



CHADIZA DISTRICT INTEGRATED DEVELOPMENT PLAN 2020 - 2030



EXECUTIVE SUMMARRY

This document presents the District Integrated Development Plan (IDP) which will guide the development of Chadiza district for the period 2020 to 2030. The whole IDP preparation process was guided by the IDP guidelines formulated by the Ministry of Local Government in January, 2019. The methodology used to come up with this IDP involved the collection of both primary and secondary data. Primary data was collected from the various stakeholder consultation meetings that were conducted in all the 18 wards of the district. Primary data collection also involved face to face interviews with the identified key stakeholders. Secondary data collection involved collecting data from statistical documents, review of existing government policy documents and laws and existing planning documents. The data which was collected by the IDP team was analyzed using problem tree analysis through the various groups that were established to do data collection, analysis and presentation and this resulted in identification and synthesis of the key issues that affect the development of Chadiza district.

The vision for the IDP area is "A High-Value, Agriculture-driven economy, improving the standard of living for all by 2030." In order to attain this vision, the district Local Authority and the DMT will focus on six (6) development objectives that are outlined in the development framework. The strategic objectives, which are also aligned to the Vision 2030 and the Seventh National Development Plan (7NDP), will promote investments in high value infrastructure in agriculture sector and infrastructure and mitigating climate change. The IDP further describes the three strategic drivers that will be used in order to achieve the strategic objectives and these are Connectivity and Productivity; Promoting Growth of Chadiza district; and Promoting Sustainable Human Settlements.

Finally, the implementation strategies tabulated in the IDP will result into a better district for the people of Chadiza. Beyond 2020, the MTEF budget will be well-versed by the IDP and linked to specific Implementation Plan and Capital Investment Plan and Monitoring and Evaluation System.

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IDP	Integrated Development Plan	
PSIR	Planning Survey and Issues Report	
CSO	Central Statistical Office	
DEBS	District Education Board Secretary	
MoGE	Ministry of General Education	
LA	Local Authority	
GRZ	Government of the Republic of Zambia	
ECCDE	Early Childhood Care, Development and Education centres	
ZIFLP	Zambia Integrated Forestry Landscape Project	
DHD	District Health Director	
DHO	District Health Office	
CDF	Constituency Development Fund	
7NDP	Seven National Development plan	
NASF	National Aids Strategic Framework	
VMMC	Voluntary Medical Male Circumcision	
A D.T.	A A. D A 1 TI	

DACO District Agriculture Coordinating Officer

FISP Farmer Input Support Program

EWSC Eastern Water and Sanitation Company

DMT District Multi-Sectoral Team CFM Community Forest Management

GHG Green House Gases

CSA Climate Smart Agriculture
DFA District Farmers Association
DWRD Department of Water Resource
NGO Non-Governmental Organisation

MOH Ministry of Health NA National Assembly

MOGE Ministry of General Education

ZANIS Zambia National Information Services

HELSB Higher Education Loans and Scholarship Board

COVID-19 Corona Virus 2019

PART ONE: INTRODUCTION AND BACKGROUND

1.0 Introduction and Background

The Urban and Regional Planning Act No. 3 of 2015 stipulates that all districts need to have an Integrated Development Plan (IDP). IDPs are not only a legal requirement but are a prerequisite to sustainable and meaningful socio-economic development. Integration is the best way of not leaving anyone behind. The absence of an IDP in a district is likely to lead to uncoordinated and unsustainable use of resources for development. An IDP identifies critical development needs which fall within the functional mandate of the Local Authority, National and Provincial Government Departments and their public entities and indicates how these needs will be addressed in the short, medium and long term (where information is available) and how they align to local planning.

Integrated development planning is a process that is undertaken within the parameters of National, Provincial and District planning frameworks and is a consultative process that solicits input from a wide range of stakeholders. It aims at identifying and prioritising District and community needs and integrate them into a singular local level plan which indicates how resources will be allocated.

The internal focus of this IDP is to ensure that it links, coordinates and integrates various sector plans and proposals for the development of the area of the local authority. It places its external focus on identifying and prioritizing the most persistent and critical development issues in the district and its communities through a well-organized governance and institutional integrated approach. It also depicts how the implementation of programs and strategies should occur in space by indicating where in the local area projects will be implemented in order to achieve the desired development. Overall, this IDP is a strategic development plan that will guide decision making, budgeting, investments and development in the district.

The document is a 10-year plan that aims to guide all developmental efforts and investments in the district in such a way as to address the core issues identified in the document through the public consultation process. The integrated approach is adopted throughout the formulation of the IDP spanning from the identification and analysis of core issues, the adoption of policies and strategies (at international, national and local level), the formation of the development framework and the implementation program. This is in order to fulfil the objective of ensuring coordination and ownership among all relevant ministries, local CSOs and NGOs, and other stakeholders in the district, as well as all regulatory authorities.

1.1 Location map of Chadiza District

Chadiza is one if the nine districts in the Eastern Province of Zambia. It is situated in the extreme south – eastern corner of Zambia. It lies between latitudes 13.75° and 14.30° South and logitudes 32° and 33° East. Its headquarters are located at Chadiza district. The district borders with Chipata to the North, Vubwi to the East and Katete to the West. It also shares a border with Mozambique in Chanida to the South. Figure 1 below shows the location map of Chadiza district.

CHADIZA DISTRICT LOCATION MAP Tanzania Democratic Republic of Congo Malawi Angola 8600000 Mozambique Namibia Southern Zimbabwe Botswana Malawi Chipata Petauke Chadiza Mozambique Provincial Boundary District Boundary 600 Kilometers 0 75 150 300 450

Figure 1: Location Map of Chadiza District

Source: Chadiza District Planning Department, 2020

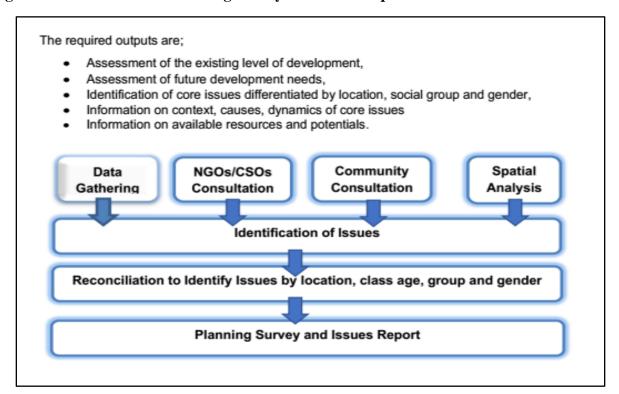
Chadiza District Boundar



2.0 The Planning Survey and Issues Report (PSIR)

Chadiza District Planning Survey and Issues Report (PSIR) highlights on the important issues that define the current situation in Chadiza District. It provides an assessment of the existing level of development, future needs, and environmental and climate impacts across the various sectors in the district while identifying core issues affecting people, providing information on the context, causes and dynamics of the core issues identified while also providing information on the available resources and their potentials. The report provides spatial analysis regarding facilities and service provision and highlights on cross cutting analysis. Figure 2 below shows the overview of the PSIR.

Figure 2: Overview of the Planning Survey and Issues Report



Source: Ministry of Local Government, 2019

2.1 Demographic Analysis

Demographic analysis is an important variable in the planning and decision-making processes. An increase in the population of an area may for instance lead to an increased demand for services like schools and health facilities. The underlying importance of the subject therefore cannot be overemphasised.

This section provides information on the population of Chadiza District. The data presented is based on the 2010 national census that was conducted by Zambia Central Statistical Office (CSO). A demographic analysis of population trends has also been carried out to allow for the assessment of future needs across various sectors, as well as implications of these trends on the environment and on climate change issues.

Disclaimer: The population data in this section is sourced from the CSO 2010 Census report, which was compiled at a time when current Vubwi District was still a constituency under Chadiza District. Efforts have herein been made to exclude population statistics and projections for all Wards that were since adopted by Vubwi at the time it was made into a separate district. This is in order to provide a more accurate position for Chadiza District's population and projections in order to inform analysis and development planning. The figures arrived at after excluding Vubwi-adopted wards may not be 100%t accurate, and must strictly be taken as estimates for planning and analysis purposes.

2.1.1 Population Characteristics

According to the 2010 CSO Census Population Projections Report, Chadiza District alone had a total population of 76,837 with the population growth rate of 2.3%. Computations carried out on the growth rate and projected populations of the district were done using mathematical models controlled to the cohort component projections made for Eastern Province, and the 2010 Census De Jure count provided the basis for the base population. Data from the report also show that Mangwe ward continues to be the highest populated ward, followed by Manje and Chadiza Central, while Kabvumo and Chanjowe are the least populated wards. (CSO, 2010).

2.1.2 Population Projections and likely characteristics

Table 1 below shows the district population projections for 2020, differentiated by ward and gender, and also shows the number of households per ward. The total projected population for 2020 in Chadiza stands at 96,707 indicating a percentage increase of 26% over a 10year period.

The projected population table below shows the disparities in ward populations by male and females with the highest summed up population being that of the female populations which is 48,663 while the male population is 48,045 as seen from table 1.

Table 1: 2020 Projected Population for Chadiza District

Wards	Households	Total	Male	Female
Mangwe / Tikondane	2 133	12 986	6 528	6 458
Nsadzu	1 249	7 266	3 600	3 666
Manje / Bwwanunkha	1 562	8 616	4 252	4 365
Chanjowe	563	3 314	1 723	1 591
Kapachi	928	5 071	2 507	2 564
Chadiza	1 284	7 136	3 520	3 616
Chilenga	1 027	5 652	2 763	2 890
Naviluri	1 426	7 992	3 933	4 059
Chamandala	1 014	5 197	2 515	2 682
Kandabwako	881	5 097	2 471	2 627
Kampini	1 071	5 544	2 751	2 793
Tafelansoni	982	5 095	2 535	2 560
Ambidzi	755	3 680	1 853	1 827
Kabvumo	613	3 320	1 661	1 659
Khumba	828	4 474	2 248	2 226
Mwangazi	1 216	6 265	3 186	3 080
Total	17 531	96 707	48 045	48 663

Source: Zambia Census Projections 2011 to 2035- CSO 2010.

The graph below shows the population disparities among the different wards in Chadiza and the changes in population for each ward between 2010 and 2020.

14000 12000 10000 8000 6000 ■ 2020 Population 4000 ■ 2010 Population 2000 Marie Buarunka warenet ikondare Chamandala kandabwako Chilenga Naviluri Ambidzi Chadiza Kampini afelansoni Charione 43P3Chi **Fabrituo** Khumba

Figure 3: Disparities in Ward Populations for 2010 and 2020

Source: Zambia Census Projections 2011 to 2035- CSO 2010.

Figure 3 above shows that Mangwe ward has remained the most populated ward in the district, with the second most populated being Manje ward. Chadiza Central ward comes in fourth after Nsadzu ward, and Chanjowe ward is the least populated ward. The existing population figures in various wards can be attributed to various factors including ward size, state of development and service delivery, economic activity, and migration patterns.

Mangwe ward is one of the fastest developing wards both in terms of infrastructure and economic activity. It hosts various natural resources including eucalyptus trees, streams and waterlogged areas, and rich soils that support high economic value agricultural activities, such as tobacco farming, which has attracted many people to form settlements within the ward. The recent connection of Zemba area to the national electrical grid will attract more people to settle in Mangwe as the economic potential for more businesses grows.

The projected populations for the years 2025 and 2030 are shown in Figure 4 below, using 2020 as the base year. At the mid-point review of the IDP in 2025, the total District population is projected to increase by 11,786, to stand at 108,493 assuming no extraordinary events occur. By 2030, the population is expected to reach 136,549.

2020, 2025 and 2030 160,000 Opulation Projections 140,000 120,000 100,000 80,000 60,000 40,000 20,000 2020 2025 2030 **2020 2025 2030** 96,707 136,549 108,493

Figure 4: Population Projections for 2025 and 2030

Source: Zambia Census Projections 2011 to 2035- CSO 2010.

2.1.3 Rural Vs Urban Population

Figure 5 below shows the distribution of Rural and Urban population in the year 2010 and projected populations 2020, 2025 and 2030.

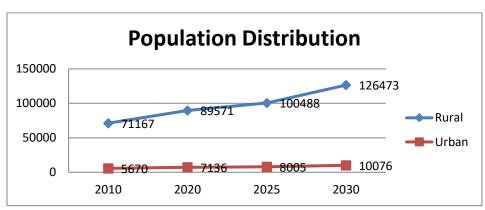


Figure 5: Rural and Urban Population Distribution

Source: Zambia Census Projections 2011 to 2035- CSO 2010.

Chadiza's rural population currently accounts for around 97% of the total District population. The above graph illustrates this fact, and also suggests that based on these projections, the population in rural areas will continue to grow faster than the urban population. One simple explanation for this is that most areas in the district are still rural. Other factors that explain rapid population growth in rural areas include little or no access to family planning in most households leading to high numbers of unplanned pregnancies, and low socio-economic status especially of women in rural areas. Low socio-economic status especially among the youth and particularly females', entails that many are not engaged in employment or business,

therefore leading them to engage in more sexual reproductive behaviour. (Chadiza District Health Office, 2019)

However, advances in development status of rural areas in the district resulting from deliberate investments and interventions over the next 10 years may cause urban population figures to rise faster than projected due to urban expansion and rural-urban migration.

2.1.4 Population by Gender

Figure 6 below shows the population distribution by Gender for the year 2010 and also in the projected years 2020, 2025 and 2030 respectively.

Population Distribution by Gender

male female

38664 48663 54593 68711
38,173 48045 52900 67838

2010 2020 2025 2030

Figure 6: Population Distribution by Gender

Source: Zambia Census Projections 2011 to 2035- CSO 2010.

The above graphical illustration shows that the female population has remained higher than the male population in the district over the last 10 years, and also projects this trend to continue over the next 10 years. This may be due to biological and health factors such as the difference between life expectancy of females and males in the district. Based on CSO projections for the year 2020, life expectancy for Chadiza District currently stands at 58.2 for males and 62.3 for females. (CSO, 2010)

Although the women are seen to be more than the men in the district, they are not fully involved in developmental issues and other economic activities. This shows that a large percentage of women especially in rural areas have low social economic status. Therefore, many households are at risk of falling into vulnerability in the event that the male head passes on. Future development planning must therefore promote women participation in developmental issues that are aimed at empowering them.

2.1.5 Population by Age Distribution

The figure below depicts the population distribution by age for Chadiza district for the year 2020.

Population Distribution by Age 80 +75 to 79 70 to 74 65 to 69 60 to 64 55 to 59 50 to 54 45 to 49 40 to 44 35 to 39 30 to 34 25 to 29 20 to 24 15 to 19 10 to 14 5 to 9 0-4 -15000 -10000 -5000 5000 10000 15000 FEMALE MALE

Figure 7: Population Distribution by Age

Source: Zambia Census Projections 2011 to 2035- CSO 2010.

With the current high percentage of youths in the district, future planning must be centred on creating an enabling environment for the youth to thrive. Deliberate efforts must be made to empower youths to become actors in development issues through enterprise and employment creation. There must also be adequate investment in the education sector to equip the younger population in the district with knowledge and skills. By doing so, the youths will become productive and competitive in different sectors. This will help to reduce among other things, the issues of vandalism and theft which are commonly associated with youths.

2.2 Analysis of Settlement Patterns and Population Distribution

Figure 8 below depicts the changes in settlement patterns in the district over the last 30 years. The purpose of the analysis is to compare changes in settlement patterns in all areas of the district, thereby granting a visual overview of possible migration trends. This will not only help to understand the possible causes of migration, but also allow for an assessment of future demand for services as well as the impact that these existing population trends may have on land use.

Spatial Distribution of Settlements in Chadiza District

Cascard Manager

Semba

SouthNorth

Tager

China Bu

South Salve

South Salve

South Semba

SouthNorth

Tager

Semba

SouthNorth

Tager

Semba

SouthNorth

Tager

Semba

SouthNorth

Tager

South

Manager

South

Manager

South

Manager

South

Manager

Chadica boundary

Saltements

Saltements

Saltements

Saltements

Saltements

Saltements

Saltements

Chadica boundary

Chadica boundary

Chadica Forest Reserve

Figure 8: Spatial Distribution of Settlements in Chadiza District

Source: Department of Physical Planning, Eastern Province, 2020

As seen in figure 8 above, old settlements are clustered more on the south-eastern part of the District representing older settlement patterns. The new settlement patterns have shown a shift in population distribution towards the Central, Northern, Southern and Western parts of the District. This has been due to various factors such as improvements in road access, establishment of services such as schools and health facilities, accessibility to water, and increasing economic activity. The changes in settlement patterns and population distribution therefore show a general trend of rural-urban migration, and also settlements resulting from people coming from other neighbouring districts.

2.2.1 The impact of Population Trends and Settlements Patterns

The impact of these population distribution trends and settlement patterns, if continued, may have an impact on land-use in the following ways:

- a) Increase in demand for services: There will be an increase in demand for services such as schools, health facilities, water supply and sanitation and markets. This will create pressure on existing infrastructure and services, and subsequently result in the need for establishment of more of these facilities to cater for the growing population. For example, in figure 6 below it can be seen that most of the new settlements patterns in the district are clustered around services like schools.
- **b)** Housing and infrastructure: All the above developments will require land along with other existing land-uses such as farming, animal grazing, burial sites and forest reserves. Therefore, there will be an increase in demand for land for housing and infrastructure. This may be a

challenge due to the scarcity of land as a resource. Continued rural-urban migration and resettlements, may also lead to mushrooming of informal settlements in planned and unplanned areas of the district thereby causing land use conflicts.

Development planning in all areas of the district will therefore require;

- Informed and integrated multi-sectoral land-use planning in order to ensure that land-uses do not conflict as population in the district increases and forest reserves are protected.
- Strong enforcement of environmental regulations to ensure that the natural resources are not unsustainably used and the environment is protected from harmful practices.

2.2.2 Future Development Patterns

The more recent settlement pattern shown above does not only indicate that development and establishment of essential services has taken place more in the recent past, but also implies that the subsequent rise in economic activity and demand for services could focus development on those areas in the next 10 years, this is likely to cause urbanisation and also also possibly leaving already underdeveloped areas such as Khumba, Kabvumo and Mwangazi wards neglected. In the absence of services such as electricity, water and sanitation, natural resources such as forests will continue being used unsustainably. Furthermore, communities in these areas will continue to rely heavily on unsustainable agricultural practices as it remains their only means of livelihood and food security causing further environmental degradation.

Development planning for the district must therefore be balanced, with targeted investments in all areas of the district in order to provide alternative sources of livelihood, sustainably manage and harness natural resources which are unique to these areas, and reduce over-reliance on these resources especially in rural areas.

2.2.3 Environmental impacts due to increased economic activities

Increased economic activities resulting from population growth and urbanization in the district have the potential to impact negatively on the environment if the use of land and other natural resources such as water and local forests is not monitored and regulated. Establishment of industries in unsuitable areas such as near human or animal dwellings, placement of dumpsites near flowing water bodies, and building of shopping centres on forest land are all examples of wrong land-uses and can adversely impact the natural environment. The use of these resources must be balanced with conservation to support sustained local development, and to avoid environmental degradation and losses in agricultural productivity which is currently the economic mainstay of most people in Chadiza. Proper spatial planning and an integrated approach will also help to prevent or mitigate the risk of environmental degradation.

2.3 Sectoral and Thematic Analysis

This section of the report will review major sectors of the district, highlighting under each sector the plans, policies and strategies guiding development at local level and their potential impact. It will also give an overview of the existing state of development under each sector, and core issues that were raised in the public participation process. The section will also provide an assessment of the impact of changes anticipated in the next 10 years in the district, and each sector's present and future interaction with crosscutting issues.

The sectors to be reviewed are Forestry and Agriculture, Education, Health, Water Supply and Sanitation, Roads, Housing and Infrastructure, Communication and Energy sectors. These sectors are considered as having a significant level of local information to be reviewed and they bear the most relevance for socioeconomic development. Chadiza being a district of relatively low socioeconomic diversity, does not have active mining and tourism sectors. The district does however have potential for these sectors to grow and contribute to local economic development, which cannot be overlooked for future planning purposes.

The following map shows some of the existing resources in the district. The district still leaves room for expansion of most of the resources it has. The figure clearly shows that most of the resources are on the northern, western and southern while depriving the eastern parts of the district. With the growing population of both people and animals, there is need to expand on the existing infrastructures in the district. Priority should also be on the eastern parts of the district so that the people living there are not deprived of the basic needs such as schools and health care.

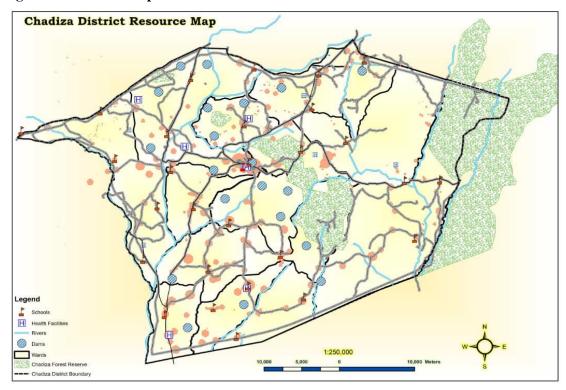


Figure 9: Resource Map for Chadiza District

Source: Chadiza District Department of Planning, 2020

2.3.1 Education Sector

The following is an analysis of the Education sector in Chadiza District. It is one of the major sectors driving development in the district, and is primarily overseen by the District Education Board Secretary (DEBS), under the Ministry of General Education (MoGE). At district level, the department of Education is one of the devolved departments that now report to the Local Authority, as guided by the National Decentralization Policy.

2.3.1.1 Review of Existing Plans and Policies

a) The 7th NDP 2017-2021

The education sector in collaboration with other sectors will employ several strategies to ensure that efforts are working towards attainment of Zambia's Vision 2030 at a local level. The strategies adopted by the sector will also enhance inclusion and participation of all citizens taking into account their age, gender, disability and other factors. In addition, emphasis will be placed on improving the quality and contribution of the education sector to development in the district.

Strategy 1: Enhance access to quality, equitable and inclusive education

Strategy 2: Enhance access to skills training

Strategy 3: Enhance private sector participation

Strategy 4: Continuous review of curriculum

Strategy 5: Enhance role of science, technology and innovation

b) Sustainable Development Goals (SDG 4): Ensure inclusive and equitable quality education and lifelong learning opportunities for all.

2.3.1.2 Existing State of Development and Availability of Service

Chadiza district has a total of 73 learning institutions comprising of 51 primary schools, 1 GRZ Secondary Boarding School, 8 GRZ Day Secondary Schools and 6 community schools. The district also has 1 private secondary school, 5 private pre-schools and 1 Tertiary institution, which is a private college; and 57 ECE centres which are annexed to the existing schools. All the institutions fall under 9 school zones.

