UNITED REPUBLIC OF TANZANIA

PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENTS

KIGOMA REGION SOCIO-ECONOMIC PROFILE



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SECTION I

1.0 INTRODUCTION

1.1 Geographical Location

Kigoma Region is located in the Western part of Tanzania between latitudes 3.6 and 6.5 degrees South and longitudes 29.5 and 31.5 degrees East along the shores of Lake Tanganyika, the second deepest fresh water lake in the world. The capital municipality, which draws its name from the regional name Kigoma, has a wonderful natural beauty, nestled under the hills of the western arm of the Great Rift Valley on the edge of the Lake. In the wet season, the place is especially spectacular, with its emerald green and clear sparkling water. In the North, the region borders with Burundi and Kagera Region; it borders Shinyanga and Tabora in the East; Rukwa Region to the South and the Democratic Republic of Congo in the West.

1.2 Surface Area

The total surface area of Kigoma region is 45,075 sq. km, out of this, 36,523 sq. km or 81 percent is land area while 8,552 sq. km or 19 percent is covered by water. Kigoma region surface area is about 4.8 percent of Tanzania mainland. On district basis, (as shown in Table 1) the largest proportion of the area is in Uvinza District Council followed by Kibondo District Council. Uvinza District Council covers 26.4 percent of the total regional area. The second is Kibondo District Council with 19.6 percent of the total regional area. However, Kigoma Ujiji Municipal Council is the smallest with only 0.3 percent of the total regional area.

Table 1: Land and Water Surface Area in the Region by District, 2016

Council Name	Land Area	Water Area	Total Area	% of Total
	(Sq Km)	(Sq Km)	(Sq Km)	Area
Kibondo DC	8,652	200	8,852	19.6
Kasulu DC	6,894	187	7,081	15.7
Kigoma DC	5,545	1,382	6,927	15.4
Kigoma MC	128	0.15	128	0.3
Uvinza DC	5,480	6,425	11,905	26.4
Kakonko DC	7,070	136	7,206	16.0
Kasulu TC	1,054	135	1,189	2.6
Buhigwe DC	1,700	87	1,787	4.0
Total	36,523	8,552.15	45,075	100

Source: Regional Commissioner's Office, Kigoma 2016

1.3 Administrative Units

Kigoma region is made up of six (6) districts, six district councils, one town council (Kasulu) and one Municipal Council namely Kigoma/Ujiji Municipality. According to Table 2, the region subdivided to 21 Divisions. Kasulu and Kigoma Districts lead with 5 divisions each while Buhigwe District has least number of 2 Divisions. The same Table reveals that the region is sub divided into 113 Wards. Comparatively, 36 wards or 31.9 percent of total regional wards are in Kasulu and 16.8 percent are in Kibondo District. However, 13 wards or 11.5 percent of total regional wards are in Kankonko District. Furthermore, Table 2 indicates that the

region is sub-divided into 308 villages and 176 *mitaa*. Analysis indicates that 62 villages or 20.1 percent of total region's villages are in Kasulu, where as Kakonko District has few villages (44) or 14.2 percent of total number of villages in the region.

The above analysis summarizes that Kasulu and Kigoma Districts have larger number of divisions, Kibondo and Kasulu have large number of wards than all other districts in the region, where as Uvinza has more subvillages (439) which is 22.3 percent followed by Kibondo district 21.1 percent and Kakonko 18.2 percent. This could be due to geographical coverage and environmental differences between districts. In all cases, Kasulu Town council and Kigoma Ujiji Municipal council has the smallest area but has many Mitaa, this can be due to high population density.

Moreover, it is the expectation of the Government that established administrative units would increase peace, order and promote economic activities through good governance. Good governance involves rule of law, transparency, human justice, democracy, rule of law and effective participation.

Table 2: Administrative Units in the Region by District, 2015

DISTRICT	DIVISIONS	WARDS	VILLAGES	HAMLETS/SUB VILLAGES	MITAA
Buhigwe	2	15	46	188	-
Kakonko	3	13	44	358	-
Kasulu	5	36	62	288	108
Kibondo	3	19	50	416	-
Kigoma	5	16	45	280	68
Uvinza	3	14	61	439	-
Total	21	113	308	1969	176

Source: Kigoma Region Commissioner's Office, Kigoma 2015

1.4 Climatic Features

Two key features show the climate of Kigoma region. These include temperature and rainfall. The climate is tropical modified by the existence of Lake Tanganyika and topography of the region. According to meteorological statistics, mean daily temperatures range from 20°C to 30°C. Temperature varies inversely with the latitude. The region experiences average annual rainfall of 600 mm as minimum in low altitude along Lake Tanganyika shores and 1200 mm as maximum in the forested highlands per year. The wet distinct wet season begin late October to May with a short dry spell of 2 to 3 weeks in January and February, followed by a prolonged dry season. The average rainfall received ranges from 860 mm to 1200 mm, in Kigoma Ujiji Municipality, 600 mm to 1200 mm in Kigoma Rural District Council and 860 mm to 1200 mm in Kibondo District Council. The heavy rainfall covers 120 days between March and June every year and spreads throughout the region. The light rainfall has been received for 60 days and common from October to December each year. However, the light rainfall does not cover the whole region and is very unreliable. The heavy rainfalls are used for cultivating crops that require more moisture such as paddy and maize. On the other hand, short rainfalls are used by smallholder-farmers to cultivate crops that require less moisture and they contribute about 15% of the cereal production. Apart from that, the interpretation appeals that smallholder-farmers would be practicing intensive farming in areas with large coverage of rainfall in terms of days.

1.5 Topography, Soils and Drainage

1.5.1 Topography

Kigoma region is a gently inclined plateau with steep hills rising very sharply from 800 m above sea level along Lake Tanganyika to an altitude of 1,750 m above seal level to the East. The landscape descends from the North and East along the gently rolling hills with three types of major perennial rivers of Malagarasi, Luiche and Ruchungi. The Malagarasi and Luiche rivers comprise major drainage in Kigoma Region. The descent leads to the rivers valley at the altitude of 1,000m above sea level and swampy and flat area at 800m above sea level where the rivers join Lake Tanganyika.

1.5.2 Drainage

Most of the rivers are correlated to drainage. The drainage system is based on rivers. Among them are Malagarasi, Luiche and Ruchungi rivers. Malagarasi River in Kigoma region is among the largest rivers in the country. Malagarasi River is largely in Kibondo District Council; Luiche River is in Kigoma Rural district council while Ruchungi River is in Kasulu District Council.

In addition, these rivers contribute significantly to the economic values of people in the region. They are used either as agricultural potential zones or as source of water for domestic and irrigation. Currently about 63 percent of the regional population is receiving water supply, thus with such features, it is evident that availability of good drainage system in Kigoma region could be a basic instrument in reducing rural poverty through utilization of rivers for irrigation and other investment opportunities.

1.6.0 Agro- Ecological Zones

There are four (4) major agro ecological zones in Kigoma Region based on altitude and corresponding annual rainfall, which can be described as follows:

1.6.1 The Lake Tanganyika Shore Zone

This zone lies within the altitude of 800 – 1000 meters with annual rainfall of 600 – 1000 mm. The lake zone shore forms a narrow strip of land between Lake Tanganyika and the block of mountains dissected by numerous rivers and streams flowing into lake creating in the process valleys in a few locations, which is potential and support paddy farming. Cassava, maize, beans and oil palm are also grown. Except in Gombe and Mahale National Parks and in few areas where forest and bushes are protected, the soil is only covered with grass. The soils are characterized by dark reddish brown sandy loamy, partly stone and severely eroded area on the slopes of the lakeshore. Heavy black soil are found in permanently waterlogged areas while black clay soil with high proportion of sand are found in swamp fringes subject to seasonal water logging. The main economic activity is fishing, fish processing, palm oil production, trade and SME business with Burundi and DR Congo. Population is sparsely distributed with more concentration on the shore of the Lake.

1.6.2 The Miombo Zone

The Miombo zone lies within altitude 1000 – 1200 meters with rainfall of 600 – 1000 mm. The zone is found in the district councils of Kigoma Rural and Kasulu generally covered with Miombo woodland and is sparsely populated due to tsetse fly infestation and lack of broad economical activities. The soil is a heavy dark reddish clay loam with internal drainage. Economic activities include cattle rearing, hunting and honey/bee

wax gathering with agriculture. The main crops grown in this area are maize, beans, palm oil production in the valleys, banana and groundnuts.

1.6.3 The Intermediate Zone

This zone covers parts of Kigoma rural, Kasulu and Kibondo district councils. The zone lies between 1200 – 1500 meters above sea level with annual rainfall between 1000 – 1200 mm. The zone is characterized by valleys and swampy areas, which provide great potential for irrigation. The soil ranges from heavy dark reddish clay loam on the low altitude to black and alluvial soils on the higher altitude. The zone has been adversely affected by the slash and burn and fallow farming systems. Shifting cultivation is also practiced and bush fires degrades the ecological environment aggravated by the settlements of refugee camps especially in Kasulu and Kibondo District Councils. Population in this zone developed from organized and spontaneous resettlement mainly from the highlands. Farming is the base of most of the production system with cultivation of cassava, maize, beans, banana, sweet potatoes and sorghum/millet. Palm oil trees are planted in the lowest part of the intermediate zone and oil is processed locally. Other crops grown in the area are cotton and tobacco, which are grown as cash crops in the area. Cattle, goats, sheep and poultry raising are practiced at a small-scale level while there is expansion of other non agricultural activities such as trading and informal sector.

1.6.4 The Highland Zone

The zone lies within the altitude of 1,500 to 1,750 metres with annual rainfall of 1,000 – 1,200 mm. The zone is divided into two main parts. In the north, the zone is located above the intermediate zone and has a high population density. In the South, there is a separate highland area and the Mahale Mountains reaching a maximum altitude of 2,373 meters. The area in uninhabited and most of it has been designated as a National Park. Another National Park is the Gombe stream situated North of Kigoma town, famous for tourist attraction due to the existence of the chimpanzees. To the North the zone is covered by black and brown soils and the climate is suitable for a wide range of economic activities like coffee, banana, groundnut, tobacco and livestock keeping. The potential of development is limited by a high population density and progressively decline of soil fertility due to over utilization of land resources coupled with poor land management

In the Northern part, the production systems are diversified depending on the geographical situation. In Kigoma rural the production are market oriented with coffee, banana and vegetable production and cattle raising while cassava and maize production are for food crops. In Kibondo district, the main income generating activities are trade, small business, shops, kiosks, guest houses and restaurant keepers, coffee and cattle. Cassava, maize, banana and small animal raising are for domestic consumption.

Table 3: Summary of the Agro-ecological Zone in Kigoma Region

Zone	Altitude Range and Coverage (masl)	Rainfall (mm)	Dominant Soils	Main Economic Activities
The Lake Shore Zone	800 – 1000	600 - 1000	Dark reddish brown sandy loamy,Heavy black soilBlack clay soil	 Fishing Fishing processing Palm oil production Trade and small business,
The Miombo Zone	1000 - 1200	600 - 1000	Heavy dark reddish clay loam	Crop cultivationPalm oil production

					•	
The Intermediate Zone	1200 - 1500	1000 - 1200	•	Heavy dark reddish clay loam Black and brown alluvial soil	•	Crop cultivation Palm oil production Livestock rearing
The Highland Zone	1500 - 1750	1000 - 1200	•	Loamy Clay Alluvial	•	Crop cultivation Small and medium trade Livestock rearing

1.7 Population characteristics

1.7.1 Population Census Results by Ranking

Population census results of 1967, 1978, 1988, 2002 and 2012 showed that Kigoma region had a total population of 473,443; 648,941; 856,770; 1,679,109 and 2,127,930 respectively (see Table 4). In Tanzania mainland, such results rank Kigoma region out of 25 regions at 14th, 15th, 14th, 9th and 7th in the year 1967, 1978, 1988, 2002 and 2012 respectively. This substantiates that ranking increases moderately as compared with other regions. The possible reasons for the increase could be due to high birth rates. However, high rate of migration from neighboring unstable countries is a major contributing factor for the increase of population in the region.

Table 4: Kigoma Region Population Trend Compared to Other Regions in 1967, 1978, 1988, 2002 and 2012 Censuses

Region	1967		1978		1988		2002		2012	Rank
	Population	Rank	Population	Rank	Population	Rank	Population	Rank		
Kigoma	473,443	14	648,941	15	856,770	14	1,679,109	9	2, 127,930	7
Coast	428,041	16	516,586	19	636,103	20	885,017	20	1,073,170	20
Arusha	610,474*	11	926,223*	8	744,479	17	1,292,973	14	1,662,618	12
Dodoma	709,380	5	972,005	6	1,235,328	7	1,698,996	8	2,050,672	8
Kilimanjaro	652,722	9	902,437	10	1,104,673	10	1,381,149	12	1,601,106	13
Tanga	771,060	3	1,037,767	4	1,280,212	6	1,642,015	10	2,020,221	9
Morogoro	682,700	7	939,264	7	1,220,564	8	1,759,809	7	2,175,011	6
DSM	356,286	19	843,090	11	1,360,850	4	2,497,940	3	4,279,032	1
Lindi	419,853	17	527,624	18	646,494	19	791,306	21	852,658	23
Mtwara	621,293	10	771,818	13	889,100	13	1,128,523	16	1,249,766	19
Ruvuma	395,447	18	561,575	17	779,875	16	1,117,166	17	1,346,966	17
Iringa	689,905	6	925,044	9	1,193,074	9	1,495,333	11	920,776	22
Mbeya	753,765	4	1,079,864	3	1,476,278	3	2,070,046	4	2,671,117	3
Tabora	502,068	13	817,907	12	1,036,150	11	1,717,908	6	2,250,921	5
Rukwa	276,091	20	451,897	20	698,718	18	1,141,743	15	991,912	21
Shinyanga	899,468	2	1,323,535	2	1,763,800	2	2,805,580	2	1,510,029	15
Kagera	658,712	8	1,009,767	5	1,313,594	5	2,033,888	5	2,423,142	4
Mwanza	1,055,883	1	1,443,379	1	1,876,635	1	2,942,148	1	2,719,487	2
Mara	544,125	12	723,827	14	946,418	12	1,368,602	13	1,706,891	11
Singida	457,938	15	613,949	16	792,387	15	1,090,758	18	1,345,531	18

Manyara	N/A	N/A	N/A	N/A	603,691	21	1,040,461	19	1,405,957	16
Njombe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	689,846	24
Katavi	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	555,339	25
Simiyu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,566,578	14
Geita	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,711,345	10
Total	11,958,654	-	17,036,499	-	22,455,193	-	33,580,470	-	40,780,091	

Source: NBS-Tanzania Mainland Socio-economic Profiles, 1967-2012

Note: (i) Population of 2002 for Iringa, Rukwa, Shinyanga, Mwanza and Kagera Regions includes population of new regions. Njombe was part of Iringa and Katavi was part of Rukwa. Part of Shinyanga, Kagera and Mwanza formed Geita and part of Shinyanga and Mwanza formed Simiyu
(ii) N/A=Not Applicable

1.7.2 Population Distribution

In 1978 Kigoma Region had a total population of 618,950, increasing to 854,817 and1,674,046 in 1988 and 2002 respectively, but stood at 2, 127,930 in the census year 2012 almost four fold from that of 1978 (Table 5). Besides the fact that Kigoma growth rate is very high (From 0.51 in 1978 to 2.4 in 2012) compared to most regions in Tanzania, there is an added fact that the influx of refugees from the neighboring countries that took place in the early 1990s and in 2015 especially from DRC and Burundi add to the already high growth rate of the population in the region. There was a moderate increase of 31 percent in 1988 over 1978 figure, but that of 2002 over 1988 is an incredible 96 percent. Also there was a moderate increase of 27 percent in 2012 over 2002 figure was revelead. The refugures started flowing back to their respective countries way back in 2000 and 2012. It appears that the rate of repatriation increased slightly after fruitful negotiations, but currently the region might have incredible increase due to recently influx of refugees from Burundi that have resulted into recent election in Burundi.

Table 5: Population Distribution in 1988 Census, 2002 Census in the Region by Council, 2005

Council		Growth Rate		
	1978	1988	2002	1988/2002
Kasulu	255,649	320,518	626,742	0.51
Kibondo	139,991	176,262	413,777	0.42
Kigoma Rural	194,520	276,770	489,271	0.56
Kigoma Ujiji Municipality	58,788	84,704	144,256	0.58
Total Region	650,926	860,242	1,674,046	0.51

Source: Census Reports for 1978, 1988 and 2002

Table 6: Population Distribution in 2012 Census and 2015 projections by Council, 2015

Council Name	Population as per 2012 census	Population Projections-2015
Kibondo DC	261,331	283,187
Kasulu DC	425,794	461,404
Kigoma DC	211,566	229,260
Kigoma/Ujiji MC	215,458	233,477
Uvinza DC	383,640	415,725
Buhigwe DC	254,342	275,613
Kakonko DC	167,555	181,568
Kasulu TC	208,244	225,660
Total	2,127,930	2,305,894

Source: Census Reports for 2012 and projections 2015

1.7.3 Ethnicity

Kigoma Region consists of various tribes including the Goma, Rundi, Bwari, Manyema, Bembe and Jiji people who have originally habited Kigoma region. Others are Waha, Holoholo, Vinza, Nyakaramba, Tongwe, Fipa, Haya, Sukuma, Chaga, Nyakyusa, Jita, Kurya, Nyamwezi and others.

Among the tribes found in Kigoma region, Waha is the biggest tribe in the region. They originated from the Bantu who were living along lakes Tanganyika, Victoria, Kivu and Lake Edward. Going by the information volunteered by elders and historians, it shows that Waha people entered Buha (Kigoma) from the areas outside Buha. Waha people often use the names from their clan. Moreover, the characteristic features of the areas of their destiny influenced names or where they dwelt. The Waha who lived around areas rich in soil for pottery were called Yungu people (Wayungu), whereas those Waha who lived around highland areas were known as Nyaheru people.

Previous administrative norms and values show that their leaders (Waha leaders) were called Mwami or Mteko. Their norms and values included practices of giving sacrifices to their ancestors; dressing in tree barks from Mirumba trees traditionally known as Impuzu and dressing in animal hides and skins commonly known as Insato. Waha people practiced anti marriage among clan members.

Economic activities within the society of Waha tribe included cultivation of food crops such as maize, millet, potatoes, bananas and beans. Furthermore, there were different trading activities as a result of various productions, and their language turned to be an economic strength in communication. Waha people participated in iron smelting for making of knives, arrows, and other tools of the like. Vinza people participated in salt making in the neighboring villages and were able to do pottery with decoration for attraction. They participated and still are participating in commercial fishing.

SECTION II

2.0 REGIONAL ECONOMY

2.1 Introduction

Agriculture is the main economic activity in Kigoma Region employing more than 70% of the population. The sector is dominated by smallholder-farmers and most of them do not practice improved farming and mostly depend on rainfed farming. As a result, yield per acre is relatively low. According to agronomical factors, the region indulges more on food crops, which include cassava, maize, legumes, sweet potatoes and banana. Cash crops include coffee, palm oil, sunflower, cotton, groundnuts and tobacco. Beans, maize and bananas are the most important crops grown in the highland zone while coffee is grown in the wetter lands, which covers most parts of Kibondo and Buhigwe District Councils. The intermediate zone grows maize, cassava, beans, palm oil, groundnuts and sweet potatoes. There is no much crop production in the Miombo area; this area is traditionally important for beekeeping, hunting and fishing activities.

Apart from agriculture, livestock also contribute significantly to the regional economy. The common livestock are local traditional cattle breed, goats, pigs and sheep. However, improved dairy cattle are also a source of income, especially in Kigoma Rural. Besides livestock, forestry products are also prominent sources of regional economy. The potential products include timber, which is exploited in Buhigwe, Kasulu, Kibondo and Uvinza district councils. Honey and wax are also among forestry products contributing to the regional economy.

Furthermore, fishing industry which is carried out in Uvinza and Kigoma district councils is one of the main economic of region. However, fishing is done below optimal level and this is due to lack improved fishing gears. Moreover, wildlife sector specifically Gombe and Mahale National Parks gives substantial amount of income to the region. In addition, Old Municipal Township (Ujiji) and lake Tanganyika tourist attractions also generate income to the region. At a small scale, salt mining at Uvinza and lime mining in Eastern part of Kigoma Rural and Kasulu District Councils supplements regional economy. Kigoma is also potential for trading with land locked countries of DRC and Burundi. In summary, the regional economy depends heavily on agriculture, natural resources, livestock, fisheries, tourism, small scale industries, trade and mining.

2.2 Regional GDP

The fourth phase government initiatives of improving service delivery and roads infrastructures to link Kigoma and other Regions which started in 2005/2006 provided opportunity for the Regional GDP to increase whereby the existing data shows that the Kigoma region GDP increased substantially from 2006 to 2015. As Table 7 indicates that the Regional GDP in 2006 was Tshs. 575,350 million but increased to Tshs. 2,635,574million(Provisional) in 2015. The increase is equivalent to Tshs.2,060,224 million or 358%. Although the increase has been realised, but the contribution of Kigoma region to National GDP as compared to other regions in Tanzania Mainland is still low (2.90%). This suggests that more efforts need to be taken to increase Regional GDP by further improvement of various infrastructures and increase production of goods and services in the Region.

Table 7: Kigoma Region GDP at Current Prices in Million Tshs from 2006 to 2015

Year	Regional GDP at Current Prices in Tshs. Million	GDP% Change	GDP% Share
2006	575,350	-	-
2007	813,172	41	3.04

2008	994,223	22	3.03
2009	1,124,275	13	2.98
2010	1,229,885	9	2.81
2011	1,545,842	26	2.93
2012	1,779,335	15	2.90
2013	2,051,034	15	2.89
2014	2,295,890	12	2.88
2015	2,635,574	15	2.90
Total	15,044,580		

Source: Kigoma Region NBS office, 2016

2.3 Per Capita Income

Kigoma region per capita Income is reflected in Table 8. The Table also shows that the per capita income of Kigoma region in 2006 was Tshs 378,685. Due to improvements done in various social and economic infrastructures and increased production of goods and services in the region, the per capita income has increased to Tshs. 507,909, 595,672, 646,094, 677,937, 817,398, 836,181, 941,015, 1,024,826, and Tshs. 1,152,553 (Provisional) in the year 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 and 2015 respectively. With such trend of changes, it is highly possible that the Regional per capita income in 2016 might be higher than in 2015. The Kigoma Regional per capita income is still low when compared to the per capita income of other Regions in Tanzania Mainland, as it is revealed by the 2015 provisional Regional per capita income whereby Kigoma region ranked 20. More efforts needed to increase Regional per capita income by further improvement of social and economic infrastructures and utilising the potentials of Kigoma region as it relies on the strategic location vital for crop production, trade and business undertakings leading to poverty reduction in the region.

