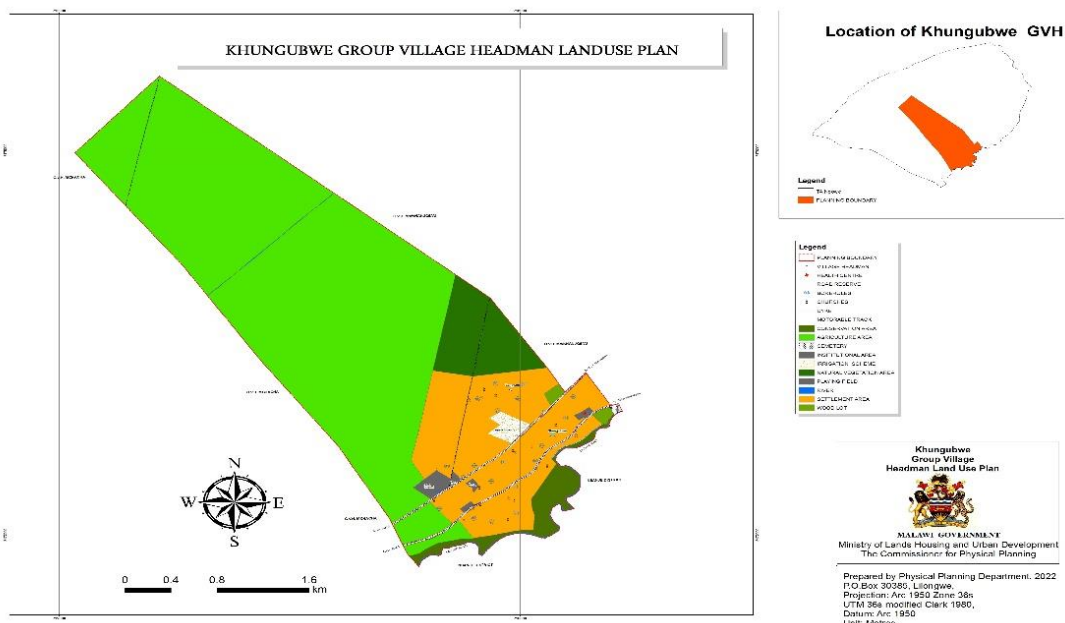




NOVEMBER 2022

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FOREWORD

Khungubwe Village Land Use Plan is a reflection of the will of the people under Group Village Khungubwe. The plan was prepared using a bottom up-approach and the process was guided by existing policies, legislations and regulations. It has been prepared as part of the Shire Valley Transformation Project which is focusing on making available land for irrigation among other Chikwawa District projects and developments setup.

The main objective of Khungubwe Village Land Use Plan is to provide a spatial framework for the sustainable development and utilization of land and land-based resources. Among others, the plan has been guided by the Physical Planning Act (2016) which mandates the planning team to engage beneficiary communities in defining the boundary of their GVH area and solicit their aspirations on how they want their areas to be developed. Therefore, the plan has been prepared through a participatory approach where the beneficiary communities are the main actors. Group Village Khungubwe is located in Traditional Authority Ngabu, within Chikwawa District. The general landscape of Group Village Khungubwe is generally flat and it is characterized by sparse trees, degraded grasses, cropland and seasonal streams that form as a result of flood waters.

Assessment of the socio-economic situation of Group Village Khungubwe shows that the area lacks a number of services and facilities, notable being lack of reliable health facility, saline water and droughts or heavy rain that affect crop production. As an agricultural community, the absence of reliable markets has also greatly affected the general livelihoods of people in Group Village Khungubwe.

People's aspirations were acquired through the Customary Land Communities, Village Development Committee and the village leadership and this is reflected in the provisions of the plan. Khungubwe Village Land Use Plan has made provisions for the following major land uses; agriculture, settlements and forestry with agriculture as a dominant land use. In compliance with the aspirations of the people of Khungubwe, the plan has also proposed the following; Construction of ADMARC, piped water supply provision, construction of a police unit and conservation activities, and rehabilitation and upgrading of access roads. The plan also recommends the construction of additional school blocks and staff houses at Lalanje Full Primary School.

Khungubwe Village Land Use Plan will be implemented by several stakeholders through Chikwawa District Council but the Customary Land Committee in liaison with the Village Development Committee will play a key role in ensuring that its provisions are complied with. It will also be monitored bi-annually, but shall be reviewed once every five years. Khungubwe Village Land Use Plan will be implemented through an integrated approach as the area is part of an impact area of the Shire Valley Transformation Project and its successful implementation hinges on collaboration of all stakeholders from national level to local level.

ACKNOWLEDGEMENTS

The Department of Physical Planning would like to express its heartfelt gratitude to the entire Ministry of Lands Housing and Urban Development for the technical and logistical support rendered throughout the process of preparing this plan. The planning team also appreciates the role played by Shire Valley Transformation Project for the financial support. The Chikwawa District Council needs to be commended for its efforts in linking the planning team with respective communities.

Furthermore, the team is indebted to various stakeholders at local level for their valuable contributions and co-operation during the preparation of this plan. Particularly, the team wishes to express great appreciation to Traditional Authority Ngabu, Group Village Head Khungubwe, the Customary Land Committee, the Village Development Committee, and the entire Ngabu Community.

