

FINAL DRAFT REPORT FEASIBILITY STUDY IDENTIFYING NEED FOR AND SCOPE OF RESCUE CENTRES IN CHIKWAWA DISTRICT



SUBMITTED TO

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Rescue Centres Feasibility Study Final Draft Report

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The views expressed in the report do not necessarily reflect those of Habitat for Humanity Malawi.

James M. A Chima For IDM Consulting & Associates December 2020

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EXECUTIVE SUMMARY

This feasibility study carried out in Chikwawa district, build understanding of why communities in disaster-prone areas are reluctant to relocate to safe havens. Its findings will help Habitat for Humanity Malawi, and our partners identify:

- Training interventions designed to shift communities' mindsets towards safety.
- The optimum safety and rescue provision options for supporting communities facing disasters/ emergencies.

It also researches and outlines how the construction of rescue centres can:

- Utilise community-based disaster risk reduction strategies, to build understanding of why some communities choose to live in flood-prone lowland areas
- Undertake a training programme designed to enable communities, authorities, and other stakeholders to prepare, withstand and recover from future disasters
- Provide families with access to training and materials to 'disaster proof' their homes and allow selected families to seek refuge during emergencies.

Methodology

The study took three main approaches:

- A literature review
- Semi-structured key informant interviews (17 key informant interviews at national and district levels with various stakeholders)
- 5 FGDs at community levels

At the community level, the study covered five VDCs selected because of their frequent experience of damaging impact from disasters: Tomali, Bester, Chabuka 1, Nkhwazi and Kholongo Villages (as recommended by Chikwawa District Council),

The study engaged 63 participants in total, 54.2% were male and 45.8% female, 47% were aged between 18 and 35 years old.

Processing of qualitative data involved analysing content from various stakeholder interviews. The data was summarized into broad themes around the feasibility study focal issues based on key issues from the ToRs. Deductions were made only upon cross-checking, and establishment of consistency (or inconsistencies) with other sources and methods deployed as part of the triangulation.

Key Findings

Barriers to relocation

There are various barriers that prevent poor communities from relocating to safer locations. Traditional and intergenerational livelihoods, like farming and fishing, rely on remaining in the same location. For survival most of the worst affected families have two homes, one in the upland and the other in low lying places which are impacted when disasters occur. There is already high pressure on the limited suitable agricultural land and without any alternatives these communities, especially those with the lowest income and economically vulnerable members, are trapped in their current home locations. As a result, they are exposed to disasters year in and year out. There is generally a lack of resources to relocate and build another or similar house due to low income.

The main barrier that hinders poor communities from adapting better construction methods is inadequate access to recommended and proper housing materials /resources. Currently, apart from Habitat for Humanity and other shelter cluster NGO's working in the district, there are no successful applied strategies to improve housing quality at community level.

Existence of evacuation structures

Our study also reviewed the current status of local disaster management practices and resources available to the local community. There are currently various community structures actively involved through Civil Protection Committees (CPCs). These community organisations have varying degrees of strengths and weaknesses. Most of them have been trained in some of the relevant areas including management of early warning systems and community-based flood risk management and therefore have some limited capacity to respond when disasters strike and ability to build early warning awareness. The major weakness is that not all structures are covered in the flood risk management training. There is limited access to materials and equipment for early warning, disaster management, response, and recovery.

Status of evacuation centres

Chikwawa District is one of the districts in Malawi that experiences semiannual floods and drought cycles. As such communities are used to evacuating from their homes. Most communities make use of existing physical structures which are mostly improvised, such as schools, churches, and school grounds, which serve as adhoc shelters for communities impacted by emergencies. It was established that there are few conventional purpose-built evacuation centres in some Chikwawa districts. Our study focused on Lundu and Ngabu, where no purpose-built centres exist, as well as Masache (as recommended by the Chikwawa District Council).

The evidence and reporting on existing evacuation centres has informed best practice recommendations for the construction and resourcing of HfH/LCT rescue centres, which must include:

- A raised ground location (above 3 metres)
- Well covered facilities
- Segregated structures for males and females
- A kitchen area,
- Washing rooms
- Access to a potable water source
- A mobile health post
- Access to roads
- Access to electricity for security and economic activity
- Proper waste disposal
- Proximity to targeted villages for ease of access in emergency situation.

There are various benefits envisaged to come from the rescue centres. These are less disruption to schools and churches which currently serve as improvised evacuation centres; ease of management of the displaced persons in one place; and creation of employment to surrounding communities during construction phase.

Community ownership to development of rescue centres

Past performance of the evacuation centres have revealed that communities are willing to contribute to a cause that benefits them. There is inherent belief that assets attract investments within the communities hence any development that promises creation of assets becomes attractive and solicits unwavering support from the communities. Similarly, the communities pledge to provide local artisans; materials and unskilled labour mobilisation; provide water during construction; monitor progress of work; provide land for the site; provide security of the facility when constructed; and provide a feedback mechanism between the community and contractors.

Rescue centres use beyond disasters

There are various anticipated use of the rescue centres in times when there are no disasters. The general picture shows the following being preferred alternative uses: community meeting point/places; resource centres; when near a school, it can be used as Community-based childcare centre (CBCCs), additional classroom, or nursery school; community hall used at a fee for services for meetings, weddings, church gatherings, entertainment (video shows) and Community-Based Organisation (CBO) activities; community make shift under-five Clinic or health post; seed bank/warehouse at fee; make shift court; and a youth centre to keep the youth busy.

Good state of the facility hinges on having a very vibrant and thriving management structure. The general view is that there will be need for a management committee for the facility, drawn from members of different structures within the community such as VCPCs and VDC, etc. These will have to be trained in management and maintenance. These will vary from the prevailing situation of each community contingent on its capacity and innovation.

Centre sustainability

The sustainability of the rescue centres will be guaranteed through deep community engagement. Local authorities must take ownership of the interventions for sustainability; Community ownership investment is key hence their engagement from the onset; eengagement with elected officials such as members of Parliament and Councillors; sustained training on how to manage structures in collaboration with others stakeholders; community contributions to form fund to augment community-based income generating activities from the facility, and choice of the post-disaster use enhances the effective use that guarantees usable state of the facility.

Linkages with other partners

At district level, DCPC platform exists where all other players are represented. There are established linkages through monthly coordination meetings and other regular mechanisms of sharing of experiences and information. This platform is very vital in informing the process of developing the rescue centres. The current crop of rescue centres are very improved types, which are a direct result of sharing of experiences based on the coordination among the actors in disaster risk management continuum.

Land Tenure Issues

Our study highlighted significant pressure on available land, disputes are very common in the district mainly disputes around Customary Land Ownership. This is mainly attributed to intermarriages between people who practice different systems of marriage, namely,

patrilineal, and matrilineal which recognise land and property inheritance through male or female lines, this has caused challenges around the management of land issues or disputes.

Increasing population density in the district coupled with increased demand for agricultural land have led to abuses of trust by local leaders who control ownership of customary land who can tend to favour a certain group of people in the community.

Centre design aspects

The technical team visited five villages based on our earlier community engagement and consultations in liaison with the HfHM Chikwawa office. The site visits were intended to establish the following data on completion of the inventory: topography of the area; proximity of area to services: access roads, portable water and, electricity inclusive; flood history of chosen locations; and availability of building materials, especially bricks.

Five sites have been identified and assessed technically for the purpose of constructing the rescue centres. There is generally close proximity to services and communities among the sites hence making it easy to for community residents to access the facility during floods. Each site has its merits highlighted coupled with past flood history with an advantage of being slightly on higher elevation than the surroundings which is a key attribute for community convenience to hedge them against effects of flooding. The common post-disaster uses among the communities include nursery school, village seed bank, under-five and antenatal clinic, multipurpose community hall (for meetings, entertainment (video shows), and weddings), storage for community properties, and youth centre.

Conclusion

From the foregoing, the study has provided a basic understanding as to the constraints that limit communities from relocating to safe havens, despite the risks that they are subjected to in their residential areas. It has also revealed initiatives by local organisational structures within the communities to mitigate the effects of the floods. These are anchored in awareness raising as well as helping in ensuring disaster resilient buildings are in place. HFHM's pilot project in the areas has augmented this drive by exemplifying the need for resilient buildings and demonstrating the concept through a few pilot houses built in the area.

Using the vast experiential learning, the respective VCPCs have carefully identified potential sites for the construction of rescue centres based on the past experiences with devastating effects of disasters, especially flooding. From a Civil Engineering perspective, the team agrees that the designs to these building must foremost be flood resilient as well as being safety zones

Against this backdrop, to further enhance community resilience and future rescue centres' impact and sustainability, there is need to:

- a) Improve adherence to technical specifications of the rescue centres that appropriately support the affected displaced population's safety.
- b) Include a training package for the VCPCs so that more of them are well versed in the flood risk management.
- c) Intensify supervisory visits and follow-ups to institutions running the facilities as part of coaching.

1.0 INTRODUCTION

1.1 Background

Habitat for Humanity Malawi (HFHM), affiliated to Habitat for Humanity International, is a non-profit housing organisation that helps low-income people in Malawi to access decent housing. HFHM was established in Malawi in 1986 and has assisted over 41,000 families through different housing solutions and is a leading NGO in Malawi addressing poverty housing amongst low income and vulnerable groups. HFHM operations are spread out throughout Malawi specifically in Mzuzu, Dowa, Lilongwe, Salima, Blantyre, Mulanje and Chikwawa. In addition to the provision of housing solutions to vulnerable families, HFHM is also a key stakeholder in WASH and Disaster Risk Reduction and Response.





Following the severe flooding and devastation caused by Cyclone Idai in March 2019, HFHM in collaboration with **Habitat for Humanity Great Britain (HFHGB)**, sought funding from **Lloyd's Charities Trust** (LCT) to support families in Chikwawa district to improve their resilience to future flooding. The project will utilise community-based disaster risk reduction strategies to:

- a) Build understanding of why some communities choose to live in flood-prone lowland areas
- b) Undertake a training programme designed to enable communities, authorities, and other stakeholders to prepare, withstand and recover from future disasters
- c) Construct rescue centres for families to access training and materials to 'disaster proof' their homes, and allow selected families to seek refuge during emergencies

Therefore, HFHM sought a qualified consultant / team of consultants to carry out a feasibility study in Chikwawa district in order to demonstrate how the project can achieve the above stated objectives.

1.2 Description of location

Chikwawa district lies along the lower flat basin of Shire River, which is along the Great African Rift Valley characterised by meanders. Thyolo-Chikwawa Escarpment lies in the eastern side of the district and forms the major source of most rivers and the Shire River is the major outlet of Lake Malawi and connects tributaries from various escarpments as it flows towards the Zambezi in Mozambique.