Table 8: Regional Per Capita Income from the year 2006 to 2015

Year	Regional per capita Income (Tshs.)
2006	378, 685
2007	507,909
2008	595,672
2009	646,094
2010	677,937
2011	817,398
2012	836,181
2013	941,015
2014	1,024,826
2015	1,152,553

Source: Kigoma Region Commissioner's office, 2016

2.4 Productive sectors

2.4.1 Agriculture

2.4.2 Introduction

Agriculture is the main stay of Kigoma residents with its activities accounting for about 80 percent of all sectors' economic contribution in the region. The type of agriculture practiced in the region is peasant

agriculture whereby smallholders who employ very limited capital in their production process are the most involved.

Agricultural production in Kigoma Region is mostly dependent on rains for crop growing. Food crops grown include cassava, maize, legumes, sweet potatoes and banana. Cash crops include coffee, palm oil, sunflower, cotton, groundnuts and tobacco. Beans, maize and banana are most important crops grown in the highland zone while coffee is grown in the wetter lands, which cover most parts of Buhigwe, Kigoma, Kibondo and Kasulu District Councils. In the intermediate zone are grown maize, cassava, beans, palm oil, groundnuts and sweet potatoes.

There are however, a number of obstacles that hamper agricultural development in the region as here under enumerated: -

- Poor application of agro-inputs: As pointed out earlier farming in the region is that of smallholders who
 cannot afford to buy and use fertilizers, agrochemicals and improved seeds. Unavailability and high price
 of agricultural inputs compounded by lack of reliable stockists of inputs and poor input distribution
 networks has a tremendous negative impact on agricultural production.
- Poor production technology: Most farmers use traditional farm implements the hand hoe, bush knife
 and axes leading to non-utilization of the potential arable land available for agricultural production.
 Further, although there is enough land for agricultural expansion, the poor technology inhibits expansion
 due to lack of improved implements such as tractors, ploughs and other farm machinery.
- Poor crop husbandry practices: The prevalence of inadequate extension services including shortage of staff, extension kits and transport facilities inhibits good agricultural production. There is also minimum regular training for both extension staff and farmers resulting into improper husbandry services, which include early land preparations, non-use of recommended hybrid seeds, improper spacing, untimely weeding, improper use of fertilizers and agrochemical applications to most of the farmers. All these factors highly contribute to low productivity in agricultural production.
- Traditional processing facilities: To large extent, the extraction techniques of palm oil adopted by farmers are the local, simple and hand operated machines and hand squeezing. The hand machines are tedious, laborious and time consuming with as low extraction efficiency of about 25 percent. These methods also produce poor quality of oil, which is a limitation to external markets access.
- Transport infrastructure and marketing: The marketing structures for farmers' produce are fragmented and poorly developed. They lack organized farmers associations and strong co-operative societies. The inadequacy of transport (especially road transport) is another set back in the marketing of agricultural produce in the region. The fact that still there is a sizeable percentage of roads that are not passable throughout the year, is a good indicator of the poor infrastructure existing in the region. There is however, one railway line, which provides a reliable outlet of agricultural cash crops beyond the regional borders. The proportion of the produce using this type of transport is, at any rate small.

Preferred interventions would require mechanization to be the alternative to overcome poverty constraints. Tractors and efficient utilization of machinery will lessen the labour constraints, put more land under cultivation and contribute to more crop production. Improved roads, railway, ports and Airport are an everimportant intervention if agriculture produce marketing is to be improved. This is because the outlined infrastructure would open up the agricultural market to include all neighboring regions and countries such as Burundi and DRC

Annual economic survey of Tanzania shows that large percent of Kigoma GDP is derived from agricultural sector, however, the available arable land is not fully utilized. For instance, Table 9 indicates that 1,058,637 ha which is 57.7 percent of the arable land is utilized in agricultural production. This reveals that 42.3 percent of arable and fertile land is not used. On Council basis, the situation is worse in Kibondo and Uvinza District

Councils where the arable land utilized to lower level. For example, Kibondo utilises only **23.2** percent, Uvinza **41.7** percent and Kasulu District Council 50 percent. By this analysis, it is suggested that for Kigoma region to reduce poverty and achieve the National Vision 2025, it requires an effective strategic plan to increase proportion of land utilization and improving land productivity.

Table 9: Distribution of Arable Land in the Region by Council 2015

Council Name	Arable land (Ha.)	Land Under Crop	% of Arable
		Production (Ha.)	utilized land
Kibondo DC	221,593	51,344	23.2
Kakonko DC	108,420	67,180	62.0
Kasulu DC	532,400	358,221	67.3
Buhigwe DC	127,780	63,890	50.0
Uvinza DC	444,633	185,302	41.7
Kigoma DC	209,480	184,822	88.2
Kasulu TC	88,179	72,307	82.0
Kigoma Ujiji MC	102,400	75,571	73.8
Total	1,834,885	1,058,637	57.7

Source: Kigoma LGA,s Socio-economic profiles, 2016

2.4.3 Cultivated Areas of Major Food Crops

Findings in Table 10 indicated that the percentage of total region's arable land under food crop cultivation increased from 15.8 in 2010/011 season to 43.6 in 2014/015 season and decreased to 29.7 percent in 2014/2015 season (see Table 10). According to regional agricultural statistics, the major food crops grown are maize, cassava, beans, sweet potatoes, bananas, paddy, sorghum, groundnuts, and pigeon peas. Table 10 indicates that maize is the dominant crop as compared to other eight crops, pigeon peas being the least. The leading District for cultivation of maize is Kasulu followed by Uvinza District. Cassava is another crop widely grown in Uvinza, Kigoma, Kibondo and Kasulu, although the trend of acreages fluctuates from year to year. The District with larger acreages of cassava is Uvinza as compared to other Districts, followed by Kigoma, Kibondo and Kasulu. Kasulu District is mostly potential for beans production but acreages for such crop are fluctuating and in most cases declining. Sweet potatoes are grown in the region wherebyUvinza District leads in cultivating larger acreages as compared to other councils. According to Table 11, Kigoma District is the second while Kakonko is the third. Banana is another widely grown crop in Kigoma rural as compared to other councils. Uvinza District is potential for paddy production, acreages under the crop fluctuate yearly but on increase. Sorghum is grown at large acreages in Kakonko and Kibondo followed by Kasulu. Pigeon peas are mostly grown in Uvinza and in Kigoma Districts.

Table 10: Total Estimated Area (Ha) Under Major Food Crops in the Region

Crop/Year	2010/011	2011/012	2012/013	2013/014	2014/015
Maize	148,717	295,526	311,221	329,063	208,911
Sorghum	5,672	10,074	12,241	11,871	6,369
Cassava	105,709	159,771	164,419	145,878	126,933
Banana	31,925	21,477	15,328	59,163	19,951
Beans	75,710	152,077	169,892	168,208	103,873
Sweet potatoes	18,745	53,751	55,880	38,643	35,326

Paddy	12,955	32,634	39,901	44,160	39,009
Pigeon peas	654	216	4,748	2,361	4,700
Total Area	290,623	725,526	773,630	799,347	545,072
% of arable land under production	15.8	39.5	42.2	43.6	29.7

Source: Kigoma Region Commissioner's Office, Kigoma 2016

Table 11: Estimated Area (Ha) Under Major Food Crops in the Region by District

Council	2010/11	2011/12	2012/13	2013/14	2014/15	
Maize						
Kibondo	27,300	44,786	48,649.36	30,075	30,014	
	·	·				
Kasulu	84,507	184,113	193,318	195,318	72,803	
Kigoma Rural	34,860	64,377	66,854	24,347	24,874	
Kigoma Ujiji Municipality	2,050	2,250	2,400	2,640	2,700	
Kakonko				18,363	22,720	
Buhigwe				22,320	15,000	
Uvinza				36,000	40,800	
Total	148,717	295,526	311,221.36	329,063	208,911	
Sorghum						
Kibondo	3,179	6,920	8929	4,335	2,176	
Kasulu	2,493	3,154	3,311	3,477	134	
Kigoma Rural	0	0	0	0	0	
Kigoma Ujiji Municipality	0	0	0	0	0	
Kakonko	-	-	-	4,059	4,059	
Buhigwe	-	-	-	0	0	
Uvinza	-	-	-	0	0	
Total	5,672	10,074	12240	11,871	6,369	
Cassava	<u> </u>					
Kibondo	43,000	18,123	19,954.41	10,212	10,456	

Kasulu	20,243	42,253	44,365	46,583	20,925		
Kigoma Rural	41,810	97,845	98,760	28,996	29,702		
Kigoma Ujiji Municipality	656	1,550	1,340	1,750	1,845		
Kakonko	-	-	-	7,187	7,755		
Buhigwe	-	-	-	15150	15,750		
Uvinza	-	-	-	-	40,500		
Total	105,709	159,771	164419.4	109,878	126,933		
Banana							
Kibondo	6,762	11,504	4,739	34,092	3,908		
Kasulu	9,676	9,323	9,789	10,278	275		
Kigoma Rural	14,910	-	0	6,135	6,139		
Kigoma Ujiji Municipality	577	650	800	0	980		
Kakonko				1,458	1,849		
Buhigwe				7,200	1,500		
Uvinza				0	5,300		
Total	31,925	21,477	15,328	59,163	19,951		
Beans						l	
Kibondo	7,195	15,768	19191.26	11,318	11,500		
Kasulu	47,051	81,549	93,611	98,292	28,971		
Kigoma	42,933	53,660	55,890	17,042	17,520		
Kigoma Ujiji Municipality	750	1,100	1,200	1,370	1,385		
Kakonko				5,885			
Buhigwe				8,801	12,311		
Uvinza					5,886		

Total	97,929	152,077	169,892.26	142,708	5,886	
Sweet potatoe	 S					
Kibondo	2,312	3,827	4335.2	118	185	
Kasulu	7,498	8,118	8,524	3,265	8,950	
Kigoma	15,660	41,306	42,501	12,518	12,400	
Kigoma Ujiji Municipality	120	500	520	740	725	
Kakonko				2,185	2,183	
Buhigwe				0	0	
Uvinza				16,500	14,200	
Total	25,590	53,751	55,880.2	35,326	38,643	
Paddy						
Kibondo	1,140	5,199	5827.99	3,605	1,975	
Kasulu	2,739	4,346	4,563	4,791	7,061	
Kigoma Rural	18,310	21,369	28,500	8,522	1,236	
Kigoma Ujiji Municipality	550	1,720	1,010	1,990	1,997	
Kakonko				4,237	4,290	
Buhigwe				15	450	
Uvinza				21,000	22,000	
Total	22,739	32,634	39,900.99	44,160	39,009	
Pigeon peas	·	·		·		
Kibondo	-	3	808	182	182	
Kasulu	3,395	213	740	777	673	
Kigoma Rural	-	-	3,200	1,310	1,295	
Kigoma Ujiji Municipality	-	-	0	0	0	
Kakonko				92	0	
Buhigwe				0	850	
Uvinza				0	1,700	
Total	3,395	216	4,748	2,361	4,700	

Source: Kigoma Region Commissioner's Office, Kigoma 2016

2.4.4 Production of Major Food Crops

The list of food crops highlighted in Table 10 and Table 11 shows that maize are more produced as compared to other crops in the region. In five years trend, Kasulu District leads in maize output while Uvinza District is the second producer. Kibondo and Kigoma Districts are potential maize producers but their outputs fluctuate significantly. Findings reveal that yield per hectare is higher in Kigoma than in Kasulu District which lead in total production of maize crop, and is low in Buhigwe District. These results influence to conclude that although Kasulu District is the major producer of maize, the Districtl needs to improve its extension services to increase land productivity by raising yield per unit area of land and adopt improved farming systems. Adoption involves maize cultivar, spacing, pest control, weeding and protection against wild animals such as monkeys and baboons.

As far as cassava is concerned, Uvinza district council is the greatest producer than all other councils. In terms of acreages, Uvinza District is leading and Kasulu is the second.

Banana is another food crop grown in Kigoma region. In 2010/011 the area under banana production was 31,925 ha and the production was 282,594 tones, from 2010/2011 to 2014/2015 the area under banana production and banana production has been decreasing with significant increase in 2013/2014 as indicated in Table 12. Kigoma District is leading in production of banana in terms of yield and area followed by Kasulu District. However, Kasulu district council has higher banana production in yield per hector as compared to Kigoma District. The observation here is that there is a need of improving extension services to increase banana production in Kigoma Region.

Other crops such as beans are produced more in Kasulu District than other councils. This also tallies with findings in Table 12. Uvinza District is the second producer. Sweet potatoes yield more in Uvinza and Kigoma Districts than other Districts do. Paddy is produced more in Uvinza District and Kakonko is the second great producer. Therefore, it can be conclude that all councils have the potential for producing certain type of crops. The essential requirement is to increase yield per hectare and this is possible through adoption of recommendable modern farming technological system.

Table 12: Estimated Production of Major Food Crops (Tons) in the Region by Council 2010/011-2014/015

Council	2010/11	2011/12	2012/13	2013/14	2014/15		
Maize	1			'		,	
Kibondo	30,305	129,933	142,206	87,818	30,014		
Kasulu	120,769	368,126	386,636	405,968	72,803		
Kigoma	67,200	215,274	233,989	60,866	77,109		
Kigoma Ujiji Municipality	2,550	6,750	8,400	9,240	9,450		
Kakonko				55089	86,336		
Buhigwe				49,280	27,000		
Uvinza				136,800	163,200		
Total	220,824	720,083	771,230.96	805,061	465,912		
Sorghum	1					1	
Kibondo	4,000	9,210	13311.556	12,140	6,093		

Kasulu	3,989	4,731	4,966	5,212	214	
Kigoma Rural	0	0	0	0	0	
Kigoma Ujiji Municipality	0	0	0	0	0	
Kakonko				8118	12,177	
Buhigwe				0	0	
Uvinza				0	0	
Total	7,989	13,941	18,277.556	25,470	18,484	
Cassava						
Kibondo	43,000	69,773	81553.91	39,830	40,988	
Kasulu	110,740	287,771	310,555	326,083	110,505	
Kigoma Rural	120,840	353,275	355,536	75,388	86,136	
Kigoma Ujiji Municipality		6,200	5,360	7,000	7,380	
Kakonko				20842.3	58,163	
Buhigwe				136,350	78,750	
Uvinza				136,800	162,000	
Total	274,580	717,019	753,004.91	742,293.3	543,922	
Banana						
Kibondo	7,310	104,724	50,647	51,478	49,832	
Kasulu	123,216	139,900	146,835	154,177	3,371	
Kigoma Rural	146,118	0		64,419	76,738	
Kigoma Ujiji Municipality	5,950	6,500	8,000	0	1,500	
Kakonko				17496	22,665	
Buhigwe				50,400	9,800	
Uvinza				0	23,800	
Total	282,594	251,124	8,000	337,970	187,706	
Beans						
Kibondo	5,665	16,556	20920.602	12,326	13,225	
Kasulu	37,182	115,900	140,416	147,437	66,262	
Kigoma Rural	35,475	59,025	78,246	17,042	17,520	
Kigoma Ujiji Municipality	2,240	1,650	2,400	2,740	2,770	
Kakonko				5885	14,715	

Buhigwe				12,673	6,156	
Uvinza				33,150	36,820	
Total	80,563	193,131	241,982.602	231,253	157,468	
Sweet potatoes				I		
Kibondo	13,874	33,294	39,013	416	266	
Kasulu	60,192	81,180	85,240	89,502	48,946	
Kigoma Rural	125,280	447,204	493,007	105,400	85,122	
Kigoma Ujiji Municipality	4,627	5,000	5,200		7,400	
Kakonko				20520	14,203	
Buhigwe				0	0	
Uvinza				79,500	198,000	
Total	203,973	566,678	622,460	100,020	353,937	
Paddy	<u> </u>	,	,	,	<u> </u>	
Kibondo	-	13,038	20702	6,489	3,752	
Kasulu	4,656	17,780	13,689	14,373	14,504	
Kigoma Rural	40,280	65,257	102,601	20,454	3,461	
Kigoma Ujiji Municipality	2,600	6,880	4,040	7,960	7,988	
Kakonko				12711	20,163	
Buhigwe				94	405	
Uvinza				73,500	99,000	
Total	47,536	102,955	141,032	135,581	149,273	
Pigeon peas						
Kibondo	-	2	646.5	136	137	
Kasulu	2,559	213	740	777	740	
Kigoma Rural	-	0	4,800	1,965	1,166	
Kigoma Ujiji Municipality	-	0	0	138	0	
Kakonko				0		
Buhigwe				0	510	
Uvinza				0	2,550	
Total	2,559	215	6,186.5	3,016	3,060	

Source: Kigoma Region Commissioner's Office, Kigoma 2016

2.4.5 Cultivated Areas of Major Cash Crops

The major cash crops are explained in Table 13 and 14. The area under crop production has been on increase from 2010/011 at 4.2 percent to 10.0 percent in 2014/015. According to regional agriculture statistics, groundnuts, fruits, coffee, tobaco and palm oil are the main cash crops grown in Kigoma region. Palm oil is grown more extensively in Kigoma District while Uvinza is the second with more acreage. Other councils such as Kigoma Ujiji Municipality, Buhigwe and Kasulu are also involved in palm oil and acreages are increasing.

The second crop is groundnuts. The smallholder-farmers concentrating more on groundnuts are those in Buhigwe and Uvinza Districts. The third District with large acreages is Kakonko where the acreages are positively increasing. Coffee is cultivated more in Buhigwe and Kigoma rural District. Buhigwe is leading than other Districtss. However, there is positive increase in the lest Districts. Table 13 indicates that Buhigwe District has planted large areas with various types of horticultural crops. Similarly, large acreages of horticultural products are in Kigoma and Uvinza Districts. Fruits are also grown in the Region, the leading council being Buhigwe followed by Kigoma and Uvinza Districts. In Kibondo District, the area under fruits production is increasing spontaneously from 119 ha in 2010/011 to 4,012ha in 2014/015. The findings conclude that larger part of the population in Kigoma region engages in production of palm oil, groundnuts and fruits of various types. But there is a positive increase in production of horticultural produce, coffee, tobacco and cotton. This is an opportunity for the region towards its efforts of reducing poverty since these are high value crops, which have also high market prices.

Table 13: Estimated Area (Ha) Under Major Cash Crops in the Region 2010/011-2014/015

Crop/Year	2010/11	2011/12	2012/13	2013/14	2014/15	
Cotton	1,490	1,708	2,356	1,669	66	
Tobacco	5,211	9,149	12,640	11,334	7,885	
Coffee	5,253	3,129	4,008	5,938	13,956	
Oil Palm	11,859	8,926	9,239	18,881	17,850	
Horticulture	1,251	5,038	5,366	3,968	3,701	
Groundnuts	16,668	21,239	25,104	26,401	33,490	
Ginger	0	2,150	2,257	2,410	65	
Irish potatoes	1,352	2,341	2,489	3,371	1,634	
Fruits	1,817	-	2,608	10,235	30,821	
Total Area	44,901	53,680	66,067	84,207	105,767	
% of arable land under production	4.2	5.1	6.2	8.0	10.0	

Source: Kigoma Region Commissioner's Office, Kigoma 2016 1,058,637

Table 14: Estimated Area (Ha) Under Major Cash Crops in the Region by District 2010/011-2014/015

Council	2010/11	2011/12	2012/13	2013/14	2014/15	
Cotton						
Kibondo	1,465	1,308	1830.95	14	10	
Kasulu	25	400	525	551	25	

	1					
Kigoma Rural	-	-		0	0	
Kigoma Ujiji Municipality	-	-		0	0	
Kakonko				1104	31	
Buhigwe				0	0	
Uvinza				0	0	
Total	1,490	1,708	2355.95	1669	66	
Tobacco				·		
Kibondo	150	515	3608.26	607	603	
Kasulu	251	2,678	2,812	2,953	1,782	
Kigoma Rural	4,810	5,956	6,220	0	0	
Kigoma Ujiji Municipality		0	0		0	
Kakonko				3274	0	
Buhigwe				0	0	
Uvinza				4,500	5,500	
Total	5,211	9,149	12,640.26	7,774	7,885	
Coffee						
Kibondo	2,500	0	697.05	3	27	
Kasulu	1,082	1,458	1,531	1,608	54	
Kigoma Rural	1,671	1,671	1,780	1,780	1,780	
Kigoma Ujiji Municipality	-	0	0	0	0	
Kakonko				552	25	
Buhigwe				1,995	11,820	
Uvinza				0	250	
Total	5,253	3,129	4,008.05	5,938	13,956	
Oil Palm	<u>'</u>	'		1		
Kibondo	645	5	6.4	2	0	
Kasulu	1,184	1,405	1,475	1,549	50	
Kigoma Rural	8,830	6,016	6,018	9,609	9,610	

Kigoma Ujiji Municipality	1,200	1, 500	1,740	1,740	1,890	
Kakonko				0	0	
Buhigwe				980	800	
Uvinza				5,001	5,500	
Total	11,859	7,927	9,239.4	18,881	17,850	
Horticulture	· · · · · · · · · · · · · · · · · · ·			<u> </u>		1
Kibondo	119	2,377	2652.91	852	4,012	
Kasulu	732	849	891	936	495	
Kigoma Rural	-	930	872	495	6,809	
Kigoma Ujiji Municipality	400	882	950	1,175	1,060	
Kakonko				224	2,345	
Buhigwe				49	10,500	
Uvinza				237	5,600	
Total	1,251	5,038	5365.91	3,968	30,821	
Groundnuts						
Kibondo	4,792	9,971	12705.05	1,352	1,450	
Kasulu	1,826	3,114	3,269	3,332	3,642	
Kigoma Rural	10,050	8,154	9,130	3,654	1,152	
Kigoma Ujiji Municipality	-	0	0	-	-	
Kakonko				3743	4,860	
Buhigwe				6,120	13,386	
Uvinza				8,200	9,000	
Total	6,924	21,239	25,104.05	18,063	27,246	
Ginger						
Kibondo	-	-				
Kasulu	-	2,150	2,257	2,370	15	
Kigoma Rural	-	-	-	-	-	
Kigoma Ujiji Municipality	-	-	-	-	-	
Kakonko			-	-	-	
Buhigwe				40	50	

Uvinza						
Total	0	2,150	2,257	40	50	
Irish potatoes	'		<u> </u>		<u>'</u>	-
Kibondo		30	62.8	13	9	
Kasulu	1,352	2,311	2,426	2,547	205	
Kigoma Rural	-	-	0	-	-	
Kigoma Ujiji Municipality	-	-	0	-	-	
Kakonko			0	811	820	
Buhigwe			0	-	600	
Uvinza			-	-	-	
Total	1,352	2,341	2,488.8	811	1420	
Fruits						
Kibondo	1,329	1,888	1,888	4,286	4,012	
Kasulu	238	871	871	3,640	495	
Kigoma Rural	-	720	720	705	6,809	
Kigoma Ujiji Municipality	250	0	0	7	1,060	
Kakonko				1097	2,345	
Buhigwe				250	10,500	
Uvinza				250	5,600	
Total	1,817	3,479	3,479	10,235	30,821	

Source: Kigoma Region Commissioner's Office, Kigoma 2016

2.4.6 Food crop production in relation to Region's food Security

Generally, the Region has continued to be food secured due to increased production of food crops from 935, 170 Tones in 2010/2011 to 1,255,425 in 2014/2015. Also the toneges of surplus has increased from 497,498 tones in 2010/2011 to 721, 304 tones in 2014/2015 as indiacated in Table 15.

