 percent of all vulnerable children in the district), followed by Kiwere (800, 6.9 percent), Maboga (781, 6.7 percent), Lyamgungwe (741, 6.4 percent) and Mgama (719, 6.2 percent). Mahuninga was the ward with the least number of vulnerable children (215, 1.8 percent).

Table 6. 5 : Number of Most Vulnerable Children by Ward, Iringa Rural District; 2012

Ward	Total Children Aged 0-17	Most Vulnerable Children													
		Orphans						Non-Orphans						Total	
		No. of Girls	Girls Percent	No. of Boys	Boys Percent	Total	No. of Girls	Girls Percent	No. of Boys	Boys Percent	Total	Number	Percentage		
Kalenga	2247	190	8.5	140	6.2	330	36	1.6	75	3.3	111	441	3.8		
Kiwere	4237	124	2.9	106	2.5	230	270	6.4	300	7.1	570	800	6.9		
Nzihi	7650	52	0.7	76	1.0	128	264	3.5	247	3.2	511	639	5.5		
Ulanda	5408	174	3.2	183	3.4	357	161	3.0	133	2.5	294	651	5.6		
Mseke	9939	81	0.8	91	0.9	172	389	3.9	367	3.7	756	928	8.0		
Magulilwa	6541	53	0.8	45	0.7	98	125	1.9	114	1.7	239	337	2.9		
Luhota	6784	86	1.3	81	1.2	167	160	2.4	154	2.3	314	481	4.1		
Mgama	6102	144	2.4	161	2.6	305	214	3.5	200	3.3	414	719	6.2		
Lyamungwe	5840	112	1.9	113	1.9	225	251	4.3	265	4.5	516	741	6.4		
Ifunda	9961	152	1.5	179	1.8	331	167	1.7	84	0.8	251	582	5.0		
Lumuli	3835	21	0.5	40	1.0	61	174	4.5	121	3.2	295	356	3.1		
Maboga	5191	127	2.4	125	2.4	252	274	5.3	255	4.9	529	781	6.7		
Wasa	4389	7	0.2	16	0.4	23	154	3.5	114	2.6	268	291	2.5		
Mahuninga	1910	5	0.3	3	0.2	8	105	5.5	102	5.3	207	215	1.8		
Idodi	3108	65	2.1	61	2.0	126	83	2.7	82	2.6	165	291	2.5		
Mlowa	3777	38	1.0	37	1.0	75	74	2.0	73	1.9	147	222	1.9		
Itunundu	4625	110	2.4	118	2.6	228	46	1.0	48	1.0	94	322	2.8		
Mlenge	4756	132	2.8	144	3.0	276	39	0.8	10	0.2	49	325	2.8		
Ilolompya	2235	48	2.1	51	2.3	99	132	5.9	123	5.5	255	354	3.0		
Nduli	3107	29	0.9	26	0.8	55	94	3.0	91	2.9	185	240	2.1		
Nyang'oro	5791	51	0.9	45	0.8	96	75	1.3	127	2.2	202	298	2.6		
Kihorogota	3874	131	3.4	148	3.8	279	119	3.1	69	1.8	188	467	4.0		
Izazi	3285	47	1.4	75	2.3	122	149	4.5	78	2.4	227	349	3.0		
Migoli	4557	151	3.3	139	3.1	290	107	2.3	94	2.1	201	491	4.2		
Malengamakali	3225	31	1.0	32	1.0	63	147	4.6	130	4.0	277	340	2.9		
Total	122374	2161	1.8	2235	1.8	4396	3809	3.1	3456	2.8	7265	11661	100.0		

Source: District Executive Director's Office (Community Development unit), Iringa rural District, 2013

6.4 Savings and Credit Cooperative Societies (SACCOS)

In the year 2012 a total of 26 registered SACCOS were recorded in Iringa Rural District with 4,430 members (Table 6.6). Among the registered SACCOSs, 15 were active and 11 were dormant. SACCOSs membership was dominated by males who were 2,588 (58.4 percent of total members) while female members were 1,842 (41.2 percent). Since only 19.6 percent of the loan (TShs. 329,910,000) was recovered, the speed of loan recovery was very low. This slow rate of loan recovery might suggest that loans are not taken for economic purposes but rather for covering social welfare obligations. Moreover, low rate of loan recovery might also be due to poor or lack of entrepreneurship skills among members which hinder them to run their businesses (income generating activities) resulting in losses and failure to pay back the loans. However, it would be advantageous for both SACCOSs management teams and their members if entrepreneurship skills were acquired by members before getting loans. This would ensure that loans are properly used for economic activities and hence, speed of loan recovery would be achieved.

Iringa Rural teachers SACCOS whose main purpose is supporting Iringa rural primary and secondary school teachers with loans, was leading in the number of members. It has 1,211 members which accounted for 27.3 percent of total SACCOSs' members in the District. This SACCOS was also leading in providing loans to its members. It accounted for 50.6 percent of the total amount of money loaned or TShs. 849,318 which were provided to this SACCOSs' members. The District Management Team should encourage more people establish SACCOSs especially in those wards having no SACCOSs as shown in Table 6.6.