A wide variety of soils have developed in Chikwawa District that vary from area to area according to different types of sediments and rocks. In terms of climate, the district experiences tropical climate and falls into wet and dry seasons. The wet season starts in

November/December and ends in April/May, while the dry season occurs from May to October/November.

Malawi has a sub-tropical climate, which is relatively dry and strongly seasonal. The warmwet season stretches from November to April, during which 95% of the annual precipitation takes place. Annual average rainfall varies from 725mm to 2,500mm with Lilongwe having an average of 900mm, Blantyre 1,127mm, Mzuzu 1,289mm and Zomba 1,433mm¹.

Against this background, it is evident that Chikwawa district experiences general unreliable and variable rainfall that is way below the average for Malawi, ranging from about 170mm to 967.6mm minimum and maximum rainfall respectively probably because it lies on the leeward sides of Shire Highlands.

Temperatures are generally high with a maximum of about 37.6 °C usually experienced in November and a minimum of 27.6 °C in July every year whilst the mean average temperatures are usually above 20 °C.

Agriculture provides the major source of employment for the district. The major food crops being grown in the district include maize, rice, sorghum, white rice, and sweet potatoes are also grown at small scale.

Sorghum is a drought resistant crop, well suited to the region's erratic rains and is considered the second food crop after maize, although maize from neighbouring districts including. Thyolo, Blantyre, and Mulanje Mwanza is available year-round.

The majority of the farmers are restricted to a small landholding mainly due to the growing population and pressure on suitable agricultural land. Male headed households are more likely to own land compared to female –headed households.

Other economic outlets include cotton, handicrafts, transportation, and trading. The district has also commonly kept livestock such as chicken, goats, cattle, pigs, sheep, rabbits, doves, and ducks which is a source of protein along with fish.

1.3 Rationale for Feasibility Study

Malawi has experienced a number of adverse climatic hazards over the last several decades. The most serious have been dry spells, seasonal dry spells, droughts, intense rainfall, riverine floods, and flash floods. Some of these, especially dry spells, dry spells, droughts, and floods, have increased in frequency, intensity, and magnitude over the last two decades, and have adversely impacted on agriculture, water, health, energy, fisheries, wildlife, forestry, gender, and education sectors.

The impact of climate change on Malawi is extremely severe both in terms of geography and vulnerability:

- A geography characterized by already warmer climates, its marginal areas are more exposed to climate hazards (rainfall variability, poor soils, and flood plains)
- The economy relies heavily on climate sensitive sectors: agriculture, fisheries, forestry, other natural resources, and tourism

¹<u>https://www.metmalawi.com%2fclimate%2fclimate.php/RK=2/RS=AUswJ0H_rRPXaQkI_306II1p0Tg-</u> Malawi Department of Meteorological Services accessed on 4 December, 2020

• Widespread poverty, poor economic and social infrastructure, coupled with limited human and institutional capacities and inadequate technologies and financial resources, reduce the resilience to the economic shock of climate disasters, and the long-term impact on the country's socio- economic development².

Floods in Lower Shire Valley occur almost every year causing damage to property and loss of life and infrastructure such as roads, railway lines, bridges, buildings and to a large extent, washing away of villages. While the impact of flooding tends to be localised to flood-prone areas, flooding in the country is becoming an annual occurrence, mainly associated with prolonged heavy rainfall, poor land and water management, and inadequate farming systems at macro and micro levels³.

A Tropical Cyclone Idai formed in the Mozambique Channel and drifted to Malawi on 5th March 2019 causing heavy rains accompanied by strong winds. The heavy and persistent rains led to severe flooding across some districts in southern Malawi. More than 922,900 people were affected, including more than 86,976 displaced, with 59 deaths and 677 injuries recorded according to the Government. Fourteen districts were impacted out of which Phalombe (22,332 (111, 660 people), Nsanje (18,000 households), and Chikwawa (16,000 households) recorded the highest number of people affected and displaced⁴.

Against this background that this study was commissioned. It is anticipated that it will help build understanding of why some communities choose to live in flood-prone lowland areas. With that understanding HfHM will be able to develop a training programme aimed at building awareness and action to instill mindset change to foster safety. Furthermore, this will result in providing rescue centres for families to access training and materials to 'disaster proof' their homes and allow selected families to seek refuge during emergencies.

It assessed the practicality of a proposed rescue centres project with aim of objectively and rationally uncovering the strengths and weaknesses of the proposed venture, opportunities and threats present in the natural environment, the resources required to carry through, the community benefits, and ultimately the prospects for success.

1.4 Scope of Work/TORs

The assignment involved conducting a feasibility study in Chikwawa district to assess and determine the type of rescue centres that HFHM intends to construct in the district as well as assess what the communities could use the rescue centres in times when there are no disasters. The consultant was also mandated to recommend appropriate designs for the rescue centres, and their management structures based on consultations with relevant stakeholders. The Feasibility study further assessed the socio-economic benefits of the rescue centres for the targeted communities taking into consideration the disasters that frequently affect the district and the aspirations of the communities for their use. The study has identified barriers preventing people from adopting better construction methods for "building back better" and linkages to other past and present activities in Chikwawa district aimed to improve flood response, risk management and resilience of the target communities.

² Malawi Government (2010) Climate Change Investment Plan, 2011-2020

³ Malawi Government (2008) National Contingency Plan, 2008-2009

⁴ ACT Alliance Idai Disaster Assessment (2019)

1.4.1 Specific objectives of the study and Scope of Work

The study sought to achieve the following specific objectives:

- a) Identify what is preventing poor communities from relocating and/or adapting better construction methods (build back better), and what are successful strategies applied locally to improve housing quality.
- b) Analyse strengths and weaknesses of the existing at community level structures related to disaster response, risk management and disaster resilience.
- c) Identify ways to improve community-based flood risk management (CB-FRM) strategies in order to improve the trainings and engagement with the communities planned under the project.
- d) Identify linkages with other agencies' (government, international organisations and NGOs) work in Chikwawa district (and adjacent regions if applicable) in flood response, risk management and resilience building to ensure the project complements and builds on their work.
- e) Provide background information, including general description of the project areas, including rescue centre locations, use, size, number of beneficiaries, plot sizes, management structure. In particular, identify centre space configuration fit for purpose during emergencies as well as during non-emergency periods.).
- f) In close consultation with the communities, identify suitable locations for the rescue centres, and determine the centres' capacity. Also determine access routes from villages in flood prone areas and calculate accurate distances between the villages and the construction site.
- g) Assess water availability, quality and supply reliability, sanitation options and hygiene issues around the villages and in proximity to the proposed construction site(s).
- h) Upon consultation with communities and local authorities, identify land tenure issues of the preferred locations for the proposed rescue centres.
- i) Review available reports on the performance of past/other rescue centres and technical designs of similar rescue centres, if available in the district or region, and assessments of the performance of these existing structures.

1.5 Study Deliverables

The pursuit of above purpose delivered feasibility study report that includes a comprehensive coverage of the study areas, in particular:

- i. Analysis of barriers preventing people from relocating to safe places and adopting better construction methods and recommendations for strategies to overcome them,
- ii. An overview of the situation in the targeted areas, an analysis of past performances of rescue, if any, opportunities and strategies for their utilisation, justification for centres locations, design recommendation and mechanisms for centres management and maintenance, and a time-bound action plan (with key responsible focal points) to systematically support HFHM in the implementation of the project,
- iii. Findings and recommendations for improving community-based flood risk management and capacity,
- iv. Recommendations for improving linkages and leverage of other activities, structures and capacities related to flood risk management in Chikwawa district.

The findings and recommendations of the study will be presented to the National Stakeholders at a conference to be agreed with HFHM.

2.0 METHODOLOGY/APPROACH

2.1 Methods and Tools

2.1.1 Details of methodology and sampling

The study took three main approaches in its data collection process to generate information for the feasibility study, namely, literature review (see Annex 3), semi-structured interviews, and focus group discussions (Annex 4) with representatives of key stakeholders. The specific focus group discussions and key informant tools were developed responding to the array of issues sought as per study focal areas in consultation with the client. Stakeholder participation was an integral component of the design and planning; information collection; the development of findings; evaluation reporting; and results dissemination.

The consultants held key informant interviews at national and district levels with 17 Key informants representing various stakeholders as well as 48 community members in 5 focus group discussions (FGDs) at community levels (Annex 2). At the community level, the study covered five VDCs that were purposively sampled due to being frequently affected by disasters as recommended by the Chikwawa District Council.

Village	Male Participants	Female Participants
Tomali	4	4
Bester	6	5
Chabuka	7	3
Nkhwazi	4	6
Kholongo	4	5

The engaged people were part of the Village Civil Protection Committees (VCPCs), who are responsible for co-ordinated responses following disaster and emergency situations. They represent different interests and segments of the population in the respective communities. The study team restricted the number of people to be contacted at community level in tandem with the Covid-19 restrictions and government guidelines.

2.1.2 Methods and tools

The following were the tools and methods for the feasibility study data collection:

- i. *Preliminary consultations and study preparations*: During this stage, the consultant undertook preliminary reviews of the project documentation and held preliminary discussions with the Habitat for Humanity project team partners, namely, the MEAL Coordinator, the IPC Chairperson, and the District Officer in Chikwawa who provided direction and advice to the consultants.
- ii. *Desk review:* The consultant had access to documents on emergency recovery and evacuation which were focal areas of the study. This informed development of data gathering tools for the key informants and focus group discussions. In addition, this helped in deepening the understanding of the key study issues.
- iii. Submission of inception report which highlighted organisation and programme of work, methodology, approach, and schedule of human resources which took into account contract negotiations.

iv. Stakeholder Map for Consultations and interviews: The selection of stakeholders consulted was motivated by the desire to balance up geographical and sectoral representation. Consultations were by means of meetings and administering questionnaires or checklists with representatives of relevant stakeholders through *Key informant interviews (KII) and Focus Group Discussions* (Annex 4). Regular consultations with the client, HFHM, kept them abreast of the demands and progress of consultations. The following stakeholders' representatives at national, district and community levels were identified and engaged:

Table 1: Stakeholders engaged during consultations

Government: National collaborators and other relevant Government Sector institutions to be guided by the client such as Department of Disaster Management Affairs (DoDMA), Chikwawa District Council (DoDMA Officer, Director of Planning and Development, Director of Public Works, and Lands Officer).

NGOs – Red Cross Society and Catholic Development Commission (CADECOM) and Catholic Relief Services (CRS).

Donor Agencies: UNDP		
HfHM staff:	Community level:	
Project Manager; Field extension staff; MEAL	TAs Ngabu and Lundu - civic protection	
Coordinator; and Procurement & Supply Chain	committees (CPCs) structures at area and village (ACPCs & VCPCs) levels including community leadership and youth groups	

During consultations, issues around site identification were very transparent and focused. GVHs and their counsels had to break away from the big meeting to discuss and consult among themselves in breakaway groups to arrive at consensus on proposed sites.

