





LILONGWE DISTRICT

VULNERABILITY CAPACITY ASSESSMENT REPORT

FOR

STRENGTHENING RESILIENCE TO DISASTERS IN URBAN AND RURAL MALAWI (STRIM) PROJECT





LILONGWE CITY REPORT

Target Areas: Kawale, Kaliyeka, Biwi, Mchesi and Mtandire

Period: November,2019

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1.0 EXECUTIVE SUMMARY

1.1 LILONGWE DISTRICT

Lilongwe District is the largest District in Central Region of Malawi. The district is bordered by Dedza district to the east, Salima to the North East, Mchinji District in the west, Dowa District in the North and Kasungu in the North western tip and Mozambique to the South West. The total land for Lilongwe District is 6,159 sq. kilometers representing 6.5% of Malawi's total land area. Lilongwe district hosts the capital city of Malawi which owes its name to the river that flows across the center of the district.

Lilongwe District is being traditionally administered by 18 Traditional Authorities. Chewa is the largest tribe (90%) with some pockets of Tumbuka, Yao and Ngoni. Christianity (84%) and Islam (5%) are the major religions with some people practicing other African traditional religion.

Over 90% of the Lilongwe population living in the rural areas derives their livelihoods from agriculture. The rural people carries different agricultural development activities ranging from cultivation of crops, animal rearing, fish farming etc.

1.2 LILONGWE CITY

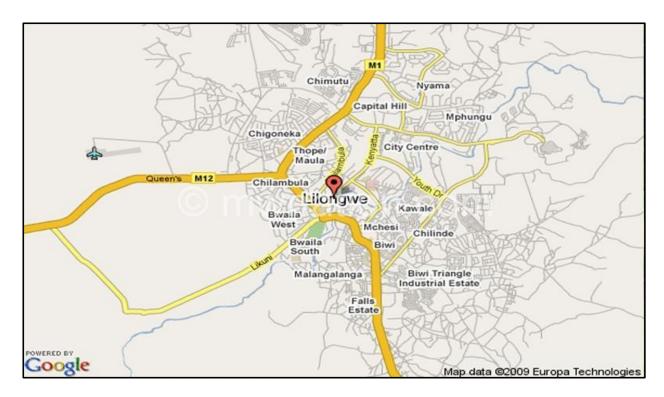
Lilongwe city is the largest city in Malawi and became the capital city in 1975 after relocating from Zomba. Lilongwe has witnessed a high urbanization rate ever since accelerated by the relocation of all government head offices from Blantyre. Lilongwe city is situated at the Centre of a large agricultural area and there are many economic activities taking place. Lilongwe's total land area is 727.79sq km. Major industry for the city is tobacco processing and that 76% of the population lives in informal settlements. Poverty stands at 25% with unemployment at 16%.

Lilongwe's environment consists of natural and manmade forests, rivers and wetlands. Some of the challenges facing the environment are deforestation, poor sewerage system, and high dependence of pit latrines which leads to pollution of underground water. Majority of the residents especially in the informal housing rely on pit latrines for human waste disposal. Though waste management disposal are readily available in the high income areas, the low income do not have these services and that most households in these low income areas dispose their waste in open spaces. Approximately only 14% of the population has access to proper sanitation. The establishment of Directorate for environment in the City assembly was a positive development for the inhabitants of the city. However, the implementation of environmental management policies that was to protect major degradation of environment was a challenge due to lack of capacity and poor governance on the part of the council. There is a common and indiscriminate dumping of waste and that designated waste disposal sites are not well managed.

The population of Lilongwe city in 2008 was 646,750 with an annual growth rate of 4.3%. About 76% of this population is living in informal settlements where the living conditions are deplorable and that residents have little or no access to social infrastructures and basic urban services. The absence of National and local Housing policies and other housing legal frameworks for low income housing and informal settlements upgrading make the situation worse. People are also constructing their slums in the seasonal rivers while in big rivers they have encroached in the banks inside the buffer zones. Increase in sand mining and brick making in the rivers is rising the by increasing the risks of the community.

The main disaster issues in the city according to Lilongwe City Council Draft Contingency Plan and the MRCS VCA findings include (not in order of priority) Strong winds, civil strife, floods, drought, Water related Diseases like Cholera, environmental degradation and disease epidemic.

The major challenge in the management of urban disaster risks according to this VCA is the lack of guiding frame works at the local authority level because as this VCA was being conducted there was no any established official Urban Civil Protection Committee which should be responsible for managing all disaster issues at City/Urban Level. It was noted that the role of disaster management in this city was being viewed as the responsibility of the Department of Disaster Management which did not put a deliberate policy of housing its officers at city council to coordinate disaster functions. (Lilongwe City Draft Contingency Plan 2017)



Map of Lilongwe City

This report summarizes the processes, findings, conclusions and recommendations for the Vulnerability Capacity Assessment conducted by Malawi Red Cross Society in 5 communities of Traditional Authorities Njewa (1) and Tsabango (4) in Lilongwe District. The Communities are in Mtandire Ward where 2 traditional Group Village Heads are existing (Chigoneka and Chibwe) with 17 assigned Block Leaders in TA Njewa while 4 Wards of Kaliyeka, Kawale Biwi and Mchesi in TA Tsabango. This activity was conducted in November, 2019 as part of situation analysis.

2.0 LIST OF PROBLEMS ENCOUNTERED

After going through all the required processes for gathering information through the set out tools, below is the summary of the issues encountered:

- There is no any established Government official organizational urban structures responsible for Disaster Risk Management capable of addressing and coordinating real DRR issues at WARD and City Council Level.(UCPC & WCPC)
- Communities in Kaliyeka, Mtandire, Kawale and Biwi depends on Community Based Disaster Response Teams established by MRCS and remnants of VCPCs. It is therefore a requirement to establish and strengthen the functions of Urban Civil Protection Committees at Ward and City Council Level. These committees shall be responsible for Planning, coordinating and sharing of information pertaining to Disaster Risk Reduction and preparedness.
- The Community in Mchesi never received any DRM messages therefore they don't have any contingency plan. There is no any organization working in the area that deals with disaster issues. MRCS must form a Community Based Disaster Response Team to increase the awareness of DRR issues at community level. Community Contingency Plans shall be made after setting up the foundation.
- Lilongwe City do not have a validated Urban Civil Protection Committee Contingency Plan. There is need to support the development and validation of the Lilongwe City Disaster Management Plan which is still in a Draft form from 2017.
- Though most of these communities live along the flood prone areas of Lingadzi and Mchesi Rivers, they don't have established systems to warn each other of the oncoming floods. Hence there is need to put in place early warning systems whether scientific or indigenous. Installation of manual Hydrometric Meters in the upper part of Lingadzi and Mchesi rivers if necessary. There is also important to increase DRR awareness by promoting reception of SMS weather alert messages from DCCMS to CBDRTs or WCPC.
- The targeted area's land is degraded due to deforestation caused by people burning bricks and sand mining along Lingadzi and Mchesi rivers. Deforestation leads to increased surface run off and excessive soil erosion that removes the fertility of the soils away. Increasing demand for fuel wood, charcoal and building material has been exacerbated by population growth caused by migration of the workforce into the city in search for employment or business opportunities. (Historical profile indicated that each area under study had huge forest reserve that was destroyed during migration of people. It is necessary to deliberately

include tree planting interventions in these areas, establish and strengthen the activities of Village Natural Resources Committees (VNRC) to fortify the protection of trees which can be planted along the river banks and some designated areas. These VNRC shall work closely with CBDRTs and MRCS Volunteers, the local leadership and Ward Civil Protection Committee (WCPC) to advocate the establishment of the by-laws to protect trees and forest reserves. They shall also be trained as pioneers of change who shall advocate their community counterparts to be using recycled papers as firewood or charcoal into their villages. (Training the community in paper briquette making) This can also act as an IGA.

- In all the targeted communities' victims of floods, strong winds or any calamity uses schools, churches and sometimes Community Leaders' houses as evacuation sites. This demonstrated that the communities do not have designated centers for evacuation in times of strife. It is therefore important to support them with construction of evacuation shelter with sanitary facilities.
- Institution and social network communication- the communities except for Mchesi are aware where they can get DRM information or where they can report in time of disasters.
 The 4 targeted communities were able to get and use communication from MRCS & CBDRT Volunteers, AEDO, CDAs HSAs, MET experts, TVs and Radios,

3.0 INTRODUCTION

3.1 VCA BACKGROUND

The Vulnerability Capacity Assessment was conducted in order to investigate and collect data using different set of tools in a participatory manner with an aim of understanding the natural hazards, susceptibility of the community to hazards and other threats, stressors or shock and to find out their capability to cope up with and recover from disasters. Results of VCA shall provide technical initiatives to be undertaken by the community, Malawi Red Cross Society and Other Stakeholders in order to mitigate the impact of disasters and climate change.

Key hazards and health incidences faced by the 5 targeted communities under study according to this VCA are Floods, drought/dry spell, Diseases-Cholera and strong winds.

3.2 PURPOSE OF VCA PROCESS

The main purpose is to identify the key weaknesses of the target communities in relation to DRR and Climate Change, understand how community members perceive risks and hazards to their lives and livelihoods, analyse resources (capacities) and strategies available for them to address or reduce these risks. From the analysis, the project document may be revised to reflect key vulnerabilities and capacities which will be the focus of project implementation.

3.3 VCA Tools used

The assessment used a number of methods that directed the facilitator to systematically collect the required data. Selection of these tools was done by National Supervisors in Mzuzu that planned effectively according to the available resources. The key issues considered when conducting this VCA included the information the project team wanted to collect; the available expertise to implement the tool, *(in this case Malawi Government, Malawi Red Cross staff and Volunteers)*, the actual time required for the exercise to take place; the number of volunteers available to take part on the part of the community *(in this activity VCA number was between 12-15)*. This means that the average total number for the 5 targeted areas was between 60 to 75; Other considerations included presence of branch volunteers, the capacities required to implement the tool correctly, *(training of facilitators was done)* and finally gathering of accurate information, analyzing and interpreting it.

Tools that were used to collect data during this activity were Focus Group Discussion, Community Mapping, Historical Profile, Seasonal Calendar, pairwise ranking and DRM Plan. A brief description of the information gathered using each of the above mentioned tools is summarized as below: -

3.3.1 Focus Group Discussion

Focus group discussion was the primary method used to interact with the community's representatives for data collection. The aim of this technique was to create a conducive environment for discussion, making awareness of the members on DRR and climate change issues and to gain their views on its relevance to their lives and to generate discussions on how to address climate change related problems.

