THE UNITED REPUBLIC OF TANZANIA



SHINYANGA REGIONAL SOCIO-ECONOMIC PROFILE



 $\begin{array}{c} \textbf{Joint publication by:} \\ \textbf{NATIONAL BUREAU OF STATISTICS (NBS)} \\ \textbf{AND} \end{array}$

SHINYANGA REGIONAL COMMISSIONER'S OFFICE

CO-ORDINATED BY: MINISTRY OF PLANNING,
ECONOMY AND EMPOWERMENT
DAR -ES -SALAAM

SECOND Edition
JULY 2007

TABLE OF CONTENTS

FOREWORD	iv
SECTION ONE	
1.0 LAND, PEOPLE AND CLIMATE	1
1.1 Geographical Location	1
1.2 Surface Area and Administrative Units	1
1.3 Population	4
1.4 Climatic Features	9
1.5 Drainage	10
1.6 Topography and Vegetation	10
SECTION TWO	
REGIONAL ECONOMY	
2.2.1 Agriculture development	
2.2.2 Livestock Development	
2.2.3 Natural Resources	
SECTION THREE	
3.0 ECONOMIC INFRASTRUCTURE	
3.1 Transport Sector	
3.2 Railway	
3.3 Air Services	
SECTION FOUR	
4.0 SOCIAL SERVICES	
4.1.1 Distribution of Pre – Schools in the Region	
4.1.2 Primary Education.	
4.1.10 Distribution of Secondary Schools by Ownership	
4.2 Water and Sanitation	
4.2.2 Number of Rural Water Schemes	
4.2.5 Urban Water Supply	
4.3 Health Sector	
4.3.3 Ten Common Causes of Mortality	
4.3.4 Infant and Child Mortality	
4.3.5 HIV/AIDS and Tuberculosis Case	
SECTION FIVE	
5.0 OTHER DEVELOPMENT ISSUES	
5.2 Women Economic Groups	
5.3 Youth Economic groups	
SECTION VI	
0.U PUTENTIAL AREAS FUR INVESTIMENT	

FOREWORD

- 1. Tanzania's Vision 2025 continues to be the guiding beacon of all our future developmental efforts summarized broadly as being:
 - *High quality livelihood including the absence of abject poverty.*
 - Good governance and the rule of law.
 - A strong and competitive economy.

The goals of our Vision 2025 are in line with the United Nations' Millennium Development Goals with MKUKUTA as the main vehicle of implementation.

- 2. Yet at this point in our history, problems especially in rural areas are many and daunting. Social and economic services require sustainable improvement. The high primary school enrollment rates recently attained have to be maintained; the food situation is still precarious; infant and maternal/mortality rates continue to be high. Unemployment is still triggering mass migration of youth from rural areas to already overcrowded urban centers.
- 3. Added to these problems in the menace poised by HIV/AIDS, the prevalence of which throughout Tanzania is negating our efforts to advance into this century of science and technology. The pandemic has been exacting a heavy toll on the economically active age group, leaving in its wake an increasing number of orphans, broken families and much suffering. AIDS together with environmental deterioration are the new developmental problems. They cannot be ignored.
- 4. Our efforts to meet both the new and the old challenges have been hampered by many factors including ill prepared rural development programmes followed by weak implementation, monitoring and supervision of these programmed and sectoral strategies. The shortcomings in policy formulation, project identification, design and implementation is in turn balanced on the lack of reliable and adequate data and information on the rural development process.
- 5. The publication of the Regional Socio-economic Profile series by the Ministry of Planning, Economy and Empowerment, in collaboration with the National Bureau of Statistics and various regional commissioners' offices is a major attempt at finding a solution to this data and information gap.
- 6. Regional profiles cover a wide range of data and information on geography, population, socioeconomic parameters, social services, economic infrastructure and the productive sectors. Such data and information has proved vital to many policy makers, planners, researchers, donors and functional managers.
- 7. This Shinyanga Regional Socio-economic Profile contains the detailed data and information on the region and is one of the Second Edition series nationwide. The second editions take advantage of experience gained in the production of the First Edition publications. They are proving even more valuable and informative to our clients. Constructive view and criticisms are still invited from readers to enable such profiles to become a better tool in the implementation of the country's policies.

iv

8. Lastly but not least, I wish to thank the staff of the Ministry of Planning, Economy and Empowerment, the National Bureau of Statistics and the Shinyanga Regional Commissioner's Office, for their devotion in ensuring the successful compilation of this document.

Dr. Juma Ngasongwa

MINISTER OF PLANNING, ECONOMY AND EMPOWERMENT July, 2007

SECTION ONE

1.0 LAND, PEOPLE AND CLIMATE

1.1 Geographical Location

Shinyanga region is located south of Lake Victoria at 20 to 160 kms from the shorelines forming part of what used to be known as the Sukuma land. The region lies between 31 and 35 Eastern longitude and between 2 and 3 Southern latitude. It makes part of the Lake Zone in the Western part of Tanzania. In the eastern part, the region borders the Arusha region, to the south Tabora region, to the west Kigoma region. To the northwest is Kagera region and in the north the region borders Mwanza region. On the eastern boundary there is the Serengeti National Park. The western and southern parts follow sand river courses and lakes.

1.2 Surface Area and Administrative Units

Shinyanga region was inaugurated in 1963. At its inauguration the region had three rural districts and a township namely: Shinyanga, Maswa, Kahama, and Shinyanga Township. To date the region is subdivided into seven rural districts. The New districts are Bariadi, Meatu, Bukombe, and Kishapu; these were inaugurated in 1971, 1980, 1995 and 2000 respectively. Among eight districts, Bukombe with 21.4 percent of the regional total surface area is the largest followed at a distance by Bariadi at 19.3 percent. The same ranking applies to the share of the total land area, which stands at 21.4 percent for Bukombe and 19.3 percent for Bariadi. The smallest district apart from the urban district of Shinyanga is Maswa in terms of land area. Table 1.1 shows the division of the region by district and size.

Table 1.1 Total areas by district, Shinyanga region, 2006

District	Area in sq. kms	% of regional
Bariadi	9,777	19.3
Bukombe	10,842	21.4
Maswa	2,736	5.4
Shinyanga(Rural)	4,212	8.3
Kishapu	4,334	8.5
Meatu	8,871	17.5
Kahama	9,461	18.6
Shinyanga (Urban)	548	1.1
Total	50,781	100.0

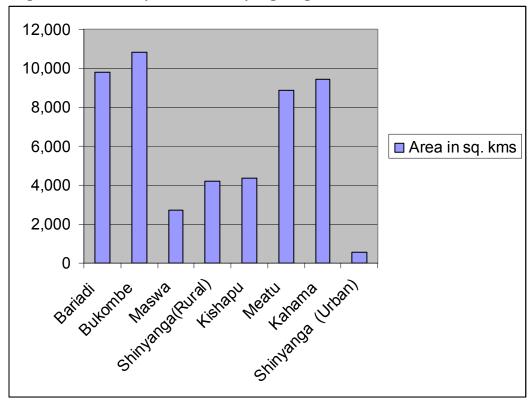


Fig 1: Total areas by district, Shinyanga region

Shinyanga region occupies an area of 50,781 sq km. According to Table 1.2 Shinyanga region's share of the Mainland's land area was 5.8 percent in 2006, making it the Eighth (8th) largest region in the United Republic of Tanzania.

Table 1.2: Land area and average area of administrative districts among Tanzania Mainland regions, 2002

Region	Regional land a	ırea	Regional dis	stricts
	Size (sq. kms)	% of Mainland	Number	Av. land area per district (sq. kms.)
Shinyanga	50,781	5.8	8	6,348
Ruvuma	63,498	7.2	5	12,700
Manyara	45,820	5.2	5	9,164
Mtwara	16,707	1.9	5	3,341
Dodoma	41,311	4.7	5	8,262
Arusha	26,486	4.1	5	7,297
Kilimanjaro	13,309	1.5	6	2,218
Tanga	26,808	3.0	7	3,830
Morogoro	70,799	8.0	6	11,800
Coast	32,407	3.7	6	5,401
Dar es Salaam	1,393	0.2	3	464
Lindi	66,046	7.5	6	11,008

Iringa	56,864	6.5	7	8,123
Mbeya	60,350	6.8	8	7,544
Singida	49,341	5.6	4	12,335
Tabora	76,151	8.6	6	12,692
Rukwa	68,035	7.8	4	17,159
Kigoma	37,037	4.2	4	9,259
Kagera	28,388	3.2	6	4,731
Mwanza	19,592	2.2	8	2,449
Mara	19,566	2.2	5	3,913
Mainland	881,289	99.9	119	7,406

Source: National Population and Housing Census, (2002), General Report

Like elsewhere on the Mainland, Shinyanga districts are subdivided into 27 divisions, 158 wards and 874 villages. The division of administrative units in the region is as shown in Table 1.3 below.

Table 1.3 Administrative units by district, 2006

District	District HQ	No. of divisions	No. of wards	No of villages
Bariadi	Bariadi	4	26	124
Bukombe	Ushirombo	3	14	125
Kahama	Kahama	5	34	221
Kishapu	Mhunze	3	20	103
Maswa	Maswa	3	16	104
Meatu	Mwanhuzi	3	19	71
Shinyanga (Rural)	Shinyanga	3	16	107
Shinyanga (Urban)	Shinyanga	3	13	19
Total		27	158	874

1.3 Population

1.3.1 Introduction

Shinyanga region was included in the national human population census of 1948, 1957, 1967, 1978, and 1988 and more recently in the year 2002. The 1948, 1957 and 1967 censuses were very limited in extent whereas those of 1978, 1988 and 2002 were more comprehensive. Arising from the last census certain general trends have emerged which the region shares with the rest of the Mainland. These include the general decline in the growth rate, increasing urbanization and agriculture as the main economic activity. Others are the declining trend in Infant Mortality Rates and Under Five Mortality Rates. Rural people especially females tend to be disadvantaged in literacy and income. Poverty is more extensive in rural areas as compared to urban areas. Although life expectancy rates are on the rise and Infant Mortality Rates are on the decline though rural areas tend to be disadvantaged.

1.3.2 Ethnic Groups

The major ethic group is the Wasukuma. Other ethnic groups are Wanyamwezi and Wasumbwa who are mainly found in Kahama and Bukombe districts. There are also substantial number of Wanyiramba, Wataturu and Wahadzabe from neighbouring regions who have settled in Shinyanga rural and Meatu districts. Most of the tribes in the region are Bantus who are believed to have moved into the country during the Iron Age. The dominant tribe, Wasukuma is both agriculturist and livestock keepers. There are also a few people of Arabic origin in the region. These Arabs are mainly found in the district and regional headquarters and trading centers engaged in trade.

1.3.3 Population size and average growth

Shinyanga population grew from 899,468 in 1967 to 1,323,535 in 1978 and to 1,763,800 in 1988. Based on the 2002 National Population and Housing Census, Shinyanga Region had a population of 2,805,580 of which 1,369,581 were male and 1,435,999 females. The region's population was about 8.3 percent of the total Tanzania mainland's population and make Shinyanga region second populous region after Mwanza region (see table 1.5). Using the 2002 annual average growth rate of 3.3 percent the present population (2006) is projected to be about 3.2 million people. The population size and growth by districts between 1976 and 2002 is depicted in the table 1.4. It is observed from that table that between 1976 and 2002 the Shinyanga regions population had grown by over 200 percent from 899,468 to 2,805,580 people. It is worth noting in the table 1.4 below that the population of Shinyanga Region tripled within a period of 35 years.

Table 1.4 Total population by district, Shinyanga region; 1967, 1978, 1988 and 2002.

District	1967	1978	1988	2002	% share of regional	
					1967	2002
Bariadi	-	296,931	380,618	605,509		21.6
Maswa	430,900	304,079	220,499	396,423	47.9	10.9
Shinyanga(Rur)	320,968	362,170	405,478	596,456	35.7	9.9
Kishapu	*	*	*	305,473		8.6
Meatu	***	***	159,266	248,949		8.9
Kahama	147,600	291,622	499,439	240,086	16.4	21.3
Bukombe	**	**	**	277,518		14.1
Shinyanga(Urban)	-	68,733	98,660	135,166		4.8
Total	899,468	1,323,535	1,763,960	2,805,580	100	100

Source: Population Census: 1967, 1978 and 2002.

Table 1.5: Shinyanga Region Population Trend Compared to Other Regions
In 1967, 1978, 1988, and 2002 Censuses

Region	egion 1967		1978	1978 1988			2002	
	Population	R	Population	R	Population	R	Population	Rank
Shinyanga	899,468	2	1,323,535	2	1,763,800	2	2,805,580	2
Arusha	610,474*	11	926,223*	8	744,479	17	1,292,973	14
Dodoma	709,380	5	972,005	6	1,235,328	7	1,698,996	8
K'njaro	652,722	9	902,437	10	1,104,673	10	1,381,149	12
Tanga	771,060	3	1,037,767	4	1,280,212	6	1,642,015	10
Morogoro	682,700	7	939,264	7	1,220,564	8	1,759,809	7
DSM	356,286	19	843,090	11	1,360,850	4	2,497,940	3
Coast	428,041	16	516,586	19	636,103	20	889,154	20
Lindi	419,853	17	527,624	18	646,494	19	791,306	21
Mtwara	621,293	10	771,818	13	889,100	13	1,128,523	16
Ruvuma	395,447	18	561,575	17	779,875	16	1,117,166	17
Iringa	689,905	6	925,044	9	1,193,074	9	1,495,333	11

^{*-}Included under Shinyanga Rural-Kishapu was part of Shinyanga Rural in 1967, 1978, and 1988 census as it was inaugurated in 2000.

^{**-}Included under Kahama – Bukombe was part of Kahama in 1967, 1978, and 1988 census as it was inaugurated in 1995

^{***-}Included under Maswa-Meatu was part of Maswa in 1967 and 1978 census as it was inaugurated in 1980.

Mbeya	753,765	4	1,079,864	3	1,476,278	3	2,070,046	4
Tabora	502,068	13	817,907	12	1,036,150	11	1,717,908	6
Rukwa	276,091	20	451,897	20	698,718	18	1,141,743	15
Kigoma	473,443	14	648,941	15	856,770	14	1,679,109	9
Kagera	658,712	8	1,009,767	5	1,313,594	5	2,033,888	5
Mwanza	1,055,883	1	1,443,379	1	1,876,635	1	2,942,148	1
Mara	544,125	12	723,827	14	946,418	12	1,368,602	13
Singida	457,938	15	613,949	16	792,387	15	1,090,758	18
Manyara	-	-	=	-	603,691	21	1,040,461	19
Total	11,958,654	-	17,036,499	-	22,455,193	-	33,584,607	-

• Includes Manyara, R-Rank, Source: 2002 Population Census report

The 2002 Population Census also revealed that there are more women than men in Shinyanga region, the regional average ratio being 95 to 100. It was further observed in the table 1.7 that the highest household size in the region is recorded for Bariadi (7.3) and Meatu (7.0) both of which are above the regional average household size of 6.3. The majority of Shinyanga region population lived in the rural areas. The 2002 Population and Household Census reveals that rural population was about 90.8 percent while urban population was only 9.2 percent. In Shinyanga Rural and Meatu districts, 99.6 percent and 97.3 percent of the total population respectively lived in the rural areas. In the paradigm of a big number of youth migrating into urban centers looking for employment opportunities and better life, the percentage of population residing in the rural areas for the region as a whole is currently estimated at 90% (2005) Table 1.7 depicted the population by district, sex and rural and urban configuration.

Table 1.6 Population Size and Growth Rate by District

District		Population			ual Growth	Rate
	1978	1988	2002	1967-78	1978-88	1988-2002
Bariadi	296,931	380,618	605,509	3.3	2.6	3.37
Bukombe	**	**	396,423			
Kahama	291,622	499,438	596,456		5.5	1.31
Maswa	304,079	220,499	305,473	2.8	2.5	2.35
Meatu	***	159,272	248,949		2.0	3.2
Kishapu	*	*	240,086			
Shinyanga	362,170	405,396	277,518	2.2	1.1	1.78****
(Rural)	60.522	00.602	107.166	7	2.0	2.2
Shinyanga (Urban)	68,733	98,682	135,166	5.6	2.8	2.3
Total	1,323,535	1,763,905	2,805,580	3.6	2.9	3.3

Source: 2002 Population Census and Regional Profile Shinyanga 1996.

^{*-}Included under Shinyanga Rural

Table 1.7 Total Population by district, sex number of households, average household size

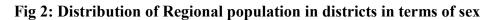
District	SEX		Number of	Average	Male per	
	Male	Female	Total	Households	Household	100
					Size	females
Bariadi	286,785	318,724	605,509	82,946	7.3	90
Bukombe	197,122	199,301	396,423	61,271	6.4	99
Kahama	295,578	300,878	596,456	128,270	4.65	98
Maswa	147,317	158,156	305,473	48,921	-	93
Meatu	119,721	129,228	248,949	35,564	7	92
Kishapu	120,802	119,284	240,086	-	-	101
Shinyanga	135,421	142,097	277,518	-	-	95
(Rural)						
Shinyanga	66,835	68,331	135,166	67,583	2.0	98
(Urban)						
Total	1,369,581	1,435,999	2,805,580	424,555	6.3	95

Source: 2002 Population Census, Regional Profile Shinyanga

NB. The number of households for Shinyanga Rural and Kishapu districts was not available.

^{**-}Included under Kahama

^{***-}Included under Maswa
****-Included Kishapu and Shinyanga Rural



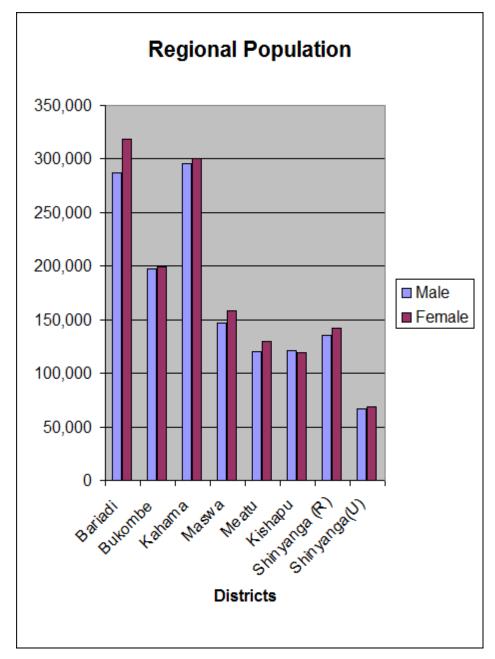


Table 1.8 Total populations by district, Urban, Rural and by sex

District		Rural		Urban			
	Male	Female	Total	Male	Female	Total	
Bariadi	270,918	302,011	572,929	14,562	16,123	30,675	
Bukombe	176,467	179,239	355,706	19,935	19,657	39,592	
Kahama	260,984	267,856	528,840	33,588	32,463	66,951	
Maswa	134,550	144,916	279,466	12,093	12,843	24,936	
Meatu	115,824	125,565	241,389	3417	3408	6,825	
Kishapu	113,207	112,929	226,136	7,080	6,089	13,169	
Shinyanga	134,281	141,076	275,357	478	558	1,036	
(Rural)							
Shinyanga	30,000	30,755	60,755	36,442	37,326	73,768	
(Urban)							
Total	1,236,231	1,304,347	2,540,578	127,575	128,467	256,952	

Source: 2002 Population Census, Shinyanga Regional Profile

1.3.7 Population density

Compared to the densely populated regions like Mwanza, Kilimanjaro, Dare s salaam and some parts of Mbeya and Kagera regions, Shinyanga could be categorized as one of the moderately populated regions. According to the 2002 Census, the region's average population density was 55.2 persons per squire km. The average population densities for Mwanza and Kilimanjaro regions (2002) were 95.8 and 83.7 persons per sq. km respectively.

1.4 Climatic Features

Shinyanga region has a tropical type of climate with clearly distinguished rainy and dry seasons. According to meteorological statistics the average temperature for the region is about 28°C. The region experience rainfall of 600mm as minimum and 900 mm as maximum per year. The region has two seasons a year. The rainy season and dry season. The rainy season usually starts between mid- October and December and ends in the second week of May. Normally it has two peak seasons. The first peak lies between mid- October and December, while the second one, the longer season, falls between February and mid- may. As such, the whole rainy season covers a total of almost six months, with a dry spell which usually occurs in January. The dry season begins in mid-May and ends in mid-October. This is a period of about five months. The dry season is the worst period for the Shinyanga region. The soils are hard to cultivate, pastures become very poor, and availability of water for domestic use and livestock become acute.

The amount and distribution pattern of rainfall in the region is generally unequal and unpredictable. This implies that rainfall as a source of water for domestic and production purposes in the region is less reliable for sustainable water supply.

1.5 Drainage

The rivers in the south-western parts of Shinyanga region flow towards Lake Tanganyika. In the eastern part of Shinyanga region waters flow to an internal drainage basis and ends up in Lake Eyasi which has no outlet.

Rivers in Kahama district, with the exception of its eastern part, drain into Malagarasi River basin which has a very low gradient. Consequently, there are large marshy areas along rivers with stagnant water. Eastern parts of Shinyanga region draining into Eyasi have a dense pattern. River beds are wide, shallow and sandy.

Manonga River is the only river with a deeper bed. Rivers Mononga, Isanga and Sibiti formed large plain areas charactering these parts of the region. Sibiti River flows during most part of the year. Other rivers sometimes do dry up during the dry seasons. Thus their basins cannot be exploited for irrigation purposes.

1.6 Topography and Vegetation

The topography of Shinyanga region is characterized by flat, gently undulating plains covered with low sparse vegetation. The North- Western and North- Eastern parts of the region are covered by natural forests which are mainly miombo woodland. The Eastern part of the region is dominated by heavy black clay soils with areas of red loam and sandy soil.