Operationally, on the ground during technical assessments, the team visited the sites in company of representatives from Chikhwawa District Council and Habitat for Malawi Chikhwawa Office. On arriving on each of the sites, the team met the area committee representatives, civil protection representatives, and other community members.

Information regarding particular thematic issues as spelt out in the detailed ToRs was also collected simultaneously as interviews or consultation sessions were in progress. All key informants were included by reason of their relevance to participate in the project or having in-depth knowledge and potential influence on the project aspects.

2.2 Data Processing and Analysis

Processing of qualitative data involved analysing content from various stakeholder interviews. The data was coded and summarised into broad themes around the feasibility study focal issues based on content analysis. Deductions were made only upon cross-checking and establishment of consistency (or inconsistencies) with other sources and methods deployed as part of the triangulation. This ensured that the veracity of individual perceptions was verified and a measure of objectivity in the conclusions established which has informed the report.

The data was analysed for consistency across sources, patterns, or deviations in reported issues with the aim of triangulating from different sources and capturing diverse stakeholder viewpoints. These were augmented by consulting available secondary information. The

qualitative data collected was analysed, critiqued, processed, and summarized based on key domains/issues established during literature review, the field survey, and interview notes. Therefore, for analysis and presentation of findings from the study, the team used a mixture of synthesis, elements of storytelling, content analysis, pattern analysis, and key word analysis as derived from the ToRs.

2.3 Study limitations

Operationally, the field work limited by the natural occurrences such as funerals meant delays in meeting some communities and recalls had to be made as was the case with Kholongo and Nkwazi. We failed to reschedule for Jombo and Sekeni.

3.0 MAIN FINDINGS AND DISCUSSIONS: SOCIAL ASPECTS

This section and the following one's present findings and analysis of the feasibility study as defined by the objectives in the terms of reference (Appendix 1) for this study. The findings and analysis are a representation of the input of key informants (HfHM and government) and community members as well as consultant's analysis augmented by the literature review in the course of the study. The findings are organised in relation to objectives as key focal areas of the study as spelt out in the TORs.

3.1 Barrier to relocation

More than 50% of the population in Chikwawa lives along rivers and they are exposed to natural disaster such as cyclones, storms, and floods. The population of these areas is partially or entirely regularly evacuated because of these cyclones and floods. Government policy has been to encourage the relocation of people away from the immediate riverbanks to higher ground, because of the risk of flooding. However, some people still remain in these flood disaster prone areas. Thus, the feasibility study looked at establishing what is preventing poor communities from relocating.



The main barriers to relocation to safe places are as follows:

a) Limited livelihoods earning from farming and fishing: It was established that the communities in the disaster-prone areas are mostly dependant of subsistence agriculture (irrigated as well as rain-fed dambos) with limited secondary sources of income such as production and/or river fishing. Dambos are complex shallow wetlands in central, southern, and eastern Africa, particularly in Malawi, Zambia, and Zimbabwe. They are generally found in higher rainfall flat plateau areas and have river-like branching forms which may be nowhere very large, but common enough to add up to a large area.

The communities derive their livelihoods from farming and fishing in the existing prone areas hence their rigidity to move out of these places for fear of losing the source of their lifeline.

One of the respondents in Tomali remarked that:

"...we are used to our ways of farming practices here ...we are familiar with no tillage...no use of fertiliser yet we are able to harvest something for ourselves...if we go to new places that rely on fertilisers and the like...in the safe haven we cannot survive...so we backslide from moving to new areas though deemed safe..."

b) **For survival most of these families have two homes:** one in the upland and the other in the low-lying places frequently damaged during disasters. Usually, heavy rains and flooding in some areas may affect lives and erosion of assets that may degenerate to another disaster. One official in Chikwawa warned though that

"...some communities which used to tow the same such practice, Mwalija and Phimbi, based on an island on Shire River, had to relocate permanently after suffering extreme and severe damage to property and loss of life in 2015..."

c) There are strong social/historical/cultural connections and factors to the places reinforced by heritage in linkage. For many, a disaster-prone area is also where their ancestors have been living for generations and abandoning the place where they grew up would leave them uprooted. Sometimes, the dangerous life is preferable to a loss of place and culture from which there is no recovery.

One of the respondents in Bester II village had this to say: "...some of us are stuck here and cannot leave this land because it is our ancestors' land ...hence we cannot surrender such land with history of our clan to the community leadership..."

Some of them were simply unaware of the risk. But even after having discussed the dangers of living in a certain area, one informant of Chabuka Village said: *"…as a family we would not want to move elsewhere because this is the place we have known as our own…"*

d) Lack of alternative land: there is already high pressure on limited agricultural land. Most communities regularly impacted by the cycle of floods and drought have no alternative place and remain stuck in their existing locations albeit exposed to disasters year in and year out. There is a commonly perceived concern that people who are living in high-risk areas, will not be encouraged to leave the areas when the floods arrive since by doing so, they may eventually lose access to their land parcels as this excerpt reveals:

"...we have no where to go because this is the only land, we have from our forefathers..."

e) Lack of resources to relocate and build another or similar house due to low income. It was noted that severe disasters are rare, therefore the notion of danger does not easily sink in. If people cannot learn from experience, they do not know how to protect themselves, especially without appropriate early-warning systems. For example, without taking part in an evacuation exercise, people would not know where to go. And even if they knew, often there are no financial subsidies for relocation or reconstruction.

f) Fear of losing power and authority by local chiefs: It was also established that generally local chiefs enjoy and wield so much power within their communities through the patronage of having more people under their jurisdiction hence by default these chiefs tend to resist movement of themselves and their affected people to be under other chiefs' as one of the local leaders said

".... for fear of being demoted as local leaders when we relocate to other jurisdictions...because there is no guarantee that I will remain the chief when I move".

This means loss of power and authority even by their subjects that serve them.

g) Overall a combination of factors within a calculated risk

"Most people who live in places that are exposed to serious hazards are aware of the risks they face, including earthquakes, floods, and droughts. Yet they still live there because, to earn their living, they need to or have no alternative. ...rivers are good for fishing and farming; valley soils are very fertile; drought alternates with good farming or herding. Culture and beliefs, for example, in spirits or gods, or simple fatalism, enable people to live with risks and make sense of their lives in dangerous places. Sometimes, though, unequal power relations are also part of culture, and those who have little influence must inevitably cope with threatening environments..."⁵

Here are a few case studies on the same:

The study met with Evelesi Utino, Magret Nkwamba and Everson Thomas in Nkhwazi village, T/A Ngabu Chikwawa.

In early March 2019, Malawi experienced one of the worst tropical cyclones that formed in the Mozambican channel, bringing heavy rains and strong winds. Severe flooding negatively affected people's lives, livelihoods, and socio-economic infrastructure, pushing more people into poverty. In total, an estimated 975,000 people were affected, with 86,976 displaced, 60 killed and 672 injured. The devastating heavy rains and floods caused substantive damage and loss across the social, productive and infrastructure sectors, with the social sector experiencing most of these effects. In the social sector, the housing subsector experienced the greatest damage, with 288,371 houses being partially or completely destroyed. Most affected people were accommodated in temporary internally displaced people (IDP) camps, mostly located in classrooms and school facilities, with limited access to safe water and sanitation facilities. This resulted in significant disruptions to learning and teaching activities at the school. In addition, the 2019 floods affected roads, bridges, power supply lines, irrigation. One of the people whose life was affected in this way was **Everson Thomas**,

⁵ International Federation of Red Cross and Red Crescent Societies (2014) World Disasters Report. Focus on Culture and Risk

male 38 years old who has seven children, married, and works at Illovo estate, a sugar cane factory situated in the district.

According to Everson, floods began in 1993 and they occur every year because their village is near Shire rive. '' Every time flood come, our houses are usually flooded with water and the same is experienced in our farms where all crops are covered with water. When this happens, we move to schools and the church in order to seek refuge. The church and the school are slightly upper land and so there are unaffected most of the times".

"In the past, it was difficult to know if the area will be affected by floods. These days we are glad that with the coming in of mobile phones, we are able to inform each other about the coming water from the other villages and we alert each other on the same. Usually, we move to the Church building or schools where we stay until the water subside. At these places, the government, the sugar company, and other NGO's usually come with assistance to help us. It is usually in form of food and some cooking utensils. We have never seen people being assisted in other things especially if they lose things like a radio. Or sometimes just being provided with money so that we can decide on our own what to buy or replace when things are lost. Usually, we are all given the same things. Priority for everyone who comes with assistance is food".

Everson explained that he is aware of messages and efforts made of telling them to move from the flood prone areas to safer places. He said that ''*They tell us to move but we are not given land to move it, in cases where land has been identified we are asked to pay huge amounts of it, I do not have that money or plan to pay for land. I am staying on my father's land that was passed on to me and I will pass it on my children as well. For me I stay close to my place of work. I am close to the sugar plantation and the factory. This is where I work and find my source of livelihood therefore it is not possible for me to move from a place which is closer to my source of income. Of course, I also have small pieces of land nearby. All these added together means that moving away from here is like killing me. I will not have land to farm on and I might end up losing my job.*"

Everson was asked as to what they think is the cause of the floods. He had this to say

"Of course, we all know that the climate is changing and that affects the way rains come. There is no protection for the land in form of trees. However, we also believe that for those of us whose villages are surrounded by the estate, the floods are heavily caused by lack of proper drainage systems by the plantation. In the past, the company used to dig huge drains which could direct the water to the main rivers. These days, this rarely happens. For us, we would like Illovo estate to continue with the drainage system that they put in place some time back. Providing the drainage system around the surrounding villages of Shire river would help us to not be affected. I should tell you here that the local chiefs have told us to move to high areas, but I and my family and most people in the village will not move. Unfortunately, Illovo stopped with the drainage because they had change of management, but our chief has appealed to them to help us this time if floods occur this coming year''.

The survey team asked Everson on his opinion about rescue centres. According to Everson, the rescue centres will be ideal as they would replace the Church and Schools. Everson stated that

"actually, constructing rescue centres nearby would mean giving an opportunity to learners to continue schooling even when disasters strike. Without a proper rescue centre, we use the schools as rescue centres, and this disrupts all school activities. The government does not take this into consideration as exams are held regardless of whether our children here experienced floods or not. We would welcome the idea of rescue centres. Furthermore, the rescue centres should be well designed so as to give room for more families to stay in comfortably."

''Again, the rescue centres could be used as centres for early child development while there are no disasters. However, this decision is up to the management of Habitat in conjunction with our chiefs''.