3.3.2 Community Risk Mapping

The first activity that was done after introduction of the activity to the participants was Community Hazard Mapping. In all the five areas the community members were asked to draw different maps by filling in the available digitized map facilitated by MRCS. The Community was able to mark and indicate different features like location of hazard zones such as rivers, hills, and water sources, types of shelter, road networks, bridges, tree woodlot and undesignated evacuation sites such as schools, churches and mosques. The map also helped to identify locations at particular risk such as areas prone to floods or hazards, indicating which groups of people are vulnerable.

3.3.3 HAZARD ANALYSIS

During analysis of hazards in all the five targeted areas a hazard analysis matrix was designed and filled in a chart where hazard historical profile was to be recorded including the severity, frequency, duration and the trends of each mentioned hazard. The community were able to evaluate their existing Early Warning System whether scientific or indigenous. This hazard analysis matrix helped the community to further gather information about what happened in the past and what changes have occurred over time. It was an important tool because it helped the communities to understand what had been happening in their community and how those events have increased their risks and vulnerabilities and strengthened their resilience to disasters. The community finally were ranking these hazards according to the enormity of the problem.

3.3.4Seasonal Calendar

The seasonal calendar opened up an opportunity for VCA facilitators to discuss whether seasons are changing which may have implications for health problems, disasters and livelihoods. This tool helped the community representatives to explore the changes taking place in their area over the period of one year. It was also used to demonstrate weather patterns, such as strong winds, floods or periods of drought, social and economic conditions (including economic recession), public events such as carnivals and festivals and seasonal activities such as harvesting.

A chart was created with the months of the year along the horizontal axis and the events, activities and significant climatic phenomena listed in the vertical axis. This tool was selected to help the communities to identify periods of stress, hazard, disease, hunger, debt and/or vulnerability.

3.3.5 Historical profile

The historical profile in the communities looked at some of the important events experienced by the community members which have some effects on their living standard and the environment. The

communities analyzed major events that had taken place within the period that they remember, particularly since they had settled in their respective areas. They also had opportunity to assess whether there are some emerging changes which could potentially affect them. The only challenge on this tool was memory based because if questions were not carefully asked drastic changes could have been misinterpreted.

3.3.6 PAIR WISE RANKING

Another tool that was used to gather information is the pair-wise ranking. This tool was used by the facilitators for the community to prioritize one option from among many because in all the five targeted areas the community had more than three hazards. The criteria to choose the high ranking hazard is always a problem. Using this criteria the community were able to make their own decision to preposition and rank the hazards in their areas according to the impact they cause.

3.3.7 Disaster Risk Management Plan

During the final focus group discussion, the facilitators asked the community to draft a plan that shall assist them to build their own resilience against the impact of climate variability. The facilitators assisted the communities in the process and finally let the community discuss how their proposed measures could be implemented. This plan acted as a genesis of change regarding the DRR issues in their areas. With the plan established the community were able to handle more uncertain weather / hazard patterns in the period to come.

Using other developed tools, a chart was developed that showed them their points to be considered in the list of issues discussed, the target area, time frame, source of resources and responsible person to lead the community. The DRM plans made showed that the outcome of the VCA exercise conducted was being finalized. The plans enabled the communities to consider emerging issues of climate changes and how they can adapt to its consequences and avoid adding more to already existing problems.

4.0 SUMMARY OF THE VCA RESULTS

Having used all the above stated tools to collect data from the five targeted areas in Lilongwe City, it was noted that the major problem of all the five areas is Flooding followed by Cholera, Drought/Dry Spell and finally strong winds.

Communities in Kaliyeka, Kawale Mtandile, Mchesi and Biwi believed that as much as they are aware of the emerging climate change issues in the country, informal settlements upgrading make the situation worse. People are constructing their slums in the seasonal rivers while in Mchesi, Chimbalame and Lingadzi rivers the community have encroached in the river banks inside the buffer zones. High deforestation rate in all the 5 Wards during migration of people to the city leaves the land bare and unprotected to surface run off while Sand mining and brick making in the rivers is increasing and worsening the situation. Houses remained unprotected to strong winds because the areas understudy have no trees to protect them. Another contributing factor of the trends of flooding in these areas is perpetrated by throwing of debris/wastes in undesignated areas that blocks the river/ stream drainage systems. This uncontrolled throwing of wastes anyhow increases the trends of cholera and diarrheal diseases.

4.1 HISORICAL PROFILE FOR LILONGWE CITY

When recalling of the events that happened 20 years ago, the communities in all the five areas provided the historical information pertaining to their areas as regards to Floods, Drought, Disease outbreak and strong winds. The following information was captured:

4.1.2 FLOODS

It was noted that the river flooding phenomena happened in almost all the targeted areas in the city and normally happened between December and March at a frequency of 3 to 5 years but the trends increased from 2017, 2018 and 2019. Flooding was ranked to be number 1 by all the five Wards of Mtandire, Mchesi, Kaliyeka, Kawale and Biwi. The worst floods happened in the years 2006, 2009, 2012, 2017, 2018 and 2019 rainy season. The most horrible being that of 2018 when more than 400 houses, 21 shops, 2 nursery schools in Mtandire were destroyed (as reported in Lilongwe City Assembly DRM) *Profile)* with 9 deaths reported by the community. Kawale also registered 15 houses while Kaliyeka registered 406 households Biwi registered 32 households and Mchesi registed14 households affected. According to the communities in all the 5 areas the severity and the trends of flooding is increasing as compared to its impact from 2009 when no deaths and property were recorded. The reason for the increase of floods being overpopulation that increases human activities along the river banks such as constructing of houses in undesignated areas like river banks, irrigation farming beyond the river buffer zones, deforestation that leaves the land unprotected and availability of dilapidated slums in the city. During 2019 flooding, though the impact on infrastructures was big when over 162 houses were completely destroyed in Kaliyeka, Kawale, Biwi and Mchesi, there was only one death. This was so because the communities were warned by MRCS-CBDRT volunteers through Participatory Scenario

Planning on 2018-2019 Seasonal Weather Forecast on the expected hazard and were able to move out of the dangerous areas before the floods happened. Other means that the communities got their warning messages on floods were through radios, community meetings and at health centres. Using indigenous and scientific signs the natural indicators of heavy down pour that they stated was the presence of dark clouds in the sky. There was no any formal community structured organized protocol to disseminate the early warning messages in Mchesi . Though the community had other scientific and indigenous early warning systems, complacent on the available information led to more vulnerability.

4.1.3 Cholera

Cholera Disease outbreak was ranked to be number 2 because it was ranked as number 2 in Kaliyeka, Mtandire and Kawale and also was number 3 and 4 in Biwi and Mchesi respectively. The outbreak of Cholera and other water, Hygiene and sanitation related diseases is posing a threat to the five communities assessed. It was noted that Cholera outbreak is increasing in all the areas and that the severity of the disease was felt in 2017 & 2018 when a total of 9 deaths were reported; 4 in Kawale, 2 in Biwi, 1 in Kaliyeka and 1 in Mtandire. The beginning of cholera in the areas was in 2006 and proceeded into the following years; 2009, 2016, 2017, 2018 and 2019 were the worst years.

According to the community it was noted that the trends of cholera/ diarrhoea/water related diseases is increasing yearly and happens from December to April and in isolated areas proceed to June. The warning signs that the area is vulnerable to cholera/ diarrhoea outbreak is the increase of the number of people affected or attending health services, throwing of children nappy's /pampas anywhere and visibility of faecal matter in the streets. The community also reiterated that the common use of unprotected water sources by a good number of people increases the risk of the community to water related diseases.

4.1.4 Drought / Prolonged Dry Spell

The other issue that disrupted the communities' life was Dry Spell or Drought which was registered from 1981, 2001,2002,2004,2014, 2017, 2018 and 2019 in almost all the five areas. According to the sequence and severity of the problem it was reported that all the areas were severely affected with Drought and that the trends is increasing. According to the ranking drought was ranked to be number 3 from Cholera after analysing the whole situation because it appeared to be number 3 in Mtandire, Mchesi Kawale and Biwi. The actual period that dry spell normally affect the community is

January to April when farmers are busy with rain fed farming and that most of the crops are in the garden. Analysing the trends of dry spell it is noted that the issues of dry spell seems to be rising. Community complained of very hot temperatures during rainy season of 2017, 2018 to 2019. It is noted that 2019 seems to be one of the hottest year because winter cropping and irrigation farming faced a lot of challenges. Some Scientific and indigenous early warning indicators such as the low rainfall and persistent prolonged dry spell normally gives them a warning that there would be low harvesting. Continued availability of North Easterly winds denotes that there would be drought/dry spell.

4.2 LOCAL AUTHORITY & STAKEHOLDERS

During the FGD exercise the community explained that the highest level of authority in their areas that handles all disaster issues are the block leaders while in Mtandire it is GVH Chigoneka and other 17 block leaders. The group explained that Politicians (MP) followed by a Councilor normally arrives when they discovered that outsiders have started arriving to the affected area to provide support to the victims. This means in all the five Wards of Lilongwe where the assessment was conducted no politicians took part in disaster risk reduction awareness messages. Analyzing participation of other stakeholders in DRM, it was noted that only Mtandire benefits from other NGOs like CICOD which is doing environmental conservation while PLAN Malawi is doing Education promotion. There is a possibility that City of Lilongwe and UN Habitat may also be involved in DRM- Climate Change interventions.

4.3 Housing & Shelter

The 5 areas under study have basically 2 types of housing design and construction. Some houses are shanty dilapidated constructed 20 to 30 years ago when the areas were just been migrated while in the same category there are others that were constructed using local materials increasing the plight of the households during rainy season and putting them susceptible to collapsing during rainy period or strong winds.. On the other hand, some substandard houses may be made with burnt bricks, with no cement and poor roofing. The other type can be defined as a standard quality of house that may be categorized as low to middle class. The standard type involves construction

of the houses using burnt bricks, cement, and with good strong roofing with at least 3 bedroomed of at least 12 to 15 sq. Meters while the lower class houses are 10Sq Meters.

There are other prominent constructions in the targeted areas like Biwi where a Health Centre was constructed but not yet opened. This Health Centre shall minimize distance covered by the local community to benefit to health services.

4.4 LOCATION OF COMMUNITY SETTLEMENT (WHETHER SAFE OR RISKY)

The location of the community settlement in all the area is at least safe with only a few who reside along Mchesi and Lingadzi rivers.