Table 15: Status of food crop roduction and food security in the Region- 2010/2011 - 2014/2015

Production	Food crops	Population	Demand of food	Surplus (Ton)
season	produced (Ton)		crops (Ton)	
2010/2011	935,170	1,823,636	437,672	497,498
2011/2012	1,243,159	1,971,333	473,119	770,040
2012/2013	1,302,064	2,127,930	504,862	797,602
2013/2014	1,476,970	2,197,868	521,455	955,515
2014/2015	1,255,425	2,251,233	534,116	721,304

Source: Kigoma Region Commissioner's Office, Kigoma 2016

2.4.7 Production of Cash Crops

According to statistics in Table 16, Kigoma District produces more palm oil than other Districts do. The findings agree with analysis in Table 14. Uvinza is the second in production of palm oil, though the area under palm oil is less than that of Kigoma District. Therefore, this reveals that Kigoma Rural and other councils need to improve their yield rates and it can be achieved if new production technology is adopted by smallholder-farmers in the region.

Coffee is produced in Buhigwe, Kigoma, Kasulu, Kakonko and Kibondo Districts. Production of coffee is higher in Buhigwe as compared to other Districts, reason being that area under coffee production is higher in the council. However, production per hectare is low in all councils being less than 2 ton per hectare. Therefore, research and extension services are needed to promote coffee production in Kigoma region.

Tobacco is more produced in Uvinza District than in other Districts. The finding tallies with the results in Table 14, suggesting that other Districts need to increase their yields capacity and this is possible through adoption of appropriate farming innovations.

Other cash crops grown in the region are ginger, groundnuts, fruits and Irish potatoes. From Table 16 it shows that production of these crops in increasing in the region and hence extension services are needed to promote production of these crops.

Table 16: Estimated Production of Major Cash Crops (Tons) in the Region by District 2010/011-2014/015

Council	2010/011	2011/12	2012/13	2013/14	2014/15	
Cotton						
Kibondo	-	170	1830.95	8	6	
Kasulu	-	700	525	993	5	
Kigoma Rural	-	-	-	-	-	
Kigoma Ujiji Municipality	-	-	-		-	
Kakonko				1104	93	
Buhigwe				-		
Uvinza				-		
Total	-	870	2355.95	1104	93	
Tobacco	'					
Kibondo	49	337	2525.84	611	784	
Kasulu	225	5,356	5,624	2,953	2,495	
Kigoma Rural	4,320	8,373	9,330	0	0	
Kigoma Ujiji Municipality	-			0	0	
Kakonko				3,275	0	
Buhigwe				0	0	
Uvinza				4,500	8,250	
Total	4,594	14,066	17,479.84	11,339	11,529	
Coffee						-
Kibondo	15	15	13.081	0.6	97	
Kasulu	669	420	424	964	47	

Kigoma Rural	900	753	643	2,136	1,602	
Kigoma Ujij Municipality	-			0	0	
Kakonko				331	25	
Buhigwe				978	10,638	
Uvinza				0	0	
Total	1,584	1,584	3,168	4,409.6	12,409	
Oil Palm		·		·		·
Kibondo	-	1	2.12	2		
Kasulu	961	67	69	3,098	91	
Kigoma Rural	8,200	9,024	9,388	14,414	15,376	
Kigoma Ujiji Municipality		2, 250	2,270	2,610	3,780	
Kakonko				0	0	
Buhigwe				1,411	500	
Uvinza				7,500	9,900	
Total	5,680	9092	11729.12	29035	29647	
Horticulture			1			<u>'</u>
Kibondo	857	52,079	52511.806	936	52,098	
Kasulu	8,023	849	891	20,882	5,918	
Kigoma Rural	-	5,815	5,289	2,553	84,644	
Kigoma Ujiji Municipality	-	16,480	17,525	4480	11,300	
Kakonko				3,121	25,049	
Buhigwe				784	137,900	
Uvinza				21,775	27,250	
Total	8,880	75,223	76216.81	54531	344,159	
Groundnuts	<u> </u>	<u>'</u>	<u>'</u>	'	<u>'</u>	
Kibondo	4,000	11,965	22551.832	1,690	1,885	
Kasulu	1,296	3,114	3,269	3,332	4,762	
Kigoma Rural	8,140	10,488	12,782	4,385	1,498	
Kigoma Ujiji Municipality	-	0	0	0	0	
Kakonko				7860	7,290	
Buhigwe				12,240	1,606	

Uvinza				11,480	15,300	
Total	13,436	25,567	38602.83	40,987	32,341	
Ginger	L	l		l		
Kibondo	-	0	0	0	0	
Kasulu	-	43,000	45,150	47,408	13	
Kigoma Rural	-	0	0	0	0	
Kigoma Ujiji Municipality	-	0	0	0	0	
Kakonko				0	0	
Buhigwe				9,000	45	
Uvinza				0	0	
Total	0	43000	45150	56408	58	
Irish potatoes	I .	1		II.		
Kibondo		168	365.8	32	22	
Kasulu	11,112	16,832	24,267	25,480	2,365	
Kigoma Rural		0	365.8	0	0	
Kigoma Ujiji Municipality		0		0	0	
Kakonko				811	13,940	
Buhigwe					12,000	
Uvinza						
Total	11,112	17000	24998.6	26323	28327.00	
Fruits	1	1		1		
Kibondo	7,417		23,097	62,688	52,098	
Kasulu	3,616		882	26,117	5,918	
Kigoma Rural	-		24,480	20,532	84,644	
Kigoma Ujiji Municipality	-		0	26	11,300	
Kakonko				6,250	25,049	
Buhigwe				438.8	137,900	
Uvinza				8,000	27,250	
Total	11,033		48,459	124,051.8	344,159	

Source: Kigoma Region Commissioner's Office, Kigoma 2016

Table 17: General crop production in 2011/2012 season by District in the region

	KAS	ULU DC	KIBO	NDO DC	KIG	OMA DC	KIGOM	A/UJIJI MC	T	OTAL
CROP	-									
Food crops	AREA(H A)	PRODUCTI ON (TONS)	AREA(H A)	PRODUCTIO N (TONS)	AREA(H A)	PRODUCTIO N (TONS)	AREA(H A)	PRODUCTIO N (TONS)	AREA (HA) 295,52	YIELD(TO NS)
Maize	184,113	368,126	44,786	129,933	64,377	215,274	2,250	6,750	295,52	720,083
Sorghum	3,154	4,731	6,920	9,210			0	0	10,074	13,941
Finger Millet	0	0	247	330			0	0	247	330
Pigeon peas	213	213	3	2			0	0	216 159,77	215
Cassava	42,253	287,771	18,123	69,773	97,845	353,275	1,550	6,200	159,77	717,019
Paddy	4,346	13,038	5,199	17,780	21,369	65,257	1,720	6,880	32,634	102,955
Banana	9,323	139,900	11,504	104,724			650	6,500	21,477	251,124
Sweet potatoes	8,118	81,180	3,827	33,294	41,306	447,204	500	5,000	53,751	566,678
Coco Yams	0	0	398	3,099			0	0	398	3,099
Beans	81,549	115,900	15,768	16,556	53,660	59,025	1,100	1,650	152,07 7	193,131
Cow peas	705	705	1,357	1,016	2,682	3,208	0	0	4,744	4,929
Chicken peas	0	0	1	2			0	0	11	2
Sunb total	333,774	1,011,564	108,132	385,719	281,238	1,143,242	7,770	32,980	730,91 5	2,573,506
Cash crops									0	0
Coffee	1,458	420	0	15	1,671	753	0	0	3,129	1,188
Tobbaco	2,678	5,356	515	337	5,956	8,373	0	0	9,149	14,066
Oil palm	1,405	67	5	1	6,016	9,024	1, 500	2, 250	8,926	11,342
Groundnuts	3,114	3,114	9,971	11,965	8,154	10,488	0	0	21,239	25,567
Pinaple	0	0	39	468	671	21,295	0	0	710	21,763
Cotton	400	700	1,308	170			0	0	1,708	870
Irish potatoes	2,311	16,832	30	168			0	0	2,341	17,000
Ginger	2,150	43,000	0	0			0	0	2,150	43,000
Sun flower	0	750	250	154			0	0	250	904
Simsim	0	0	82	70			0	0	82	70
Sugar cane	0	0	171	910			0	0	171	910
Sunb total	13,516	70,239	12,370	14,257	22,468	49,933	1, 500	2, 250	49,854	136,678
Cash crops	849	849							849	849
Cabbage	0	0	1,195	31,534	34	486	85	1,700	1,314	33,720
Amaranthus	0	0	601	12,875	572	2,337	80	1,440	1,253	16,652
Tomatoes	0	0	152	1,352	93	1,751	510	10,200	755	13,303
Swet pepper	0	0	2	42	12	30	32	480	46	552
Okra	0	0	0	0	21	373	5	40	26	413
Spinach	0	0	54	859			45	450	99	1,309
Plum	0	0	1	11			30	270	31	281
Cucumber	0	0	1	7	14	58	52	1,040	67	1,105

African egg										
plant	0	0	161	3,001	82	295	43	860	286	4,156
Onion	0	0	175	1,705	14	95	0	0	188	1,800
Carrot	0	0	22	522	16	66	0	0	37	588
Chinese										
cabbage	0	0	14	171	75	325	0	0	88	495
Sub total	849	849	2,377	52,079	930	5,815	882	16,480	5,038	75,223

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Table 18: General Crop production in 2012/2013 season by Council in the region

	KAS	ULU DC	KIB	ONDO DC	KIG	OMA DC	KIGOM	A/UJIJI MC		TOTAL
Crop Food crop	AREA(HA)	PRODUCT ION (TONS)	AREA(HA)	PRODUCTION (TONS)	AREA(HA)	PRODUCTION (TONS)	AREA(HA)	PRODUCTION (TONS)	AREA (HA)	YIELD(TONS)
Maize	193,318	386,636	48,649. 36	142,205.96	66,854	233,989	2,400	8,400	311,221	771,231
Sorghum	3,311	4,966	8929.67	13311.556			0	0	12,241	18,278
Cow peas	223	223	187.35	103.56			0	0	410	327
Cassava	44,365	310,555	19954.4 1	81553.91	98,760	355,536	1,340	5,360	164,419	753,005
Paddy	4,563	13,689	5827.99	20701.822	28,500	102,601	1,010	4,040	39,901	141,032
Banana	9,789	146,835	4,739	50,647			800	8,000	15,328	205,482
Sweet potatoes	8,524	85,240	4335.2	39012.6	42,501	493,007	520	5,200	55,880	622,460
yams	0	0	21.63	100.35			0	0	22	100
Beans	93,611	140,416	19191.2 6	20920.602	55,890	78,246	1,200	2,400	169,892	220,859
Soya beans	0	0	0.25	0.4			0	0	0	0
NJUGU MAWE	0	0	9	5			0	0	9	5
Chicken peas	0	0	332.74	296.768			0	0	333	297
Coco yam	0	0	443.02	3456.51			0	0	443	3,457
Finger millet	2,437	4,874	974.93	1153.11			0	0	3,412	6,027
Pegion peas	740	740	807.65	646.5	3,200	4,800	0	0	4,748	6,187
Sub total	360,881	1,094,174	114,403	374,116	295,705	1,268,179	7,270	33,400	778,259	2,748,745
CASH CROPS										-
Coffee	1,531	424	697.05	13.081	1,780	643	0	0	4,008	1,080
Tobbaco	2,812	5,624	3608.26	2525.84	6,220	9,330	0	0	12,640	17,480
Oil palm	1,475	69	6.4	2.12	6,018	9,388	1,740	2,270	9,239	11,729
Groundnuts	3,269	3,269	12705.0 5	22551.832	9,130	12,782	0	0	25,104	38,603
Cotton	525	945	1830.95	733.07			0	0	2,356	1,678
Irish potatoes	2,426	24,267	62.8	365.8			0	0	2,489	24,633

Ginger	2,257	45,150	0	0			0	0	2,257	45,150
Sugar cane	418	33,360	631.72	8995.806			0	0	1,050	42,356
Simsim	0	0	313.425	290.125			0	0	313	290
Sun flower	3,000	4,500	326.495	303.0545			0	0	3,326	4,803
Sub total	17,713	117,608	20,182	35,781	23,148	32,143	1,740	2,270	62,783	187,801
Grand total	891	891							891	891
Cabbage	0	0	1195.06	31534.262	35	512	110	2,200	1,340	34,246
Amaranthus	0	0	601.315	12875.488	582	2,386	85	1,275	1,268	16,537
Tomatoes	0	0	152.06	1352.538	93	1,763	520	10,400	765	13,515
Sweet paper	0	0	1.98	42.018	13	32	40	600	55	674
Okra	0	0	161.13	426.57	23	79	10	100	194	605
Spinach	0	0	54.13	859.03			60	600	114	1,459
Plum	0	0	1.15	11.25			30	450	31	461
Cuccumber	0	0	0.75	7	14	60	50	1,000	65	1,067
African egg plants	0		161.9	3001.947	82	295	45	900	289	4,197
Onions	0	0	174.98	1705.953	14	95	0	0	189	1,801
Carrot	0	0	21.89	522.1	16	67	0	0	38	589
Chinese cabbage	0	0	13.51	170.65			0	0	14	171
Pepper	0	0	113.055	3			0	0	113	3
Sunb total	891	891	2652.91	52511.806	872	5,289	950	17,525	5,366	76,217
Fruits									-	-
Mangoe	0	0	185.256	385			0	0	185	385
Pawpaw	0	0	63.421	154.746			0	0	63	155
Orange	0	0	12.886	10.17			0	0	13	10
Avocado	0	0	1014.69	21534.66			0	0	1,015	21,535
Water melon	0	0	240.04	505.14			0	0	240	505
Lemon	0	0	17.79	240.3			0	0	18	240
Passion	0	0	0.025	0.25			0	0	0	0
Pineaple	0	0	353.9	266.38	720	24,480	0	0	1,074	266
Sub total	871	882	1,888	23,097	720	24,480	0	0	2,608	23,979
Grand total	380,356	1,213,555	139,127	485,505	320,445	1,330,091	9,960	53,195	849,016	3,036,742

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Table 19: General crop production in 2013/2014 season by Council in the Region	Table 19: General cros	production in	2013/2014 season by	v Council in the Regio
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CASH CROPS	Kibon	do DC	Kasu	ılu DC	Kigor	na DC	Kakoni	ko DC	Buhio	iwe DC	Uvin	za DC	Kigoma/Ujiji MC		тс)TAL
	area (Ha)	Produc tion(To ns)	area (Ha)	Produc tion(To ns)	area (Ha)	Produc tion(To ns)	area (Ha)	Produ ction(T ons)	area (Ha)	Producti on(Tons	area (Ha)	Produc tion(To ns)	area (Ha)	Produc tion(To ns))	area (Ha)	Productio n(Tons)
rice	30,075	87,818	195,31 8	405,96 8	24,347	60,866	18,363	55089	22,320	49,280	36,000	136,80 0	2,640	9,240	329,063	805,061
pady	3,605	6,489	4,791	14,373	8,522	20,454	4,237	12711	15	94	21,000	73,500	1,990	7,960	44,160	135,581
Finger millet	4,335	12,140	3,477	5,212	0	0	4,059	8118	0	0	0	0	0	0	11,871	25,470
Ulezi	125	168	2,559	4,114	0	0	2,046	2046	0	0	0	0	0	0	4,730	6,328
cassava	10,212	39,830	46,583	326,08 3	28,996	75,388	7,187	20842	15150	136,350	36,000	136,80 0	1,750	7,000	145,878	742,294
Irish potatoes	185	416	8,950	89,502	12,400	105,400	2,183	20520	0	0	14,200	79,500	725	7,250	38,643	302,588
Banana	34,092	51,478	10,278	154,17 7	6,135	64,419	1,458	17496	7,200	50,400	0	0	0	0	59,163	337,970
Beans	11,318	12,326	98,292	147,43 7	17,042	17,042	5,885	5885	8,801	12,673	25,500	33,150	1,370	2,740	168,208	231,253
Cow peas i	182	136	777	777	1,310	1,965	92	138	0	0	0	0	0	0	2,361	3,016
Pigeon peas	10	8	234	234	5	9	179	268.5	0	0	1,500	1,800	0	0	1,928	2,320
Jumla	94,139	210,80 9	371,25 9	1,147,8 77	98,756	345,543	45,689	143114	53486	248,797	0	461550	8,475	34,190	806,004	2,591,881
coffee	3	0.6	1,608	964	1,780	2,136	552	331	1,995	978	0	0	0	0	5,938	4,409

Tobacco	607	611	2,953	2,953												
					0	0	3274	3,275	0	0	4,500	4,500	0	0	11,334	11,339
cotton	14	8	551	993	0	0	1104	1104	0	0	0	0	0	0	1,669	2,105
Irish	13	32	2,547	25,480												
potatoes					0	0	811	811	0	0	0	0	0	0	3,371	26,323
Groundn uts	1,352	1,690	3,332	3,332	3,654	4,385	3743	7860	6,120	12,240	8,200	11,480	0	0	26,401	40,987
sugarca ne	86	62	439	35,028	0	0	289	1445	0	0	124	612	0	0	938	37,147
Palm oil	2	2	1,549	3,098	9,609	14,414	0	0	980	1,411	5,001	7,500	1,740	2,610	18,881	29,035
Ginger	0	0	2,370	47,408	0	0	0	0	40	9,000	0	0	0	0	2,410	56,408
Simsim	0	0	0	0	0	0	12	4.8	0	0	5	6	0	0	17	11
sunfolow er	8	7	3,150	4,725	0	0	2,571	5,142	0	0	0	0	0	0	5,729	9,874
Vegitabl	852	20,882	936	936												
es					495	2,553	224	4480	49	784	237	3,121	1,175	21,775	3,968	54,531
Fruits	4,286	62,688	3,640	26,117	705	20,532	1097	438.8	250	6,250	250	8,000	7	26	10,235	124,052
Sub	7 000	05.002	22.075	151,03	16 042	44.000	12 677	24 902	0.424	20.662	10 217	3E 040	2 022	04 444	00 901	206 224
total	7,223	85,983	23,075	4	16,243	44,020	13,677	24,892	9,434	30,663	18,317	35,219	2,922	24,411	90,891	396,221
Grad total	101,36 2	296,79 2	394,33 4	1,298,9 11	114,99 9	389,563	59,366	168,00 6	62,920	279,460	152,51 7	496,76 9	11,397	58,601	896,895	2,988,102

Table 20: Genearal crop production in 2014/2015 season by Council in the Region

CROP NAME			Kasulu DC Kibondo DC		Kigoma DC		Kigoma/Ujiji MC		Buhigwe DC		Kakonko DC		Uvinza DC		т	otal
CEREAL CROPS	area (Ha)	Producti on(Tons	area (Ha)	Producti on(Tons	area (Ha)	Producti on(Tons	area (Ha)	Productio n(Tons)	area (Ha)	Productio n(Tons)	area (Ha)	Producti on(Tons	area (Ha)	Productio n(Tons))	area (Ha)	Productio n(Tons)
Maize	72,80 3	161,474	30,01 4	87,052	24,87 4	77,109	2,700	9,450	15,00 0	27,000	22,720	86,336	40,800	163,200	208,911	611,621
Paddy	7,061	14,504	1,975	3,752	1,236	3,461	1,997	7,988	450	405	4,290	20,163	22,000	99,000	39,009	149,273
Finger millet	134	214	2,176	6,093	0	0	0	0	0	0	4,059	12,177	0	0	6,369	18,484
Ulezi	117	176	83	112	0	0	0	0	0	0	2,050	3,075	0	0	2,250	3,363
Sub total	80,11 5	176,368	34,24 8	97,009	26,11 0	80,570	4,697	17,438	15,45 0	27,405	33,119	121,751	62,800	262,200	256,539	782,741
Root crops																
Cassava	20,92 5	110,505	10,45 6	40,988	29,70 2	86,136	1,845	7,380	15,75 0	78,750	7,755	58,163	40,500	162,000	126,933	543,922
Sweet potatoes	3,265	48,946	118	266	12,51 8	85,122	740	7,400	0	0	2,185	14,203	16,500	198,000	35,326	353,937
Irish potatoes	205	2,365	9	22	0	0	0	0	600	12,000	820	13,940	0	0	1,634	28,327
Magimbi	65	455	135	776	0	0	0	0	650	13,000	105	315	0	0	955	14,546
Sub total	24,46 0	162,271	10,71 8	42,052	42,22 0	171,258	2,585	14,780	17,00 0	103,750	10,865	86,621	57,000	360,000	164,848	940,732
Legume crops																
Kunde			2	1	0	0	0	0	0	0	200	240	0	0	202	241