In terms of emergency response, Everson recommends that response should be beyond food. "Yes, food is important, but decisions should be made about what will happen after the disasters. We are usually left unattended to and this makes us to go back to our previous homes."

Magret Nkwamba, female 30 years old has 2 children and is married. "Ever since I moved to this village when I got married, we have had floods every year. Often times we move to the school or church when we are hit by floods. I haven't thought of moving or relocating elsewhere because this is where my husband and I do our piece of work at the estate as a means of income for our household. If we move, where are we going to do piece work at. The land we were told to move to is very far from the estate, it's not possible to walk every day on such distances. Additionally, we don't know if those lands are permanently secured for us. At least here I know this is my husband's place and no one can kick us out. If they want us to move, they should first of all build resilient houses for us in the areas they want us to relocate to because personally my family and I cannot afford to construct one for ourselves. There should be basic services available to us in those areas such as a school for the kids, water, a market to do our businesses and maybe a health facility, we cannot move to a place that has nothing to offer."

According to Magret, they are used to floods however this is not their wish that they should live this way, year in year out. "It is not that we are not concerned, we are concerned but we know that we are poor and there is very little that we can do. So far, I know only three people that managed to move out of this village to safer land. Two of these people had some stable businesses and therefore could afford to buy the piece of land where they moved to. The other person has a relative in Mozambigue and she received money from the relative which she used to buy the land. For those of us who do not have such support systems where do you think we will get the money to buy the land? I am saying this because most of the times, we are told to move but nobody seems to care about these questions; who will give us the land? How about other necessary amenities? Can we live in a place where there is no school, no health facility, not even a market? Can we?". She further said that she would love to have a house like the ones that are built by Habitat. We are aware that all the people who benefited from Habitat houses still have their houses intact. "In fact, the way to build is the way Habitat builds". This prompted the team to ask her as to why they do not build like the way Habitat builds and she had this to say 'we do not have the money to buy the construction materials especially cement for us to construct houses that have a higher foundation. Secondly, even if we had the money, we are not sure if our builders would know how to build the way Habitat builds. May be if they will be taught how to construct that way, may be".

Magret asked the team on the ways how they could be assisted in ensuring that they are also able to build disaster resilient houses. She said that if the government could subsidise building materials especially cement then many people will be able to buy and construct houses that can withstand floods.

"If the government is able to subsidise fertilizer, why not subsidise cement. Added to that, it would also be good if the artisans that live in our villages are trained by Habitat on how to construct disaster resilient houses. I am not sure if our builders know these skills. We need these skills to be locally available. You know we cannot afford a builder to come from places like Blantyre just to build our houses. That will be very expensive. Our builders should learn these skills and build for us here." **Evelesi Utino,** female (does not remember her age, but her first born is around 38 years) has 3 three children but one is deceased therefore she stays with her 5 grandchildren. *"I moved to the area because of marriage and have been a victim of floods every year as my house is affected by floods. I cannot move because there isn't help there, there is nothing for me out there. These people will act like they care when the floods happen by bringing items to us at the schools or churches after a month or so nobody cares what happens next to us. So how is it that they want us to move when there is nothing there, they just tell us to move when there is no house to move to and no source of water available at least here. I am able to do my farming and piece work to feed my grandchildren".*

The survey team asked Evelesi what should be done for them to stay away from flood prone areas. She indicated that even though many people come during emergencies with assistance, the most important thing is to hear what they go through and act on it.

"We have leaders who usually work with the NGOs, but we do not see tangible results especially on issues of land. We ask our leaders, especially the chief, give us land where will stay comfortably, as long as there is farmland, we cannot refuse. But most of the time, they only tell us move without any assistance. Why can't we be assisted in the same way they give us food during emergencies, they should give us land. It should be made clear that it is our land. Some two years there was an incident some members of our village were told to move only to realise that the land where they were told to move belonged to someone. The person started demanding for money. Our friends had no choice but to come back. These are some of the challenges that we experience and therefore prefer to stay here."

The voice of Traditional Authority Ngabu

Chikwawa district is exposed to many hazards that cause disasters every year, impacting thousands of people across the district. Recently, and as a result of population growth, climate change, environmental degradation and other factors, the magnitude, impact, and frequency of these disasters has been on the increase. Overall, the hazards that are commonly experienced include floods, heavy storms, droughts, and dry spells, in addition to the HIV and AIDS pandemic.

According to the Senior Chief Ngabu, apart from the potential loss of life, the main negative impacts of floods, for instance, are damage and destruction of property, agricultural and livestock systems, damage to infrastructure, disruption of social services, internal

displacement, separation of children from caregivers and possible trauma and psychological distress. "Unless measures are found to address these disaster risks, the Malawi Government, its development partners and other stakeholders will continue spending resources that would have otherwise been spent on productive sectors of the economy".

On the reasons why people do not move from disaster prone areas, the chief had this to say:

"There is growing concern during disasters. Immediately after disasters, the government and NGOs are usually concerned, and they seem to care for the warfare of the affected communities. Hence, you will see relief items coming in with message encouraging people to move from the flood prone areas. But the question that we always ask is, have you asked them why they stay in those areas' year-in year-out? Disasters come and go and yet every year we have people who stay in these areas".

"Secondly, there are very little incentives that are given to the people for them to move. The people will need schools, will need a source of livelihood including land for farming. If we are to take this into consideration, then a majority of the people will move".

"Furthermore, there is very little consultation. I am glad that Habitat for Humanity, you have taken this bold move to ask us traditional leaders on why people do not move and what needs to be done. However, I do believe that there is need for more consultations. All communities should be consulted on why they stay in those areas. These are areas are quite different and the socio-economic profiles of our villages are not homogenous".

In addition to that, there is need to follow up on programmes after the relief phase. We have seen a lot of NGOs coming in during the emergency phase but there after there is very little on recovery. My big question, even to you Habitat, is what happens after people have been moved to evacuation centres? That is the question we should strive to answer. As Traditional leaders, we welcome the evacuation centres, however, what will happen to the people after the disaster? Will people stay there forever? Are we going to relocate them? We have to answer these questions in a detailed manner with proper plans so that we do not come up with something that will only encourage people to continue being dependent on NGOs and the government.

In terms of the evacuation centres, there is need to make sure that they do not become places of abuse for women and children, the elderly and the physically challenged. The centres should be spacious enough to accommodate the designated number of families that shall be targeted. This being the case, there is need for the district to have proper data for the villages that will benefit from the rescue centres. Proper data management systems at the district level can help in determining who are badly affected and the sort of assistance that should be provided.

Should the rescue centre be used for trainings on disaster risk reduction, especially building back better, I would recommend Habitat for Humanity should know that there exist a lot of indigenous early warning systems, practices, and beliefs by the community, these have not been studied and documented in detail. Again, trainings, and information on disaster risk management be made accessible to everybody in a form that will be understood and enable people take positive actions to tackle the disaster risks they are exposed to. It is only when people are informed that they can take steps to adopt resilience enhanced practices.

3.2 Barrier to adaptation to better construction methods

There has been training done in some communities to equip Civil Protection Committees with knowledge and skills in Community Based Disaster Risk Reduction using the Sendai Framework for Disaster Risk Reduction (SFDRR) (https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030). Topics covered include understanding disaster risks at community level, strengthening disaster risk governance to manage disaster risks at community level, community, and district investment in disaster risk reduction for resilience, and enhancing disaster preparedness for effective response and to "build back better" in recovery, rehabilitation, and reconstruction at community level. This has enabled Civil Protection Committee Members to articulate all the components learned and come up with action plans for their respective areas to be responsible for awareness, planning and implementation of Disaster Risk Reduction activities. In spite of these efforts, there are still significant gaps in improving construction that is resilient to occurrence of floods.

The main barrier that hinders poor communities from adapting better construction methods (build back better) is poverty. These households have no or lack access to proper housing materials /resources. Our interaction with the committee members surveyed revealed that lack of resources is what hinders construction of such houses, even though communities are aware of preventive methodologies. As highlighted in the case studies above, the communities are willing to construct according to safer housing guidelines. However, this can only happen if the materials are easily accessible and affordable.

At the moment, there are no successful applied strategies to improve housing quality at that level. The closest is the promotion of basic housing standards like raised height of foundations, for example, to a minimum of 500mm high. In addition, HFHM is the only player that was mentioned by the respondents as providing houses that are resilient to disasters. However, they were not aware of how they could benefit from the programmes.

3.3 Income/Poverty incidence in the study areas

Analysis of the population shows that 74.1% of person's aged 10 years or older in Chikwawa District are economically active. Sixty-three (63.1%) per cent of the population are subsistence farmers with a further 10.7% being employed in other activities⁶.

Idiosyncratic and community-level shocks have serious implications for poor households' income and overall well-being. Job loss, disease, and death of a family member are considered to be idiosyncratic in nature, while crop disease and extreme weather events are examples of common shocks. These are very common in Chikwawa district. Therefore, not only is the assessment of vulnerability critical in the context of climate change, but it is even more relevant as 51.5% of Malawians lived in poverty in 2016. This rate is even higher (59.5%) among rural households who tend to be the most affected by weather shocks as is common among the study population (Malawi NSSO and World Bank 2018)⁷.

Malawi suffers from recurrent weather shocks that are detrimental to poverty reduction efforts. The latest shock was tropical cyclone *Idai* that hit Malawi and neighboring countries in March 2019 and led to devastating floods. The post-disaster needs assessment (PDNA) estimated that 500,000 farmers or small businesses had their income affected by this event (Malawi Government, 2019⁸).

The impact of droughts and excess rainfall on the welfare of Malawian households shows that exposure to these shocks decreases households' consumption and elevates their vulnerability to poverty. Weather shocks have severe impacts on welfare of households and push non-poor households into poverty⁹. This phenomenon has worsened the vulnerability of households in Chikwawa in general and the study areas in particular.

These households are characterized by being male and female headed. Households with female or less-educated heads are poorer on average. As expected, large households and those with a large share of dependents (the elderly and children) tend to be poor. Residing in rural areas is also associated with a high poverty rate. Employment in the services or industrial sector and asset ownerships—farm plots, houses with toilets, access to services such as electricity—all correlate with higher welfare.

3.4 Existing community level structures

The study established existence of the community structures that are currently involved with the management of disasters issues in their respective communities. These include the Area Development Committees, Village Development Committees and specifically the Civil Protection Committees (CPCs) at Traditional and Group Village Headman level. These committees were instituted through the establishment of the National Disaster Risk Management policy whose aim was to ensure the participation of local people in disaster management. Overall, the ACPC and VCPC are mandated to deal with all activities related to disasters at traditional and Group Village Head level, respectively. Although this is the case, it is important to mention that these Committees do not handle all cases of disaster

⁶ Chikwawa District Council Socio-Economic Profile 2017-2022

⁷ Malawi NSSO (National Sample Survey Organisation) and World Bank. 2018. "Methodology for Poverty Measurement in Malawi (2016/2017)." Working Paper.