The district has a total teacher population of six hundred and thirteen (613) comprising three hundred and seventy-three (373) males and two hundred and forty (240) females. Out of this, four hundred and eleven teachers (411) (243 males and 168 females) are in primary schools, one hundred and eighty-nine (189) (26 males and 63 females) in secondary schools, eight (8) (4 males and 4 females) are in community schools while the remaining five (5) are at Early Childhood Care, Development and Education (ECCDE) centres respectively. *Refer to table 3*.

Table 2: Classifications of Schools in the District

CATEGORY OF SCHOOLS	NO. OF SCHOOLS	MALE	FEMALE	TOTAL			
	Enrolments						
ECCDE Centres	57	1242	1766	3008			
Primary Schools	51	9767	9998	19765			

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Secondary Schools	8	1601	1318	2919		
Community Schools	6	457	541	998		
TOTAL	65	13067	13623	26690		
Staffing						
ECCDE Centres	57	0	5	5		
Primary Schools	51	243	168	411		
Secondary Schools	8	126	63	189		
Community Schools	6	4	4	8		
TOTAL	65	373	240	613		

Source: Ministry of General Education, Chadiza, 2020

Figure 10 below shows the classification of learning institutions in the district by percentage. Primary schools have the largest percentage share, reflecting the importance that is placed on primary education in the district. However, it also shows an imbalance as the number of secondary and tertiary institutions is significantly low, and this poses a challenge to the local rate of transition from primary to secondary school, as there are few local secondary institutions to accommodate all primary school graduates.

Classification of Schools in Chadiza Private Pre-School, 5, 7% Tertiary Institution, Private Secondary, 1, 1% 1, 1% ■ Primary Schools Community . ■ Boarding School Schools, 6, 8% ■ Day Secondary Schools **Day Secondary** ■ Community Schools Schools, 8, 11% ■ Private Secondary Primary Schools, ■ Private Pre-School Boarding 51,70% School, 1, ■ Tertiary Institution 2%

Figure 10: Classifications of Schools in Chadiza District

Source: Ministry of General Education, Chadiza, 2020

2.3.1.3 Spatial Distribution of schools in the district.

Figure 11 below shows the spatial distribution of schools in the district and their proximity to old and new settlement.

Spatial Distribution of Primary Schools in Chadiza District

| Charabox Primary Schools | Charabox Pri

Figure 11: Spatial Distribution of Schools in the District

Source: Department of Physical Planning, Eastern Province, 2020

It can clearly be seen that despite primary schools being the majority of schools in the district, they too are not enough to service the current population in all the settlements in the district. Both old and new settlements in the wards like Kavumo, Khumba and Mwangazi in the central and north east parts of the district do not have access to a primary school within a 5km radius. It is therefore a challenge for the primary school going pupils in these settlements because they have to walk long distances to access education, mostly reaching the nearest schools tired and unable to fully benefit despite their efforts. The long distances to schools has also contributed to the illiteracy levels in the district as it discourages not only children to have interest in school but for parents to enrol their children in school as well.

2.3.1.4 Issues Arising from Public Participation Process

The first issue arising from the consultation process was that of inadequate education facilities. There are only six (6) Day Secondary schools in the district, leaving many areas without close access to secondary education facilities. This leads to many secondary scholars seeking to be enrolled in the only secondary boarding school in the district, which is not able to accommodate all of them. Pupils who are not able to find accommodation or be enrolled in the boarding school resort to living in unregulated boarding houses within the central business district where many of them engage in vices such as alcohol abuse, drugs and sexual activity.

The second issue arising from the consultation process was the low levels of literacy in the district. Literacy levels remain low especially in the rural parts of the district, due to a number of reasons including poverty, which leads to many children dropping out or failing to attend school. A socioeconomic survey conducted by Zambia Integrated Forest Landscape Project (ZIFLP) in 2019

revealed that 78.4% of household heads in rural Chadiza cited "lack of financial support" as their reason for never having attended school. The table below shows the number of households by Ward, and percentages in level of education attained by the heads of households.

Table 3: Levels of Education by Heads of households

WARD	Population (Defacto)	Number of Households	Percent Completed Primary School	Percent Completed Secondary Education	Percent Completed Tertiary
TIKONDANE	2,378	409	33.1	4.9	3.0
MANGWE	7,581	1,286	36.5	6.8	4.4
NSADZU	4,470	784	31.4	3.5	1.2
CHANJOWE	2,983	593	23.6	5.1	2.5
MANJE	5,558	1,047	32.5	5.2	3.2
BWANUNKHA	1,382	256	29.6	6.5	2.9
KAPACHI	3,614	737	29.9	5.4	3.2
CHADIZA	5,286	1,020	69.0	28.2	19.9
KANDABWAKO	3,918	700	25.4	6.9	3.5
CHILENGA	4,216	816	27.9	5.7	3.3
NAVILURI	6,033	1,133	21.4	3.2	1.7
CHAMANDALA	3,766	806	23.3	2.0	1.1
KAMPINI	4,198	851	24.1	8.1	4.4
TAFERANSONI	3,938	780	23.4	4.4	2.6

Source: Ministry of General Education, Chadiza, 2019

The consultation process also revealed that there is inadequate primary school infrastructure in the district. As seen from the spatial distribution of primary school facilities and their proximities to settlements in the districts in figure 9 above, several communities still remain outside of the acceptable proximal distance of five (5) kilometres from a primary school facility. Furthermore, existing school infrastructure is not adequate and lacks capacity in most communities to service all primary grades effectively. Many primary schools have only one or two, 1 x 3 classroom blocks with one classroom servicing over 80 pupils per day. This significantly exceeds the expected average ratio of one classroom to 35 or 40 pupils.

Another issue arising from the sector is that of inadequate infrastructure for teachers' accommodation. Most schools especially in the rural parts of the district do not have enough housing units to accommodate teachers, and this forces the teachers to travel long distances between locations where they manage to source housing and the schools.

2.3.1.5 Impacts of Changes Anticipated over the Next Ten Years

Demand for education services will increase as the district population continues to grow, necessitating expansion of existing infrastructure and establishment of more schools, teacher's houses and roads in all areas of the district in order to accommodate the growing demand. There will also be need for more staff to be trained locally or deployed to the district, thereby increasing demand for other essential services such as water and electricity.

Provision of these facilities will require natural resources such as land, sand, and clay. There are no major negative impacts on land-use expected from growth in the education sector and transfer of knowledge on climate change and environmental sustainability will be beneficial to the district. Below are the potential impacts of future development plans and growth in the education sector;

- Equitable and inclusive education for all children will provide more and broader opportunities in terms of employment and entrepreneurship, and result in reduced vulnerability across social groups.
- Enhancing access to skills training for the district's youthful population will empower more people to start up local businesses thereby creating more sustainable livelihoods, enriching local industry, promoting enterprise, creating employment and local skills transfer. This will further lead to creation of wealth and value in the district, therefore reducing vulnerability among those who would otherwise have little access to wealth creation opportunities. This will especially be beneficial for empowerment of businesses which ae run by women.
- Enhancing private sector participation in matters of education in the district will promote competition and improve standards in the sector. It will also lessen the burden on government in terms of providing education infrastructure in all areas in the district.
- Review and revision of curriculum, though done at national level, will be essential to ensuring that the contribution of the sector to sustainable local development remains relevant. In light of constant technological advancements, new innovations and research, regularly updating the curriculum will enable Chadiza scholars to make meaningful contributions towards environmentally friendly and socially just local and national development.
- Along with continuous review of curriculum, enhancing the role of science, technology and innovation will enable the district to benefit from modern knowledge and solutions, and strengthen all local sectors. In order to accommodate future innovative and technological learning in the district, deliberate efforts will need to be directed towards provision of electricity and internet facilities in all existing and planned school infrastructure.

2.3.2 Health Sector

The following is an analysis of the health sector in Chadiza District. It is one of the major sectors driving development in the district, and is primarily overseen by the District Health Director (DHD), under the District Health Office (DHO). At district level, the department of Health is one of the devolved departments that now report to the Local Authority, as guided by the National Decentralization Policy.

Chadiza District has a total of Twenty-Three (23) Health Facilities of which one (1) is a 1st Level Referral Hospital, nine (9) are Health Centres, twelve (12) are Health Posts and one (1) is a Mental Rehabilitation/Resettlement Centre. Of the 23 health facilities only five (5) are connected to the National Electricity Grid and only (3) are connected to Water and Sanitation Company. Important to note also, is that one Health Post at Mwangazi has been constructed through CDF funding and is yet to be commissioned.

2.3.2.1 Key Elements of Policies, Strategies and Plans

The health sector in Chadiza is guided by global and national policies as well as strategic plans at national, provincial and district level. Alignment of strategies in the district takes into account available

services and the major challenges being faced by the sector ranging from maternal mortality and disease prevention and control, to public and environmental health, and also in terms of infrastructure, accessibility and administrative capacity. Some of the major policies adopted and localized by the sector include the Nine (9) Legacy Goals, Sustainable Development Goals, 7NDP, National Health Policy 2012, and National Aids Strategic Framework (NASF) 2017-2021. The key elements adopted from these documents are as follows:

- Malaria Elimination
- Reduction in Maternal and Child mortality
- HIV Epidemic Control by reducing new HIV infection from 48,000 to 5,000
- Lobbying for increased staffing levels including funded positions for all health facilities.
- Introduction of health care insurance and 100% coverage
- Construction of new health facilities and upgrading existing ones to meet demand in their catchment areas. Infrastructure must be sensitive to gender and other social groupings such as the differently abled

Current and future strategies for development of the district over the next 10 years will therefore be formulated in line with the above elements.

2.3.2.2 Availability and Quality of Service in the Health Sector

Figure 12. below shows the spatial distribution of Health Centres and Health Posts in Chadiza District. The Health Sector in Chadiza currently services a District wide population of (79, 519) according to the 2010 CSO Population projection with a head count of (16, 618) in terms of Service Delivery. The projected population figures for the next three years have been estimated at **82,154, 84044, and 85,977** respectively based on a 2.3 percent growth rate.

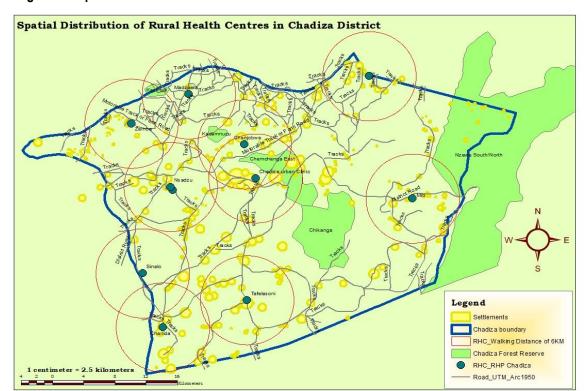


Figure 12: Spatial Distribution of Rural Health Centres in Chadiza

Source: Department of Physical Planning, Eastern Province, 2020

It can also be seen that several rural settlements especially in the eastern part of the district are still deprived of health facilities and patients in these areas must travel long distances on foot or by ox-cart to access health services. The table below shows the current catchment population for health facilities in the district.

Table 4: Catchment Populations for each Health Facility in the District

S/No	Facility	Catchment population
1	Bwanunkha RHC	6362
2	Chadiza Rural Health Centre	9224
3	Chamandala R.H.P	3190
4	Chanida Health Post	1590
5	Chanida Rural Health Center	3181
6	Chanjowe Health Post	3976
7	Chilenga Health Post	3281
8	John RHC	4076
9	Kabvumo HP	2386
10	Kapirimpika Health Post	1590
11	Madzaela HP	4771
12	Miti Rural Health Post	9542
13	Mkumbudzi RHC	2386
14	Msokosela RHC	2386
15	Mtaya Health Post	1101
16	Naviluli Health Post	2386
17	Nsadzu	3976
18	Sinalo Health Post	1590
19	Tafelansoni RHC	3381
20	Zemba RHC	5964
21	Zingalume RHC	3181

22	District Hospital	0
23	District Health Office	79520

Source: Ministry of Health, 2019

The population breakdown according to CSO Projection for 2019 is as follows:

Population: 79, 519 (2010 CSO)

■ Women of Child Bearing Age (WCBA): 17,494

Expected Pregnancy: 4,294Expected Deliveries: 4,132

Under > 1: 3,181Live Births: 3,896

Estimated Under > 5 Population: 15,904

Total Females: 40,555Total Males: 38,964

The Health Sector focuses on providing Primary Health Care Services on one hand and Systems Strengthening Services on the other hand. The Primary Health Care package anchoring on universal coverage comprises of curative, primitive, palliative, rehabilitative, and preventive services as outlined below:

- Reproductive, Maternal, Neonatal, Child, Youth, Adolescent Health and Nutrition
- Communicable diseases, especially malaria, HIV and AIDS, STIs and TB
- Non-Communicable diseases
- Disease outbreaks and epidemic control, public health surveillance
- Environmental Health and Food Safety
- Health Service Referral Systems
- Community Health
- Social Determinants of Health

On the other hand, the Health Sector endeavours to enhance Health Systems Strengthening in line with various National Health Policy instruments such as the (2012) National Health Policy. These include:

- Human Resource for Health
- Essential Drugs and Medical Supplies
- Infrastructure and Equipment
- Health Care Financing
- Leadership and Governance
- Health Information Systems.

2.3.2.3 Situational Analysis- Review of 2018 - 2019 indicators

The Health Sector has reflected a dynamic indicator performance over the years. Fluctuating at some point but, generally progressive across key indicators such as fully immunized, first Antenatal Attendance, Postnatal Care, institutional deliveries and Skilled deliveries. Table 5 below shows how the health sector in the district has reflected across key indicators the issues affecting people, data gaps and impacts.

Table 5: Key Performance Indicators in the Health Sector

S/N	INDICATOR COVERAGE	QUARTER & YEAR			
		Q1 2018	Q2 2018	Q1 2019	Q2 2019
1	Fully Immunized < 1 year	131	133	134	147
2	ANC 1st Visit Total	117	115	115	116
3	Institutional Deliveries	89	89	89	88
4	Postnatal Within 48 hours	78	83	88	86

Source; PIMM presentation 2nd Quarter, 2019

Table 6 below shows that the performance of the health sector in Chadiza in respect of most key performance service indicators has been positive over the past Two (2) years, 2018 and 2019. Services such as voluntary medical male circumcision (VMMC) and provision of Anti-retroviral treatment (ART), which are strategically targeted at improving sexual reproductive health and preventing the spread of HIV/AIDS, have shown that efforts in the sector are achieving intended results. However, the sector still faces socio-cultural challenges such as cultural barriers, myths and misconceptions. It also faces the challenge of inadequate infrastructure in many areas in the district, especially in the face of a growing district population.

Table 6: Performance of the Health Sector

RESPONSIBILITIES/SERVICES	OUTPUT/PERFORMAN CE	ISSUES AFFECTING PEOPLE	DATA GAPS	IMPACTS
Conducting VMMC Services	(1,016) out of an annual target of (876) circumcised	Cultural Barriers	Non	Prevention of HIV AIDS and STI Transmission
Provision of Antenatal Care Services	1240 Women accessing ANC Services reflecting 116%.	-Myths and Misconceptions -Lack of Primary Health Care Units (PHCs) -Lack of Maternity Annexes and Mothers Shelters in most facilities -long distances Poor healthy seeking behaviour	Discrepancie s between registers and HIA tools	Reduction in Maternal Mortality as maternal complication are detected early and addressed
Provision of Immunization Services	(1,171) Children less than 1 years immunized translating into 147 % coverage	-Long Distances -Lack of outreach shelters -Transport challenges	NON	Reduction in under- five mortality and child related illnesses.
Provision of ART Services	3,569 clients accessing the services	-Non disclosure of status by some clients to their partners.	NON	HIV AIDS Epidemic Control
Inspection of Trading and Food Premises	(54) Handlers examined translating into 83% coverage		NON	-Improved sanitation and hygiene standards -Disease Control

Source; PIMM presentation 2nd Quarter, 2019

2.3.2.4 Issues Arising from the Public Participation Process

The consultative process revealed that stakeholders and members of the public regard issues to do with the health sector as some of the top priority issues to be addressed. It was also revealed that these issues affect all social groups and genders. Below are the issues that came out of the consultation process:

- The high rate of malaria cases in the district which continues to be a life-threatening disease in the Sub-Saharan African region. It is the concern of stakeholders that most communities in the district are still at high risk of the disease. Some of the factors contributing to the prevalence rate of the disease include many rural households not having safe, treated mosquito nets and also bad practices like keeping of long grass and uncontrolled vegetation in and around communities, where mosquitoes are allowed to breed and thrive.
- Another issue raised was that of poor access to family planning services, leading to unplanned pregnancies.
- Inadequate transport such as ambulances for transporting patients was also a major issue raised in the public consultation process. This is especially a challenge for rural communities in far flung areas, where patients who need emergency care get referred to the district main hospital but there is no ambulance to transport them, often resulting in preventable loss of lives. The limited ambulances available in the district often get broken down due to wear and tear caused by the deplorable state of roads in most parts of the district. The problem is further exacerbated by many communities not having health facilities within acceptable distances.

2.3.2.5 Impacts Anticipated over the Next 10 Years in Chadiza

- Malaria is still one of the biggest health threats in the district. Achievement of a Malaria-free community will help to reduce mortality rates especially among expectant mothers and children.
- Reduction in maternal and child mortality will contribute to preservation of lives, and help to avert poverty and vulnerability arising from preventable deaths.
- Improved access to essential health services through the construction and rehabilitation of health facilities as one of the policy measures on infrastructure development contained in the National Health Policy (2012) has had a positive impact on the development of Chadiza and Eastern Province in that through the adoption of such strategies, there has been an increase in the number of health post constructed since 2015 with Chadiza having constructed (8) health posts of which (5) are prefabs and others Constructed through CDF support. Maternity annexes and mothers' shelters have since been constructed in some health facilities thus contributing to a reduction in maternal mortality.
- Connectivity of health facilities to the national grid as a policy measure when domesticated can contribute to the development of Chadiza in that it will enhance the electrification of all health facilities thus creating an enabling environment for the provision of comprehensive health care services some of which may be impaired by the absence of electricity to have the needed equipment in the health facilities.
- Domesticating the policy measure aimed at ensuring effective use of ICTS in the delivery of health care services would bring development to Chadiza in that all health facilities would have the Smart

- Care system installed and applied in service provision. This promotes efficiency and effectiveness as it reduces on time spent in accessing services.
- Primary Health Care Units (PHCs) in all health facilities would easy accessibility to outreach services such as immunizations, family planning and antenatal care hence, enabling timely detection of complications and intervention measures thus, preventing mortalities.
- Drilling of boreholes in all health facilities would enhance disease prevention through improved sanitation levels and availability of water supply. This would ultimately reduce on the occurrence of epidemics that can be very costly to the district and impact negatively on development in the event of occurrence.
- The Construction of a ONE STOP Gender Based Violence Centre (GBV) for the provision of comprehensive GBV services would be beneficial to the district in creating awareness against gender-based violence and through the structures prevent would be perpetrators of such cases which include physical violence and sexual abuse.

2.3.3 Agriculture Sector

The following is an analysis of the agriculture sector in Chadiza District. It is one of the major sectors driving local development and is the economic mainstay of the district. The sector is primarily overseen by the District Agriculture Coordinating Officer (DACO), under the Department of Agriculture which now reports to the local authority as guided by the National Decentralization Policy. The district is rich in farming and livestock agriculture.

In terms of farming, the sector is both a source of income and of food security for most households in the district. According to a Preliminary Crop Forecast Survey Report for the year 2019 – 2020 agricultural season, it was found that the most grown crop was maize with a total of 23,974 hectares of maize fields and a total of 26,644 growers (15,541 males and 11,103 females). Sunflower and Soya beans were the second and third most grown crops with a total field area of 7,793 and 7,605 hectares. Paddy Rice and Sorghum were the least planted crops with only 21 and 104 hectares respectively. Refer to table 7 below.

Table 7: Preliminary Forecast of Major Crops grown in the district

2019/2020	Area	Number of growers			Estimated	Estimated	Retention	Average	
	Planted				Production	Sales	(50KG)	Yield (50kg)	
	(Ha)				(50 Kg)	(50kg)		/ HA	
Crop		Male	Female	Total					
Maize	23,974				1,030,882	525,750	505,132	43 X 50 Kg	
		15,541	11,103	26,644					
Groundnuts	2,692	3,093	3,890	6,983	53,840	29,612	24,228	20 X 50 Kg	
(unshelled)									

Cotton	2,765	2,391	1,012	3,403	2,588,040 Kg	2,588,040 Kg	0	936 Kg
Sunflower	7,793	6,118	4,083	10,201	140,274	84,164	56,110	18 X 50 Kg
Tobacco	295	330	120	450	315,864Kg	315,011 Kg	853 Kg	1,070 Kg
Soya beans	7,605	8,781	3,962	12,743	159,705	130,958	28,747	21 X 50 Kg
Cassava	161	502	149	651	201,375 Kg	124,853 Kg	76,523kg	1,250 Kg
Mixed beans	308	1,152	618	1,770	3,080	616	2,464	10 X 50 Kg
Sweet potatoes	376	1,845	1,034	2,879	476,269 Kg	295,287 Kg	180,982kg	1,266 Kg
Cowpeas	387	525	1,212	1,737	5,418	1,084	4,334	14 X 50 Kg
Paddy Rice	21	63	36	99	190	4	186	9 X 50 Kg
Sorghum	104	149	282	431	832	83	749	8 X 50 Kg

Source: Ministry of Agriculture Preliminary Crop Forecast (2019 - 2020) Report

According to the District Preliminary Crop Forecast Report, the district has experienced a general increase in both production and productivity of some of the major crops. Some of the reasons attributing to this were the following;

- The number of hectares planted had increased for some crops
- Early distribution of inputs under the Farmer Input Support Program (FISP)
- Good rainfall distribution with a total of 997.7 mm by the end of March, 2020
- Attractive market prices in the previous season which encouraged farmers to cultivate more crops on larger hectares of land

In terms of livestock, the main animals in the districts are cattle, sheep, goat, pig and donkeys. Livestock plays an important economic and socio-cultural role in the district for the wellbeing especially of rural households, such as food supply, source of income, asset saving, source of employment and transportation purposes. According to the 2008-2018 livestock population survey by the CSO, the largest population of livestock in the district is that of cattle, followed by pigs and goats. Although the population survey for 2019-2020 has not yet been done, due to the fact that the district has not yet done

some immunisation that helps to record the statistics, it is expected that the same pattern will continue with cattle having the largest population. Refer to table 8 below.