Prior to the endorsement of the Khungubwe Village Land Use Plan by the Chikwawa District Council, contributions by DEC and Council were incorporated into the plan. The Planning Team hopes and believes that the community in Group Village Khungubwe will offer its support and cooperate during the implementation, monitoring and evaluation of this plan. Special recognition should also go to every member of the Planning Team both in the field and at the office for the various roles they played at every stage of plan preparation.

ACRONYMS

ADC	Area Development Committee
ADMARC	Agricultural Development and Marketing Corporation
CLA	Customary Land Act
CLC	Customary Land Committee
DEC	District Executive Committee
GVA	Group Village Area
GVH	Group Village Headperson
NGO	Non-Governmental Organization
NLP	National Land Policy
PPA	Physical Planning Act
SVTP	Shire Valley Transformation Project
VDC	Village Development Committee

1 BACKGROUND

1.1 Introduction

Land-use planning is the systematic assessment of land and water potential, alternatives for land use and economic and social conditions in order to select and adopt the best land-use options. Its purpose is to select and put into practice those land uses that will best meet the needs of the people while safeguarding resources for the future. Participatory Land Use Planning (PLUP) is essentially a bottom-up land use planning, carried out with active participation of the concerned community (International Fund for Agricultural Development, 2014). The role of physical planning experts was to bring together the aspirations of the people, synthesize them and plan according to the existing standards of the services and facilities as demanded.

1.2 Planning Goal and Objectives

The main goal of Khungubwe Village Land Use Plan is to provide a spatial framework for the sustainable development and utilization of land and land-based resources. Specifically, the plan aims to achieve the following objectives:

- To identify land for irrigation purposes in order to boost agricultural production.
- To promote optimum and sustainable use of water, land and land based natural resources.
- To improve infrastructures and socio-economic services for the villages within the Shire Valley Transformation Project 1.
- To facilitate the implementation of land related laws and regulations.
- To assist in resolving land use conflicts and disputes among land users.
- To ensure and empower the participation of communities and other stakeholders in the preparation of Land Use Plan.
- To promote resilience and mitigate the impacts of natural disasters

1.3 Planning Principles and Approach

The planning process in all the villages in the Shire Valley Transformation Project Area adopted the basic principle of participatory planning. This is so because participatory land use planning provides an opportunity for local land users to play a central role in decision-making processes concerning the land and resources upon which they depend.

Basically, the approach to the planning exercise involved preparation, discussion and adoption of data collection guide (questionnaire); and sensitization of concerned Traditional Authorities and Group Village Heads. Socio-economic information was collected through structured questionnaires and focus group discussions and observations. In addition, perimeter boundary identification was also done for the group village area while at the same time picking boundaries of various land uses such as settlements, forestry, cemetery and farming area. All the activities were done with community representatives.

1.4 Legal and Policy Framework

The Physical Planning Act 2016 is the principal legal instrument governing physical planning in Malawi. The main objective of the Act is to provide for orderly and progressive development of land in both urban and rural areas in order to guide and facilitate the country's social and economic development. This is in line with one of the prime objectives of the National Land Policy (NLP) of extending land use planning and development controls to all types of land, in effect, making the whole country a planning area. The NLP also provides guidelines for village land use planning. Among other things, the guidelines stipulate that 'land use planning should be done as a dual process in which the community participates fully by offering local knowledge of their environment and existing land use patterns.'

Section 42 of the Physical Planning Act, 2016 gives power to the Commissioner for Physical Planning to prepare land use plans within an area under the jurisdiction of the local government authority. Therefore, the village land use plan for Khungubwe was prepared by the Department of Physical Planning on behalf of Chikwawa District Council under powers conferred on the Commissioner for Physical Planning under the aforementioned section of the Act.

The Physical Planning Act also provides for public participation at all levels of planning in the country. Specifically, Section 23 (4) of the PPA gives freedom to the responsible authority to hold meetings with any persons or organizations for the purpose of explaining the proposed plan and receiving representations and comments thereon. In order to be in line with the provisions of the PPA and the NLP guidelines for village land use planning, the planning approach adopted in the preparation of Khungubwe Group Land Use Plan was fully participatory.

Section 43 (1) of the PPA recognizes the mandate of the Customary land Committee provided for under Section 6 of the Customary Land Act (CLA), 2016 relating to authorization of use and occupation of customary land within its area of jurisdiction. Customary Land Committees which are established at group village level, whose secretary is the land clerk, form part of the village development committee.

Section 6 (2) of the CLA provides that in the management of customary land. A customary land committee shall have the responsibility to plan for sustainable development within the area. In addition, Section 8 (3) (d) of the CLA stipulate that the land clerk shall be responsible for the preparation of land use plans in accordance with the PPA, 2016.

Section 43 (2) (d) of the PPA makes provision for the preparation of a simple layout plan for a 'Village' for use by a Traditional Authority and customary land committees in the authorization of use and occupation of customary land. It is therefore noteworthy that the term 'village' in both the PPA and CLA should be understood to be group village and this serves as the lowest planning unit. The Khungubwe Group Village Land

Use Plan was prepared within the spatial framework of the Chikwawa District Physical Development Plan. Other laws which are critical for the preparation and implementation of the Khungubwe Group Land Use Plan include the following: The Land (Amendment) Act, 2016, the Land Survey Act, 2016, the Forestry (Amendment) Act, 2016, the Local Government (Amendment) Act, 2016 and the Environmental Management Act.