It is observed that most of the Shinyanga region is dry flat lowland thus its agro- economic zones are not well pronounced as it is with some regions in the country.

SECTION TWO

REGIONAL ECONOMY

2.0 Introduction

Despite of the recent mushrooming of mine industry, agriculture has continued to dominate the livelihood and economic performance of Shinyanga region. The sector contributes about 75 percent to the regional economy and employs about 90 percent of the working population in the region. Agriculture is dominated by peasantry farming. Main cash crops are cotton and tobacco while the main food crops are maize, sorghum, paddy, sweet potatoes, millet and cassava. The region has the largest planted area of maize and second largest for paddy and sorghum than other regions in Tanzania. Besides farming, livestock keeping is also a major activity in the region. Cattle, coats and sheep are the major domesticated animals.

Modern diary farming and poultry keeping are confined to urban centers. Apart from agriculture and livestock keeping, mining and industrial activities play a significant role in the economy of the region. There are gold mines situated in Bulyankulu- Kahama and diamond mine situated at Mwadui. With massive investment in gold mining it was feasible to see the economy of Shinyanga changing drastically; however, the sector is yet to contribute significantly towards that end. Industrial activities mostly include cotton ginning, cotton seed oil extraction, milling and small scale industries.

2.1 REGIONAL GDP AND PER CAPITA

Shinyanga region's GDP trend is highlighted in table 2.1. In monetary terms the region had a GDP at current prices of Tshs.667, 311 million in 2003 while in 2004 it recorded GDP at current prices of Tshs. 692,529 million, a positive change of 3.7 per cent. The region contribution to country GDP averaged at between 6.8 percent and 6.1 percent over the period. With income per capital of Tsh 233,116 Shinyanga region ranked 17th in terms of per capita income among Tanzania Mainland regions in 2004 (see Table 2.2)

Table 2.1 Allocated GDP and per capita GDP of Shinyanga region at current prices between 1997 and 2004

Year	Regional GDP at current	P at Per capita GDP at	
	prices in mil. T.shs	current Price	Prices
1997	335,306	148,404	7.88
1998	369,846	169,692	7.22
1999	430,383	191,559	7.20
2000	520,504	210,306	7.76
2001	589,032	230,873	7.73
2002	677,560	241,504	7.79
2003	667,311	232,364	6.80
2004	692,529	233,116	6.14

Source: National Accounts of Tanzania, National Bureau of Statistics January, 2006.

Table 2.2: Per capita income for Tanzania Mainland regions, 2004

Region	Per capita Income	Rank
	(Tshs)	
Shinyanga	233,116	17
Dodoma	200,006	21
Arusha	355,952	5
Kilimanjaro	375,873	3
Tanga	355,712	6
Morogoro	337,032	8
Pwani	253,607	15
Dar es Salaam	634,978	1
Lindi	294,104	13
Mtwara	260,840	14
Ruvuma	372,028	4
Iringa	394,449	2
Mbeya	354,023	7
Singida	208,812	19
Tabora	243,886	16
Rukwa	321,927	10
Kigoma	206,359	20

Kagera	226,773	18
Mwanza	309,577	12
Mara	329,655	9
Manyara	313,894	11
Tanzania-Mainland	320,044	

Source: National Accounts of Tanzania Mainland, January, 2006

2.2 PRODUCTIVE SECTORS

2.2.1 Agriculture development

2.2.1.1. Introduction

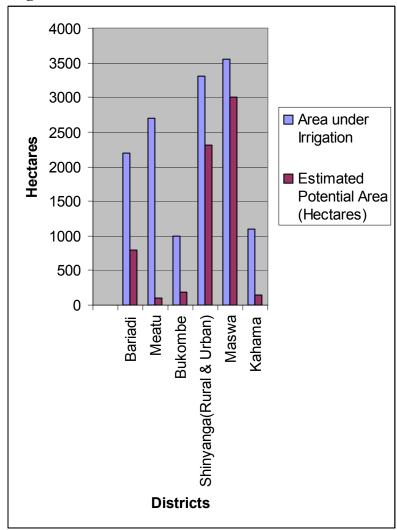
Agriculture is the leading sector in Tanzania's economy since it provides about 80 percent of employment, 50 percent of the nation's income and 66 percent of all foreign exchange earnings (Medium Term Plan for Growth and Poverty Reduction 2004/05 – 2006/07 Vol. I.) Agriculture remains by far the sector with the largest share of Gross Domestic Product (GDP). Its share averages approximately 50 percent since 1990. The county's agricultural growth attained in 2004 and 2005 was 5.8 percent and 5.2 percent respectively (Economic Survey, June 2006 Dar es Salaam Tanzania). Agriculture therefore deserves prominent in the economic growth and reduction of poverty.

Shinyanga Region occupies an area of about 5,078,100 hectares of land where 46 percent of the total area is potential for agriculture production. It is estimated that on average each household has access to about 3.2 hectares of land. Despite of semi-arid condition, agriculture has continued to dominate the livelihood and economic performance of region. Great majority of the total population in Shinyanga is still engaged in subsistence agriculture as the main economic activity. According to National Sample Census of Agriculture 2002/2003, Shinyanga has the largest area of land under cultivation (over 1,250,000 ha) and has the highest land utilization per household (over 2.6 hectares of annual crops). Practically no permanent crops are grown and it has the largest area of pasture to supports the high population of cattle in the region. For several years, the agricultural sector in the region has been facing some major problems; among them those of low fertilizer use and lack of irrigation facilities which contributed to the low yields for this region. There also problems of lack of extension services, unreliable market outlets and a poor transport network in the rural areas. Other problems includes limited access to credit facilities for agricultural inputs particularly cotton pesticides, low prices offered to farmers by private buyers as well as failure by the major Cooperative union, namely Shinyanga Region Cooperative Union (SHIRECU) to buy cotton from farmers and pay them on time. Crop farming in the region is almost entirely carried out by the peasantry. In 2005 the region had only 8,901 hectares under irrigation while 18,160 hectares of land were identified as a potential area for irrigation. The table 2.3 depicts the area under irrigation as well as estimated potential area for irrigation by districts in the region in 2005.

Table 2.3 Irrigation Prospects by Districts in Shinyanga Region, 2006

District	Area under	Estimated
	Irrigation	Potential Area
	(Hectares)	(Hectares)
Bariadi	2,200	800
Meatu	2,700	100
Bukombe	1,000	191
Shinyanga(Rural	3,310	2,310
& Urban)		
Maswa	3,550	3,010
Kahama	1,100	140
Region	18,160	8,901

Fig 3: Area under (hectares) irrigation as compared to estimated potential area in irrigation



2.2.1.2 Food Crops

Shinyanga region has land area of 50,781 sq km (6,439,300 ha) about 2,193,500 hectares are suitable for agriculture and 950,000 ha for grazing. The area currently under agriculture is 1,484,568 ha or 50 percent of the total area suitable for agriculture. The food crops grown in the region includes maize, sorghum, paddy, cassava, sweet potatoes, pulses and groundnuts. With good rains the region produces surplus maize and paddy which are sold to other regions.

Agricultural production is adversely affected by various factors which includes unpredictable and unequal distribution of rainfall, low soil fertility due to wind and water erosion, non-adherence to proper crop husbandry practices, dependency on rain fed agriculture, lack of access to credits by many farmers, use of low yielding local seed varieties and low use of farmyard manure and industrial fertilizers.

Food shortages occur during years of prolonged drought periods which lead to poor harvests. Other causes of food shortage include lack of storage structures at household level and low use of pesticides. Some farmers are forced to sell food stocks for fear of losing their reserves to storage pesticides.

Table 2.4 Estimated Average (Hectares) Area under Major Food Crops Production by

district, Shinyanga region, and 1996/97- 2006/07

uistrict, Siii	district, Sinnyanga region, and 1990/97- 2000/07												
Crop	Maswa	Meatu	Bariadi	Kahama	Bukombe	Shinyanga/	Regional						
						Kishapu	Average						
Maize	30,573	27,047	49,139	71,357	62,009	54,581	294,706						
	ŕ		ŕ										
Sorghum	24,927	26,631	8,617	4,380	820	21,791	87,166						
Paddy	15,262	2,514	14,134	29,083	18,464	17,454	96,911						
Sweet /P	13,850	9,203	10,440	15,920	24,116	29,665							
		Í	ĺ		Ź	Í	103,194						
Cassava	3,226	76	893	17,319	22,461	5,006	48,981						
Pulses	5,741	4,404	2,917	10,273	20,527	5,743	49,605						
Groundnuts	8,030	1,566	2,246	17,801	28,160	10,581	68,384						
Total	101,609	71,411	88,386	166,133	176,557	144,821	748,947						
	·												

Table 2.5 Estimated Average Production of Major Food (Tons) by district, Shinyanga region, and 1996/97-2005/06.

Crop	Maswa	Meatu	Bariadi	Kahama	Bukomb	Shinyanga	Regional	Perc
_					e	/Kishapu	Average	ent
Maize	13,229	16,668	51,264	55,115	69,731	29,099	235,106	24
Sorghu	16,157	15,403	8,107	3,077	1,012	17,859	61,615	6
m								
Paddy	23,979	4,379	9,407	77,459	27,046	27,280	169,550	17
Sweet	41,634	18,598	19,316	35,668	64,461	79,452	259,129	26
Potato								
Cassava	6,161	247	1,162	34,688	67,104	13,184	122,546	13
Pulses	3,167	1,804	1,617	5,151	27,770	6,671	46,180	5
Groundn	3,526	4,794	5,265	16,133	43,108	7,228	80,054	8
uts								
Total	107,853	61,893	96,136	227,291	300,232	180,773	974,180	100

Source: Shinyanga Regional Commissioner's Office, 2006.

2.2.1.3 Food adequacy:

The majority of the population in Shinyanga region depends largely on grains for their staple food. Grains account for about 70 percent of starch foods available for consumption. Root crops mainly cassava and sweet potatoes take the remaining 30 percent. In the region rice is also sold as cash crop in different proportions.

Food adequacy according to FAO means access to sufficient food (both in terms of quantity and quality) to all people at all times to support an active and healthy life. Undernourishment significantly lowers physical ability, cognitive development and learning achievement, resulting in lower productivity. The local common diet of the people in Shinyanga region is mainly maize, cassava, and Sorghum. As food Maize, cassava and Sweet potatoes accounts for about 76 percent and rice about 17 percent of all sources of available starch food in the region while sorghum contributed 6 percent. Along with starch food the region produce groundnuts and beans which are mostly produced in Bukombe and Kahama districts.

Table 2.5 shows that Shinyanga region produced annually an average of 974,180 tons of starch food during the ten years period 1996/97 to 2004/05. Bukombe district was ranking first with 31 percent, followed by Kahama district 23 percent; Shinyanga district including Kishapu was third with 18.5 percent while Maswa had an average of 11 percent. Bariadi and Meatu were least with 10 and 6 percent respectively.

2.2.1.4 Cash Crops

In terms of cash crops, Shinyanga is the most important region for cotton production. Cotton is the major cash crop in the region supplemented by far by tobacco. Out of 337,059 hectares of the total planted area for cotton in the country, the region had an area of about 200,000 hectares equivalent to 59.2 percent. Cotton is mostly grown in Bariadi followed by Maswa and Meatu. In spite of enthusiasm to grow cotton, farmers face a problem of easy access to credit for the purchase of inputs such as pest sides and poor mechanization. On the other hand, poor prices offered by private buyers as well as in ability of Cooperative Union to support farmers have

augmented the problem. The tables below depict the area utilized in crop production as well as estimated tons produced. Table 2.6 presents the area under cash crop cultivation by crop and by district for the ten year period from 1996/97 to 2004/05. The region over the period managed to put under cash crops a total of 283,040 hectares cumulatively. On average the region had 47,170 hectares under cash crops each year. Maswa district had the largest area under cash crops, which averaged 35,100 hectares annually dominated by cotton. Shinyanga Rural district including Kishapu ranked second with 29,474 hectares annually. Bariadi district ranked third with 26,930 hectares. Table 2.7 depicts the volume of cotton and tobacco produced in terms of tons. Bariadi district had the largest production of cotton followed by Maswa, Meatu and Shinyanga. Accurate data for the area and volume of Tobacco produced could not ascertain, however, 542 hectares were grown in Bukombe while 2861 tons were produced in Kahama and 407 tons in Bukombe.

Table 2.6 Estimated Average Area (hectares) under cash crops Production by District, Shinyanga Region 1996/97-2004/05.

Crop	Maswa	Shinyanga/	Bariadi	Bukombe	Kahama	Meatu	Shinyan	Regiona
		Kishapu					ga	1
							(Urban)	Average
Cotton	35,100	29,474	26,930	18,962	NA			
Tobacco	-	-	-	542	NA			
Total	35,100	29,474	26,930	19,504				

Source: Shinyanga Regional Commissioner's Office, 2006.

Table 2.7 Estimated Average Production of Major Cash Crops (Tons) by District, Shinvanga Region 1996/97-2005/06.

Crop	Maswa	Shinyanga/ Kishapu	Bariadi	Bukombe	Kahama	Meatu	Shinyanga (Urban)	Regional Average
Cotton	20,949	17,625	31,597	12,541	9,813	17,687	595	15,829.57
Tobacco	-	-	-	407	2,861	-	-	1,634
Total	20,949	17,625	31,597	12,948	12,674	17,687	595	16,296.4

Source: Shinyanga Regional Commissioner's Office, 2006.

2.2.2 Livestock Development

2.2.2.1 Introduction

Livestock provide the people with high quality protein products such as meat, milk and eggs. Animal protein is widely supplied and consumed in Shinyanga region. In all the region's districts some livestock including cattle, sheep, goats and chickens are kept.

2.2 2.2 Livestock population

Livestock keeping in Shinyanga region is one of the major economic activities. The livestock population is predominantly of indigenous stock. According to Table 2.8 the region in 2005/06 had a total population of 2,671,294 cattle 1,323,946 goats; 540,415 sheep, 14,449 donkeys; 3,658 pigs; and 3,237,163 poultry.

In comparison with other districts, Bariadi is leading in cattle population followed by Meatu, Maswa, Kahama and Kishapu. Shinyanga Rural and Urban districts shared almost the remaining proportion. Comparison on the number of Livestock and area available for grazing by district shows that Kahama, Bukombe and Kishapu districts had relatively high densities of livestock. The region's dairy cattle population in 2005/06 was pretty small at about 6,474 or 0.2 percent of the total cattle population. Shinyanga Urban had the highest number at 85.5 percent of the region's dairy herd. Kahama, Maswa, Shinyanga rural and Kishapu districts had 5.4, 4.7, 1.9 and 1.7 percent share of the region's dairy cattle population respectively. The remaining districts had less than one percent share. Along with diary cattle the region introduced diary goats in all districts except Bukombe, Kishapu and Meatu. In 2005 the region had a total of 619 diary goats with Maswa district leading with 303 diary goats followed by Kahama, Bariadi, Shinyanga rural and Shinyanga Urban respectively. Table 2.9 depicts the distribution of diary cattle and goats by district, in Shinyanga region 2005/06.

Table 2.8 Estimated Livestock Population by district, Shinyanga region, 2006

Animal	Maswa	Meatu	Bariadi	Kahama	Bukombe	Shinyanga	Shinyanga	Kishapu	Regional
						(Rural)	(Urban)		Total
Cattle	401,714	448,557	559,025	358,453	192,823	300,344	56,244	354,134	2,671,294
Goats	216,815	243,508	213,234	185,840	113,053	118,433	53,997	179,066	1,323,946
Sheep	112,229	40,012	103,468	81,833	38,579	61,746	16,964	85,584	540,415
Donkey	825	4,278	934	2,923	249	3,452	310	1,478	14,449
Pigs	730	228	329	520	1,069	151	413	218	3,658
Poultry	918,411	336,272	528,847	734,729	378,385	188,500	85,241	182,450	3,381,835

Source: Shinyanga Regional Commissioner's Office, 2006.

Table 2.9 Distribution of Diary Cattle and Goats by District, in Shinyanga Region 2006

District	Number of	Number of	Number of Diary	Number of Goats	
	Diary Cattle	Cattle owners	Goats	Owners	
Bariadi	39	8	89	72	
Bukombe	15	6	-	-	
Kahama	348	70	90	81	
Kishapu	112	32	-	-	
Maswa	289	52	303	191	
Meatu	10	1	-	-	
Shinyanga Rural	118	40	99	50	
Shinyanga (Urban)	5,538	184	77	35	
Total	6,469	393	658	429	

2.2.2.3 Grazing land area

The region's area annually used for grazing is estimated at 1,343,199 hectares. Out of the region's 1,672,277 hectares potential for grazing the area annually used for grazing is equivalent to 80.3 percent. Some land area, which is annually under crop production normally, gets used for grazing after crop harvests. Such dual purpose land provides additional grazing area especially during the dry season. Grazing land by district for livestock grazing is shown in Table 2.10. There is no surplus land available for increased livestock keeping in the region. Drought in the region augmented with tsetse fly infestation in Kahama, Meatu and Bariadi districts as well as vast areas demarcated for mining have been the causes for the recent exodus of livestock population from Shinyanga to other regions in the country.

Currently the region is overstocked carrying 2,441,247 Livestock Units (LU's) while when land suitable for agriculture and livestock (3,100,000 Ha) is considered it can barely sustain 1,550,000 LU's in favourable years.

Table 2.10 Grazing land area by district, Shinyanga region, 2005/06

District	Land Fit for	Land used for	% of land fit	Tsetse Fly
	grazing	grazing	for grazing	
			being grazed	
Bariadi	459,170	313,412	68.3	11,400
Bukombe	62,892	62,892	100	2,516
Kahama	361,740	482,320	133.3	115,490
Kishapu	215,460	121,160	56.2	-
Maswa	93,595	75,895	81	-
Meatu	189,000	131,400	69.5	33,000
Shinyanga	238,420	134,120	52.2	-
(Rural)				
Shinyanga	52,000	22,000	42.3	-
(Urban)				
Total	1,672,277	1,343,199	74.9	162,406

Source: Shinyanga Regional Commissioner's Office, 2006.

2.2.2.4 Livestock infrastructure:

Improvement of livestock quality is limited by access to facilities capable of controlling or preventing animal diseases. Delivery of livestock health services depends on facilities such as dips, veterinary health centers and water sources. Many of these facilities are non-functional. For Shinyanga region in 2006, among 163 dips, 147 were not working. Also out of 41 veterinary health centers no a single centre was in working condition for various reasons. The high density of livestock does compound the already big problem of non-functional livestock health facilities needed for the control especially of tick borne diseases.

Table 2.11 shows the livestock economic infrastructure by districts in 2005/06.

Table 2.11: Livestock economic infrastructure by district, Shinyanga region, 2005/06

District		Dips		Vet	terinar	y	Crushes	Hides	Slaugh	Abattoir	Livestoc
	centre				/skins	ter	S	k market			
								sheds	slabs		
	W	NW	Total	W	NW	Total					
Bariadi	3	23(5)	31	0	9	9	0	2	3	1	4
Bukombe	1	2(3)	6	0	3	3	0	0	3	0	1
Kahama	2	34(2)	38	0	5	5	0	1	3	1	4
Maswa	2	31(5)	36	0	7	7	0	2	5	1	5
Meatu	0	6(2)	8	0	6	6	2	0	4	1	6
Shinyanga	3	3	6	0	0	0	0	3	5	1	1
(Urban)											
Shinyanga	5	15(9)	26	0	5	5	0	9	1	0	3
(Rural)											
Kishapu	3	(7)	10	0	6	6	0	6	4	0	2
Total	19	114(33)	163	0	41	41	2	23	28	5	26

W= Working, NW =Not working –number in brackets mean in good order but not working.

Source: Shinyanga Regional Commissioner's Office, 2006

2.2.2.5 Livestock Market- Product and Value

As the table 2.12 depicts, the livestock products are one of the region's sources of income. Most of livestock are sold live and transported to various parts of the country for slaughtering. In 2005/06 a total of 223,585 animals valued at Tshs. 19,017,905,050 were sold. The number of cattle sold was 148,885 Goats 54,974 and sheep 19,726. Along with live animals, other livestock products sold includes milk and eggs. In 2005/06 the volume of milk sold was 1,080,482 liters while eggs were 2,867,911. Table 2.12 depicts the marketed livestock by type and district in 2005/06.

Table 2.12 Marketed Livestock by District, in Shinyanga Region 2005/06

	Cattle	•	Goats	<u>,, ~, wg.</u>	Sheep		Total
District	No	Value	No	Value	No	Value	
Bariadi	38,190	3,055,200,00	11,010	220,200,000	4,336	65,040,000	3,340,440,000
Bukomb	7581	1,405,189,500	1260	27,720,000	88	792,000	1,433,701,500
e							
Kahama	29,784	3,538,529,000	3,743	53,051,000	283	3,039,050	3,594,619,050
Kishapu	6519	782,280,000	11,159	178,544,000	2068	26,884,000	987,708,000
Maswa	32,411	3,305,745,000	14,534	221,885,500	3,454	38,04,000	3,565,670,500
Meatu	13,966	2,187,160,000	9,768	175,824,000	8,111	137,887,000	2,500,871,000
Shinyan	14,708	2,065,471,000	3,010	36,669,000	1271	11,479,000	2,113,619,000
ga							
(Rural)							
Shinyan	5726	1,471,938,000	490	6,624,000	115	714,000	1,479,276,000
ga							
(Urban)							
Region	148,88	14,756,312,500	54,974	920,517,500	19,726	245,835,050	19,017,905,050
al	5						

Table 2.13 the number of livestock marketing centers by District 2005/06

District	Primary	Secondary
Bariadi	4	0
Bukombe	1	0
Kahama	4	0
Kishapu	1	1
Maswa	5	0
Meatu	6	0
Shinyanga	3	0
(Rural)		
Shinyanga	1	0
(Urban)		
Total	25	1

Source: Shinyanga Regional Commissioner's Office, 2006

2.2.2.6 Livestock diseases

Livestock diseases in Shinyanga region lead to poor livestock health, reduced milk production and even deaths. The diseases of economic importance in the region are the tick borne diseases namely East Coast Fever (ECF), Anaplasmosis, Babesiosis, black quartor, and Heart Water. Others are Contagious Bovine Pleuropneumonia (CBPP) and Trypanosomiasis in those areas infested with tsetse fly. As far as poultry is concerned, the major livestock diseases include; new castle, F.Pox, F.typhod, Coccidiosis and F. cholera.