Table 8: Livestock Population in the district

Chadiza Livestock Population 2008 – 2018											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cattle	20223	21835	23426	25310	27340	29543	31492	33066	24057	37898	39030
Sheep	476	490	521	536	551	689	861	1076	1345	1743	1793
Goat	13619	14347	14789	15536	16354	18464	19436	20458	21311	22438	23558
Pig	16567	18206	20007	21985	24160	26334	28704	31287	28471	30193	30793
Donkey	30	33	35	37	39	42	45	48	51	57	72

Source: CSO, 2010

2.3.3.1 Key Elements of Policies, Strategies and Plans

The Agricultural sector in Chadiza is guided by national policies and strategic plans at national, provincial and district level such as Agricultural Policy and 7NDP. Alignment of strategies in the district takes into account available services and the major challenges being faced by the sector ranging from climate change factors to pest control and agricultural inputs, and also in terms of infrastructure, accessibility and productivity. Some of the major policies adopted and localized by the sector include the National Agriculture Policy and 7NDP. The key elements adopted from these documents are as follows:

- Strengthening productive capacity of all subsectors under agriculture i.e., Crop farming, Livestock and Fisheries.
- Promoting Climate-smart agricultural practices
- Provision of supporting infrastructure for local farmers to access inputs and markets
- Accessibility to agricultural finance and credit facilities
- Enhancing private sector participation
- Mainstreaming climate, environment, gender and other cross-cutting issues in the district.

2.3.3.2 Availability and Quality of Service in the Agriculture Sector

Chadiza District has one (1) Farmer's Training Centre, six (6) Dip Tanks, three (3) of which are non-functional, 21 Dams mainly used by communities for Agricultural purposes, 1 livestock Quarantine Centre and 30 storage sheds of which Three (3) are owned by Food Reserve Agency. Figures 13. below shows the spatial distribution of dip tanks in the district.

Spatial Distribution of Dip Tanks in Chadiza District

| Age | Chadiza | Cha

Figure 13: Distribution of Dip Tanks in the District

Source: Department of Physical Planning, Eastern Province, 2020

The figure above clearly shows that currently the district has not enough dip tanks to cater for the existing population of livestock. Animals therefore, especially in the eastern and southern parts have to move long distances to access the existing dip tanks. This poses a risk to livestock infections.

Figure 14. below shows the spatial distribution of Dams in the district.

Spatial Distribution of Dams in Chadiza District

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Figure 14: Spatial Distribution of Dams in the District

Source: Department of Physical Planning, Eastern Province, 2020

The figure above depicts the locations of dams and weirs in the district. These dams and weirs are critical sources of water for agriculture, livestock consumption, irrigation, fishing and aquaculture, and domestic supply to households connected to Eastern Water and Sanitation Company. The spatial distribution of dams is evidently relative to that of human settlements, which are more concentrated in the central to western zones of the district. However, proximity of the dams to settlements does not directly translate to adequate access to clean and safe water, as this is still prioritized to be one of the major developmental issues in the district, and particularly in rural areas. Furthermore, only 9 out of the total 21 dams (43%) are operational, while the rest have since developed galleys and other faults. As the population of Chadiza continues to grow, development and increased agriculture activity will cause changes in settlement patterns and densities, and this may exert too much pressure on the limited number of operational dams. There are also notably low levels of security and protection of these facilities, and this has seen several incidences of illegal usage and even encroachments on land buffers required to prevent water pollution. Considerations must therefore be made for the rehabilitation and construction of dams over the next 10

years in order to promote access to water, and thereby enhance growth in key economic sectors such as agriculture and aquaculture that depend massively on availability of the resource.

The complete list of dams and weirs in the district is shown in the table below:

Table 9: Dams and Weirs in the district

No	NAME	TYPE	CHIEFDOM	STREAM	YEAR	USE	STATUS	COMMENTS
1	Kandabwako 1	Weir	Zingalume	Kandabwako	1952	Gardening, Livestock/Fishing	seepage, little water	needs seepage control
2	Kandabwako 2	Weir	Zingalume	Kandabwako	1952	Gardening, Livestock/Fishing	little & dirty water	stable
3	Kandabwako	Dam	Zingalume	Kandabwako	1952	Gardening, Livestock/Fishing	washed away/spillway intact	needs immediate attention
4	Malemya	Weir	Zingalume	Kandabwako	1952	Gardening, Livestock/Fishing	eroded down stream of spillway	immediate sill construction
5	Lundu	Weir	Zingalume	Kabvumo	1953	Gardening, Livestock/Fishing	silted up	needs desilting
6	Chamandala	Dam	Mlolo	Chamandala	2010	Gardening, Livestock/Fishing	stable	stable
7	Chizuula	Dam	Mlolo	Namwela	1954	Gardening, Livestock/Fishing		to be assessed
8	Manthowa	Dam	Mlolo	Namwela	1954	Gardening, Livestock/Fishing		to be assessed
9	Namwela 1	Dam	Mlolo	Namwela	1954	Gardening, Livestock/Fishing		to be assessed
10	Namwela 2	Dam	Mlolo	Namwela	1954	Gardening, Livestock/Fishing	Dam wall washed away	needs reconstruction
11	Kasongo	Dam	Zingalume	Kasongo	1955	Gardening, Livestock/Fishing	silted up, crest in bad shape	immediate attention
12	Chamchenga	Weir	Mlolo	Chamchenga	1955	Gardening, Livestock/Fishing	silted up	needs desilting, vegetable control
13	Njiletenga	Dam	Mwangala	Mwangazi	1961	Gardening, Livestock/Fishing	Dam wall washed away	needs reconstruction
14	Chadzombe	Weir	Zingalume	Chadzombe	1963	Gardening, Livestock/Fishing	little & dirty water, silted up	desilting
15	Nsadzu 2	Weir	Mlolo	Nsadzu	1975	Township Water Supply	silted up, seepage, weeds	desilting, weeds removal
16	Chintachi	Dam	Zingalume	Chintachi	1976	Gardening, Livestock/Fishing		to be assessed
17	Chimphelera	Weir	Zingalume	Chimphelera	1968	Cultivation, Irrigation Potential	seepage, unstable wall, silted up	immediate attention
18	Chifafa	Weir	Zingalume	Chadzombe	1965	Gardening, Livestock/Fishing	relatively stable	requires attention
20	zemba	Weir	Mlolo		2008	Gardening, Livestock/Fishing	washed away	needs reconstruction
21	Bwanunkha	Weir	Zingalume	Chintachi	1977	Gardening, Livestock/Fishing	relatively stable	to be assessed
22	Luli	Dam	Mlolo	Luli	2011	Gardening, Livestock/Fishing	relatively stable	worked on recently on spillway but works not completed

Source: Department of Water Affairs, 2019

Figure 15. below shows the spatial distribution of storage sheds in the district.

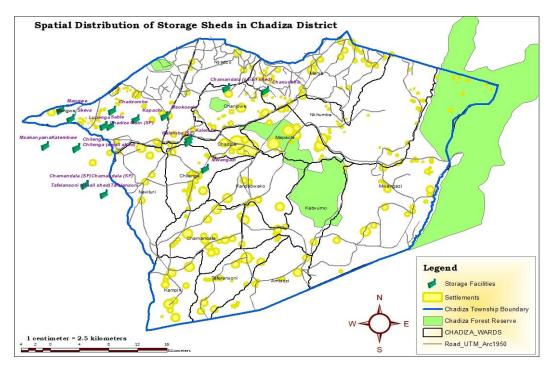


Figure 15: Spatial Distribution of Storage Sheds in the District

Source: Department of Physical Planning, Eastern Province, 2020

All the existing storage sheds in the district are currently in the North – Western part of the district. Farmers in the North-Eastern, Southern and South-Western parts of the district are deprived of storage facilities for their farming products. This means farmers in other parts of the district where there are no storage sheds have to travel long distances for them to sell their farm produce to FRA or other private producers.

Agriculture Extension services are offered to farmers in almost all areas in the district. Currently the District has 18 Extension Officers and 24 extension camps. The Officer-to-Farmer ratio remains high, currently standing at 1:2000. (Department of Agriculture (2019)

In an effort to encourage tree planting and reduce the effects of climate change in the district, the Ministry of Agriculture has partnered with the Zambia Integrated Forestry Landscape Project (ZIFLP) to empower farmers by raising and supplying 592,020 agro-forestry trees comprising of 484, 380 Gliricidia Sepium and 107, 640 Faidherbia Albida (*Musangu*) seedlings for 1,305 Lead farmers and 12,150 Follower farmers in the camps of Chadiza and Vubwi districts by February,2022. The project is being done under Chadiza Farmers Trainig Centre (FTC).

The Ministry has a target of supplying 296,010 seedlings by February 2021 while the remaining 296,010 will be supplied by 30th February 2022. The MOA has since procured some seedlings and 153,000 polythene pots of which 90,000 have been filled with plants of the Musangu seedlings at 95%.

The following table shows the status of the seedling project as at October, 2020.

Table 10: Status of Seedlings project by MOA in the district

Tree	Target	actual	Achieved percentage	remarks
Musangu	53,820	53,820	100%	Target reached and planting almost concluding
G/Sepium	242,190	36,180	15%	To be completed by mid-November 2020

Source: Ministry of Agriculture, 2020

From the table above it can be seen that so far, the target for pot-filling of the Musangu seedlings has been achieved while that of the Giliricidia Sepium stands at 15% and is expected to be completed by mid-November, 2020 once more labour is engaged. However, mobilisation of both the manure and soil for the pots are underway.

2.3.3.3 Empirical Review: Availability and Quality of Service in the Agriculture Sector

Table 10 below shows the availability and state of service provision in the agriculture sector, as well as issues affecting communities, prevailing data gaps and potential impacts of improvement in the sector.

Table 11: Availability and state of service provision in Agriculture sector

RESPONSIBILTIES/S	PERFORMANCE OUTPUTS	ISSUES AFFECTING	DATA GAPS	IMPACT
ERVICES		THE PEOPLE		
Provision of Extension Services	 24 Agricultural Camps and 3 Agricultural Blocks operational 07 Veterinary/Livestock/Fisheries Camps operational 20 Agricultural Dams and 1 Water reticulation Dam operational 6 Dip Tanks operational 22 water bodies used for capture fisheries 246 Fish Ponds operational 01 Livestock Service Centre operational 30 Storage sheds operational 101.283 ha land area under crops 49,109.5 ha land area under pasture 44 staff houses (Condition: 18 good, 8 fair, 18 bad) Crop production and productivity has steadily improved in recent years (Refer to the latest Crop Forecast attached) Chadiza has 83,788 farmers (M-41,036, F-42,802, HH-27,700) 02 Agricultural Schemes operational 	Extension worker to farmer ratio is very high Low productivity Inadequate storage space for both agricultural inputs and Agricultural produce Poor road infrastructure Inadequate Agricultural Infrastructure Structured markets not readily available for most Agricultural Commodities.	Updated/ latest data on the various infrastructure and land use Digital and hard copies of maps showing precise details such as Agricultural Camp/Block boundaries, location of various infrastructure etc.	Improved Agricultural production and productivity. However optimum levels not yet attained.
Training and mentorship to farmers	Conducts regular trainings and mentorship to farmers and other	 Unable to reach out to all farmers/producers 	 Actual numbers of trainings/mentorship 	Farmers/producers have improved knowledge in
and other producers in	producers.	due to limited	conducted and actual	production. However
an entire value Chain	p.0445510.	resources	number of	more still needs to be

			farmers/producers trained/mentored	done because the knowledge gap is still apparent
Distribution of Agricultural Inputs	14,710 farmer beneficiaries accessing Agricultural Inputs. (14,710x10kg maize seed, 2,000x50kg soya beans seed, 4305x20kg groundnuts seed, 3,000x5kg sorghum seed, 58,435x50kg D Compound fertilizer, 47,130x50kg Urea fertilizer)	Inadequate inputs supplied	• Non	Optimum Production and productivity not yet attained.
Market Linkage and Trade Facilitation	On a regular basis, farmers are linked to markets	Inadequate knowledge by farmers of available, viable and profitable markets	Data on all available markets	Improved income levels attained at household and national levels
Crop Marketing	Few current structured markets available such as in commodities like maize, soya beans, goats, etc.	Lack of structured markets for a number of agricultural commodities	Data on market players ready to set up structured markets for the various agricultural commodities	Improved income levels attained at household and national levels
Provision of Market Information	Prices and quantities of some agricultural commodities are available especially those having structured markets	Adequate and timely market information not readily available to the farmers and buyers	Data on prevailing market prices and available quantities of all commodities not readily and timely provided	Increased profits and production attained
Pest and Disease control and management	Control and management measures have been put in place such as provision of agro-chemicals, vaccination programs and information dissemination and training to farmers	Pests and disease burden on crops, livestock and fish	Data on all farmers that may be affected	Increased productivity and production attained
Dissemination of Agricultural Information	The National Agricultural Information Services Department regularly disseminates information to farmers and other market players	Inadequate and timely information not readily available to farmers and other market players	Data on all agricultural information disseminators	Farmers and other market players are empowered with information for decision making

Source: Ministry of Agriculture, 2019

2.3.3.4 Impacts of Changes and Plans

- Strengthening all subsectors under Agriculture will enhance diversity of production, increase possible revenue streams for farmers, enhance value chains, and attract more internal and external investments. This will lead to greater food security in the district and improved livelihoods.
- Effective Research and Development in agriculture will improve crop and animal resilience, and help to avert risks in production.
- All the above strategies will positively impact production and productivity in the district, but this may also increase demand for arable land in the district.

2.3.4 Forestry Sector and the Natural Environment

The district manages four forest reserves namely Kazimule, Kadamluzi, Chamchenga and Chikanga Forests as shown on the Map below. According to the Forestry Department under the Ministry of Lands and Natural Resources, the District has a total area of 7,774 hectares of forest reserves. The two main types of vegetation are Riparian and Miombo woodlands. Typical trees include, Mukula, Miombo, and Mopane.

CHADIZA'S FOREST RESERVES

Chairchangà forest-210ha

Chadiza Township Area

Figure 16: Forest Reserves in the District

Source: Forestry Department, 2019

The Local Authority and the Forestry Department consciously strives to conserve the natural environment by minimising the impact of its own activities. It also strives to minimise the impact of other parties' activities through the utilisation of mechanisms provided by law. There are a number of factors that impact on the environment, one of the most critical being poverty which forces impoverished people to rely on natural resources which are often used unsustainably. Conversely private and public development initiatives which are needed to address poverty also have the potential to impact negatively on the environment if not correctly managed. International organisations have come in with the introduction of efficient cook stove and projects like bee keeping and tree nurseries that will reduce dependence on forest resources. The challenge is to ensure that all development is done in a sustainable manner ensuring protection of biodiversity, forest management and climate change mitigation and adaptation. Table 11 below shows the size and status of the forest reserves.

Table 12: Size and Status of Forest Reserves in the District

S/N	NAME OF	AREA (HA)	PERIMET	STATUS
	FOREST		ER (KM)	
1.	Chamchenga	2,104	22.2	Slightly encroached with settlements and
				threatened illegal activities but generally
				forested
2.	Chikanga	4,937	42.4	Heavily encroached with settlements and
				fields
3.	Kandamuluzi	380	7.7	Encroached with few villages and fields
4.	Kazmuli	353	7.9	Fairly intact

|--|

Source: Ministry of Lands and Natural Resources (MLNR), Forestry Department, (2020),

It can be seen that there have been some encroachments on the forest reserves especially Chikanga forest reserve which is heavily encroached with settlements and fields while Chamchenga the second largest reserve is slightly encroached with settlements and threatened illegal activities. Kandamuluzi is encroached with few villages and fields while Kazmuli is fairly intact.

The Department of Forestry, is also in the process of establishing a tree nursery. The principal objective of the programme is to plant more trees. This is to ensure sustainable wood supplies and offset the high rate of deforestation and degradation currently taking place in the district. These seedlings from the nursery will be used in the establishment of many plantations found in the forest areas and reserves.

2.3.4.1 Community Forests (CF) in the district

The National Forestry Policy of 2014, the Forests Act of 2015 and the SI No. 11 of 2018, combined with the Government policy of promoting decentralisation, provide the policy, legal and institutional basis for greater community involvement in forest management. Strengthening the forest rights and responsibilities of local communities, is intended to achieve the parallel goals of ending open access, promoting enhanced forest management, whilst unlocking the full potential of sustainable forest use for economic development in the forest communities. A community forest as defined in the forest Act, 2015, means a forest controlled, used and managed under an agreement between a community forest management group and the Forestry Department.

The district through the Department of Forestry supports the empowerment of the local people and ensuring that the local forests are protected and managed. It has been recognised that forest dependent communities are the best stewards of their local forest resources if their forest rights are secure. They have both the most to lose from its destruction and most to gain from its good management. The Community Forestry approach provides an incentive mechanism and capacity development process to make this a reality.

2.3.4.2 Community Forest Management (CFM)

Chadiza district has a total of three Community Forest Management (CFM) areas all located in Kapachi ward namely, Kapachi, Tadyela and Changaya. The three CFMs are approximately 49.36 Hectares in total and are established in order to help reduce Green House Gas (GHG) emissions in the atmosphere, adequately protecting and managing the forests areas in the district. During the establishment of the three CMFs, several meetings were conducted on Community Forestry processes and awareness raising, CF boundary negotiation, demarcation and mapping.

The District Multi Sectoral Team (DMT) first conducted a meeting with the Chief at his palace in order to inform them about Community Forestry which is a government programme under the new Forests Act No. 4 of 2015. The team later conducted other meetings with the indunas, village headmen and the community respectively in order to explain the program to them. The said meetings were conducted in Kapachi, Tadyela and Changaya and were attended by both men and women. The DMT team undertook

steps that involved creating the conditions for initiating community forestry in communities, building a team to facilitate the community forestry steps and fully informing all concerned stakeholders on community forestry

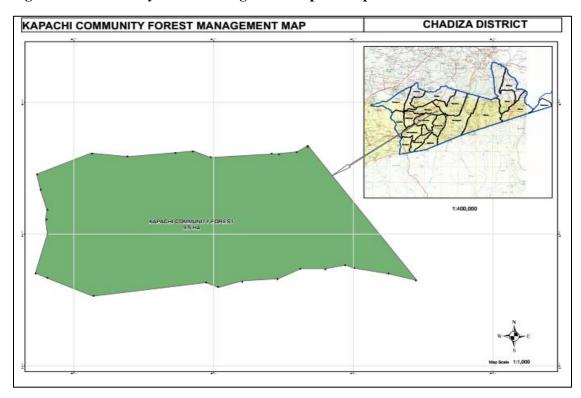
The objective for undertaking those steps was to set up and train the Community Forestry coordination and facilitation team, inform all relevant stakeholders about Community Forestry and seek community interest to voluntarily establish their own Community Forest. The other objective was to identify suitable uncontested site for community forestry through broad consultation and negotiation.

After the land was identified by the community, and proposed boundary drawn, the DMT team developed a clear community forest boundary for each of the CFMGs. and had them signed by the chief.

The following maps shows the Community Forests that the district currently has.

a) Community Forest Management (CFM) Area Map for Kapachi

Figure 17: Community Forest Management Map for Kapachi



Source: Department of Forestry, Chadiza, 2020

Figure 17 above shows Kapachi CFM which is approximately 9.5 hectares.

b) Community Forest Management (CFM) Area Map for Tadyela

Figure 18 below shows Tadyela CFM which is approximately 15.5 hectares.

TADYELA COMMUNITY FOREST MANAGEMENT MAP

CHADIZA DISTRICT

Tablets Community Fores:
15.5.440

1.400,000

Figure 18: Community Forest Management Area Map for Tadyela

Source: Department of Forestry, Chadiza, 2020

c) Community Forest Management (CFM) Area Map for Changaya Figure 19 below shows Changaya CFM which is approximately 24.36 hectares.

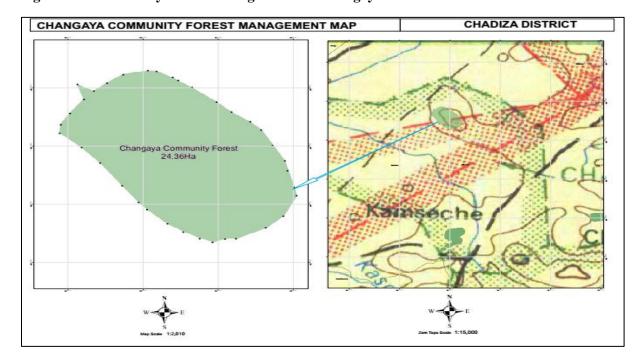


Figure 19: Community Forest Management for Changaya

Source: Department of Forestry, Chadiza, 2020

2.4.3.3 Key Elements of Policies, Strategies and Plans

- Prioritise the preparation and implementation of forest management plans for all types of forests including forests on titled land, which is based on up-to-date information, practices and technologies on sustainable forest management and utilisation of forest products and services;
- Promote multi-sector coordination of land-use system that ensures the protection of headwaters, river basins, terrestrial resource and rehabilitation of degraded and threatened ecosystems;
- Conduct regular forest inventories and monitoring and integrate local knowledge in the management and utilisation of forest resources;
- Ensure forest health at all times by protecting forest resources against damage by fires, pest and disease outbreaks and against unsustainable harvesting practices

The District must adopt strategies to promote cleaner production so as to reduce negative impacts on the environment; take measures to increase public participation and stakeholder buy-in to environmental issues; adopt stricter measures to ensure that social and environmental impact assessments are conducted on all projects that have potential to have an environmental effect in the District and implement strategies that will regulate the use of natural resources, such as Land-use Planning (Environmental Management Act No. 12 of 2011)

2.4.3.3.1 Local Community Empowerment

Objective

To empower local communities and traditional leaders in order to ensure adequate protection and management of forests.

Strategies;

- Facilitate collaborative and innovative forest management to enable the participation of local communities and traditional leadership in the management and development of the forestry sector;
- Establish a framework that supports traditional leadership and communities to develop local level rules and regulations to facilitate affective management of forest resources;

2.4.3.3.2 Ecosystem Services and Climate Change

Objective

To improve the role of forests in addressing climate change in order to contribute to reducing its impact through mitigation and adaptation measures.

Strategies;

- Create public awareness on the environmental and socio-economic effects of climate change, deforestation and forest degradation arising from unsustainable forest management;
- Develop strategies for increasing the capacities of local communities aimed at adaptation and mitigating against the impacts of climate change

2.4.3.3.3 Investing in Forestry and Forest Based Industry Development

Objective

To increase the participation of the private sector in the development of the forestry industry in order to enhance the contribution of the sector to the growth of the economy

Strategies;

- Promote and provide technical support towards forest-based ecotourism;
- Facilitate the establishment and operationalization of the Timber and Honey Auction Floor;
- Promote the participation of micro, small and medium enterprises in the harvesting of wood and non-wood forest products such as mushrooms, honey and bee's wax.