Additionally, the Draft Land Use Policy acknowledges that the public has the right to demand and participate in decision making at all stages of land use planning and management. Experience has shown that plan implementation is easier where this basic right is respected because the public fully owns the plan. In the light of the above, the policy aims to promote participatory and community driven planning to ensure ownership and effective implementation of plans by all stakeholders and the public. Similarly, Land Use Planning and Management Guidelines and Standards stipulate that planning and implementation processes must ensure public participation at all times.

2 DESCRIPTION AND ANALYSIS OF PHYSICAL FEATURES

2.1 Location

Khungubwe Group Village Area is located on the central part of Traditional Authority Ngowe. It has made boundary with GVH Mchacha to the West, GVH Mwananjobvu to the North and North-East and Lalanje River to the West which also forms boundary with Nsanje District. The area is comprised of 9 villages namely: Khungubwe, Nambaya, Langwani, Jese, Liyani, Harrison, Khukhumba, Alikuleti and Misasi.

2.2 General Landscape

Khungumbwe GVH area is generally flat. It is characterised by both artificial and indigenous trees. Trees are common around the village and in the homestead and mostly common are jacaranda, acacia and mtondo trees. Cropland also covers a big part of the village with only 1 river, Lalanje, passing on the eastern boundary of the village.

2.3 Soils

Common soils in the area are makande and sandy loam type of soils. These are suitable for growing various types of crops such as maize, sweet potatoes, millet, sorghum, cotton and tobacco.

2.4 Forests and Conservations

There are 2 woodlots in the area and there is no natural forest. The woodlots cover an area of about 4.216ha. However, there is a wide cover of jacaranda plants which the people regard as a forest. This natural vegetation area covers total land area of about 57.841ha. The woodlots in the area are looked after by a Village Natural Resources Management Committee. The settlements areas are mostly covered by both natural and artificial trees and the only land with no or few trees are the farmland. Most common trees in the woodlots are acacia and neem. Common trees in the settlements and homestead include acacia, mtondo, baobab, phakasa, mvunguti, njale, mgoza and jacaranda. Jacaranda is the most common tree in the area. Rabbits, birds, agondwa, mwiri and vumbwe are the most common animals inhabiting these forests. The community rely on jacaranda for firewood and charcoal, it also gets sheltered by huge mtondo trees. The trees from the woodlots are used for community developments like burning of bricks while the natural jacaranda forest provides fuelwood.

2.5 Disaster Occurrences

Khungubwe GVH area is mostly affected by the following disasters: floods, strong winds, drought and pests. Floods usually affect the farmland and only in extreme cases do they affect settlements areas. Drought is usually caused by the persistent dry spells which repeatedly hit most areas in Chikwawa District or in some cases as a result of flooding which destroys crops and livestock. Strong north-southern winds also affect the area which are, in some cases, accompanied by heavy rainfall. These disasters affect the

lives of the people in the area in different ways such as loss of life and properties, disruption of families and disruption of learning at the school as it acts as an evacuation centre when disaster occurs.

Village Civil Protection Committee is the committee which oversees all disaster issues in the GVH area. In times of disasters, it alerts the community through the use of megaphones, drums, and whistles. The area has an evacuation centre which is located in Khukhumba village. However, the centre is small that in times of floods people also use Lalanje primary school. There are houses built by Islamic Relief Project which were handed to flood victims. There are 50 houses in total which have been occupied by flood victims.

3 EXISTING SOCIAL ECONOMIC SITUATIONS

3.1.1 Introduction

This section discusses the social economic situation of the people of Khungubwe and how it affects the people in the area.

3.1.2 Population

GVH Khungubwe has a total population of 2995 out of which 1520 are females and 1475 are males, according to data from Khungubwe Village Development Committee (VDC). There is a total household population of 900. This represents an average of 4 persons per household if 900 households is divided into the population of 2995. The population can be projected to the plan's implementation period of 10 years using annual population growth rate of 2.5% established in Chikwawa District Development Plan, 2019. Using population growth rate of 2.5% by 2032 the population can be estimated to grow to 3834. Using the average of 4 members per household, household population can be estimated from the projected population. Hence, in the tenth-year household population will be about 959. This population growth, although it may seem minimal, will exert pressure on the area's services and utilities such as boreholes and the primary school.

3.1.3 Social Economics / Livelihood

GVH Khungubwe community relies on agriculture as their source of livelihood. The community grows sesame, sorghum, pepper, cotton and tobacco to earn an income. They also cultivate maize, beans, millet, sweet potatoes and cucumbers for food, however, surplus from these food crops is also put on the market to sale to earn an income. People in the area also rear livestock to supplement on the crop farming. Mostly reared livestock include chicken, ducks, goats, sheep, cattle, guinea fowl, rabbits and pigeons. Goats, sheep and cattle are mostly reared for sale while poultry and rabbits are reared for both sale and food.

The community also relies on casual labour, small scale businesses for their day-to-day livelihood. The most common small-scale businesses include beerhalls, shops, carpentry, bicycle repairs, bakeries, shoe repairers and on tinsmith. Piece works are mostly in the farms of well to do Kinsmen.

The area does not have a commercial market, it relies on Sojin Trading Centre which is in Nsanje and it's at a distance of about 5 km. **Table 1** below shows commercial activities that are common in Khungubwe GVH area.