Mbaazi	673	740	182	137	1,295	1,166	0	0	850	510			1,700	2,550	4,700	5,103
Choroko	5	4	0	0		0	0	0	0	0			0	0	5	4
Njegere	32	64	7	6	7	8	0	0	0	0					46	78
Njugumawe			1	1	0	0	0	0	0	0			950	1,300	951	1,301
Beans	28,97 1	66,262	11,50 0	13,225	17,52 0	17,520	1,385	2,770	12,31 1	6,156	5,886	14,715	26,300	36,820	103,873	157,468
Soya beans	15	12	0	0	0	0	0	0	0	0	,	,	0	0	15	12
Sub total	29,69	67,082	11,69 2	13,370	18,82 2	18,694	1,385	2,770	13,16 1	6,666	6,086	14,955	28,950	40,670	109,792	164,207
Oil crops																
Simsim	5	5	0	0	0	0	0	0	0	0			0	0	5	5
Sunflower	4,035	5,618	41	62	0	0	55	110	320	800	65	98	280	600	4,796	7,288
Ground nuts	3,642	4,762	1,450	1,885	1,152	1,498			13,38 6	1,606	4,860	7,290	9,000	15,300	33,490	32,341
Palm oil	50	91	0	0	9,610	15,376	1,890	3,780	800	500			5,500	9,900	17,850	29,647
Sub Total	7,732	10,476	1,491	1,947	10,76 2	16,874	1,945	3,890	14,50 6	2,906	4,925	7,388	14,780	25,800	56,141	69,281
Cash crops																
Cotton	25	5	10	6	0	0	0	0	0	0	31	93	0	0	66	104
Tobacco	1,782	2,495	603	784	0	0	0	0	0	0			5,500	8,250	7,885	11,529
Coffee	54	47	27	97	1,780	1,602	0	0	11,82 0	10,638	25	25	250	0	13,956	12,409
Sugar cane	403	8,427	82	5,084	0	0	0	0	0	0	390	11,700	0	0	875	25,211

Sub Total	2,264	10,974	722	5,971	1,780	1,602	0	0	11,82	10,638	446	11,818	5,750	8,250	22,782	49,253
Fruits	2,201	10,011	,,,,,	0,011	1,700	1,002				10,000	110	,	0,100	0,200	22,102	10,200
Mangoe	49	700	48	631	0	0	0	0	0	0	10	100	0	0	107	1,431
Banana	275	3,371	3,908	49,832	6,139	76,738	980	9,800	1,500	18,750	1,849	22,665	5,300	23,800	19,951	204,956
Orange	34	344	8	152	0	0	0	0	50	950			0	0	92	1,446
Pawpaw	25	178	6	553	0	0	0	0	500	6,000			0	0	531	6,731
Machenza	20	255	0.1	1	0	0	10	100	200	3,800			0	0	230	4,156
Guava			3	39	0	0	0	0	0	0			0	0	3	39
Pinaple	17	202	0	0	670	7,906	0	0	8,000	94,400			300	3,450	8,987	105,958
Avocado	10	146	27	770	0	0	0	0	200	3,000	486	2,284	0	0	723	6,200
Tikitimaji	44	574	7	87	0	0	70	1,400	50	11,000			0	0	171	13,061
Lemon	18	129	0.8	11	0	0	0	0	0	0			0	0	19	140
Ndimu	1	4	0	0	0	0	0	0	0	0			0	0	1	4
Passion fruit	2	15	4	22	0	0	0	0	0	0			0	0	6	37
r assion nuit	2	13	4	22	0	0	0	0	10,50	0			U	0	0	31
Sub total	495	5,918	4,012	52,098	6,809	84,644	1,060	11,300	0	137,900	2,345	25,049	5,600	27,250	30,821	344,159
VIUNGO																
Ginger	15	13							50	45					65	58
vitunguu swaumu	12	49													12	49

Sub Total	27	62							50	45					77	107
Vegitables	21	UZ.							30	70					- 11	107
	40	445	4.4				7.5	4.500							404	4 000
Matango	16	115	1.1	6	9	77	75	1,500	0	0					101	1,698
Cabbage	97	1,249	103	2,570	23	669	150	3,000	48	5,760	160	1,280			581	14,528
Mchicha	57	428	28	632	356	9,968	130	1,950	50	600	39	195			660	13,773
Spinach	18	119	4	58	0	0	0	0	0	0					22	177
Chinese Cabbage	23	132	82	1,845	52	868	90	900	48	5,760					295	9,505
Tomatoe	159	2,371	53	1,470	68	2,176	670	13,400	50	5,500	180	540			1,180	25,457
Biringanya	4	38	1	36	0	0	0	0	0	0					5	74
Egg plant	44	519	48	805	71	781	75	1,500	50	500	63	158			351	4,263
Onion	82	1,543	87	3,455	12	384	0	0	0	0	115	414			296	5,796
Pilipili hoho	26	179	1.2	3.4	16	54	50	750	20	220					113	1,207
Carrot	16	203	10	244	13	358	0	0	0	0					39	805
Leek			0	0	0	0	20	200	0	0					20	200
Bamia	6	7	4	6	13	66	15	150	0	0					38	229
Sub total	548	6,903	422	11,130	633	15,401	1,275	23,350	266	18,340	557	2,587			3,701	77,712
Grand total	145,33 7	440,054	63,305	223,577	107,13 6	389,043	12,947	73,528	82,753	307,650	58,343	270,169	174,880	724,170	644,701	2,428,191

2.4.8 Irrigation Prospects

Kigoma region is potential for irrigation as it contains abundant natural drainage system, which originates from Malagarasi, Luiche and Ruchungi rivers. Agricultural statistics indicate that **50,952** ha are potential for irrigation in the region (see Table 21). However, only **8,219.5** Ha. or **16.1** percent of total regional potential area is under irrigation. This proportion is insignificant and therefore purposive investment is necessary.

According to Table 21, Uvinza district council possesses larger potential irrigation area (19,920 Ha.) than all councils but it has low utilization where only 15 percent of its area is used. Uvinza district council is followed by Kasulu district council. Kakonko district council has large proportion of area under irrigation 68% followed by Kasulu district council .Agronomical findings indicate that major crops, which could be exploited in irrigation, include paddy, horticultural crops and fruits, which are high value crops and could earn more income from small area. The analysis suggests that cultivation throughout the year is possible in Kigoma region when irrigation schemes are initiated and sustained. The irrigation schemes would either be of traditional type especially in districts where irrigation potential areas are of small size distributed in all divisions, or modern ones in Districts with large areas. However, farmers would prefer any improved one but maintained by community, which is simple to maintain and manage.

Table 21: Irrigation Prospects in the Region by Council, 2016

Council	Estimated Potential Area (Ha)	Area Under Irrigation (Ha)	% Used
Kibondo DC	3,510	1,328	37.8
Kasulu TC	1,515	4.5	0.3
Uvinza DC	19,920	2990	15.0
Kigoma DC	3,420	106	3.0
Buhigwe DC	3,700	100	2.7
Kakonko DC	1,757	1,194	68
Kasulu DC	14,100	1,390	9.9
Kigoma Ujiji Municipality	3,030	1,107	36.5
Total	50,952	8,219.5	16.1

Source: Kigoma LGAs District Socio-economic profiles, 2016

2.4.9 Livestock

2.4.9.1 Introduction

Livelihoods of Kigoma region population also relies on livestock economy. The major source of income being local short zebu cattle but do not produce considerable economic values of milk and beef due to poor animal husbandry and traditional breed type. Improved dairy cattle are reared in all councils and are more paying as compared to local short zebu cattle. Other domestic animals, which support population livelihoods, include goats, sheep, pigs and poultry. Return on livestock is low due to lack of essential infrastructures. The established ones in Kigoma region include grazing areas, dips, veterinary centres, crushers', hides/skin sheds and abattoirs. Although the basic infrastructures are insufficient, the analysis shows the marketed livestock by type from abattoir records.

2.4.9.2 Livestock Population

Livestock population in the region are shown in Table 19. The Table indicates that Cattle are more than other type of livestock in the region. By distribution, 275,561 cattle or 43.1 per cent of total regional number are in Kasulu District Counci. The second council with large number of cattle is Uvinza as it keeps 255,055 or 39.9% of total regional number. Uvinza district council also has large stock of goats(189,396), which is about 41.3 percent of total goats in the region. The smallest number of goat, which is equivalent to 3,230 or 0.7% of the region-reared herds, is in Kigoma Municipality. This proposes that Kasulu TC, Kigoma DC, Kibondo,

Kakonko, Buhigwe and Kasulu district councils have favourable environment for rearing goats and Kigoma Municipality is not suitable for such investment.

The same Table reveals that a large number of region's sheep are in Kasulu DC (49,216) or 44.8 per cent, Uvinza DC (39,154) or 35.7 percent and Kigoma DC (10,697) or 9.7 per cent. Nevertheless, the smallest number are kept in Kakonko DC (158) or 0.1 percent of the total number of shheps in the Region. The reason is similar to Donkeys. It is again interesting that huge number of Donkeys are found in Uvinza, Kasulu districts, and insignificant number in Kakonko District council. The reason could be the same explanation as in cattle and goats. The same table shows that 17,161 pigs or 58.2 percent of total region's pigs are kept in Kasulu district. Contrary to what could be termed as socio religious factor, Kigoma Ujiji Municipality is the second last in number of pigs in the region, which are 325 or 1 percent. Table 19 also shows that Uvinza, Kasulu rural, Kibondo, Buhigwe, Kakonko, Kigoma Urban and Kigoma rural keep poultry in large numbers.

Table 22: Estimated Livestock Keeping in the Region by Council, 2016

Council Name	Cattle	Goats	Sheep	Donkeys	Pigs	Poultry	Others
Kakonko DC	17,671	19,593	158	12	633	123,840	3,200
Kasulu DC	275,561	115,051	49,216	183	17,161	130,520	9,320
Buhigwe DC	29,665	17,506	3,893	-	852	132,737	1,768
Kibondo DC	35,241	64,570	2,278	-	3,650	172,340	5,976
Uvinza DC	255,055	189,396	39,154	230	120	658,427	11,896
Kigoma DC	7,369	30,230	10,697	-	2,631	144,069	4,128
Kasulu TC	16,904	18,997	3,014	-	4,095	46,943	2,601
Kigoma Ujiji MC	2,532	3,230	303	-	325	123,303	1,367
Total	639,998	458,573	108,713	425	29,467	1,532,179	40,256

Source: Kigoma LGAs District socio-economic profiles, 2016

2.5 Natural Resources

2.5.1 Introduction

Kigoma region is endowed with vast natural resources that include rivers such as Malagarasi, Luiche, Lugufu, Bogwe, Ngonya, Gombe, Kaseke, Mkuti and many other minor rivers. These rivers provide great opportunity for fishing, irrigation and water for both human and animals being domesticated or wild. Other natural resources in the region include Lake Tanganyika, forests, minerals and wildlife. Kigoma region also has unique features that include the Livingstone Memorial at Ujiji; Slave Trade Route; the Liemba Ship, which is believed to have been used during Second World War and is still in operation; old Germany buildings; Gombe and Mahale National parks famous for existence of Chimpanzees. These unique features are a good tourist attraction. The region has also Moyowozi Game reserve famous in abundance of big game which makes the region famous for tourist hunting.

2.5.2 Lake Tanganyika

Lake Tanganyika with a total area of 13, 350 sq. km is the largest body of fresh water in Africa almost one sixth of the world available fresh water resources. More than 10 million people share the Lake's watershed and they depend on it for fresh water, food and transportation. This lake is very rich in aquatic species with more than 1,500 fish species, invertebrates and plants, thereby providing a great opportunity for economic activities (fishing) to communities living along the lake and other investors/entrepreneurs. The lake is deepest in Africa and second in the world. It is estimated that 800,000 tones of different variety of fish can be harvested annually without causing any negative ecological impact to the lake.

2.5.3 Forests

About 2,000,000 hectares of Kigoma landmass is covered by forests of which 839,266.9 hectares are reserved forests (236,421.9 ha Kasulu, 514,633.5 ha Kibondo and 88,211.5 ha Kigoma including Moyowosi game reserve) and the remaining forest area is unreserved. These forests are important for economic activities to adjacent communities who get various forest products for domestic purposes, sale and trade. Products extracted from these forests include firewood, charcoal, construction materials, timber and other products. Kigoma region having Miombo type of forests is very potential in honey and beeswax production as economic activities as well as for nutrition.

2.5.4 Minerals

Kigoma region is famous in salt production at Uvinza. In Kibondo and Kakonko districts there are Gold deposit exploration: Nyakayenzi Village, Ruhulu - Kabare villages, Nyamwironge - Nyamtukuza villages have estimated area of approximately 240,000m² of Gold deposit. Large deposits of Kaolinite: Found at Kasuga village. Coal survey and exploration: Kasanda, Kibuye and Kichananga villages. Kumwambu and Kitahana villages: have large natural occurrence of limestone deposits estimated to occupy an area of more than 5 hectares. Lime is is largely produced at Makere area in Kasulu district. These mining activities are very important in the region's economy. There is also a prospect of other minerals such as nickel and copper. Furthermore, there is also prospect of natural gas and oil along the shores of Lake Tanganyika.

2.5.5 Forestry

2.5.5.1 Forestry Reserves

The region has 34 reserved forests out of which 16 forest reserves or 47 percent of total region reserved forests is found in Kakonko district. Uvinza district council owns 6 forest reserves that occupy 196,595 ha or 17 percent, Kasulu district owns four forest reserves that occupy a total area of 185,249 ha or 16 percent of the total forest reserve area in the region (Table 24). The same Table discloses that Kibondo district has one forest reserve with 557,656 ha or 48.2 percent of regional reserved forest area. Kigoma Municipal has one forest reserve occupying 129 ha. The data in Kasulu district council shows that about 50 percent of her forest reserves are encroached. There is no data for forest reserves in Buhigwe District also no data of encroachment in other districts. Forest encroachments disturb ecological patterns consequently, imparting negative influence on living creatures (both fauna and flora) through environmental destruction. Thus, data availability on forest encroachment signals the extent of the problem, the absence of which may hamper establishment of the magnitude of the problem hence the region is working on data gathering for forest reserves encroachment.

Table 23: Forest Reserves in the Region by District, 2015

District Name	No. of Reserved Forests	Total Area (Ha.)
Uvinza DC	6	196,595
Kibondo DC	1	557,656
Kasulu DC	4	185,249
Kakonko DC	16	182,364
Kasulu TC	2	60
Buhigwe DC	-	-
Kigoma DC	3	34,137
Kigoma Ujiji MC	1	129
Total	34	1,156,190

Source: Kigoma LGAs District socio-economic profiles, 2016

2.5.6 Tree seedlings raised

Efforts of conserving regional land involve individual and various institutions. That findings show that the number of trees seedlings raised in the region has increased from 3,105,811 in 207 to 14,000,000 in 2015. The institutions which raised more tree seedlings for the past eight years (2007 – 2015) are NGOs, Districts and Villages.

2.5.7 Fisheries

Fishing activities are carried out mostly in Lake Tanganyika. Kigoma/Ujiji Urban has a distance of about 50Km of Lake Tanganyika shore line in which fish production potentially is high. Fishing is carried out by artisanal fishermen. It contributes about 30% to the urban economy annually by creating employment opportunities to youth and women in fishing, processing and marketing of the fish products.

There are four fishing stations namely Kibirizi, Katonga, Ujiji and Shede. There has been an increase of fishermen and low level fish processors while the amount of fishing is declining. Fish catch from Lake Tanganyika is marketed to various parts of the country. The surplus produced is exported to Democratic Republic of Congo, Burundi and Zambia.

Lake Tanganyika is very rich in Biodiversity species. The predominant fish species are 'Dagaa' (<u>Stolothris Tanganyikae</u>) and 'Migebuka' (Lates steppers ii) which are endemic. Based on sustainable fishing industry development, local communities play a role in the conservation and protection of the natural heritage of Lake Tanganyika.

Table 24: Revenues from fishing activities from 2005 to 2013

YEAR		FISH	S	ARDINE
	AMOUNT (Kgs)	WORTH (Tsh)	AMOUNT (Kgs)	WORTH (Tsh)
2005	126,340	90,631,548.5	379,020	271,894,645.5
2006	126,490	180,324,144	379,470	540,140,480
2007	129,092.5	335,033,765.2	387,278	899,312,229
2008	134,600	349,327,380	403,800	990,783,420
2009	152,675	481,262,135	458,025	1,215,921,751
2010	155,100	462,213,510	465,300	1,357,793,490
2011	157,900	462,220,670	473,700	1,386,694,255
2012	147,450	486,688,215	442,350	1,460,098,785
2013	140,428	486,615,599.60	448,472	1,479,957,600

Source: Kigoma LGAs District socio-economic profiles, 2016

Table 25: Fishing infrastructures

No	INFRASTRUCTURE	AVAILABILE
1	Number of Fish ponds	16
2	Number of local fishing boats	250
3	Number of engine Boats	225
4	Number of Fish Markets	1
5	Number of fish parking industries	-
6	Number of sites demarcated for fish ponds	3
8	Modern Landing Site	1
9	Ice Plant House	1

Source: Kigoma LGAs District socio-economic profiles, 2016

2.5.7.1 Fish Processing

Although Kigoma region has a high potential for fishing industry, there is no fish-processing factory. Most of the fishing products are processed by fishermen and/or petty traders through sun drying. Fishermen sell their

fish to petty traders or directly to consume Fishing industry is facing many bottlenecks among them being poor and inadequate facilities in fishing, fish processing, modern fish gears, technologies and entrepreurship skills. Fishing activities are also affected by Lake Piracy and lack of large scale fish processing industries. rs. The findings suggest that deliberate efforts are needed to invest in fish processing especially in Kigoma rural district and Kigoma Municipal.

2.5.8 Bee Keeping

With massive opportunity of forestry reserves in the region the findings by districts indicates that Kibondo, Kakonko, Kasulu and Uvinza District Councils are potential for Bee-keeping, as there are many nectar yielding tree species and flowery agricultural plants. Kibondo is the first in bee keeping and honey and beewax producer while Kasulu District is the second. Generally, the productivity of beekeeping has been increasing. Currently there is 6,521 modern beehives and 114,825 traditional beehives, 5,611 beekeepers(1,687 females and 3,924Males). Honey production has increased from 100 tones in 2007 to 472tones in 2015. Also production of beewax has increased from 7 tones in 2007 to17 tones in 2015. Purposive efforts are taken to encourage all districts to adopt modern beehives in order to increase production and quality of bee products. The region got a beekeeping Support Project under Belgian Technical Cooperation (BTC) support to some district councils in the region. Among the project goals is to enable beekeepers to produce quantitative and qualitative bee product for market and to raise their income to reduce poverty and meet the standard of living. For the time being, beekeeping is still carried in small scale in different areas in the region where people process honeys for retailing business in the market but still there is high demand of bee products domestically and internationally.

2.5.9 Wildlife

2.5.9.1 Type and area occupied by game reserves

The region owns one game reserve (Moyowosi) which is inter-regional, it extends to other two regions of Shinyanga and Tabora.(Table 34). Gombe National Park occupies a total area of 52 square kilometers while Moyowosi occupies a total of 10,758 square kilometers, which is the largest in the region. Kasulu district has Nyamuroha game reserve. In Kigoma rural there is Ruganjo controlled game area which is estimated to occupy a total area of 65 square kilometers. Gombe and Mahale national parks are famous for Chimpanzees.

2.6 Development of Tourism

Kigoma region is endowed with good climatic conditions producing good green scenery with very limited level of pollution. Attractive sites suitable for tourism in the region include:

- Lake Tanganyika, the second deepest lake in the world;
- ➤ Gombe National Park, famous in the world for the existence of well researched Chimpanzees; and Mahale National Park, important for big population of Chimpanzees and other animals as well as birds;
- Moyowosi Game reserve important for abundance of big game for tourist hunting;
- > Dr. Livingstone Memorial at old Ujiji town and the Slave Trade Route;
- Salt Springs and the Salt factory at Uvinza,
- Old German buildings;
- The Old ship known to have been used during World War II, the MV Liemba;
- The meandering nature and the waters of River Malagarasi and beautiful indigenous forests, to mention a few.

2.7 Industry

2.7.1 Small and Medium Scale Industries by Activities

The region is involved in small and medium scale industries. Table 39 indicates that most of the industries are located in Kasulu District (540), Kigoma and Uvinza DC (248), Kigoma Ujiji Municipality (156), Kibondo and Kakonko (153). According to the Table, small-scale industries in Kasulu district specialize on milling machines, charcoal stove, black smith, carpentry and honey processing. Those at Kigoma Ujiji Municipality are oil palm, soap manufacturer, saw mills and, carpentry. Kigoma rural and Uvinza district council involves milling machines and carpentry and in Kakonko and Kibondo involves milling, machines and welding/carpentry. In all aspects, those industries rely on abundance of local raw materials. However, the level of industries in the region needs a lot of study. The region is potential for investment but still facing infrastructural botleneks for example good roads, standard gauge rail, modern port and Air port.

Though the region is producing fish varieties, there is no fishing processing industries. Other viable industrial option is fruit canning. Similarly, since oil palm and groundnuts are abundant in the region, small-scale processing factories can be established in Kigoma region.