2.4.3.3.4 Sustainable Production and Processing of Charcoal

Objective

To put in place measures that will promote sustainable harvesting of wood and production of charcoal in order to reduce deforestation.

Strategies;

- Create public awareness on the impact of unsustainable charcoal production on the environment, socio-economic sector and the climate;
- Design and set aside charcoal production areas in the district;
- Promote and provide technical support for small, medium enterprise in charcoal production to enhance sustainable forest management;
- Promote efficient charcoal production methods

2.4.3.3.5 Forestry Extension

Objective

To strengthen and develop human capacity with extension skills and a service delivery framework to effectively and efficiently meet stakeholders' needs

Strategies;

- Strengthen extension services through the provision of appropriate and adequate facilities, staff and financial resources;
- Create public awareness and dissemination strategies to promote forest ecosystems, utilization and species conservation at all levels.

2.4.3.4 Impacts of changes and plans

- Improved management of Forest resources and eco-systems will contribute positively towards creating sustainable environment for human, animal and plant life, and will also help to reduce carbon emissions
- Empowerment of local communities through alternative means of income will take the burden off of diminishing Forest resources and also improve livelihoods sustainably
- Investments in Forest and Forest based industry will impact positively in forest management, providing employment and business opportunities, and improving the contribution of Forest resources to local economic development. However, this must be done with regulations in order to avoid natural resource exploitation
- Efforts to curb unsustainable Charcoal production will entail the introduction of alternative and more efficient sources of energy, and thus impact positively on the environment. However,

Charcoal production is currently a source of livelihood, and therefore these efforts must go hand-in-hand with creation of alternative sources of livelihood.

- Strengthening of extension services will improve the management of Forest resources
- All measures taken towards protection of natural resources will have a positive impact on the natural environment and contribute towards carbon emission reduction.
- Efforts must be made to introduce significant investments in the Mining and Tourism sectors in the district, which have massive potential to grow the local economy.

2.3.5 Water Supply and Sanitation

The Township water supply is solely provided by Eastern Water and Sanitation Company (EWSC) in accordance with the Water Services Act, Act 108 of 1997. The company provides water services to individual households upon application within the township at a fee with the exception of Kamwala Compound and Chanida area where water Kiosks have been constructed at intervals to serve the surrounding communities. Nsadzu dam is currently the main dam supplying water for household use and for small businesses. It is maintained by the district's only water supply company, and currently services a total of 1,346 user accounts (EWSC, 2020). This caters for only about 1.3% of the district population, while the rest of the population depend on streams, shallow wells and hand-pump boreholes provided for by the Local Authority under National Rural Water Supply and Sanitation Programme.

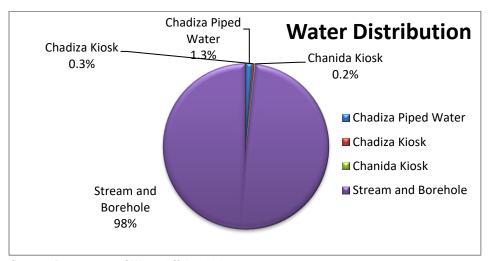


Figure 20: Percentage of Water Distribution in the District

Source: Department of Water Affairs, 2019

Figure 21 below shows the spatial distribution of water points in the district. The figure depicts that there is a higher concentration of water points (hand-pumps and wells) in the central and western parts of the district, leaving many settlements in the eastern region underserviced, with Khumba and Mwangazi particularly among the most deprived. This is mostly because the soil type in the east part of the district is not suitable for drilling boreholes. This current situation means that several rural communities do not have adequate access to clean and safe drinking water, and must travel unreasonably long distances to access it.

Spatial Distribution of Water Points in Chadiza District

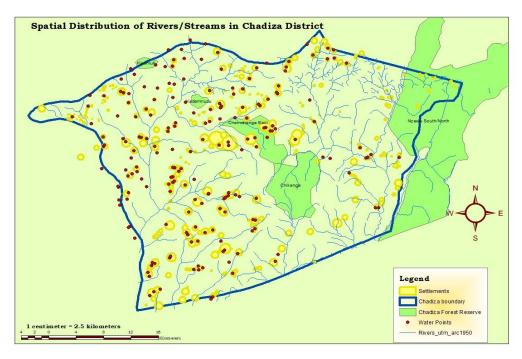
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Figure 21: Spatial Distribution of water points in the District

Source: Department of Physical Planning, Eastern Province, 2020

Despite the eastern region of the district being deprived of the water points discussed above, it is endowed with several streams and rivers which are used as water sources for farming, providing drinking water for livestock and home use by the affected settlements. However, these streams and rivers usually dry up during the dry seasons thus causing negative impacts on human and animal lives. Figure 22 below shows spatial distribution of rivers and streams in the district;

Figure 22: Spatial Distribution of Rivers and Streams in the District



Source: Department of Physical Planning, Eastern Province, 2020

2.3.5.1 Sanitation in the District

Eastern Water and Sanitation Company (EWSC) also provides sanitation services to households upon request in form of emptying the septic tanks when full. All existing households within the township have access to minimum standards of sanitation through use of septic tanks while the backlogs correlate directly to the need for housing. Chadiza Boarding School and the District Hospital are the only infrastructures connected to the sewer network which discharges in stabilising ponds.

Drainage systems in the township areas of the district still remain largely under-developed. Due to the mountainous geographical attributes of much of Chadiza, poor water drainage contributes significantly to dilapidation of existing road networks, which further disrupts economic activity and raises the costs associated with road maintenance. Furthermore, coupled with below standard solid waste management practices and in light of a growing population, these poor drainage systems pose a future threat to human health and the environment primarily through potential disease outbreaks, water pollution, soil degradation and loss of eco-systems. Improvement and upgrading of township drainage systems are therefore crucial for development planning.

Rural sanitation in the district is also another critical area for consideration, as communities in rural areas still face challenges in achieving sustained Open Defecation Free (ODF) status. Rural households do not have connection to EWSC water supply and therefore primarily use latrines for purposes of urinating and defecating. However, heavy downpour of rains during the rainy season often causes poorly constructed and protected latrines to collapse, and subsequently leads to community members using nearby forests and bushes for the same purposes, posing the threat of disease to human life in these areas.

2.3.5.2 Issues Arising from the Participatory Process

Water supply was placed as the top most priority among all issues raised during the public consultation process in all Wards in the District. This is especially a challenge for people living in rural areas. The spatial distribution of water points in figure 16 above shows that currently the bulk of water points are located in the central and western regions of the district, leaving many settlements in the eastern region, with Wards like Khumba and Mwangazi being among the most deprived. The prevailing situation means that several rural communities do not have adequate access to clean and safe drinking water, and must travel unreasonably long distances to access it. The problem is exacerbated during the dry season when most streams and even some boreholes dry up, leaving human and animal life at high risk of diseases.

Sanitation also continues to be a big challenge especially in rural communities. It was revealed that in some villages, as many as ten (10) households make use of only one (1) pit latrine facility for their conveniences, and that the structural quality of many of these facilities leads to them collapsing during rainy season. This poses a great challenge towards the attainment and maintenance of Open Defection Free (ODF) status in most rural areas of the district.

The table below shows the number of households by ward, and the percentage of households with improved sanitation and access to clean and safe water.

Table 13: Number of Households by Ward and percentage with improved sanitation

WARD	Population (Defacto)	Number of Households	Percent without Improved Sanitation	Percent with mud, dung or soil Floor	Percent without Improved Source of Water
TIKONDANE	2,378	409	79.0	69.7	54.3
MANGWE	7,581	1,286	72.1	74.7	51.8
NSADZU	4,470	784	77.4	79.7	40.4
CHANJOWE	2,983	593	50.9	81.5	60.4
MANJE	5,558	1,047	78.4	85.1	49.2
BWANUNKHA	1,382	256	72.7	75.4	54.7
KAPACHI	3,614	737	70.4	83.6	44.6
CHADIZA	5,286	1,020	46.9	34.5	19.9
KANDABWAKO	3,918	700	73.4	85.7	24.1
CHILENGA	4,216	816	74.1	87.0	22.2
NAVILURI	6,033	1,133	82.0	80.9	34.3
CHAMANDALA	3,766	806	78.3	87.8	36.1
KAMPINI	4,198	851	58.8	77.6	25.5
TAFERANSONI	3,938	780	79.9	89.0	59.1

Source: Department of Water Affairs, 2019

Most of the wards in the district have no improved sanitation as seen from the figure above. This poses as a threat and may lead to sanitary infections. For example, Mangwe ward which has the highest number of households shows a relatively high percentage of people living without improved sanitation and improved source of water. Bwanunka ward with the lowest number of households also shows a relatively high percentage of households living without improved sanitation and improved source of water. All the wards also have a high percentage of floors that are either of mud, dung or soil except for chadiza which is the hub of the district.

2.3.6 Housing and Infrastructure Sector

The following section highlights some of the challenges that are faced in the roads, communication and energy infrastructure in the district.

2.3.7 Road Network

The district has a total of 314.6Km of road network. The main road in the district joins T4 (the Great East Road) that links Katete with Chipata at about 35Km on the South and about 80Km South West of Chipata. Most of the roads in the district are in deplorable state and therefore need upgrading, rehabilitation and maintenance. Figure 24 below shows the road network in the district.

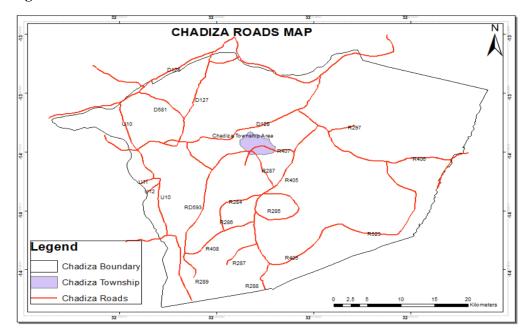


Figure 23: Road network in the District

Source: Department of Physical Planning, Eastern Province, 2019

2.3.5.2 Key Elements of Policies, Strategies and Plans

- There continues to be great need for improved transport systems and road infrastructure in Chadiza, as this has a bearing on growth in all other sectors.
- Improvement in transport and road infrastructure will massively impact the local economy in a positive manner, but also cause higher demand for social service provision in such areas as Locals will be prone to build settlements closer to the roads.

2.3.5.3 Issues Arising from the Participatory Process

The main issue arising from the consultative process was that of poor road infrastructure in the district. It was highlighted that there is need for massive improvements in road infrastructure in the district in order to make all areas easily accessible, therefore providing people with easier access to goods and other essential services.

2.3.6 Communication

Chadiza district hosts all of the three (3) main mobile phone service provider networks, namely: Airtel, MTN and Zamtel. Coverage is however, limited in a few remote areas. The district has one (1) post office located in the central business district, and 1 Radio Station which is currently under construction. The district also receives ZNBC Radio1 and 2 signals, with other signals received being Radio Maria, Radio Mphangwe FM, Parliament FM and Radio Breeze. Information Dissemination in the District is mainly handled by Zambia News and Information Services (ZANIS). The district currently has a total of 13 communication towers. Some areas of the district have no network and thus communication is a challenge. Figure 25 below shows the spatial distribution of the 13 communication towers that exist in the district.

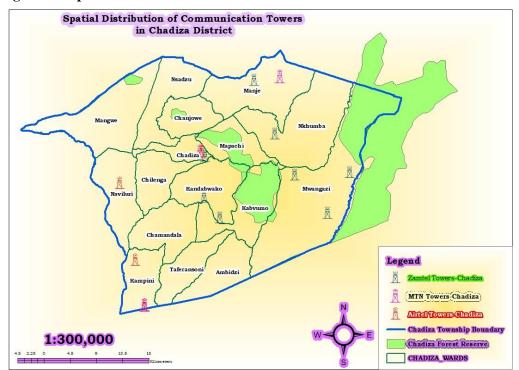


Figure 24: Spatial Distribution of Communication Towers in Chadiza District

Source: Department of Physical Planning, Eastern Province, 2020

Figure 26 below shows the spatial distribution of the communication towers with a coverage radius of 10km.

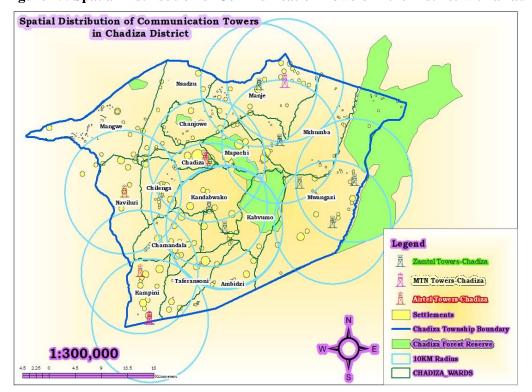


Figure 25: Spatial Distribution of Communication Towers in the District with a radius of 10km

Source: Department of Physical Planning, Eastern Province, 2020

The figure above clearly shows that the available communication towers in Chadiza are not enough to service all the settlements within the district. There are only 8 Zamtel, 3 Mtn and 2 Airtel communication towers, and as a result very few settlements in the district have access to all the three networks. For example, wards such as Mangwe, chanjowe, Teferansoni and Nsadzu do not have any communication towers. Settlements within these wards have to tap network from the nearest communication towers in other wards within a radius of about 5km to 10km. This therefore means that those settlements which are completely outside the 10km radius have poor or no network coverage at all.

Information and Communication Technology (ICT) is an essential part in modern development across all sectors, and will therefore need massive advancements and improvements in the district in terms of access and supporting infrastructure.

2.3.7 Energy

The Zambia Electricity Supply Cooperation Limited (ZESCO) is responsible for the distribution of electricity in the urban area and some sub-centres of the district like Zemba and Nsadzu which are along the main gridline with 1618 households connected. SOLERA is an independent company which is putting up a solar power plant in Taferansoni ward of chief Mwangala's area to distribute electricity to the areas not serviced by ZESCO and intends to roll out the project to other sub centres once the first phase is completed. All indigent households within the township's area have access to minimum standards of electricity at K0.499 per KwH. The district has only one filling station which supplies Diesel, petrol and lubricants to the district.

Sources of Energy by Percentage

0.13% 2% 0.01%

2 Zesco

Solar

Firewood and Charcoal
Gas

Figure 26: Percentage share of Energy Sources in the District

Source: Department of energy, 2019

Figure 27 above shows that the district, especially in the rural areas mainly rely on firewood and charcoal for energy sources. As can be seen from the graph above, the current situation is very alarming in terms of climate change related issues. More and more trees are expected to be cut and hence the forest areas and reserves will be diminishing. The removal or cutting down of trees adds to the high levels of carbon dioxide in the atmosphere, as trees are needed to absorb carbon dioxide from the atmosphere. Deforestation also leaves the soil bare to erosion and leaching. Thus overtime the soil will lose its fertility, and eventually desertification may occur in the area that was covered by trees.

2.3.8 Environment and Climate Change Analysis

2.3.8.1 Climate Change

Chadiza district has climatic characteristic similar to other parts of the country. The district experiences adequate rains and has temperatures ranging between 18 °C and 27°C for most of the year. The climate in Chadiza is mild for most of the year while the temperature is generally warm. The district has an average annual temperature of 21.8°C and about 1089mm of precipitation falls annually. July has the lowest precipitation for most of the year with an average of 1mm. January has the greatest precipitation which occurs every year with an average of 273mm. October is the hottest month of the year at an average temperature of 25.4° C. The lowest temperature occurs in June at an average of 17.6°C.

Chadiza district has a vast number of activities that bring about the issues of climate change, the most predominant ones being land use change, agriculture practices, livestock waste who's main GHG are methane and nitrous oxide. Methane, mainly produced by enteric fermentation and manure storage, is a gas which has an effect on global warming higher than carbon dioxide. Nitrous oxide, arising from manure storage and the use of organic or inorganic fertilizers, is a molecule with a global warming potential higher than carbon dioxide. Other activities in the district include non-environmentally friendly energy sources like charcoal and fire wood; industrial processes and waste.

These activities mentioned above increase GHG emissions into the atmosphere. These GHG's have adverse effect on the climate of which if not properly looked into might bring about an increase in

frequency of extreme weather events and natural disasters like floods, heat waves, droughts, desertification, water shortages and spread of tropical and vector borne diseases.

This section discusses climate change and environmental issues in Chadiza district, gender sensitive risks and an assessment of the current and future climate risks. It also highlights some of the possible threats on various sectors in the district.

2.3.8.1.1 Climate Risk Assessment

2.3.8.1.1.1 Gender Sensitive Climate Risk Assessment

Chadiza district experiences both dry spells and heavy rains. During this period of droughts every gender is affected, but mostly women and children who are in most cases the ones to fetch water for use at their homes. With the limited water points in most areas of the rural parts of the district, the women and children tend to walk long distances to access water for consumption. Furthermore, considering that livestock rearing is one of the major activities in the district, children are also sent to far places to access water for the animals to drink up.

The effect that this has is that time is consumed for women to venture in other developmental activities hence reducing their self-reliance among other things. The other effect includes the increase in child illiteracy levels as most children do not manage to attend school. The vulnerable groups in society also face challenges of accessing water

2.3.8.1.1.2 Current and Future Climate Risks

Chadiza district has not experienced any hazard exposure to climate change as both temperatures and rainfall have been stabilised. However, the district has in the past years experienced some dry spells in some wards. This is according to the information that was obtained from the Zambia Meteorological Department for the 2019/2020 period. If most developmental activities are not properly looked into, and due to the history of dry spells in the district, the following are some of the impacts that can be posed on different sectors as shown in Table 14. Below.

Table 14: Possible impacts of climate change on various sectors in the district

Variable	Future				Impacts			
	Scenario	Education	Health	Infrastructure	Agriculture	Forestry	Livestock	Water And Sanitation
Extremes	Dry spells	Increased absenteeism of pupils in schools due to diseases burdens and difficulties in accessing water for livestock and house hold use	there will be increase in diseases in the district	- there will be effect on corrosion protection on steel structures (roofing's) - wood structures are prone to members bending - increased maintenance cost on infrastructure	- low yield of crops - reduced availability of water for irrigation	- low regeneration of some tree species in the forest -reduced flora -increased occurrence of forest fires resulting in destruction of vegetation	- decrease in animal productivity -complete loss reduced pastures resulting in reduced stocking density -increase in occurrence of livestock diseases	- Surface water sources for animals and people due to excessive evaporation

Source: Chadiza Town Council Planning Department, 2020

2.3.8.1.1.3 Implementation, Monitoring and Evaluation

> Existing Indicators and Action Shields:

The table below shows some indicators that the district has put in place

Table 15: Indicators and Action Shields

DIMENSIONS	ACTION FIELD	INDICATOR
Environment	Soil And Green Covered Spaces	Reforestation
	Water Bodies	River/ Stream Buffer Zones
	Drinking And Waste Water	water availability and quality
Economic	• Farmland production activities	Crop Forecasting

Source: Chadiza Town Council Planning Department, 2020

➤ Additional Indicators and Action Fields

The table below shows the additional indicators that the district has put in place for future climate risks.

Table 16: Additional Indicators for future risks

DIMENSIONS	ACTION FIELD	INDICATOR
Environment	Soil And Green Covered Spaces	Degree of Soil SealingUndisturbed Land Cover
	Water Bodies	 State of Water Bodies Water Shed Buffer Zone River/ Stream Buffer Zones
	Biodiversity Air	Wetlands And Retention AreasCold Air Parcels
Rural/ Urban Infrastructure	Settlement Structure	 Accessibility of Green Parcels of Land Density of settlements Sustainably Built Infrastructures
	Drinking And Waste Water	Frequency Of Water Shortages Or Contamination
Governance	Strategy and plans for the environment	Climate change adaptation part of urban development plan
	Administration	Inter-office working group regarding risk, climate change and resilience
Society	Knowledge and Risk Competence	Citizens Information About Heat
Economic	Farmland production activities	livestock densitymanure management strategies

Source: Chadiza Town Council Planning Department, 2020

The vision for the future is to provide an environment that is not vulnerable and that responds to climate change hazards. From the current assessment, communities in some wards of the district are practicing afforestation and resource conservation, with the help of the ZIFLP and the LA. For the current and future risk prevention measure, the district promotes the following;

- Creation of storage sheds for storing of agriculture crops, to prevent food insecurity in an instance of disaster occurrences.
- Conducting awareness programs on drought resistance crops, trees and animals that can be invested into during the period a disaster occurs.
- Constructing dams and drill more high-water level boreholes that will help sustain the communities during dry spells and droughts

In order to mitigate the activities that pose a threat to the climate in the district, the following strategies will be implemented.

2.3.8.1.1.4 Adaptation and Disaster Risk Reduction

Objective;

To promote and strengthen the implementation of adaptation and disaster risk reduction measures to reduce vulnerability to climate variability and change

Strategies;

- 1. Promote community based risk management activities and use of social safety nets for the most vulnerable
- 2. Promote the adoption of appropriate Climate Smart Agricultural (CSA) technologies for different agro-ecological zone
- 3. Promote landscape-based livelihood diversification
- 4. Promote the protection of water catchment areas

2.3.8.1.1.5 Mitigation and Low-Emission Development-Related Actions

Objective

To promote investments in climate resilient and low carbon development pathways in order to generate co-benefits and provide incentives for addressing climate change more effectively

Strategies;

- 1. Promote sustainable land use planning to protect key ecosystems and related services such as carbon sinks
- 2. Promote landscape-based livelihood diversification
- 3. Reduce forest degradation and loss of forest ecosystem
- 4. Strengthen the fire management and soil conservation

2.3.8.1.1.6 Capacity Building

Objectives

To strengthen the institutional and human resource capacity in order to effectively and efficiently address all aspects of climate change

Strategies;

1. Promote stakeholders' participation and partnerships that integrate climate change in natural resources management at all levels

2. Promote public education and awareness to enhance the capacity to address climate change

2.3.8.1.1.7 Education and Public Awareness

There is need to raise awareness on climate change related issues. Overall, there is a limited understanding amongst the residents of the district, on how the various human and animal activities bring about climate change and its impacts on livelihoods and various sectors. Hence, the district has embarked on disseminating information through various departments and institutions so as to broaden the knowledge of environmentally friendly acts that would reduce on the negative impacts posed on the climate.