Table 1: Common Commercial Activities in Khungubwe GVH

ITEM NO.	ACTIVITIES/SERVICES	NUMBER
1	Maize mills	1 (run on diesel)

2	Shops	13
3	Bicycle repair	4
4	Carpenter	3
5	Bakery	9
6	Butchery	5
7	Benches	14
8	Shoe repairs	2
9	Tinsmith	9
10	Barbershops	1
12	Tearoom	20

Source: Department of Physical Planning, 2022.

3.1.4 Financial Services

People in the area access financial services from Neef. Neef provide loans for small scale businesses to youth and women. However, people rely mostly on selling their agriculture produce to finance business they want to engage in. Some members of the community are engaged in bank m'khonde. This is where a group of people come together and contribute money per week or month for a particular agreed period of time. Only members can access loans which they pay back with interest and they share the money after that agreed period of time. Hence, people join bank m'khonde to access money which they can use for businesses and other financial needs as well an easy way for saving money.

3.1.5 Land Availability

Khungubwe GVH has total land area of about 936.261ha. This is under different land uses amongst which the major ones include agriculture (646.246), residential (181.992ha), natural vegetation (57.851ha), institution (6.632ha) and woodlots (4.216ha). **Table 2** and **Figure 1** below show different land uses in the area of GVH Khungubwe.

Table 2: Summary of existing land uses

ITEM NO.	LANDUSE	AREA (HA)
1	Agricultural area	646.246ha
2	Settlements area	181.992ha
3	Natural veg.	57.851 ha
4	Flooding area	26.544 ha
5	Institutional area	6.632 ha
6	Irrigation land	6.851 ha
7	Woodlot	4.216 ha
8	River	3.467 ha
9	Playing field	1.436 ha
10	Cemetery	0.729 ha
11	Dyke	0.297
TOTAL AREA		936.261

Source: Department of Physical Planning, 2022.

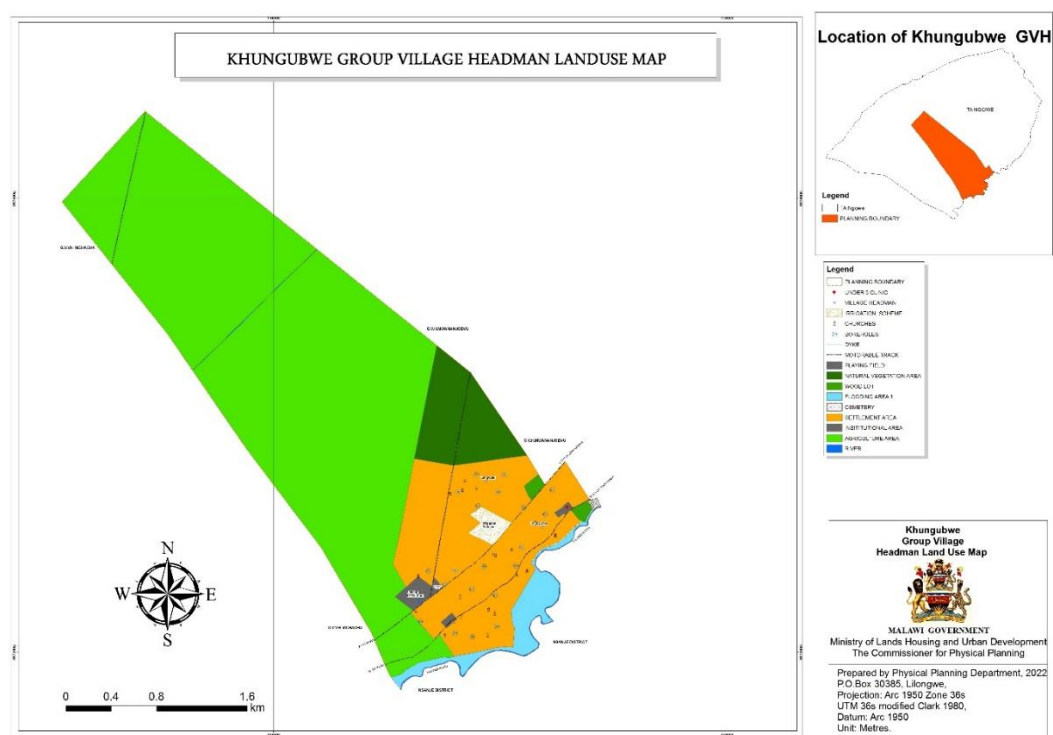


Figure 1: Khungubwe GVH Existing Land Use Map (Department of Physical Planning, 2022)

3.2 Existing Infrastructures

3.2.1 Introduction

This section analyses the existing infrastructures' in Khungubwe GVH area together with their main challenges. This section will look at housing, settlements, community services, health, education and utilities.

3.2.2 Housing and Settlements

Settlements in Khungubwe GVH are concentrated on one side in the East near Lalanje River. Settlements follow the 3 main roads of Thudzi – Mwananjobvu, Mchacha – Mwananjobvu and Khungubwe - Masanduko in the area, so to say they are linear settlements. Mostly common in this area are semi-permanent houses which are forming most of the residential areas. The area has 181.992ha of land for housing and settlement.