The table below (table 2.14) shows the position of livestock sub-sector in the region. The region has a total of 202 employees in this sub sector, most of them being Livestock Field Officers.

Table 2.14 Type and total livestock sub-sector personnel by District, in Shinyanga Region, 2006

District	Vet.O	Liv.Of	Liv.Field	Liv.F/Au	Total
	fficers	ficers	Officers	xilliary	
Bariadi	1	1	27	1	30
Bukombe	0	3	14	1	18
Kahama	1	1	34	3	39
Kishapu	0	1	12	0	13
Maswa	1	2	20	0	23
Meatu	1	0	26	1	28
Shinyanga	1	0	26	4	32
(Rural)					
Shinyanga	1	2	15	2	19
(Urban)					
Regional	6	10	174	14	202

2.2.3 Natural Resources

2.2.3.1 Introduction

The natural resources sector comprises of forestry, beekeeping, fisheries and wildlife. The sector contributed significantly to the overall national GDP at 3.8 percent and 4.5 percent in 2004 and 2005 respectively at constant 1992 prices (Economic Survey, 2006).

2.2.3.2 Forestry:

Environmentally the forestry sub sector plays an important role in maintaining ecological balance, soil protection from erosion and the conservation of water and wildlife. Forests are a source of domestic energy and industrial raw materials. Forests also provide useful non-wood products mainly honey and beeswax. Failure to maintain or improve forest resources eventually leads to problems of unsustainable livelihood. Shinyanga region covers an area of 5,078,100 hectares of which 704,200 hectares or 14 percent is covered by natural and planted forest. The Natural resource annual reports indicate that timber production potential has been declining due to uncontrolled harvest in the open forest. Knowing the danger facing the region, government and private sectors have intensified their efforts in a forestation processes. Public awareness of environmental issues and the importance of trees is the key to sustainability of various a forestation programmes. Plantation forests have been and are being established in the region in order to offset deforestation from indiscriminate tree cutting for various reasons including farm expansion, fuel wood utilization and tobacco curing in tobacco growing areas. But extra efforts should be made to plant trees to cater for the fuel needs especially in tobacco growing villages. Between 1997/98 and 2004/05 various institutional agencies and individuals were involved in both raising and planting trees in adversely affected areas. In the period of eight years, Shinyanga region raised a total of 16.9 million tree seedlings at an average of 2.1 million seedlings annually. Meatu, Bariadi, Maswa and Kahama districts were the leading districts in seedlings rising while Shinyanga Urban was at the bottom in the on going exercise of raising tree seedlings.

Table 2.15 shows institutions and individuals in the region who were actively involved in raising tree seedlings during the period from 1997/98 to 2004/05. These were the central government, district councils, schools, NGOs and individuals who together planted a total of 18.5 million seedlings. NGOs and schools contributed 29 percent and 27 percent respectively. Village Government was the least contributors at 2.4 percent.

The government in Shinyanga region continued to collect revenue from taxes on reserved plantation mainly soft wood timber. The region earned about T.Shs 43.3 million over the period of 6 years from 1997/98 to 2002/03; an average of T.shs 7.2 million annually. However, in 2004 the harvesting in forest reserves was closed. The highest annual revenue of Tshs 9,924,350 was collected in 2001/02 and the lowest of Tshs 4,152,250 in 2000/01 Table 2.14 depicts the NGOs involved in environmental conservation activities in the region.

Table 2.15: Tree seedlings rose by institutions and individuals in Shinyanga region, 1997/98 to 2004/05

Institution	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Central	218,000	150,000	204,000	204,000	204,000	204,000	500	460
Government District	345,000	176,000	20,000	20,000	20,000	20,000	4,400	7,000
Council	343,000	170,000	20,000	20,000	20,000	20,000	4,400	7,000
Village. G	45,000	58,000	875,000	875,000	875,000	875,000	-	-
Schools	391,090	601,000	871,896	871,896	871,896	871,896	190,331	257,904
NGO'S	521,739	584,760	486,761	486,761	486,761	486,761	1,307,205	1,036,350
Others	349,280	993,310	973,307	973,307	973,307	973,307	385,269	301,107
Total	1,870,109	2,563,070	3,430,964	3,430,964	3,430,964	3,430,964	1,887,705	1,602,821

Source: Shinyanga Regional Commissioner's Office, 2006

Table 2.16: Shinyanga region's NGOs involved in environmental conservation activities in 1997/98 to 2005/06.

Name of Organization	Objective	Areas of Operation by District
CADET	Tree Planting	Kahama
GREENBERT	Tree Planting	Kahama-Kagongwa
KABUDEA	Tree Planting	Kahama -Bukombe
CARITAS(T)	Tree Planting	Kahama
WORLD VISION (T)	Capacity Building/Tree	All Districts
	Planting	
TASAF	Tree Planting	Bariadi, Maswa, Shinyanga
BIORE	Organic Agriculture	Meatu-Kimali
ICS	Tree Planting	Meatu-Kisesa
UNDP	Tree Planting	Bariadi Prison

Source: Shinyanga Regional Commissioner's Office, 2006

2.2.3.3 Beekeeping

Beekeeping in Shinyanga region is taken as one of the economic activity. Its economic contribution to the region is small compared to other income generating activities. Modern beekeeping is mainly undertaken in Kahama and Maswa districts. According to available estimated data for the period from 1997 to 2005 show that Kahama and Maswa districts accounted for about 47.5 and 27 percent of the region's modern beehives respectively. Refer to Table 2.17, there were about 571 modern beehives. In case of traditional beekeeping, there were 2,057,704 traditional beehives in the region from 1997 to 2005. Traditional beekeeping is mainly undertaken in Bukombe and Kahama districts. These two districts accounted for 52 and 47 percent respectively. However, a beehive census would pinpoint more accurately the number of beehives in the region which are mostly believed to be of traditional design. Table 2.18 depicts the number of traditional beehives in the region by district, Shinyanga region, 1997 to 2005.

Table 2.17: Number of Modern beehives by district, Shinyanga region, 1997 to 2005

					J)	<u> </u>	,	
Institution	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bukombe	-	-	-	-	-	1	23	25	30
Kahama	21	19	19	15	15	35	41	53	53
Maswa	4	13	18	23	23	33	40	-	-
Shinyanga	11	8	7	2	2	18	18	3	-
Total	36	40	44	40	40	87	122	81	83

Source: Shinyanga Regional Commissioner's Office, 2006

Table 2.18: Number of Traditional beehives by district, Shinyanga region, 1997 to 2005

							0 /		
Institution	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bukombe	69,024	169,024	169,624	169,624	169,724	169,724	170,025	-	-
Kahama	74,792	75,023	76,112	76,715	95,317	115,084	131,700	148,316	166,918
Maswa	-	9	33	42	52	114	120	-	-
Shinyanga	854	932	922	760	1,198	1,895	1,604	150	310
Bariadi	119	53	95	188	188	330	330	330	330
Total	144,789	245,041	246,786	247,329	266,479	287,147	303,779	148,796	167,558

Source: Shinyanga Regional Commissioner's Office, 2006

Table 2.19 highlights the value of beekeeping products in Shinyanga region from 1997 to 2005. A total of 432,553 kgs of honey valued at Tsh 419,195,000 were produced while 290,261 kgs of bee wax valued Tshs, 306, 021,000 were produced. The highest volume of honey and bee wax was produced in 2000 which generated revenue of tshs, 108,352,500 and Tshs, 166,293,000 respectively.

Table 2.19: Beekeeping Products and Value in Shinyanga Region from 1997-2005

Year		Honey	Е	Bee Wax
	Kgs	Tshs	Kgs	Tshs
1997	31,708	12,633,000	11,880	11,880,000
1998	73,452	36,726,000	23,550	18,157,500
1999	73,050	36,560,000	14,526	34,700,000
2000	31,535	108,352,500	166,293	166,293,000
2001	26,869	26,869,000	1,981	2,669,000
2002	57,049	57,623,500	2,907	3,135,000
2003	17,690	18,056,000	8,545	8,657,500
2004	89,950	91,125,000	44,954	44,904,000
2005	31,250	31,250,000	15,625	15,625,000
Total	432,553	419,195,000	290,261	306,021,000

2.2.3.4 Fisheries:

Fishing is one of the minor economic activities in the region. However, fish breeding is practiced at two fish breeding stations covering an area of 8 hectares. Over 100,000 fingerlings mainly Tilapia species are produced annually for onward stocking into dam reservoirs and ponds for domestic fish farming. Fresh water fish are obtained from dam reservoirs, rivers and Lake Kitangiri. Nevertheless, fish is comparatively scarce in Shinyanga region compared with other Lake zone regions.

2.2.3.5 Wildlife

The region has two game reserves and one game controlled area. Table 2.20 shows that, the names of the game reserves are Maswa, which borders the Serengeti National Park in Bariadi district, the Makao in Meatu district and the Kigosi in Bukombe district and they cover a total area of 11,210 sqkm. Their location and sizes are shown in table 2.16. A wide variety of wildlife can be found within these game conservation areas such as hippo, lion, zebra, buffalo, wild dog, bushbuck, impala, giraffe and baboon. The fairly large wildlife areas in the region with a diversity of wildlife species already attract a fair number of tourists. However, these wildlife attractions are yet to be developed in terms of tourist accommodation, camping sites for tourist hunting.

For the period 1997 to 2005, the game reserves generated revenue of Tshs. 106,703,665 from tourism hunting and Tshs. 6,141,909 from local hunting. Also in the same period about 1698 poacher were netted by game personnel for illegal hunting in the games. The number of poachers and Government revenue from hunting in the region is depicted in the table 2.21.

Table 2.20: Wildlife conservation areas by district, Shinyanga region, 2005

Name of wildlife	District	Area in sq.kms
conserved area		
Maswa Game Reserve	Bariadi	2,880
Kigosi game Reserve	Bukombe	7,000
Game controlled area		
MakaoWidlife Management	Meatu	1,330
Area		
Grand Total	1	11,210

Table 2.21 Number of poachers and Government Revenue from hunting, Shinyanga region 1997-2006

Year	Number of Poachers	Government Revenue from	Local Hunting
		Tourism Hunting (TShs)	(Tshs)
1997	212	5,920,990	993,000
1998	223	37,005,646	713,600
1999	332	4,248,635	717,500
2000	160	3,890,885	617,709
2001	171	5,014,307	57,250
2002	81	6,104,860	326,350
2003	255	9,503,952	996,500
2004	114	35,041,390	704,400
2005	150	254,055,000	1,015,600
2006	169	267,255,000	1,806,820
Total	1,698	628,040,665	7,948,729

Source: Shinyanga Regional Commissioner's Office, 2006

2.2.3.6 Mineral resources

The mining policy aims at putting in place an enabling environment which could attractive to investors to invest in the mining sector. In mid 1990's the small-scale mining of gold and gemstones used to dominated this important sector, though its contribution to the national economy was not captured owing to the disorganized nature of the operations. The government still encourages small-scale mining activities to enable small miners become entrepreneur and create more employment.

Following the commencement of the large scale mining in the Lake regions the importance of the sector has changed significantly. Tanzania Investment Report of 2004 shows that, since 1999 the mining sector has become the dominant sector in Foreign Direct Investment (FDI) flows into Tanzania. Investment in the Mining sector is substantial, accounting to 34 percent of total FDI stock in 1999 and 28 percent in 2001. The surge of investment in mining sector reflects the general Government policy of attracting investment into the sector. The sector's contribution to overall national GDP (at constant 1992 prices) continued to grow from 1.5 percent in 1996 to 3.5 percent in 2005. Minerals worth USD 711.3 million was exported in 2005 compared to USD 178.2 exported in 2000. (Economic Survey 2005, Dar es Salaam June 2006).

Shinyanga region play a significant role in mineral production in the country. However, the sector has yet to contribute significantly to the region's economy. The region attracted a large flow of Foreign Direct Investment, mainly in the mining of gold and diamonds. Gold is mined in Bulyankulu, and Nyakafuru in Kahama and Bukombe districts. Diamond deposits are concentrated around Mwadui area. There also artisan miners who mine gold mainly in Itilima, Samuye, Mwakitolyo. Table 2.22 highlights mineral production in the region.

Mineral deposits are also found in the other districts in the region, they are as shown in table 2.23, but little is known about the actual potential of the minerals in these sites. Small-scale

mining has continued to experience problems such as poor technology, lack of consultancy services and lack of capital. These negative production factors have adversely affected the sector's contribution to the region's economy. However in the year 2006, total collection in Shinyanga region amounted to Tshs 4,502,021,384.46 excluding royalty paid to Kahama Mining Company Limited (KMCL).

Table 2.22: Mineral production in Shinyanga region, 2005

MINERAL	SMALL SCALE	MINERS	LARGE SCALE MINERS		
	Weight of	Value of	Weight of	Value of	
	Minerals	Minerals Tshs.	Minerals	Minerals(USD)	
Gold	1,028.5 gms	12,342,000	4,299,841 Kgs	42,196,661.91	
Diamond	11,516.94 cts	1,620,733,020	207,493.99cts	27,876,338.85	

Source: Shinyanga Regional Commissioner's Office, 2006

Table 2.23 Distribution of Existing Mineral Deposit by Sites, Type and District, Shinyanga Region 2005

Region 2005				
Site/Village	Type of Mineral	District		
Maganzo	Diamond	Kishapu		
Itlima	Gold	Kishapu		
Mwakitolyo	Gold	Shinyanga		
Mwanubi-Kolandoto	Gold/Diamond	Shinyanga		
Nyangwale	Diamond	Kahama		
Mwime	Gold	Kahama		
Kerezia	Gold	Bukombe		
Nyakafuru	Gold	Bukombe		
Bukandwe	Gold	Bukombe		

Source: Shinyanga Regional Commissioner's Office, 2006

NB. There is a recent Diamond mining site called El-Hilal minerals (in Kishapu District). It is located near Williamson Diamond Mine (Mwadui area) occupying 135 sq. km North and West of the small town Maganzo which produced about 23,434 carats of diamond worth USD 4,454,167 and paid a royalty of USD 222,708 up to December 2006. This diamond site has about 150 employees

2.2.3.7 Industrial Development

Industrial base of Shinyanga region is still small compared with other regions like Dar es Salam, Mwanza, Arusha and Mbeya. With much investment in mining and manufacturing sectors, the level of industrial development has been improving drastically. Large scale industries include Williamson Diamond Ltd, Kahama Mining Ltd, CASPIAN Construction Ltd and El Hilal Minerals Ltd. However, lack of significant contribution from mining sector has left industrial development in the region with little contribution to the region's economy. Along with mining companies, there large scale, medium and small-scale industrial establishments scattered in the

region. The large scale and medium size industries are mostly oil mills and ginneries while small scale industries are dominated by flour milling, tailoring, carpentry and food processing industries. Contributing factor to the low level of industrial development in the region include infrastructure problems such as inadequate electricity supply, lack of adequate water supply, and poor roads conditions. Table 2.24 shows the number of medium scale industries by type and number while table 2.25 shows large scale industries by type, 2006. Table 2.26 combines small, medium and large scale industries.

The region has more than 1000 small scale industries in the region. More than 50 percent of all small scale works are flour milling machines followed by tailoring works. Other small scale works are carpentry, food processing, welding, garages and printing works (in descending order).

Table 2.24 Medium scale industries in the region by type 2006

Type	Name			
Ginneries	Highway,Sola,Bibiti(in			
	Meatu),Mhunze			
Oilmills	SHOIL(SHIRECU),Brown Eagle			
	Ltd,FRESHO,Uzogore,Soud			
Wood works	MADECO(Bariadi),Mafundi			
	seremala(Bariadi)			
Cotton ginning & Oil mills	Chapa kazi Group(Maswa),Karim			
	Katanda(Maswa),Maswa fine wood			
	works, Maswa furniture & Timber			
Mechanical &Electrical	Bariadi general Workshop			
Carpentry	Mwadui carpentry workshop			

Source: Shinyanga Regional Commissioner's Office, 2006

Table 2.25 Large Scale Industries in the Region by Type 2006

Table 2.23 Large Scale Industries in th	c Region by Type 2000
Type	NAME
Mineral	Williamson Diamond Ltd
Mineral	Kahama Mining Ltd
Mineral	CASPIAN Construction Ltd
Mineral	El Hilal Minerals Ltd
Cotton Ginning & Oil Mill	GAKI investment
Cotton Ginning & Oil Mill	Jambo Oil Mills
Cotton Ginning & Oil Mill	Kahama Ginnery
Cotton Ginning & Oil Mill	KACU Ltd
Cotton Ginning & Oil Mill	Alliance Ginnery
Cotton Ginning & Oil Mill	Afrisian Ginnery

Source: Shinyanga Regional Commissioner's Office, 2006

NB: Many ginneries (own by SHIRECU) have been closed by not working for more than ten years. However SHIRECU is under way to revamp them.

Table 2.26 Industries established in Shinyanga by District and size 2006

District	Small scale	Medium scale	Large scale
	industries	industries	industries
Bariadi	203	1	1
Bukombe	174	2	0
Kahama	135	3	3
Kishapu	*	*	*
Maswa	162	7	0
Meatu	88	1	0
Shinyanga (Rural)	99	1	3
Shinyanga (Urban)	337	12	3
Total	1,198	27	10

Source: Shinyanga Regional Commissioner's Office, 2006

NB: The size of the industry (in this context) depends on the number of employees in that particular industry.

- o A small scale industry has 1 to 9 employees
- o A medium scale industry has 10 to 49 employees
- o A large scale industry has 50 or more employees.

^{*-}Included in Shinyanga Rural

SECTION THREE

3.0 ECONOMIC INFRASTRUCTURE

3.1 Transport Sector

3.1.1 **Introduction:**

Transport sector has an effective role in contributing to social and economic development of Tanzania. The sector performance has continued to grow due to both government efforts and private sector investment in road rehabilitation, expansion of telecommunications services, modernization of port services, and improvement in marine, railway and air transport services. Along with Mwanza, Mara and Kagera, Shinyanga is a region, which is located in the Lake Zone area of Tanzania Mainland. The Lake zone is very important in terms of mining, farming, fishing and livestock keeping. To sustain these economic activities in the zone, efficient transport system is paramount.

Being in the centre in the Lake Zone, Shinyanga plays a role in the transit of goods and people from the Lake Zone to other parts of the country and neighbouring countries through road and railway networks. Isaka Port in Shinyanga is also used as a dry port for the goods designated for Rwanda and Democratic Republic of Congo.

3.1.2 The road Sector

In 2006 Shinyanga region had a total of 4,953 kms of trunk, regional, district and feeder roads network. Shinyanga districts (Urban and Rural) had about 20.8 percent of the entire network followed by Kahama district 14.7, Maswa district 14.4 percent, Meatu district 13.5, Bukombe 13.5 percent, Bariadi 12.1 percent and Kishapu was a least with 10.9 percent. In terms of classification the majority of the network was district roads at 45.1 percent, feeder roads at 23.3 percent, Regional roads at 24.6 percent and trunk roads made up only 7.0 percent of the total road network. The length of network and grade by district is depicted in table 3.1.

Table 3.1: Length of the road network by class and by district, Shinyanga region, 2006

District		Road class in kilometers			% share	
	Trunk	Regional	District	Feeder	Total	of regional total
Bukombe	108	81	352	128	669	13.5
Kahama	107	154	405	63	729	14.7
Shinyanga	92	165	458	315	1030	20.8
Kishapu	42	221	185	93	541	10.9
Maswa	0	209	192	314	715	14.4
Meatu	0	144	367	159	670	13.5

Bariadi	0	246	273	80	599	12.1
Total	349	1220	2,232	1,152	4,953	100
% share of	7.1	22.6	45.1	23.2	100	
regional						
total						

Source: Shinyanga Regional Commissioner's Office, 2006

3.1.2.1 Type of road network surface:

The road network of Shinyanga region by road surface gave tarmac roads 7.0 percent of the total network or 349 kms of 4,953 kms in 2006, compared with 3.6 percent or 202 kms of total network of 5,669.5 in 1996. Gravel roads accounted for 45.6 percent or 2,261 kms compared with 10.8 percent or 615.2kms in 1996. The balance of the road network in 2006 was given over to earth surface at 47.4 percent of the total network or 2,343 kms of road networks compared with 85.6 percent or 4,852.3 kms in 1996.