During this VCA, characteristics of human element at risk to disaster was determined, by physical, social, economic and environmental factors. The group explained that most of the people that are more vulnerable to disaster are the elderly, people with disability, pregnant mother'. Economically the elders cannot find their own money to buy food, clothes or medicine. Sometimes they may be settled in a poor designed and constructed houses which are susceptible to floods or strong winds. They shall always depend on somebody to support them. Physically the elders may also not be able to support themselves to walk to a safe zone. Another group that is affected is the group of people with disability who are discriminated socially. People with disability and pregnant women still need somebody to evacuate them during disasters to a safe place.

In all these areas common emergency public health emergencies that affect the population more is Cholera, All the Wards except for Kawale, do not have Health Centers therefore increased difficulties to be accessed during rainy season especially when Kawale is used as a Cholera Treatment Centre for Biwi, Mchesi, Kaliyeka and Kawale uses Kawale Health Centre or Kamuzu Central hospital while Mtandire uses Area 18 health centers. According to the information collected in other tools like historical profile, the community feels that climate change is real and that they have experienced effects of climate changes in all the areas for the past decade

4.5 Tree Cover

Tree cover is rarely visible in all the 5 targeted locations of Mtandire, Kawale, Kaliyeka, Biwi and Mchesi because most of the trees were cut down during migration of people from rural areas and other district to the capital (to the areas settled) or that some were cut down in order to make charcoals or burning of bricks. Mtandire has potential land for tree regeneration but community need to reinforce and make the bye laws,

4.6 WATER RESOURCES

Each settlement requires portable water for drinking and domestic use. All the five Wards have no water problem because some taps supplied by Lilongwe Water Board are working properly though some community members opt to use some unprotected shallow wells because of financial constraints as shallow wells are cheaper to manage. There are some communal water Kiosks managed by Water Users Association (WUA). It is anticipated that there is always breakdown of Cholera/diarrheal diseases because some of the community members uses unprotected water sources in all the five areas being assessed.

4.7 INFORMATION, EDUCATION AND COMMUNICATION ON DRR

Communities in Mtandire, Kaliyeka, Kawale and Biwi have been getting DRR messages from MRCS, CBDRTs, and MET Experts during Participatory Scenario Planning meetings (PSP) and other gatherings but Mchesi never get any DRR message from anybody. DRR –Climate Change Open days, Quiz, Debate, traditional dances and poems made and conducted in primary schools of Kankodola, Kaliyeka, Kafulu and communities from these WARDS disseminated messages and reached more people.

Some group members reported that they get this information from the radios, TVs, social meetings, funerals and others from school learners. The communities in Mtandire, Kaliyerka, Biwi and Kawale have been participating in DRR activities like in tree planting except for the Mchesi Ward.

4.8 PREPAREDNESS PLANNING

Only Mchesi has no contingency plan. All the remaining 4 communities have their Disaster Management Plan drafted in 2018. There are some focal persons listed who are responsible for monitoring and implementation of these plans and encouraging the community to follow what was put in the plan. The only challenge with these plans is that they are not shared to WCPC or UCPC because as this VCA was being conducted these structures were not existing. There are some

committees (CBDRTs) in the community which complement the works of the UCPC and WCPCs in managing disaster issues where linkages with other stakeholders is attained.

The only community structure that got trained in DRM is the CBDRT and learners from the above mentioned schools with their teachers.

4.9 EARLY WARNING SYSTEM

All the 5 areas under study have no standardized early warning system therefore they do not have the strategy of providing information that allows individuals and communities to protect their lives and property. Though Malawi Red Cross Society through the Community Based Disaster Response Team empowered the community to take appropriate action to disseminate secondary early warning messages provided to the community by MET Experts before an impending disaster situation occurs, the CBDRTs are yet to be trained in Early Warning Systems installation and Interpretation of seasonal Weather Forecast. The only warning systems the community can get is through radios, TVs, and sometimes through message transferring by CBDRTs from MET experts. The CBDRT alerts the community in time of danger. Community members in the 4 areas of Kaliyeka, Kawale, Mtandire and Biwi are familiar with the presence of CBDRTs in their area except for Mchesi that has no any CBDRT Committee.

CBDRTs is responsible for disseminating the alert messages to other community members through community dialogue, door to door visits, community meetings and sometimes uses common grouping taking place in their villages. Some indigenous messages that the community uses are not validated and that it is only individual believes that play roles in following and interpretation of the indigenous warnings.

4.10 EVACUATION CENTERS

In all the 5 communities there are no designated evacuation centers. However in all the areas flood victims used undesignated areas like in schools and churches. Communities from Kaliyeka Ward uses Kaliyeka School, Kawale Ward uses Kawale School and Full Gospel Church, Mchesi Ward uses Mchesi Primary school and Redemption Church, Biwi Ward uses Biwi Primary Shool while Mtandire Ward uses Kankodola School.

In all these undesignated evacuation sites, issues of water and sanitation is only critical when the IDPs are accommodated while school sessions are in progress. There is always congestion and competition in the use of latrines and water taps. Learners suffer as they stand still on line waiting to use latrine. Sometimes these learners opt to defecate openly at the nearest bushes if any or stand tall at the corner of the toilet to urinate. If the project cannot identify designated evacuation centers then there is need to increase the number of sanitary facilities in all the schools.

4.11 RESPONSE SKILLS AND RESOURCES

During discussion with the community about the response skills and other resources four of the five Wards responded that they know the Community Response Team existing into their areas. Mtandire, Kaliyeka, Kawale and Biwi they all have their own Community Disaster Response Teams while Mchesi do not have any.

It was also noted that all the schools within the targeted areas do not have DRM contingency plans except for the 4 communities mentioned above whose contingency plans contain the early warning alerts messages and when to disseminate them.

4.12 DISASTER RISK MANAGEMENT PLAN

After all the tools were administered, facilitators in all the five Wards organized a participatory planning session for the community representatives to plan about Disaster Risk Management. The community were able to pick the hazard that was ranked to be number one as the first to be deliberated. On the chart the community were able to note the cause of the problem and how to address the proposed measures in their plan that could be geared to handle a more uncertain weather related hazard pattern in the time to come. Resources that are required and where to acquire them including the time frame and the responsible person were indicated on the chart. Using the table developed some of the points to be considered in the list of issues were extracted from the VCA adopted tools used. Disaster Risk Management plan was most important outcome of this VCA process. With proper guidance the facilitators ensured that the plans build not only upon

the past experience and historical evidence of disasters but was able to consider about the emerging changing risks

5.0 SUMMARY OF DISASTER RISK MANAGEMENT PLAN PER HAZARD

5.1 FLOOD

As stated above that all the 5 targeted Wards of Mtandire, Kaliyeka, Kawale, Biwi and Mchesi ranked Floods as most hazardous within their area, community selected to conduct VCA made a plan with an aim of mitigating disaster issues that are caused by floods. According to the VCA findings, it was noted that in all the rivers that cause havoc to the community, the river banks have been left unprotected because most of the trees that were there were cut down without discrimination in order to use the trees for firewood, charcoal making and timber for construction of houses. Other contributing factors on floods are continued farming along or inside the buffer zone. These practices leave the soils unprotected such that surface run off is increased resulting into soil erosion. Soil fertility is carried away to the lower land. The barrier to protect water from over flooding is also removed such that when the river exceed its full capacity the running water finds no any resistance to change its direction to other areas. Different interventions to build the resilience of the community towards flooding were planned. The first major activity was afforestation. All the 5 areas of Mtandire, Kawale, Biwi, Kaliyeka and Mchesi planned to plant a total of over 50000. The team planned to establish communal tree nurseries so that each community member can benefit into the tree regeneration exercise. Village natural Resources committees shall be established. Communities in Mtandire, Kaliyeka and Mchesi requested for the introduction of small scale businesses and briquettes making in order to minimize the sand mining and wanton cutting down of trees in the areas.

5.2 CHOLERA

Cholera outbreaks rapidly intensify in densely populated urban slums before spreading to other regions

Seasonality of cholera outbreaks according to the seasonal calendar used under this VCA appear driven by rain-fall induced contamination of unprotected water sources, as well as human activities like open defecation and uncontrolled disposing off of used up children nappies and feacal matter in open areas.

Recent outbreak of cholera as indicated in the hazard matrix showed that in areas of Kaliyeka, Kawale Biwi and Mtandire cholera is increasing while in Mchesi the status seems to be normalized, therefore a need for a sustained preparedness effort and early response capacity to be established at community level is a prerequisite. In all the 5 areas interventions to prevent Cholera breakdown were established and planned.

In their plans, communities decided to conduct cholera awareness meetings, distribution of HTH Chlorine granules or diluted water guard, building the capacity of the committees how to handle cholera cases, Cleaning up exercise,.

5.3 DRY SPELL/DROUGHT

Poor harvest caused by persistent dry spell is also one of the hazard presented during this VCA exercise. Dry spell or drought affect all the cross section of the community members because no any development activity can be done or sustained without food or water. Drought increases the scarcity of food and water. The community put forward their desire to live peacefully and adapt other hazardous situations like drought. The plans that the communities of Mchesi, Mtandire, Kawale, Kaliyeka and Biwi are:-To increase knowledge in sustainable agriculture practices, To protect the river banks of Mchesi, Chimbalame and Lingadzin Rivers by preventing careless cutting down of trees and using drought resistance crops,

6 CONCLUSION & RECOMMENDATIONS

The following are the conclusions from the results of the VCAs and the recommendations are the views of facilitators

There is no any established Government official organizational urban structures
 responsible for Disaster Risk Management capable of addressing and coordinating real

- DRR issues at WARD and City Council Level.(UCPC & WCPC) There is need to establish the WCPC and UCPC for effective operations on DRR.
- Fortify the works of the CBDRT and provide guidance on their role so that there should not be overlapping of roles with VCPCs/WCPC.
- The Community in Mchesi never received any DRM messages. MRCS should Support formation of local DRR structures and development of contingency plans in Mchesi and Reviewing of the already developed plans for Biwi, Kaliyeka, Kawale and Mtandire.
- Lilongwe City do not have a validated Urban Civil Protection Committee Contingency Plan. There is need to support the development and validation of the Lilongwe City Disaster Management Plan which is still in a Draft form from 2017.
- Establish and standardize early warning systems. Formation of early warning committees and monitors in all the 5 Wards of Kawale, Kaliyeka, Biwi, Mchesi and Mtandire
- There is also important to increase DRR awareness meetings by promoting reception of SMS weather alert messages from DCCMS to CBDRTs or WCPC. Provide smart phones for this activities.
- The targeted area's land is degraded due to deforestation caused by people burning bricks and sand mining along Lingadzi and Mchesi rivers. The project should deliberately include tree planting interventions in these areas, establish and strengthen the activities of Village Natural Resources Committees (VNRC) to fortify the protection of trees which can be planted along the river banks and some designated areas
- Increasing demand for fuel wood, charcoal and building material has been exacerbated by population growth caused by migration of the workforce into the city in search for employment or business opportunities. WCPC) to advocate the establishment of the bylaws to protect trees and forest reserves. The project should advocate for the use of briquettes or energy saving stoves
- There is no any evacuation Centre recognized by the community- The project should support the establishment of a designated area for evacuating victims/IDPs during disasters.
- Increase number of sanitary facilities to undesignated evacuation centers to avoid diseases
- Support cholera prevention awareness messages through open days and provision of HTH Chorine to health facilities.