Table 6. 6: Active SACCOs by Ward Iringa Rural District; 2012

Ward	Name of SACCOS	No. of SACCOs (Registered)		Total Members		In '000' TShs Total Value of Shares as at 31.12.2012	'000' TShs Total Money Loaned to Members (Jan –Dec 2012)	Total Loans Recovered from Members (Jan –Dec 2012) '000" TShs
		Active	Dormant	Male	Female			
Kalenga	Muongano							
	Tosa	1	-	30	45	2,980	36,926	9,657
Kiwere	Mfyome	1	-	46	18	450	760	-
Nzihi	Magubike	1	1	81	35	2,428	68,835	1,435
Ulanda	Mangalali	1	0	57	33	2,125	39,990	28,400
Mseke	Ugwachanya	-	-	-	-	-	-	-
Magulilwa	Magulilwa	1	0	44	18	620	22,300	3,372
Luhota	-	-	-	-	-	-	-	-
Mgama	Ihemi	1	0	43	37	1,605	24,700	3,221
Lyamgungwe	-	-	-	-	-	-	-	-
Ifunda	Ifunda	1	1	54	11	1,385	25,294	10,492
Lumuli	-	-	-	-	-	-	-	-
Maboga	-	-	-	-	-	-	-	-
Wasa	-	-	-	-	-	-	-	-
Mahuninga	-	-	-	-	-	-	-	-
Idodi	Idodi	1	0	280	54	39,016	289,822	11,8167
	Ruaha	1	0	134	12	35,356		
Mlowa	Mlowa	0	1	63	36	2430	7641	-
	Kimande	1	0	166	56	7,074	61,576	2,324
Itunundu	Mkombozi	0	1	40	20	3,872	-	-
	Mboliboli	0	1	46	28	6,933	-	-
Mlenge	Okoa	0	1	54	47	505	-	-
	Tuungane							
Ilolompya		0	1	65	11	460	22579	-
	Magozi	0	1	253	23	750	-	-
Nduli	Nduli	1	0	115	121	1,976	48,840	25,098
Nyang'oro	-	-	-	-	-	-	-	-
Kihorogota	Kihorogota	1	0	94	59	2,208	160,902	29,527
Izazi	-	-	-	-	-	-	-	-
Migoli	Migoli	1	0	167	67	5,915	1,500	-
Malengamakali	Mkulula	1	0	48	9	3,005	17,250	-
na	Iringa							
	R.Teachers	1	0	644	567	83,553	849,318	98,217
na	Chemba	0	1	62	15	1,413	-	-
na	Wanawake	0	1	2	520	18,554	-	-
na	Iringa Joint							
	Enter	0	1	-	-	800	-	-
District-Total		15	11	2588	1842	225,413	1,678,233	329,910

Na: means not applicable

Source: District Executive Director's Office (Community Development unit), Iringa rural District, 2013

6.5 Crime statistics

6.5.1 Introduction

The growth of towns, population increase, the development of science and technology and the increase of crimes are the sources and catalysts to the erosion of morals in the country. The statistics on the rate of crime and the type of offences committed reveal that the erosion of morals within the society has been increasing day by day. Iringa Rural District like other parts of the country also experiences an increase in crime as well as erosion of morals.

6.5.2 Crime Cases Reported

Table 6.7 shows that from January 2010 to December 2012 a total of 2,306 crime cases were reported in Iringa Rural District. Property crimes were dominant at 98.5 percent of all cases reported followed by drug crime cases (1.5 percent). No violent crimes were reported in the given period. The average number of crime cases reported per month was 64 and average number of people jailed due to the reported crime cases was 4. With a population of 254,032 people in 2012, one police officer in the district served a population of 7,258 people. This is above the Tanzanian Standard of one police officer per 1,500 people and above the international standard of one police officer per 450 people. It is therefore, important for the Government of Tanzania to recruit more police officers to meet the increasing demand caused by rapid population growth.

Table 6.7 : Total Number of Crimes Reported in Districts' Police Station and Number of People Jailed, Iringa Rural District, January 2010 to December, 2012

Year	Total no. of Police in the District	Total Number of Reported				Total Number of People Jailed due to			
		Violent Crimes	Property Crimes	Drug Crimes	Total	Violent Crimes	Property Crimes	Drug Crimes	Total
2010	21	-	600	12	612	-	40	5	45
2011	26	-	966	8	974	-	21	2	23
2012	35	-	706	14	720	-	59	5	64
Total			2272	34	2306		120	12	132
Percent		-	98.5	1.5	100	-	90.9	9.1	100.0

Note: D: Died, I: Injured. **Source:** Districts' Police Head Office, Iringa region, 2013