Table 3.3: Length of the road network by the type of surface and by district, Shinyanga region, 2006:

District				
	Tarmac	Gravel	Earth	Total
Bukombe	108	281	280	669
Kahama	107	274	348	729
Shinyanga	92	369	569	1030
Kishapu	42	301	198	541
Maswa	0	339	376	715
Meatu	0	354	316	670
Bariadi	0	343	256	599
Total	349	2,261	2,343	4,953

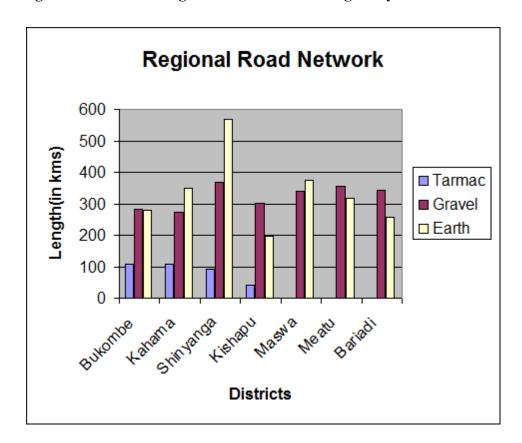


Fig 4: Classification of grades of roads in the region by 2006

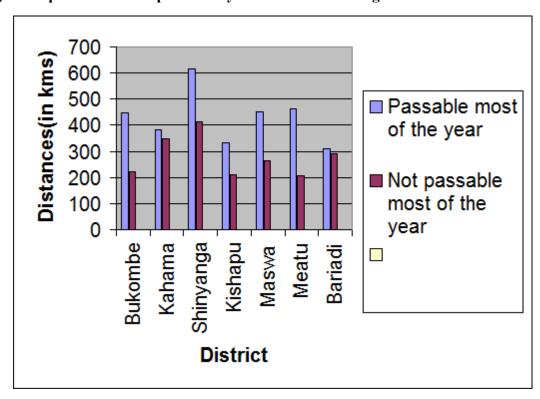
3.1.2.2 Road pass- ability the year round:

The type of road surface to a large extent determined the durability of the surface under pressure from traffic and hence its pass-ability throughout the year. Earth surfaces tend to last the shortest duration after grading. They soon get corrugated or even rutted, rendering them difficult for traffic to negotiate and even totally impassable. The absence of bridges and culverts also renders roads unusable during the rain season because of flood water. Where significant river water flows are permanent no traffic can cross except by bridge or by culvert. According to Table 3.4 a total of 2,999kms of roads or 61 percent of Shinyanga's network was passable the year round and 39 percent of the network is not passable for most of the year especially during the rain period.

Table 3.4 Pass-ability of the road network by district, Shinyanga region, 2006.

District	Passable most of the year	Not passable most of the year	Total network	% of network passable throughout the year		
Bukombe	449	220	669	67		
Kahama	381	348	729	52		
Shinyanga	615	415	1030	60		
Kishapu	331	210	541	61		
Maswa	451	264	715	63		
Meatu	464	206	670	69		
Bariadi	308	291	599	51		
Total	2,999	1,954	4,953	61		
% share of regional total	61	39	100			

Fig 5: Proportion of road pass-ability in districts in the region



3.1.2. 4 Potential Improvement of Road network

The economy of Shinyanga mainly agriculture, livestock keeping and mining depend much on the improvement of road networks. Improvement made to trunk, regional district and feeder roads would go a long way towards opening up of agriculture potential areas in the region, and relieve the region of heavy dependence on the central Railway Line Mwanza-Shinyanga-Tabora -Dar es Salaam for the export of food and cash crops as well as live animals. The major connections and road networks that link Shinyanga with other regions are either of gravel or earth (see table 3.5). This state of the road surface becomes an impediment to the economic development of the region since are not easily passable particularly in the rain season. It is therefore observed that improvement of the following roads is crucial for the economic development of the region.

(i) Shinyanga – Mwanhunzi – Arusha Road

A short cut between Shinyanga and Arusha via Mwanhunzi would be of a great importance for the region, because firstly, Shinyanga would then have a direct trunk connection with Tanga and Mombasa and an alternative connection with Dar es Salaam. Secondly, the proposed road to Arusha would open up isolated areas in Meatu district, around Lake Eyasi and some parts of Kishapu District.

(ii) Mwanza - Shinyanga - Dodoma Road

Mwanza – Shinyanga – Dodoma road is currently under construction to the level of bitumen. The road bisect the region into halves hence its improvement would stimulate crop production in the region and provide an alternative route connection with Dar es Salaam thereby reducing the region's dependence on the Central railway Line.

(iii) Internal Roads Rehabilitation.

All important earth roads which take a big share of all road networks in Shinyanga region need to be upgraded to gravel. They also need to be improved by constructing drains and culverts. It is imperative for the region to initiate a study that would enable it to draw up a transport and network plan in order to evaluate the economic potentiality and feasibility of improvements of the road network.

Table 3.5 Major Connections and Road links Shinyanga region, 2006

Road Links	Type of Road Surface
Bubiki-Ilula	Bitumen
Malampaka –Ngudu	Gravel
Kasoli –Magu	Earth
Ushirombo – Geita	Earth
Bariadi – Ramadi	Gravel
Uyovu- Nyakanazi	Bitumen
Uyovu – Bwanga	Gravel

Tinde –Nzega	Bitumen
Kogonwa –Itobo- Nzega	Gravel
Kanawa _Kalitu Igunga	Gravel
Chambo- Ishishinulwa	Earth
Bukindi- Chemchem-	Earth
Ibaga	
Makao – Enduleni	Earth
Bukundi- Mitala –	Earth
Mangora – Karatu	

Source: Regional Commissioner's Office, Shinyanga, 2006

3.2 Railway

The Mwanza –Shinyanga –Tabora -Dar es Salaam Railway Line is not only the most important mode of transport within the region but also connects Shinyanga region with other seven regions namely Mwanza, Tabora, Singida, Dodoma, Morogoro, Coast, and Dar es Salaam. The station along the Mwanza –Shinyanga –Tabora -Dar es Salaam Railway Line in Shinyanga region by name and district are as follows: Isaka in Kahama district; Luhumbo, Mascat, Shinyanga and Songwa in Shinyanga district; and Malampaka in Maswa district.

3.3 Air Services

Air transport facilities available in the region include one airport for Shinyanga and 6 air strips in Bariadi district, 5 air strips in Meatu, 2 air strips in Kahama, and 1 air strip in Bukombe and Maswa district respectively. There are no facilities in Kishapu district. Eight (8) of the air strips in the region are owned by TANAPA while Tanzania Airport Authority (TAA) owns two air strips. Kahama Mining Company Limited (KMCL), Government and Alliance Ginneries Ltd own one air strip each. The airstrips owned by TANAPA are used by TANAPA personnel for game reserves surveillance while the Bulyanhulu airstrip is used to transport the mines, personnel and small quantities of high valued goods to Dar es Salaam. There are no regular flights between the airfields and other places in the country and even the only available airport in the region is not used in its maximum capacity. The situation compels passengers to and from the region to travel by road to and from Mwanza International Airport situated about 165 kms from Shinyanga town. Shinyanga region stands to benefit greatly from improvement of the airstrips and regular flights between the region and other parts of the country. The number of the Airstrips by district and owner is depicted in the table 3.6.

Table 3.6: Number of Airstrips by District and Owner in Shinyanga Region 2005

AIRSTRIP	DISTRIČT	OWNER
Maswa	Maswa	TAA
Kahama	Kahama	TAA
Kigosi	Bukombe	AICT
Bariadi	Bariadi	Alliance Ginneries LtD
Alliance	Bariadi	SDA
Bupandagila	Bariadi	TANAPA
Duma	Bariadi	TANAPA

Mwamalehe	Bariadi	TANAPA
Handajiga	Bariadi	TANAPA
Mbono	Meatu	TANAPA
Buturi	Meatu	TANAPA
Mwagwina	Meatu	Government
Kimali	Meatu	TANAPA
Makao	Meatu	TANAPA
Bulyanhulu	Kahama	KMCL

Source: Regional Commissioner's Office, Shinyanga, 2006

3.4 Telecommunication Services

3.4.1 Telephones

In Shinyanga Region, the existing communications network consists of telephone lines, Cellular telephone services, telex lines, telefax lines, several Posts and Sub-Posts offices. The capacity available for telephone lines by TTCL is 5,738 lines but so far connected lines are 2,844 or 49.6 percent. The Cellular telephone services in the region are provided by the Vodacom, Celtel, and Tigo and Zantel companies. The number of cellular phone companies providing services by district is shown in table 3.7 while number of telephone owned by TTCL by district is shown in the table 3.8 There big potential for the expansion of telephone services in the region due to the increased use of mobile phone services.

Table 3.7 Number of Cellular phone Companies Providing Services by District 2006

VODACOM	CELTEL	TIGO	ZANTEL
Shinyanga	Shinyanga	Shinyanga	Shinyanga
Kahama	Kahama	Kahama	
Bariadi	Bariadi	Bariadi	
Maswa	Maswa	Maswa	
Bukombe	Bukombe		
	Meatu	Meatu	
	Kishapu	Kishapu	

Source: Shinyanga Regional Commissioner's Office, 2006

Table 3.8 Number of Telephone (TTCL) by District 2005

District and	Capacity	Connected	unutilized	% of utilization
Exchange Name		Lines	capacity	
Shinyanga	2,048	1377	671	67.2
Kahama Box 1000	1,000	660	340	66
Bariadi GX 1000	1,000	310	690	31
Maswa DTS 1100A	1,072	260	812	25.2
MME (Malampaka)	100	11	89	11
Meatu DTS 1100A	512	226	286	44.1
Total	5,738	2,844	2,888	49.6

3.4.2 Postal services (2006)

There were nine (9) full departmental post offices, five (5) sub-postal office and four (4) franchised post offices. The major services provided includes, Expeditor Mail Services (EMS) for letters, parcels and vital items which require quick delivery, money order services and mail delivery services. The number of postal stations (Full Departmental Post Office –FDPO), franchised postal offices (FPO) and sub-postal offices (SPO) by district are shown in table 3.9.

Table 3.9 Number of Postal Stations by Type and by District 2006

District	Name of Postal Office	Class
Shinyanga	1.0 Shinyanga	FDPO
	2.0 Bunungu	FDPO
	1.0 Kolandoto	FPO
	1.0 Tinde	SPO
Bariadi	1.0 Bariadi	FDPO
Maswa	1.0 Maswa	FDPO
	1.0Malampaka	FPO
	2.0 Lalago	FPO
Kahama	1.0 Kahama	FDPO
	2.0 Isaka	FDPO
	1.0 Usule	SPO
	2.0 Ibojaukune	SPO
Meatu	1.0 Mwanhuzi	FDPO
Kishapu	1.0 Mwadui	FDPO
	1.0 Kishapu	SPO
	2.0 Songwa	SPO
Bukombe	1.0 Ushirombo	FDPO
	1.0 Masumbwe	FPO

Source: Shinyanga Regional Commissioner's Office, 2006

3.4 Energy Sector Development

3.4.3 Introduction

Source of energy utilized in Shinyanga region for both industrial and domestic use emanate from various sources such as hydro and thermal electricity, firewood, diesel, petrol and kerosene. Almost the entire population residing in the rural areas depends on firewood/charcoal as their main source of power. In 2005, the demand for fuel wood for the whole region was estimated at 5 million m³ whereas the actual supply of firewood was estimated at 700,000 m³ equivalent to 14 percent of the total demand. The great demand for firewood has led to widespread felling of trees. The massive felling of trees in turn has led to decrease in soil fertility which has seriously affected productivity of agricultural crops in various parts of the region.

3.4.4 Electricity

TANESCO is the principal supplier of electricity in the region as it is in all Mainland regions. For the year 2005 some 63,681 customers' were covered with electricity supplies. The customers needed a supply of 14,168,042KWh monthly. Such coverage did not include generator/solar electricity provided by the private sector for private use.

For the region as a whole, supply of electricity is insufficient and is much confined to urban centres. The electricity used in the region comes from the National grid system. Bukombe district headquarter is not yet to be connected to the National grid system. Of the 5,881 customers in Shinyanga Municipal were covered with TANESCO produced electricity. Thus urban households were covered to the extent of 13 villages. Kahama 2,232 customers in 5 villages while Kahama Mining CoLtd alone consumes over 10 Megawatts of electricity monthly. The 2002 population Census revealed that only small percentage of households dwelling in the rural areas were supplied with electricity. Table 3.10 depicts the distribution of the electricity in the region in 2005.

Table 3.10 Distribution of the Electricity by Districts, Shinyanga Region 2005

District Name	Number of	Kwh Demand	Number of Village
	Customers	Monthly	covered
Shinyanga Municipal	5,881	3,716,737	13
Kahama	2,2232	528,048	5
Kahama Mining Co ltd	01	9,458,400	1
Maswa	1,015	230,851	5
Bariadi	964	149,559	5
Meatu	588	84,447	5

Source: Shinyanga Regional Commissioner's Office, 2006

3.5.3 Fuel wood

The dominant source of energy used for domestic consumption is fuel wood. The main use for fuel wood has been cooking and heating. Even where electricity is available to a household it is rarely used for anything else except lighting and entertainment. For urban areas, fuel wood normally takes the form of charcoal while in rural areas firewood is preferred. Firewood is not cheap and women spend a lot of time in search of fire wood and in more seriously hit areas such as Kishapu and Negezi Divisions in Shinyanga rural district a good part of Maswa district people are resorting to cow dung and agricultural straws as an alternative source of energy for domestic use. Given an average consumption per head of 2 cubic meters of round wood per year, for the year 2005 it represented 2½ million cubic meters. Alternatives to fuel wood had better be found soon if the Shinyanga forests are to be saved from depletion.

3.4.5 Fossil fuels

In this age of dependency on petroleum products, Shinyanga shares with the rest of the Mainland in consuming large quantities of kerosene for lighting both in towns and

villages. Diesel oil and petrol continue to be used in order to run the regional economy particularly the industrial, commercial, transport and service sectors.

SECTION FOUR

4.0 SOCIAL SERVICES

4.1 Introduction

Social services involve education, water supply and sanitation facilities, and health. The analysis focusing on Education sector offers a serious debate on primary schools, enrolment rates and the problems facing primary schools as well as discussions on Secondary education and teachers. In items of health sector, the aspects covered include morbidity, mortality and health facilities. The profile also discusses issues relating to rural and urban water supplies as well as sanitation issues.

4.1.1 Distribution of Pre - Schools in the Region

The region has no official registered day care centres, instead there were pre- schools owned by the public and private sectors. The Pre- schools were first introduced in the region in 2001 in the Shinyanga urban district. However, in 2006, Kahama district was leading with 114 pre- schools. Table 4.1 shows that the number of pre schools increased from 30 in 2001 to 616 in 2006. Table 4.2 indicates that number of pupils in pre- schools also increased from 1,868 in 2001 to 26,208 in 2005 with Meatu district leading with enrolment of 10,437 pupils. Bukombe district ranked second with 5,198 pupils, followed by Kahama district 2,252 pupils while Maswa district came last with only 486 pupils. The finding reveals that the number of private pre-schools and pupils enrolled in those schools were very few. For example out of 606 pre-schools in 2005 only 18 were privately owned. In case of enrolment, only 825 pupils out of 26,208 were in private owned schools, in 2005. Therefore, the region is advised to adopt strategies used by other regions to encourage private sector participation in establishing pre- schools in the region.

Table 4.1 Number of Pre-schools by ownership and by District, 2001-2006

		NUMBER OF PRE- SCHOOLS										
DISTRICT	2001		2002	2002		2003		2004			2006	
	Pub	Priv	Publ	Priv	Publ	Priv	Publ	Priv	Publ	Priv	Public	Private
Bariadi	0	0	0	0	23	0	23	0	79	0	79	0
Bukombe	0	0	0	0	0	0	0	0	85	1	72	1
Kahama	0	0	0	0	20	4	20	4	110	4	110	4
Kishapu	*	*	*	*	*	*	*	*	*	*	64	2
Maswa	0	0	0	0	3	0	3	0	105	3	106	3
Meatu	0	0	0	0	1	0	1	0	56	0	56	0
Shinyanga (Rural)	0	0	0	0	68	5	68	5	110	4	65	2
(IXuiai)												

Shinyanga	27	3	27	3	33	4	33	4	45	6	46	6
(Urban)												
Total	27	3	27	3	148	13	148	13	590	18	598	18

Table 4.2 Pre-schools enrolment in Public and Private (Pre-schools) 2001-2006

	NUMBER OF PRE- SCHOOLS ENROLMENT											
DISTRI CT	200	2001		2002		2003		2004			2006	
	Pu	Pri	Pu	Pri v	Publ	Priv	Publ	Priv	Publ	Priv	Publi	P r i v
Bariadi	0	0	0	0	1547	0	1918	0	1895	0	17,149	-
Bukombe	0	0	0	0	0	0	0	0	5198	0	3,127	-
Kahama	0	0	0	0	1097	668	4772	0	2993	259	4,266	-
Kishapu	*	*	*	*	*	*	*	*	*	*	3,235	-
Maswa	0	0	0	0	79	0	4168	0	486	0	5,825	-
Meatu	0	0	0	0	103	0	5460	0	10437	0	10,765	-
Shinyang a (Rural)	0	0	0	0	1411	73	0	1168	2404	150	4,017	-
Shinyang a (Urban)	1,579	28 9	0	0	1790	0	1928	0	1970	416	4,078	
Total	1,579	28	0	0	6,024	741	18,246	1168	25383	825	52,462	

Source: Shinyanga Regional Commissioner's Office, 2006

4.1.2 Primary Education

Education System in Shinyanga Region is less developed compared with the other regions like Mbeya, Kagera and Kilimanjaro. The absence of active involvement of Christian Missionaries in the past in education, the tradition of the Wasukuma and Wanyamezi of sending their older children to school only when the younger ones are old enough to take over the cattle herding tasks and parent's restriction imposed on girls education, preferring bride-price to education are but some of the factors which slowed down education in the region.

^{*-}Included under Shinyanga Rural

^{*-}Included under Shinyanga Rural

Despite the problems cited above the period between 2001 and 2006 witnessed notable expansion of primary and secondary education programmes in Shinyanga region. The implementation of Primary education programme has been a force behind the significant expansion of Primary School Education in the region. The number of primary schools in Shinyanga region increased steadily from 876 in 2001 to 1,092 in 2006. The number of pupils in those schools increased from 460,944 pupils in 2001 to a total of 686,686 pupils in 2006. The highest number of primary schools was 249 in Kahama district, followed by Bariadi district 182 and the lowest was in Shinyanga Urban and Meatu districts with 37 and 110 schools respectively.

The share of the private sector in the ownership of primary schools was disappointingly low. In 2001 only 5 out of 876 schools was privately owned. By the year 2006, only 13 out of 1,092 schools were private. Thus the share of the private sector increased only slightly from 0.5 percent to 1.19 percent. Looking at the number of public schools and private schools, the findings lead to conclude that schools are evenly distributed but effort to increase private schools is necessary.

Table 4.3: Distribution of Primary Schools by Ownership in the region by District

D. Comp. Com								
DISTRICT	2001		2003	2003			2006	
	Publ	Priv	Publ	Priv	Publ	Priv	Publ	Priv
Bariadi	169	0	180	0	181	0	182	0
Bukombe	0	0	139	0	140	1	140	1
Kahama	260	0	231	4	245	4	245	4
Kishapu	*	*	*	*	*	*	113	2
Maswa	92	0	102	0	0	0	115	0
Meatu	95	0	106	0	110	0	110	0
Shinyanga	220	5	235	1	235	2	128	2
(Rural)								
Shinyanga	35	0	41	3	45	6	33	4
(Urban)								
Total	871	5	27	8	1,062	13	1,079	13

Source: Shinyanga Region Commissioner's Office, 2006

4.1.3 Total Enrolment in Public Primary Schools by Sex

Enrolment by sex in the region for the year 2002, 2003,2005 and 2006 are as shown in Table 4.4 In the year 2003, 2005 and 2006, the total regional girls enrolments in primary schools increased by 29.0 percent(from year 2001 to 2003), 6.8 percent (from year 2003 to 2005) and 13.8 percent (from year 2005 to 2006). Comparatively, Bariadi district leads on enrolment (in the year 2006) of girls, followed by Kahama and Shinyanga Municipality districts. The enrolment of boys in the region for the year 2001, 2003, 2005 and 2006 was 52, 51.9, 49.5 and 49.5 percent respectively.

^{*-}Included under Shinyanga Rural

Boys were more enrolled in Bariadi, Kahama and Shinyanga Rural districts. Such findings suggest that regional primary school enrolment by sex ratio is almost equal and it eradicates the notion of male dominance in such kind of education.

Table 4.4: Total Enrolment in Public Primary Schools in the region by Sex and District

				-	_	-		
DISTRI	Year 200)1	Year 20	Year 2003		005	Year 20	06
CT	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Bariadi	48,685	45,692	67,656	58,227	70,812	65,020	75,807	70,538
Bukombe	29,323	25,135	42,935	38,647	47,414	43,107	49,414	45,819
Kahama	49,183	44,162	61,855	57,087	68,764	63,581	70,773	65,989
Kishapu	*	*	*	*	*	*	*	*
Maswa	28,067	27,898	35,445	34,649	38,700	37,577	39,921	39,358
Meatu	24,179	22,717	29,973	29,002	32,304	31,486	23,394	32,441
Shinyan	47,400	42,746	53,713	53,713	61,320	85,126	64,128	61,064
(Rural)								
Shinyan	12,825	12,932	14,152	14,142	14,945	14,907	15,598	14,798
(Urban)								
Total	239,662	221,282	307,888	285,477	334,259	304,804	339,803	346,883

Source: Shinyanga Region Commissioner's Office, 2006

4.1.4 STD One Enrolment in Public Primary Schools

Table 4.5 depicts the development in STD one enrolment in the region. The table indicates that the number of pupils enrolled in year 2002 surpassed the target while enrolments in year 2000, 2003 and 2006 were below target. For the year 2005 no target was indicated although the number of enrolled pupils did drop significantly compared to year 2002. Shinyanga Rural Bariadi, Kahama districts in that order, were leading in enrolling std one pupils followed by Bukombe,Maswa,Meatu and Shinyanga Urban districts for the given years(also in decreasing sequence).