⁸ Malawi Government. 2019. *Malawi 2019 Floods: Post Disaster Needs Assessment (PDNA)*.

⁹ Baqui , S and Fuje, H (2020). Vulnerability to Poverty Following Extreme Weather Events in Malawi. World Bank

management alone, hence they work in liaison with other committees for them to effectively carry out their duties.

Briefly, here are some of the main functions of the CPCs.

> District Civil Protection Committees

The District Civil Protection Committee oversees all matters relating to disaster risk management at the district level. This includes coordinating and facilitating collaboration between partner organisations to ensure efficiency and effectiveness in operations and activities undertaken to mitigate the impact of disasters.

> Area Civil Protection Committees

The Area Civil Protection Committee oversees all matters relating to disaster risk management at the area level. This includes ensuring that targeting for relief is effective and that operations involving disaster preparedness, mitigation relief and recovery are undertaken transparently and efficiently.

> Village Civil Protection Committees

The Village Civil Protection Committee oversees all matters relating to disaster risk management at the village level. This includes ensuring District and Area Civil Protection Committees are alerted about disasters through reporting and monitoring events, in addition to transparent selection of beneficiaries and distribution of relief items.

The CPCs have varying degrees of strengths and weaknesses.

Strengths of community level structures

The main strengths:

- a) Trained in various relevant areas including management of early warning system and community-based flood risk management
- b) Requisite capacity to respond when disasters strike by moving people to safe areas using canoes (schools, churches & other improvised temporary sites tend to be the first places people go when a disaster strikes)
- c) Capacity to build early warning awareness
- d) Sensitised on infrastructure standards (to make them resilient) and site selection and how to make use /engage local artisans

Weaknesses of community level structures

The major weaknesses are:

- a) Not all structures are covered in the flood risk management training.
- b) There is limited access to materials and equipment for early warning, disaster management, response, and recovery such as boasts, tents, personal protective equipment, light, and mega speakers.
- c) Other capacity gaps include drills in response and lack of community contingency and response plans

3.5 Evacuation centres

3.5.1 Existence of evacuation centres

Chikwawa District is one of the districts in Malawi that experience floods and drought almost yearly. As such structures that have to deal with such disasters have been put in place either

as make-shift or purpose built. Most of the existing evacuation centres are improvised such as schools, churches, and school grounds. GVH Chikuse, an island on the Shire River, annually seeks refuge at Illovo Ground in Nchalo where Illovo has tents, lights and water supply handy to respond and support this community.

The study established that there are currently conventional purpose-built rescue centre are located at TAs Makhuwira, Ngowe, Mlilima, and Katunga; the one at Katunga is under construction by UNDP.

Consequently, TAs Lundu and Ngabu, where this study focused were priority TAs together with Masache. HfHM was allocated these TAs by the Chikwawa District Council with the specific VDCs of Tomali, Bester, Chabuka, and Sekani under TA Lundu and Jombo, Nkhawazi, and Kholongo under TA Ngabu. Out of the 7 VDCs, 5 of them were sampled for this study.

3.5.2 Ideal Rescue Centre

Based on the past performance of similar structures/facilities, the ideal centre needs to have the following:

- a) Located at a high raised ground in excess of 3m
- b) Well covered structure
- c) Segregated structures for male and female
 - i. Separate bathrooms and toilets for men and women in recognition of gender and privacy
 - ii. Adequate separate shelter rooms for men and women
- d) Kitchen area
- e) Washing rooms
- f) Access to potable water source
- g) Mobile health post
- h) Access to roads
- i) Access to electricity for security and economic activity
- j) Proper waste disposal
- k) Close to the targeted villages for ease of access in emergency situation
- I) Durable so that it lasts long
- m) Ownership fully granted to community

Currently, the rescue centres standard as the one in use by UNDP remains an ideal one and it has had input of all stakeholders.

3.6 Socio-economic benefits of rescue centres

There are various benefits that are envisaged to come from the rescue centres. These include the following:

- a) Less disruption to schools and churches which currently serve as improvised evacuation centres.
- b) Ease of management of the displaced persons to administer all the needed services in one place under the centre.
- c) Remedy for land constrained people to access shelter.
- d) Creation of employment to surrounding communities during construction phase, during service delivery when disasters occur as well during post-disaster use.
- e) Improvement in health and nutritional status of displaced people due to better management of disaster response.

3.7 Community ownership to development of rescue centres

Past performance of the evacuation centres has revealed that communities are willing to contribute to a cause that benefits them. Consequently, the centres have been community-supported wholesome. The communities paid for local artisans involved in the structures' construction; there has been enough time for mobilising local building materials/resources; and food for assets for resource mobilization. There is inherent belief that assets attract investments within the communities hence any development that promises creation of assets becomes attractive and solicits unwavering support from the communities.

Similarly, when the study team engaged different VCPCs on the development of the rescue centres, the communities pledged different ways that would make the construction of the rescue centres a reality. These include the following:

- a) Local artisans
- b) Materials and unskilled labour mobilisation
- c) Provide water during construction
- d) Monitor progress of work
- e) Provide land for the site
- f) Awareness raising among communities about evacuation
- g) Provide security of the facility when constructed
- h) Conflict feedback mechanism between the community and contractors

3.8 Rescue Centres' use beyond disasters

There are various anticipated use of the rescue centres in times when there are no disasters. These centre on serving other developmental functions managed by the community and offering multiple benefits to the public at large. This however will have to strike a balance of providing a public service and sustained usability of the facility. Each of the five communities has its own priority as elaborated below. The general picture shows the following being preferred alternative uses:

- a) Meeting point/place, for example, for distributing items to community members
- b) Resource centres
- c) When near school, it can be used as Community-based childcare centre (CBCCs), additional classroom, or nursery school
- d) Community hall used at a fee for services (as income generating activity) such as meetings, weddings, church gatherings, entertainment (video shows) and Community-Based Organisation (CBO) activities to be used for maintaining the structures
- e) Community makeshift under-five Clinic or health post
- f) Seed bank/warehouse at fee
- g) Traditional Authority's Office
- h) Makeshift court
- i) Youth centre to keep the youth busy

3.9 Centre Management Structure

Management of the facility hinges on having a very vibrant and thriving management structure. Thus, the study delved into this aspect and the following were proposed strategies and a blend of them is likely to provide a better fit which vary from the prevailing situation of each community contingent on its capacity and innovation.

Multi-stakeholder facility management committee to oversee structure management on rotational basis of term of office drawn from collaborating stakeholders. It can also be select management committee for the facility drawn from members of different structures within the community such as VCPCs and VDC, etc. these will have to be trained in management and maintenance.

The committee may be supported by employed staff depending on the revenue streams of the facility. These can be augmented by regular community contributions, funds or proceeds from communal gardens.

3.10 Centre Sustainability

The sustainability of the rescue centres can be guaranteed through various ways from the initial stages at conception through to maintenance after construction through enhanced management by the Village CPCs. These are some of the key strategies:

- a) Local authorities must take ownership of the interventions for sustainability. This must be pursued through proper and sustained coordination by key district stakeholders such as Community Development and Social Welfare, District Lands Office, Buildings Supervisor, and Forestry. This extends to involvement of the district council through the Directorate of Public Works and Buildings including advertising of works at district level
- b) <u>Community ownership investment is key</u>: the communities should be engaged from the onset. This may include contributions from the community such that certain portion of contractual obligation must come from within community. Communities are able to contribute land, unskilled labour, materials, monitoring and basic supervision of on-going implementation works
- c) <u>Engagement with elected officials</u> such as members of Parliament and Councillors and work with them so that these centres' maintenance costs can benefit from Constituency Development Funds
- d) <u>Training</u> on how to manage structures in collaboration with other stakeholders
- e) Choice of the <u>post-disaster use</u> enhances the effective use that guarantees usable state of the facility. For example, current centres that are partially used as Teachers Development Centres have been able to put in place a system to manage the facility.
- f) Community contributions to form fund to augment community-based income generating activities from the facility. Currently some VCPCs, for example, Nkhwazi, already solicit monthly contributions from the community at MK300-MK500 per household per month.

3.11 Community Based-Flood Risk Management improvement

The study also looked at ways of improving community-based (CB)-Flood Risk Management (FRM). The following are the key ones to enhance CB-FRM:

- a) Acknowledgement of community knowledge: it very paramount that indigenous knowledge of the communities is acknowledged. This is especially crucial for the community specific entities as key informants and opinion leaders in their own right.
- b) Focus on locally available resources for early warning interpretation so that this goes beyond river gauges
- c) Documentation of Indigenous Knowledge to inform community based Early Warning System (EWS) from participatory vulnerability and capacity assessment which captures a lot of issues which are not currently comprehensively documented yet which can support existing scientific understanding

3.12 Linkages with other actors

At district level, DCPC platform exists where all other actors are represented. These linkages are through monthly coordination meetings and other regular mechanisms of sharing of experiences and information. This is very vital in informing this process of developing the rescue centres which fits within the existing framework in flood response, risk management, and resilience building.

The current crop of rescue centres are very improved types which are a direct result of sharing of experiences based on the coordination among the actors in disaster risk management continuum.

3.13 Land Tenure Issues

Most of the land in Chikwawa is under customary ownership. Customary Land is all land falling within the jurisdiction of a recognised Traditional Authority, which has been granted to a person or group and used under Customary Law. This land is owned and controlled by Chiefs in trust. These include arable dry land, cultivated land, and arable wet land. The primary use of this land is for settlement and agricultural activities for people. Its secondary use could be a source of income.

Thus, from the preceding, customary land rights exist and are recognized as such. Local people also accept these rights, which are based on the occupation and use of land. This offers major advantages in the absence of formal documentation. It also gives weight to oral testimony in case this is required and promotes finding local solutions to problems.

In effect a natural disaster such as floods, in addition to loss of life and the severe impacts on peoples' livelihoods, have also an impact related to the disruption of land tenure systems and property loss. After a natural disaster, the access to land and security of tenure are very often damaged since in most of the cases the affected people are unable to access their land either for production or for housing purposes. Some of the cases are related to the destruction of land tenure records like land titles, land registry records, identity cards. They can involve the total or partial destruction of physical evidence of property boundaries; the disappearance or death of people who have the memory of property boundaries. This calls for the local leadership to embrace the task to minimise possible conflicts after a disaster over land tenure that might appears at return of displaced families, as well as conflicts over inheritance of land rights.