Using simple calculations, it can be analysed if the settlement land is enough for the current population in the area. If every household is given a land area of 0.045 hectares (15m by 30m plot which is a minimum size of a plot at a village level), using simple maths of land area per household by the number of households in a given time, we can calculate a rough estimate of the total required land area for housing. In this case 900 households requires 40.5ha of land for settlement. This means currently there is enough land for settlement.

In the next 10 years the household population will increase from 900 to 959. The additional 59 households will need 2.655ha. This means the total settlement land needed for the plan's implementation period is 43.155ha. This means that in the next 10 years current settlement land which is 181.992ha will be enough.

From observation it showed that houses and other structures are build anyhow without following any particular order or planning. It was a challenge to reach some of the settlement areas, during data collection, by vehicles as they have no vehicular access. In addition, some of the settlements, on the south eastern side, are along Lalanje River which makes them prone to flooding. However, a dike is under construction which will help to reduce the risk of flooding.

3.2.3 Education

The area has only one primary school namely Lalanje Full Primary School. The area does not have a secondary school, it relies on Mphanda Community Day Secondary School in Sub T/A Masache which is at a long distance of about 12km and Magoti community day secondary school at Sojin in Nsanje which is at a distance of 5km. The area does not have any community college, they access tertiary education in Blantyre and other surrounding areas.

3.2.3.1 Lalanje Full Primary School

Lalanje Full Primary School is located in Liyani village. The school's catchment area is GVH Mchacha, part of GVH Mwananjobvu and GVH Khungubwe itself. The school has 8 classrooms of which only 4 are in good condition while the rest are dilapidated and have mud floors. It has 14 toilets from which 5 are for boys, 5 are for girls and 4 are for school teachers. It has 2 staff houses of which 1 house is dilapidated, a change room for girls and a temporary head masters office. The school has 9 qualified teachers from which 8 are males and 1 is a female and 2 auxiliary teachers, 1 male and 1 female.

Table 3: Enrolment at Lalanje Full Primary School

YEAR	NUMBER OF GIRLS	NUMBER OF BOYS	TOTAL NUMBER OF PUPILS	DROP OUTS
2020-2021	415	404	819	32
2021-2022	468	445	913	133
2022-2023	446	469	915	N/A

Source: Department of Physical Planning, 2022.

As seen from Table 3 above this academic year, 2022 – 2023, total enrolment is 915 pupils and this is versus a total of 11 teachers. This represents a teacher to pupil ration of 1:83. This shows that teachers are inadequate at the school as recommended teacher to pupil ration as per education standard and guidelines is 1:60.

Table 3 above also shows a high number of pupils drop outs at the school mainly the previous academic year. According to the school's headmaster, this is so because of lack of participation from parents who don't see the benefits of education as they are uneducated themselves, hence they would rather send their children to the farms than school. Another reason is that child labour is rampant in the area hence children prefer going to work at Sojini trading centre than going to school. Lastly, natural disasters like flooding and drought contribute to drop outs as students cannot go to school hungry and, in some cases, due to flooding many families are left homeless hence children fail to go to school.

In addition to some of the issues raised in the discussion above, the school has inadequate learning and teaching materials. Lastly, the school is used as an evacuation centre during flooding which disrupts classes hence it is also a major challenge.

3.2.4 Health

The area only has 1 under-5 clinic which is located in Khungubwe village. All other health services the community accesses them at Sojin in Nsanje, at Dolo Health Centre or at Ngabu Rural Hospital which are at 5, 15 and 17km away respectively.



Figure 2: Under-5 Clinic in GVH Khungubwe (Department of Physical Planning, 2022)

3.2.5 Community Services

3.2.5.1 Cemetery

The area has only 1 cemetery land which is on the boundary with GVH Mwananjovu. This cemetery is used by both GVHs and GVH Khungubwe only owns half of the cemetery land. The GVH area is also allowed use of Mchacha cemetery land which is also on the boundary of the 2 GVHs. The cemetery land covers about 0.729ha. Using the British standard of 1ha accommodating 1550 burial sites, currently the area requires 1.932ha. This shows that current cemetery land is not enough to accommodate the current and the future population of Khungubwe community.

3.2.5.2 Community Hall, Community Based Organizations and Playgrounds

Khungubwe GVH area has only 1 CBO called Chiletso located in Khungubwe village. However, the area does not have a community hall. The area does not have a proper community ground. The 2 grounds which the community use have issues like the other 1 in Khukhumba village an 18m road passes through and cuts the grounds into half and the other ground in Khungubwe village is on a health post premises and also has issues with goal posts.

3.2.5.3 Religious Institutions

Only Christian religion is available in the area and there are about 20 denominations. The churches include: Nyasa Mission, Mountain Victory, Christian Apostolic Church, Church of God, Mzimu Oyera ndi Moto Church, Seventh Day Adventist, Charismatic, Goshen International, Finish Line, Church of Jesus Christ, Independence Pentecostal Church, Army Zion, Gospel life church and Faith of Mission. Some of these churches have no structures they pray under trees or use classroom blocks at Lalanje primary school. These churches will need land where they will have to build their prayer houses. The area has 2 ancestral sites where the village, led by the GVH, offer sacrifices when there is drought or strange disease outbreaks. These sites are located in Khungubwe and Khukhumba villages.