Table 4.5 STD One Enrolment in Primary Schools by District 2000, 2002, 2005 and 2006

DISTRI	Year 2000	Year 2002	Year 2005	Year 2006

^{*-}Included under Shinyanga Rural

CT	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Bariadi	35,152	24,250	31,109	22,376	-	25,848	23,116	22,758
Bukombe	14,717	6,016	13,368	16,781	-	17,361	16,701	16,456
Kahama	26,756	14,358	29,103	27,384	-	26,852	19,936	20,363
Kishapu	*	*	*	*	*	*	*	*
Maswa	22,265	6,871	17,562	12,260	-	12,714	11,177	10,028
Meatu	7,873	5,123	15,741	11,102	-	10,532	8,850	8,700
Shinyan	24,994	12,938	26,744	64,814	-	20,404	18,862	18,561
(Rural)								
Shinyan	6,232	3,939	5,041	21,973	-	4,758	4,802	4,322
(Urban)								
Total	137,989	221,282	138,668	176,600	-	118,469	103,444	101,178

4.1.5 Drop Out by Reason and Sex

Reasons causing drop out of primary schools pupils in the region by reason, sex and district are as depicted in Table 4.6. The Table indicates that drop out increased more in 2006 as compared to 2000, 2002 or 2005. Number of girls who drop out in the period under review was lower than that of boys. When the reasons for drop out were considered, then truancy was considered to be a first course with 78 percent in 2000; 75 percent in 2002; 67 percent in 2005 and 82.2 percent in 2006. Truancy was rampant in Shinyanga Rural district followed by Bukombe and Bariadi districts; Shinyanga Urban was the last with the smallest number of truancy in the region. The findings suggest that cooperation between parents and school committees on truancy is highly needed. The second cause for drop out was due to death which contributed 5 percent in 2000, 9 percent in 2002; 13 percent in 2005 and 5.9 percent in 2006. The findings reveals that boys were more vulnerable to death than girls. The percentage of boys who dropped out because of death was 4.6 percent in 2000, 9.1 percent in 2002; 10.6 in year 2005 and 5.9 percent in 2006. The issue of death for pupils needs a serious study. Pregnancy was also considered to be a cause for drop out among girls. It contributed 5.9 percent in 2000, 8.6 percent in 2002; 10.2 percent in 2005 and 6.0 percent in 2006 of all reasons for the girls drop out. Although the number is not so alarming, girls need extra sensitisation on how to avoid early pregnancy as this prevents them from further studies. Reasons other than truancy, pregnancy and death, contributed 9.1 percent of the causes for drop out in 2000, 11.8 percent in 2002 and 15.4 percent in 2006.

Table 4.6: Pupils Drop Out in the region by Reason, Sex and District

District	Year 20	00	Year 2002		Year 2005		Year 2006	
Name								
/Reasons								
Truancy	Boy s	Girls	Boys	Girls	Boys	Girls	Boy s	Girls

^{*-}Included under Shinyanga Rural

Grand Total	1,762	1,584	1,377	1,195	1,106	1,000	2,160	1,698
Sub-Total	266	211	174	131	167	157	220	135
Shinyanga Rural	140	109	60	40	55	51	31	23
Shinyanga Urban	17	13	0	1	0	0	5	6
Meatu	6	3	7	5	2	4	28	12
Maswa	29	34	50	34	12	20	24	11
Kahama	37	13	12	8	34	22	17	9
Bukombe	0	1	0	0	5	8	81	41
Bariadi	37	38	45	43	59	52	34	33
Other								
Sub-Total l	90	65	137	96	180	90	133	95
Shinyanga Rural	17	10	29	23	19	18	20	23
Shinyanga Urban	3	3	5	1	11	7	9	1
Meatu	7	6	16	11	14	9	15	14
Maswa	9	10	10	11	7	4	12	7
Kahama	13	4	19	16	35	23	36	25
Bukombe	14	12	20	5	51	12	4	4
Bariadi	27	20	38	29	43	17	37	21
Death								
Sub-Total		94	0	103		102	0	102
Shinyanga Rural	0	8	0	40	0	45	0	2
Shinyanga Urban	0	10	0	7	0	4	0	15
Meatu	0	12	0	11	0	10	0	3
Maswa	0	19	0	10	0	16	0	15
Kahama	0	16	0	19	0	-	0	38
Bukombe	0	10	0	5	0	13	0	10
Bariadi	0	19	0	11	0	14	0	19
Pregnancy								
Sub-Total	1406	1214	1066	865	759	651	1,807	1366
Shinyanga Rural	569	519	380	257	204	193	120	101
Shinyanga Urban	64	51	20	4	16	19	75	74
Meatu	82	66	73	73	75	88	204	131
Maswa	183	155	83	63	99	77	214	158
Kahama	133	114	146	120	0	0	476	385
Bukombe							+	229
Bariadi Bukombe	208 167	159 150	193 171	177 171	122 243	83 191	429 289	288

4.1.6 Number of Pupils sat for STD VII Examination in Public and Private Primary schools

The total number of pupils that completed STD VII in Shinyanga region for the year 1997, 2001, 2005 and 2006 was 36,997; 27,285; 41,355 and 53,555 respectively. Shinyanga Rural, Bariadi and Kahama, districts seem to be performing well in terms of the number of students completing standard VII and joining secondary schools. The number of pupils who sat for STD VII in the year 1997, 2001, 2005 and 2006 is shown in Table 4.6. The table indicates that number of STD VII who sat for examination remained almost the same during the periods under review; however number of girls increased more than boys in year 1997 and 2005 where it reached 50.4 percent and 51.7 percent respectively. The survey suggests that effort must be done to increase the number of schools so that more pupils could be admitted. On the other hand the total number of STD VII showed more boys being admitted than girls.

Table 4.7 Number of Pupils Sat for STD VII Examination in Public and Private Primary Schools in the Region by District

District	Year 199	7	Yea	r 2001	Year 20	05	Year	2006
Name	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Bariadi	3,795	4,145	3,371	3,268	4,579	3,506	5,099	4,690
Bukombe	1,524	1,393	1,302	1,047	2,550	1,957	3,166	2,446
Kahama	3,403	3,142	2,025	1,651	3,457	2,761	5,428	4,965
Kishapu	*	*	*	*	*	*	2,900	2,831
Maswa	2,522	2,648	1,857	1,818	2,346	2,056	3,351	3,349
Meatu	1,996	1,940	1,814	1,760	2,131	1,992	2,602	2,452
Shinyanga								
Urban	1,004	1,169	838	945	912	843	3,151	2,884
Shinyanga								
Rural	4097	4219	2,839	2,750	3,986	8,279	1,586	1,555
Total	18,341	18,656	14,046	13,239	19,961	21,394	27,283	26,272

^{*-}Included under Shinyanga Rural

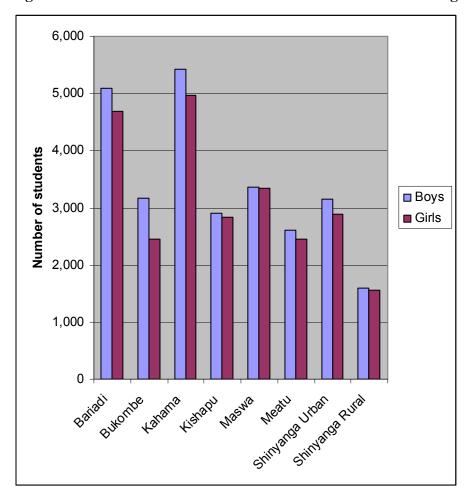


Fig 6: Number of students sat for STD VII examination in the region in 2006

4.1.7 Number of Examinees Selected to Join Form One in Public Secondary Schools

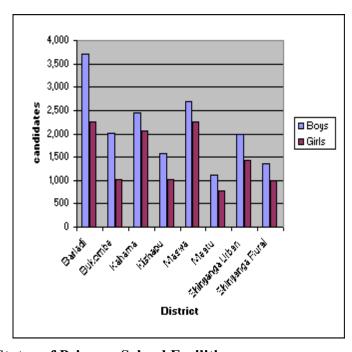
In absence of many private secondary schools in the region, it is not easy for class VII leavers in the region to secure a place in Form I. Number of examinees that joined form one in public secondary schools in the region for the year 1997; 2001; 2005 and 200 was only 5 percent, 7.4 percent, 38 percent and 53.6 percent respectively. The table 4.7 shows that there were remarkable increase of students who joined Form One in year 2006 compared to the other years under review. This is the result of implementation of Primary Education Development Programme (PEDP) as well as the beginning for the implementation of Secondary Education Development Programme (SEDP) in the region. The findings also revealed that, the number of girls selected to join form one was 51.3 percent in 1997, 48.4 percent in 2001, 44 percent in 2005 and 41 percent in 2006. This indicates that the number of girls selected to join Form One was higher than that of boys in 1997 and smaller than that of boys in 2001 and 2005. The finding also suggested that there is an urgently needs to increase the number of secondary schools in the region so as to increase the number of students who enters form one each year. Along with the increase of number of schools, the notion of having an equal number of selections for both girls and boys to join form one should be adhered to in all districts. Therefore, all districts should increase their efforts in building secondary schools for both boys and girls

.

Table 4.8: Number of Examinees Selected to Join Form One in Public Secondary Schools in the Region by District

District	Year 19	97	Yea	r 2001	Year 200	5	Year 20	06
Name	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Bariadi	183	180	254	248	1796	1463	3,705	2,253
Bukombe	75	64	111	99	992	678	2,021	1,021
Kahama	145	136	195	183	1,632	1170	2,457	2,052
Kishapu	*	*	*	*	*	*	1,585	1,025
Maswa	124	218	138	131	1,401	1035	2,679	2,251
Meatu	80	72	80	74	844	733	1,112	767
Shinyanga								
Urban	56	44	93	82	590	519	1,983	1,419
Shinyanga								
Rural	180	177	170	163	1,505	1257	1,363	986
Total	843	891	1041	980	8760	6855	16,905	11,774

Fig 7: Number of Examinees Selected to Join Form One in Public Secondary Schools in the Region in 2006



4.1.8 Status of Primary School Facilities

The development of primary school facilities in Shinyanga region is considered to be pathetic. The shortage of various facilities in the region are almost similar, however, they may differ in magnitude only. The region faces an acute shortage of classrooms, pupils' desks, toilet holes, water supply facilities, teachers' houses and other facilities. Table 4.9 (a) to 4.9 (e) depicts the status of various primary schools facilities in the region for the period from 2000 to 2006.

^{*-}Included under Shinyanga Rural

4.1.8.1 Status of Primary school classrooms

The status of primary school classrooms in Shinyanga region is pathetic. Table 4.9(a) indicates that in 2003 were 5,322 equivalents to 46 percent of the actual requirements. In 2004, the number of classrooms was 6,822 equivalents to 47.6 percent of the actual requirement, while in 2005 the number of classrooms was 7,122 equivalents to 47.5 percent of the actual requirement and 50.4 percent of the requirement. When the shortage of classrooms is analysed at the level of district, the situation depicts the same picture. Bukombe district rank first with shortage of classrooms among other districts. The district had 37 percent of required classrooms in 2003, 36 percent in 2004, 33 percent in 2005 and 42 percent in 2006. Bariadi district was second with 39 percent in 2003, 43 percent in 2004, 40 percent in 2005 and 41 percent in 2006. Shinyanga Rural district was better off when compared with other districts, by having 56 percent of required classrooms in 2003, 56 percent in 2004 55 percent in 2005 and 58.2 percent in 2006. Generally, the finding reveals that the region has a big shortage of classrooms which stands as an impediment towards the development of primary education in the region. Therefore efforts should be made in increasing the number of classrooms in the region.

Table 4.9 (a) Status of Primary school classrooms

	Year 200 3	3	Year 2004	4	Year 200 :	5	Year 200	6
		Shortag		Shortag		Shortag		Shortag
District	Existing	e	Existing	e	Existing	e	Existing	e
Bariadi	995	1,578	1,365	1,782	1,366	2,063	1,518	2,152
Bukombe	543	924	727	1,295	730	1,473	839	1,129
Kahama	1,037	1,176	1,458	1,457	1,521	1116	1,776	1,609
Kishapu	*	*	*	*	*	*	760	720
Maswa	766	778	982	781	997	889	1,053	611
Meatu	519	466	556	781	626	853	690	654
Shinyanga								
Urban	268	360	340	319	426	268	435	300
Shinyanga								
Rural	1,194	956	1,394	1,075	1,456	1191	763	548
Total	5,322	6,238	6,822	7,490	7,122	7,853	7,870	7,723

Source: Shinyanga Region Commissioner's Office, 2006

4.1.8.2 Status of Toilet Holes in primary schools

In case of Toilets holes in primary schools, the finding reveals that the region is facing a serious problem of toilets holes shortages. The table 4.9 (b) shows that the number of toilets holes in the region was 2,183 equivalent to 35 percent of actual requirements. In 2003 the number was 4,015, equivalent of 18.5 percent, in 2004 the number was 5,144 or 20.5 percent in 2005 the number was 5,824 or 21.5 percent and the number was 7,581 or 26.2 percent of the total requirement. All the districts had less than 35 percent of the required capacity in 2006. Bariadi district with only 15 percent of required toilet holes was in the precarious situation in 2006, followed with

^{*-}Included under Shinyanga Rural

Bukombe district with only 20.8 percent of the required number of toilets holes. It could be judged from the statistics that the situation of toilets in primary schools in the region is pathetic and call for urgently action to reverse the situation.

Table 4.9 (b) Status of Toilet Holes in primary schools by District

	Year 20	02	Year 200	03	Year 200	04	Year 2	2005	Year 2	2006
	Existi	Shorta	Existin	Shorta	Existin	Shorta	Exist	Shorta	Exist	Shorta
District	ng	ge	g	ge	g	ge	ing	ge	ing	ge
Bariadi	549	604	604	4,199	754	4,281	799	5,023	987	5,590
Bukombe	36	253	253	2,774	460	3,174	608	3,268	852	3,228
Kahama	296	1,115	1,115	3,175	1,393	3,268	1,436	3,289	1,673	3,797
Kishapu	*	*	*	*	*	*	*	*	944	2,061
Maswa	452	605	605	2,382	725	2,315	786	2,520	860	2,394
Meatu	94	539	539	1,211	533	2,069	689	2,185	889	1,760
Shinyanga Urban	216	29	29	16	308	861	340	756	365	909
Shinyanga Rural	540	870	870	3,955	971	4,014	1,166	4,227	1,011	1,588
Total	2,183	4,015	4,015	17,712	5,144	19,982	5,824	21,268	7,581	21,327

Source: Shinyanga Region Commissioner's Office, 2006

4.1.8.3 Status of Water Tanks in Primary Schools

The availability of adequate, clean and safe water supply for primary schools in the region was also a big problem. Most of primary schools in the region depend much on the water tanks for the preservation and smoothly supply of water. However, the status of water tanks in the primary schools in the region as shown in table 4.9 (c) depicts an acute shortage. The number of water tanks available was far below the required amount. For example, in 2003 the number of available tanks were 404 or 34 percent compared with the requirements of 1,170 tanks. Also in 2005 the number of existing tanks was 475 or 25 percent of the required 1,890 water tanks. However, under this article in 2006, the actual number of water tanks available was only 28 percent of the requirement. Bariadi with only 4 percent of required capacity, Bukombe with 13 percent and Maswa districts with 18 percent are the districts with severe shortage of water tanks in the region. These districts are experiencing more problems than other districts in the region. Although the existing total number of water tanks is 560(in year 2006) only 524 tanks are functional.

^{*-}Included under Shinyanga Rural

Table 4.9 (c) Status of Water Tanks in Primary Schools by district

	Year 200	3	Year 2005			Year 200	6
			Existing	Short	Exis	Short	Functio
District	Existing	Shortage		age	ting	age	nal
Bariadi	13	167	19	442	52	442	25
Bukombe	6	133	33	215	42	215	42
Kahama	192	169	169	76	120	76	120
Maswa	53	50	85	321	71	321	62
Meatu	35	71	38	174	128	174	128
Shinyanga							
(Urban)	30	16	52	38	60	38	60
Shinyanga							
(Rural)	75	160	79	165	57	165	57
Total	404	766	475	1,431	560	1,431	524

4.1.8.4 Status of Pupils Desks in primary schools

The region also faces an acute shortage of desks to carter for the increasing needs of the pupils' enrolments. The situation is worse in all districts as table 4.9 (d) indicates.

In case of desks, in 2006, the region had 114,579 desks with the shortage of 107,592 or 51.7 percent of the required desks. Bukombe district ranks first with 25,544 desks while Bariadi district ranks second with 22,466 desks. The worse districts with poor desk's facility are Shinyanga Municipal and Shinyanga Rural districts.

4.9 (d) Status of Pupils Desks in primary schools

					2006	
District	2002	2002	2004	2005	Requirem-	Available
District		2003		2005	ent	
Bariadi	10,186	11,073	17,311	19,651	44,554	22,466
Bukombe	8,598	12,645	18,181	23,189	26,237	25,544
Kahama	19,783	20,946	25,772	52,580	56,389	20,091
Kishapu	*	*	*	*	21,191	14,006
Maswa	20,930	10,307	13,704	15,203	33,669	17,508
Meatu	7,079	7,711	7,612	9,193	18,816	11,497
Shinyanga					13,749	7,035
Urban	5,113	6,006	6,341	6,617		
Shinyanga					28,757	10,438
Rural	18,628	19,869	20,546	20,390		
Total	90,317	88,557	109,467	146,823	222,171	114,579

^{*-}Included under Shinyanga Rural

4.1.8.5 Status of Teachers Houses in Primary schools

There has been steady growth in the number of teachers' houses available for teachers in Shinyanga region. The number of houses in 2000 was 911 which grew to 1,087 houses in 2001 to 1058 houses in 2003 and further to 1,967 houses in 2005. The requirement in 2005 was for 9,669 houses and so giving a deficit of 7,702 houses or 20.3 percent of requirements.

Despite the new initiatives in solving the problem of teachers' houses in the region, Shinyanga region is still experiencing an acute shortage of teachers' houses as there were only 2,239 teachers' houses. Teacher's houses available in the region are only 20 percent of total requirement. Table 4.8 (e) shows that the shortage of teachers' houses in all districts is also alarming. The situation in Shinyanga Municipal district was even worse with only 83 teachers' houses. Generally the finding suggests that the construction of houses for the primary school teachers should be given priority particularly during the implementation of the Primary School Education Development Programme (PEDP).

. Table 4.9 (e) Status of Teachers Houses in Primary schools

District	2000	2001	2002	2003	2004	2005	2006
Bariadi	228	153	330	309	591	492	621
Bukombe	32	26	30	26	59	75	245
Kahama	82	77	79	111	165	202	286
Kishapu	*	*	*	*	*	*	251
Maswa	167	211	248	226	254	293	391
Meatu	65	59	64	67	111	118	194
Shinyanga					57	65	83
Urban	57	60	59	2			
Shinyanga					358	722	168
Rural	280	289	277	317			
Total	911	875	1,087	1,058	1,595	1,967	2,239

^{*-}Included under Shinyanga Rural

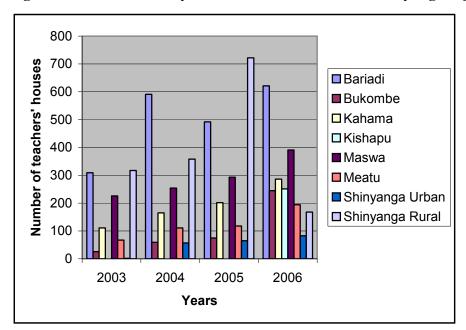


Fig 8: Number of Primary school teachers' houses in Shinyanga region from 2003-2006

4.1.9 Status of Primary School Teachers

The region has an acute shortage of teachers. Available strength is 51 percent of the required number of teachers. Whereas there were 5,908 Grade A and Grade B primary school teachers throughout the region in 2000 some six years later in 2006 there were 10,022 teachers representing an increase of 36 percent. Although the data suggests that there was significant increase in number of teachers in the region, by 2006 the deficit in the numbers of such teachers in the region was 6,993 representing a 40.9 percent deficit over the requirement of 16,955 teachers. The shortage of teachers in the region was further amplified by newly posted teachers who never report to their stations instead they make their way to urban areas or more attractive regions. Between 20 percent and 30 percent of new teachers allocated to Shinyanga region every year do not report! At the district level the largest percent of deficit was in Bukombe at 51 percent and the least in Shinyanga Urban at 41.7 percent.

Another cause of primary school teachers' shortage in the region was death. The number of teachers who died from 2000 to 2006 was 306. Table 4.10 shows that most of teachers' death occurred in 2005 and Kahama district was leading with 74 deaths during the period under review and 11 reported death in 2006. The second leading district was Shinyanga Rural with 71 deaths. At the same period few cases of death were recorded in Kishapu with cumulative death of only 4 teachers between 2000 and 2006(This might not be a valid figure as formerly Kishapu was included in Shinyanga Rural before separation) and only15 teachers in 2006 in Bukombe district. This suggests that effort must be made to meet requirement of teachers in all districts.

