

# Mainstreaming Disaster Risk Reduction and Climate Change Adaptation into Local Development Planning in Zimbabwe

**FINAL REPORT 2016 - 2018**



**ACP-EU Natural Disaster Risk Reduction Program**  
*An initiative of the African, Caribbean and Pacific Group, funded by the European Union and managed by GFDRR*



## Project Summary

<b>Project name:</b>	<b>Mainstreaming Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) into Local Development Planning in Zimbabwe</b>			
<b>Implementing partner</b>	Zimbabwe Red Cross Society			
<b>Supporting partner</b>	Danish Red Cross			
<b>Original Total Budget:</b>	USD \$857,300			
<b>Co-funding contributions:</b>	USD \$449,848 from WB/GFDRR (ACP-EU 2 <sup>nd</sup> Call for NDRR) Contract 7180281 USD \$407,452 from DRC DANIDA Frame			
<b>Location (branch/district):</b>	Mashonaland West Province Kariba District Mola (Ward 3), Negande (Ward 6) and Nebiri (Ward 7)			
<b># of villages/clusters:</b>	9 village clusters (+ 1 fishing camp cluster) = 10 clusters			
<b>Estim. # of households:</b>	<b>Total: 2,257</b>	Mola 1,303	Negande 380	Nebiri 574
<b>Estimated # of beneficiaries:</b>	<b>Total: 10,373</b>	Mola 6,216	Negande 1,381	Nebiri 2,276
<b>Project start &amp; end date:</b>	1 <sup>st</sup> January 2016 – 30 <sup>th</sup> June 2018			
<b>Overall goal:</b>	Mainstreaming disaster risk reduction and climate change adaptation into local development in Zimbabwe.			
<b>Immediate objective:</b>	Enhanced capacity of vulnerable rural communities to prepare for, mitigate and respond to recurrent disasters and the impacts of climate change in Kariba District.			
<b>Outputs / Expected results:</b>	<b>OUTPUT 1: COMMUNITY-BASED DISASTER RISK REDUCTION</b> - An established program of Disaster Risk Reduction activities related to primary function of organization. <b>OUTPUT 2: MAINSTREAMING DRR IN LOCAL DEVELOPMENT PLANNING</b> - compilation, dissemination and use of Disaster Risk Reduction information becomes a practice. <b>OUTPUT 3: EARLY WARNING-EARLY ACTION</b> - Early warnings reach and serve people at the community level.			



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## Acronyms

CBDRM	Community-based Disaster Risk Management
CBDRR	Community-based Disaster Risk Reduction
CBHFA	Community-based Health and First Aid
CCA	Climate Change Adaptation
CCMD	Climate Change Management Department
CDRAP	Community Disaster Reduction Plan
CDRT	Community Disaster Response Team
CEWS	Community Early Warning System
DCP	Department of Civil Protection
DM	Disaster Management
DMC	Disaster Management Coordinator (ZRCS/HQ)
DMO	Disaster Management Officer (ZRCS/HQ)
DRC	Danish Red Cross
DRLA	Department of Rural Local Authorities
DRR	Disaster Risk Reduction
EHT	Environmental Health Technician
EWS	Early Warning System
GoZ	Government of Zimbabwe
HSSC	Health and Social Services Coordinator (ZRCS/HQ)
ICRC	International Committee of the Red Cross
IFRC	International Federation of the Red Cross and Red Crescent Societies
KAP	Knowledge, Attitudes and Practices
LDP	Local Development Planning
LNC	Lake Navigation Control
MSD	Meteorological Services Department
MoHCC	Ministry of Health and Child Care
PHHE	Participatory Health & Hygiene Education
RDC	Rural Development Council
RMS	Resource Management System
ToT	Training of Trainers
uBVIP	upgradeable Blair Ventilated Pit Latrine
VCA	Vulnerability & Capacity Assessment
VIDCO	Village Development Committee
WADCO	Ward Development Committee
WASH	Water, Sanitation and Hygiene
ZIMVAC	Zimbabwe Vulnerability Assessment Committee
ZRCS	Zimbabwe Red Cross Society



## Introduction

*Target area context:* Kariba district is unique in Zimbabwe – in that it comprises two distinct administrative areas, Kariba Urban and Kariba Rural. Kariba Urban (i.e. Kariba town) is the official District centre and is where the District Administrator (DA) sits along with the District-level offices and staff of the various line ministries. Kariba Urban is situated next to the Lake Kariba dam wall and supports industries and resorts that are founded on the lake's resources. It is connected to Harare and to Zambia by a well-surfaced tarmac road.