Figure 3: Mzimu Oyera ndi Moto Church (Department of Physical Planning, 2022)

3.2.5.4 Child Based Care Centres (CBCC)

The area has 4 Child Based Care centres located in Khungubwe as Chiletso CBCC, Langwani CBCC in Langwani Village, Mitowe CBCC in Khukhumba Village and Thokozani CBCC in Jese Village. Three of these CBCC's (Thokozani, Mitowe and Langwani) use church premises while Chiletso CBCC use the under 5 structures.

3.2.6 Utilities

3.2.6.1 Water

The main source of water for Khungubwe community is boreholes. The area has 21 boreholes altogether out of which only 1 borehole is non-functional. Like many other areas in Chikwawa District the area produces saline waters but they are less saline than in most areas. The only place where people access piped water is in Langwani Village where Islamic Relief built houses for flood victims and they installed piped water which only serve these houses. They use underground water pumped by solar energy to supply

water to these houses. A borehole is supposed to serve 250 people, hence, using this standard it can be determined if the number of boreholes are enough for current and the future need of the community. Therefore, current population of 2995 requires about 12 boreholes and the projected population of 3834 will need to be supplied by about 15 boreholes. This indicates that the current number of boreholes is enough to cater for the current and future needs of the population.

3.2.6.2 Energy

The GVH area relies on solar energy, firewood, charcoal and battery cells as their sources of energy for both lighting and cooking. Solar energy is used at a smaller scale and it's used for lighting, televisions and sound systems, in barbershops and charging phones. Firewood and charcoal are used for mostly cooking and burning while battery cells are mostly used for lighting. Firewood and charcoal are supplied by thickets of jacaranda which are common in the village and from trees in the homestead. The area is not connected to ESCOM electricity powerlines although they passed through the GVH area to the next GVH area of Mwananjobvu. All other activities that require electricity like welding are accessed at Sojini trading centre in Nsanje which is about 5km away from the GVH Khungubwe area.



Figure 4: Solar Energy Used for Lighting, Television and Sound Systems (Department of Physical Planning, 2022)

3.2.7 Roads and Transportation

The GVH area is served by 3 in-situ roads namely: Thudzi – Mwananjobvu, Mchacha – Mwananjobvu and Khungubwe - Masanduko. The roads are of Makande type of soils which makes them slippery during rainy season when rain falls. Due to flooding as is the case with many roads in Chikwawa District gullies are formed making them bumpy.

They are also impassable during rainy season due to lack of bridges and curvets in most of these roads. The area also has a network of footpaths and motor-able tracks which connects the villages in the area and also connects the village to the farms.

Common modes of transport are bicycles and walking. Travelling long distances like to Nsanje, Chikwawa Boma or Blantyre, people use bicycles to M1 road then board vehicles there while in short distances people just walk or use bicycles. Ox carts are also used for moving goods and services like crop harvests.

3.2.8 Agriculture

3.2.8.1 Crop Farming

The community of GVH Khungubwe relies heavily on crop farming for their livelihood. About 3 quarter of the Khungubwe total land area is under crop farming and it covers about 646.246ha. Commonly grown crops in the area are maize, sorghum, sweet potatoes, millet, sesame, pumpkins, cotton, tobacco and vegetables. The recommended hectare of a piece of land per household is 2ha. Using simple calculations, the current amount of land which each household on average is possessing can be determined. Current household population is 900 against 646.246ha, hence, on average each household is possessing about 0.718ha of land for farming. This indicates that agriculture land in the area is inadequate for both current and the future needs of the plan as the future household population is projected to be 959 hence will require about 1918ha.

People in the area are engaged in crop Irrigation apart from the rain fed agriculture. The area is involved in 2 irrigation schemes namely M'madzi and Lalanje. Lalanje is a solar irrigation scheme which covers about 6.851ha of land. Mostly cultivated crops are sweet potatoes, maize, cassava, nandolo and vegetables. M'madzi Irrigation Scheme is located in GVH Mwananjobvu but the scheme belongs to the people of Khungubwe. Mostly irrigated crops in this scheme are maize, vegetables and sweet potatoes.

Major issues affecting crop farming in the area include pests and diseases like Locusts and army worms and lack of reliable and permanent markets for crop produce.

3.2.8.2 Livestock Farming

Livestock farming is also mantle to the livelihood of GVH Khungubwe community. Commonly reared livestock include cattle, chickens, goats, rabbits, pigs, guinea fowl, sheep and ducks. These are most reared for sale and livestock are mostly sold during the lean months of the year when hunger hits hard. However, the area does not have a grazing land, livestock are grazed in the settlement area along the Lalanje River, natural vegetation area and later in the farmlands after harvesting.

Livestock farming in the area is mostly affected by diseases. Common diseases affecting livestock are foot and mouth and swine flu. The area is also affected by livestock theft

which is now rampant and lastly, lack of reliable markets results into local farmer's selling their livestock to vendors at a cheap price.

4 KEY ISSUES FOR THE LAND USE PLAN

4.1 Introduction

This section lists the major issues and challenge which have been established from analysing the existing infrastructures. These issues and challenges need to be addressed collectively and in an integrated manner for proper planning and implementation of this plan.

4.2 Major Issues

Listed in table 7 below are all the major issues and challenges faced by the community of GVH Khungubwe.