Table 4.10: Status of Primary School Teachers in the Region by District

District	Year 20	000	Year 2003	3	Year 20	05	Year 2000	6
				Deficit	Existi			
	Exist	Deficit	Exist		ng	Deficit	Exist	Deficit
Bariadi	1,235	1,237	1,732	1,326	1,849	1,929	1,962	1,495
Bukombe	502	425	738	901	1,018	1,138	1,199	1,186
Kahama	1,126	428	1,425	904	1,823	1,802	2,018	1,604
Kishapu	*	*	*	*	*	*	937	704
Maswa	711	370	991	569	1,186	1,273	1,267	500
Meatu	459	246	529	200	732	724	850	562
Shinyanga					594	621	600	141
Urban	545	25	530	69				
Shinyanga					2,467	1,767	1,049	741
Rural	1,330	785	1,635	1,326				
Total	5,908	3,606	7,580	5,295	9,669	9,254	10,022	6,933

Table 4.11: Status of Death of Primary School Teachers in the Region by District

	2000	2001	2002	2003	2004	2005	2006	Cumulative
District								
Bariadi	6	7	7	0	8	9	11	48
Bukombe	0	3	2	5	0	1	4	15
Kahama	3	3	12	16	13	16	11	74
Kishapu	*	*	*	*	*	*	4	4
Maswa	7	7	6	6	2	5	5	38
Meatu	3	4	5	1	0	10	5	28
Shinyanga (Urban)	2	1	4	0	4	3	11	25
Shinyanga (Rural)	9	5	11	11	13	20	5	71
Total	30	30	47	39	40	64	56	306

Source: Shinyanga Region Commissioner's Office, 2006

4.1.10 Distribution of Secondary Schools by Ownership

Distribution of secondary schools by ownership in the region for the year 2001 to 2006 is depicted in Table 4.12. The table indicates that by 2006 Shinyanga region had a total of 122

^{*-}Included under Shinyanga Rural

^{*-}Included under Shinyanga Rural

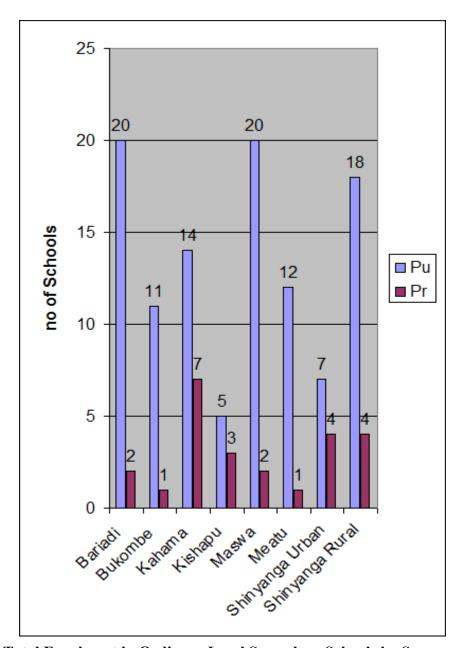
secondary schools, 102 public and 20 private. The number is still small compared to the number of primary schools which is 1,092 in the region. As the result, a large number of pupils who complete primary education do not join secondary schools. In the level of district, Kahama, Bariadi and Shinyanga rural tie with a total of 22 secondary schools.

Table 4.12 Number of Secondary schools by Ownership and by District

	2001		2002		2003		2004		2005		2006	
District	Pu	Pr										
Bariadi	5	2	5	2	5	2	5	2	11	2	20	2
Bukombe	2	0	2	0	3	0	3	0	5	1	11	1
Kahama	3	0	3	0	7	6	7	5	10	7	14	7
Kishapu	*	*	*	*	*	*	*	*	*	*	5	3
Maswa	3	0	3	0	6	1	6	1	12	1	20	2
Meatu	1	0	1	0	4	0	4	0	5	0	12	1
Shinyanga	2	1	2	1	4	3	4	3	5	4	7	4
(Urban)												
Shinyanga	3	0	3	0	8	3	8	3	10	4	18	4
(Rural)												
Total	19	3	19	3	37	15	37	14	58	19	102	20

^{*-}Included under Shinyanga Rural

Fig 9: Comparison between the number of Private and Public Secondary schools in 2006



4.1.11 Total Enrolment in Ordinary Level Secondary Schools by Sex

Number of enrolment in ordinary secondary schools by sex and by district for the year 2001 to 2006 is depicted in the table 4.13. The table shows that the number of enrolled student in 2005 was 8,185 compared to 2,492 in 2001 an increase of over 200 percent over six years. The proportions of enrolled girls were less than boys in all periods. 'The enrolled girls reached 48.6 percent in 2001, 49.7 percent in 2002, 48.9 percent in 2003, 48.7 percent in 2004 and 49.2 percent in 2005. Overall findings suggest that equal enrolment of boys and girls should be encouraged in secondary schools. Nevertheless, the problem of increasing number of girls in the

secondary schools could be resolved if efforts were increased in building more girls' secondary schools in the districts.

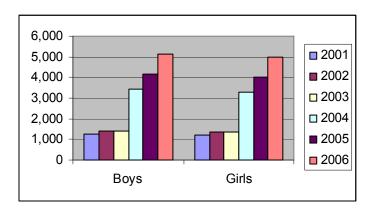
Table 4.13: Total Enrolment in Ordinary Level Secondary School in the Region by Sex and District

Sex	2001	2002	2003	2004	2005	2006
Boys	1,281	1,385	1,415	3,445	4,155	5,132
Girls	1,211	1,366	1,355	3,276	4,030	5,007
Total	2,492	2,751	2,770	6,721	8,185	10,139

Source: Shinyanga Region Commissioner's Office, Shinyanga, 2006

.

Fig 10: Total Enrolment in Ordinary Level Secondary School in the Region by Sex and District, 2001-2006



4.1.12 Total Enrolment in Advanced Level Secondary Schools by Sex

Enrolment in Advanced Level secondary school by sex in the region for the period 2001 to 2006 is depicted in Table 4.14 The table reveals that boys were enrolled more than girls in Advanced level secondary schools in the period under review. During the period under review girls' enrolment as a percentage of total enrolment reached 29.5 percent in 2001, 29.9 percent in 2002, 24.7 percent in 2003, and 27.3 percent in 2004, 33.4 percent in 2005 and 31.8 percent in 2006. The findings suggests for the construct of more Advanced Level Secondary Schools in the region.

Table 4.14: Total Enrolment in Advanced Level Secondary School in the Region by Sex and District

Sex	2001	2002	2003	2004	2005	2006
Boys	525	487	483	820	405	1,023
Girls	220	208	159	309	134	478
Total	745	695	642	1,129	539	1,501

Source: Shinyanga Region Commissioner's Office, Shinyanga, 2006

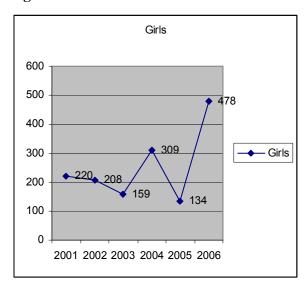


Fig 11: Number of Girls who were enrolled in Advanced Level Secondary school

4.2 Water and Sanitation

4.2.1 Introduction

In the rural areas of Shinyanga region the availability of natural water sources are scarce and seasonal. Rivers do not have surface discharges during the most part of dry season. Lakes and springs are almost non existence. The majority of rural population still depend on traditional water sources, like hand-dug water, waterholes in riverbeds during the dry season or unlined and unprotected shallow wells for both human and livestock consumption. The natural sources existing in the region are usually unsafe and not reliable.

4.2.2 Number of Rural Water Schemes

By Dec 2006, only 43.8 percent of the over 3 million people were estimated to have access to safe and adequate drinking water during rainy seasons. Last quarter of 2006 implementation report indicates that the region had a total of 5,225 schemes, which included 4,292 shallow wells, 174 boreholes, 592 rain water tanks, 45 rivers, 71 dams, 46 charcos and 5 springs. Number of rural schemes in the region by district in 2006 is summarised in the table 4.15. The summary in table shows Bariadi district was leading with 1,123 schemes, followed by Shinyanga Rural, Kahama district 872 schemes and Shinyanga Municipal was least with only 353 water schemes. The table also indicates that the mostly reliable source of water was shallow wells which amounted to 4,292 or 82.1 percent of the total water schemes in the region.

Table 4.15: Number of Rural Water Schemes in the Region by District, 2006

Technology			V	Water reso	ource				
	Lake	Dams	Charcos	Springs	Shallow wells	Borehole	Rain water tanks	Rivers	Total
Bariadi	0	3	30	1	1,056	7	52	3	1,123
Bukombe	0	1	0	0	555	19	61	0	636
Kahama	0	8	0	0	689	27	120	0	844
Kishapu	0	18	0	0	192	2	30	16	258
Maswa	0	1	16	0	644	25	77	9	772
Meatu	0	2	0	0	468	2	128	0	600
Shinyanga Urban	0	3	0	0	250	34	66	0	353
Shinyanga Rural	0	35	0	4	438	68	57	17	872
Total	0	71	46	5	4,292	174	592	45	5,225

According to table 4.16 the number of water schemes that were not working in the by 2006 reached 726. Out of this number of water schemes, there were about 569 non working shallow wells which are 78.4 percent of all not functioning water schemes in the region. The other water schemes comprised of 61 boreholes which is 8.4 percent of the non functioning water schemes. At district level, Kahama was leading with 223 schemes followed by Maswa 183 and Meatu was the least with only 36 non functioning schemes. The finding reveals that rural water supply in Shinyanga region is not adequate and need urgently improvement.

Table 4.16: Number of Rural Water Schemes not working in the Region by District, 2006

Technology		Water resource								
	Lake	Dams	Charcos	Springs	Shallow wells	Borehole	Rain water tanks	Rivers	Total	
Bariadi	0	2	14	1	35	1	27	1	83	
Bukombe	0	0	0	2	33	13	0	0	48	
Kahama	0	0	2	1	204	16	0	0	223	
Kishapu	*	*	*	*	31	1	0	10	42	
Maswa	0	0	0	0	154	12	9	8	183	
Meatu	0	0	11	0	25	0	0	0	36	
Shinyanga	0	1	0	0	29	13	0	0	43	

Urban									
Shinyanga	0	2	0	3	58	5	0	0	68
Rural									
Total	0	5	27	7	569	61	36	19	726

4.2.4 Rural Water Supplies Coverage

The coverage of rural water supplies in the region is well presented. The presentation compiled on Table 4.17. The Table shows that rural water average coverage in the region is 54.2 percent. The least coverage districts are Kahama 30.5 and Kishapu 30.5. Shinyanga Urban and Maswa districts are better on coverage as compared to other districts with 82.6 and 56.1 percent respectively. The findings suggest that Shinyanga region is facing an acute shortage of water supply. This problem could be alleviated by looking for new source for adequate and reliable water supply. The on going project of supplying water from Lake Victoria could effectively reduce the problem. Other alternative source would include medium and deep wells, as well as medium size dams.

Table 4.17: Coverage of Rural water Supplies by District Dec 2006

District	Estimated population Covered as Dec 2006	Population 2002	Projected population as at Dec 2006	Estimated Percentage of Coverage
Bariadi	340,384	605,509	667,454	50.8
Bukombe	159,523	396,423	436,978	36.5
Kahama	212,181	596,456	694,771	30.5
Kishapu	121,772	240,086	336,648	36.2
Maswa	188,850	305,473	336,724	56.1
Meatu	118,000	248,949	248,949	47.4
Shinyanga Urban	123,146	135,166	148,994	82.6
Shinyanga Rural	170,738	277,518	314,723	54.2
Total	1,434,714	2,805,580	3,113,165	46.1

^{*-}Included under Shinyanga Rural

5.4.3 Number of Village Water Committees and Village Water Funds

Number of Village Water Committees (VWCs) and Village Water Funds (VWFs) in Shinyanga region by Dec, 2006 are summarised in the table 4.18. The summary from table indicates that the region owns 3,960 VWCs. Bariadi district was leading with the establishment of VWCs than other districts. The district had established 1,061 VWCs equivalent to 26.8 percent of total regional VWCs. Kishapu district had the lowest number of committees (69) in the region. Kahama district ranks second with establishing large number of regional VWCs. The district had 689 VWCs, equivalent to 17.4 percent of the total regional proportion. The same table shows that the region established Tsh 222,035,064.5 VWFs by Dec 2006.Bariadi district had fund amounting to Tsh 72.9 million or 32.8 percent of the total fund. Maswa was the second with Tsh. 38.9 million or 6.4 percent of the total VWF. Kishapu district was last with only Tsh. 2.7 million or 0.58 percent of the total VWFs.

Table 4.18: Number of Village Water Committees and Village Water Funds in the Region by District as at 31.12. 2006

District Name	VWCs	VWFs
Bariadi	1,061	72,900,000
Bukombe	478	15,743,000
Kahama	689	22,855,000
Maswa	552	40,620,000
Meatu	468	31,000,000
Shinyanga Urban	205	14,317,064.5
Shinyanga Rural	438	23,280,000
Kishapu	69	1,320,000
Total	3,960	222,035,064.5

Source: Shinyanga Region Commissioner's Office, 2006

4.2.5 Urban Water Supply

4.2.5.1 Introduction

The object of urban water supply is to provide adequate amount of clean water for urban population and at the same time satisfy the water requirement for the industrial sector. The region has about eight main urban centers namely: Shinyanga Township, and five district headquarters: Kahama, Maswa, Bukombe, Mwanhuzi and Bariadi. Other minor urban settlements include Mwadui, Isaka, Malampaka and Maganzo. The Shinyanga region urban population is estimated to increase at an annual growth rate of between 3.8 percent and 5 percent. Thus the urban population is projected to grow from 256,052 (2002 Census) to 3,000,000 people by the year 2010. The urban population percentage out of the total population is projected to between 20 percent and 30 percent by the year, 2010.

The current position water supply in the major urban centers is extremely inadequate. Where as only 22 percent of the rural people get clean and safe water, 53.5 percent of the urban population is accessible to the same

4.2.5.2 Water source for major Urban Centres

(i) Shinyanga Town

Currently Shinyanga Township receives its water from four sources, namely, Ning'hwa Dam, boreholes near Kizumbi, shallow wells and Nhumbu dam near Mwadui which currently caters for Mwadui mines only. Ning'hwa dam serves Shinyanga Township, some parts of Old Shinyanga, Chibe and Lubaga villages. According to 2002 National Census report, Shinyanga town was estimated to have a population of 73,768. Due to natural increase and immigration of youth into the town the population is expected to reach 120,000 people by year 2010. It is estimated that only 56 percent of its population have access to clean and safe water. The demand for water which was estimated to 14,689 cubic meters per day is expected to reach 17,000 cubic metres a day by the year 2010.

(ii) Kahama

Kahama Township receives its water at present from two sources namely Kahama dam and natural spring at Mwine a few kilometres away from Kahama town. Kahama dam is not reliable source particularly during rain season. According to National Census (2002) report, Kahama town had a population of 66,051 people. The current and projected figures based on the 2002 with growth rate of 5 percent per annum the town has a population of 79, 261 and projected to have 92,471 by 2010. By March 2005, only 10 percent of its population was supplied with clean and reliable water. The completion of Mwanza –Kahama, Lake Victoria water project, is envisaged to change the water situation in the district drastically.

(iii) Maswa

Maswa district headquarter is the only town in Shinyanga region which is adequately supplied with clean and safe water. The township receives its water supply from Zanzui Dam which was constructed in the late 1980's. The dam has a capacity of supplying Maswa district headquarter with 1,607 cubic metres of water which is over and above the daily requirement of the residents which currently standing at 1,500 cu metres per day.

(iv) Mwanhuzi

Mwanhuzi with its population estimated at 15,508 is the district headquarters of Meatu which was established in 1987. The district headquarters faces critical shortage of water only 17 percent of its residents have access to clean and safe water. The serious water shortage facing Mwanhuzi is a reflection of the under development of water sector in the district as a whole. The 2006 water management report from Shinyanga reveals that most of shallow wells in the district are not functioning and those functioning they dry up during dry season. This situation calls for concrete efforts and intervention by all parties concerned in order to improve the water supply situation.

(v) Bariadi

Bariadi town is served by piped water supply, drawing water from river reservoir. Only 48 percent of the Bariadi town residents are actually supplied with clean and safe water, the remaining part of population still use natural sources for their water supply.

4.2.6 Choice of Technology

In order to provide the much needed clean and safe water for majority of people leaving in the towns in the region the adoption of affordable and appropriate technology is inevitable. Currently, there are four categories of water technologies in use in the region:

- (i) Improved Traditional water points
- (ii) Hand pumped wells. These fall under three hand dug, hand drilled and machine drilled
- (iii) Piped water schemes which are operated from boreholes, dams, rivers spring
- (iv) Rain water harvesting system.

The urban water supply by source and technology is depicted in the table 4.16. The table shows various sources of water supply in urban areas. According to the Table, the region has 38 electric pump and 73 rain harvest. A Most used technology in water supply is rain harvest.

Table 5.19: Urban Water Supply Sources in the Region by District, 2006

			τ	rban water	supply by	y technol	logy		
	Wind mill	Electric Pumped	Diesel pumped	Under constructi on	Gravit y piped	Solar piped	Rain harvest	others	Tota l
Bariadi	0	1	0	1	0	0	0	0	2
Bukombe	0	0	0	0	0	0	2	9	11
Kahama	0	4	0	0	0	0	1	0	5
Maswa	0	3	0	0	0	0	0	0	3
Meatu	0	0	0	1	0	1	20	0	22
Shinyanga Urban	1	26	0	0	0	0	39	0	66
Shinyanga Rural	0	2	2	0	0	0	10	51	65
Kishapu	0	2	0	0	0	0	1		3
Total	1	38	2	2	0	1	73	60	176

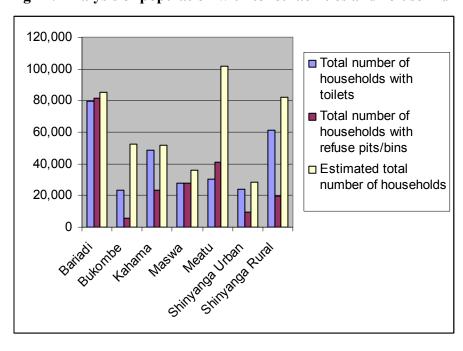
Source: Shinyanga Region Commissioner's Office, 2006

NB: One tank at Shinyanga Municipal (Solar piped) is just for demonstration although people are using it as a water source.

4.20. Toilet Facilities and Refuse Pit/Bins

District	Total number of households with toilets	Total number of households with refuse pits/bins	Estimated total number of households
Bariadi	79,582	81,724	85,559
Bukombe	23,617	5,675	52,381
Kahama	48,748	23,520	52,024
Maswa	27,600	27,609	36,228
Meatu	30,048	41,295	101,380
Shinyanga Urban	23,700	9,203	28,217
Shinyanga Rural	61,216	19,750	82,159
Total	294,511	208,776	437,948

Fig 12: Analysis of population with toilet facilities and refuse Pit/Bins in 2006



4.3 Health Sector

4.3.1 Introduction

Health situation in Shinyanga region is characterized by high infant and maternal mortality rates. Prevalence of high rates of water borne and water caused diseases as well as severe malnutrition in some parts of the region is also a big problem. The causes of diseases are amplified by inadequate health facilities, like lack of essential equipment and hospital supplies as well as deterioration of health delivery services.

4.3.2 Ten Common Causes of Morbidity

The region is characterized by high death toll resulting from common preventable diseases such as malaria, respiratory infections, cholera, dysentery etc as table 4.21(a) and 4.21 (b) indicated. The table show various causes of morbidity in the region for the year 2004 and 2005. In year 2004, Malaria, Pneumonia and Anaemia were the first, second and third in causing morbidity respectively. In year 2004, Malaria was the severe cause of morbidity in Shinyanga Urban, Bariadi and Maswa Districts while Anaemia was serious in Shinyanga Urban and Bariadi. Pneumonia was rampant in Shinyanga Urban and Rural districts. Diarrhoea was more acute in Bariadi and Shinyanga Rural districts. Even though, causes of morbidity in Bukombe district are minimal compared to other districts, the overall result suggests that malaria, Pneumonia and Anaemia need more priority in terms of research and treatment.

Table 4.21(a) Ten Most Common Causes of Morbidity in the Region by District 2004

Disease	Bariadi	Buko- mbe	Kaha- ma	Maswa	Kish -apu	Meatu	Shinyan ga Rural	Shiny Urban	Total
Malaria	4,833	0	3,474	2997	*	554	1,833	5490	19,181
ARI	313	112	545	26	*	1,210	294	0	2,500
Anaemia	1,398	44	2,845	551`	*	123	222	2178	7,361
Diarrhoea	540	139	935	13	*	710	344	0	2,681
Pneumonia	725	58	961	209	*	108	2,348	5170	9,579
Severe Malaria	510	272	3,608	958	*	540	525	487	6,900
UTI	496	0	443	54	*	399	0	178	1,570
TB	76	38	0	76	*	0	0	193	383
Intestine Worms	0	44	0	0	*	704	0	0	748
HIV/AIDS	0	9	148	32	*	0	58	0	247
Epilepsy	57	6	0	0	*	0	0	0	63

^{*-}Included under Shinyanga Rural

In 2005, Malaria, Anaemia and Pneumonia were the 1st, 2nd and 3rd in causing morbidity respectively in the region. Malaria continued to be number one cause of morbidity in Shinyanga Urban and Bariadi districts. Pneumonia was more severe in Bariadi, Kishapu and Maswa districts while Anaemia was mostly severe in Bariadi district. ARI was also a highly contributor of morbidity in Kishapu and Bariadi districts while Diarrhoea was acute in Maswa, Bariadi and Maswa districts.

Generally, lack of adequate medical facilities and supplies might have contributed much to the various causes of morbidity in the region. However, lack of sufficient data has caused miss reporting for some of diseases and their extents.