Table: 26: Small and Medium Scale Industries by Activities in the Region by Councils, 2015

Council Name	Total Number	Major Activities
Kibondo DC and Kakonko DC	153	Milling machines (130), welding/carpentry (22). Honey processing (1)
Kasulu DC and Kasulu TC	440	Milling machines (442); carpentry/wellding (15); charcoal stove (46) black smith (34), honey processing (3)
Kigoma DC and Uvinza DC	248	Milling machines (180); carpentry (100)
Buhigwe DC	56	Milling machines (20); carpentry (36)
Kigoma/ Ujiji MC	156	Oil palm(27); soap manufacturer (46); Milling machines (64), carpentry machines (18), Water purification and packaging 1, Flour milling and packing (1)
Total	1053	

SECTION III

3.0 ECONOMIC INFRASTRUCTURE

3.1 Introduction

Kigoma region has a lot of potential for development but the underdevelopment of economic infrastructure such as poor road, unreliable rail and air transport, poor marine infrastructures like harbour, docking stations and energy from thermal electricity generated by powered diesel generators has been most significant barrier to socio-economic development. Despite the majority of the regional population relying on road services, the level of road services is still poor during rainy season. Besides roads, marine is highly used in Lake Tanganyika connecting Kigoma region to Democratic Republic of Congo, Burundi and Zambia and all towns and villages along Lake Tanganyika shore. Railways link Kigoma region with other towns and cities in Tanzania and is mostly used to ferry passengers and bulk load in and out of the region. Furthermore, geographical location of the region makes it quite inaccessible from other centers of economic and political importance. The following sub-sections present details of each type of infrastructure.

3.2 Road Network

3.2.1 Type of Road Network

The region possesses four types of road network as shown in Table 40. The Table indicates that km **1689.2** or 52.7 percent of total region's road network are feeder roads. District roads cover **729.7** km or 22.8 percent of total regional road network. Regional roads cover **379.1** km or 11.8 percent of total regional road network; where as the trunk roads cover **487.3** km or 15.2 percent of total regional road network.

On comparison, Kibondo district council owns 112.5 km or 23.1 percent of total regional trunk roads followed by Kigoma DC with 94.6 km or 19.4 per cent. Kigoma Ujiji has only 5 km or 1.0 percent of the regional trunk road. Kakonko possesses the largest proportion of regional roads, 124 km or 32.7 percent while Kigoma/Ujiji has least proportion 19.5 km or 5.1 percent of total regional roads. Kibondo has largest proportion of feeder roads 453.3 or 26.8 percent while Uvinza has least proportion of feeder roads 160.9Km or 9.5 percent. Overall analysis reveals that Kibondo has longest road network 662.9 Km while Buhigwe is the second and the third is Kakonko DC. Uvinza is the last with a total of 216.4 km of all road networks with exception of regional road.

The result suggests that more efforts need to be taken in order to increase additional feeder roads. Despite the importance of all road grades, feeder roads are a lifeline in the process of agricultural production in rural areas and this is crucial on poverty reduction for Kigoma region citizens.

Findings shows that most of the villages in Kigoma District except the villages found at the North of the district are accessible by road. Villages along the shore of Lake Tanganyika can be reached by boats and ship. Initiatives are underway to constructing new road form Mwandiga-Chankele via Mwamgongo to Kagunga village- Burundi Bouder. Efforts have started by completing Feasibility study.

Table 27: Road Networks in the Region by Types and Council, 2015

Council Name	Type (Km)								
	Trunk	Regional	District	Feeder	Total				
Kibondo DC	112.5	49.0	48.1	453.3	662.9				
Kasulu DC	83.0	34.4	107.0	131.0	355.5				

Kigoma DC	94.6	24.0	32.9	112.0	263.5
Kigoma/Ujiji MC	5.0	19.5	71.0	256.5	352.0
Kakonko DC	42.0	124.0	112.0	209.0	487.0
Buhigwe DC	30.0	60.0	282.0	202.0	574.0
Uvinza DC	90.2	22.2	22.7	160.9	216.4
Kasulu TC	30.0	46.0	54.0	164.5	294.5
Total	487.3	379.1	729.7	1689.2	3205.8

Source: Council's socio-economic profiles, 2016

3.2.2 Surface Condition of Road Network by council

The region possesses 23205.8 km of tarmac, gravel and earth roads. Proportionally, tarmac, gravel and earth roads are approximately 1.0 percent, 27.0 percent and 72.0 percent of regional distance respectively (see Table 41). The same Table shows that Kakonko, Uvinza, Buhigwe, Kigoma and Kasulu district councils lack tarmac roads while Kasulu town council and Kibondo district council has insignificant number of kilometers of tarmac roads compared to Kigoma/Ujiji municipality. Similarly, Uvinza has shortest distance of gravel roads while Kibondo is the first with longest distance of gravel roads. Kigoma Ujiji Municipality has most of all the roads i.e. tarmac, gravel and earth. Buhigwe council is the first on the earthl roads (21.0 percent) and Kigoma district council is the last with less distance of earth roads 144.9 km (6.3 percent). The result suggests that purposive efforts need to be employed to develop more turmic and gravel roads in all councils with minimal proportion especially district and feeder roads. In addition, there is a need to upgrade trunk and regional to tarmac condition.

Table 28: Road Network Surface Condition in the Region by Council, 2016

Council		Surface Condition										
Name	Tari	mac	Gra	Gravel		Earth		tal				
	Km	%	Km	%	Km	%	Km					
Kibondo DC	4.2	0.6	213.9	29.8	434.8	32.3	662.9					
Kasulu DC	0.0	0.0	68.5	19.3	287.0	80.7	355.5					
Uvinza DC	0.0	0.0	44.3	20.5	172.1	79.5	216.4					
Kakonko DC	0.0	0.0	166.0	34.1	321.0	65.9	487.0					
Kasulu Tc	1.5	0.5	90.0	30.5	203.0	69.0	294.5					
Buhigwe DC	0.0	0.0	90.0	15.7	484.0	84.3	574.0					
Kigoma DC	0.0	0.0	118.6	45.0	144.9	55	263.5					
Kigoma Ujiji Municipality	24.5	7.0	71	20.0	256.5	73.0	352.0					
Total	30.2	1.0	862.3	27.0	2303.3	72.0	3205.8					

Source: Council's socio-economic profiles, 2016

3.2.3 Regional road network under TANROADS

The roadnetwork in the region maintained by TANROADS has increased from Km 1,205 Kms (including 438 Kms trunk roads and 594Kms regional roads) in 2005 to 1,205.38 Kms (including 657.62 Kms trunk roads and 547.76 Kms regional roads) in 2015. More over turmac roads underTANROADS, Kigoma MC, Kasulu town counci and Kibondo district council has increased from 10Kms in 2005 to 224.36Kms in 2015.

Two roads construction projects to turmic standard are underway with total length of 100Km including 50 Km from Kidahwe - Kasulu and 50 Km from Nyakanazi – Kibondo. Feasibility study for four road projects started in 2015 (Kibondo – Mabamba – Burundi boarder km 35); Uvinza – Ilunde – Malagarasi (km 51); Chagu – Kazilambwa (Kigoma/Tabora) (km 40) and Kasulu (Nyumbigwa) – Kibondo (Kabingo) (km 210). Construction of the four projects will accelerate more investments and more positive impacts to the region economy. The analysis shows that more interventions to increase turmic roads especially for linking Kigoma region and the rest regions are very crucial for easier transportation of goods and services in and out region leading to poverty reduction.

3.3 Railways

Kigoma region is approached by rail from Tabora on the Central railway line which was constructed by the Germans in 1914. Tanzania Railway Corporation (TRC) operated the railway line up to 2007. From 2008 the TRC was privatized to Tanzania Railway Limited (TRL). The railway station which transverse the region serves nine stations namely: Luiche, Kandaga, Kalenge, Kazuramimba, Lugufu, Uvinza, Ilunde, Malagarasi, and Nguruka and Kigoma railway stations. There are two passengers and regular freight services to Tabora, Dodoma and Dar es Salaam transporting goods such as fish, salt, timber, coffee, maize, beans from Kigoma and industrial goods, agricultural inputs etc into the region. The central region also serves the landlocked countries of Democratic Republic of Congo, Burundi and Rwanda through Kigoma port.

3.3.1 Railway Services

Kigoma region has railway services in three Councils. Table 42 indicates that Kigoma, Uvinza and Kigoma Ujiji Municipal councils have railway stations. Kigoma district council possesses one station, Uvinza possess many stations (6) than Kigoma Ujiji Municipality (2) and Uvinza (1) Economically, Uvinza would have more cargo and passenger services than Kigoma district council and Kigoma Ujiji Municipality. This is based on number of stations. However, there is no data for comparison.

Table 29: Railway Services in the Region by Council, 2016

Council Name		Railway Services								
	No. Stations	Cargo Services (Tons)	No. of Passengers							
Kibondo DC	-	-	-							
Kasulu DC	-	-	-							
Kakonko DC	-	-								
Kasulu TC										
Buhigwe DC	-	-	-							
Uvinza DC	6									
Kigoma DC	1	-	-							
Kigoma Ujiji MC	2	-	-							
Total	9	-	-							

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

3.4 Marine Services

Kigoma region has a well established port along Lake Tanganyika. Lake Tanganyika provides an important communication link for Kigoma and neighbouring countries of Zambia, Burundi and Democratic Republic of Congo. The port is strategically well placed to serve as an outlet for cargo to and from these neighbouring countries.

The major sea vessels in use in Kigoma Municipal are M.V. Liemba with capacity of 200 tons and 600 passengers; M.V Mwongozo 80 tones and 800 passengers; Cargo ship MT Sangara with capacity of 350

tones and 420,000 liters of oil. MV Mwongozo and MV Liemba serve other ports in Kigoma Rural Distrct Councils.

The major sea vessels in the use are the M.V. Liemba and M.V. Mwongozo. The vessels sail weekly from Kigoma to Bunjumbura (Burundi), Kalemie (DRC) and south along the lake to Mpulungu (Zambia) calling at the major villages in between both Kigoma and Rukwa regions.

Findings shows that 99,386 tones of cargo serviced by Kigoma port from the year 2010 to 2015 and on average 375 ships sail every year whereby more than 38,749 pasengers are being served served. Strategic initiatives for Extension and improvement/ modernistion of port and upgrading of trunk roads and central railway to standard gauge once implemented, the amount of cargo, passangers and sailing ships in and out Kigoma port will increase

3.5 Air Services

Kigoma region is served by one commercial airport located in Kigoma Ujiji Municipality. The airport has 1.8Km turmic run away. Extension of runway to 3.1 km length and 45 M widith is underway so that it can be capable to handle Boeing airplanes (Code 4C). Currently the airport is capable of handling ATR, Fokker aircrafts and other small planes. There is a regular services several times a week to Tabora and Dar es Salaam by Precision Air and Air Tanzania.

There are also three airstrips maintained by TAA, which are earth surfaced located in Uvinza, Kasulu and Kibondo. Light, non-commercial aircraft uses these airstrips at irregular intervals. The airstrips are generaly maintained in good condition but may become waterlogged after exceptionally heavy rains. Buhigwe has 1 air strip located at Biharu village. This airstrip is mainly used and maintained by missionaries' freight According to socio economic profile of 1998, there was notable increase of passengers handled in 1993 where records show that 3166 passengers used the airport. (1673 disembarked while 1493 embarked). Data of 2007 show that, the number has increased tremendously to 23,673 passengers and to 37,723 in 2015. This increase attributed to many things but important are potentials that exist in Kigoma region ranging from trade, agricultural products and tourism. Therefore, the importance of Kigoma airport is evident since is the main outlet.

3.6 Communication net work

Generally, communication network in the regiont has improved over the past few years. All mobile companies operates in the region, these includes, VODACOM, TTCL, AIRTEL, TIGO and ZANTEL. Through these companies Internet, service made easily and affordable. Other media include TBC, ITV, Star TV, EATV, CNN, BBC and print media from IPP media and other News publishers.

3.7 Energy

There are three main services of energy mainly used by the population in Kigoma region namely electricity, fuel wood and solar energy. Tanzania Electricity Company and some individuals supply electricity. The region uses thermal electricity generated by diesel-powered generators capable of producing about 14.15 MW

According to previous findings, the region produces a huge quantity of charcoal. Inhabitants in Kigoma region use charcoal domestically. Most charcoal gives energy to rural population, as it is easier to afford as compared to other sources.

Electricity is more used in urban centres than in rural areas. According to Table 46 currently utilised electricity is 65.5 percent (9.27 MW) while existing supply capacity is (14.15 MW). The overall findings suggests that purposive efforts are needed to increase number of customers especially small and medium scale industrial activities so that supply capacity 0f 14.15 can be fully utilised. However, there is a plan of developing

hydroelectric from Malagarasi river and other sources currently not exploited this if implemented will increase the power supply in Kigoma region and accelerates more investments.

Table 30: Electricity Supply in the Region by Council, 2015

District Name	Electricity Supply								
	Supply Capacity (MW)	Utilised (MW)	No. of Customers						
Kibondo and Kanko	3.2	1.37	-						
Kasulu and Buhigwe	3.0	1.6	-						
Kigoma and Uvinza	1.7	1.7	-						
Kigoma Ujiji	6.25	4.6	-						
Total	14.15	9.27	7699						

SECTION IV

4.0 SOCIAL SERVICES

4.0.1 Introduction

Social services involve health, education and water. Analysis focusing to health in Kigoma region includes Health provision centre, Health sector staff requirements, Health sector Infrastructure requirements, Major endemic diseas in the region, Martenal and Child service deliverly, Emergency surgery services, Prevelence of HIV/AIDS, Malaria prevention initiatives and service delively and Turberclosis services. Education sector gives discussion on primary and secondary schools, enrolment, performance, infrastructures requirements as well as staff requirements. The profile also discusses issues relating to rural and urban water supplies. The content in this section discloses how social services are rendered in the region.

4.1 Health Sector

4.1.1Health provision centres

Table 31 indicates the distribution of health provisión centres by Council and ownership The Region has 278 heath provisión centres which includes 6 Hospitals, 32 Health centres and 240 Dispensaries. The same table shows that 85 percent (235) of Health provisión centres are owned by Public/Government while 15 percent are for the privately owned Health provisión centres. The table indicate that Kibondo District Council has large number (45) of heath provisión centres followed by Uvinza District Council (44) while Kigoma/Ujiji Municipality has less number (22) Health provisión centres. Hence enough to conclude that if the number of existing health provisión centres is compared with total Regional population of 2012 (2,127,930) and existing administrative units (Districts, Wards and Villages/Hamlets) it is obvious that in all councils there is a need to construct more health provisión centres basing on implimentation of MMAM Policy ensuring that there is District Hospital in every District, Health center in every Ward and a Dispensary in every Village/ Hamlet. The región is proceeding with the implementation of this Policy annualy basing on the availability of funds. Also prívate sector has been invited to invest in health sector infrastructures and service provisión basing on the Public Private Partnership modalities.

Table 31: Distribution of Health provision centres by Council and Ownership in the region, 2015

Table 31. Distribution of fleatin provision centres by Council and Ownership in the region, 2013										
	ŀ	lospital	Health Centres			Dispensaries				
	000	FBO	000	- BO	PRIV	GOV	FBO	PAR	PRIV	Tota
Council Name										
Buhigwe DC	0	1	2	2	0	23	5	0	1	34
Kibondo DC	1	0	3	0	1	38	1	1	0	45
Kasulu DC	0	0	5	1	1	32	0	0	0	39
Uvinza DC	0	0	5	0	0	35	0	2	2	44
Kigoma DC	0	0	2	2	0	32	3	2	2	43
Kasulu TC	1	1	1	0	0	12	4	1	3	23
Kakonko DC	0	0	3	0	0	20	3	1	1	28
Kigoma/Ujiji MC	1	1	2	0	2	6	1	4	5	22
Sub Total	3	3	23	5	4	198	17	11	14	
Grand Total		6		32			240)		278

4.1.2 Health sector staff requirements

Table 32 and Table 33 indicates Health sector staff requirements as per 2014 staff establishment. Table 32 shows that the region is supposed to have 5,007 health care staffs. By 2015 the region had only 1,881 or 38 percent of the total number of staff requirents hence 62 percent deficity. The same table shows that Kibondo, Kasulu, Uvinza, Kakonko and Kigoma District Councils have large percent of deficit than other councils. Tale 33 indicates that the region has 96 percent deficity of Pharmacy technicians, 88 percent deficit of Dentists, 80 percent deficity of Laboratory technician, 86 percent deficity of Medical specialists and 70 percent deficit of Medical Doctors while deficit for other staffs is ranging from 41 percent to 57 percent. Thus government strategic allocation of health sector staffs in Kigoma Region is of very high need. Findings shows that initiatives are being made to reduce such deficity whereby the existing data shows that the number of health sector staff has increased from 1,139 in 2005 to 1,881 in 2015 or 65 percent increase.

Table 32: Health sector staff requirements by council in the region 2015

COUNCIL	DISP	НС	HOS	R/CHMT	Deguirement	Available	Deficity	%
COUNCIL	אפוע	пС	поз	K/CHWH	Requirement	Available	Delicity	70
Buhigwe dc	345	78	0	8	431	167	264	61
Kibondo dc	570	117	200	8	895	331	564	63
kasulu dc	480	195	0	8	683	142	541	79
Uvinza dc	525	195	0	8	728	165	563	77
Kigoma dc	480	78	0	8	566	158	408	72
Kasulu tc	180	39	200	8	427	287	140	33
Kakonko dc	300	117	0	8	425	154	271	64
Kigoma/Ujiji MC	90	78	200	8	376	232	144	38
Maweni RRH	0	0	468	8	476	245	231	49
Total	2970	897	1068	72	5007	1881	3126	62

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Table 33: Health sector professional staff requirements in the Region by 2015

	Professional	Requirement	Available	Deficity	%
1	Specialist Medical Doctor	21	3	18	86
2	Medical Doctor	67	20	47	70
3	Assistant Medical Doctor(AMO)	118	70	48	41
4	Clinical Officer /Assistant Clinical Officer	421	182	239	57
5	Dental Doctor	8	1	7	88
6	Nurse	1,200	713	387	41
7	Laboratory Tchnician/Assistant Lab. Technician	280	56	224	80
8	Pharmacist	10	6	4	40
9	Pharmacy Techinician	270	10	260	96
Total		2,295	1,061	1,234	54

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.1.3 Health sector Infrastructure requirements

Table 34: Health sector infrastructure requirements by Council and Health service provision centre by 2015

Council Name	Heath service provision Centres	Staff Houses requirements	Staff houses available	Centres with pipe wáter schem	Centres with bore holes	Centres with TANESCO electricity	Centres with Solar power
Buhigwe DC	34	83	49	13	11	0	35
Kibondo DC	45	155	102	16	16	0	34
Kasulu TC	39	173	7	7	3	4	11
Uvinza DC	44	127	62	2	33	1	33

Kigoma DC	43	131	52	9	0	0	9
Kasulu DC	23	145	111	18	5	4	52
Kakonko DC	28	96	38	12	6	0	17
Kigoma/Ujiji MC	21	109	10	8	1	0	0
Maweni RRH	1	30	10	1	0	1	0
Total	278	1,049	441	86	75	10	191

4.1.4 Major endemic diseas in the region

The major 10 endemic diseases in the region are malaria, ARI, Intestinal worms, Pneumonia, Diarrhoes, UTI,eye infection, skini infections, anemia and respiratory infections as indicated in table 35

Table 35: Top ten endemic diseases in the region by 2015

No.		
	Type of disease	No. of patients reported
1	Malaria	372,501
2	Respiratory infection	1,203
3	Eye Infections	38,353
4	UTI	52,042
5	Diarrhoes	82,373
6	Skin Infections	34,243
7	Pneumonia	60,731
8	Intestinal worms	89,738
9	ARI	221,572
10	Anemia	18,913
Total		971,669

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.1.5 Martenal and Child service deliverly

The región is providing martenal and child service whereby som imrovements have been realised as shown by indicators in table 36

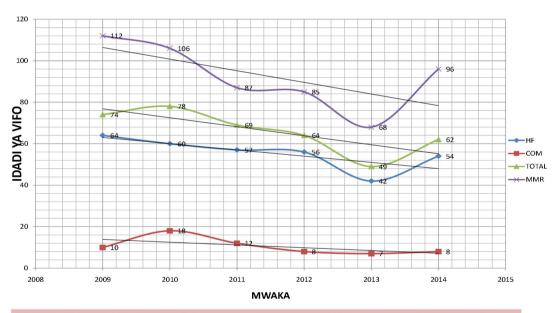
Table 36: ndicators showing improvements in Martenal and child service delivery in the región

INDICATOR	YEAR-2015
Centres providing RCH services	241
Rate of Clinic attendences of atleast 1 (%)	90
Number of preginant mothers attending clinic withini first 12 weeks of	15
pregnancy	
Rate of Family Planning (%)	35
Births under health provisión centres (%)	58
Kiwango cha wanaozalishwa na wakunga wenye ujuzi	54
Birth/Martenal Mortality rate	101/100,000
Under 5 mortality rate	12/1000
Child mortality rate	7/1000
Infant mortality rate	5/1000
Number of health centres providing PMTCT services	239
Number of heath centres provinding emergency surgery services	19
Centre for blood donation services	1
Immunization rate	95
Idadi ya magonjwa yanayotolewa chanjo	12

Figure 1: Martenal Mortality rate by Region as per 2012 census

TRENDS OF MATERNAL DEATH 2009-2014

400 600 Maternal Mortality Ratio



TANZANIA 2012 CENSUS KIGOMA 248/100,000 RANKS 2ND LOWEST IN TANZANIA

4.1.6 Emergency surgery services

Emergency surgery services are provide in 19 health provision centres (13 health centres and 6 Hospitals) equals to 76 percent of the total target of 25 centres at 2018. Rural areas are given first preriority and currently this service is provided at Kakonko, Nyanzige, Mabamba, Kifura, Nyenge, Kiganamo, Shunga, Nyarugusu, Matyazo, Bitale, Ujiji, Nguruka na Buhingu heath centres. Three heath centres (Muyama, Ilagala na Kalya) are about to be completed.