Table 4: Summary of Major Issues and Challenges

ITEM NO.	FOCUS AREA	CHALLENGES
1	Water Supply	• Saline water
2	Education	• Poverty • Lack of staff houses • High rate of dropout • Inadequate learning and teaching materials • Lack of staffroom and head teacher's offices and dilapidated classrooms • Low community participation
3	Agriculture	• Pest and disease e.g. foot and mouth disease etc. • Lack of established and reliable markets for agriculture produce. • Lack of a designated grazing land • Drought
4	Health	• Absence of a hospital • Long distance to the nearest Health Centre located at Sojini, Dolo or Ngabu Rural Hospital
5	Access roads	• Lack of bridges and curvets • Roads usually get affected by flood during rainy season due to poor drainage.
6	Sources of livelihoods	• Lack of established markets for commercial activities • Lack of employment opportunities • Inadequate financial services
7	Natural Hazards	• Drought • Strong winds

		• Pests and diseases e.g. locusts • Floods
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Source: Department of Physical Planning, 2022.

4.3 Community Aspiration

Outlined below are the shared aspirations of Khungubwe community and how they want their land to be planned and developed within the plan's implementation period. Some aspirations happen to be responses to some of the challenges the community faces.

- ✓ Child Based Care Centre
- ✓ Hospital
- ✓ Admarc
- ✓ Additional classrooms and staff houses at Lalanje Full Primary School
- ✓ Additional boreholes
- ✓ Community ground
- ✓ ESCOM electricity
- ✓ Good and potable water
- ✓ Commercial market
- ✓ Solar irrigation schemes

5 PROPOSED LAND USE PLAN

5.1 Introduction

GVH Khungubwe proposed land use plan has been determined by several factors that influence and affect the use of land in the area. These major factors include the following:

- The coming of SVTP irrigation canal
- Availability of vast land for agriculture
- Population
- Availability of water resources e.g., Lalanje River
- The socio-economic needs of people in the area

GVH Khungubwe Land Use Plan has been produced as a result of shared aspirations on how the community want their area developed. Details of the plan including recommendations on allocation of land for various uses is outlined in the following sections below and the land use map is attached to the plan.

5.2 Agriculture

Khungubwe community has 646.246ha of land designated for agriculture use. However, the current household population of 900 requires 1800ha and the projected household population of 959 will require 1918ha of land for agriculture use (using the recommended hectare of a piece of land per household is 2ha) which shows that agriculture land is inadequate. Therefore, the plan proposes intensification of agriculture as well as promotes irrigation farming which the area already practices. This will be assisted by the coming of Shire Valley Transformation Program Irrigation Canal from which schemes and cooperatives will be formed for intensive irrigation farming. This will help increase agriculture production and in turn reduce the effects of drought in the area.

The plan proposes construction of ADMARC or a market for agriculture produce to reduce the reliance of the area on vendors. 0.74ha of land has been reserved for this proposed activity. It also proposes construction of livestock drinking water points where livestock can drink water.

5.3 Housing and Settlements

The Khungubwe GVH has enough settlement land for the current and future needs of the population as projected household population will only require 43.155ha of land compared to the existing 181.922ha Therefore the plan has reserved 644.468ha for housing and settlement. However, the area lacks orderliness in the way building/houses are constructed without any proper planning. Hence, the plan proposes the use of simple lay out plans to guide developments in these settlement areas. It also encourages development control and upgrading of the unplanned built environment. These methods will help control developments as well as improve the existing settlements.

The plan also proposes a continuous training of CLC's on their roles and responsibility on the management of customary land. This will enable the CLC's to better control development of settlement areas as well as plan how structures should be constructed.

5.4 Health

The plan proposes for construction of a health centre in Khungubwe village in the GVH area. Land amounting to 1.019ha has been reserved for this purpose. This health centre will also cater for the surrounding GVH's of Mwananjovu and Mchacha.

5.5 Education

Teacher to pupil ratio for Lalanje primary school indicates that there is a shortage of teachers at the institution. The plan, therefore, proposes that ministry of education in liaison with Chikwawa District Council should deploy additional teachers at the school. The plan also proposes construction of additional classrooms at the primary school. The plan proposes that the GVH in the area should put in place by-laws to encourage parents to send their children to school and to punish those who don't.

5.6 Police

The plan has proposed for the construction of a police unit in the area. This is to help curb the rampant livestock theft as well as other criminal activities happening in the area. 0.184ha of land has been reserved for this proposed activity.

5.7 Utilities

5.7.1 Water

The plan proposes for installation of piped water in the area pumped by solar energy. These should be installed in villages where there are no saline waters and distributed to all other parts in the GVH area with the problem of saline waters.

5.7.2 Energy

The plan proposes that the Department of Energy through MAREP should connect the area to electricity power grid so that it should be able to access some of the services that require electricity like welding, maize mills and other services. The plan also encourages the community to continue relying on solar energy to make use of the hot Chikwawa weather.

5.8 Community Services

5.8.1 Cemetery

The plan proposes the extension of the current cemetery or opening of a new cemetery as the current cemetery land is not enough for current and the future population. The current cemetery land covers about 0.729ha. Using the British standard of 1ha accommodating 1550 burial sites, currently the area requires 1.932ha. Therefore, the plan has extended the current cemetery land to 2.104ha to cater for the current and future population need for cemetery land.