Objective

To promote communication and dissemination of climate change information to enhance awareness and understanding of its opportunities and impacts

Strategies;

- 1. Facilitate climate change advocacy, communication and awareness;
- 2. Promote involvement of Local Authorities and traditional leaders in climate change education, public awareness including the use of indigenous knowledge

2.3.8.1.1.8 Encouraging Gender sensitive programs

Objective

To engender Climate Change programmes and activities in order to enhance gender equality and in the implementation of climate change programmes

Strategy;

Improve the participation of women, youth and children in climate change programmes

2.3.8.1.1.9 Technology Development and Transfer

Objective

To promote appropriate technologies and build local capacity to benefit from climate change technological transfer

Strategies;

- 1. Promote identification and utilization of available climate-friendly technologies for mitigation and adaptation that meet low-carbon and climate –resilient development
- 2. Promote use of indigenous knowledge and local innovation on climate change

2.3.8.2 Environment

The environment is what houses and helps our ecosystem grow and thrive. The district through its various sectors and departments strives to promote activities that protect the environment such as growing more trees and plants and saving the natural resources. Without protecting the environment so many lives such as animals, plants, crops and even human beings are put in danger. The following are some of the interventions put in place to protect the environment.

2.3.8.2.1 Promote Cleaner Production

Objective

To provide a clean, safe and healthy environment

Strategies

- 1. Preventing or stopping any activity which threatens or can cause harm to human health or the environment.
- 2. Ensuring that a person conducting an act that causes negative impact on human health or the environment take measures to minimise or mitigate the impacts
- 3. Ensure that persons dealing with toxic substances have an agency approved license and eliminate non environmentally friendly devices
- 4. Facilities that cause emission or discharge of a pollutant or contaminant into the environment to submit information to inspectorate on quantity and quality of the pollutant or contaminant.
- 5. Provide cleaner production guidelines to facilities operating in the area.

Impacts

- Strategy 1 and 2 will mitigate activities that bring about negative impacts on the environment or human's health and also promote re-use, recovery and recycling. At present it has not had any positive impact.
- Strategy 3 will help improve health of human and the environment as there will be no or less exposure to toxic materials, and also reduce on the cost of rehabilitation and treatments. It has not had any positive impact at present.
- Strategy 4 will help the appropriate authority to come up with efficient measures, collection, segregation and disposal plans for the pollutants or contaminants from the facilities.
- Strategy 5 will ensure enlightenment of every resident, facility, department or organization in the area about what can be done to reduce contamination and pollution.

2.3.8.2.2 Encourage Public Participation in Environmental Issues

Objective

To ensure people understand environmental issues

Strategies

- 1. Conduct public debates, reviews of documents and hearings.
- 2. Allowing the public to participate in environmental decision making.
- 3. Inform residents of their duty to safe guard and enhance the environment and to inform the agency of any activity that affects the environment.

Impacts

- Strategy 1 and 2 will help people in the area to have more knowledge on environmental issues, increase participation, reduce biasness and also help appropriate authorities to know issues that are majorly affecting the area.
- Strategy 3 will increase the efficiency of compliance as there will be great participation against negative environmental practices.

2.3.8.2.3 Assessing all Projects in the Area

Objective

To assess environmental impacts that are brought about by developments on the environment.

Strategies

- 1. Conducting social, environmental impact assessment.
- 2. Conduct environmental audits or monitor any on-going activity.

Impacts

- Strategy 1 will help decrease on the negative effects brought about to the environment as a whole from construction to operation phase of projects; this has not had any positive impact in the area.
- Strategy 2 will help mitigate any adverse effects not thought of during the SEIA and also promote compliance.

2.3.8.2.4 Management of Natural Resources

Objective

Conservation and management of natural resources.

Strategies

- 1. Inspection of land use impacts.
- 2. Publicizing land use guidelines and natural resource conservation regulations.

Impacts

- Strategy 1 will help determine the impacts of land use on the quality and quantity of natural resources, hasn't had any positive impact in the area to date.
- Strategy 2 will enable residents to be knowledgeable of good land use practices. It has not had any impact in the area at present.

2.3.8.3 Corona Virus (COVID 19) and its Impacts on various sectors in the district

Since March 2020 when Zambia recorded its first case of Corona Virus (COVID 19), a virus which causes illnesses such as common cold and severe acute respiratory syndromes, most of the sectors in the country were affected by its impacts. Chadiza District has not been spared from the COVID-19 Pandemic. The district had recorded a total of thirteen (13) cases of COVID-19 by November, 2020, ten (10) of which were truck drivers from other countries who entered the district through Chanida Border while the other three (3) were Chadiza residents. All the 13 cases were isolated, quarantined and managed at Nsandzu Isolation Centre in Chadiza.

The coming of COVID 19 pandemic also led to the shutting down of all the industries and factories as employees from various organisations and institutions were forced to stay home in order to practice social distance. As a result of the closure of all the operations in the district, the cost of living for the average residents became high and this led to less or no income for a lot of people in the district.

• Local Authority operations and Revenue Collection

The revenue collection for the LA was affected negatively. The main revenue collection points at Sinalo, Zemba and Chanida border area were not doing well as most of the trucks were not allowed to move or to cross the border. The LA could also not collect their revenues like licence fees due to the fact that most of the business premises like bars and shops were not operating. Programs and meetings for the LA, government department and other organisations were also

cancelled in order to avoid social gatherings. Most of the operations were also stagnant due to the direction for most people to work from home or on rotational basis.

• Education Sector

The Education Sector in the district got disrupted and this has resulted in changing the routines among the children and adolescents thus causing unprecedented stress among many. This change in routines has also affected the performance of many pupils due to the extended long break which took more than three months. For the final year students, they were delayed to write their exams.

• Agriculture Sector

Due to the restrictions in movements that came with the COVID 19, as a means to mitigate the possible spread of the disease, most farmers in the district were having a challenge to sell their fresh produce to the markets. Most of the farmers in the district depend on the sale of their farm produce for livelihoods. Most of the perishable products like tomatoes, onions and vegetables were just going to waste with no one to buy. With most of the farmers in the district depending on the small income from trading of the farm produce, the new normal posed a challenge because they started selling their produce at a lower price and this ultimately affected their incomes.

• Social impact

Due to the recommendation for the public to stay at home, avoid mass gatherings and close contact with other persons, particularly targeting the known high-risk groups resulted in the failure to conduct trade and make money mostly at the Kabwadila Market as most people come from as far Malawi and Mozambique to trade. Due to the measures to limit outside visitors and limit the contact between inmates or patients in confined settings, such as long-term care facilities for the elderly at Nsadzu Mental and District Hospital, persons with special needs, psychiatric institutions, homeless shelters, prisons, the district had a challenge of feeding these people as no relative could provide food and clothing for them. Cultural events such as theatres, traditional ceremonies, concerts, and sporting events such as football, indoor and outdoor athletic games and marathon runs. were also suspended. due to the virus. These ceremonies are known to keep mostly the youths from indulging in immoral activities as they are kept busy while also learning from the counsel of the wise. The district has been reported to have in the recent months recorded an increase in the number of teenage pregnancies during the COVID 19 outbreak.

• Economic Impact

Due to the closure of most of the business premises during the pandemic in the district, some businesses were closed up during this period such as breweries. As only essential movement was permitted within a defined area in the district, some business communities started shunning travelling to buy and sell some commodities. This paralyzed the economy of the district.

Schools such as pre-school, primary and secondary schools, higher educational institutions were closed resulting in the proprietors of the institutions to fail to make money. This further

resulted in some general workers, teachers and lecturers losing employment as the owners were unable to pay salaries.

2.4 **Conclusion and Summary of Issues**

The core issues presented in this chapter were a representation of the various issues that were brought out from the various stakeholder consultative meetings with community representatives, various institutions and non-governmental organisations. The section also reviewed the existing plans and policies and provided a framework within which the IDP will be formed in order to deal with the challenges and hence find possible remedies through employing strategies that will help attain the overall objective of the IDP for the next 10 years. The core issues include:

- 1. Limited access to clean and safe water.
- 2. Limited health infrastructure,
- 3. Limited schools in the district,
- 4. No banks in the district,
- 5. Poor communication network,
- 6. Poor road infrastructure,
- 7. Uncontrolled spatial growth of settlements especially in customary areas,
- 8. No skills training facilities for the youths,
- 9. Inadequate sanitation services
- 10. Limited access to FISP
- 11. Deforestation
- 12. Limited agriculture infrastructure
- 13. Early marriages and teenage pregnancies

PART THREE: THE DEVELOPMENT FRAMEWORK

3.0 Introduction to the Development Framework

The IDP Development Framework for Chadiza district will enable the local authority to properly coordinate the integration of programs and projects across sectors and spheres of government in order to maximize the impact thereof on the livelihoods of communities while safeguarding the environment and promoting social, cultural and economic development. This section of the IDP outlines the vision for Chadiza district for the next 10 years, the goals and objectives that the plan aims to achieve, and strategies that must accordingly be implemented. The formation of the vision, goals and objectives was informed by the core issues identified in the planning survey and participatory process in order to ensure that they speak to the local context of development needs and also take into account existing local resources and potentials that can be harnessed to provide sustainable solutions.

The spatial aspect of the development framework provides a visual representation of where various development efforts must be focused, taking into consideration area specific needs and potentials, but also considering measures to ensure the sustainable use of natural resources so as to promote conservation and a thriving natural environment. The IDP will therefore guide all decision-making processes regarding spatial (physical) development over the next 10 Years.

3.1 Development Framework

This section consists of the vision for the long-term development of Chadiza District, the policies that will stir this development, strategic objectives to be achieved, and the strategies to be implemented over the period of the IDP. It will also present alternative spatial development scenarios from which one spatial development framework will be chosen to address the issues identified in the district, and guide physical development decisions for the district.

The purpose of the development framework is to support and create an enabling environment where the objectives of the IDP can be achieved, while at the same time ensuring that proposals made are in line with relevant policies and legislation. All decisions made must also take into account issues of environmental sustainability, climate change, and cross-cutting issues such as HIV/AIDS, gender equality, and vulnerable groups in the community. In effect, the development framework will guide all decisions of the local authority that involve the current or future use and development of land, including infrastructure and buildings such as;

- ➤ Land use management decisions on applications for change of land use, such as rezoning and subdivision applications
- > Decisions on where and how public funds (from locally generated revenue, equalization fund and other government agencies) are invested.
- > Decisions on where services and infrastructure should be located.
- > Guidance for developers as to appropriate locations and forms of development.

The core focus of the Chadiza IDP is to develop a district that promotes the following;

- Productivity: Investment in high value infrastructure in agriculture sector
- Local Economy: Agricultural productivity, investment in infrastructure improving the livelihood of the local people.
- Natural Resource management: Protecting the environment, afforestation, preservation of the local natural resources

3.2 The Vision for the IDP area

"A High-Value, Agriculture-driven economy, improving the standard of living for all by 2030."

3.3 Development Policies

- 1. Scaling up SMART and integrated agriculture practices
- 2. Develop and strengthen use of alternative renewable energy solutions
- 3. Create and improve public infrastructure and social services which are responsive to people's needs.
- 4. Promote and ensure sustainable practices in all sectors.
- 5. Stimulate self-reliance and empowerment of the marginalized

3.4 Development Objectives, Priorities and Development Strategies

The strategic objectives of the Chadiza IDP are aimed at achieving the overall goal for the district, and their alignment with the goals and objectives of Seventh National Development Plan (7NDP). The goal for the IDP is outlined below:

"To promote sustainable value addition and equitable distribution of infrastructure and services, that is responsive to social and economic needs of the people"

Table 17: Development Objectives

IDP Development Objective by 2030	Alignment With 7NDP and Vision 2030
1. To enhance agricultural productivity	To enhance economic diversification and
in the district by 2030	inclusive growth
	 To enhance human development
	 To reduce poverty and vulnerability
2. To promote Spatial Growth and	To enhance human development
improve transport and	 To reduce development inequalities
communication systems by 2030	
3. To promote investments in	To enhance economic diversification and
alternative sources of energy	inclusive growth

4. To promote	environmental	■ To create an enabling environment for
protection and c	conservation of	sustainable economic growth
natural resources		
5. To improve access t	o clean and safe	 To improve water resources development
water supply and sar	nitation	and management
		■ To enhance human development (health
		promotion)
6. To enhance huma	an development	 To enhance human development through
through skills	training and	improved education and skills
empowerment progr	rams	development

Source: Chadiza district DMT 2020

3.5 Development Priorities

- 1. Employ modern Climate Smart Agriculture practices
- 2. Increase knowledge on the use of clean energy sources
- 3. Provide rural households with sufficient boreholes and wells
- 4. Establish skills training centres and recreation facilities
- 5. Conservation of existing natural resources
- 6. Tree planting
- 7. Road Transport and Communication infrastructure
- 8. Building of schools and health centres
- 9. Improve access to FISP by farmers
- 10. Create an enabling environment for investors in all sectors

3.6 Development Strategies

The IDP has six (6) Developmental objectives or strategies which are aimed at achieving the set of development objectives for the district over the next ten (10) Years. These developmental objectives are tabulated in the tables below;

3.6.1 Objective 1: To Enhance Agriculture Productivity in the district by 2030

Table 18: Objective 1- To enhance Agricultural Productivity in the District by 2030

Objective 1: To Enhan	Objective 1: To Enhance Agricultural Productivity in the district by 2030									
Strategy	Program	Activities	Target year 1	Target year 2	Target year 3	Target year 4	Target year 5	Responsible Agency/Dept.		
Employ modern Climate Smart	Agro-forestry training	Prepare modules	1		1			MOA, Departme		
Agriculture practices		Train Camp Officers	1		1			nt of Forestry,		
Community training on CSA		Train Lead farmers	1		1			DFA, L.A		
	Lead farmers train local farmers		1	1	1	1	<i>D.</i> 1			
		M&E	1	1	1	1	1			
Strengthen emergency preparedness through Reinforcement of early warning systems and	Build storage sheds		1 shed	1 shed	2 sheds	2 sheds	MOA			
early warning systems	increasing local storage capacity	Training Camp Officers	1		1					
and efficient crop forecasting and maintenance of strategic food reserves		Distribution of Pheromone traps	56	48	52	60	60			
Create an enabling	Provision of small	Identify land	4 S/H		4 S/H		4 S/H	MOA, LA,		
environment for investors in the	holdings and commercial farm land	Engage Traditional Leaders	3 Chiefs		3 Chiefs		3 Chiefs	MOCTA, Department of		
agricultural sector		Survey Land	4 S/H		4 S/H		4 S/H	Forestry, Livestock and		
		Stakeholder engagement	1		1		1	Fisheries		
Increase number of farmers and strengthen synergies among	armers and strengthen ynergies among layers in the	Register new cooperatives	40 co- operativ es	40 co- operativ es	40 co- operativ es	20 co- operativ es	20 co- operativ es	MOA, LA, Department of Livestock and		
players in the agriculture sector		Train Cooperatives	5	5	8	8	8	Fisheries.		
-		Participate in Expos	1	1	1	1	1			

	Empowerment of local cooperatives	Build market infrastructure	1	1	1	1	1	
		Increase number of farmers accessing FISP	400	450	500	600	700	
		Acquire information from financial institutions about suitable products and credit facilities for farmers	1	1	1	1	1	
		Trainings for cooperatives on accessing financial products and credit facilities available	5	5	8	8	8	
Establishment of a	Facilitate for the	Identify land	1 Ha					Local Authority,
One-Stop registration centre for agro-	provision of land	Engage Traditional Leaders	1 Chief					DFA
investments		Survey Land	1 Ha					
		Stakeholder engagement	1 meeting					
	Infrastructure financing	Budget		1				
		Float proposal to well-wishers		1				
To provide adequate	Provision of new modern	Identify land	1 Ac	1				Department of
support livestock	infrastructure	Engage Traditional Leaders	3 Chiefs		3 Chiefs			Fisheries and Livestock,
production in the District		Survey land	1 Ac	1				MOA
		Construct dip tanks		1	1	1	1	
	Upgrading of existing infrastructure	Rehabilitate existing dip tanks			1	1	1	
		Identify land	1					MOA,

Establish value addition	Establishment of agro- processing plants for local	Engage Traditional Leaders	1			LA, private investors
centers/facilities in	agro-products	Survey land	1			
agriculture		Advertise for Pubic		1		
		Private partnerships				

Source: Chadiza Town Council Finance Department, DMT 2020

3.6.2 Objective 2: To promote Spatial Growth and improve transport and communication systems by 2030

Table 19: Objective 2 - To promote Spatial Growth and improve transport and communication systems by 2030

OBJECTIVE 2: To pror	OBJECTIVE 2: To promote Spatial Growth and improve Transport and Communication Systems by 2030										
Strategy	Program	Activity	Target	Target	Target	Target	Target	Responsible			
			Year 1	Year 2	Year 3	Year 4	Year 5	agency/Depart.			
Improve connectivity in	Improve quality of road	Lobby for 150km to be	1	1	1	1	1	NRFA, RDA,			
the district	network in the district	tarred						LA			
				_	_	_	_				
Improve communication	Expand coverage of	Lobby for		2	2	3	3				
in the district	telecommunication	communication towers									
	network services in the	to be set up.									
	district										
Promotion of orderly,	Ensure quality housing	Development control	52	52	52	52	52	LA,			
aesthetic settlement								EPPA			
growth	Promotion of orderly	Re-planning and Up-	2	2		2					
	spatial growth	grading settlements	settleme	settleme		settleme					
			nts	nts		nts					
	Prepare local area plans	Identification of land	1								
	for expansion of										
	settlements	Meeting traditional	1								
		leaders									
		Survey	1								
		Preparation of layout		1							
		plans									

	Numbering		1		
	Development and maintenance of database	1			
Development of Dumpsite and Cer	Provision of land netery	1			
Provision of a Sev	ver line Identify land	1			
	Conduct Environmental and social impact assessment		1		
	Survey land	1			

Source: Chadiza Town Council Finance Department, DMT 2020

3.6.3 Objective 3: Promote investments in alternative sources of energy by 2030

Table 20: Objective 3 - To promote Investment in Alternative sources of Energy by 2030

Objective 3: To promote	Objective 3: To promote Investments in alternative sources of energy by 2030										
Strategy	Program	Activities	Target	Target	Target	Target	Target	Responsible			
			year 1	year 2	year 3	year 4	year 5	Agency/ Dept.			
Encourage the use of bio	Enhance knowledge on	Training Community		33		33		MOA, Ministry of			
fuel, bio gas and other	the use of bio fuel, bio gas	Leaders		tradition		tradition		Energy,			
sources of clean	and other sources of clean			al		al		DFA			
	energy			leaders		leaders					
		Conduct community		4 wards	4 wards	4 wards	4 wards				
		sensitization meetings									
Attract investments in	Market the district to	create and avail	1					LA			
Solar energy	would be investors	investment profiles									
		_									
	Creating an enabling	provision of land	1								
	environment for investors										

		establish a framework for possible PPPs	1					
Operationalize the local solar milling plants which can supply solar energy to at least 25	operationalize the existing solar plants	Create an investment profile for PPPs	1					Ministry of Commerce, Ministry of Energy
housing units per plant		Procurement and installation of heavy-duty solar batteries		1 plant	1 plant	2 plants	2 plants	LA, Cooperatives Union of Zambia,

Source: Chadiza Town Council Finance Department, DMT 2020

3.6.4 Objective 4: To Promote Environmental Protection and Conservation of Natural Resources

Table 21: Objective 4: To Promote Environmental Protection and Conservation of Natural Resources

Strategy	Program	Activity	Target Year 1	Target Year 2	Target Year 3	Target Year 4	Target Year 5	Responsible agency/Depart.
Ensure 100,000 trees are	Tree planting	Establish one tree	Once a	Department of				
planted in the next 10		nursery centre	year	year	year	year	year	Forestry, MOA,
years		Plant 100,000 trees	10,000	10,000	10,000	10,000	10,000	LA
			trees	trees	trees	trees	trees	
		Tree planting	8	6	6	6	6	
		sensitization meetings	Meeting	Meeting	Meeting	Meeting	Meeting	
			s	S	S	S	S	
Increase knowledge on	Community awareness	Use ZANIS and	12	12	12	12	12	Department of
effects of deforestation		Community radio to	Announ	Announ	Announ	Announ	Announ	Forestry, ZANIS,
		make sensitization	cements	cements	cements	cements	cements	LA
		announcements once a						
		month						
		Engage WDCs and	8	6	6	6	6	Department of
		educating them of	Meeting	Meeting	Meeting	Meeting	Meeting	Forestry, LA
		effects of deforestation	s	S	S	S	S	

		and impact of tree planting to the environment twice a year						
Encourage alternative uses for forests	Enhance knowledge on apiaries and modern bee keeping technologies	Training potential bee keeping groups quarterly	4 Times	4 Times	4 Times	4 Times	4 Times	Department of Forestry, MOA
	Establish apiaries and modern bee keeping	Making bee hives			20	20	20	
	technologies	Identify suitable forest areas			1	1	1	
		Install bee hives			20	20	20	
Reduce environmental hazards and promote aesthetics	To enhance solid waste management	Revise the district solid management plan		1				LA
		Promote recycling and reuse	1	1	1	1	1	
		Sensitization and consultation meetings	2					
		Preparation of by-laws	1					
		Enforcement of by-laws	1					

Source: Chadiza Town Council Finance Department, DMT 2020

3.6.5 Objective 5: To improve access to clean water supply and sanitation by 2025

Table 22: Objective 5: To Improve access to clean water supply and sanitation by 2025

Objective 5: To Improve access to clean and safe water supply and sanitation								
Strategy	Program	Activities	Target year 1	Target year 2	Target year 3	Target year 4	Target year 5	Responsible Agency/ Dept
Provide rural households with	Provision of rural water	Drill Boreholes and wells for the community	10	10	10	10	10	D.W.R.D LA NGOs

sufficient boreholes and wells		Rehabilitation and maintenance of existing boreholes	40	40	40	40	40	
		Formation of V- WASHE committees	10	10	10	10	10	
		Training of V- WASHE committees	10	10	10	10	10	
Provide rural households with skills to build VIP latrines	Provision of rural sanitation	Training the community to build and use VIP latrines	6 meeting s	6 meeting s	6 meeting s	6 meeting s	6 meeting s	LA MOH D.W.R.D
Ensure households have toilets and VIP latrines	Conduct enforcement activities	Monitoring	2 monitori ng activitie s	2 monitori ng activitie s	2 monitori ng activitie s	2 monitori ng activitie s	2 monitori ng activitie s	LA MOH, D.W.R.D
Ensure water bodies and wet lands are protected	Formulate by laws to protect water bodies and	Stakeholder meetings		7				LA, Zambia Police Service,
1	wet lands	Draft the by-law		1				Water affairs Department
		Adoption of by-law		1				Бершинен
	Enforce existing laws that protect water bodies and wet lands	Conduct spot check inspections	4 Times	4 Times	4 Times	4 Times	4 Times	
	Sensitize communities on water bodies and wet lands	Hold sensitization meetings	6 announc ements	6 announc ements	6 announc ements	6 announc ements	6 announc ements	LA, Water affairs Department, EWSC

Source: Chadiza Town Council Finance Department, DMT 2020

3.6.6 Objective 6: To Enhance Human Development through Skills and Empowerment Programs by 2030

Table 23: Objective 6: To Enhance Human Development through skills and empowerment programs by 2030

OBJECTIVE 6: To Enhance Human Development through skills training and empowerment programs								
Strategy	Program	Activity	Target Year 1	Target Year 2	Target Year 3	Target Year 4	Target Year 5	Responsible agency/Departm ent
To empower women and youths in the district	strict training center	Lobby for resources and sponsorships	1	1	1	1	1	LA, NA
with skills and crafts to better their livelihoods		Identification of land	1					LA and Chiefs
Strengthen Linkages between potential	Raising awareness	Radio sensitization	4	4	4	4	4	MoGE, LA, Socio welfare,
scholars and scholarship programs Provision of Tw permanent annu scholarships for	Provision of Two permanent annual	Establish scholarship fund account	2	2	2	2	2	HELSB, NGOs
	scholarships for best performing boy and girl	Lobby for funds	2	2	2	2	2	
	in the district	Sensitize potential school leavers and higher secondary school pupils	3	3	3	3	3	

Source: Chadiza Town Council Finance Department, DMT 202

3.7 Spatial Development Framework

In order to achieve the development objectives, Chadiza IDP will have three strategic drivers;

- 1. Connectivity and Productivity
- 2. Promote Growth of Chadiza district
- 3. Promote Sustainable Human Settlements

3.7.1 Scenario 1: Connectivity and Productivity

In this development scenario Connectivity is acknowledged as a means to an end as it promotes and enhances Productivity. This development scenario will therefore provide Economic and Social opportunities by enhancing the transport infrastructure and improving agricultural productivity in the potential agriculture areas (farm lands), while promoting value addition at the identified Nodes known as Production Consolidation Areas. This will result in additional investments and job creation.