6.5.3 Road Accidents

In Iringa Rural District, from January 2010 to December 2012, a total of 89 accidents occurred and involved 78 victims (Table 6.8). Of the total victims, 41 people (56.2 percent) died and 37 people (47.4 percent) were injured. Accidents involving motor vehicles and motor cycles versus pedestrians were the largest at 43 (equivalent to 48.3 percent of total accidents that occurred in Iringa Rural District in three years) while those accidents involving motor cycles only were the smallest (9 accidents, 10.1 percent). Accidents involving motor vehicles and motor cycles versus pedestrians caused more deaths (16) and injured more people (14) than other types of accidents. Accidents involving motor cycles only caused the smallest number of deaths (6) and injuries (6). On average, over the three year period (January 2010 to December 2012), two accidents occurred each month killing and also injuring one person

Table 6.8 : Number of Accidents Reported in the District Police Station and Number of People Injured/Died by Type of Accident, Iringa Rural District, January 2010- December, 2012

Year	Total Number of Accidents involving					Total Number of People Died/Injured from Accidents involving											Total Died/Injured				
	Motor Vehicles Only	Motor Vehicles versus Motor Cycles	Motor Cycles only	Motor Vehicles and Motor Cycles versus Pedestrians	Total	Motor Vehicles only				Motor Vehicles versus Motor Cycles				Motor cycles only				Motor Vehicles and Motor Cycles versus Pedestrians		Sub -Total	
						D	I	D	I	D	I	D	I	D	I	D		I			
2010	5	10	5	17	37	3	2	6	4	3	2	7	6	19	14	33					
2011	3	5	2	12	22	1	4	3	3	2	1	4	5	10	13	23					
2012	6	8	2	14	30	3	2	3	2	1	3	5	3	12	10	22					
Total	14	23	9	43	89	7	8	12	9	6	6	16	14	41	37	78					
Percent	15.7	25.8	10.1	48.3	100.0	17.1	21.6	29.3	24.3	14.6	16.2	43.2	37.8	52.6	47.4	100					

Note: D: Died, I: Injured. **Source:** Districts' Police Head Office, Iringa region, 2013

6.5.4 Theft Cases

Over the period of three years (January 2010 to December 2012), cattle theft cases concerning cattle were very common in the District. This is because of the total 1,082 reported cases, cattle theft cases accounted for 91.5 percent (Table 6.9). It was followed by bicycle thefts (7 percent), motor cycles stealing (1.2 percent) and theft on motor vehicles (0.3 percent). Jailed people due to thefts were 76 with majority being jailed because of cattle stealing (65.8 percent) followed by bicycle stealing (34.2 percent). With a total of 35 police officers and 25 wards which the district had in 2012, on average each police officer during that particular year provided security services to one ward. Further to that, taking into account that the district had a total of 123 villages in 2012, one police officer provided security to four (4) villages

Table 6. 9: Number of Theft Cases Reported in the District Police Station and Number of People Jailed for Theft Iringa Rural District, January 2010-December, 2012

Year	Total no. of Police in the District	Total Number of Cases					Total Number of People Jailed due to Stealing of				
		Motor vehicles stolen	Motor cycles stolen	Bicycles stolen	Cattle stolen	Total	Motor vehicles	Motor cycles	Bicycles	Cattle	Total
2010	21	-	3	11	482	496	-	-	3	26	29
2011	26	1	2	19	260	282	-	-	7	13	20
2012	35	2	8	46	248	304	-	-	16	11	27
Total	82	3	13	76	990	1082			26	50	76
Percent		0.3	1.2	7.0	91.5	100.0	-	-	34.2	65.8	100

Source: Districts' Police Head Office, Iringa region, 2013

6.6 Policy Implication on Other Development Issues

The policy of empowering women is practically implemented in Iringa Rural District. Women are empowered economically through establishment of women economic groups, SACCOS and Village Community Banks (VICOBA). Lack of reliable sources of funds for provision of loans to group members so as enabling them establish income generating activities is among the problems facing such groups. In addition to that, group members lack or have insufficient business/entrepreneurship skills which result into poor business management and collapse of businesses. On the other hand unequitable distribution of managerial, professional/technical and political posts between males and females shows that there is still a long way to go before implementing millennium development goal of providing equal opportunity to male and female in leadership and job recruitment.

In the case of youths, a significant number of youth economic groups have been established. Lack of corateral for securing loans hinders youth initiatives in establishing income generating activities. The government needs to formulate policies which will ease accessibility of loans for people who don't possess corateral. By so doing, the government will manage to reduce youth unemployment and also reduce crime not only in Iringa Rural District, but also in other parts of the country.

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Iringa Rural District Council

Vision

Iringa District Council aspires to have a community that enjoys high and sustainable living standards.

Mission

Iringa District Council in collaboration with stakeholders is committed to provide high quality and sustainable services to its community through participatory and democratic approaches, good governance and rule of law and proper use of available resources.