Table 4.21(b) Ten Most Common Causes of Morbidity in the Region by District 2005

Disease	Bariadi	Bukomb e	Kahama	Maswa	Kishapu	Meatu	Shiny Rural	Shiny Urban	Total
Malaria	4,968	35	8,581	1,065	982	746	1156	23,327	40,860
ARI	371	53	709	98	478	121	87	16	1,933
Anaemia	1,900	27	3,438	501	141	502	66	368	6,943
Diarrhoea	438	50	1,383	613	237	235	13	0	2,969
Pneumonia	801	125	0	430	649	297	95	148	2,545
Severe Malaria	0	247	0	0	35	961	324	0	1,567
UTI	427	0	681	72	0	0	0	0	1,180
ТВ	98	4	125	93	0	0	19	57	396
Worms	0	22	140	0	0	0	0	0	162
HIV/AIDS	25	0	0	0	0	187	0	72	284
Epilepsy	0	0	0	0	0		0	0	0
Rheumatism	0	0	0	0	0		0	0	0
Fractures	0	0	273	0	32	175	0	0	480

Table 4.21(c) Ten Most Common Causes of Morbidity in the Region by District 2006

Disease	Bariadi	Bukomb	Kahama	Maswa	Kisha	Meatu	Shiny	Shiny	Total
		e			pu		Rural	Urban	
Malaria	204,679	77,768	11,656	200,101	71,628	209,060	103,649	34,015	1,017,556
ARI	81075	23747	282	26050	32,943	106736	23853	12,798	307,484
Anaemia	10368	3051	3110	1149	2518	857	2948	894	24,895
Diarrhoea	52953	11229	15487	14293	11,697	55427	7549	2543	171,178
Pneumonia	27758	6860	8672	8194	7699	31233	7711	1717	99,844
Severe Malaria	376,833	0	7216	579	0	0	568	0	385,196

UTI	0	5023	3286	4186	6339	0	0	0	18,834
TB	495	132	168	56		242		345	1,438
Worms	19277	9486	13597	3591	7266	11094	4607	2543	71,461
HIV/AIDS		84	146	43		156	176	1781	2,386
Epilepsy	0	0	0	0	0	0	0	0	0
Rheumatism	0	0	0	0	0	0	0	0	0
Fractures	0	0	347	0	0	0	0	394	741

4.3.3 Ten Common Causes of Mortality

Various causes of mortality are summarized in Table 4.22(a) and 4.22 (b) which show the causes of mortality in Shinyanga region for the year 2004 and 2005. Malaria is still number one killer in the region claiming around 46 percent of total death. Malaria transmission has increased drastically over the last decades in the country mainly due to environmental and population factors. Drug therapy has been the only control measure commonly applied as a result drug resistance has been very high. Recently, there sensitization campaign to advocate for the use of mosquito nets as well as environmental up keeping in eradicating the sources of malaria out break in the region. Death caused by Malaria was more in Shinyanga Urban, followed by Maswa and Bariadi districts. The second cause of death in the region in 2004 was Anaemia with 25 percent of all deaths. Anaemia was severe in Shinyanga Urban and Bariadi districts than any other districts in the region. HIV/AIDS and Tuberculosis were also big cause of death in the region, where most of cases were reported in Shinyanga Urban and Maswa District. The finding reveals that, the data collection for mortality in Shinyanga region is still insufficient, and where more cases are reported perhaps is because of the efficiently data collection. However, there is urgently need to address the growing problem of Tuberculosis and HIV/ADS in the region.

Table 4.22(a) Ten Most Common Causes of Mortality in the Region by District 2004

Disease	Bariadi	Bukombe	Kahama	Maswa	Kishapu	Meatu	Shiny Rural	Shiny Urban	Total
Malaria	79	0	0	126	*	31	11	210	457
ARI	2	1	0	0	*	0	0	8	11
Anaemia	84	4	191	112	*	46	5	173	615
Diarrhoea	6	1	19	0	*	5	5	4	40
Pneumonia	13	0	34	35	*	28	5	67	182
Severe Malaria	0	0	129	154	*	28	24	87	422
UTI	3	0	0	0	*	7	0	0	10
TB	19	0	24	24	*	18		38	123

HIV/AIDS	0	0	9	32	*	32	23	42	138
Others	14	11	28	38	*	18	13	35	257
Total	220	17	434	521	*	213	86	664	2,255

Table 4.22 (b) depicted the various causes of mortality in the region by 2005. The table shows that, Malaria continued to be a number one killer in the region with more than 45.8 percent of all deaths reported. Shinyanga Urban had more reported cases of death from malaria than any other district, perhaps due to availability of data and not on vulnerability.

The second cause of death in the region was Anaemia which contributed about23 percent of deaths by diseases in the region. This disease is mostly severe in Bariadi, Maswa and Shinyanga Urban districts.

Table 4.22(b) Ten Most Common Causes of Mortality in the Region by District 2005

Disease	Bariadi	Bukombe	Kahama	Maswa	Kishapu	Meatu	Shiny Rural	Shiny Urban	Total
Malaria	79	0	229	89	10	60	4	106	577
ARI	4	0	0	0	1	0	0	0	5
Anaemia	57	0	136	44	2	49		44	332
Diarrhoea	9	0	20	0	2	32	1	0	64
Pneumonia	10	1	41	28	2	29	8	13	62
Severe Malaria	0	5	0	0	18	113	15	0	151
UTI	0	0	1	0	0	0	0	0	1
TB	3	0	10	0	0	15	0	3	31
HIV/AIDS	13	0	0	0	5	100	0	12	130
Others	1	0	6	3	0	21	1	36	68

Table 4.22(c) Ten Most Common Causes of Mortality in the Region by District 2006

Disease	Bariadi	Bukombe	Kahama	Maswa	Kishapu	Meatu	Shiny Rural	Shiny Urban	Total
Malaria	31	0	0	0	115	93	0	0	239
ARI	5	0	2	8	74	0	0	10	99
Anaemia	67	103	146	11	9	67	26	209	638

^{*-}Included under Shinyanga Rural

Diarrhoea	5	6	42	3	21	0	1	14	92
Pneumonia	14	37	49	10	0	11	0	21	142
Severe Malaria	90	118	202	9	0	79	100	221	819
UTI	0	0	0	0	3	0	0	0	3
TB	6	0	25	0	0	4	7	18	60
HIV/AIDS	36	0	43	9	0	45	46	118	297
Others	11	0	94	8	0	3	16	51	183

4.3.4 Infant and Child Mortality

Shinyanga region is among the regions in the country which shows a rapid rate of changes in infant mortality rate (IMR) and under- five mortality rates (U5MR) as the figures in table 4.23 indicates. Based on 2002 National Census data, infant and under-five mortality declined from 137 to 95 and 231 to 162 per 1,000 live births respectively at national level. The trend generated by the preliminary 2004/05 Domestic Household Survey (DHS) data is even more optimistic. From the 1999 and 2004/05 surveys, infant and under-five mortality declined from 99 to 68 and from 147 to 112 per 1,000 live births, respectively. Much of this decline is likely to be the result of improved malaria control- both increased use of preventive mosquito nets and improve curative care through more effective drug treatment.

As the table 4.19 depicted, the region was within national level indicators for IMR although for U5Mr the figures are slightly higher. Shinyanga Rural district was leading with the lowest rate of IMR followed by Maswa and Meatu districts. Bukombe is the only district which had higher rate above the national level of below 68. In the side of U5MR only Maswa with 68 was ahead of the national level of 112 per 1,000 live births. The finding reveals that despite of the remarkable achievement there is still much to be done to reach the national targets, particularly on U5MR.

Table 4.23 the Infant and Under Five Mortality rate, by District 2005

District	Estimated IMR	Estimated U5MR
Bariadi	16 out of 1,000	180 out of 1,000
Bukombe	115 out of 1,000	146 out of 1,000
Kahama	14 out of 1,000	141out of 1,000
Maswa	11.2 out of 1,000	86 out of 1,000
Meatu	11.5 out of 1,000	220 out of 1,000
Shinyanga U	19.1 out of 1,000	280out of 1,000
Shinyanga R	8 out of 1,000	168out of 1,000

4.3.4. 1 Distribution of BCG Vaccination of Children under One Year

Distribution of BCG vaccination to children less than one year for the year 2003, 2004, 2005 and 2006 was outstanding. Table 4.24 indicates that in the year 2003, 2004, 2005 and 2006, vaccination performance reached 107 percent, 97 percent, 97.2 percent and 93.3 percent of the total regional targets respectively. The achievement was improving with time. In 2005, Bariadi and Shinyanga Rural districts reached 99 percent of the target and Bukombe, Kahama and Maswa districts reached 98 percent while Shinyanga Urban district was last with 85 percent of the target. The findings postulated that the children vaccination with BCG in the region was most success.

Table 4.24: Distribution of BCG Vaccination of Children under -One Year in the region by District from 2003-2006

District	Year 2003		Year	Year 2004		005	2006	
Name	Target	Vaccina ted	Target	Vaccina ted	Target	Vaccinate d	Target	Vaccinate d
Bariadi	24,216	24,074	24,852	24,355	25,764	25,523	26,614	25,585
Bukombe	16,936	19,885	18,292	17,818	19,742	19,342	24,428	19,780
Kahama	23,859	28,165	24,646	24,403	26,230	25,826	27,096	26,981
Maswa	12,219	12,376	12,519	12,114	12,828	12,593	13,122	12,171
Meatu	9,958	9,730	10,632	9,821	10,586	10,160	10,908	10,129
Kishapu	*	*	9,924	9,825	10,594	9,922	10,935	10,423
Shinyanga (Urban)	5,402	5,862	5,628	4,881	5,760	4,880	5,892	5,446
Shinyanga (Rural)	20,705	21,422	11,466	11,231	11,846	11,712	12,641	12,337
Total	113,295	121,514	117,959	114,478	123,350	119,958	131,636	122,852

Source: Shinyanga Region Commissioner's Office, 2006

4.3.4.2 Distribution of DPTHB3 Vaccination to Children under One Year

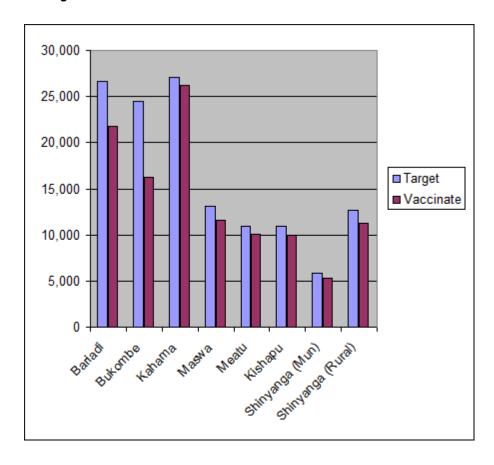
The necessity of vaccinating children under one year with DPTHB3 is not under estimated. Table 4.25 shows that in 2003, 2004 2005 and 2006 the region vaccinated 90.3 percent, 90.3 percent 87.4 percent and 85.3 percent of the total Regional children with DPTHB3 of the total targeted respectively. The districts that achieved higher target were Kahama 99.6 percent, Meatu 92.3 percent and Kishapu 91.3 percent of the target respectively. However, the result reveals that level of achievements of DPTHB3 vaccination to children under one year was also remarkable.

^{*-}Included under Shinyanga Rural

Table 4.25: Distribution of DPTHB3 Vaccination to Children under One Year in the Region by District

District	Year	2003	Year	2004	20	005	20	006
Name	Target	Vaccina	Target	Vaccina	Target	Vaccinate	Target	Vaccinate
Bariadi	24,216	20,351	24,852	19,402	25,764	21,699	26,614	21,721
Bukombe	16,939	14,403	18,292	17,109	19,742	17,866	24,428	16,255
Kahama	23,859	22,957	24,646	23,942	26,230	23,817	27,096	26,168
Maswa	12,219	11,505	12,519	11,296	12,828	10,972	13,122	11,601
Meatu	9,958	9,342	10,632	9,480	10,586	9,963	10,908	10,041
Kishapu	*	*	9,924	9,815	10,594	8,217	10,935	9,983
Shinyanga (Mun)	5,830	4,774	5,628	4,970	5,760	4,866	5,892	5,312
Shinyanga (Rural)	20,705	19,372	11,460	10,599	11,846	10,376	12,641	11,230
Total	113,726	102,704	117,953	106,613	123,350	107,776	131,636	112,311

Fig 13: Distribution of DPTHB3 Vaccination to Children under One Year in the Region by District in 2006



^{*-}Included under Shinyanga Rural

4.3.4.3 Distribution of OPV3 Inoculation to Children under One Year

OPV3 inoculation to children under one year is absolutely essential for the enhancing the immunity system against number of diseases. The results as depicted in table 4.26 shows that, in 2003 Shinyanga region distributed 98.4 percent of the total target. In year 2004 the region distributed 91.6 percent, in 2005 reached 97 percent and 87.7 percent of the targeted distribution. Distribution in the level of district was also remarkable with all districts attained over 79 percent of the target except Bukombe which attained 68.1 percent of the target. The leading three districts in achievement were Shinyanga Rural 98.3, Kahama 98.0, Meatu 91.8 respectively. Bukombe district came last with 68.1 percent attainment that was below regional average of 87.7 percent. Based on the level of distribution it could be urged that the exercise was successful.

Table 4.26 Distribution of OPV3 Inoculation to Children under One Year

District	Year 2003		Year 2004		20	005	2006	
Name	Target	Vaccina	Target	Vaccina	Target	Vaccinate	Target	Vaccinate
Bariadi	24,216	23,394	24,852	19,860	25,764	25,523	26,614	22,861
Bukombe	16,939	17,274	18,292	17,561	19,742	19,347	24,428	16,625
Kahama	23,859	25,441	24,646	24,304	26,230	25,826	27,096	26,566
Maswa	12,219	11,624	12,519	11,295	12,828	12,593	13,122	11,744
Meatu	9,958	9,346	10,632	9,595	10,586	10,160	10,908	10,013
Kishapu	*	*	9,924	9,805	10,594	9,922	10,935	9,945
Shinyanga (Urban)	5,830	5,013	5,628	4,919	5,760	4,580	5,892	5,312
Shinyanga (Rural)	20,705	19,925	11,460	10,792	11,846	11,712	12,641	12,427
Total	113,726	112,017	117,953	108,131	123,350	119,663	131,636	115,493

Source: Shinyanga Region Commissioner's Office, 2006

4.3.4.4 Distribution of Measles Vaccine Inoculation to Children under One Year

Distribution of measles vaccine inoculation to children under- one year in the region for the year 2003, 2004, 2005 and 2006 is shown in Table 4.27. The Table indicates that the distribution pattern depict down trend as 2006 achievement was lower than the preceding years. In 2003 for example, level of distribution was 95 percent of the target while 2004 was 88 percent in 2005 was 87 percent but in 2006 was 84.7 of the total target. In 2006, Kishapu district rank first by distributing 93.5 percent of the total targeted measles vaccine inoculation. Kahama district was

^{*-}Included under Shinyanga Rural

second with 92.9 percent followed by Shinyanga Urban with 92.3 percent of the achievement (target) while Bukombe was last with 69.0 percent. Achievements for Bariadi, Meatu and Shinyanga Rural districts were, 79.9 percent, 91.7 percent, 91.7 percent respectively.

Table 4.27: Distribution of Measles Vaccine Inoculation to children Under One Year in The Region by District

District	Year 2003		Year	Year 2004		005	2	2006	
Name	Target	Vaccina	Target	Vaccina	Target	Vaccinate	Target	Vaccinate	
Bariadi	24,216	22,878	24,852	19,215	25,764	19,983	26,614	21,275	
Bukombe	16,939	16,868	18,292	16,277	19,742	16,763	24,428	16,854	
Kahama	23,859	22,957	24,646	22,716	26,230	22,634	27,096	25,159	
Maswa	12,219	11,416	12,519	11,626	12,828	12,255	13,122	11,189	
Meatu	9,958	8,795	10,632	8,945	10,586	9,787	10,908	9,999	
Kishapu	*	*	9,924	9,705	10,594	9,372	10,935	10,221	
Shinyanga (Urban)	5,830	5,225	5,628	4,996	5,760	4,882	5,892	5,441	
Shinyanga (Rural)	20,705	20,158	11,460	10,429	11,846	11,100	12,641	11,587	
Total	113,726	108,297	117,953	103,909	123,350	106,776	131,636	111,725	

Source: Shinyanga Region Commissioner's Office, 2006

4.3.4.5 Distribution of Children under One Years who were severely Underweight During Measles Vaccination

Children severely underweight were determined during measles vaccination in the region. Table 4.28 shows that 2,264 children were severely underweight in 2003, equivalent to 2.0 percent of the total regional number. In the same period, Shinyanga Rural district was leading with children who were severely underweight with 3.1 percent. In 2004, the region had 7,115 children severely underweight equivalent to 7.5 percent. The situation in Maswa district was precarious, since the district had 26.8 percent of the severely underweight children. Meatu District had 20.5 percent of total weighted children were severely underweight and 5.4 percent were from Bukombe district. Shinyanga Urban and Kahama districts were better off with 0.6 percent and 0.9 percent respectively. In 2004, the number of children with severely underweight were 3.9 percent. The analysis shows that 16.3 percent were from Meatu district and 7.1 percent from Shinyanga Rural district. In all other districts the percentage was less than 3, indicating some improvement. The result reveals that proportion of severely underweight in 2005 was decreasing compared to 2004. However, the situation in Meatu district was not impressive. Therefore, the problem of children who are severely underweight should be given a priority when the child mortality problems are addressed.

^{*-}Included under Shinyanga Rural

Table 4.28: Distribution of Children under One Year who were Severely at the Time Measles Vaccination in the Region by District

District	Ye	ar 2003	Ye	ar 2004	Ye	ar 2005
Name	Total	Severely	Total Severely		Total	Severely
	Weighed	Underweight	Weighed	Underweight	Weighed	Underweight
Bariadi	22,878	630	19,215	547	24,852	467
Bukombe	16868	403	16277	886	19,742	372
Kahama	25,023	224	22,716	227	22,634	518
Maswa	11416	203	11628	3115	12,254	199
Meatu	8795	132	8945	1836	10,775	1763
Shinyanga Urban	5225	42	4996	33	5,669	121
Shinyanga Rural	20158	630	10429	471	11,503	820
Total	110,363	2,264	94,206	7,115	107,429	4,260

4.3.5 HIV/AIDS and Tuberculosis Case

HIV/AIDS is considered to be one of the most impoverishing forces facing Tanzanians, mainly affecting individuals in the prime of their productive and childbearing years with consequent repercussions for their families(R & AWG 2004). Tuberculosis on the other hand has become a rampant disease and difficult to treat when combined with HIV/AIDS.

4.3.5. 1 Cumulative Number of People Reported with HIV/AIDS

The case of HIV/AIDS reported in the region from 2000 to 2006 is depicted in table 4.29(a). According to the table, the numbers of cases reported in the region were 511 in 2000, 783 in 2003, 743 in 2004; 1,218 in 2005 and 2,093 in 2006. The numbers of cases reported were increasing in all districts but the rate was higher in Shinyanga Urban district than other districts. The second district with higher cases was Kahama district, followed by Meatu district. The lowest number of cases was reported from Bukombe District. The Table 4.29(b) reveals that at average, female were reported to be infected with HIV/AIDS more than male. Overall findings suggest that, the bigger number of people might have contacted HIV/AIDS although the actual number is not known since few have volunteered to go for testing. Therefore, precaution against HIV/AIDS must be taken seriously as the killer is not curable. Precaution should be taken in all districts but more strategically in Shinyanga Urban and Kahama due to influx of people prospecting for mining activities in the region.

Table 4.29(a): Cumulative Number of People Reported with HIV/AIDS Cases in the Region by District

District	2000	2003	2004	2005	
Name					2006
Bariadi	39	66	113	122	116
Bukombe	1	15	21	20	155
Kahama	39	48	119	348	618
Maswa	25	31	21	156	382
Meatu	108	17	47	187	150
Shinyanga	277	592	392	351	
(Urban)					491
Shinyanga	23	29	30	34	
(Rural)					167
Total	511	798	743	1218	2,093

Table 4.29(b): Distribution of New AIDS Cases by Sex in the Region

SEX	2002	2003	2004	2005	2006
Male	354	319	341	566	1,073
Female	444	356	402	652	1,020
Total	798	675	743	1,218	2,093

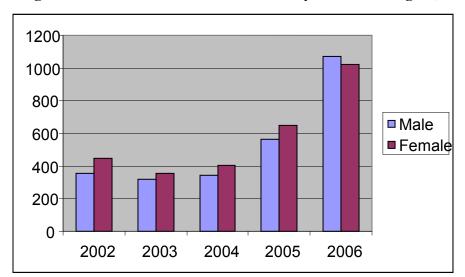


Fig 14: Distribution of New AIDS Cases by Sex in the Region, 2002-2006

4.3.5.2 Prevalence of HIV among Family Blood Donors

The prevalence of HIV in blood donors in Shinyanga region for the year 2003, 2004 and 2005 is depicted in the table 4.30. The table shows that the prevalence stands at 8.1 percent of all blood donors in 2003, 7.7 percent in 2004 and 10.3 percent in 2005. In the district level, by 2005 Bukombe district was leading with 18.3 percent of HIV positive among blood donors, followed by Kahama district 16.9 percent and Bariadi was least with only 4.0 percent. Generally, the findings reveals that the 10.3 percent prevalence among blood donor is very high, therefore more efforts should be devoted to educate people about the negative impacts of HIV/AIDS to the society.

Table 4.30 Prevalence of H.I.V. among family blood donors by District

District	Ye	ar 2003	Ye	Year 2004		ar 2005
Name	Total number	Number of Donor H.I.V	Total number	Number of Donor H.I.V	Total number	Number of Donor H.I.V
	of Donors	Positive	of Donors	Positive	of Donors	Positive
Bariadi	5,118	274	4,997	206	5,058	204
Bukombe	-	_	-	-	251	46
Kahama	5,467	487	5,922	550	4,786	812
Maswa	1,408	96	-	-	1,545	115
Meatu	935	109	916	110	863	86
Shinyanga Urban	6,110	581	11,177	919	5,645	607
Shinyanga Rural	52	1	34	1	26	2
Total	19,090	1,548	23,046	1,786	18,174	1,872

4.3.5 3 Tuberculosis Case

Cases of TB in the country have increasingly reported where most of people are either under treatment or died of the disease. The spread of TB in Shinyanga region for the year 2000 to 2005 has been depicted in table 4.31. The table reveals that the region had 2,638 TB patients in 2005. The number of reported cases of TB in 2005 increased by 48.5 percent when compared to the cases reported in 2000. In the district level, Kahama was leading with 28.8 percent, followed by Bariadi 23.1 and Shinyanga Urban 19.9 percent. The number of reported cases of TB remains low in Meatu, Kishapu and Bukombe districts.