4.1.7 Prevelence of HIV/AIDS

Accoding to Malaria and HIV/AID (*THIMS*, 2007/08) survey results indicated that Kigoma región had 1.8 percent of HIV infection rate while the average national HIV infection rate was 5.7percent. The 2011/12 survey results shown that the rate of IHV infection in Kigoma región increased from 1.8 percent in 2007/08 to 3.4 percent in 2011/2012 while the average nationa HIV infection rate decreased from 5.7 percent in 2007/2008 to 5.1percent 2011/2012. These results call for more regional initiatives to combat HIV/AIDS infection. Centres providing HIV testing and counciling services has increased from 6 centres in 2005 to 239 centres in 2015. Also centres provinding care and medical services to people living with HIV infections (CTCs) has increased from 5 centres in 2005 to 33 centres in 2015. The number of registerd peolpe living with HIV infections attending CTCs has increased to 16,327 out that 11,872 or 72.7 are using ARVs. The spread of HIV/AIDS in the región is mostly contributed by traditional local marketing activities conducted during night ours, income poverty and increased community and regional interactions.

4.1.8 Malaria prevention initiatives and service delively

The finding from health provision centres in the region indicates that Malaria cases have decreased from 35% in 2005 to 23% in 2015. This progress may be due to effective distribution of Mosqueto nets to all households and under five children in the region conducted in 2015 whereby 1,400,000 mosquito nets distributed. Number of deaths due to malaria incidences has also decreased from 359 in 2005 to 198 deaths in 2015. Also number of patients reported with Malaria cases has decreased from 492,178 in 2005 to 372,501 in 2015 equals to 24.3 percentage decrease

Malaria testing services in the region has further improved, the service is provided in all 278 health provision centres in 2015 while in 2005 such service was provided only to 38(Hospitals and Health centres). Curently malaria testing in the region is done by using modern technology mRDT which gives accurate results in a very short time.

4.1.9 Turberculosis services

Turberclosis services are provided in some health service provision centres in the region. The number of patients reported with turberclosis has decreased from kutoka 1,074 patients in 2005 to 952 in 2015, which is equals to 11percent decrease. Centres providing turberclosis services in the region have increased from 24 centres in 2005 to 32 centres in 2015. Rate of patient getting well from turberclosis has reached 89 percent and turberclosis services are provided free of charge to all patients. All patients reported with turberclosis cases are being subjected to HIV/AIDS infection testing services too. Patients observed to have HIV infections after testing are being provided with appropriate services as Turberclosis and HIV/AIDS infections as concerned.

4.2 Education Sector

4.2.1 Distribution of Pre-Schools by Ownership

Distribution of pre-schools in the year 2005 and 2016 by ownership in Kigoma region is as shown in Table 61. The Table shows that by 2005, Kibondo District Council had more pre-schools centres (166) than all other council. In the same year Kasulu district council ranks the second (120) and Kigoma district council the third (30). However, over 97% of total centres were owned by Public in 2005. The table also reveals that by 2016, Uvinza District Council has more pre-schools centres (118) than all other seven council, Kigoma district council ranks the second (108) and Buhigwe district council the third (88). Still over 97% of total centres are owned by the Public. The number of Public pre-schools in the region has increased from 644 in 2005 to 650 in 2016 and the number of Private pre schools has increased from 7 in 2005 to 15 in 2016. The analysis indicates that more increase of Private pre schools are equally important in the region.

Table 37: Distribution of Pre-Schools by Ownership in the Region by Council

YEAR	COUNCIL NAME	CENTRE BY	OWNESHIP	TOTAL	PERCENT
2005		Public	PRIVATE		
	KIBONDO DC	166	3	169	50.4
	Kasulu DC	120	2	122	36.4
	KIGOMA DC	30	0	30	9.0
	KIGOMA UJIJI MC	12	2	14	4.2
	TOTAL	328	7	335	100.0
Year	COUNCIL NAME	CENTRE BY	OWNESHIP	TOTAL	PERCENT
2016		Public	PRIVATE		
	Kigoma/Ujiji MC	45	0 5	49	7.5
	KIGOMA DC	106	03	109	16.8
	Kasulu DC	77	00	77	11.8
	Kasulu TC	59	04	63	9.7
	BUHIGWE DC	88	01	89	13.7
	UVINZA DC	118	01	119	18.3
	Kakonko DC	59	00	59	9.1
	KIBONDO DC	83	01	84	12.9
		I I			

Source: Kigoma Regional Commissioner's office, 20016

4.2.2 Status of Primary Schools in the Region

The number of primary schools increased between 2000 and 2007 and this is reflected in Table 62. According to Table 62, the number of primary schools was 261 in 2000 but increased to 592 in 2005 and further increased to 620 in 2007. The increase of available school was positive since in 2000, available school was 39.7% of the required school, the percentage increased to 88.6 in 2005, while in 2007 the percentage of available school increased to 92.8 percent.

The effort of increasing number of primary schools to reach the target number of school was progressive in all council except in Kigoma Ujiji Municipality council. While other councils have reached over 90 percent, Kasulu (97.8%), Kigoma rural (96.9%), Kibondo (93.5%) but Kigoma Ujiji Municipality had only reached 64.9%. Therefore, more efforts were required in Kigoma Ujiji Municipality to reach the target of required primary schools. Futher analysis in table 39 shows that, the number of Public primary schools has further increased from 620 in 2007 to 635 in 2016 equal to 2.4 percentage increase

Table 18: Distribution of Public Primary Schools the region by Council from 2002 to 2007

Council Name	Year	Year 2000 Year 2005			Year 2007		
	Required	Available	Required	Available	Required	Available	
Kigoma Ujiji Municipality	77	19	77	43	77	50	
Kigoma Rural	218	82	227	215	227	220	
Kasulu	225	90	226	207	226	221	
Kibondo	138	70	138	127	138	129	
Total	658	261	668	592	668	620	

Table 39: Distribution of Primary Schools by Council and ownership in the region by 2016

No.	Council Name	Owne	Ownership			
		Public	Private			
1	Kigoma/Ujiji MC	45	0.5	50		
2	kigoma DC	106	03	109		
3	Kasulu DC	77	00	77		
4	Kasulu TC	59	04	63		
5	Buhigwe DC	88	01	89		
6	Uvinza DC	118	01	119		
7	Kakonko DC	59	00	59		
8	Kibondo DC	83	01	84		
Total		635	15	650		

4.2.3 Total Enrolment in Public Pre Primary Schools by Sex

Pre primary schools enrolment by sex in the region for the year 2016 is as shown in Table 63. By the year 2016 approximately 51% (31,021) of total regional enrolments are girls. Enrollment of girls has been increasing over time in all councils of the region. The findings suggest that equal enrolment by sex is more desirable. The enrolment data indicate that 92 percent of anticipated under 7 children have enrolled in pre primary classes in the region by 2016. More attention need to be undertaken by all councils to reach 100 percent enrolment target.

Table 40: Total Enrolment in Public Pre Primary Schools in the region by Sex and Council, 2016

No.	Council		Anticipat	ed			Enroled	
NO.	Council	Boys	Girls	Total	Boys	Girls	Total	Percent
1	Kasulu DC	4476	4545	9021	3863	4091	7954	88
2	Uvinza DC	5352	5539	10906	5001	5081	10082	92
3	Kakonko DC	3560	3601	7157	1858	1914	3772	53
4	Kasulu TC	4465	4539	9004	4894	5098	9992	111
5	Kibondo DC	5157	5391	10548	4296	4298	8594	81
6	Kigoma MC	1509	1565	3074	2600	2856	5456	177
7	Kigoma DC	3734	4156	7890	3101	3314	6415	81
8	Buhigwe DC	4494	4377	8871	4471	4369	8840	100
	Total	32747	33713	66471	30084	31021	61105	92

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.2.4 Standard One Enrolment in Public Primary Schools by Sex

Standard one enrolment by sex in public schools in the region is as shown in Table 64. The Table indicates boys were enrolled more than girls in 2000, 2005 and 2007. However, girls were enrolled more than boys in Kibondo district council except 2000. Moreover, Kasulu and Kigoma rural district councils enrolled more girls than boy 2005 and 2007, respectively. The findings implied that, equal enrolment by sex is important. Other councils were required to adopt the system used by Kibondo district council on encouraging girl's enrolment. The 2016 standard one enrolment data in table 42 indicate more than 100 percent of the anticipated number of girls and boys were enroled. This is because of the fifith phase government decision of abolishing school fees and contributions for Primary and Ordinary level schools. Also data show that 47929 or 49 percent of total enrolled standard one pupil are girls while boys are 50 percent or 48990. Equal enrolment by sex is important however the findings implies that still is challenging

Table 41: Standard One Enrolment in Public Primary Schools by Sex and Council

Council Name	Year 2000 Year 2005		Year 2007			
	Boys	Girls	Boys	Girls	Boys	Girls
Kibondo	4235	3903	5987	6043	6064	6090
Kasulu	10760	7621	10499	10538	11796	11474
Kigoma Rural	9386	8667	10168	10075	8579	8677
Kigoma Ujiji Municipality	1799	1628	3631	3566	3185	2945
Total	26180	21819	30285	30222	29624	29186

Table 42: Standard One Enrolment in Public Primary Schools by Sex and Council by 2016

No.	Council	Anticipate	enrolment	Ī	Enroled pupils				
		Boys	Girls	Total	Boys	Girls	Total	Percent	
1	Buhigwe DC	5130	4930	10060	5350	5342	10692	106	
2	Kakonko DC	3995	4051	8046	5008	4779	9787	122	
3	Kasulu DC	8399	7861	16260	8489	7904	16393	101	
4	Kasulu TC	3483	3185	6668	5522	5681	11203	168	
5	Kibondo TC	6189	5990	12179	6987	6698	13685	112	
6	Kigoma MC	2886	2882	5768	4648	4456	9104	158	
7	Kigoma DC	4626	4853	9479	4255	4450	8705	92	
8	Uvinza DC	9271	8763	17960	8731	8619	17350	97	
Total		43979	42515	86420	48990	47929	96919	112	

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.2.5 Standard seven examination performance in Public Secondary Schools (PSLE)

The findings show that the percentage of standard seven national examinations performance in Public primary schools has improved from 41 percent in 2013, 42 percent in 2014 to 54 percent in 2015. All standard IV pupils who passed the examination were selected to join fourm one. More interventions need to be taken by regional governnt for further improvement of examination performance in primary schools in the region.

4.2.6 Status of Primary School Facilities

The status of primary school facilities in the region is as shown in Table 43. The Table indicates that in 2007 Kasulu, Kigoma rural and Kibondo councils attained 97.8, 97.4 and 93.4 percent on school construction, respectively. Kigoma Ujiji Municipality was the last on constructing schools where by 2007 it had only attained 64.9 percent on school construction. Classroom construction was very low in all councils. In 2005, Kibondo District council (67.5 percent) led on classrooms construction and Kasulu district council (50.3 percent) ranked the second. However, in 2007, classroom construction decreased and Kasulu was leading (42 percent) and Kibondo district council (37.7 percent) ranked the second. On desks in 2000, Kigoma Ujiji Municipality ranked the first while Kasulu ranked the second. The facilities still experience the highest shortages than others, are toilet holes and teacher's houses. The facility that attained more than others is schools. This could be due to PEDP, financed by World Bank through PMO-RALG and LGAs. The findings suggest that Strategic initiatives are required to meet school facilities with emphasis on Councils with large inadequacy or deficit as shown in the following tables;-

Table 43: Status of Primary School Facilities in the Region by Council

Council Name/Facility	Year 2000		Year 2005		Year 2007		
-	Required	Actual	Required	Actual	Required	Actual	
Schools							
Kibondo	128	70	138	127	138	129	
Kasulu	226	90	226	207	226	221	
Kigoma Rural	227	82	227	215	227	221	
Kigoma Ujiji Municipality	77	19	77	42	77	50	
Total	658	261	668	591	668	621	
Classrooms							
Kibondo	845	473	1531	1033	2698	1017	
Kasulu	1642	784	2596	1306	3386	1423	
Kigoma Rural	1088	448	2914	1076	3062	1145	
Kigoma Ujiji Municipality	382	199	865	345	1085	413	
Total	3957	1904	7906	3760	10231	3998	
Desks							
Kibondo	20863	9172	22956	15270	29708	18406	
Kasulu	21492	18378	62498	29743	62465	29220	
Kigoma Rural	6634	4563	53699	30419	53699	21467	
Kigoma Ujiji Municipality	5111	4565	12881	5529	13279	6717	
Total	54100	36678	152034	80961	159151	75810	
Toilets Holes							
Kibondo	1713	293	2755	756	3337	1115	
Kasulu	2893	579	5609	985	5532	1632	
Kigoma Rural	1526	336	5509	904	4892	1134	
Kigoma Ujiji Municipality	742	322	1549	354	1599	413	
Total	6874	1530	15422	2999	15360	4294	
Teacher's Houses							
Kibondo	993	232	1531	460	1857	406	
Kasulu	1525	432	3374	461	3161	507	
Kigoma Rural	1360	180	2466	283	2699	270	
Kigoma Ujiji Municipality	487	31	656	40	1100	58	
Total	4365	875	8027	1244	8817	1241	
Teacher's Offices							
Kibondo	177	116	381	212	619	206	
Kasulu	270	120	3374	461	1053	351	
Kigoma Rural	249	103	645	184	899	300	
Kigoma Ujiji Municipality	60	28	88	44	367	122	
Total	756	367	4488	901	2938	979	

Table 44: Regional statistics of School infrastructure and furniture for Primary School as at June, 2016

	Category	Required	Available	Deficit	Deficit %	
1	Classrooms		9921	4312	5609	57
2	Teachers Houses		9102	1364	7738	85
3		Boys	515	11	504	98
4	Pit Latrines for Disabled Pupils	Girls	515	11	504	98

5		Boys	10140	3178	6962	69
6	Pit Latrines for Pupils	Girls	11434	3349	8085	71
		Male	316	0	316	100
8	Pit Latrines for Disabled Teachers	Female	315	0	315	100
9		Male	768	283	485	63
10	Pit Latrines for Teachers	Female	646	242	404	63
11	Heads Offices		1718	509	1209	70
12	Teachers Offices		807	347	460	57
13	Counseling Room		635	2	633	100
14	Library		713	2	711	100
15	Kitchen		716	5	711	99
16	Dinning		716	3	713	100
17	Stores		1048	119	929	89
18	Water Tanks		17942	12647	5295	30
19	Desks		134569	91135	43434	32
20	Cabinet		5472	1553	3919	72
21	Shelves		3704	467	3237	87

Kasulu Town Council

Table 45: Primary School infrastructures requirements in Kasulu Town Council 2016

No.	Category		Required	Available	Deficit	Deficit %
1	Classrooms		1131	388	743	66%
2	Teachers Houses		1131	107	1024	91%
3		Boys	-	-	-	100%
4	Pit Latrines for Disabled Pupils	Girls	-	-	-	100%
5		Boys	3386	545	2474	73%
6	Pit Latrines for Pupils	Girls	1297	237	1060	82%
7		Male	997	237	760	76%
8	Pit Latrines for Disabled Teachers	Female	-	-	ı	100%
9	Pit Latrines for Teachers	M/F	163	57	106	65%
11	Heads Offices		59	30	44	75%
12	Teachers Offices		1,131	107	1024	91%
13	Counseling Room		59	0	59	00
14	Library		59	0	59	00
15	Kitchen		59	1	58	98%
16	Dinning		59	1	58	98%
17	Stores		59	1	58	98%
18	Water Tanks		143	5	138	97%
19	Desks		16,965	12457	4508	27%
20	cabinet		643	132	511	79%
21	Shelves		59	0	59	100%

Kigoma District Council

Table 46: Primary School infrastructures requirements in Kigoma District Council 2016

No.	Туре	Required	Available	Deficit
1	Classrooms	1412	670	742
2	Teachers houses	1412	196	1216
3	Latrines	2435	872	1563
4	Desks	15707	13201	2506
5	Tables	1178	722	456
6	Chairs	2671	1264	1407
7	Cup boards	1357	270	1087
8	Matrons' office	106	0	106
9	Counseling office	106	0	106
10	Stores	106	0	106
11	Patrons' offices	106	0	106
12	Teachers' offices	106	77	29
13	Head teachers' offices	106	66	40
14	Shelves	106	0	106
15	Water tanks	106	38	68
16	Kitchen	106	0	106
17	Dining Halls	106	0	106

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kibondo District Council

Table 47: Primary School infrastructures requirements in Kibondo District Council 2016

	Category		Required	Available	Deficit	Deficit %
1	Classrooms		1433	560	873	61
2	Teachers Houses		1433	272	1161	81
3		Boys	83	9	74	89
4	Pit Latrines for Disabled Pupils	Girls	83	9	74	89
5		Boys	1155	1075	80	7
6	Pit Latrines for Pupils	Girls	1422	1055	367	26
7	Pit Latrines for Disabled	Male	1	0	1	100
8	Teachers	Female	1	0	1	100
9		Male	83	42	41	50
10	Pit Latrines for Teachers	Female	83	41	42	50
11	Heads Offices	•	83	70	13	16
12	Teachers Offices		83	63	20	24
13	Counseling Room		83	0	83	100
14	Library		83	0	83	100
15	Kitchen		83	1	82	99
16	Dinning		83	1	82	99
17	Stores		83	22	61	73
18	Water Tanks		168	58	110	65
19	Desks		19,050	13,226	5,824	31
20	Cabinet		83	0	83	100
21	Shelves	0.65	690	53	637	92

Kasulu District Council

Table 48: Primary School infrastructures requirements in Kasulu District Council 2016

Category		Required	Available	Deficiency
Classrooms		1403	503	900
Teachers Houses		731	92	639
Pit Latrines for Disabled	Boys			
Pupils	Girls			
	Boys	1268	347	921
Pit Latrines for Students	Girls	1564	380	1184
	Boys	83	67	16
Pit Latrines for Teachers	Girls	65	24	41
Heads Offices		77	37	40
Teachers Offices		161	32	129
Counseling Room		77	-	77
Library		77	-	77
Kitchen		77	-	77
Dinning		77	-	77
Stores		308	-	308
Water Tanks		154	5	216
Tables				
Chairs				
Cupboards		1039	327	712
Shelves		533	60	473
Desks		21049	13970	7079

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Buhigwe District Council

Table 49: Primary School infrastructures requirements in Buhigwe District Council 2016

No	Category		Required	Available	Deficiency
1	Classrooms		1211	558	653
2	Teachers Houses		1104	183	921
3		Boys	88	0	88
4	Pit Latrines for Disabled	Girls	88	0	88
5		Boys	1282	288	994
6	Pit Latrines for Students	Girls	1595	319	1276
7	Pit Latrines for Disabled	Male	88	0	88
8	Teachers	Female	88	0	88
9		Male	88	44	44
10	Pit Latrines for Teachers	Female	88	34	54
11	Heads Offices		88	57	31
12	Teachers Offices		88	56	32
13	Counseling Room		88	2	86
14	Library		88	0	88
15	Kitchen		88	2	86
16	Dinning		88	1	87

17	Stores	352	28	324
18	Water Tanks	88	17	71
19	Tables	2240	765	1475
20	Chairs	2538	965	1573
21	Cupboards	1580	375	1205
22	Shelves	652	50	602
23	Desks	28478	10943	17535

Furniture

Category	Required	Available	Deficit
Tables	2221	804	1432
Chairs	2503	948	1555
Cupboards	1587	381	1206
Shelfs	652	50	602
Desks	20575	16201	4374

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kakonko District Council

Table 50: Primary School infrastructures requirements in Kakonko District Council 2016

	Category	<u>, </u>	Required	Available	Deficit	Deficit %
1	Classrooms		790	480	310	39
2	Teachers Houses		790	226	564	71
3	Pit Latrines for Disabled	Boys	2		2	100
4	Pupils	Girls	2		2	100
5		Boys	690	228	462	67
6	Pit Latrines fo rPupils	Girls	877	307	570	65
7	Pit Latrines for Disabled	Male	3		3	100
8	Teachers	Female	2		2	100
9		Male	59		59	100
10	Pit Latrines for Teachers	Female	59	40	19	33
11	Heads Offices		59	51	8	14
12	Teachers Offices		59	55	4	8
13	Counseling Room		59		59	100
14	Library		137		137	100
15	Kitchen		140		140	100
16	Dinning		140		140	100
17	Stores		118	17	101	86
18	Water Tanks		124	35	89	72
19	Desks		11840	10152	1688	14
20	Cabinet		444	89	355	80
21	Shelves		594	84	490	86

Uvinza District Council

Table 51: Primary School infrastructures requirements in Uvinza District Council 2016

	Category		Required	Available	Deficit	Deficit %
1	Classrooms		1546	730	816	53
2	Teachers Houses		1546	217	1329	86
3		Boys	236	-	236	100
4	Pit Latrines for Disabled Pupils	Girls	236	-	236	100
5		Boys	1,687	387	1300	77
6	Pit Latrines fo rPupils	Girls	2,034	400	1634	80
7		Male	118	-	118	100
8	Pit Latrines for Disabled Teachers	Female	118	-	118	100
9		Male	118	32	86	73
10	Pit Latrines for Teachers	Female	118	33	85	72
11	Heads Offices		118	84	34	29
12	Teachers Offices		118	60	58	49
13	Counseling Room		118	-	118	100
14	Library		118	-	118	100
15	Kitchen		118	-	118	100
16	Dinning		118	-	118	100
17	Stores		118	-	118	100
18	Water Tanks		236	33	203	86
19	Desks		27,615	12,807	14888	54
20	Cabinet		118	250	0	0
21	Shelves		118	56	62	53

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kigoma/Ujiji Municipal Council

Table 52: Primary School infrastructures requirement in Kigoma/Ujiji Municipal Council 2016

	Category		Required	Available	Deficit
1	Classrooms		995	423	572
2	Teachers Houses		955	71	884
3		Boys			
4	Pit Latrines for Disabled Pupils	Girls			
5		Boys	1934	175	1759
6	Pit Latrines for Pupils	Girls	1222	209	1013
7		Male			
8	Pit Latrines for Disabled Teachers	Female			
9		Male		63	
10	Pit Latrines for Teachers	Female		14	
11	Heads Offices		45		
12	Teachers Offices		45		
13	Counseling Room		45		
14	Library		45		
15	Kitchen		45		
16	Dinning		45		
17	Stores		45	14	