To achieve efficient connectivity, the primary focus will be to be rehabilitate and upgrade the main roads such as Chadiza - Chipata, Chadiza - Chiswa, Chadiza - Vubwi and Chadiza - Katete to tarred roads to ease import and export of goods and services while opening up the local roads to enable the transportation of agricultural products from the agricultural production areas to the production consolidation areas consisting of food processing plants, for value addition.

There are three identified production consolidation areas as seen from the map below. These are Chadiza, Teferasoni and Khumba wards which were selected because of their existing supporting activities and infrastructure. Four agricultural development corridors (along the four main roads) have also been identified. These corridors are connecting to the value addition regions of the district while promoting Local Economic Development and trade between Chadiza and the other Districts in the province. Refer to figure 28 below:

Scenario 1: Connectivity and Productivity

Nesdro

Chargioge

Chargioge

Chargioge

Chargioge

Chargioge

Chargioge

Kandabresko

Ambidis

Foldorico Chargioge

Radovumo

Logend

Loge

Figure 27: Connectivity and Productivity

Source: Department of Physical Planning, Chadiza Town Council Planning Department, 2020

3.7.2 Scenario 2: Promote Growth of Chadiza District

This development scenario is aimed at promoting the growth of the district through the promotion of investment by using concepts such as growth areas, nodes and development corridors. Growth will be promoted at the growth areas and along development corridors to enhance high density spaces so as to efficiently make the most out of the district's social services and support a wider population. Furthermore, this development scenario seeks to ensure that, the direction of growth is controlled in order to protect restricted areas such as forest reserves from being encroached. Therefore, growth is being directed away from these protected areas.

3.7.2.1 Growth Areas (GA)

The hierarchy of settlements is a critical consideration in the promotion of growth areas and the therefore Chadiza Central, Kapini and Teferansoni wards as are selected as growth areas.

i. Chadiza Central: This is the Central Business District (CBD) and is planned for value addition as a growth area. Skills training centres, a one stop registration and other infrastructure have been proposed for the area. Food processing plants have also been proposed for various agricultural products such as milk, meat, maize, soya beans, and sunflower and this is intended to create job opportunities for the locals and the area will be promoted to become an urban township. Other basic services such as housing

developments, commercial and social services such as education and health will be setup to support the processing plants that will setup in the area.

- ii. **Teferansoni**: The ward is on the south-western parts of the district and has been selected as a growth area as it is considered to be a ward with immense infrastructure development.
- **iii. Kampini**: Also located on the south-western parts of the district, Kampini ward was selected as a growth area due to its potential for economic development because of Chanida Border which is the border between Zambia and Mozambique.

3.7.2.2 Development Corridors (DC)

Four agricultural development corridors namely, Chipata-Chiswa road, Chadiza-Chipata road, Chadiza-Vubwi road, and Chadiza-Katete road are proposed as development corridors.

3.7.2.3 Nodes (N)

Four wards namely Mangwe, Mange, Khumba and Naviluli are proposed for the development of nodes due to their resource potentials and population trends.

The figure below shows the proposed growth areas, developments corridors and nodes.

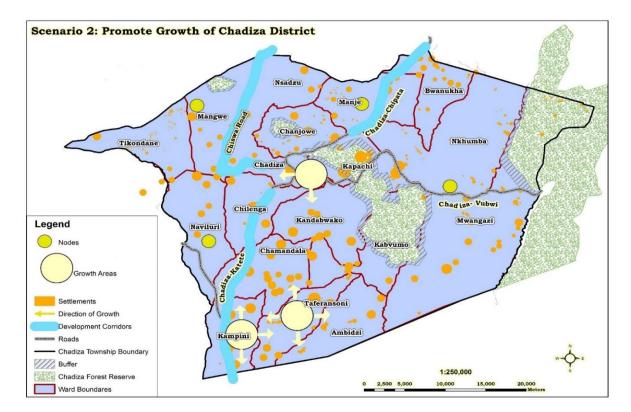


Figure 28: Promote Growth of Chadiza District

Source: Department of Physical Planning, Chadiza Town Council Planning Department, 2020

3.7.3 Scenario 3: Promote Sustainable Human Settlements

This development scenario aims to improve the economic, social and environmental quality of human settlements through increased access to Basic Services such as Education, Health, Environmental Services and Social Protection while conserving the environment. By using the concept of growth nodes known as areas of economic, social and environmentally friendly infrastructure, the idea is to strengthen service delivery through equitable distribution of social services to ensure that distances covered by populations are significantly reduced while encouraging green energy and green building. Therefore, this development scenario, promotes the buffering of water bodies so as to protect the water quality, agricultural blocks to enhance food production and forest reserves in order to minimize deforestation. Inter-district resource conservation is also being promoted to protect shared natural resources between Chadiza and its neighbouring districts.

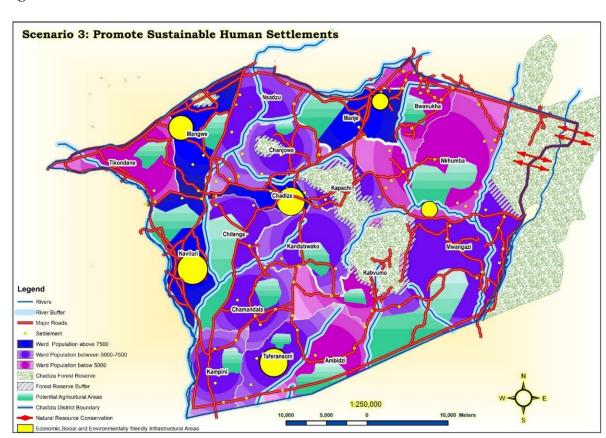


Figure 29: Promote Sustainable Human Settlements

Source: Department of Physical Planning, Chadiza Town Council Planning Department, 2020

3.7.4 Selected Spatial Development Framework

The criteria for the selection of the best scenario is based on the following factors: the scenario's potential to Contribute to the local and national economic development; its potential to contribute to job creation; demographic trends; social economic factors and environmental factors.

3.7.4.1 Scenario 1: Connectivity and Productivity

The district has selected Scenario 1, as the best alternative for meeting the objectives for the IDP area. The scenario focuses on unlocking the potential of agriculture and economic

development. Connectivity and productivity will create an enabling environment to attract investors in the agriculture sector. The nodes known as areas of economic, social and environmentally friendly infrastructure and the environmental protection concept from scenario 3, were also adopted to strengthen the selected spatial development framework in order to effectively attain the overall vision for the IDP area.

Enhancing connectivity will improve service delivery through equitable distribution of social services and reduce distances covered by populations while encouraging green energy and green building. Therefore, the selected best alternative scenario, promotes connectivity and productivity while conserving the environment.

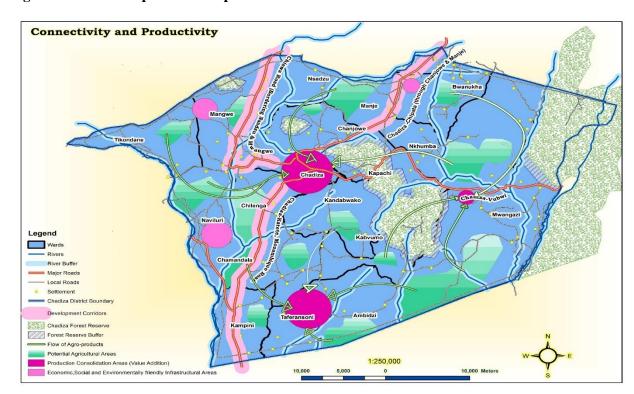


Figure 30: Selected Spatial Development Framework

Source: Department of Physical Planning, Chadiza Town Council Planning Department, 2020

3.8 Planning Needs

In line with population projections and existing planning standards in units and hectarage, this chapter outlines the assessed and estimated planning needs of the different sectors in Chadiza. The examined planning needs include existing and estimated ones. The year 2010 was used as the base year.

3.8.1 Housing needs

Table 24 below illustrates the number of households and the estimated number of housing units in Chadiza for the year 2020 and the projected for 2025 and 2030.

a) Housing unit needs

Housing needs based on population projections

Table 24: Housing needs based on population projections

	2020	2025	2030
Population	96 707	108,493	136,549
Number of households for above population	17,531	20, 693	23, 938
Number of existing houses	787	1500	2200

b) Housing Needs in Hectarage

Table 25 below shows the expected population growth together with the estimated number of houses, existing housing hectarage, and the estimated hectarage required. Housing hectarage needs based on population projections

Table 25:Housing hectarage needs based on population projections

	2020	2025	2030
Population	96 707	108,493	136,549
Number of houses for above population	17,531	20, 693	23, 938
Number of Existing Houses	787	1500	2200
Number of estimated housing Shortfall			
Existing Housing Hectarage			
Estimated Housing Hectarage shortfall			

c) Number of Units per Hectare in Residential Zones

Table 26 below shows the number of units per hectare in residential zones

Table 26: Number of units per hectare in residential zones

Residential	Plot Sizes	Dwelling	Possible Appropriate Locations
Zoning	(\mathbf{m}^2)	Units/ Ha	
Low Cost	450m ²	22 ha	Town centre or immediately adjacent to public transport hubs
Medium Cost	1350m ²	7 ha	Neighbourhood centres (typically within 400m walking distance of centre point), inner urban suburbs
High Cost	2475m ²	4 ha	Urban Periphery, outlying lands, areas with capacity/ environmental constraints

3.8.2 Commercial Building Needs

a) Commercial Building Unit(shop) needs

The table below shows the number of shops needed in Chadiza from 2020 to 2030 according to the existing and projected population. The estimates were based on the current planning standards of one shop per 30 households.

Table 27: Commercial building (shop) needs

	2020	2025	2030
Population	96 707	108,493	136,549
Number of households for above population	17,531	20, 693	23, 938
Number of shops needed for above population	584	689	797
Number of existing shops	460	460	460
Number of estimated shop needs	124	229	337

b) Central Business Hectarage Needs

The land use planning standards for the Central Business area are as follows:

Table 28: Central Business Needs

Land Use	Standards and Catchments	Comments
Shopping (BS)	rural area settlement: total= 160m²-360m²/1000pop (260m² average) dispersed as: a) central area 80-180m² /1000pop (i.e one shop) b) Dispersed 80-180m²/1000pop	standard relates to retail space not plot size

Parking (shops)	3/1000m ² floor space	
Retail Market (BM)	14 stalls / 1000pop ie 25m²/1000	1km Catchment
Parking (Markets)	1/300m ² floor space	
Offices (BC)	400m ² /10,000pop	
Parking (Offices)	1/100m ² floor Space	
Licensed Premises	2000m ² / 3,000pop (plots to be 1,000-2,000m ²)	
Petrol Filling Station (TS)	1000-1500m ² site /20,000pop	
Post office (AP)	Sub office 300m ² /10,000pop	
Parking (Licensed	1/40m ² public floor space	
Premises)	¾ bedrooms	
	1/5 staff	
Small Workshops	10×25m ² /4,000pop	adjacent market area
Industry/warehousing	1car/10 employees	lorry
	1 lorry/ 1000m ² (min 3)	spaces=46m ² additionbal provision for offices where appropriate
	1car/10 employees	lorry spaces=46m ² additionba provision for offices

In line with the above planning standards and unit needs in the above table, the table below gives the commercial hectarage needed for the CBD.

c) Commercial building needs based on population projections

Table 29: Commercial Building needs based on population projections

	2020	2025	2030
Population	96 707	108,493	136,549
Number of households	17,531	20, 693	23, 938
Number of Shops needed for above Pop.	584	689	797
Number of existing Shops	460	460	460
Number of estimated shop shortfall	124	229	337
Estimated Shopping Hectarage shortfall			

3.8.3 Administration Building Needs

a) Administration Building Unit Needs

The land area proposed to address the administrative building needs in Chadiza by the year 2030 is estimated at approximately 2.5ha on the assumption of 70 employees per ha for an estimated 150 government employees working in office buildings.

b) Administration Building Hectarage needs

3.8.4 Educational Needs

The education needs in Chadiza for the planning period includes a skills training center. Educational hectarage requirements drawn from the planning standards shown below

Table 30: Educational needs

Land Use	Standards and Catchments	Ha/ Population	Comments
Nursery School (GEN)	0.5ha; with GEN 200 pupils/4000pop. average 25 pupils /school	0.125/1000	Land use to be allocated in advance of requirements pending availability of funds
Primary School (GEP)	1 stream: 280pupils (1,500pop);1.2ha 2 streams:560 pupils (3000pop) 1.8ha 3 streams: 840 pupils (5400pop) 2.4ha 4 streams:1120 pupils (6,000pop) 3.0ha	At 4 streams (ideal target) 0.5/1000	Excludes teachers housing in all cases
Secondary School (GEP)	4/2 streams (4×grades 1,2,3; 2×Grades 4,5) for 20,000pop buildings required when 3-4% of pop =620-820pupils with 520 min	5/20,000	
Parking (Schools)	1/classroom (plus 'set down' area)		'set down' area to be within site

	2020	2025	2030
Population	96 707	108,493	136,549

Hectarage		
(Schools)		

3.8.5 Health Building Needs

a) Health Building Needs

Chadiza's health building needs for the planning period are as follows:

- Construction of maternity Annexes and mothers' shelters facilities
- Construction of Primary health care units
- Construction of Staff houses
- Construction of placenta pits and incinerators
- Construction of a medical hub
- Construction of minimal zonal hospitals
- Installation of solar water reticulation system facilities

b) Health Hectarage Building Needs

Below are the Planning standards for general hospitals and clinics

Table 31: Health Building needs

Land Use	Standards and Catchments	Ha/	Comments
		Population	
Health Sub- centre or Clinic	600-800m ² / 1,000pop	0.06-0.08/1000	Housing outside site; 15Km radius
(GHC)			catchment
Primary School (GEP)	1 stream: 280pupils (1,500pop);1.2ha 2 streams:560 pupils (3000pop)	At 4 streams (ideal target) 0.5/1000	
	1.8ha 3 streams: 840 pupils (5400pop) 2.4ha		
	4 streams:1120 pupils (6,000pop) 3.0ha		
Hospital (GHO)	Mk.1 (District)1/50,000pop; Mk.2 (Prov.H.Q) 1/100,000pop		
	Mk.3 1/20,000 pop; General		
	1/300,000pop		
Parking (Health)	1space /5beds + space per staff		

	2020	2025	2030
Population	96 707	108,493	136,549
Hectarage (Hospitals/ clinics)	5	7	9

Chadiza has an existing District hospital, hence total hectarage of 9 hectares will be required for this sector by the year 2030.

3.8.6 Industrial Needs

a) Industrial unit needs for Chadiza

In Chadiza, Industrial needs for the planned period include development of Industrial Plots for local processing and pprovision of a site for a skills training Centre

b) Industrial Hectarage needs

Table 32: Industrial use Needs

Land Use	Standards and Catchments	Comments
Service Industry		
Small workshops	10×25m ^{2/} /4000pop	Adjacent market area
Large workshops (FL)	5× 400m ² / 1000pop	Adjacent market area
Other Industry		
(General or Specific) specific works as requested	+50% expansion nearby +50% land reservation elsewhere for 'spin-off'	
Parking (Industry)	1 car/10 employees	Lorry spaces = $46m^2$
	1 lorry/ 1,000m ² (min 3)	Additional provision for offices where appropriate

3.8.7 Road Unit Needs

These are shown in the table below:

Table 33: Roads Unit needs

Type of Road	Length (Km)	Proposed (km)
Gravel	346 km	500 km
Tarred	17 km	150 km

3.8.8 Social Facilities Needs

The hectarage needs for public and social facilities are obtained from the planning standards given below:

Table 34: Social facilities needs

Land Use	Standard and Catchments	Ha/Population	Comments
Community Hall (PS)	1,500-2,500m ² /10,000pop; (3,000m ²) if sports facilities)	0.06-0.08/1000	housing outside site: 15km radius catchment
Place of Worship (PW)	1,000- 1,500m ² /3,000pop		at each shopping centre and bus station
Public Convenience (PT)	0.04ha/1000, pop		Suitably located land reservation
Entertainment (theatre, cinema, social clubs) (PE)	0.5ha/300,000pop		Suitably located land reservation
Open air cinema (PE)			

	2020	2025	2030
Population	96 707	108,493	136,549
Hectarage			

3.8.9 Electricity Needs

a) Electricity unit needs

3.8.10 Open Spaces and Recreational Facilities Needs

This includes Open spaces, green areas, parks, cemetery, recreation and tourism. Planning standards for open space facilities are outlined in the table below:

Table 35: Open spaces and recreational facilties needs

Land Use	Standard and	Ha/Population	Comments
	Catchments		
"Tots Lots"	0.1ha/1,000pop. Serving	0.1ha/1,000	Ideally to serve
	100m radius		25 houses
Children's	Sites totaling	0.5ha/10,000	Including
Playground (OPP)	0.5ha/1,000pop.		Informal football
			pitch areas

			1football pitch/5,000pop.
Playfields, Tennis Courts etc. (OPF)	To serve 200m radius 2.0ha/10,000pop; 1km radius		
Parks (OP)	0.1ha/ 1,000pop.		
Swimming Pools (OPS)	0.75ha site/ 30- 50,000pop		
Golf Course (OPG)	60ha site (18hole) 30ha site (9hole)		Less specific requests -this acts as land reserve within town
Private Park or Play Area (OVP)	0.05ha/1,000pop 5ha site	1ha/1,000	
Race Track/Stadium/Show Ground (OPR)	50ha/50,000pop.		
Cemetery and Crematorium (CE) Gardens (AU)	0.25ha/1,000pop.		Site away from residential area

	2020	2025	2030
Population	96 707	108,493	136,549
Hectarage	120	135	170

3.8.11 Transport Unit Needs

a) Transport Unit Needs

A comprehensive road network is essential to ease movement of people, goods and services. In this vein, improving the quality of the main roads in the district is priority. Aside from improving the quality of main roads, opening up of local streets has been proposed throughout the planning boundary in order to provide access to all proposed land use blocks. Proposed roads are to be constructed as per the road standards given below:

Table 36: Transport unit needs

Land Use	Standards and Catchments	Comments
Primary Distributor	Dual 2 or 3 lane 30-36m overall reserve	65kph no plot access

	Single 2 or 4 lane 24m for 2lane; for 4 lanes	
District Distributor	single 2 lane 12m reserve	60kph no plot access
Local Distributor	Single 2 lane 12m reserve	50kph no plot access permitted
Access Roads	3m min. width; gravel based	30kph no plot access permitted
Segregated pedestrian ways turning space in cul de sac	12.50 × 18mm hammerhead	

TYPE OF ROAD	EXISTING LENGH (km)	Proposed (km)
Gravel	346 km	500 km
Tarred	17 km	150 km

PART FOUR: THE IMPLEMENTATION PROGRAM

4.0 Capital Investment Plan

This section presents the capital investment plan for the Chadiza IDP

Table 37: Capital Investment Plan for Chadiza IDP

IDP Capital	Investment Plan						
District	Chadiza						
Objective 1	To enhance agricultural productivity in the distri	ict by 2025					
Strategy	Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves	Budget Estimate	2021	2022	2023	2024	2025
programme	Reinforcement of early warning systems and increasing local storage capacity	1,500,000.00		250,000.00	250,000.00	500,000.00	500,000.00
Output	Six storage sheds Constructed						
Programme	Empowerment of local cooperatives	1,250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00
Strategy	Increase number of farmers and strengthen synergies among players in the agriculture sector						
Output	Five Market sheds Constructed						
Programme	Facilitate for the provision of land	3,000.00	3,000.00	-	-	-	-
Strategy	Establishment of a one stop registration centre for agro investment						
Output	One stop registration centre established						
Programme	Provision of new modern infrastructure	600,000.00	-	150,000.00	150,000.00	150,000.00	150,000.00
Strategy	To provide adequate infrastructure to support livestock production in the district						