From the study results, there is land pressure and land disputes are very high in Chikwawa district mainly on Customary Land Ownership. This is mainly attributed to intermarriages between people who practice different systems of marriage, namely, patrilineal, and matrilineal which recognise land and property inheritance through male. Worse still, floods increase the pressure on viable agricultural land, by reducing the amount of land which can be grown on, as a result commonly following a drastic flood, people are forced to search for new land. Abuse of trust ownership of customary land vested in the local leaders; they tend to favour a certain group of people in the community. This is one of the conflict potential areas in the district.

Even though land tends to be passed through the maternal lineage, it was indicated from the discussions that this traditional set up is slowly losing its steam giving room to land tenure problems. However, it was underscored that the land allocated to the rescue centre sites will not face these land tenure wrangles as the facility is for public use than individual. It is recommended to lease land for the centres through CPCs as trustees and Traditional leaders as patrons.

4.0 TECHNICAL ASSESSMENT OF POTENTIAL RESCUE CENTRES' SITES

4.1 Centre design aspects

The technical engineer led the team to visit five villages based on the earlier community engagement and consultations in liaison with the HfHM Chikwawa office. These were Tomali Traditional Court, Bester Village, Chabuka 1, Nkhwazi and Kholongo Village. The description below shows findings on the respective sites.

The site visits were intended to establish the following data on completion of the inventory:

- Topography of the area
- Proximity of area to services: access roads, Portable Water and, electricity inclusive
- Flood history of chosen locations
- Availability of building materials, especially bricks

4.2 Tomali GVH

This is a new site with original location being approximately 900m away on the south side. It is located near Mbewe EPA staff houses and Tomali Traditional Court. Tomali community is part of the Shire valley Irrigation Project with an irrigation canal close by. The site has an advantage of its close proximity to more houses, hence making it easy to for community residents to access the facility during floods.







The site above shows the market and abandoned court building beyond. The site is near HFHM pilot building in vicinity.

Figure 1: Tomali proposed site for rescue centre

The area is approximately 50mx100m and slopes gently from South West to North East and has the earth access roads. It has shrubs and trees throughout. It is surrounded by market on the North West and Housing on the South East. The site has both borehole and electricity including the ADMARC marker.

According to the VCPC Chairman, he could only recall high floods hit that area in 1997 when water level rose more 1.2m above the ground level.

4.2.1 Community rating on post-disaster use

The communities around this site has 401 households. Out of these during their community meeting held on 1st October,

the preference is the following uses in order of priority:

- a) Community hall (76.2%)
- b) Nursery school (22.3%)
- c) Village seed bank (3.3%)

4.3 Bester GVH

This village is located behind Illovo Sugar Factor off Shire River. This site is located towards Namicheni Primary School near agricultural demonstration plot within the community.

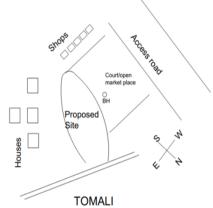


Figure 2: Site sketch for Tomali VCPC Rescue Centre site

Figure 3: Bester VCPC site



The area is approximately 70mx100m and slopes gently from South West to North East. It has access earth roads. The vegetation on this site is that of shrubs of Jacaranda species and it has electricity but no working borehole. Apparently, the available borehole was damaged and has since not been repaired.

According to the GVH and his team, whom we met, the area sheds off water due its higher elevation. That was the more reason the area was chosen, being naturally less flood prone

4.3.1 Community rating on post-disaster use

The communities did not grasp the rating task but just enumerated their envisaged uses as follows without prioritizing:

- a) Under-five and antenatal clinic
- b) Nursery school /CBCCs
- c) Community hall for meetings, entertainment (video showing), and weddings
- d) Renting out

4.4 Chabuka 1 GVH

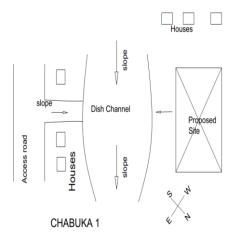
The Chabuka 1 site area slopes gently from South West to North East. It has access earth roads and shops/houses on the South East and houses on the west. The vegetation on this site is that of shrubs of Jacaranda species and the site has tap water from a solar borehole pump. It however has no electricity. The site has a big dish channel on one side and according to the GVH of the area, this site sheds water off into the dish, hence is naturally a relief zone during disasters.

Figure 4: Chabuka 1 VCPC site



The site has a dish channel in view on the left with the site on right.

Figure 5: Site sketch for Chabuka 1 VCPC Rescue Centre site



4.4.1 Community rating on post-disaster use

Chabuka 1 GVH has 488 households with total population of 2364 people comprising 183 male, 305 females, 928 girls and 948 boys. In terms of priority uses of the facility, these are as follows:

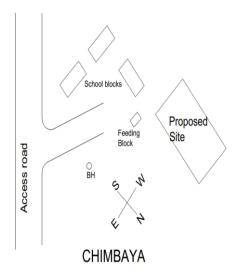
- a) Grain storage (50.7%)
- b) Nursery school (25%)
- c) Community hall (15.6%)
- d) Video show (8.6%)

4.5 Nkhwazi GVH

The area is in GVH Nkhwazi and is located adjacent to Chimbaya Primary school. It is approximately 80m by 60m and slopes gently from South West to North East. It has access earth roads. The vegetation on this site is that of shrubs of Jacaranda species and the site has borehole nearby. It however has no electricity.

According to the village committee representative that we met; the area has low risk of floods due to being slightly on higher elevation than the surroundings. He reported that the school was actually being used as a relief evacuation centre during the floods.





4.5.1 Community rating on post-disaster use

Senior GVH Nkhwazi has a population 2505 households with at total population of 9901. The ranking of shelter use in order of priority is as follows:

- a) Under five clinic /antenatal clinic (76.9%)
- b) Multipurpose community hall (70.7%)
- c) Distribution centre (69.2%)
- d) Renting out (53.7%)
- e) Storage for community properties (28.1)
- f) Youth centre (14%)

4.6 Kholongo GVH

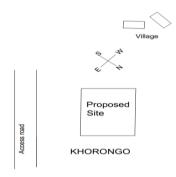
This site area lies on plain piece of land, currently with no vegetation cover. It uniformly slopes from South East to North West. It has access road nearby, some 60metres away. It has no electricity, but we were informed there is borehole some 500metres away.

Figure 7: Kholongo VCPC site



According to the village committee representative that we met; the area has low risk of floods.

Figure 8: Site sketch for Kholongo VCPC Rescue Centre site



4.6.1 Community rating on post-disaster use

GVH Kholongo has a total of 1840 households and a total population of 9774. The ranking of alternative shelter use in order of priority is as follows:

- a) Multipurpose community hall (53%)
- b) Nursery school (26.7%)
- c) Worship centre (20.2%)
- d) Community storage centre (20.2%)

4.7 Technical analysis

The findings presented above do indicate the initiative by local committee of various areas in trying to mitigate the effect of the floods by choosing less flood risk area for the relief buildings. This can only be justified by someone who has experienced this over some years.

Also observed is the initiative by the HfHM to provide pilot project for these resilient buildings. From Civil Engineering perspective, the team agrees that the designs to these building must foremost be flood resilient as well as being safety zones.

The respective VCPCs so far have been very careful in selecting these sites based on the past experiences with devastating effects of disasters, especially flooding.

However, floor levels should have adequate plinth above ground level as shown in Fig 7. Residents have to be consulted to give the contractors, history of the area in form of peak flood heights. HFHM has already demonstrated the concept in the few pilot houses built in the area.

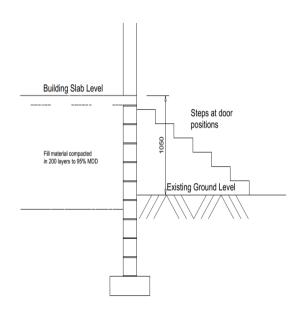


Figure 9: Typical Building X-Sections

Secondly, the foundation must be resilient. This could be in form of environmentally accepted cement blocks or stone masonry walls to floor level.

Currently, the buildings are being built from unburnt clay bricks and the plinth height are very low. This renders the residents vulnerable from flooding into houses as well from collapse of houses.

On our interaction with the committee members on this survey, it was revealed that lack of resources is what hinders construction of such houses, even though communities are aware of such preventive methodologies. The area is generally flat and as such very little cross over structures can be provided to access these relief buildings being proposed.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

The study has provided a basic understanding as to the constraints that limit communities from relocating to safe havens despite the risks that they are subjected to in their residential areas. It has also revealed initiatives by local organisational structures within the communities to mitigate the effects of the floods. These are anchored in awareness raising as well as helping in ensuring resilient structures are in place. This experience can only be justified by someone at community level who has gone through these scenarios over some years. HFHM's pilot project in the areas has augmented this drive by exemplifying the need for resilient buildings and demonstrating the concept in the few pilot houses built in the area. From Civil Engineering perspective, the team agrees that the designs to these building must foremost be flood resilient as well as being safety zones.

Using the vast experiential learning, the respective VCPCs have carefully identified potential sites based on the past experiences with devastating effects of disasters, especially flooding.

From the building technical point of view, currently, the buildings put up by the community members are generally being built from unburnt clay bricks and the plinth height are very low which exposes residents to vulnerability from flooding into houses as well from collapse of houses. Discussions with communities corroborated by key informants revealed that lack of resources hinders construction of resilient structures despite communities being aware of such preventive methodologies.

As part of next steps regarding the study, the report will be disseminated through national stakeholder which is part of the drive to set advocacy of issues around the safe havens and disaster resilient construction in general and rescue centres in particular.

Depending on the chosen designs and the area to put up rescue centres for each site, a detailed Environmental Impact Assessment will need to be carried out for the proposed centres according to the guidelines set by the Environmental Management Act.

8.2 Recommendations

Study Recommendations

To further enhance future rescue centres' impact and sustainability, there is need to:

- a) Improve adherence to technical specifications of the rescue centres that appropriately support the affected displaced population's safety. In the proposal to the Lloyd's Charities Trust, HFHM indicated that the rescue centres would be used as a hub for information provision or training centres for local artisans on constructing disaster resilient houses as well as providing safer housing guidelines. This should be encouraged and implemented as it was reported by the communities that they do not have many skilled artisans who can construct disaster resilient houses like the ones promoted by HFHM.
- b) The rescue centres should be used as training facilities to help equip communities to build back better through the integration of local artisans modelled on the disaster resilient construction. In so doing, the building capacity of communities who live in flood prone areas to build safer and better housing as one of the means to reduce vulnerability to disasters through awareness, and on the job training of local artisans, construction of demonstration houses and production of an illustrated building manual for use by communities and others.
- c) Include a training package for the VCPCs so that more of them are well versed in the flood risk management continuum.
- d) **Intensify supervisory visits and follow-ups to institutions running the facilities as part of coaching**. The construction of the rescue centre alone will not be enough to leave the communities to manage the facilities on their own. HFHM should make efforts to supervise intensively during the first 6 months and then reduce on the supervision while empowering the communities to manage the facility.

e) HFHM should use the findings of this report for advocacy and awareness drive at community, district council, and national level in disaster resilient constructions standards to enhance sustained dialogue and engagement. The study found that there are issues that can be advocated for at the district level and there are other issues that can be advocated for at national level. For instance, the isse of emergency relief going into recovery can be addressed through the district structures whereby some regulations and standards can be put in place and agreed upon. On the other hand, if HFHM were to engage government on the provision of subsidised building materials, this would be done at national level. Among other issues, HFHM should be engaged to promote / subsidise production of affordable construction and products using locally sourced (affordable and appropriate) materials and techniques. Continuous market assessment and evaluations should inform the supply chain demands.

f) There is need to conduct community Score Cards to bring out issues of Disaster Management in the communities and bring duty bearers respond to some of the issues to be raised by the communities. Such stakeholders to include Illovo Sugar Company.