18	Water Tanks	45		
19	Desks	14925	10318	4609
20	Cabinet	90		
21	Shelves	995		

4.2.7 Status on the requirements of Primary School Teachers

The status of primary school teachers' requirements by council, gender and grade in the region for the year 2016 is as shown in Table 53

Kasulu Town Council

Table 53: Teachers requirement by grade and gender in Kasulu Town Council, 2016

Damiliand		Available						
Required	Grade	Male	Female	Total				
	IIIA	467	523	990				
	DIP	11	4	15				
	Degree	7	4	11				
1144	Total	485	531	1016	128			

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kigoma District Council

Table 54: Teachers requirement by grade and gender in Kigoma District Council, 2016

Required	Grade	Male	Female	Total	Deficit
	III A	669	547	1216	
	Diploma	44	7	51	
	Degree	28	1	29	
	Masters	2		2	
1536	Total	743	555	1298	238

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kasulu District Council

Table 55: Teachers requirement by grade and gender in Kasulu District Council, 2016

		Available							
Required	Grade	Male	Female	Total					
	III B/C								
	III A	338	165	503					
	Diploma	13	2	15					
	Degree	8	-	8					
1584		359	167	526	264				

Kibondo District Council

Table 56: Teachers requirement by grade and gender in Kibondo District Coucil, 2016

Grade	Required	<i> </i>	vailable		Deficit	Deficit	
		Male	Female	Total		(%)	
	IIIA	564	313	877	-	-	
	Diploma	22	12	34	-	-	
	Degree	14	2	16	-	-	
1433	Total	600	327	927	506	35	

Buhigwe District Council

Table 57: Teachers requirement by grade and gender in Buhigwe District Council, 2016

Grade	Required	Male	Female	Total	Deficit	Deficit (%)
	IIIB/C	13	1	14		-
	IIIA	511	198	709		-
	Diploma	40	9	49		-
	Degree	18	2	20		-
	Uzamili	0	0	0		-
1287	Total	582	201	783	504	39

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Uvinza District Council

Table 58: Teachers requirement by grade and gender in Uvinza District Council, 2016

Grade	Required	Male	Female	Total	Deficit	Deficit (%)
	IIIB/C	19	6	25	-	-
	IIIA	664	260	924	-	-
	Diploma	38	3	41	-	-
	Degree	24	-	24	-	-
1515	Total	745	269	1014	501	49

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kakonko District Council

Table 59: Teachers requirement by grade and gender in Kakonko District Council, 2016

Grade	Required	Male	Female	Total	Deficit	Deficit (%)
	IIIB/C					-
	IIIA	338	165	503		
	Diploma	13	2	15		-
	Degree	8		8		-
790	Total	359	167	526	264	50

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Table 60: Statistics on literacy rate (3rs understanding) and iliteracy rate by council and gender for the year 2016

	ioi the year 2010											
NO	COUNCIL	ADULT PEOPLE			ADULT PE	ADULT PEOPLE CAPABLE TO 3Rs			ADULT PE	OPLE CAPAE	SLE TO 3Rs	%
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL		MALE	FEMALE	TOTAL	
1	KIGOMA DC	56,586	65,798	122,384	44,464	48,209	92,673	76	12,068	17,643	29,711	24
2	KASULU DC	49,012	57,157	106,169	37,557	40,130	77,687	73	11,423	17,057	28,480	27
3	BUHIGWE DC	55,631	62,776	118,407	49,903	62,776	112,679	95	3,564	2,164	5,728	5

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4	UVINZA DC	178,355	173,635	351,990	110,068	102,268	212,336	60	54,491	85,163	139,654	40
5	KAKONKO DC	21,032	22,955	43,987	15,434	15,020	30,454	69	5,598	7,935	13,533	31
6	KIGOMA MC	77,583	89,797	167,380	67,607	75,984	143,591	86	8,909	14,880	23,789	14
7	KIBONDO DC	29,727	31,314	61,041	20,731	20,213	40,944	67	8,996	11,101	20,097	33
8	KASULU TC	114,032	140,421	254,453	103,942	80,296	184,238	72	10,093	60,122	70,215	28
	JUMLA	581,958	643,853	1,225,811	449,706	444,896	894,602	73	115,142	216,065	331,207	27

Source: Regional Commisioner's office Kigoma, 2016

For further improvement of quality of primary education, and reaching zero illiteracy rate, the Region is implementing the Primary Education Development Plan (PEDP), which is a five years plan that articulates vision of universal primary as well as Secondary education within the wider Tanzania policy framework of education and training policy and the education sector development programme, the Local Government Reform Programme and the overreaching poverty reduction strategy paper vision 2025. The major PEDP strategic priorities are:

Enrolment expansion
Quality improvement
Capacity building
Institutional arrangement
Cross cutting

4.2.8 Enrolment and Access:

The highest priority for primary education is to increase enrolment for both girls and boys. Enrolment expansion in the region has been attributed to an increase of enrolment rate of all groups of children, use of existing teachers and classrooms more effectively and awareness of community on Education especially in educating their children.

4.2.9 Teachers Recruitment and Deployment

Kigoma Region has experienced a shortage of Grade IIIA Teachers for a quite a long time due to unfavorable working condition (social insecurity, high cost of living and remoteness). However, deliberate attempts have been made to address the problem of shortage of teachers in the schools by recruiting more teachers and re – deploying others in order to bring balance among schools. During this financial year the government has allocated 473 new teachers but only 432 teachers reported

4.3 Construction

Construction of school infrastructures including classrooms, teachers houses, latrines and offices are being carried out using PEDP funds in collaboration with the community.

4.4 Education for out of school children

Efforts have been made by Region to establish Complementary Basic Education (COBET) for out of school children and youth by identifying teachers and students.

4.5 Quality Improvement

The second objective of the Primary Education Policy is to revitalize and improve the quality of primary education focusing:Improving teaching styles and methods in the classrooms. The aim is to improve the overall achievement for both male and female pupils in the primary education systemTo emphasize application of child centered method (participatory method)

4.6 Human Resources

The teacher in the classroom is the main instrument for bringing about, Qualitative improvement in Learning. Such Quality is maximized where there is an enabling and supportive environment, where learners participate effectively in the learning process and where pupils, teachers and schools have opportunities for personal and institutional growth. Efforts have been made to improve teachers' effectiveness by providing in service training through Teachers training colleges (By using Modules), intervention of EQUIP – T as partnership with government on provision of quality education and Teachers Resources Centers. Other measures taken include improving working environment and providing teachers with necessary support in order to raise work morale. The Region also ensures that capacity building to all key actors and core groups in the implementation of PEDP from district to grassroots levels is raised to enable them perform their duties and responsibilities effectively.

4.7 Availability of Teaching and Learning Materials

The Quality of education processes is enhanced by availability of relevant teaching and learning materials. Textbooks are one critical factor in successful learning. However textbooks are still inadequate despite efforts made by the government and Region to address the problem. The availability of textbooks and other teaching and learning materials is now improving. Currently the pupils' book ratio is 1:4.

4.8 Capacity Building

Capacity building is another priority of the PEDP. Efforts are being made to raise the capacity of all key actors in the implementation PEDP by providing education to education stake holders. Region is working in collaboration with Councils to ensure the number of teachers who are upgrading themselves on different level of education is expanding so as to cater the need of the students and technological advancement

4.9 Distribution of Secondary Schools by Ownership

Distribution of secondary schools by ownership in the region for the year 2000, 2005, 2007 and 2016 is depicted in Table 61 and Table 62. Table 60 indicates that public secondary schools were more than private secondary schools between 2000 and 2007. As in 2000, 2005 and 2007 public secondary schools were 63.6% (14), 62% (31) and 75.8% (69) of total regional secondary schools respectively. However, the proportion of private secondary schools was increasing from 8 schools in 2000 to 22 schools in 2007. The same Table reveals that Kasulu district council owns more private secondary schools than other districts. It was noted that in Kibondo and Kigoma rural district councils there had no new private secondary school from 2005. The findings suggested that concrete strategies needed to increase the number of secondary schools.

Table 62 indicates that public secondary schools has increased more than private secondary schools between 2007 and 2016. As in 2007 public secondary schools were 69 or 75.8 percent of total regional secondary schools while in 2015 public secondary schools are 127 or 72.9 percent of total regional secondary schools. Also the proportion of private secondary schools has increased from 22 schools in 2007 to 47 schools in 2015. The same Table reveals that Kasulu Town council owns more private secondary schools (15) or 31.9 percent than other districts. The Table indicates that in Kasulu, Buhigwe, Uvinza and Kakonko district councils have less number of private secondary schools.

Table 61: Distribution of Secondary Schools by Ownership in the Region by Council

1	Council Name	Year 2000	<u> </u>	Year 2005	5	Year 2007		
		Public	Private	Public	Private	Public	Private	
	Kibondo	3	1	5	3	24	3	
	Kasulu	5	2	9	6	18	8	

Kigoma Rural	4	2	13	4	17	4
Kigoma Ujiji Municipality	2	3	4	6	10	7
Total	14	8	31	19	69	22

Table 62: Distribution of Secondary Schools by Ownership in the Region by Council, 2016

No.	Council	Public	Private	Total
1	Kigoma MC	19	09	28
2	Kigoma DC	19	06	25
3	kasulu	16	02	18
4	Kasulu TC	11	15	26
5	Buhigwe DC	18	03	21
6	Uvinza DC	16	02	18
7	Kakonko DC	11	02	13
8	Kibondo DC	17	08	17
Total		127	47	174

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.9.1 Form One Enrolment in Public Secondary Schools by Sex

Enrolment of form one students by sex in public secondary schools in the region by council is illustrated on Table 63 and Table 64 and it discloses various findings. Table 63 indicates that the number of form one enrolment increased over given time where more boys were enroled than girls in 2005 and 2007. As in 2000, 2005 and 2007 enrolled boys were 50% (780), 50.4% (2441) and 70.9% (9,273) of the total regional numbers respectively.

Secondly, all councils enrolled equal number of boys and girls in 2000. Kigoma rural district council also attempted reasonably to enrol equal number of boys and girls in the same period. However, in 2005 and 2007 all councils enrolled large number of boys than girls.

Table 64 indicates that out of 14872 total anticipated enrolments in 2016, 85 percent or 12609 stundents were enrolled to form one. The same table indicates that more boys enrolled (7576) or 60 percent than girls and all councils enrolled more boys than girls. The findings suggest that equal enrolment of boys and girls in form one is very important on effort of reducing poverty in the community.

Table 63: Form One Enrolment in Public Secondary Schools in the Region by Sex and Council

Council Name	Year 200	000 Year 2005		Year 2007		
	Boys	Girls	Boys	Girls	Boys	Girls
Kigoma Ujiji Municipality	120	120	284	283	1729	690
Kigoma Rural	180	180	823	810	2518	1090
Kasulu	300	300	828	815	3370	1378
Kibondo	180	180	506	499	1656	643
Total	780	780	2441	2407	9273	3801

Table 64:Form One Enrolment in Public Secondary Schools in the Region by Sex and Council, 2016

	Council		Anticipated			Enroled		Percent
N0.		Boys	Girls	Total	Boys	Girls	Total	%
1	Buhigwe DC	1042	726	1768	937	632	1569	89
2	Kakonko DC	574	462	1036	454	369	823	79
3	Kasulu DC	978	584	1562	868	505	1373	88
4	Kasulu TC	837	625	1469	754	542	1296	88

5	Kibondo DC	1122	875	1997	970	713	1683	84
6	Kigoma MC	1520	1124	2644	1234	880	2114	80
7	Kigoma DC	1253	837	2090	1103	716	1819	87
8	Uvinza DC	1466	840	2306	1256	676	1932	84
	Total	8792	6073	14872	7576	5033	12609	85

4.9.2 Performances of Form Four Examinations in Public Secondary Schools

Performance of form four examinations in public secondary schools in the region by councils is disclosed in Table 65. Findings showing that the trend of passes was low in the region and started to rise in 2012. For instance, in 2000, 2005 and 2007, the proportion of passes, to total number of examinees was 34.3%, 35.6% and 30% respectively. Kigoma Ujiji Municipality leads with large proportion of passes. Such findings suggested that more efforts must be made to increase number of passes in all councils. From 2012 the region undertaken various initiatives to improve performance of form four examinations hence the level of form four examinations performance has been increasing from 30%, 43%, 63% and 74% in 2007, 2012, 2013 and 2014 respectively. In 2015 there is minimal percentage drop in performance as compared to the 2014 performance. However such drop does not mean poor performance because the regional overall performance in form four examinations from 2013 to 2015 has been motivating as it is implied by the Nation performance rank where by Kigoma Region ranked number 5 and 3 in 2014 and 2015 in Form Four National examinations performance and Kakonko District council become the overall best performer council of the year 2015 and ranked number one in National Form fourm examinations

Table 65: Performances of Form Four Examinations in Public Secondary Schools (CSEE 2012 – 2015)

EXAMINATION YEAR	PERCENTAGE PERFORMANCE
2007	30%
2012	43%
2013	63%
2014	74%
2015	71%

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.9.3 Performance of Form Six Examination in Public Secondary Schools

Table 66 indicates that performance of form six examinations in Public Secondary schools in the region increased more in 2012 (98%) when compared to 85.5%, 88.5% and 89.0% in 2013, 2014 and 2015 consecutively, but less when compared to 99.6% in 2016. Generally it is concluded that the overall regional perform in form six examinations has been increasing and advocates good regional performance which need to be maintained.

Tabe 66: Performance of Form Six Examination in Public Secondary Schools in the Region (ACSEE)

EXAMINATION YEAR	PERFORMANCE
2012	98.1%
2013	85.6%
2014	88.5%
2015	89.0%
2016	99.6%

4.9.4 Status of Public Secondary Schools Facilities

The status of public secondary school facilities in the region by council is summarized fromTable 67. Findings indicate that all councils in the Region has deficit of classrooms where by it ranges from 6 classrooms to 104 classrooms. Uvinza District council has the highest deficit (104) while Kigoma/Ujiji Municipal council has the lowest recorded (6) classrooms deficit. Kibondo district council has higher percent of shortage/deficit of tables (36%) or 3018 followed by Uvinza (2447) and Kakonko (317) District councils. The findings also show that here is no deficit of Tables and chairs in Secondary schools of Kigoma Municipal council. The council which has serious deficity of toilet holes is Uvinza District council with 78.8 percent or 2,932 shortage of toilet holes followed by Kasulu District councils which has 73.6 percent or 2,084 shortage of toilet holes. In general, all Councils are facing serious shortage/deficit of more than 65 percentage toilet holes. The situation calls for more efforts in order to rectify the problem. The worst council with the highest deficit for number of houses for teachers is Kigoma/Ujiji Municipal Council with 479 (92.6%) deficity followed by Kakonko District council with a deficit of only 70.7 percent. Generally all councils has deficit of teachers' houses of more than 70 percent hence this shows that there is a need of more effort to rectify the situation. More school infrastructures requirements by council are shown in the following statistical tables:-

4.9.5 Secondary school infrastructures requirements by council in the region for the year 2016

Uvinza District Council

Table 67: Secondary School infrastructures requirement in Uvinza District Council, 2016

NO	TYPE	REQUIRED	AVAILABLE	DEFICIT
1	Classrooms	246	142	104
2	Teachers Houses	200	56	144
3	Libraries			
4	Pit Latrines	302	160	142
5	Stores			
6	Tables	7131	4684	2447
7	Chairs	7131	4684	2447
8	Cupboards	20	10	10
9	Admin Blocks			
10	Dining Halls			
11	Laboratories	51	00	51
12	Hostels	20	07	13

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kigoma District Council

Table 68: Secondary schools infrastructures requirement in Kigoma District Council, 2016

No.	Type	Require	Available	Deficit
1	Classrooms	259	181	78
2	Teachers houses	251	57	194
3	Latrines	309	204	108
4	Tables	5371	6962	0
5	Chairs	5371	6607	0
6	Cup boards	64	30	34

Kibondo District Council

Table 69: Secondary schools infrastructures requirement in Kibondo District, 2016

No.	Туре		Required	Available	Shortage/Deficity
1	Classrooms	Classrooms		149	49
2	Teacher's Hous	ses	426	125	301
3	Libraries		17	4	13
4	Pit Latrines	Male	34	15	19
	Teachers	Female	34	14	20
	Pit Latrines	Male	160	98	62
	Students	Female	115	115	0
5	Stores		34	14	20
6	Tables - Teach	ers	426	180	246
	Tables - Stude	nts	7880	5188	2,772
7	Chairs Teache	rs	426	206	220
	Chairs - Studer	nts	7880	5130	2750
8	Cupboards		170	52	118
9	Admin Block		17	10	7
10	Dining Hall		17	1	16
11	Laboratories		51	12	39
12	Hostels	Male	14	3	11
		Female	14	9	5
13	Dormitories	Male	4	2	2
		Female	12	10	2

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

Kakonko District Council

Table 70: Secondary schools infrastructures requirement in Kakonko District, 2016

No.	Type	Required	Available	Shortage/Deficity
1	Classrooms	133	107	26
2	Teacher's Houses	196	48	148
3	Libraries	11	1	10
4	Pit Latrines	237	143	94
5	Stores	22	4	18
6	Tables	2987	2670	317
7	Chairs	2987	2632	355
8	Cupboards	90	36	54
9	Admin Block	11	8	3
10	Dining Hall	11	0	11
11	Laboratories	33	3	30
12	Hostels	22	14	8

Kigoma/Ujiji Municipal Council

Table 71: Secondary schools infrastructures requirement in Kigoma/Ujiji Municipality, 2016

No.	Туре	Require	Available	Deficit
1	Classrooms	221	246	6
2	Teachers houses	517	38	479
3	Latrines	385	240	158
4	Tables	8681	11682	-
5	Chairs	8681	11682	-
6	Cup boards	119	110	9
7	Shelves	38	21	17
8	Water Tanks	-	-	-

9	Laboratories	76	8	68
10	Library	-	-	-
11	Admin Blocks	19	3	16
12	Stores	-	-	-

Table 72: Statistics on toilet holes requirements by council in the region by 2016

Council Name	Required toilet holes	Available toilet holes	Deficity
Kigoma DC	2,550	883	1,667
Kigoma/Ujiji MC	1,869	377	1,492
Kasulu DC	2,832	748	2,084
Kasulu TC	2,059	474	1,585
Buhigwe DC	2,250	607	1,643
Uvinza DC	3,719	787	2,932
Kibondo DC	•	•	•
Kakonko DC	1,609	487	1,122
Total	16,888	4,363	12,525

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.9.6 Laboratories construction undertakings in the Region

The region has **39** constructed Science laboratories, the total required laboratories are **378**, the deficit is **339** laboratories. The lest 339 Laboratories are under various stages of construction to fill the gap as indicated in table 73 below:-

Table 73: Laboratories construction undertakings by council and requirements

Councill	Schools	Required Lab	Constructed Lab	%	Lab Under construction	%	Lab with equipments	%	Lab with no equipments	%
Buhigwe DC	18	54	4	7	50	93	3	6	51	94
Kakonko DC	11	33	7	21	26	79	1	3	32	97
Uvinza DC	16	48	0	0	48	10 0	0	0	48	100
Kasulu DC	16	45	3	5	42	95	2	4	43	96
Kasulu TC	11	33	1		32		1		32	
Kigoma DC	19	57	6	11	51	90	4	7	53	93
Kibondo DC	17	51	12	24	39	77	12	24	39	77
Kigoma MC	19	57	6	11	51	90	6	11	51	90
TOTAL	127	378	39	10	339	90	29	8	349	92

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

4.9.7 Tertialy education institutions in the Region

The Region has 4 TTCs (Teacher's Training Colleges) of which 2 are public,1 for private and 01 for Religious institution. Also there are 3 Folk Development Colleges (FDC), 1 Vocation Education Training Centre (VTC-VETA) and currently there is undergoing construction of Nyamidaho Training College (NUTC) in Kasulu which is being built by Joint collaboration between Kasulu district council and World Vision Tanzania. There three branches of Higher Learning Institutions/Uviversities 1 for are for St. John's University, 1 for Tanzania Institute of Accountancy (TIA) and 1 for Open University of Tanzania (OUT). More investments in tertially education institutions in the Region are highly encouraged and welcomed.

5. 0 WATER AND SANITATION

5.1 Number of Rural Water Schemes

Number of rural schemes in the region by council in 2016 is sumarized in table 74. According to the table there 497 springs schemes in the region and out of that, 400 (80.5%) are working. Most of working springs are in Kibondo, Kigoma, Uvinza and Kasulu district councils. The analysis shown that the region has 548 shallow well schemes by 2016, proportionally, 75.7% (415) of total regional shallow wells are working most in Kibondo and Kasulu, Buhigwe, Kigoma and Uvinza District Councils. Table 5.39 shows that Kigoma region has 276 boreholes out of that, 220 (79.7%) are working. The region also has 209 rainwater harvesting schemes, out of that 202 (96.7%) are working. Other schemes in the region are gravity schemes which are 357 and out of that, 329 (92.2%) are working.

Table 74: Number of Rural Water Schemes in the Region by Council, 2016

Council Name	Council Name Spring		Shallow Well		Rainwater Harvest		Bore holes		Gravity	
	W	NW	W	NW	W	NW	W	NW	W	NW
Kibondo	162	8	118	3	54	0	97	10	206	20
Kakonko	89	70	50	85	35	0	40	27	37	0
Kasulu	77	5	83	17	32	0	49	8	32	0
Buhigwe	49	13	56	13	27	0	20	7	20	3
Kigoma DC	20	0	04	0	14	7	4	4	25	1
Uvinza DC	03	1	104	15	40	0	10	0	9	4
Total	400	97	415	133	202	7	220	56	329	28

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

5.2 Rural Water Supplies Coverage

The coverage of rural water supplies in the region is 61%. The least coverage is in Uvinza district council. Kigoma, Buhigwe, Kasulu and Kibondo district councils are better on coverage as compared to Kakonko and Uvinza distric councils. The findings suggest that effective strategic plan is required to increase proportion of rural water supplies in the region. This should involve all councils but attention be made to Uvinza and Kakonko district councils. It crealy known that National Water Policy of 2000 and National Development Vision 2025 advocate large coverage of clean, safe and hygienic drinking water to all Tanzanians. Besides that, poverty reduction strategy advocates substantial water coverage to rural population. These will be achieved when all stakeholders participate fully in the implementation.