7.0 ANNEXIES

ANNEX 1. SEASONAL CALENDARS FOR 5 WARDS

A. SEASONAL CALENDAR FOR KALIYEKA

| EVENTS | MONTHS | | | | | | | | | | | |
|---|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| HAZARDS | | | | | | | | | | | | |
| Floods | | | | | | | | | | | | |
| Strong winds | | | | | | | | | | | | |
| Cholera | | | | | | | | | | | | |
| Drought/Dry spells | | | | | | | | | | | | |
| FARMING ACTIVITIES | | | | | | | | | | | | |
| Rain Fed Farming | | | | | | | | | | | | |
| Land preparation | | | | | | | | | | | | |
| Planting | | | | | | | | | | | | |
| Weeding | | | | | | | | | | | | |
| Pest and Disease | | | | | | | | | | | | |
| Fertilizer and manure application | | | | | | | | | | | | |
| Harvesting | | | | | | | | | | | | |
| Irrigation and Winter Cropping | | | | | | | | | | | | |
| Irrigation | | | | | | | | | | | | |
| Winter Cropping | | | | | | | | | | | | |
| Livestock Production | | | | | | | | | | | | |
| Poultry rearing | | | | | | | | | | | | |
| Cultural Events | | | | | | | | | | | | |
| Traditional Dances | | | | | | | | | | | | |
| initiation ceremonies | | | | | | | | | | | | |
| Memorial ceremonies & Tombstone unveiling | | | | | | | | | | | | |

| Natural Events | | | | | | |
|---------------------------|--|--|--|--|--|--|
| Floods | | | | | | |
| Drought | | | | | | |
| Strong winds/hail storms | | | | | | |
| Fall Army worm | | | | | | |
| Social Events | | | | | | |
| Village Savings and Loans | | | | | | |
| Market days | | | | | | |
| Weddings | | | | | | |

B. SEASONAL CALENDAR: KAWALE WARD.

| EVENTS | MONT | ГНЅ | | | | | | | | | | |
|--------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| HAZARDS | | | | | | | | | | | | |
| Floods | | | | | | | | | | | | |
| Strong winds | | | | | | | | | | | | |
| cholera | | | | | | | | | | | | |
| FARMING ACTIVITIES | | | | | | | | | | | | |
| Rainy season | | | | | | | | | | | | |
| Tree planting | | | | | | | | | | | | |
| Cultural Events | | | | | | | | | | | | |
| livelihoods | | | | | | | | | | | | |
| Weddings | | | | | | | | | | | | |
| Condolences | | | | | | | | | | | | |

C. Seasonal Calendar for Mchesi

| EVENTS | MONTHS |
|--------|--------|
| | |

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| HAZARDS | | | | | | | | | | | | |
| Floods. | | | | | | | | | | | | |
| Strong winds. | | | | | | | | | | | | |
| Cholera. | | | | | | | | | | | | |
| Dry spells. | | | | | | | | | | | | |
| Fall army worms. | | | | | | | | | | | | |
| Witch weed. | | | | | | | | | | | | |
| Termites. | | | | | | | | | | | | |
| First rainfall. | | | | | | | | | | | | |
| Rain Fall | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| FARMING ACTIVITIES | | | | | | | | | | | | |
| Harvesting | | | | | | | | | | | | |
| Land preparation | | | | | | | | | | | | |
| Planting | | | | | | | | | | | | |
| Weeding | | | | | | | | | | | | |
| Pest and Disease | | | | | | | | | | | | |
| Fertilizer and manure application | | | | | | | | | | | | |
| Harvesting | | | | | | | | | | | | |
| Winter Cropping and Irrigation | | | | | | | | | | | | |
| Winter Cropping | | | | | | | | | | | | |
| Cultural Events | | | | | | | | | | | | |
| Gulewankulu | | | | | | | | | | | | |
| Weddings and initiation ceremonies | | | | | | | | | | | | |
| Memorial ceremonies | | | | | | | | | | | | |

| Natural Events | | | | | | |
|-----------------------------|--|--|--|--|--|--|
| Floods | | | | | | |
| Dry spells. | | | | | | |
| Social Events & Livelihoods | | | | | | |
| Village Savings and Loans | | | | | | |
| Irrigation | | | | | | |
| Tree planting | | | | | | |
| Farming | | | | | | |
| Strong winds. | | | | | | |
| Fall Army worm | | | | | | |
| Livestock and Poultry | | | | | | |
| Irrigation.s | | | | | | |
| Village Savings and Loans. | | | | | | |
| Market days. | | | | | | |
| Gulewankulu Dance. | | | | | | |
| Tree planting. | | | | | | |

D. Seasonal calendar for Biwi

| EVENTS | MONTHS | | | | | | | | | | | |
|--------------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| HAZARDS | | | | | | | | | | | | |
| Floods | | | | | | | | | | | | |
| Strong winds | | | | | | | | | | | | |
| Drought/Dry spells | | | | | | | | | | | | |
| FARMING ACTIVITIES | | | | | | | | | | | | |

| | | 1 | 1 | | | 1 | |
|--------------------------------|--|---|---|--|--|---|--|
| Land preparation 1 (kusosa) | | | | | | | |
| Land preparation 2 (kugalauza) | | | | | | | |
| Planting (kudzala) | | | | | | | |
| fertilizer application 1 | | | | | | | |
| Weeding (kupalira) | | | | | | | |
| Fertilizer application 2 | | | | | | | |
| Banking(kukwezera) | | | | | | | |
| Harvesting (kukolola) | | | | | | | |
| Cultural Events | | | | | | | |
| Weddings | | | | | | | |
| Initiation ceremonies | | | | | | | |
| Funerals | | | | | | | |
| Tombstone unveiling | | | | | | | |
| Church meetings | | | | | | | |

E. Seasonal calendar for mtandire ward

| EVENTS | MON | MONTHS | | | | | | | | | | | |
|--------------------|-----|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| HAZARDS | | | | | | | | | | | | | |
| Floods | | | | | | | | | | | | | |
| Strong winds | | | | | | | | | | | | | |
| Cholera | | | | | | | | | | | | | |
| Drought/Dry spells | | | | | | | | | | | | | |

| FARMING ACTIVITIES | | | | | | | |
|---|--|--|--|--|--|---|--|
| Rain Fed Farming | | | | | | | |
| Land preparation | | | | | | | |
| Planting | | | | | | | |
| Weeding | | | | | | | |
| Pest and Disease | | | | | | | |
| Fertilizer and manure application | | | | | | | |
| Harvesting | | | | | | | |
| Irrigation and Winter Cropping | | | | | | | |
| Irrigation | | | | | | | |
| Winter Cropping | | | | | | | |
| Livestock Production | | | | | | | |
| Poultry rearing | | | | | | | |
| Cultural Events | | | | | | | |
| Traditional Dances | | | | | | | |
| initiation ceremonies | | | | | | | |
| Memorial ceremonies & Tombstone unveiling | | | | | | | |
| Natural Events | | | | | | | |
| Floods | | | | | | • | |
| Drought | | | | | | | |
| Strong winds/hail storms | | | | | | | |
| Fall Army worm | | | | | | | |
| Social Events | | | | | | | |
| Village Savings and Loans | | | | | | | |
| Market days | | | | | | | |
| Weddings | | | | | | | |

ANNEX 2 - HISTORICAL PROFILES

A. Historical Profile for Biwi

| Year | |
|-----------|---|
| 1967 | People were transferred from Biwi village and were relocated to Mchinji |
| 1967 | Demarcation and allocation of plots to new residents |
| 1967 | Installation of water kiosks |
| 1980/81 | Biwi Primary School was built |
| 1980/81 | First Biwi Clinic was built |
| 1980/81 | Biwi Market construction by City Council |
| 2003/2004 | Construction of brick wall/fence around Biwi Primary School |

Summary Results:

Due to urbanization, people in the area have constructed both standard and substandard houses. Some have even gone to construct along the river banks.

B. Historical Profile for Kaliyekas

| Year | Description |
|------|---------------------------------------|
| 1976 | First bridge built (Near Chipasula) |
| 1987 | Flooding |
| 1993 | Huge migration to Kaliyeka |
| 1993 | First church built |
| 1994 | First school built |
| 1996 | Availability of clean water from taps |
| 2000 | Availability of electricity |
| 2005 | Orphanage built |
| 2006 | Flood |
| 2006 | Cholera |
| 2007 | Strong winds |
| 2011 | Flood |
| 2015 | Flood |
| 2017 | Flood |
| 2019 | Flood |

C. HISTORICAL PROFILE: KAWALE

| Year | Description |
|------|--|
| 1962 | Establishment of Kawale primary |
| 1980 | Masitha CCAP church establishment |
| 1984 | Kawale market established |
| 1992 | Bloody Diarrhea (Kaliwende) disease hits Kawale |
| 1994 | Huge migration came in approximately 6000 people |
| 2011 | Cholera |
| 2017 | Floods |
| 2018 | Strong winds |

Summary Results: This is kawale historical profile

D. Historical Profile for Mchesi Ward

| Year | Description | | | | | | |
|------|---|--|--|--|--|--|--|
| 1977 | First year of tap water | | | | | | |
| 1980 | An earthquakes stroked, many houses affected. | | | | | | |
| 1982 | Landslides many houses affected. | | | | | | |
| 1992 | Closing of kiosk at summit. | | | | | | |
| 1995 | -Construction of road to kamuzu central hospitalcoming of foreigners, Burundians, sSomalians and Rwandans -construction of Mchesi primary school. | | | | | | |
| 2001 | Establishment of madina village. | | | | | | |
| 2002 | Construction of Admarc and filling station. | | | | | | |
| 2009 | First private clinic called Moyo Wanga Rit Clinic. | | | | | | |