The Community Score Card (CSC) process, sometimes also known as a community voice card, is a community-based monitoring tool that enables citizens to voice their assessment of a priority public service. The CSC is an instrument used to elicit social and public accountability and increases the responsiveness of service providers.

Primary Purpose of the CSC in Disaster Management in Communities

• To assist communities and local governments in monitoring and reviewing progress and challenges in the implementation of the Disaster management interventions within the communities.

• To enable the development of a local disaster risk reduction strategy (resilience action plans for the community).

The benefits of using the CSC in Disaster Management in Communities

• Increase awareness and understanding of resilience challenges.

• Enable dialogue and consensus between key stakeholders and duty bearers who may otherwise not collaborate regularly.

• Enable discussion of priorities for investment and action, based on a shared understanding of the current situation.

• Ultimately lead to actions and implementable projects that will deliver increased resilience for the community over time.

- g) There is need to engage communities in the security of land tenure through the participatory land use planning. This process will ensure that the land to potential areas where communities have to be reallocated will be properly demarcated and judicated and families which are willing to move are given land certificates.
- h) The communities, through the local artisans, can also be given an opportunity to participate or comment on the housing designs suitable for their locality. During design formulation affected communities can be asked to participate, key will be local artisans and technicians who normally do the constructions. Formulated designs can be engineered to meet local regulations as well as government regulations Ministry of lands and housing. Designs should allow for expansions whenever individual families have resources. We do understand that currently, HFHM has programmes which they

design houses, with the intention that the homeowner will be able to expand after finding the necessary resources.

- i) To facilitate the recovery in the housing sector, an enabling environment should be created, with processes, policies, guidelines, and legislations being part of structured documented mechanisms to facilitate building back better. However, this should be done with the realisation that rural communities are diverse and where communities have been adversely affected. It is also necessary to remain aware of how measures to address housing, land and property rights can enhance recovery. The emphasis should be on the provision of a safe, secure, habitable shelter with stable land tenure to provide both physical and psychological sense of security. These factors would contribute to enhancing active participation in livelihoods activities and lead to increased enrolment in schools by school-aged children. Legal assistance should be provided to affected communities to facilitate the strengthening of existing cultural, community and government policies to achieve the same purposes. If implemented appropriately, communities will be able to build back better to achieve improvements in both social and economic terms.
- j) Strengthen coordination between stakeholders to inform effective decision making and early actions related to the development of the vibrant regulations on building back better. HFHM, the Government and other stakeholders, including members of communities, should work together to develop systems and ways of how they can build back better using locally available resources. This could be done through the smooth information flow that would enhance national capacities to manage and monitor processes at the district level and to communicate information related to the achievement of the same.

ANNEXES

Annex 1: Terms of Reference RESCUE CENTRES FEASIBILITY STUDY IN CHIKWAWA DISTRICT

1.0 Background

Habitat for Humanity Malawi (HFHM), affiliated to Habitat for Humanity International, is a non-profit housing organization that helps low-income people in Malawi to access decent housing. HFHM was established in Malawi in 1986 and has assisted over 41,000 families through different housing solutions and is a leading NGO in Malawi addressing poverty housing amongst low income and vulnerable groups. HFHM operations are spread out throughout Malawi specifically in Mzuzu, Dowa, Lilongwe, Salima, Blantyre, Mulanje and Chikwawa. In addition to the provision of housing solutions to vulnerable families, HFHM is also a key stakeholder in WASH and Disaster Risk Reduction and Response. Following the severe flooding and devastation caused by Cyclone Idai in March 2019, HFHM in collaboration with **Habitat for Humanity Great Britain (HFHGB)**, sought funding from **Lloyd's Charities Trust** to support families in Chikwawa district to improve their resilience to future flooding. The project will utilise community-based disaster risk reduction strategies to:

- Build understanding of why some communities choose to live in flood-prone lowland areas
- Undertake a training programme designed to enable communities, authorities, and other stakeholders to prepare, withstand and recover from future disasters
- Construct rescue centres for families to access training and materials to 'disaster proof' their homes, and allow selected families to seek refuge during emergencies

Therefore, HFHM seeks a qualified consultant / team of consultants to carry out a feasibility study in Chikwawa district in order to demonstrate how the project can achieve the above stated objectives.

2.0 **Purpose and Objectives of the Assignment**

The assignment involves conducting a feasibility study in Chikwawa district, to assess and determine the type of rescue centres that HFHM intends to construct in the district and what the communities could use the rescue centres in times when there are no disasters. The consultant will recommend also appropriate designs for the rescue centres and their management structure based on consultations withrelevant stakeholders. The Feasibility study will also assess the socio-economic benefits of the rescue centres for the targeted communities taking into consideration the disasters that frequently affect the district and the aspirations of the communities for their use. The study will also identify barriers preventing people from adopting better construction methods for "building back better" and linkages to other past and present activities in Chikwawa district aimed to improve flood response, risk management and resilience of the target communities.

3.0 Specific objectives of the study and Scope of Work

The study should meet the following specific objectives:

- i. Identify what is preventing poor communities from relocating and/or adapting better construction methods (build back better), and what are successful strategies applied locally to improve housing quality.
- ii. Analyse strengths and weaknesses of the existing at community level structures related to disaster response, risk management and disaster resilience.

- iii. Identify ways to improve community-based flood risk management (CB-FRM) strategies in order to improve the trainings and engagement with the communities planned under the project.
- iv. Identify linkages with other agencies' (government, international organisations and NGOs) work in Chikwawa district (and adjacent regions if applicable) in flood response, risk management and resilience building to ensure the project complements and builds on their work.
- v. Provide background information, including general description of the project areas, including rescue centre locations, use, size, number of beneficiaries, plot sizes, management structure. In particular, identify centre space configuration fit for purpose during emergencies as well as during non-emergency periods.).
- vi. In close consultation with the communities, identify suitable locations for the rescue centres, and determine the centres' capacity. Also determine access routes from villages in flood prone areas and calculate accurate distances between the villages and the construction site.
- vii. Assess water availability, quality and supply reliability, sanitation options and hygiene issues around the villages and in proximity to the proposed construction site(s).
- viii. Upon consultation with communities and local authorities, identify land tenure issues of the preferred locations for the proposed rescue centres.
- ix. Review available reports on the performance of past/other rescue centres and technical designs of similar rescue centres, if available in the district or region, and assessments of the performance of these existing structures.

4.0 Deliverables

a) A report that includes a comprehensive coverage of the study areas, in particular:

- An overview of the situation in the targeted areas, an analysis of past performances of rescue, if any, opportunities and strategies for their utilisation, justification for centres locations, design recommendation and mechanisms for centres management and maintenance, and a time-bound action plan (with key responsible focal points) to systematically support HFHM in the implementation of the project,
- Analysis of barriers preventing people from adopting better construction methods and recommendations for strategies to overcome them,
- Findings and recommendations for improving community-based flood risk management and capacity,
- Recommendations for improving linkages and leverage of other activities, structures and capacities related to flood risk management in Chikwawa district.
- a) The consultant shall be expected to present the findings and recommendations of the study to National Stakeholders at a conference to be agreed with HFHM.

5.0 Time Frame

The study should take a maximum of 15-man days that include preparation, field work, engagement with communities and other relevant stakeholders, documentation and report writing.

6.0 Budget

The consultant's budget should cover for <u>all anticipated costs</u> to conduct the <u>whole study</u>. This should include all taxes, all operational costs (e.g., transport, lodging, meals) and fees (e.g., consultancy fees).

7.0 Consultant Profile and Experience

Qualifications:

- At least a master's degree in agricultural economics, engineering, economics, communication, social sciences, development studies, strategic management, project management or other relevant discipline with experience in Disaster management and climate change.
- One of the team members should be a Civil Engineer with at least 5 years of work experience in similar assignment.
- Mastery of English communication skills, both written and oral; ability to effectively communicate with a diversified team.
- The ability to work collaboratively with local teams.
- Excellent problem-solving skills and an ability to work within tight deadlines.
- A commitment to excellence in order to meet high quality standards expected by HFHM and its partners.

Experience:

Essential:

- At least 10 years of relevant experience in similar work, preferably in a disaster affected area/setting.
- Proven track record of similar studies.
- Experience and expertise in conducting complex studies in disaster affected areas.
- Experience in land management system operations and housing aolutions in humanitarian response and development contexts.

Desirable:

- Relevant experience and knowledge of working with NGO's or other development partners in humanitarian response with special focus on disaster resilient settlements.
- Knowledge of Malawi disaster context and initiatives.

8.0 Application and selection

Qualified consultant(s) are invited to send their applications to the address below before close of business on **11th June 2020**.

The application shall contain:

- A technical proposal not exceeding 10 pages (excluding work plan and budget) showing the following:
 - Explanatory note on the understanding of the TOR and the reasons for the application.
 - Brief presentation of the methodological approach and organization of the proposed assignment.
 - Activities schedule
 - Financial proposal (a detailed and easy to follow budget with budget notes) on the basis of the TOR, denominated in MK or USD.
 - Cv(s)
- HFHM is looking to identify suppliers with the interest, capabilities, and financial stability to supply the consulting services, as defined in this ToR. All applications will be evaluated based on the following criteria:
 - Quality of the methodological proposal: aspects that will help us to assess their suitability for that, which is proposed in the ToR, quality of the proposal, feasibility, etc.
 - Profile and competencies of the consultant(s): knowledge, experience, composition, and other necessary competencies,
 - Suitability of the financial proposal for the study activities.
- Short-list Selection:

Consultants who have demonstrated their capacity to meet our needs will be contacted via phone and/or email to be notified of their selection to move forward in the process. Consultants, who have not been selected, will not be contacted.