0 1 1	P 1 1 1 1 1						
Output	Four new dip tanks constructed						
programme	Upgrading of existing infrastructure	150,000.00	-	-	50,000.00	50,000.00	50,000.00
Strategy	To provide adequate infrastructure to support livestock production in the district						
Output	Three existing dip tanks rehabilitated						
programme	Establishment of agro-processing plants for local agro-products	4,180.00	4,180.00	-	-	-	-
Strategy	Establish value addition centres						
Output	Three agro-processing plants established by 2025						
			l .				
Objective 2	To Promote Spatial Growth and Improve Transport	and Communication	Systems by 2030				
Strategy	Improve Connectivity in the District	Budget Estimate	2021	2022	2023	2024	2025
Programme	Improve Quality of Road Network in the District						
		1,978,600,000.00	605,500,000.00	485,250,000.00	335,750,000.00	286,000,000.00	266,100,000.00
Output	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained and 120km of roads opened	1,978,600,000.00	605,500,000.00	485,250,000.00	335,750,000.00	286,000,000.00	266,100,000.00
Output	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained	1,978,600,000.00	605,500,000.00	485,250,000.00	335,750,000.00	286,000,000.00	266,100,000.00
Output Programme	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained	1,978,600,000.00	7,000.00	485,250,000.00 7,000.00	335,750,000.00	7,000.00	266,100,000.00
	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained and 120km of roads opened						
Programme	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained and 120km of roads opened Promotion of Orderly, Spatial Growth Promotion of Orderly, Aesthetic Settlement						
Programme Strategy	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained and 120km of roads opened Promotion of Orderly, Spatial Growth Promotion of Orderly, Aesthetic Settlement Growth						
Programme Strategy	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained and 120km of roads opened Promotion of Orderly, Spatial Growth Promotion of Orderly, Aesthetic Settlement Growth						
Programme Strategy Output	150km of feeder roads Tarred, 40km of Township Roads Tarred, 160km township roads Maintained and 120km of roads opened Promotion of Orderly, Spatial Growth Promotion of Orderly, Aesthetic Settlement Growth Four Settlements Replanned and Upgraded Prepare Local Area Plans for Expansion of	21,000.00	7,000.00				

Programme	Establishment of Dumpsite		-	-		-	-
		133,700.00			133,700.00		
Output	Dumpsite Established						
Programme	Establishment of a Cemetery		-	-	=		-
		103,000.00				103,000.00	
Output	Cemetry Established						

Objective 4	To Promote Environmental Protection and Conservation of Natural Resources									
Strategy	Ensure 100,000 trees are planted in the next 10 years	Budget Estimate	2021	2022	2023	2024	2025			
programme	Tree Planting	47,225.00	-	47,225.00	-	-	-			
Output	Hundred Thousand Trees planted	Jundred Thousand Trees planted								

Objective 5	To Improve Access to Clean and Safe Water Supply and Sanitation									
Strategy	Provide Rural households with Sufficient	Budget Estimate	2021	2022	2023	2024	2025			
	Boreholes and Wells									
Programme	Provision of Rural Water									
		3,850,000.00	770,000.00	770,000.00	770,000.00	770,000.00	770,000.00			
Output	Fifty Borehores drilled and Two hundred									
	rehabilitated by 2025									

Objective 6												
Strategy	To empower women and youths with skills and crafts to better their livelihoods	Budget Estimate	2021	2022	2023	2024	2025					
programme	Establishment of a Skills training center	3,000.00	3,000.00	-	-	-	-					
Output	One Skills Training Centre established											
	Grand Totals	Grand Totals 1,986,274,105.00 606,546,180.00 486,724,225.00 337,353,700.00 287,830,000.00 267,820,000.00										

4.1 Local Authority's Financial Plan

Chadiza District projects to raise a total of K66,789,059.99 by 2025. A major component of this projected revenue is generated from Own Source Revenue (OSR) streams which include; Fees and charges, licenses, levies, permits and local taxes while the other component comes from external sources of revenue such as Constituency Development Funds (CDF), the Local Government Equalization Fund (LGEF) and other grants from treasury. In the financial plan, recurrent expenses requisite for the implementation of 35 programmes are set out according to identified strategies intended to meet the 6 key objectives as detailed in the tables below;

Table 38: Local Authority's Financial Plan 2021 -2025

al Plan 2021-2025						
Chadiza						
To Enhance Agricultural Productivity in the distr	rict by 2025					
Employ modern climate smart agriculture practices	Budget Estimate	2021	2022	2023	2024	2025
Agro-forestry training	106,270.00	51,515.00	-	54,755.00	-	-
Agriculture productivity increased by 60%						
Community training on Climate Smart Agriculture	116,385.00	53,536.00	2,022.00	56,778.00	2,024.00	2,025.00
Agriculture productivity increased by 60%						
T	1			1	1	T
Reinforcement of early warning systems and increasing local storage capacity	173,240.00	63,830.00	16,220.00	59,250.00	16,820.00	17,120.00
Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves						
6 Storage Sheds constructed, 21 Camp officers trained and 276 Pheromone Traps Distributed						
Provision of small holdings land	21,780.00	6,670.00	725.00	6,810.00	725.00	6,850.00
Create an enabling environment for investors in the agriculture sector						
12 Small holdings created and offered						
Formation of cooperatives	128 810 00	25680	25720	25760	25810	25840
	To Enhance Agricultural Productivity in the distremploy modern climate smart agriculture practices Agro-forestry training Agriculture productivity increased by 60% Community training on Climate Smart Agriculture Agriculture productivity increased by 60% Reinforcement of early warning systems and increasing local storage capacity Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves 6 Storage Sheds constructed, 21 Camp officers trained and 276 Pheromone Traps Distributed Provision of small holdings land Create an enabling environment for investors in the agriculture sector	To Enhance Agricultural Productivity in the district by 2025 Employ modern climate smart agriculture practices Agro-forestry training Agriculture productivity increased by 60% Community training on Climate Smart Agriculture Agriculture productivity increased by 60% Reinforcement of early warning systems and increasing local storage capacity Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves 6 Storage Sheds constructed, 21 Camp officers trained and 276 Pheromone Traps Distributed Provision of small holdings land Create an enabling environment for investors in the agriculture sector 12 Small holdings created and offered	To Enhance Agricultural Productivity in the district by 2025 Employ modern climate smart agriculture practices Agro-forestry training 106,270.00 51,515.00 Agriculture productivity increased by 60% Community training on Climate Smart Agriculture 116,385.00 53,536.00 Agriculture productivity increased by 60% Reinforcement of early warning systems and increasing local storage capacity 173,240.00 63,830.00 Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves 6 Storage Sheds constructed, 21 Camp officers trained and 276 Pheromone Traps Distributed Provision of small holdings land 21,780.00 6,670.00 Create an enabling environment for investors in the agriculture sector 12 Small holdings created and offered	To Enhance Agricultural Productivity in the district by 2025 Employ modern climate smart agriculture practices Agro-forestry training 106,270.00 51,515.00 - Agriculture productivity increased by 60% Community training on Climate Smart Agriculture 116,385.00 53,536.00 2,022.00 Agriculture productivity increased by 60% Reinforcement of early warning systems and increasing local storage capacity 173,240.00 63,830.00 16,220.00 Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves 6 Storage Sheds constructed, 21 Camp officers trained and 276 Pheromone Traps Distributed Provision of small holdings land 21,780.00 6,670.00 725.00 Create an enabling environment for investors in the agriculture sector 12 Small holdings created and offered	To Enhance Agricultural Productivity in the district by 2025 Employ modern climate smart agriculture practices Agro-forestry training Agriculture productivity increased by 60% Community training on Climate Smart Agriculture Agriculture productivity increased by 60% Reinforcement of early warning systems and increasing local storage capacity Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves 6 Storage Sheds constructed, 21 Camp officers trained and 276 Pheromone Traps Distributed Provision of small holdings land Create an enabling environment for investors in the agriculture sector 12 Small holdings created and offered	To Enhance Agricultural Productivity in the district by 2025 Employ modern climate smart agriculture practices Agro-forestry training Agro-forestry training Community training on Climate Smart Agriculture Agriculture productivity increased by 60% Community training on Climate Smart Agriculture Agriculture productivity increased by 60% Reinforcement of early warning systems and increasing local storage capacity Strengthen emergency preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves 6 Storage Sheds constructed, 21 Camp officers trained and 276 Pheromone Traps Distributed Provision of small holdings land Create an enabling environment for investors in the agriculture sector 12 Small holdings created and offered

				1	1		
Strategy	Increase number of farmers and strengthen synergies among players in the agriculture sector						
Output	160 new Cooperatives formed and trained by 2025						
Programme	Facilitate for the provision of land	4,160.00	4,160.00	-	-	-	-
Strategy	Establishment of a one stop registration centre for agro investment						
Output	One stop registration centre established						
Programme	Empowerment of local cooperatives	235,580.00	46,398.00	46,767.00	47,136.00	47,505.00	47,774.00
Strategy	Increase number of farmers and strengthen synergies among players in the agriculture sector	,	<u> </u>	·		· ·	,
Output	5 Market shelters constructed by 2025						
Programme	Facilitate for the provision of land	6,560.00	6,560.00	-	-	-	-
Strategy	Establishment of a one stop registration centre for agro investment						
Output	One stop registration centre established						
	1	T T		T	T	Г	T
Programme	Infrastructure financing	3,640.00	-	3,640.00	-	_	-
Strategy	Establishment of a one stop registration centre for agro investment						
Output	One stop registration centre established						
		·					,
Programme	Provision of new modern infrastructure	13,410.00	2,640.00	2,670.00	2,685.00	2,700.00	2,715.00

Strategy	To provide adequate infrastructure to support livestock production in the district						
Output	Four new dip tanks constructed						
Programme	Upgrading of existing infrastructure	7,200.00	-	-	2,340.00	2,400.00	2,460.00
Strategy	To provide adequate infrastructure to support livestock production in the district						
Output	Three existing dip tanks rehabilitated						
Programme	Establishment of agro-processing plants for local agro-products	12,815.00	2,105.00	10,710.00	-	-	-
Strategy	Establish value addition centres						
Output	Three agro-processing plants established by 2025						
Objective 2	To Promote Spatial Growth and Improve Transport	and Communica	tion Systems by	2030			
Strategy	Improve Communication in the Disrict	Budget Estimate	2021	2022	2023	2024	2025

Objective 2	To Promote Spatial Growth and Improve Transport and Communication Systems by 2030								
		Budget							
Strategy	Improve Communication in the Disrict	Estimate	2021	2022	2023	2024	2025		
Programme	Expand Coverage of Telecommunication Network Services in the District	4,155.00		840	870	1200	1245		
Output	10 Communication Towers Set up by 2025								

Programme	Ensure Quality Housing	269,200.00	52,400.00	53,120.00	53,840.00	54,560.00	55,280.00
Strategy	Promotion of Orderly, Aesthetic Settlement Growth						
Output	260 Development Control activities conducted by 2025						

Programme	Promotion of Orderly, Spatial Growth	94,500.00	29,200.00	32,200.00	-	33,100.00	-
Strategy	Promotion of Orderly, Aesthetic Settlement Growth						
Output	4 Settlements Replanned and Upgraded by 2025						
Programme	Prepare Local Area Plans for Expansion of Settlements	26,280.00	16,280.00	10,000.00	-	-	-
	Promotion of Orderly, Aesthetic Settlement						
Strategy	Growth						
Output	Land identified, surveyed and database developed by 2025						
Programme	Establishment of Dumpsite	133,700.00	-	-	133,700.00	-	-
Strategy	Promotion of Orderly, Aesthetic Settlement Growth						
Output	1 Dumpsite established						
Programme	Establishment of a Cemetery	103,000.00	-	-	-	103,000.00	-
Strategy	Promotion of Orderly, Aesthetic Settlement Growth						
Output	Cemetery Established						
Programme	Provision of a Sewer Line	3,210.00		3,210.00	-	-	-
Strategy	Promotion of Orderly, Aesthetic Settlement Growth						
Output	3 land parcels identified for sewer ponds						

Objective 3 To promote Investments in Alternative Sources of Energy

Strategy	Encourage the use of Bio fuel, Bio gas and other sources of Clean Energy	Budget Estimate	2021	2022	2023	2024	2025
Programme	Enhance knowledge on the use of Bio fuel, Bio gas and other sources of Clean Energy	48,190.00	-	13,835.00	9,700.00	14,555.00	10,100.00
Output	33 Traditional Leaders Trained						
			<u> </u>			<u> </u>	
Programme	Market the district to would be Investors	1,305.00	1,305.00	-	-	-	-
Strategy	Attract Investments in Solar Energy						
Output	One Investment Profile Created and availed						
Programme	Create an enabling Environment for Investors	2,305.00	2,305.00	-	-	-	-
Strategy	Attract Investments in Solar Energy						
Output	Land Identified and Secured and Framework for possible PPPs Established						
					<u>, </u>		<u>, </u>
Programme	Operationalise the existing Solar Milling Plants	13,400.00	1700	2700	2850	3000	3150
Strategy	Operationalize 6 local Solar Milling Plants which can supply Energy to at least 25 housing units per Plant						
Output	6						

Objective 4	To Promote Environmental Protection and Cons	ervation of Nat	ural Resources									
	Ensure 100,000 trees are planted in the next	are 100,000 trees are planted in the next Budget										
Strategy	10years	Estimate	2021	2022	2023	2024	2025					
Programme	Tree Planting											

Output	100,000 Trees Planted						
Programme	Community Awareness	40,800.00	7,680.00	7,920.00	8,160.00	8,400.00	8,640.00
Strategy	Increase Knowledge on effects of Deforestation						
Output	60 Sensitization Announcements by 2025						
Programme	Enhance knowledge on apiaries and modern bee keeping Technologies	17,250.00	3,350.00	3,400.00	3,450.00	3,500.00	3,550.00
Strategy	Encourage Alternative uses for Forests						
Output	Bee Keeping Groups Trained						
Programme	Establish apiaries and modern bee keeping technologies	6,600.00	-	-	2,140.00	2,200.00	2,260.00
Strategy	Encourage Alternative uses for Forests						
Output	100 Bee hives Created and Installed by 2025						
Programme	To enhance Solid Waste Management	6,055.00	-	6,055.00	-	-	-
Strategy	Reduce environmenmetal Hazards and promote aesthetics						
Output	The District Solid Management Plan Revised, One Solid Management By-law Drafted						

Objective 5	To Improve Access to Clean and Safe Water Supp	o Improve Access to Clean and Safe Water Supply and Sanitation									
Strategy	Provide Rural households with Sufficient Budget Estimate 2021 2022 2023 2024 2										
Programme	Provision of Water to Rural Communities	166,000.00	31,600.00	32,400.00	33,200.00	34,000.00	34,800.00				

Output	Fifty Borehores drilled and Two hundred rehabilitated Fifty V-WASHE committees formed by 2025						
Programme	Provision of Rural Sanitation	23,550.00	4,530.00	4,620.00	4,710.00	4,800.00	4,890.00
Strategy	Provide Rural households with skills to build VIP latrines						
Output	30 Trainings Conducted by 2025						
Programme	Conduct Enforcement Activities	9,420.00	1,812.00	1,848.00	1,884.00	1,920.00	1,956.00
Strategy	Ensure Households have Toilets and VIP larines						
Output	10 Monitoring activities conducted by 2025						
Programme	Formulate by-laws that protect water bodies and wet lands	6,140.00	-	6,140.00	-	-	-
Strategy	Ensure water bodies and wet lands are protected						
Output	1 By-law to Protect water bodies and wet lands Drafted and Adopted						
Programme	Enforce existing laws the protect water bodies and wet lands	10,050.00	1,830.00	1,920.00	2,010.00	2,100.00	2,190.00
Strategy	Ensure water bodies and wet lands are protected						
Output	20 Spot Checks conducted, 30 Sensitization announcements by 2025						

Objective 6	To enhance Human Development through Skills t	raining and En	npowerment pr	ograms			
Trategy	To empower women and youths with skills and crafts to better their livelihoods	Budget Estimate	2021	2022	2023	2024	2025

Programme	Establishment of a Skills training center	1,735.00	1395	85	85	85	85
Output	One Skills Training Center Established						
Programme	Raising Awareness	11,350.00	2,210.00	2,240.00	2,270.00	2,300.00	2,330.00
Strategy	Strengthen linkages between potential scholars and scholarship programs						
Output	20 Radio Programs conducted by 2025						
Programme	Provision of two permanent annual scholarships for best performing boy and girl in the District	7,210.00	1,760.00	1,295.00	1,340.00	1,385.00	1,430.00
Strategy	Strengthen linkages between potential scholars and scholarship programs						
Output	8 Scholarships awarded by 2025						
	Grand Totals	1,837,495.00	422,451.00	294,542.00	515,723.00	368,089.00	236,690.00

Source: Chadiza Town Council finance Department, DMT, 2020

4.2 Program for the preparation of Local Area Plans and other detailed Planning Activities

Three priority Local Area Plans were selected to be finalized and implemented for Chadiza District. This section highlights three (3) main areas for which layout plans will be prepared and implemented beginning in the first five years of the IDP period.

Chanida Local Area Plan: The main idea behind the land use layout in this design is to concentrate economic and social development around Chanida boarder. This proposed plan will seek to provide for a coordinated layout which would provide land uses such as; commercial and social activities within this main growth area. The process will involve coming up with new developments and clearance urban renewal.

Chadiza Central Local Area Plan: The focus for this Local area plan is to promote orderly development through up-grading and re-planning of settlements. These settlements will be planned to have clear accessibility in order to aid the movement of people, goods and services while linking it to other places.

Zemba Local Area Plan: This Local area plan will also be developed to control and promote orderly development through re-planning of settlements and therefore provide accessibility in order to ease the movement of people, goods and services.

Chadiza Town Council Shall develop Local Area Plans for the IDP from 2021 onwards as outlined below:

Phase 1: Urban Renewal (2021 - 2023)

Phase 2: Urban Renewal and New Developments (2022 – 2024)

Phase 3: New Developments, Linking the Wards (2024 - 2025)

4.3 Monitoring and Evaluation Plan, including Key Performance Indicators

The IDP will guide the operations of the various departments and sectors starting from 2021 – 2030. In order to achieve the shared vision all departments and sectors involved will work together to ensure all the programs are implemented and done according to the IDP document. In order to achieve this

Monitoring and evaluation will be done by the responsible departments who are indicated in the tables. In addition, all Heads of Departments will be responsible for operationalising the IDP. Their major function will include preparing annual work plans derived from the objectives and activities of the IDP, implementing and monitoring of the annual work plans, preparing monthly, quarterly and annual progress reports and participation in evaluation activities. the table below shows the key output and indicators to be measured by the plan.

Table 39: Monitoring and Evaluation Plan

Objective 1	To Enhance Agricultura	ll Productivity i		Indicator	Source of Informatio n	Frequenc y			
Strategies	Programme	Year 1	Year 2	Year 3	Year 4	Year 5			
Employ Modern Climate Smart Agriculture	Agro-forestry Training	1 Training		1 Training			No. of camp officers and No. of lead farmers trained	MOA	Annual
	Community Training on Climate Smart Agriculture	1 Training		1 Training			No. of local farmers practicing CSA	MOA	Annual
Strengthen emergency Preparedness through early warning systems, efficient crop forecasting and maintenance of strategic food reserves	Reinforcement of early warning systems and increasing local storage capacity	1 Training, 56 Pheromone Traps	1 shed, 48 Pheromon e Traps	1 shed, 1 training, 52 pheromone traps	2 sheds, 60 pheromone traps	2 sheds, 60 pheromone traps	No. of storage sheds, No. of trainings and No. of traps set	MOA	Annual
Create and enabling environment for investors in the agricultural sector	Provision of Small Holdings	4 Small holdings		4 Small holdings		4 Small holdings	No. of small holdings allocated	Local Authority	Annual
Increase number of Farmers and Strengthen Synergies among	Formation of cooperatives	40 cooperatives	40 cooperati ves	40 cooperative s	20 cooperative s	20 cooperative s	No. of cooperatives formed	Ministry of Agriculture	Annual

Players in the Agriculture Sector	Empowerment of cooperatives	5 Trainings	5 Trainings	5 Trainings	5 Trainings	5 Trainings	No. of market shelters, No. of cooperatives participating in expos, No. of Cooperatives accessing financial products	MOA LA	Quarterly
Establishment of a One- stop registration center for agro-investments	Facilitate for the provision of Land	Land identified and surveyed					Land identified	LA	Once
	Infrastructure financing		1 budget prepared, proposal floated				Infrastructure financed	LA	Once
To provide adequate infrastructure to support livestock production in the District	Provision of new modern infrastructure	Land identified and surveyed	1 dip tank	1 dip tank	1 dip tank	1 dip tank	No. of dip tanks constructed	Ministry of fisheries and livestock, LA	Annually
	Rehabilitation of Existing infrastructure			1 dip tank rehabilitate d	1 dip tank rehabilitate d	1 dip tank rehabilitate d	No. of dip tanks rehabilitated	Ministry of fisheries and livestock, LA	Annually
Establish Value Addition Centres/Facilities	Establishment of agro- processing plants for local agro-products	Land identified and surveyed	PPP Advertise d				Land identified	MOA LA	Once

Objective 2	To Promote Spatial Gro	wth and Impro	ve Transpor	t and commu	nication by 20	030	Indicator	Source of Information	Frequenc y
Strategies	Programme	Year 1	Year 2	Year 3	Year 4	Year 5			
Improve Connectivity in the District	Improve Quality of Road Network in the District						Kilometers of roads; tarred, upgraded, maintained, opened	Department of works, Local Authority, RDA	Annual
Improve Communication in the District	Expand Coverage of Telecommunication services in the District		2 Towers	2 Towers	3 Towers	3 Towers	No. of communicatio n towers set up	ZICTA, LA	Annual
Promotion of Orderly, Aesthetic Settlement Growth	Ensure Quality Housing	52 development control activities	52 developm ent control activities	52 developme nt control activities	52 developme nt control activities	52 developme nt control activities	No. of development control activities conducted yearly	LA	Annual
	Promotion of orderly spatial growth	2 settlements re-planned and upgraded	2 settlement s re- planned		2 settlements re-planned		No. of settlements re-planned and upgraded	LA	Annual
	Prepare local area plans for expansion of settlements	Land identified and surveyed; database developed					Land identified and surveyed; database developed	LA	Once
	Development of Dumpsite			1 Dumpsite Established			1 Dumpsite Established	LA	Once
	Development of Cemetery				1 Cemetery established		1 Cemetery established	LA	

Provision of land for Social Amenities	Land identified and surveyed			No. of plots allocated to social amenities	LA	Once
Provision of land for sewer ponds	Land identified and surveyed			No. of land parcels identified for sewer ponds	LA	Once

Objective 3	To Promote Investments in Alternative Sources of Energy							Source of Informatio n	Frequenc y
Strategies	Programme	Year 1	Year 2	Year 3	Year 4	Year 5			
Encourage the use of Bio-Fuel, Bio-gas and other sources of Clean Energy	Enhance Knowledge on the use of clean energy sources		3 trainings, 2 meetings	2 meetings	3 trainings, 2 meetings	2 meetings	No. of trainings and sensitization meetings held	Ministry of energy, LA	Quarterly
Attract investments in Solar Energy	Market the District to would-be Investors	1 investment profile					1 Investment profile created	LA	Once
	Create an enabling environment for investors	Land identified and surveyed; PPP framework established					Land identified	LA	Once