E. Historical Profile for Mtandire

| Year | Description | | | | | | |
|-----------|--|--|--|--|--|--|--|
| 1976 | Huge migration population from Thope, Maula to Palace, Mtandire | | | | | | |
| 1977 | 77 First market built under the Bill gates donation | | | | | | |
| 1981 | First Hit by the floods | | | | | | |
| 1993 | The first piped water brought by Plan Malawi The first borehole drilled by Catholics | | | | | | |
| 1994 | First bridge constructed by Plan Malawi | | | | | | |
| 1996 | Construction of the First Government Primary school- Mtsiliza | | | | | | |
| The above | is the historical profile of Mtandire ward. | | | | | | |

ANNEX 3 - Ranking & Prioritization

A. PAIR WISE RANKING FOR Biwi

| | FLOODS | STRONG WINDS | DROUGHT | SCORE | RANK |
|--------------|--------|--------------|---------|-------|------|
| FLOODS | | | | 2 | 1 |
| STRONG WINDS | FLOODS | | | 1 | 2 |
| DROUGHT | FLOODS | STRONG WINDS | _ | 0 | 3 |

B. Pair Wise Ranking for Kaliyeka

| | FLOODS | CHOLERA | STRONG WINDS | DRY SPELL | SCORE | RANK |
|--------------|--------|---------|--------------|-----------|-------|------|
| FLOODS | | | | | 3 | 1 |
| CHOLERA | FLOODS | | | | 2 | 2 |
| STRONG WINDS | FLOODS | CHOLERA | | | 0 | 4 |
| DRY SPELL | FLOODS | CHOLERA | DRY SPELL | | 1 | 3 |

C. Pair Wise Ranking for Kawale

| | FLOODS | CHOLERA | STRONG WINDS | SCORE | RANK |
|--------------|--------|---------|--------------|-------|------|
| FLOODS | | | | 2 | 1 |
| STRONG WINDS | FLOODS | | | 0 | 3 |
| CHORELA | FLOODS | CHOLERA | | 1 | 2 |

D. Pair wise Ranking for Mchesi

| | FLOODS | STRONG WINDS | DROUGHT | SCORE | RANK |
|--------------|--------|--------------|---------|-------|------|
| FLOODS | | | | 2 | 1 |
| STRONG WINDS | FLOODS | | | 1 | 2 |
| DROUGHT | FLOODS | STRONG WINDS | | 0 | 3 |

E. Pairwise Ranking for Mtandire

| HAZARDS | Cholera | Strong Winds | Dry spell | Flood | SCORE | RANK |
|--------------|---------|--------------|-----------|-------|-------|------|
| Cholera | | | | | 2 | 2 |
| Strong wings | Cholera | | | | 0 | 4 |
| Dry Spell | Cholera | Dry Spell | | | 1 | 3 |
| Floods | FLOODS | Flood | Floods | | 3 | 1 |

ANNEX 4 - DISASTER RISK MANAGEMENT PLAN FOR LILONGWE CITY

| A. DISASTER RISK MANAGEMENT PLAN FOR MTANDIRE WARD | | | | | | | | | |
|--|---------------------------------------|-----------------------|--------|-------------------|---------------|------------------------|------------------|---------------------------|-----------------------------|
| Hazard | Issues/Prob lem Being Addressed | Activity And Place | Target | Time Fram e | Resourc es | Community Resources | Other Sources | Responsi ble Person | Monitori ng Indicator |

| Floods | Deforestation | Plant trees along Lingadzi and Chimbalame river banks | 15,000 trees 5000 bamboos on Lingadzi river | Nov- Jan | Wheelbar rows, hoes, watering cans, Gumboot s, gloves, panga knives, treadle pumps Shovels, Seedlings | Labor, available expertise from forestry officer, Land | Malawi Red Cross Society City Council, Lilongwe Wildlife Trust Plan Malawi | Chair of CBDRT Chair of VNRC, GVH Chigoneka | Number of trees surviving |
|---------|--|--|---|------------------------------|---|--|---|--|--|
| | Deforestation | Conducting sensitization meetings to Stop farming building, mining of sand and brick making along the Lingadzi and Chimbalame rivers | 4 meetings | Dec, Mar, June, Aug | PA System, Facilitator s, Venues, Ball point, Allowanc es, Participa nts, Chairs, By Laws, Refreshm ents, snacks | Participating audience, venue, chairs, | Malawi Red Cross Society City Council, Lilongwe Wildlife Trust, Plan Malawi | Chair of CBDRT Chair of trees managem ent committee , Senior GV | No of meetings conducted No of people not doing sand mining & brick making along the river banks. |
| | Blocked of water tunnels | Stopping disposing waste on the river banks | Constructi ng 3 waste disposing area | April - Nov | Wheelbar rows, hoes, Gumboot s, Shovels, bricks, cement, skilled labor, sand, quarry, timber, picks, | Sand, Labor | Malawi Red Cross Society- Lilongwe City Council, Lilongwe Wildlife Trust Plan Malawi | Chair of CBDRT Chair of trees managem ent committee , Senior GV | No. of designate d place built |
| Cholera | Lack of portable water for drinking | Conduct water treatment exercise. | 10,000 litre of 1% stock solution to the community or water guard | Jan to Dec | 1% Stock solution, Capacity building manuals, allowanc es Water Guard, Pales, Cups, labor | Providing venue, labors force, chairs, volunteers | Malawi Red Cross Society,, Lilongwe City Council, Lilongwe DHOs, HSAs | Chair of CBDRT Chair of trees managem ent committee , Senior GV | No. of 1% Stock solution distributed to the communit y per quarter. |

| | | | | | material for measurin g and diluting medical eg pails | | | | |
|------|--------------------------------|--|---|----------------------|--|--|--|--|--|
| hygi | c of good dene ettices | Conducting Hygiene Promotion - Door to Door campaign, community dialogue, | 4 sensitizatio n meeting | Jan to Dec | Training facilitator s and training materials , volunteer s, refreshments, stationer y, venue, chairs, | Venue, volunteers, | Malawi Red Cross Society,, Lilongwe City Council, Lilongwe DHOs, HSAs | Chair of CBDRT Chair of trees managem ent committee , Senior GV | No. of Hygiene promotion meetings conducted |
| | tary ities like | Construction of rubbish disposal pits | 4 | April to Sept. | Land, iron sheets, cement sand nails, bricks, artisan plunks shovels wheelbar row, hoes | Land, artisans | Malawi Red Cross Society,, Lilongwe City Council, Lilongwe DHOs, HSAs | Chair of CBDRT Chair of trees managem ent committee , Senior GV | NO. of designate d waste disposal sites constructe d |
| beca | ecation ause of c of Pit | Conduct CLTS triggering | 4 | April to Sept. | Training facilitator s and training materials , volunteer s, refreshments, stationer y, venue, chairs, | Venue, volunteers, | Malawi Red Cross Society,, Lilongwe City Council, Lilongwe DHOs, HSAs | Chair of CBDRT Chair of trees managem ent committee , Senior GV | NO. of Triggering Sessions done |
| | | Support construction of household and communal latrines. Support construction | 3000 HH Latrine 4 Communal Latrine (Pay in Toilets) | April to Nov | Cement, Sand, Quarry, Artisans, land, venue, capacity building, stationer y, | Venue, Chairs, Sand, Quarry, Bricks | Malawi Red Cross Society,, Lilongwe City Council, Lilongwe | Chair of CBDRT Chair of trees managem ent committee | No of Latrine Constructe d with Slabs. No of Communal Toilets |

| | | of San /Doom Slabs | | | refreshm ent, facilitator s | | DHOs, HSAs | , Senior GV | constructe d |
|-----------------|--|---|--|---------------|---|---|--|---|-----------------------------------|
| Strong Winds | Deforestation | Plant trees along Lingadzi and Chimbalame river banks | 15,000 trees 5000 bamboos on Lingadzi river | Nov- Jan | Wheelbar rows, hoes, watering cans, Gumboot s, gloves, panga knives, treadle pumps Shovels, Seedlings | Labour, available expertise from forestry officer, Land | Malawi Red Cross Society City Council, Lilongwe Wildlife Trust Plan Malawi | Chair of CBDRT Chair of VNRC, GVH Chigoneka | Number of trees surviving |
| Dry Spell | Deforestation | Plant trees along Lingadzi and Chimbalame river banks | 15,000 trees 5000 bamboos on Lingadzi river | Nov- Jan | Wheelbar rows, hoes, watering cans, Gumboot s, gloves, panga knives, treadle pumps Shovels, Seedlings | Labour, available expertise from forestry officer, Land | Malawi Red Cross Society City Council, Lilongwe Wildlife Trust Plan Malawi | Chair of CBDRT Chair of VNRC, Sr GVH Chigoneka | Number of trees surviving |
| В. | DISASTER RISK | MANAGEMEN | IT PLAN FOR | BIWI V | VARD | | | | |
| Hazard | Issues/problem being addressed | Activity and place | Target | Time frame | Resources | Community Resources | Other Sources | Responsibl e person | Monitoring indicator |
| Floods | Sand Mining & Molding bricks along the river bank | Establishment of bylaws | 4 blocks and their leaders | Nov | hardcover Papers Pens Venue for the meeting Chairs and mats | Venue for the meeting Chairs and mats | City Council Police Councilor | Village head | Minutes for the meeting |
| | Wrong positioning of caravats under the bridge. | Construction dyke | 1 dike OF 500METRES | NOV | Machines Stones Quarry- stones Cement Sand Metal-bars Wheelbarro W | security human- resource/ labour | MP Village head Village committee councilor | Village head | Number of Dikes constructed |

refreshm

San

DHOs, HSAs

Senior

constructe

| | | | | | Human resource | | | | |
|-----------------|---|-------------------------|----------------------------|-------------|---|--|--|--|-------------------------|
| FLOODS | Sand Mining & Moulding bricks along the river bank | Establishment of bylaws | 4 blocks and their leaders | Nov | hardcover Papers Pens Venue for the meeting Chairs and mats | Venue for the meeting Chairs and mats | City Council Police Councilor | Village head | Minutes for the meeting |
| | Deforestation | Tree Planting | 15000 | | Seedlings Hoes, picks Water canes Hardcover, Pens Labor, Land Human Polythine tubes, Transport. Forest Officers Capacity building | Hoes, labor, land | Forest Dept. MRCS, LL City Council | Block Leaders City council Councilors | Number of Trees |
| STRONG WINDS | Damaging of houses | Tree Planting | 15000 | Dec- Jan | Seedlings Hoes, picks Water canes Hardcover, Pens Labor, Land Human Polythine tubes, Transport. Forest Officers Capacity building | Hoes, labor, land | Forest Dept. MRCS, LL City Council | Block Leaders City council Councilors | Number of Trees |
| | Deforestation | Tree Planting | 15000 | | Seedlings Hoes, picks Water canes Hardcover, Pens Labor, Land Human Polythine tubes, Transport. | Hoes, labor, land | Forest Dept. MRCS, LL City Council | Block Leaders City council Councilors | Number of Trees |