5.9 Transportation and Roads Network

The plan has proposed that ministry of transport should upgrade Thudzi – Mwananjobvu, Mchacha – Mwananjobvu and Khungubwe – Masanduko to 18m roads. The plan also proposes upgrading these in-situ roads to gravel roads to reduce slipperiness during rainy seasons. Bridges and curvets should also be constructed on these roads to improve transport communication during rainy seasons.

5.10 Forest and conservation

The plan has reserved 2.104ha of land for woodlots from the existing 4.216ha from which part of it has been used for cemetery land. The plan has retained 57.851ha for natural vegetation which is the areas major source of firewood and charcoal. However, heavy reliant on firewood possess threat on these woodlots and natural vegetation. The plan encourages the community to plant more woodlots and find alternative forms of energy to firewood and charcoal use in order to save the environment. The plan also proposes 26.544ha of flood prone land to be a conservation area.

5.11 Management of Population Growth

The area's population is not growing at an alarming late, however, the plan has proposed that households need to be civic educated and encouraged to manage their family sizes in order not to exert pressure on agriculture land and other community services. The table below shows the existing and proposed land uses.

Table 5: Existing and Proposed Land Uses

ITEM NO.	LAND USE	EXISTING LANDUSE (HA)	PROPOSED LANDUSE (HA)	INCREASE	DECREASE
1	Agriculture Area	646.246ha	644.468	0	1.778
2	Settlements Area	181.992ha	175.894	0	6.098
3	Institutional Area	6.632 ha	7.679	1.047	
4	Playing Field	1.436 ha	0.644		0.792
5	Flooding Area	26.544 ha	0	0	26.544
6	Irrigation Land	6.851 ha	6.616	0	0.235
7	Woodlot	4.216 ha	2.533	0	1.683

8	Cemetery	0.729 ha	2.104	1.375	0
9	Dyke	0.297	0.297	0	0
10	Natural Veg.	57.851 ha	57.851	0	0
11	Conservation Area	0	26.544	26.544	0
12	River	3.467 ha	3.467	0	0
13	Road Reserve	0	8.165	8.165	0
	Total Area	936.262	936.262	37.131	37.131

Source: Department of Physical Planning, 2022.

6 IMPLEMENTATION ARRANGEMENT

Implementation of Khungubwe Land Use Plan depends on commitment of various stakeholders that include the Chikwawa District Council, the Area Development Committee, the Village Development Committee, the Customary Land Committee and various local and international funding agencies. Responsibilities of each stakeholder are outlined in Table 4 below:

Table 6: Implementation Arrangement

ITEM NO.	STAKEHOLDER	RESPONSIBILITY
1	Khungubwe GVH	• Contribute towards community projects e.g. construction materials and labour, etc • Making available land for development projects
2	Chikwawa District Council	• Allocating resources for projects • Mobilization of resources for projects eg financial, technical, materials etc • Ensuring that plan provisions are followed • Coordinating plan implementation
3	SVTP	• Establishing irrigation scheme • Capacity building for plan implementation structures • Setting up appropriate business model for farming cooperative • Identifying markets for agricultural products
4	District Executive Committee	• Technical support towards plan and project implementation • Supervising of projects and plan implementation
5	Area Development Committee	• Prioritising projects in the community
6	Village Development Committee	• Prioritising projects in the community • Monitoring project implementation
7	Customary Land Committee	• Local land management and administration • Effective plan implementation
8	Development Agencies/NGOs	• Providing financial resources for projects • Civic education on cross cutting issues

Source: Department of Physical Planning, 2022.

6.1 Risks and Sustainability

The preparation of Khungubwe Village Land Use Plan was done by the Khungubwe community with technical assistance from Department of Physical Planning in collaboration with Chikwawa District Council and financial assistance from SVTP. The successful implementation of this plan is based on the assumption that various government and donor agencies will be willing to provide financial resources for effective implementation. There is a risk however, that this plan may not be implemented accordingly as a result of the following:

- Changes in the priorities by government, cooperating partners and the community itself
- Delayed implementation of the irrigation project may reduce the impetus generated by the community through the proposed project
- Failure of community to preserve land for proposed projects
- Lack of effective local level structure to oversee plan implementation
- Lack of commitment of beneficiary communities to contribute towards plan implementation
- Change of community leadership within the community may relegate plan implementation to the periphery
- Political interference

The participatory approach of preparing this plan will encourage the community to own it because it is a reflection of their aspirations. The presence of the Village Development Committee, Customary Land Committee and able leadership of the Group Village Head will ensure sustainability of the policy/proposals and projects outlined in the plan.

6.2 Monitoring and Evaluation

Monitoring of Khungubwe Village Land Use Plan shall be done periodically by Khungubwe CLC, Chikwawa District Council through the District Physical Planning Office in conjunction with District's Monitoring and Evaluation Office. The Plan shall be reviewed after its life span of 10 years or when need to so arise.

It is important that the mechanisms developed for monitoring and evaluation of GVH Khungubwe land use plan should respond to concerns such as:

- Extent to which goals have been achieved and their impact on the community
- The extent of the activities and funding for implementation
- The extent to which resources have been mobilised and how much
- The extent of the planned activities for land use plan implementation

7 CONCLUSION

The plan contains development projects which, if implemented could transform the entire community and contribute towards the overall district's economy. There is likelihood that the plan will be successfully implemented because it has taken on board the aspirations of the community. It is also anticipated that communities will be willing to be part of the success story of participatory planning.