Table 4.31 Distribution of TB cases notification by District.

District	2000	2001	2002	2003	2004	2005	% of Total case 2005
Bariadi	490	503	499	385	532	610	23.1
Bukombe	100	148	191	207	234	184	7.0
Kahama	404	436	458	700	749	761	28.8
Maswa	200	195	205	162	268	246	9.3
Meatu	91	128	111	130	98	106	4.0
Kishapu	*	*	*	*	*	78	3.0
Shinyanga	151	208	341	313			
(Urban)					455	526	19.9
Shinyanga	340	374	272	266			
Rural					380	127	4.8
Total	1776	1992	2077	2163	2716	2638	100

Source: Shinyanga Region Commissioner's Office, 2006

4.3.6 Distribution and Ownership of Health Facilities.

Involvement of the private sector in the delivery of health services has accelerated the establishment of hospitals, health centres and dispensaries in the region. For stance the period between 1990 and 2005 witnessed significant expansion of heath services in the region. During the period under discussion dispensaries grew from 243 to 289. Health Centres increased from 21 to 29 and hospitals from 7 to 9. Table 4.32 indicates the status and distribution of Health Facilities in the region in 2005. The table reveals that mostly available health facilities in the region are dispensaries. Out of 289 dispensaries in the region 65 or 29 percent were private owned. Kahama district was leading with 51 dispensaries equivalent 18.3 percent. Like wise out of 29 health centres 25 were public and 4 were private operated. Kahama district again take a lead with 7 followed by Bariadi 5. However Shinyanga Urban district does not have a health centre. In case of hospitals, out of 9 available hospitals 4 were under private and 5 public. However, Shinyanga Rural and Bukombe district does not have hospitals. This situation forces most of sick to travel to other districts for hospital services. The finding suggests that more effort is required increase health facilities in the region by build health centres or increase number of

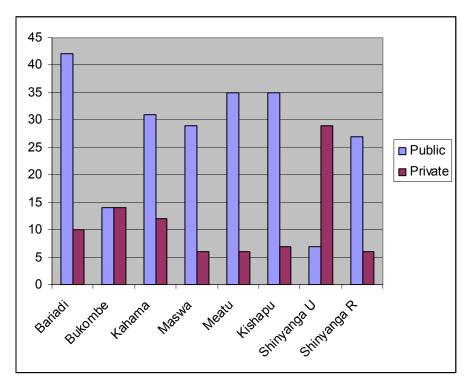
^{*-}Included under Shinyanga Rural

dispensaries in all districts. Similarly, private health facilities need to be increased in the region as they also provide the mostly needed service to the people.

Table 4.32: Distribution and Ownership of Health Facilities in the Region by District 2006

District Name	No. of Hospitals		No. of Heal Centres	lth	No. of Dispensaries		
	Public	Private	Public	Private	Public	Private	
Bariadi	1	0	5	0	42	10	
Bukombe	1	0	4	0	14	14	
Kahama	1	1	3	4	31	12	
Maswa	1	0	3	0	29	6	
Meatu	1	0	2	0	35	6	
Kishapu	0	1	4	0	35	7	
Shinyanga Urban	1	1	0	0	7	29	
Shinyanga Rural	0	0	4	0	27	6	
Total	6	3	25	4	220	90	

Fig 15: Distribution and Ownership of Health Facilities in the Region by District 2006



4.4 7 Distribution of Complimentary Rural Health Services Provider

A Rural Health Centre (RHS) is the second level of referral system at district level. A Health Centre is supposed to cater for at least to the population of 50,000 persons. The complimentary Rural Health Services in the region in 2005 are as shown in Table 4.33. The Table indicates that Shinyanga region had 817 TBAs. Shinyanga Rural district owns 33 percent of the total regional number followed by Maswa district which owns 16.4 percent of total regional number. In 2005, the region had a total of 1,279 VHWs. Shinyanga Rural district had 23.7 percent of the total regional VHWS. Also in 2005, about 582 villages in the region had established health committees of which 120 or 20.6 percent are both found in Bariadi and Shinyanga rural district respectively. The same Table shows that the region had 4,765 traditional medicine practitioners (TMP).Kahama district, Shinyanga Rural and Bariadi district were leading with 27.4 percent, 26.6 percent and 26.4 percent of the traditional medicine practitioners respectively.

Table 4.33 Distribution of Complementary Rural Health Service Provider in the Region by District, 2005

District Name	No. of TBAs	No. of VHWs	No. of VHC	No. of TMP
Bariadi	106	240	120	1,257
Bukombe	82	158	86	136
Kahama	130	296	96	1,303
Maswa	134	166	70	329

Meatu	60	102	71	120
Shinyanga Urban	35	14	19	350
Shinyanga Rural	270	303	120	1,270
Total	817	1,279	582	4,765

4.4.8 Distribution of Hospitals and Health Centre Beds and Doctors

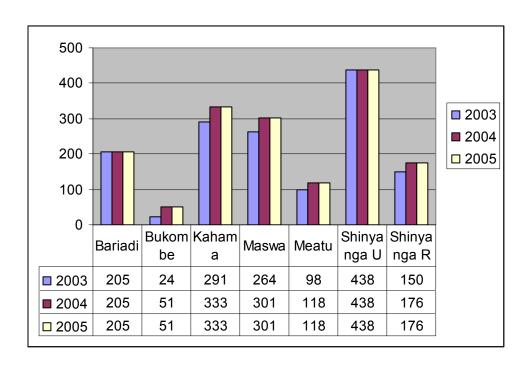
Distribution of beds and doctors in the region in 2003, 2004 and 2005 is depicted in Table 4.34. The Table shows that the number of beds in the region did not change much since 2003 to 2005. During the period under review, the number of beds in hospitals increased by only 10 percent. The increase of beds was in all districts except Bariadi and Shinyanga Rural where number of beds remains constant throughout the period

Shinyanga region is facing an acute shortage of doctors. The number of doctors in the region by 2005 was only 19. However, when compared with 2003, the number of doctors has increased by 111 percent from 9 to 19 doctors. Shinyanga Urban district was leading with 8 doctors or 50 percent of the doctors in the region while Bukombe and Meatu district had one doctor each in the same period. The finding suggests that there is an urgently need of addressing the shortage of doctors in the region given the number of patients reporting in the hospitals for medical services. Similarly the number of beds in hospitals is a serious issue given the increasing number of admission of patients with various health problems

Table 4.34: Distribution of Hospitals and Health Centre Beds and Doctors in the Region by District

District Name	N	umber of Be	eds	Number of Doctors		
	2003	2004	2005	2003	2004	2005
Bariadi	205	205	205	1	1	1
Bukombe	24	51	51	0	1	1
Kahama	291	333	333	1	4	4
Maswa	264	301	301	1	2	2
Meatu	98	118	118	0	1	1
Shinyanga Urban	438	438	438	4	8	8
Shinyanga Rural	150	176	176	2	2	2
Total	1,470	1,622	1,622	9	18	19

Fig 16: Distribution of Hospitals and Health Centre Beds and Doctors in the Region by District, 2002-2005



SECTION FIVE

5.0 OTHER DEVELOPMENT ISSUES

5.1 Introduction

The issues discussed in this section include women development groups, youth economic groups, cooperative development, Non Governmental Organisation (NGOs), Community Based Organisation (CBOs), Faith Based Organizations (FBOs) and gender mainstreaming. Other cross-cutting issues such as environment, good governance, HIV/AIDS and poverty are discussed sufficiently in the previous sections.

5.2 Women Economic Groups

As it is with most of the regions in the country, the number of women in Shinyanga Region outnumbers that of men. According to the 2002 Census women in Shinyanga Region constitute **51.percent** of the regions total population.93.6 percent of the women live in the rural areas. The average age at marriage is 17 years. This early marriage may be one of the factors which contribute to the higher maternal mortality rate in the region. Early marriage also influences the level of education for most women in the region since some of them are forced to leave schools at early stages for marriage. Consequently, illiteracy rate is higher among women in the region compared to men. It is estimated that about 87 percent of the total women in rural areas are illiterate.

Women in Shinyanga region are industrious thus a good number of them are engaged in various economic activities. Table 5.1 shows that, by 2005 there were 591 women economic groups in the region. Maswa District was leading with 161 groups or 27.2 percent, followed by Kahama district, 108 groups or 18.3 percent while Bariadi district was last with 40 groups only or 6.8 percent. These women groups engaged in various micro economic activities such as horticulture, agriculture, poultry keeping, tailoring, sewing, tie and dye, pottery, bakery food and beverages etc. In order to conduct their activities smoothly the groups were assisted to the extent of 209.807 million Tanzania shillings in 2005.

Maswa district received assistance of Tsh 61.83 million or 29.5 followed by Kahama district 15.1 percent while Bukombe was last with 7.1 percent of the assistance.

The findings reveal that more women group should be encouraged particularly in Bariadi, Meatu and Shinyanga Urban districts. Similarly, the participation of women in groups should go hand by hand with the provision of entrepreneurial skills as well as loans for transforming their groups into real SMEs.

Table 5.1: Active Women Groups in the Region by District, 2005

District Name	Total number of groups	Total Membership	Number of groups assisted 2005	Total 2005 Tsh(000)
Bariadi	40		40	17,150
Bukombe	50		50	15,000
Kahama	108		108	31,666
Maswa	161		161	61,830
Meatu	42		42	9,000
Kishapu	68		68	21,153
Shinyanga Urban	47		47	23,450
Shinyanga Rural	75		75	30558
Total	591		591	209,807

Source: Shinyanga Region Commissioner's Office, 2006

Note: Number of women group ranges between 5 and 15

5.3 Youth Economic groups

The development of youths starts at the level of family and it is hastened during primary education. According to Tanzanian Education policy, every youth of school going age should have access and actually attain primary school education. Future income for these youths tends to be linked with the extent and quality of the youth's education. The period of education is the

preparatory phase of these young people. Where possible, after primary schooling, vocational training or secondary education should be aimed at. Given that the huge majority of youths never attend either secondary school or vocational training, employment into the agricultural and informal sector becomes the only feasible alternative. Employment in the agricultural sector and other informal sectors is mainly self-employment. However, self-employment even in these sectors also need some preparation and some capital input. Access to entrepreneur skills as well as credit is therefore absolutely essential facilitator if these youths are to develop their potential and contribute to the national economy and poverty eradication.

Availability of training and credit facilities depends on the formation of mutual benefit economic groups basically because many youths have no collateral. Youths can be provided with entrepreneurial skills and access to credit through these groups, which provide supervision and guarantee repayment of the loans.

Based on this paradigm of helping youth to generate income for poverty alleviation, youth have initiated and formulated economic groups. Table 5.2 indicates that Shinyanga region has 100 active youth economic groups by December 2005. Although the region has 7 districts, only four districts namely Maswa, Bukombe, Shinyanga Urban and Shinyanga Rural have formed such groups. Bukombe was leading with 40 percent, followed by Shinyanga Urban 38 percent, Maswa 16 percent and Shinyanga Rural was the last with 6 percent.

The table further indicate that the youth groups in the region received an assistance of Tsh 25.85 million. Groups in Shinyanga Urban district received a lion share of Tsh 17.7 million or 68.5 percent, followed by Bukombe district 23.2 percent while Maswa district was last with 2.5 percent. The promotion of youth development projects in Shinyanga remain a big challenge to the regional and districts authorities. Various studies report have linked training and access to credit as a window to help to reduce poverty among youth when used for income generating activities.

Table 5.2: Active Youth Economic Groups in the region by District, 2005

District Name	Total number of groups	Total Membership	Number of groups assisted 2005	Total 2005 Tsh(000)
Bariadi	0		0	0
Bukombe	40		40	6,000
Kahama	0		0	0
Maswa	16		16	650
Meatu	0		0	0
Kishapu	0		0	0
Shinyanga Urban	38		38	17,700
Shinyanga Rural	6		6	1500

Note: Number of youth membership ranges between 5 and 20

5.4 Co-operative Development

The people of Shinyanga are traditionally cooperative minded people. They enjoy working in groups and often use the rhythm or beats of drums while cultivating, weeding, harvesting, or when participating in various development activities. By 2005, the region had a total of 600 different types of community based co-operative Societies as indicated in table 5.4. It is observed in the table that Marketing Societies constitute 83.7 percent of all societies in the region while SACCOs constitute 13.3 percent.

5. 4.1 Saving and Credit Co-operative Society (SACCOs)

Saving and Credit Co-operative Societies (SACCOs) is a useful instrument, which support members when used economically. Table 5.4 indicates that there were 80 SACCOs in the region in the year 2005 with membership of 5,065 people and total fund of over Tsh 546 million. Out of that 30 or 37.5 percent of total the regional number are operating in Bukombe district. Kahama was second with 20 or 25 percent, Maswa 20 or 12 percent while Shinyanga Rural district was last with 3 or 4 percent of the regional number of operating SACCOs.

The most important indicator for the effectiveness of cooperative development is the amount of fund deposited in the Bank and the amount of loans granted to the members. Table 5.3 indicates that Shinyanga Urban district deposited 40 percent of the total regional deposited fund by December 2005, followed by Bariadi district 22.7 percent and Shinyanga Rural district 14.1 percent. Districts with lowest deposits were Kahama 2.7 percent, Maswa 3 percent, and Bukombe 5.6 percent.

By 2005, SACCOs members in the region were granted total loans of over Tsh 1.2 billion. SACCOs members of Bariadi district received 36.7 percent of total regional loan followed by Meatu district 22.7 percent and Shinyanga Urban district 17.6 percent. SACCOs members who benefited less were from Kahama district that got only 1.5 percent, and Bukombe district 1.6 percent of loans granted to SACCOs members in the region.

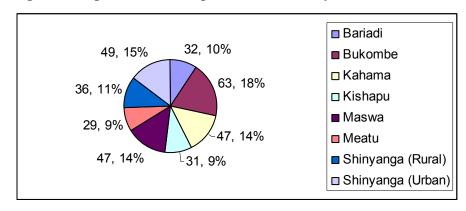
Based on number of SACCOs, funds deposited and amount granted as a loan to members, the finding implies that the region needs to put more efforts in encouraging the rural population to accord high priority in the formation of the much needed SACCOs and livestock Co-operative Societies in the region. This is imperative since the loans and credit facilities such as SELF and Empowerment Funds will channelled through SACCOs.

Table 5.3 Co-operative Development SACCOs by District 2006

District Name	No. of SACCOs	Total Membership	Total Funds SACCOs A/C	Total Loaned to Members (Tshs.)
Bariadi	32	3,816	432,430,455	633,128,500

Bukombe	63	7,061	598,907,235	1,732,881,020
Kahama	47	4,345	733,228,110	1,394,853,000
Kishapu	31	3,099	72,335,600	21,640,000
Maswa	47	5,235	38,452,000	463,830,000
Meatu	29	2,372	161,731,482	87,357,250
Shinyanga (Rural)	36	1,398	33,936,560	410,000
Shinyanga (Urban)	49	2,511	158,729,514	427,245,747
Total	334	29,837	2,529,770,956	4,761,345,517

Fig 17: Co-operative Development SACCOs by District 2006



5.4.2 Other Cooperatives

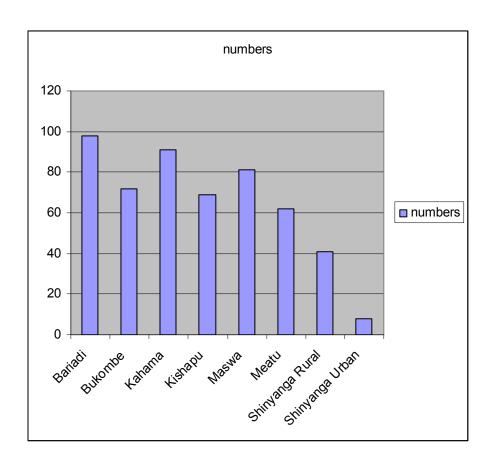
Apart from SACCOs the region also engages on other cooperatives Societies as indicated in table 5.4. The table shows that Marketing Co-operative Societies were 522 of which 110 were in Shinyanga Rural district, 98 in Bariadi, and 88 in Kahama. Service Cooperatives were 12 of which 4 were in Maswa, 3 in Bukombe and Shinyanga Urban and 2 in Bariadi. Also there were 6 other Cooperatives not classified above. The Table also discloses that the Region does not have Consumer Co-operative societies.

In case of membership, the table shows that Marketing Cooperative Societies had 43,834 members in the region of which 25.6 percent were in Maswa district, followed by Kahama district 20.8 percent and Bariadi district 20.4. The districts with few members of Marketing Cooperative Societies were Shinyanga Urban 0.7 percent, Shinyanga Rural 8.5 percent and Meatu 9.8 percent. Other forms of Cooperative Societies such as Service Cooperative were small in number and subsequently the number of members was insignificant.

Table 5.4 Other Active Cooperatives in the region by District, 2006

District Name			Service Cooperative		Marketing Cooperative		Others (Not SACCOs)	
	Number	Member	Number	Member	Number	Member	Number	Member
Bariadi	0	0	3	62	98	8,969	0	0
Bukombe	0	0	5	233	72	6,196	0	0
Kahama	0	0	4	94	91	9,137	1	14
Kishapu	0	0	0	0	69	10,438	0	0
Maswa	0	0	3	36	81	11,200	0	0
Meatu	0	0	0	0	62	4,308	0	0
Shinyanga Rural	0	0	0	0	41	26,762	0	0
Shinyanga Urban	0	0	5	168	8	309	0	0
Total	0	0	20	593	522	73,011	1	14

Fig 18: Other Active Cooperatives in the region by District, 2006



5.4.3 Regional Development Programmes Supported by Donors

Shinyanga region has several donors who offer technical and financial support to various types of development programmes. They range from Non- Governmental Organizations

(NGOs) like OXFAM, CARE International, World Vision, Axios, Youth Advisory and Development Council. Along with NGOs, the United Nations Agencies such as UNDP, UNFPA and UNICEF which support various programmes in the region. Table 5.5 depict the type of organization and project supported in the region. There are also donors such as the Dutch Government who support the Domestic Rural Water Supply and sanitation and district based Rural Development Programmes, and the Royal Norwegian Government who support the Afforestation programme in the region. IFAD and GTZ also support a few development programmes/ activities in the region.

Table 5.5: Active NGOs in the Region by District, 2005

No. of Organisation	No. of Beneficiaries	Types of programmes/Activities
Tanzania Essential Strategies Against Aids		HIV/AIDS intervention to 7 LGAs and Municipal Council
Youth Advisory and		Carry Out Campaign to fight against

Development Council		the spread of HIV/AIDS
Axios	Assisted three hospitals	Support VCT programme
	These are-	
	Regional, Kolandoto, KKKT	
OXFAM	180-primary schools	School Project and Agriculture
	1729-Teachers	
	100,715 pupils,	
	14-water tanks (rain harvest)	
World Vision Tanzania	Construction of classrooms – 100, Training of teachers – 322, Construction of water tanks (rain harvest) – 26, Construction of teachers houses – 60, Construction of latrines – 31, Assistance of bicycles – 322.	School, Shallow wells construction
CARE International	Assistance to SACCOs and Construction of Dispensaries.	Productive and Child Health

SECTION VI

6.0 POTENTIAL AREAS FOR INVESTMENT

6.1 Introduction

The region has identified six sectors as potential areas for investment; these include Agriculture, Livestock development, Industrial development, Mining, Tree nurseries and Education.

6.2 Agriculture

The region has great potential of land. Appropriate extension services to farmers as well as education on the proper methods of land utilization management will lead to increased food and cash crop production. Analysis shows that, potential food crops calling for strategic investment include maize, paddy, sorghum, Sweet potatoes cassava and legumes; whereas cash crops include cotton tobacco and fruits. Also Irrigation schemes in the production of food crops such as paddy is also of a vital importance. This will enable the region to produce enough rice for its needs as well as surplus for exchanging with other goods and services plus export.

6.3 Livestock Development

Livestock sector needs to be developed. Investment could be on Livestock multiplication with a view of improving the indigenous herd, improvement of breeds of cattle and introduction of diary farming. Establishment of viable commercial ranches facilities is also a feasible project in the region. Facilities for such ventures are available e.g. Lubaga Diary Farm, Kahama Livestock Multiplication Unit etc. Health, education and water supply are potential areas which require investment. For instance, there is need to increase the number of health facilities, to increase the number of secondary schools with focusing more on private ones. Rural water supply needs further investment.

6.4 Industrial Development

The region has a very low level of industrial development as such investors are invited to establish small, medium and large scale industries. Construction of ginneries in Meatu and Bukombe districts is another green area for investment. The area for construction as well as raw materials is available e.g. cotton, oil seeds, lime stone, leather, diary products etc.

6.5 Mining Sector

Shinyanga region has the largest deposit of gold and diamonds. Beside Kahama Mining which is based in Bulyankulu, Kahama and Mwadui Diamond Company at Mwadui, there are several companies in the region prospecting for mining. Small and Large scale mining could be developed in the region .Small scale mining could be empowered with skills and tools in exploiting the region's mineral deposits that include gold and diamonds.

6.6 Tree Nurseries

Private individuals are invited to establish tree nurseries to meet the requirement of seedling for agro-forest programmes.

6.7 Education

The government education policy states clearly on the call for private sector participation in the sector. Consequently, individuals, NGOs, Religious institutions are invited to invest in private primary schools and secondary schools in Shinyanga region.