| | | | | | Forest Officers Capacity building | | | | |
|-----------------|--|--|-------|----------------|---|--|---|--|--------------------------------------|
| STRONG WINDS | Damaging of houses | Tree Planting | 15000 | Dec- Jan | Seedlings Hoes, picks Water canes Hardcover, Pens Labor, Land Human Polythine tubes, Transport. Forest Officers Capacity building | Hoes, labor, land | Forest Dept. MRCS, LL City Council | Block Leaders City council Councilors | Number of Trees |
| | Deforestation | Tree Planting | 15000 | | Seedlings Hoes, picks Water canes Hardcover, Pens Labor, Land Human Polythine tubes, Transport. Forest Officers Capacity building | Hoes, labor, land | Forest Dept. MRCS, LL City Council | Block Leaders City council Councilors | Number of Trees |
| | poor Construction of shanty houses | Capacity building to new technologies | 1 | April | Facilitator s, Stationery , Chairs, Venue Communit y Represent atives, Volunteer s, Allowance s | Venue Volunteers Demonstratio n sites | MRCS Dept. of Lands and Housing City Council | Block Leaders Councilor | No of Trainings |
| | Lack of proper management of harvested crops | Conducting Sensitization meetings & Post harvest trainings | 1 | April- June | Chairs, Ball pens, Facilitator s, Volunteer | Chairs, Ball pens, Facilitators, Volunteers, Block leaders | AEDO Councilor Block Leaders, | AEDO Councilor | Number of Meetings & Trainings |

| | High costs of drought resistant crops & farm inputs | Early planning on buying farm inputs Encouraging the farmers to practice modern Smart agriculture e.g. use of compost manure | 2 meetings | Dec- Jan | AEDO Capacity building Chairs, Ball pens, Facilitator s, Volunteer s, Block leaders | Chairs, Ball pens, Facilitators, Volunteers, Block leaders | Councilor, MRCS Dept. of Agricultur e AEDO Councilor Block Leaders, Councilor, MRCS Dept. of Agricultur e | AEDO Councilor | Number of Meetings & Trainings |
|--------|--|---|--------------------------|----------------|--|--|--|------------------------------------|--------------------------------------|
| | | Use of Improved organic manure | | | | | | | |
| | Dependability on one type of crop | Conduct sensitization meetings to be practicing subsistence farming | 2 | Dec- Jan | AEDO Capacity building Chairs, Ball pens, Facilitator s, Volunteer s, Block leaders | Chairs, Ball pens, Facilitators, Volunteers, Block leaders | AEDO Councilor Block Leaders, Councilor, MRCS Dept. of Agricultur e | AEDO Councilor | Number of Meetings & Trainings |
| | Lack of proper management of harvested crops | Conducting Sensitization meetings & Post harvest trainings | 1 | April- June | Chairs, Ball pens, Facilitator s, Volunteer s, Block leaders | Chairs, Ball pens, Facilitators, Volunteers, Block leaders | AEDO Councilor Block Leaders, Councilor, MRCS Dept. of Agricultur e | AEDO Councilor | Number of Meetings & Trainings |
| С. [| DISASTER RISK MAN | NAGEMENT PLAN | FOR MCHESI | | | | | | |
| Hazard | Issues/problem being addressed | Activity and place | Target | Time Frame | Resources | Community Resources | Other Sources | Responsibl e Person/ Dept. | Monitoring Indicator |
| FLOOD | Deforestation | Re- afforestation. | Planting 15,000 trees | Jan to Feb. | Wheelbarr ows, Tubes, Shovels, Seedlings, Hand groves, shovels, hoes, W/cane, | Labour, Land, Manure. | Red Cross Society, City Council, Forestry Departmen t-Well- wishers. | Mr dave Thawani. VNRC chair. | No. trees surviving |

| | Sand mining in | Awareness | Conducting | Decr to | trainings, slashes, megaphon | Venue, chairs | -donorsMember of parliament . | Group | No of |
|-------|-----------------------------|---------------------------------|--|----------------------------------|--|---|--|--|-----------------------|
| | rivers. | campaign. | awareness meetings - 5 blocks) | March. | es, Tents, whistles, drinks, Chairs Allowance s, | 10.103, 5.1111 | Council, Member of Parliament | Village headman and councilor. | meetings |
| | Disposing wastes in rivers. | Awareness campaign. | Making meetings with villagers (5 blocks) | Dec to March | - megaphon es, Allowance s, Chairs | Land and Labour | Ward Councilor, Member of Parliament | Group Village Headman and councilor. | Number of meetings |
| | Quarry mining. | Awareness campaign Conduct IGA | Conduct 5 awareness meetings Support in Briquettes making | Decr to march Apr- Decr | megaphon es, Allowance s Chairs. Capacity building, Briquettes machine. Labour, Exercise Books | Labour and Land Facilitators Exercise Books Refreshments and snacks, venue | Ward Councilor and Member of Parliament , City council Ward Councilor, Volunteers , Communit y | Group Village Headman and councilor. | Number of Meetings |
| FLOOD | Deforestation | Re- afforestation. | Planting 15,000 trees | Jan to Feb. | Wheelbarr ows, Tubes, Shovels, Seedlings, Hand groves, shovels, hoes, W/cane, trainings, slashes, | Labour, Land, Manure. | Red Cross Society, City Council, Forestry Departmen t-Well- wishers. -donors. -Member of parliament | Mr Dave Thawani. VNRC chair. | No. trees surviving |
| | Sand mining in rivers. | Awareness campaign. | Conducting awareness meetinmgs - 5 blocks) | Dec to Mar. | megaphon es, Tents, whistles, drinks, Chairs Allowance s, | Venue, chairs | Ward Council, Member of Parliament | Group Village headman and councilor. | No of meetings |

| | Cultivating along the river bank. | Awareness campaign and encouraging Income generating activities (IGA). | Planting 15000 trees along the river bank and Civil education to 1500 community members on the bad effects of cutting down trees carelessly | Jan to Dec | Loudspea kers, Place, Posters, Labour, Training allowance s, | Land and volunteers | Ward Councilor, Member of Parliament | Group Village Headman and councilor, Mr. R. Nankhumba ,J.Msiza | No of campaigns |
|-----------------|---|--|---|-----------------|--|--|--|---|-------------------------------|
| STRONG WINDS | Deforestation. | Re- afforestation and encouraging ton the new technology for constructing Flood resistant houses | 5 meetings annually. | May to June. | Wheelbarr ows, Tubes, Shovels, Seedlings, Hand groves, shovels, hoes, W/cane, trainings, slashes, | Land, Labour | Ward Councilor, Member of Parliament , MRCS, City Council | Mrs Gama Mr chitenje. Mr bester. | Number of surging trees |
| cholera | Disposing of wastes in undesignated areas | Awareness meetings & campaign, Provision of Sanitary Disposal Bins | 5 meetings 10 Bins | Dec to Apr | HTH Chlorine, water guard, measuring materials. Vehicle, Man power, Handle holes, Shovels, HTH Chorine, Maskls | Labour, Land, HTH Chlorine. Site for prepositioning the bins. | MRCS, Councillor s Member of parliament , councillor, Chiefs. City Council City of Lilongwe MRCS Volunteers HSAs | Councillors, (HSA), Mr white, Mr Maere Mr Maere (HSA) | No: of meetings |

| | Cultivating along the river bank. | Awareness campaign and encouraging Income generating activities (IGA). | Planting 15000 trees along the river bank and Civil education to 1500 community members on the bad effects of cutting down trees carelessly | Jan- Dec | PA System, Venue, Posters, Labor, Training allowance s, | Land for and volunteers | Ward Councilor, Member of Parliament | Group Village Headman and councilor, Mr. R. Nankhumba ,J.Msiza | No of campaigns |
|-----------------|--|--|---|-----------------------------------|--|---|---|---|---|
| STRONG WINDS | Deforestation. | Re- afforestation and encouraging ton the new technology for constructing Flood resistant houses | 5 meetings annually. | May to June. | Wheelbarr ows, Tubes, Shovels, Seedlings, Hand groves, shovels, hoes, W/cane, trainings, slashes, | Land, Labour | Ward Councillor, Member of Parliament , MRCS, City Council | Mrs Gama Mr chitenje. Mr bester. | Number of surging trees |
| cholera | Disposing of wastes in undesignated areas | Awareness meetings & campaign, Provision of Sanitary Disposal Bins | 5 meetings 10 Bins | December to April Dec – April | HTH Chlorine, water guard, measuring materials. Vehicle, Man power, Handle holes, Shovels, HTH Chorine, Maskls | Labour, Land, HTH Chlorine. Land for prepositioning the bins. | MRCS, Councilors Member of parliament , councillor, Chiefs. City Council City of Lilongwe MRCS Volunteers HSAs | Councillors, (HSA), Mr white, Mr Maere Mr white, Mr Maere (HSA) | No: of meetings |
| | Lack of Latrines. | Conduct CLTS with triggering meetings Construction of latrines | 5 Meetings | Apri- June | Stationery, Triggering materials, Chairs, Venue, Facilitator s | Venue, Chairs | HSAs, City, Councillor, MRCS, Facilitator s | HAS & MRCS | 3 of triggering sessions Number of Latriones constructed |
| | Lack of chlorine and water guard. | Distributing chlorine and water guard to people. | 5 blocks | No specifi c time | Cups, spoons, Trainings. | Volunteers, place for meetings, labour available. | Member of parliament , churches and councillor s. | Stella and white | No: of people receiving the chlorine and water guard. |