Please send your application to: The Chairperson Internal Procurement Committee Habitat for Humanity P.O Box 1638 Lilongwe For inquires email: <u>info@habitat.mw</u>

Annex 2: List of People Consulted

KEY INFORMANTS

- 1. Lucy Mwase Acting National Director, HFHM, Country Office
- 2. Enisa Sande MEAL Coordinator, HFHM, Country Office
- 3. Donald Manda Resource Development and Partnerships Coordinator, HFHM, Country Office
- 4. Annie Chiumia Disaster Risk Reduction and Recovery Coordinator, HFHM, Blantyre
- 5. William Kachikopa Construction Coordinator, HFHM, Blantyre
- 6. Francis Sande Construction specialist, HFHM, Country Office
- 7. Sothini Nyirenda Programme Analyst (Climate Change & Disaster Risk Reduction) UNDP
- 8. Humprey Magalasi DoDMA Officer, Chikwawa District Council
- 9. Isaac Mdindo Director of Public Works, Chikwawa District Council
- 10. Thokozile Ngwira Director of Planning and Development, Chikwawa District Council
- 11. Chifatso Jere Buildings Supervisor, Chikwawa District Council
- 12. Cecilia Banda Field Manager, Malawi Red Cross Society, Chikwawa
- 13. Frank Mkamanga DRR Officer, Malawi Red Cross Society, Chikwawa
- 14. Martin Chitemango Field Officer, HFHM Chikwawa Office
- 15. Spenser Soko VCPC Chairperson TOMALI GVH
- 16. Watson Solobala
 - Solobala VCPC Chairperson BESTA VH Dwalidi Kholongo VCPC
- 17. Senior GVH Dwalidi
- 18. Senior Chief Ngabu

GVH

	nmunity Members	Gender		POSITION	GVH
1.	Spenser Soko	M	VCPC	Chairperson	TOMALI
2.	Thokozani Banda	F	VCPC	Secretary	TOMALI
3.	Cecilia petrol	F	VCPC	Member	TOMALI
4.	Zione Solijala	F	VCPC	Member	TOMALI
5.	Lameck Lucius	М	VCPC	Member	TOMALI
6.	Amos Falakeza	М	VCPC	Member	TOMALI
7.	Evelisi Sitenala	F	VCPC	Member	TOMALI
8.	Batson Tomas	М	VCPC	Member	TOMALI
9.	Watson Solobala	М	VCPC	Chairperson	BESTA
10.	Matias Lapozo	М	VCPC	Vice Chairperson	BESTA
11.	Hindi Limpu	М	VCPC	Secretary	BESTA
	Ellen Dani	F	VCPC	Vice Secretary	BESTA
	Metulo Kaphilipili	М	VDC	Chairperson	BESTA
14.	Robert Boisi	М	VDC	Vice Secretary	BESTA
15.	Rose Makaiko	F	VCPC	Member	BESTA
16.	McDonald Billiat	М	VCPC	Member	BESTA
17.	Aida Nzondola	F	VCPC	Member	BESTA
	Agnes Mphingu	F	VCPC	Member	BESTA
19.	Million Dafuleni	F	VCPC	Member	BESTA
20.	Godfrey Frank	М	VCPC	Chairperson	CHABUKA
21.	Peterson Harry	М	VCPC	Vice Secretary	CHABUKA
22.	Pencil Chabuka	М	VCPC	PATRON	CHABUKA
23.	Raphael Simbi	М	VCPC	Vice Chairperson	CHABUKA
24.	Feston Kendulo	М	VCPC	Member	CHABUKA
25.	Anni Clemence	F	VCPC	Member	CHABUKA
	Office Daki	М	VCPC	Member	CHABUKA
27.	Mavuto Sozinyo	F	VCPC	Member	CHABUKA
	Henry Kennedy	М	VCPC	Member	CHABUKA
	Aluveshita Biton	F	VCPC	Member	CHABUKA
30.	Abraham Kambewa	М	VCPC	Secretary	NKHWAZI
31.	Mwaiwawo Zuze	F	VCPC	Vice Secretary	NKHWAZI
32.	Rose Nkuluzado	F	VCPC	Chairperson	NKHWAZI
33.	Andrew Fombe	М	VCPC	Member	NKHWAZI
	Yamikani John	F	VCPC	Member	NKHWAZI
	Ronnex Elias	М	VDC	Chairperson	NKHWAZI
	Gracious Lucius	M	VDC	Treasurer	NKHWAZI

Community Members: VCPC/VDC Members Under TA Ngabu & TA Lundu

37. Magaret Nkwamba	F	VDC	Member	NKHWAZI
38. Lydia Kautale	F	VDC	Member	NKHWAZI
39. Getrude Chipembe	F	VCPC	Chairperson	NKHWAZI
40. Million Mindazi	F	VCPC	Vice Chairperson	KHOLONGO
41. Chrissy Vasco	F	VCPC	Secretary	KHOLONGO
42. Andrew Fundulani	М	VCPC	Vice Secretary	KHOLONGO
43. Florence Nansimba	F	VCPC	Member	KHOLONGO
44. Alufandika Story	М	VCPC	Member	KHOLONGO
45. Kamwendo Chataika	М	VCPC	Member	KHOLONGO
46. Charles Misongwe	М	VCPC	Member	KHOLONGO
47. Hilda Wilson	F	VCPC	Member	KHOLONGO
48. Lucy Alufandika	F	VCPC	Member	KHOLONGO

Annex 3: References/Glossary

- 1. Malawi Government (2019). Disaster Risk Management for Resilience Programme (DRM4R) 2019-2023. Lilongwe
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Annex 4A: Interview Checklist/Tools - Key Informants

RESCUE CENTRES FEASIBILITY STUDY IN CHIKWAWA DISTRICT

KEY INFORMANT INTERVIEWS CHECKLIST

- Why do some communities choose to live in flood-prone lowland areas?
 - What prevents poor communities from relocating and/or adapting better construction methods (build back better) DPD, DPW, LANDS, RC, CADECOM, TA
 - What are successful strategies applied locally to improve housing quality? DPW/LANDS/TA
- When disasters have struck, how do communities respond?
- Explain strengths and weaknesses of the existing at community level structures related to disaster response, risk management and disaster resilience
- Are there emergency evacuations /rescue centres?
 - What would an ideal rescue centre be like?
 - Assess and determine the type of rescue centres to be constructed by HfHM
- What contributions would communities/DC make to the development rescue centres?
- What designs would be appropriate for the rescue centres and their management structure?
- What would the communities use the rescue centres in times when there are no disasters?
 - manage disaster by provide safe haven during hazard events
 - o facilitate early recovery
 - serve other development functions managed by the community and offering multiple benefits
- What are the socio-economic benefits of the rescue centres for the targeted communities taking into consideration the disasters that frequently affect the district and the aspirations of the communities for their use?
- How would community ownership be demonstrated to support the efforts of HfHM?
- Mechanisms for centres management and maintenance?
 - Fund?
 - Revenue generation from facility?
 - Rent rooms, Warehousing, Others???
- What are the barriers preventing people from adopting better construction methods and recommendations for strategies to overcome these?
- How do we improve linkages and leverage of other activities, structures and capacities related to flood risk management in Chikwawa district?
- What are the sustainability plan for the facilities?
 - Local authorities must take ownership of the interventions for sustainability
 - Community ownership investment is key
- Identify suitable locations for the rescue centres, and determine the centres' capacity. Also determine access routes from villages in flood prone areas and calculate accurate distances between the villages and the construction site.
 - Assess water availability, quality and supply reliability, sanitation options and hygiene issues around the villages and in proximity to the proposed construction site(s).
- Identify ways to improve community-based flood risk management (CB-FRM) strategies in order to improve the trainings and engagement with the communities planned under the project.

- Identify linkages with other agencies' (government, international organisations and NGOs) work in Chikwawa district (and adjacent regions if applicable) in flood response, risk management and resilience building to ensure the project complements and builds on their work.
- Provide background information, including general description of the project areas, including rescue centre locations, use, size, number of beneficiaries, plot sizes, management structure. In particular, identify centre space configuration fit for purpose during emergencies as well as during non-emergency periods.).
- Upon consultation with communities and local authorities, identify land tenure issues of the preferred locations for the proposed rescue centres.
- Review available reports on the performance of past/other rescue centres and technical designs of similar rescue centres, if available in the district or region, and assessments of the performance of these existing structures.
- Council Quality assurance process

Annex 4B: Interview Checklist/Tools - Community Members

RESCUE CENTRES FEASIBILITY STUDY IN CHIKWAWA DISTRICT

FOCUS GROUP DISCUSSIONS WITH AREA/VILLAGE CIVIL PROTECTION COMMITTEES

- 1) Why do some communities choose to live in flood-prone lowland areas?
 - a. What preventing poor communities from relocating and/or adapting better construction methods (build back better)
 - b. What are successful strategies applied locally to improve housing quality?
- 2) When disasters have struck, how do communities respond?
 - a. Do you think the community can cope during a disaster?
 - b. Is the local council prepared if a disaster happens?
 - c. How do women participate in decision making during disasters?
 - d. How do young people participate in decision making during disasters?
 - e. What is the composition of the Civil Protection Committee-male/female?
 - f. What is needed to make women and men more resilient to disasters?
- 3) Explain strengths and weaknesses of the existing at community level structures related to disaster response, risk management and disaster resilience
- 4) Are there emergency evacuations /rescue centres?
 - a. What would an ideal rescue centre be like?
 - b. Assess and determine the type of rescue centres to be constructed by HfHM
- 5) What contributions would communities make to the development rescue centres?
- 6) What designs would be appropriate for the rescue centres and their management structure?
- 7) What would the communities use the rescue centres in times when there are no disasters?
 - a. manage disaster by provide safe haven during hazard events
 - b. facilitate early recovery
 - c. serve other development functions managed by the community and offering multiple benefits
- 8) What are the socio-economic benefits of the rescue centres for the targeted communities taking into consideration the disasters that frequently affect the district and the aspirations of the communities for their use?
- 9) How would community ownership be demonstrated to support the efforts of HfHM?
- 10)Mechanisms for centres management and maintenance?
 - a. Fund?
 - b. Revenue generation from facility?
 - i. Rent rooms
 - ii. Warehousing
 - iii. Others???
- 11)What are the barriers preventing people from adopting better construction methods and recommendations for strategies to overcome these?
- 12)How do we improve linkages and leverage of other activities, structures and capacities related to flood risk management in Chikwawa district?
- 13)What are the sustainability plan for the facilities?
 - a. Local authorities must take ownership of the interventions for sustainability
- 14)Identify suitable locations for the rescue centres, and determine the centres' capacity. Also determine access routes from villages in flood prone areas and calculate accurate distances between the villages and the construction site.

15)Identify ways to improve community-based flood risk management (CB-FRM) strategies in order to improve the trainings and engagement with the communities planned under the project.