Table 75: Rural Water Supplies Coverage in the Region by Council, 2015

Council Name	Estimated Total	Estimated Population	Estimated % of
	Population in rural	Coverage	Coverage
Kibondo DC	260,272	179,588	69
Kigoma MC	59,856	31,960	53
Kasulu DC	560,543	347,537	62
Kakonko DC	167,622	83,811	50
Buhigwe DC	261,209	175,010	67
Uvinza DC	393,998	141,840	36
Kigoma DC	261,151	161,914	62
Total	1,964,651	1,121,660	61

5.3 Number of Village/Mtaa Water Committees and Village/Mtaa Water Funds

The number of Village/Mtaa Water Committees (V/MWCs) and Village Water Funds (V/MWFs) in Kigoma region by 2015 are summarized in Table 76. The table indicates that the region owns 222 V/MWCs. Kasulu district council established more VWCs (54) than other councils. This is equivalent to 24.3% of total regional VWCs. Kigoma Municipal council established the lowest number of committees (06) in the region. Kibondo ranks second and it has 45 VWCs which is equivalent to 20.3% of total regional proportion. The same Table shows that the region established 222 V/MWFs by 2015. Kasulu district council established 24.3% (54), which is the largest while Kibondo with 20.3% (45), is the second. By December 2015, the region had about Tshs. 143,565,112 as total village and Mitaa water funds. Kasulu district council ranks first on having a large amount of fund. Buhigwe ranks second while Kigoma Municipal council is the last having the smallest amount of funds.

Table 76: Number of Village and Mitaa Water Committees and Village/Mtaa Water Funds in the Region by Council as on Dec.2015

Council Name	Villages/Mitaa with water A/C	Village/Mtaa water Funds	Amount of funds in village/Mtaa wáter A/C	Estimated total population	Estimated population coverage	Estimated % of coverage
Kigoma MC	6	6	7,500,000	59,856	31,724	53
Kasulu TC	16	16	125,216	224,880	125,933	56
Kibondo DC	45	45	13,870,700	260,272	179,588	69
Kasulu DC	54	54	58,416,000	560,543	347,537	62
Kakonko DC	32	32	11,235,095	167,622	83,811	50
Buhigwe DC	31	31	24,018,031	261,209	164,562	63
Uvinza DC	15	15	13,750,070	393,998	141,840	36
Kigoma DC	23	23	14,650,000	261,151	161,914	62
Total	222	222	143,565,112	2,189,531	1,236,909	61

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

5.4 Urban Water Supply Sources

Urban water supply in the region by council is shown in Table 5.42 and it depicts various sources of water supply in urban areas. According to the Table, the region has 30 boreholes. A large number (7) of boreholes (23.3%) are in Kibondo district council followed by Kasulu Town Council which possesses 20.0% (6) of total regional urban boreholes.

The Table further shows that 14 shallow wells operate in the region 50 percent are in Kigoma Ujiji Municipality. Similarly, the Table indicates that the region possesses 56 springs. According to the Table, over 80 percent of total springs are in Kasulu Town council. It is also shown that Kigoma Ujiji Municipality relies on Lake Tanganyika as source of water supply. In the same table, three streams/rivers are currently being used as sources of water in urban areas, although there are others currently not used that can be used in future. For insitance the data in Kasulu Town council shows that are 208 source of water not yet utilized this comprises 57 shallow wells, 74 spring water and 56 streams. All Water Projects in Kasulu TC have 633 water points out of them 346 water points are functional and 287 water points are not functional. For the sustainability for Water supply Projects, the Council through the department of water need to stablishe and strengthen Water User entities and water Boards for undertaking operation and maintenance. Currently only one water Board exists and establishments for other water users' entities is on progress. Council also need to rehabilitates old infrastructure and make replacement of the new ones. The Table also shows that other

source of urban water supply is rainwater-harvesting schemes. With such findings, it is sufficient to conclude that Lake Tanganyika is the main water supply source, followed by springs, boreholes, gravity piped and rainwater harevesting schemes than other sources in the regional urban centres. This suggests that an effort to increase boreholes is an economical undertaking.

Table 77: Urban Water Supply Sources in the Region by Council, 2015

Council Name	Source of Water					
	No. of Boreholes	No. of Shallow wells	No. of Springs	No. of Lakes/river/ streams	Rain water Harvesting tank	Gravitypiped schemes
Kibondo	7	0	4	0	4	3
Kasulu TC	6	0	43	0	8	11
Kasulu	2	1	2	0	2	3
Buhigwe	2	2	0	0	5	2
Kakonko	5	3	1	0	0	0
Uvinza	1	1	2	0	4	0
Kigoma	2	0	0	1	3	0
Kigoma Ujiji Municipality	5	7	4	2	5	3
Total	30	14	56	3	31	22

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

5.5 Coverage of Urban Water supply

The compiled data shows that coverage of urban centers water supplies in the region by council. The data in Table 81 show that average urban centres water coverage in the region is approximately 62%. Kasulu TC leads with high coverage (69%) and Uvinza ranks the least (46%) with water coverage in the region. Based on these results, it is recomended to increase efforts of supplying more water to regional population to attain the national target of 90% by the year 2025.

Table 78: Urban Water supply Coverage in the Region by Council, 2015

Council Name	Estimated Total Population	Estimated Population Coverage	Estimated % of Coverage	
Kibondo DC	32,834	21,342	65	
Kasulu DC	40,343	27,433	69	
Kasulu TC	74,442	51,587	68	
Buhigwe	12,320	6,899	56	
Uvinza	8,672	4,336	50	
Kakonko	15,100	7,248	48	
Kigoma Ujiji Municipality	54,010	28,625	53	
Total	237,721	147,123	62	

SECTION VI

6.0 CROSS-CUTTING ISSUES

6.1 Introduction

The HIV/AIDS, women/youth economic groups and cooperatives need further investment. However, more study or research which focus on the above cross cutting issues need to be addressed. In Kigoma region efforts are called for to increase awareness among women and men population regarding gender issues and poverty reduction. Investment is required in terms of more women groups to reach more women. The use of income generation as a motivation tool means further and more loans and training for women and youth. There is a chances of investing in youth and women economic groups by increasing the number and capital. SACCOS and Cooperatives are useful instrument, which give support to members when used economically. Kigoma region is currently facing critical environmental degradation, however, there are opportunities for pressure groups to invest on environment and that will create tourist attraction especially along the lakeshore.

6.2 Women and Youth Economic Groups

Several studies report that youths of between 18 and 45 years are more in regional population than elders who range from the ages 45 to 60 years. As a consequence, active labour force which is mostly youths have initiated and formulated economic groups. Table 79 shows that 139 Women and youth economic groups were loaned from 2013 to 2016 whereby the total loaned money was Tshs.216,018,700. Most of the loaned groups are in Kigoma/Ujiji Municipality (68). Although Kigoma/Ujiji has more loaned groups, but it has less amount of loaned money amounting to TShs 66,440,000 as compared to uvinza District Council loaned 24 groups with amount of Tshs. 74,000,000. The findings reveal that all Councils need more sensitization and advocacy strategy to enroll more groups. However Kakonko District Council has to learn procedures used by other councils to offer loans to women and youth economic groups in order to figth against poverty.

Table 79: Women and Youth economic Groups loaned from 2013/2014-2015/2016 by Council in the Region

Council Name	No. of Groups Loaned	Total Loaned (Tshs)
	Loaned	
Kibondo DC	6	10,163,000
Kakonko DC	0	0
Buhigwe	8	4,915,700
Kasulu DC	16	28,500,000
Kasulu TC	1	2,000,000
Kigoma DC	16	30,000,000
Uvinza DC	24	74,000,000
Kigoma Ujiji MC	68	66,440,000
Total	139	216,018,700

Source: Kigoma Region Commissioner's Office, Kigoma, 2016

6.3 Co-operative Development

By 2015 the region had 258 various coperatives with 49,395 members, liquidity of Tsh. 2,959,280,164 and shares of Tsh. 342,709,201/=. The Kanyovu Coffee Curing Cooperative Joint Enterprise is the giant cooperative found by 9 primary coffee cooperatives in Kigoma District. Table 81 indicates the number of cooperatives by council in the region

Table 80: Number of cooperatives by council in the region as at Septemba, 2015

Aina ya	Regional	Kasulu	Kibondo	Kigoma	Kigoma	Buhigwe	Uvinza	Kakonko
Chama	(Total)	DC	DC	MC	DC	DC	DC	DC
Farmes	64	12	12	1	6	7	21	6
cooperatives								
(AMCOS)								
SACCOS	168	39	11	57	25	6	23	6
Livestock	2	0	0	0	0	0	2	0
Trade	6	3	1	1	0	1	0	0
Industries	5	2	1	2	0	0	0	0
Beekeeping	6	1	3	0	0	0	2	0
Fisheries	2	0	0	2	0	0	0	0
Vyama	2	0	0	0	1	0	1	0
Vikuu								

6.4 NGOs

NGOs are among the official stakeholders supporting rural development through LGAs (Act No. 7 and 8 of 1982). Most of the NGOs are involved in environmental issues, HIV/AIDS, human right and poverty reduction. It is revealed that most of the active NGOs are working on refugee camps especially in Kibondo, Kakonko and Kasulu district councils and villages around the camp. Therefore, the challenge to all councils is to keep record of beneficiaries that will help the region in measuring impact of NGOs in development initiatives.

6.5 Community Based Organizations (CBOs)

Community Based Organizations (CBOs) operate in the region. Findings show that by 2014, there were 104 and 35 CBO operating in Kigoma Ujiji Municipality and Kigoma rural district councils. However, there are no records of CBOs in other two district councils. The findings also reveal that Kibondo and Kasulu district councils either do not possess official CBOs or lacks records. Nevertheless, it is encouraging to note that existing CBOs indulge on outstanding matters such as environment, poverty and HIV/AIDS. The number of beneficiaries is relatively higher in Kigoma Ujiji Municipality council. This could be due to the fact there are more CBOs in the area. With these findings, it is fair to propose that the councils which are lacking CBOs are encouraged to embark on establishment and registration of CBOs.

6.6 Faith Based Organizations (FBOs)

Findings indicates that all councils have at least FBOs. As with NGOs, FBOs also concentrate on paramount issues. These include poverty, environmental protection and HIV/AIDS. However, the number of beneficiaries are not analyzed due to insufficient data. Therefore, there is a need to enhance record keeping capacity to ensure availability of data.

6.7 Environment and Natural resources management

Kigoma region is endowed with vast natural resources that include rivers such as Malagarasi, Luiche, Lugufu, Bogwe, Ngonya, Gombe, Kaseke, Mkuti and many other small rivers. These rivers provide great opportunity for fishing, irrigation and water for both human and animals being domesticated or wild. Other natural resources in the region include Lake Tanganyika, Miombo forests, Wildlife and Minerals. Kigoma also has unique features like the Gombe National Park with its well researched Chimpanzees, Mahale National Park with a big population of Chimpanzees and other big games.

Notable products extracted from the forests include firewood, charcoal, construction materials, timber and other minor forest products like mushroom, fruits and medicine. The same communities' dependence is true to other natural resources. Studies show that this dependence of communities on natural resources in one hand is dictated by poverty and on the other hand by the lack of affordable alternatives. However resource evident that the natural resources in Kigoma Region especially the forests are highly degraded through various human related activities. Hence underlying challenges facing natural resources management in Kigoma region which includes

- Rapid population growth of the residents and in some occasions refugees influx from neighbouring countries of Burundi and DR Congo;
- Unsustainable harvesting of natural resources such as forests for timber, agriculture, charcoal and firewood mainly due to high dependence on biomass energy; Industrial fuel wood harvesting (for salt and lime mining) hence environmenta degradations

SECTION VII

7.0 POTENTIAL AREAS FOR INVESTMENT

7.1 Introduction

After analysis, two major sectors have identified as potential areas for investment. The areas include productive and social sectors. The specific areas are described in the following sub sections.

7.1.1 Sectoral Areas

7.2 Productive and Economical Sector

The productive areas, which need investment, include agriculture, livestock, forestry, bee keeping, energy, roads, fisheries communication network and industrial development.

7.2.1 Agriculture

Kigoma region which is estimated to have over **1,834,885** hectares of potentially cultivatable land has a favorable climatic conditions which allow the growth of a wide variety of crops - both food and cash crops. But the area under cultivation has been averaging **1,058,637** hectares equivalent to **57.7%** and has not been expanding significantly. The insignificant expansion of cultivatable area is attributed to inadequate application of modern agricultural method. Therefore, there is an urgent need to encourage investment in the use of tractors and irrigation to expand the area and increase production.

The soils of Kigoma region have potential fertility which can support a variety of crops but soils loose fertility after several years of use. However, fertilizers are not widely used in the region resulting in low yield per hectare. The use of organic fertilizers such as manure, compost and legumes particularly in highland areas, is highly recommended and emphasized in order to retain and increase soil fertility. Integration of agriculture and forestry a well as improving cropping pattern for food crops in order to increase fertility and maximize yields need to be practiced.

The high irrigation potential (50,952 Ha) that exist in the region need to be explored and exploited for increased crop production. Moreover, the region used only 8,219.5 Ha or 16.1% of the potential irrigated land. Therefore, 83.9% of potential irrigated land needs investment. The recommended crops are paddy, fruits and vegetables.

Stabilization of the Kigoma region economy to increase per capital income depends very much on the development and promotion of palm oil, cotton, tobacco, groundnuts and coffee production. This again will depend on the planting of new and better varieties of oil palm and expansion of cotton, tobacco and coffee farms. Hence, investment in agricultural inputs to expand or establish new palm oil, cotton, tobacco, groundnuts and coffee plantations will stimulate production and regional economy. Investment on the the followings are highly encouraged;

- Crop Production and Post-harvest technology
- Improved livestock keeping and processing of livestock products
- Fisheries Post-harvest fish technology
- Beekeeping value added
- Horticulture handling and storage
- Agro-processing
- > Agro-transporting
- Organic food products

7.2 Livestock

Given the livestock population in the region, serious planning and determination is needed in investing in this sector. The establishment of new livestock settlement areas are looked into so as to encourage the introduction of more Tanzania short horned zebu which, with good management system, will produce a reasonably good quantity and quality meat much required in the region. The climate of the region also favors growth of animals of improved breed for dairy development particularly the promotion of dairy cattle through local breeding. Among the strategies are to improve grazing areas. As 23.2% (252,300 Ha) is used as grazing land leaving more than 76.8% potential grazing area in the region. The issue of investing in livestock industry in the region needs further research but livestock market expansion is potential too.

7.3 Fisheries

Kigoma region has a promising potential for fishing in its water bodies but this potential has not been exploited adequately. Current exploitation of the fish resource is by small scale artisan fishermen who continue to play major role in supplying fish for local consumption. However, very little catch go into outside markets. Investment in fisheries is highly required in terms of modern fishing gears, processing and marketing skills. The artisan fishermen require accessibility to credit facilities to enable them acquire suitable modern fishing gears and other facilities.

7.4 Tourism

Presence of Gombe National Park with its well researched Chimpanzees, Mahale National Park with a big population of Chimpanzees and other big game, Dr. David Livingstone Memorial, MV Liemba - the oldest ship known to have been used during the First World War which is still in service, Slave Trade Route at Ujiji Town Lake Tanganyika First longest, second deepest and second in fresh water and German Buildings creates a big potential for further development of tourism industry in the Region. Investments are encouraged on tour guiding, tourists' information centre, tourist hotels, and others like Sand and rocky beaches in Lake shoe, Canoeing tourism and Diving, Ornamental fish – for aquarium, Photographic tourism (Gombe & Mahale, Cultural tourism and Hunting/sport tourism.

7.5 Industrial Development

Industrial development is one of the sources of employment opportunities for the increasing number of unemployed youths. But in Kigoma region there is a big room for investment in agro- based industries, marine based as well as forest-based industries.

About **20,000ha** earmarked for Kigoma Special Economic Zone (SEZ). Survey has already done for **691ha** and **401 plots** demarcated. Preparation of line infrastructure drawings for roads, water, electricity, storm water and sewerage and BOQs already done and know pending to physical implementation. The KiSEZ master plan consist of the following clusters:

- Manufacturing: Production, assembling plants, gowdowns
- **Residential:** Mult-storey buildings for residential accommodation,
- Institutional: Schools, colleges, universities and Hospitals
- Trade: Banks, malls, super markets and hotels
- Recreational: Stadiums, clubs, parks and halls
- Transport: Ports, airport, railways, bus and HDV terminals

Typical investments are invites especially on the followings;

- Concessions for Port modernization, expansion, operations and cargo freight shipping;
- Fishing and fish processing for export;
- Agro processing:
- ➤ Information Communication Park:

- > Recreational and sport facilities
- > Provision of Utilities i.e. Electricity and Water
- Warehousing, Showrooms, Malls, Halls, Duty Free Shops, Banking, Insurance, Freight Services
- Dry Port, Cargo Centre, Bulk Storage Facilities, (Trade and Logistics Hub);
- Hotels and Restaurants

7.6 Social Services

Health and education are potential areas requires investment. For instance, there is a need to increase the number of health facilities, the number of secondary schools with focus on private ones and Higher learning institutions.

7.7 Health

The health care delivery system is already open for private investment. A start has been made but the pace is very slow compared to other regions in the Mainland Tanzania. Therefore, individuals, NGO's, Companies and other private sector organization are encouraged to invest in the establishment and running of health facilities in the region with the aim of increasing the coverage. In addition, the training of health personnel to boost the number of trained personnel; the supply of vaccines, drugs, equipment and other medical supplies and technical assistance are important for improving the quality of medical care and so contain health problems. The containment of AIDS and HIV infection is a task that has to be performed by every one. Health education and other preventive measures are desperately required.

7.8 Education

Investment in education sectors at all levels from pre-primary school education to University is now open to private sector. In 2000, the region had only eight secondary private schools which was only 40 percent of the required schools. The corresponding figure for 2015 is 60.4% of the required schools, this suggest that there is still a need of investing to secondary schools, Vocational training centers for youths and Higher learning institutions. The quality of primary and secondary education is still low. Also demand for tertially education in the region is high. Therefore, there is a very large area in education for an investor to make a choice.

7.9 SOME OF INVESTMENT OPPORTUNITIES IN DISTRICTS

7.9.1 Opportunities in Kasulu and Buhigwe Districts

- The land bank estimated at 104,400ha, for investment purpose such as agricultural development, processing industries, manufacturing etc. The land use planning done in 18 villages to eliminate chaos that might happen in future. The Districts aims at changing from clearly unprofitable smallholder farming and focuses to medium and large-scale farming, by identifying areas for investment.
- There is agricultural area at Kigadye 200,000 Ha. for Sugar cane Plantations,
- Makere Lime, Gold and Coal Deposit for mining

7.9.2 Opportunities in Kibondo and Kakonko Districts

- Sugar cane plantation at Malagarasi River Basin and Lumpungu River Basin Ha.12,595 and Ha.12,243 respectively.
- ➤ Gold deposit exploration Nyakayenzi Village, Ruhulu Kabare village, Nyamwironge Nyamtukuza village it is estimated that an area of approximately 240,000m² have Gold deposit.
- Large deposits of Kaolinite are found at Kasuga village.

- > Coal survey and exploration Kasanda village, Kibuye village and Kichananga village.
- ➤ Kumwambu and Kitahana villages have large natural occurrence limestone deposits estimated to occupy an area of more than 5 Ha.

7.9.3 Opportunites in Kigoma rural and Uvinza

- Lugufu and Basanza Agricultural Area 13,000 Ha; Copper, Galena, Lime, Gpysum and Platinum deposit at Ilagala, (6,847 Ha.), Buhingu (1,200 Ha.) and Nguruka (95,155 Ha.)
- Lake Transportation.
- ➤ Kigoma port is expected to cater for the increased passenger haulage and goods haulage by steamer to the Great Lakes Nations.
- There is a potential of developing a new free port at Kaseke within the Kigoma Special Economic Zone

7.9.4 Opportunities in Kigoma/Ujiji municipality

> Industrial Estate Development at Katosho

There is land ready for industrial Development at Katosho Industrial area with 15 industrial plots totaling 10 Hactres.

> Tourism Circuit

Kigoma Ujiji Municipality is endowed with white sand beaches along the Lake Tanganyika; the detailed design of Lay out for development of Hotel Sites totaling 145 Hectares of land is at an advanced stage.

8.0 CONCLUSION

There are several comparative advantages for investing in Kigoma Region which includes:-

The advantageous location and connectivity to other Regions in the country and boarders of neighbouring countries like Democratic Republic of Congo (DRC), Burundi and Zambia hence assurance to Regional and Global markets. The availability and promising infrastructures of existing Kigoma Port, Airport, railway and improved roads which easy internal and external communication. Thus, given the strategic position of the Kigoma Region, the region has a comparative and competitive advantage that it is worth exploiting through foreign trade.

Tourism potentials of culture heritage, Muyowosi Game Reserve, Luganzo Game controlled Area, Resident hunting area, National Parks of Gombe and Mahale mountains, Kigoma-Bagamyo Slave trade route and the mysterious Dr. Livingstone Memorial site, the oldest German ship Mv. Liemba (more than 100 years old) which is still operating; to mention only a few.

Favorable arable land and climate which favor variety of crops like coffee, coconut, palmoil, banana, sunflower, citrus fruits, rice, maize, and cassava. Conducive climate for livestock keeping with suitable grazing land with large biodiversity of grasses and leguminous species and animal feeds. Existence of Rivers and Lake Tanganyika which favor fishing activities in the region and a solid partnership between Public and Private sector which have built trust and created a win-win environment for all.

The Region's development strategy is to reform its economy through proper utilisation of available development potentials with apropriate investments and creating conducive investment environment to generate sustainable economic growth and economic development.

The investment opportunities in this profile clearly express the type of investment needed. The Regional and Local Government Authorities invites investors to come and embark on the projects of their choice. The Government assures all prospective investors a top most cooperation as well as enabling environment of peace, security and good policies.