| Hazard | Issues/problem being addressed | Activity and place | Target | Time frame | Resources | Community Resources | Other Sources | Responsibl e person | Monitoring indicator |
|-----------------|--------------------------------------|--|---------------------------|----------------------------|--|------------------------|---|--|--|
| FLOODS | Soil erosion | Planting trees(nsenjere and vetiva) along the river bank Planting grass | 5000 | Jan - March | Hoes, gumboots, Shovels, wheelbarro w, panga knives, watering canes, tree seedlings | Labour, land | Local authorities such as councillor, block leader | Chiefs, CBDRT, MRCS volunteers | Number of trees planted and successfully germinated |
| | Knowledge on climate change | Awareness campaigns | 3 activities | Nov- Dec | Stationery, PEA system, bibs | facilitators | NGOs, local stakeholder s | Chiefs, CBDRT, red cross volunteers | Campaigns reached and impact made |
| | Improper waste disposal | Awareness campaign Waste collection | 3 activities | Nov- Dec | Stationery, gloves, masks, wheelbarro | facilitators | NGOs, local stakeholder s | Chiefs, CBDRT, MRCS volunteers | Number of collections and campaigns done |
| CHOLER A | Water borne disease | Chlorine distribution Awareness campaigns | 3 acivities | Dec- Jan | Cholrine Chlorine Buckets Gloves Facilitators PA system Stationery | Place for distribution | Local health authorities City authorities | HAS, volunteers(lo cal and others), MRCS | Number of people who have received chlorine Campaigns achieved |
| | Knowledge on wash activities | Awareness campaign | 4 activities | Nov- Dec | PA system Stationery Bibs | Place for campaign | Local health officials City authorities | Chiefs, HAS, red cross volunteers | Campaign achieved |
| STRONG WINDS | Careless cutting down of trees | Afforestation- planting trees in our | 5000 | Jan - March | Hoes, gumboots, Shovels, wheelbarro w, panga knives, watering canes, tree seedlings | Labour, Land, Hoes, | MRCS- Forest | Block Leaders- MRCS | Number of trees |
| DRY SPELL | Food insecurity | Awareness on how to preserve food Irrigation | 4 activities 2 activities | Aug- Feb May- Nov | PEA system, stationary, | Venue Land, labour | None Field officer | Chiefs, CBDRT and stakeholders from the ministry of agriculture | Availability of food in the community Number of grown crops |
| | | | Z activities | INUV | canes, fertilizer, seeds, | Lanu, iaboui | from the | | |

| | | | | | treadle pump, farm tools, hoes and pesticides | | ministry of agriculture | Chiefs, MRCS volunteers | |
|---------|--|---|--|---------------|---|---|---|-------------------------------------|--|
| | Water borne diseases | Campaign on water diseases | 2 events | Aug- Oct | PEA system stationery, facilitators | Venue | HAS, city council | HAS, volunteers, chiefs | Campaigns done |
| | | | | | | | | | |
| | DISASTER RISK MAI | | | | | | | | |
| Hazard | Issues/Problem Being Addressed | Activity And Place | Target | Time Frame | Resources | Community Resources | Other Sources | Responsibl e Person | Monitoring Indicator |
| Cholera | Lack of proper waste disposal/management such as dumping of children nappies and faeces in undesignated Areas. | Civic education on proper waste disposal and proper use of sanitary facilities | Reaching 2,800 Households | Apr- Oct | Disposal community bin, PA System, Venue, Whistle, Labour Chlorine Gloves and face masks | Whistle, Land, Labour | Ward Councilor, City Council, MRCS, Member of Parliament Bloc Leaders | Ward councilor, GVH, WCPC | Number of meetings |
| | Lack of sanitary facilities like latrines, hand washing & portable water | Civic Education for promotion of the use hygiene and sanitation facilities | Reaching 3000 people to wash hands with soap after touching any dirty. | Jan- Dec | PA System, Whistle, Posters, Latrines, Shovels, Wheelbarro w, | labor, Shovels, Hoes, Wheelbarrow | Ward councilors, Community Funds, City Council | WCPC, GVH, Ward councilor | Number of meetings and Number of sanitary facilities made |
| | Open defecation around Block B and other areas. | Conducting awareness meetings using Community Led Total Sanitation Triggering Sessions | Reaching to go over 5000 Households | Dec- June | Stationery, Whistles, PA System, Triggering tools | Facilitators Triggering Tools | Ward councilor, MRCS, Member of Parliament, City council | WCPC, Ward councilor, GVH | Number of meetings and latrines constructed |
| | | Promotion of latrine construction | 1000 latrines | Feb c- Feb | Demonstrat ion latrines, Land, venue, Constructio n materials, artisans, | Labour, Land | Ward Councillor, MRCS, Member of | WCPC, Ward Councillor, GVH | Number of meetings and latrines constructed |

| | | | | | capacity building | | Parliament, City council | | |
|-----------------|---------------|---|---|-------------|--|-------------------------------------|--|-----------|-------------------------------|
| STRONG WINDS | Deforestation | Planting of trees around houses in order to protect them. | 10000 trees | Aug- Jan | Wheelbarro ws, Tubes, Shovels, Seeds, Hand groves, seedlings | wheelbarrows Land, Labour | Ward Councillor, Member of Parliament | WCPC, GVH | Number of trees planted |
| | | Developing and Strengthening By Laws B against rampant cutting down of trees. | Civil education to 1500 community members on the bad effects of cutting down trees carelessly | Dec | PA System Place, Posters, Labour, Training materials | PA System, venue,, Chairs | Ward councilor, member of parliament | GVH, WCPC | Availability of By Laws |
| | | Conducting Civic Education. about the effects of deforestation | 3 meetings | Dec , | PA System - Place, Posters, Labour, Training materials | PA System, place, land Chairs | Ward councillor, member of parliament | GVH, WCPC | Number of meetings |
| | | Establishing tree planting exercise day to be commemorate d every year by the community | Engaging all community members around 1500 per block leader to embrace the day every year | Dec | Water canes, Land, Labour, Whistles, Loudspeak er | Land, Whistles, Labour | MRCS, City Council, Forestry Department | WCPC, GVH | Number of Trees Planted |

ANNEX 5 - FOCUS GROUP DISCUSSIONS

Another tool that was used during VCA was a Focus Group discussion. The group was represented by all groups of people from Men, Women, the Elderly and the youth. FGD helped to get more opinions on a designated topic, and then guide future action, the specific topic was focused.

FGD CHECKLIST

Location of the community

District: Lilongwe

T/As: Njewa and Tsabango

GVHs / Ward: Mtandire in TA Njewa ; Kawale, Kaliyeka, Biwi and Mchesi in TA Tsabango.

Includes: Total Adults (>20yrs): 35,665 (male: 19,156, female 16,509) (2018 population census)

■ Total Youth: (13-20),

Total children : NA

Infants, toddlers and children under 5 years (NA)

Average family size: 6

Local Authority & Coverage

1. Who has highest level of authority in the community in disaster related:

Block Leaders in Mchesi, Kawale, Kaliyeka and Biwi while SGVH Chigoneka, SGVH Chibwe and some Block leaders in Mtandire- TA Njewa.Senior GVH Chigoneka through Community Based Disaster Response Team

- 2. What NGOs and local community based organizations exist in this community? What are the areas of their programming and expertise?\
 - a. MRCS-GFCS and DIPSAC Projects in Disaster Risk Reduction projects working in TA Njewa and Tsabango
 - b. Plan WASH and Girl Child education promotion in Mtandire
 - c. CICOD WASH and Forest management and supporting river bank protection. This organization is working in Mtandire. No organization is working in the WARDS in TA Tsabango (Kawale, Mchesi, Kaliyeka and Biwi)

Housing

3. Basic house construction type:

Iron roofed though built with burnt brick but the mortar is mud

4. Other prominent construction types in the community:

Church, School, Mosque, market and Under 5 clinic.

- 5. Average house size (per family in sq. m): 12m x6 m
- Location of community settlement
- t (whether safe or risky): Both risk
- and safe areas

Human Vulnerability to disasters

1. Who are people are most at risk during disasters (age, gender, occupation)?

People most at risk to disasters are People with disability, pregnant women, the aged. Other groups included the aged, Female aged mostly house wife

2. In what specific ways are they vulnerable?

These people are vulnerable not only simply because of their poverty but because of the weak DRM Governance that the City of Lilongwe has. The City has no DRM structures and Early Warning System to alert these people on these hazards. It was also revealed that economic pressures caused by high unemployment forced these people to live in unsafe shanty locations with poor design and construction of houses within the unregulated sites like river banks. Poverty and inequality, marginalization, social exclusion and discrimination by gender, social status, disability and age put these people vulnerable to disasters. The groups narrated that poor livelihoods led to their poor environmental management such that there is an overconsumption of natural resources such as trees, sand and soils used for brick making, sand selling to construction companies and firewood or charcoal.

3. What are common public health emergencies?

Common public health emergencies in all these area as explained by the communities under study concluded that the community is always anxious in the way how public health emergencies were being administered as regards to communication, handling, detection, reporting, and verification of events as well as control of disease outbreaks like cholera. It was noted that Biwi, Mchesi, Kawale and Kaliyeka uses Kawale Health Centre which is on average of 3 kilometers each and that there is always a prepositioned cholera treatment center while Mtandire uses Area 18 Health Centre which is over 5 kilometers and causes panic to the people because of distance and that the likelihood of spreading this disease to the villages in passage was always high. It was suggested if Government can preposition a temporally cjholera treatment centre in all the WARDS.

4. Has area experienced any climate changes in the past decade?

In all these five areas of Mtandire, Kaliyeka, Kawale, Mchesi and Biwi, the areas experienced climate variability that brought in notable implications such as prolonged dry spells, increased prevalence of water related diseases such as Cholera, strong winds and Floods. The trends of these hazards increased from 1980 to 2019 according to historical profiles given. The following years were recorded by all the WARDS as most critical years of climate related hazards: - 1981,2015,2016,2017 and 2018.

5. Ease and ability to access this community during floods:

All the areas except for Mtandire can be accessed during floods using tarmac roads as well as seasonal roads. There is a seasonal road from Mtandire Turn Off which is about 2 to 3 kilometers to the central area of GVH Chigoneka which may not be accessed during rainy season if Chimbalame River overflows. There are also some water tunnels that were constructed to drain surface run off away to its way in Mtandire. These are normally blocked by disposed wastes during rainy season. The blockade that the wastes makes affect the water tunnels by increasing the chance of unreachability to Mtandire from the central town.

Trees

There are a few visible tree shrubs left in the woodlots. In all the five areas understudy it was concluded that there are no living woodlots preserved. In Mtandire and Kaliyeka there are some isolated number of trees along the river banks of Lingadzi and Mchesi planted within 2 years ago by the community supported by MRCS's DIPSAC and GFCS Projects. This means that the areas under study have been depleted of natural vegetative cover.

1. Main types of water sources:

There are over 75 protected water points that are functioning with 74 open unprotected shall wells in all the 5 WARDs. Most of the community members uses tap and boreholes for their drinking water while shallow wells are used for irrigating their crops, construction of their houses.