Operationalize the local	Operationalize the	1 plant	1 plant	2 plants	2 plants	No. of solar	Ministry of	Annual
solar milling plants	existing solar plants	_				plants	Agriculture,	
which can supply solar						operationalize	Ministry of	
energy to at least 25						d	Energy	
housing units per plant								

Objective 4	To Promote Environmen	Indicator	Source of Informatio n	Frequenc y					
Strategies	Programme	Year 1	Year 2	Year 3	Year 4	Year 5			
Ensure 100,000 trees are planted in the next 10 years	Tree Planting		1 centre, 10000 trees,	10000 trees	10000 trees	10000 trees	No. of trees planted per year	Forestry Department	Annual
Increase knowledge on the effects of deforestation	Community Awareness	12 announceme nts	12 announce ments	12 announcem ents	12 announcem ents	12 announcem ents	No. of announcemen ts	ZANIS, LA, Department of Forestry	Quarterly
Encourage alternatives used for forests	Enhance knowledge on apiaries and modern bee keeping technologies	1 training	1 training	1 training	1 training	1 training	No. of groups trained/No. of trainings	Department of Forestry	Annual
	Establish apiaries and modern bee keeping technologies			Land identified, 20 beehives	Land identified, 20 beehives	Land identified, 20 beehives	No. of Beehives operationalize d	Department of Forestry, LA	Annual
Reduce environmental hazards and promote aesthetics	To enhance solid waste management		SWM plan revised, 1 by-law				Solid Waste Management Plan revised	LA	Once

Objective 5 To Improve access to clean and safe water supply and sanitation						Indicator	Source of Information	Frequenc y	
Strategies	Programme	Year 1	Year 2	Year 3	Year 4	Year 5			
Provide rural households with sufficient boreholes and wells	Provision of Rural water	10 boreholes, 40 rehab, 10 V-WASHE	10 boreholes, 40 rehab, 10 V- WASHE	10 boreholes, 40 rehab, 10 V- WASHE	10 boreholes, 40 rehab, 10 V- WASHE	10 boreholes, 40 rehab, 10 V- WASHE	No. of Boreholes drilled and rehabilitated, No. of committees formed	LA	Annual
Provide rural households with skills to build VIP latrines	Provision of rural sanitation	6 Trainings	6 Trainings	6 Trainings	6 Trainings	6 Trainings	No. of trainings	LA	Quarterly
Ensure households have toilets and VIP latrines	Conduct enforcement activities	2 M&E	2 M&E	2 M&E	2 M&E	2 M&E	No. of Monitoring activities	LA	Quarterly
Ensure water bodies wetlands are protected	Formulate by-laws to protect water bodies and wet lands		1 by-law				By-law formulated	LA	Once
	Sensitize Communities on water-protection by- law	6 Announceme nts	6 Announce ments	6 Announce ments	6 Announce ments	6 Announce ments	No. of announcemen ts	LA	Quarterly
	Enforce existing laws that protect water bodies and wet lands	4 Spot- checks	4 Spot- checks	4 Spot- checks	4 Spot- checks	4 Spot- checks	No. of spot checks	LA	Quarterly

Objective 6	To enhance human development through skills training and empowerment programs						Indicator	Source of Information	Frequenc y
Strategies	Programme	Year 1	Year 2	Year 3	Year 4	Year 5			
To empower women and youths with skills and crafts to better their livelihoods	Establishment of a skills training centre	Land identified			1 Skills centre established		Skills center established	LA, Ministry of Community Developme nt and Social Welfare	Once
Strengthen Linkages between potential scholars and scholarship Programs	Raising Awareness	4 radio programs	4 radio programs	4 radio programs	4 radio programs	4 radio programs	No. of radio programs	MoGE, LA, Ministry of Community Developme nt and Social Welfare	Quarterly
	Provision of Two permanent annual scholarships for best performing female and male pupil		2 scholarshi ps	2 scholarship s	2 scholarship s	2 scholarship s	No. of scholarships awarded	MoGE, LA, Ministry of Community Developme nt and Social Welfare	Annual

Source: Chadiza Town Council finance Department, DMT, 2020

5.0 Report on the Public Consultation Process carried out for Preparation of the Chadiza District Integrated Development Plan (IDP)

Introduction

This report gives an overview of the public consultation process that was conducted by the IDP Team in Chadiza District. Key to the preparation of an integrated development plan to guide a multi-sectoral and multi-stakeholder coordinated development effort for the proceeding 10-year period, was the need to involve all of the relevant stakeholders in the process. It was for this reason that a comprehensive public consultation process was followed at various stages in the preparation of the document. The reasons for involving all relevant stakeholders included acquiring consent and resolution from community and civic leadership to proceed with the development planning process (as required by the Urban Regional Planning Act No. 3 of 2015), informing the general community of the intent to begin formation of the plan and availing of the program by which this would be conducted, and also to access the invaluable knowledge and inputs of various stakeholders in the District so as to identify developmental issues and development priorities at grass-root level.

The public consultation thus involved the following activities;

- i. Securing of Full Council resolution to commence preparation of the Chadiza Integrated Development Plan (in accordance with the URP Act No. 3 of 2015)
- ii. Advertisement to the public of the intent to begin formulation of the plan, through live media (radio station)
- iii. Availing of the Planning Program to the Development Planning, Works and Agriculture Committee (DPWA) and Full Council
- iv. Initial visitation to Traditional leaders in all the Three (3) chiefdoms in the District, to acquaint them with the Chadiza IDP process
- v. Stakeholder Mapping
- vi. A Stakeholder Consultation Meeting involving organizations and institutions from all sectors in the District, as well as church mother bodies
- vii. A district-wide community consultation exercise
- viii. Availing of the Planning Survey and Issues Report to the DPWA, DDCC and Full Council

The proceeding sections will provide details of the Public Consultation process.

5.1 Council Resolution to prepare the IDP

Chadiza Town Council, in its sitting on 29th November, 2019, and according to Minute No. CTC/OC/04/46/19 duly resolved to begin preparation of the Chadiza Integrated Development Plan.

5.2 Planning Program

The Planning program for preparation of the Chadiza IDP was published through broadcast media, and in particular through an advert run by Radio Mphangwe. The decision to use broadcast media was to reach out to the wide listenership of members of the community in both urban and rural areas, and also in acknowledgment of the fact that the use of print media would be less effective in reaching the Chadiza public. This is because majority of members of the public do not have access to print media in Chadiza, as there are no distribution points for newspapers in the District.

5.3 Stakeholder Mapping

The Chadiza IDP team conducted the stakeholder mapping activity prior to commencement of the planning program. The exercise involved listing of all government departments and ministries (internal and external to the district) who would be relevant to the formulation of the document, all NGOs and Civil Society organizations with a presence in the district, churches and church mother bodies, traditional leaders, key private sector economic players, and all sub-district structures available in the District. The stakeholder mapping was conducted on the basis of achieving integration of planning to as high a degree as possible, and for the purpose of avoiding silo-type, uncoordinated development.

Stakeholders were sampled and classified according to;

- i. Stakeholders from whom key technical guidance and authority would be acquired.
- ii. Stakeholders with vital information pertaining to the development status and ongoing activities in the district (at institutional and organizational level)
- iii. Community members from whom grass-root information would be accessed to identify key issues on the ground.
- iv. Religious body representatives representing the faith

5.4 Description of the Consultative Process

The applied process of public consultation for preparation of the Planning Survey and Issues Report (PSIR) was conducted in 2 stages;

i. Stage 1 was conducted as a stakeholder consultation meeting that was held at the Chadiza Farmers Training Centre. The meeting was attended by representatives from 16 organizations namely Catholic, EFZ, Chadiza Business Community, CCZ, DWA, EWSC, NZP, Childline Lifeline, Disabilities Rights Watch, Plan International, Department of Immigration, National Registration, Judiciary, ZESCO, Market Advisory Committee and CMAC, and the activity observed a healthy gender balance of participants. The purpose of the meeting was to receive and record stakeholders' perspectives and inputs on key developmental needs and matters affecting the vulnerable in the district. This was achieved by grouping the stakeholders and providing each group with materials and a standard template on which to capture their inputs. The template was designed to capture gender

and age-group disaggregated data, as well as highlighting issues that particularly affect other vulnerable groups such as the differently-abled. The information was later compiled in tabular format by the IDP team, and is available on Annex ...



Figure 31: Stakeholders Consultation meeting at FTC

Source; Planning department, 2019

ii. Stage 2 involved district-wide consultations with community representatives and other key members of the community at ward level. The community representatives were identified through the available Sub-District Structures operating in each Ward. These included Ward Development Committees (WDCs) and Community Welfare Assistance Committees (CWACs). Community participants included both genders (male and female) and people of various age groups. The differently abled in the communities also participated.

The IDP Team prepared a structured questionnaire prior to conducting of the activity, which was designed to capture community-based perspectives on issues across various sectors affecting development, as well as potential resources in their respective areas that could be harnessed for the purpose of driving development.

The focus was on the following sectors and thematic areas:

- ➤ Agriculture Sector (climate smart Agriculture improve livelihoods)
- ➤ Health
- **Education**
- Communication
- > Accessibility
- > Energy
- > Forest sector(reforestation) and
- ➤ Wildlife sector

This exercise was conducted over a stretch of 18 days in order for all of the 18 Wards to be reached. Community participants were divided by age-group as indicated below, to identify and rank their vital developmental needs:

- ➤ Below 35 years
- ➤ Between 36 and 64 years
- ➤ Above 65 years

These age categories were further disaggregated by gender, and each group was administered the questionnaire on which to identify their specific needs and rank them according their significance. Participants were also requested to state what they currently have in the form of land, business ventures, cultural sites, mining activities, agricultural and forestry activities.

The data captured was then compiled by the Team, and key issues were identified and ranked in order of priority as given by the community members.

The table below provides a summary of the community ranking of priority in the District:

Clean and safe water	1
Health	2
Education	3
Roads/culvert	4
Market	5
Bank	6

Social Economic Activities

The major economic activity as narrated by all age groups in the district is agriculture specialized in livestock raring, poultry and crop production such as maize, cotton, soya beans, cashew nuts, groundnuts and beans.

Available Natural Resources

From the responses from all the age groups, it was deduced that the available natural resources in the district are;

- Rivers
- > Land
- > Sand
- > Forest resources

5.5 Feedback / Concerns

Members of the public expressed the following concerns;

- Source of clean and safe water for both people and livestock is a major problem
- ➤ Health services must be within reach by all age groups
- ➤ Improvement in school infrastructures and making them accessible with the right enrolment capacity and staffing levels
- ➤ Rehabilitation of the road network system and drainage structures. The picture below shows an area in the district completely cut off during rainy season due to bad drainage systems.
- Quality of education and infrastructure services.

5.6 Consultation with Traditional Leaders

The public consultation process also involved consultations with Traditional Leaders, who were identified as key drivers of development in the District.

The IDP Formulation Team first met with all 3 Chiefs in the district, namely Chief Mwangala, Chief Zingalume, and Chief M'lolo in Three (3) separate meetings at each of their Palaces. These initial meetings were for the purpose of providing the Chiefs with deeper insight into the process and purpose of formulating the IDP, providing them with a roadmap of activities that would be conducted, and obtaining their consent to conduct related activities in their respective Chiefdoms.

5.7 Conclusion

It is the general consensus of the IDP Formulation Team, The Council Secretary, Council Chairperson, the Area Member of Parliament, and the District Commissioner that the public consultative process has been practical and all-inclusive. Taking into account the various challenges faced by the Team, all initiatives taken by the Team have been well received and commended by the district leadership.

The information that was captured during the process is not only vital, but does in fact reflect what issues are pertaining on the ground as the Team has made maximum effort to capture this information in a non-biased manner. This information, once analyzed, will enable the formulation of realistic and achievable solutions and interventions to meet the many developmental needs of our community in Chadiza, thereby contributing towards closing the current social and economic gaps that members of the community have for a long time faced.

The District Team has also endeavoured to the best of its capacity, and through the relevant offices and structures, to keep members of the public informed about the progress of formulating the IDP, and indeed to receive feedback on the goals, objectives and interventions as prescribed in the document. Recognized as a top priority in this process, is the need to make the people of Chadiza

District owners of their own development. It was therefore, and continues to be, key that this process be handled with such high regard and finesse so as to ensure that the final product (The Chadiza District IDP) be received as the key developmental document across all sectors in the district for the next 10 years.

APPENDICES

A. Climate Risk Screening for the identified strategies

	Strategies		ey Project/ Activity	Climate Risk Screening				
				Increase Temperatures	Shorter Rainy Season	Dry Spells In The Rainy Season	Increased	Floods
1.	Employ modern climate smart agriculture practices	•	Agro- forestry- conduct training	No	No	No	No	
2.	Department of agriculture will strengthen emergency	•	Lobby for establishment of early warning system	No	No	No	No	
	preparedness through early warning efficient crop fore- casting & maintenance of strategic food reserves	•	Establish communal storage sheds	Yes	No	No	No	
3.	Create an enabling environment for investors in the agriculture	•	Provision of small holdings and commercial farm lands	No	No	No	No	
	sector	•	Upgrading feeder roads	Yes	No	Yes	No	
4.	Department of livestock & department of commerce to register & train more	•	Register and train more cooperatives in agriculture skills	No	No	No	No	
	cooperatives in agriculture skills	•	Lobby for funding & support from well wishers	No	No	No	No	
5.	Local authority & district	•	Provision of land	Yes	No	No	No	
	farmers union will facilitate for the establishment of one stop registration centre for agro- investment	•	Infrastructure financing	No	No	No	No	
6.	Local authority, fisheries & livestock & ministry of	•	Construction & rehabilitation dip tanks	Yes	No	No	No	
	agriculture to construct & rehabilitate dip tanks and storage sheds	•	Construct & rehabilitate storage sheds	Yes	No	No	No	
7.	Establish agro-processing plants for local agro-products	•	Provide land for agro processing plants establishment	Yes	No	No	No	

Advertise for private public partnership	No	No	No	No
Sensitize & mobilize communities	No	No	No	No
	No	No	No	No
Build markets	Yes	No	Yes	No
Train farmers	No	No	No	No
Conduct community sensitization meetings	No	No	No	No
Training community leaders	No	No	No	No
Create and avail investment profiles	No	No	No	No
Operationalize the existing solar plants	No	No	No	No
Sensitize communities on the use of alternative clean energy	No	No	No	No
Drill boreholes and wells for the community	Yes	No	No	No
Rehabilitation & maintenance of existing boreholes	No	No	No	No
• sensitizing the community to build VIP latrines	No	No	No	No
train the community leaders on how to build & use VIP	No	No	No	No
	 Sensitize & mobilize communities Build markets Train farmers Conduct community sensitization meetings Training community leaders Create and avail investment profiles Operationalize the existing solar plants Sensitize communities on the use of alternative clean energy Drill boreholes and wells for the community Rehabilitation & maintenance of existing boreholes sensitizing the community to build VIP latrines train the community leaders on 	partnership Sensitize & mobilize communities No Build markets Train farmers No Conduct community sensitization meetings Training community leaders Create and avail investment profiles Operationalize the existing solar plants Sensitize communities on the use of alternative clean energy Drill boreholes and wells for the community Rehabilitation & maintenance of existing boreholes sensitizing the community to build VIP latrines train the community leaders on No	partnership Sensitize & mobilize communities No No Build markets Train farmers No No Conduct community sensitization meetings Training community leaders Training community leaders Training community leaders Operationalize the existing solar plants Sensitize communities on the use of alternative clean energy Drill boreholes and wells for the community Rehabilitation & maintenance of existing boreholes sensitizing the community to build VIP latrines train the community leaders on No No	partnership Sensitize & mobilize communities No No No No No Build markets Yes No Yes Train farmers No No No No No Conduct community sensitization meetings Training community leaders Training community leaders Training community leaders Toperationalize the existing solar plants Sensitize communities on the use of alternative clean energy Drill boreholes and wells for the community Rehabilitation & maintenance of existing boreholes sensitizing the community to build VIP latrines train the community leaders on No No No

17. Ensure households have toilets	conduct enforcement activities	No	No	No	No
and VIP latrines 18. to establish skills training centers in the district	lobby for skills training center from ministry of higher education, quarterly	No	No	No	No
	the chiefs & the local authority to identify 5 parcels of land to be used for construction of skills centers	No	No	No	No
19. linkages between potential scholars 7 scholarship programs	 radio sensitization to give information on available scholarship programs quarterly sensitization of would be potential school leavers in schools per term 	No	No	No	No
20. ensure timely development of land is observed	routine inspections to be conduct twice a month	No	No	No	No
21. increase frequency of development control activities	 hire 2 interns to support the planning in carrying out development control carry out development control one day each week 	No	No	No	No
22. Local Authority & RDA to tar 150Km of roads	Lobby RDA to tar 150 Km of roads (local roads)	No	No	No	No
23. local authority regulates all building plans	sensitization of potential land developers through meeting quarterly on the need to submit building plans to local authority for review and approval	No	No	No	No
	use ZANIS and community radio to sensitize through announcements once a month	No	No	No	No
24. local authority & mobile network providers to put up 25 towers	Lobby network providers to set up 25 communication towers	No	No	No	No
25. generate land use maps that are routinely updated to detect new infrastructure	• preparation of land use maps of the district every 5 years	No	No	No	No
26. forest department and local authority to ensure 100, 000	establish one tree nursery	No	No	No	No

trees are planted in the next 10 years	• tree planting exercise of 10,000 trees per year	Yes	No	Yes	No
	18 tree planting sensitization meetings	No	No	No	No
27. improve knowledge on effects of deforestation	use ZANIS & community radio to make sensitization announcements once a month	No	No	No	No
	engage WDC's & educating them of effects of deforestation & important of tree planting to the environment twice a year	No	No	No	No
28. forest department & ministry of agriculture to establish apiaries & modern bee keeping technologies	training potential bee keeping groups quarterly	No	No	No	No
29. enforce existing laws that protect water bodies	conduct spot checking inspectors once a month	No	No	No	No
	hold meetings with community members & stakeholders to sensitize them on preserving water bodies and not encroaching once a month	No	No	No	No
30. institutions to formulate policy on gender equity and resource allocation	formulate a policy which will promote gender equity in all the institutions and organization	No	No	No	No
31. to provide more mentorship and training programs for women in the district	to develop mentorship and training for women materials in socio-economic sustainability quarterly	No	No	No	No
	conducting mentorship and training for women in socio- economic sustainability quarterly	No	No	No	No
32. sensitize communities on the importance of educating the girl child while eliminating early	conduct sensitization meetings on girl child education and eliminating early marriages and teenage pregnancies	No	No	No	No

marriages and teenage pregnancy	conduct local radio programs on girl child education and eliminating early marriages and teenage pregnancies	No	No	No	No
33. to create a gender sensitive environment in all institutions and communities	Formulating a policy which will promote gender equity in all institutions and communities	No	No	No	No
	Sensitize traditional leaders on gender equity	No	No	No	No
	Sensitize communities on gender equity	No	No	No	No

B. Options to respond to Climate Risks

Strategies	Key Project/ Activity	Climate Risk Screening			
		Increase Temperatures	Shorter Rainy Season	Dry Spells In The Rainy Season	Increased Incidences of Floods
Create an enabling environment for investors in the agriculture sector	upgrade feeder roads which are properly compacted	No	No	No	No
Local authority, fisheries & livestock & ministry of agriculture to construct & rehabilitate dip tanks and storage sheds	Construction & rehabilitation of sustainable dip tanks	No	No	No	No
Local authority to build market infrastructure for local agriculture produce	Building Sustainable Markets	No	No	No	No
Provide rural households with sufficient boreholes and wells	provide solar powered water facilities	No	No	No	No
Local Authority & RDA to tar 150Km of roads	Lobby RDA to tar 150 Km of roads with heat resistant bituminous (local roads)	No	No	No	No
forest department and local authority to ensure 100, 000 trees are planted in the next 10 years	tree planting exercise of 10,000 trees per year and ensuring that most are drought resistant	No	No	No	No

C. Developmental Issues and impacts in the District

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Developmental issues	General /area specific	Social groups affected	Possible remedies	impacts
Teenage Pregnancies	General	Girl Child	Sensitization/By laws	Reduced cases of Teen Pregnancies Reduced death rate for Teens
Early marriages	General	Both genders	Sensitization/ by -laws	Reduction cases of Early marriages Increased school retention Decreased birth rates
Illiteracy	General	Both genders	Building Schools Sensitization	More literate people
High rate of Malaria cases	General	Both genders	IRS Distribution of mosquito nets Burring of breeding ponds	Reduced cases of malaria Reduced deaths
Inadequate transport for patient (limited ambulances	General	Both genders	Procurement of more ambulances	Reduced deaths
Defilement cases	General	Both genders	Sensitization, formation of by- laws	Reduced cases of defilement
Child labour	General	Both genders	Formation of by- laws Sensitization	Reduced child labour Increased school retention rate
Gender Issues	General	Both genders	Sensitization of harmful cultural practices	Gender equality
Poor access to family planning services	General	Both genders	Increase access to family planning services Sensitization	Reduced unplanned pregnancies
Long distance to health facilities	General	Both genders	Building more health facilities	Easy access to health facilities
Low household income levels	General	Both genders	Promote village saving groups VSLA Improve road network Improve agricultural production	Improved household income level Easy access to the market
Poor road network	General	Both genders	Construction of roads	Easy access to the market
Poor implementation of policy to include children with disabilities	General	Both genders	Effective implementation of disability policy	Improved inclusion of children with disabilities.
Poor access to safe clean drinking water	General	Both genders	Construction of bore holes Regular rehabilitation of boreholes	Improved water quality
Limited early child care and education	General	Both genders	Building of more child care facilities Recruitment of more teachers	Proper educational foundation
Lack of youth employability skills/employment	General	Both genders	Building youth training centers Enhancing education levels	More employment and self-sustainable skills
Lack of funding for mobile National Registration Card registration exercise and sensitization	General	Both genders	Regular funding to the department	Increased number of people accessing NRCs Increased knowledge on the importance of owning NRC
Inadequate water supply (Central Business District) EWSC	Squeez, Mlolo, Kamwala extension, Nsadzu, Zingalume, Chanida border	Both genders	Network expansion	Improved sanitation and hygiene
Harbouring prohibited immigrants with expired permits	Most wards except Central Business District	Both genders	Sensitization Enforcement of the law	Prevent harboring of immigrants
Lack of passport/ travelling documents issuing services	General	Both genders	Open an office for travelling document issuance	Easy movements for Chadiza residents to other countries
Lack of bore holes in Churches	Rural areas	Both genders	Construction of boreholes	Improved sanitation and hygiene
Inadequate primary schools	General	Both genders	Construction of more primary schools	Increased enrolment Improved literacy level
Too much dependence on government	General	Both gender	Sensitization on self- reliance	empowerment