2. Whether these water sources are vulnerable to flooding?

Some protected water points may not be vulnerable to flooding as they were located at the higher ground while others because they are located in flood prone areas. These water sources might have been contaminated because of its high turbidity as reported by all the groups. No defined turbidity measurement was scientifically measured but the color of water during the flooding period demonstrated this.

3. Are water sources accessible during flooding?

The taps in kiosks are accessible during flooding but all other remaining water points are susceptible to flooding... It was reported that some water points during the flooding period were inundated in dirty flooded water. Open wells are believed to be filled up with 100% water related pathogens putting the surrounding communities at risk. Hygiene promotion on the use of WASH facilities is a requirement in all the areas.

Information, Education and Communication on DRR

1. Have you heard any message on DRR in the past 1 year?

All the five WARDS of Mtandire, Mchesi, Kawale, Kaliyeka and Biwi have heard some messages pertaining to DRR in the past 1 Year. The 4 WARDs got this information from MET experts through CBDRTs during a Participatory Scenario Planning organized by MRCS –DIPSAC Project and GFCS in Mtandire WARD. Other messages that all the wards received were through radios, TVs, Block leaders and village heads. Community members prefer radios than all channels followed by information from the same community members via volunteers using mobile phones. The grouping received messages about flooding, dry spell, strong winds and cholera.

The messages were relating to early warning systems which enabled the community members to obtain a daily, weekly and monthly weather forecast. Team from Mtandire commented that they got a DRR messages because some of their colleagues were oriented on the Interpretation of Seasonal Weather forecast by GFCS Project.

2. If yes, through which channel? Of those channels which ones do you prefer most?

| Channel | prefer |
|---------------|--------|
| Met report | X |
| Radio | X |
| TV | |
| Newspaper | |
| Mobile phones | X |

- 3. What type of messages did you receive? Flood, dry spell and cholera
- 4. Did you participate in any DRR activities? (Collect GVH / Ward population data): .

The Team in the 4 FGD from Mtandirei, Kawale; Kaliyeka and Biwi participated in the DRR activities. Some of the members said they participated directly in disseminating DRR messages while others took part in the cleanup exercise of blocked water tunnels in Mtandire and Kaliyeka. They were also involved in replacement/planting of trees in their woodlots and river banks.

Preparedness planning

1. Is there an emergency contingency plan in place?

All the wards except for Mchesi has emergency contingency plans. The contingency plan was developed in December, 2018 with support from MRCS –DIPSAC Project. The plan is expected to be revised in December, 2019. The only challenge was that the plan was not fully disseminated to all the blocks in the affected wards.

Contacts for the leading personnel on the contingency plans are as follws:-

| # | Location | Contact Person | Organization/Position | Phone Number |
|---|----------|------------------|-----------------------|--------------|
| 1 | Mtandire | Thomas Chikomeni | CBDRT Chair | 0999282535 |
| | | Tonnex Magomero | Block Leader | |
| 2 | Kaliyeka | Agatha Chitengu | CBDRT Chair | 0996239500 |
| | | Peter kaphwiti | Block Leader | 0999113203 |
| 3 | Biwi | Alex Banda | CBDRT | 0993656002 |
| | | Wilson Limbalire | Block Leader | 0999291719 |
| | | Katantha | WDC | 002867469 |
| 4 | Kawale | Anjiru Makandula | CBDRT | 0882612862 |
| | | Kandodo | Block leader | 0993205506 |
| 5 | Mchesi | Owen Malunga | Block leader | 0995 271589 |

2. Is there a DRM plan in the community?

Communities under study have only a draft Disaster Risk Management plan made during a DIPSAC and GFCS Project Vulnerability Capacity Assessment (VCA).

3. When was it written and who is the primary contact?

The Plan was made in September, 2018 for DIPSAC Project and February, 2019 for GFCS

4. Are there committees in the communities that respond to disasters (VCPC, WCPC)?

Yes the committee that responds to disasters in the community is a community based disaster response team (CBDRT) which is composed of members from different committees in the village such as VNRC, VHC, CBOs, PTAs or SMC, HSAs, Forest Assistant, MRCS Sub Division Volunteers and others. These CBDRTs are found in 4 of the 5 WARDS under study. Mchesi Ward has no CBDRT.

5. What are the linkages between the community and other actors? (Local authority, NGOs, Community based organization, etc)

There is a link between the community through CBDRT, Lilongwe City and District Council, MRCS, and other actors. This linkage was visible during trainings and monitoring of activities. The trainings that are conducted in our villages are facilitated by staff from City or District Council. This link was strengthened when there were 2 disasters in 2015 and 2019 in when Mtandire and Kaliyeka were hit by floods that destroyed most of the houses and livelihoods. The community through CBDRTs, Block Leaders, Government, MRCS and CBDRTs conducted a rapid assessment and later verification. This also while Cash transfers programme was administered by MRCS with support from the Government. Lilongwe City Council and Government during the flood

6. How many people in the district, community structures and schools have been trained in disaster interventions?

There are 30 CBDRT members, 30 Climate Change School Club members, 30 VSL members, 10 Lead farmers and 16 Government staff from Education with 10 Volunteers from Mtndire, Kaliyeka, Biwi and Kawale while the Climate Change School Clubs are from Kaliyeka, Kafulu and Kankodola who were trained in Disaster interventions in the area. Other community structures that were trained included:- 700 households that have household contingency plans. (secondary data from MRCS Lilongwe Office) School learners have been trained on disaster through the School Climate Change Clubs

7. What activities have they been engaged on?

The community structures above have been engaged in different DRR activities such as Dissemination of seasonal weather forecast, Dissemination of Early warning messages, dissemination of importance of tree planting messages, dissemination of evacuation sites messages, dissemination of good site for construction messages, taking part in cleaning up exercise of the trenches, taking part in river bank protection messages, dissemination of Hygiene promotion

messages, tree planting exercise and supporting in responsee, rescue and search during the 2019 disaster especially in Kaliyeka, kawale and Biwi areas..

8. Does your community have a contingency plan? When was it reviewed last time? If yes, is this plan linked with the District Contingency plan: NO

All the wards except for Mchesi has Community contingency plans. The contingency plan was developed in December, 2018 with support from MRCS – DIPSAC Project. The plan is expected to be revised in December, 2019. The only challenge as explained by all the groups in the 4 WARDS is that the plan was not fully disseminated to all the blocks in the affected wards. The plan is linking to the draft plan of the Lilongwe City Council Disaster Contingency plan though the councils plan is still in a draft state and yet to be validated.

C Early Warning

1. Are there an early warning systems in this community?

The communities in the 5 WARDS of Mtandire, Kaliyeka, Kawale, Mchesi and Biwi have no standardized early warning system. These communities depend on information delivered to them by CBDRTs which are still not formally trained in early warning system. Lingadzi River has an automatic river line hydrometric meter which may be difficult for the community to interpret the information

2. What type of early warning systems in place?

Automatic River-line EWS:- This was just installed by Malawi Government without any involvement of community members.

3. Are community members' familiar with this system and what it means?

No

4. What indigenous early warning systems they have in place?

None

5. If yes, do community members consider it to be reliable system?

NA

6. Describe modes in which alerts are disseminated to people;

Only through direct communication- sending messages or speaking to the audience or use of phone calls

7. Do they receive alerts from early warning system?

Only from MET through Radios or CBDRT volunteers

8. How do they act on the alerts?

disseminating the information to the members of the community.

Evacuation

1. Are there designated evacuation centers? What could be the alternative evacuation sites?

According to the information gathered in all the 5 Wards, there are no any designated areas or shelters for evacuation. Community members are using alternative undesignated evacuation sites such as schools, CBOs, Churches and Local Leader's residences.

2. What is the best way to communicate on evacuation routes? Does the community understand these evacuation procedures and evacuation routes?

The best way to communicate on evacuation sites is through door to door campaigns, open days (Drama/ Quiz) and community dialogue sessions. Community members will only understand these evacuation routes if there is a continuous flow of information because most of the affected households are tenants who live temporarily in the houses..

The members proposed that these undesignated sites should have sign posts pointing to the actual site from the main roads. The community structures should also always be disseminating this information about the evacuation sites.

3. Does the community recognize and respect those with the authority to announce an evacuation? Have these evacuation procedures been used successfully in the last five years?

Yes. The community recognizes and respect authority that announces of the evacuation centers. It was noted that all the evacuation procedures and centers were being successfully used especially in 2015 and 2019.

4. Evacuation sites:

Kankodola School, CCAP Church in Mtandire; Kawale Primary School, Mchesi Prrimary school and Kafulu., and CCAP church

a. Type of sanitation: Pit latrines

b. Sanitation arrangements: no arrangement

c. Water availability: Yes tap water

Response skills and resources

1. Have you ever heard about Response teams? If yes do you have one in this area?

FGD in Kaliyeka, Kawale, Biwi and Mtandire reported that they heard about the Response Teams in their areas. The groups explained that there is a Community Based Disaster Response Teams in each of their areas.

2. Does your school have a contingency plan?

No school has any contingency plan

3. Does your contingency plan contain early warning message alerts?

NA

4. What emergency response skills exist in the community (First aid, search and rescue, public health)?

The 4 Community Based Disaster Response Teams were trained in First Aid organized by MRCS-DIPSAC Project.

5. What resources exist in the community?

Local resources like manpower, Schools and Churches for evacuation, skilled laborers,

6. What equipment does the response team need to respond?

First Aid box, Capacity Building in rescue and Searching, First Aid, Protective Clothes, Tarpaulins, torches, rain coats, bicycles, phones, whistles, stretcher, learning/visit exchange to other CBDR Committees outside Lilongwe, gloves, gumboots, wheel barrows, hoes, picks, nylon ropes, chlorine and water guard,

7. Have community members participated in emergency response or emergency response or evacuation drills and simulations?

No community participated in emergency drills but communities in Mtandire, Kaliyeka and Kawale participated in the damage assessment and needs Assessment exercise soon after the 2015 and 2019 disasters even without proper skills

Existence and capacities of the teams ready for deployment and do assessments in times of disasters).

1. How long does it take to start the assessment after disaster:

The team may be prepositioned but not ready to lead or provide services without close supervision because of the low capacity they have.

Emergency response resources

1. Is there a stockpile of emergency items?

- Food NO
- Blankets- No
- Tents- No
- Stretchers no
- First aid kits -No
- Ambulances (National level) and Local vehicle and bicycles are used as ambulances

2. What NFIs would the people need?

People in all these 5 Wards shall need Tents, pails, kitchen utensils, first aid kits, blankets, plastic papers

Problem/priority than the other, participants were asked to write the selected problem.

When the matrix is complete, participants were asked to count