Kariba Rural, by contrast, is some 350 km and a 5-hour drive from Kariba Urban and is run by the Nyaminyami Rural District Council (RDC) situated in Siakobvu (see maps overleaf). There is very occasional electricity in Siakobvu and very limited communication infrastructure: limited 2G phone network coverage and poorly maintained earth/gravel/rock road network. In the target area, all of Mola (Ward 3) and the fishing camps, and parts of Negande (Ward 6) and Nebiri (Ward 7) are usually cut off from Siakobvu for 1 – 2 months of the rainy season – since the bridges across the major rivers have been washed away.

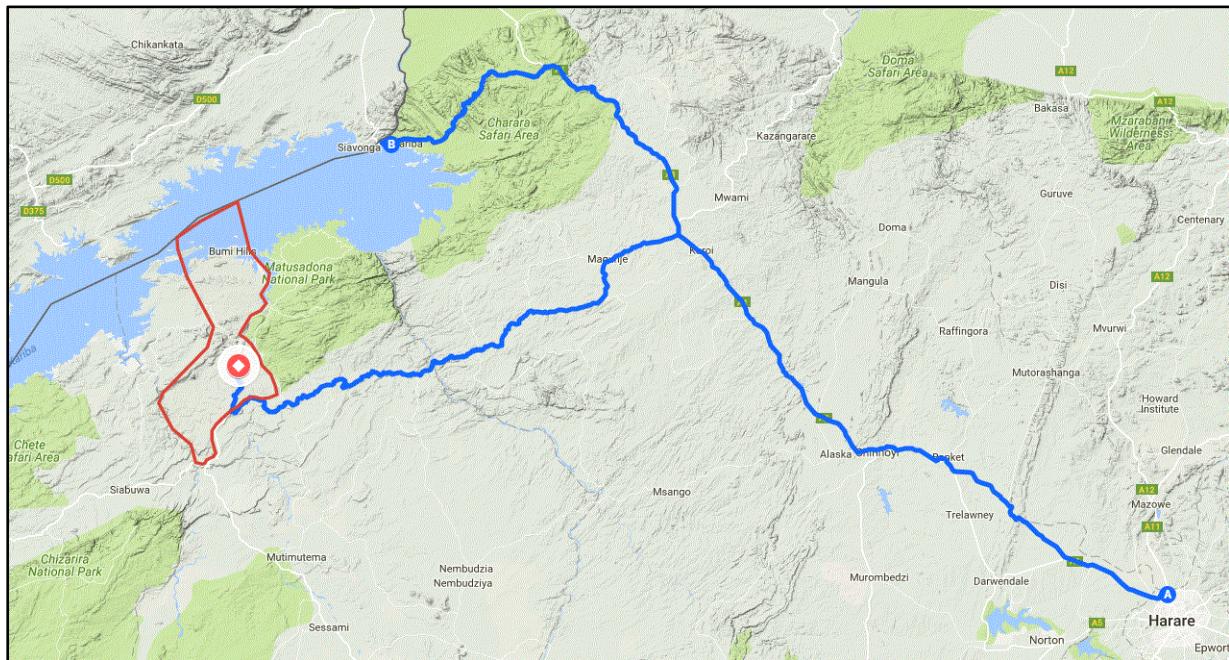
Kariba Rural is therefore remote and marginalized. It consists largely of the Matusadona National Park and of legally designated “communal lands” - inhabited primarily by the minority Tonga people who were resettled from the Zambezi River when the Kariba Dam was constructed in 1956.

Kariba Rural is categorised by the Government of Zimbabwe (GoZ) as lying in natural region V and is characterized by low and erratic rainfall and frequent droughts; and by numerous short and high gradient seasonal rivers that feed alluvial soils around the lake edge. Livelihoods are predominantly mixed farming (maize, sorghum & goats), illegal hunting and for the few settlements around the lake shore, fishing. These livelihoods are increasingly threatened by changing hazard and vulnerability profiles – exacerbated by climate variability and climate change. Flash floods commonly destroy bridges and crops planted in and around river beds. Tsetse fly infestations threaten livestock, and wild animals destroy crops as well as putting humans and livestock in danger. There is a high prevalence of malaria, HIV/AIDS and diarrhoeal disease – with outbreaks of cholera particularly in the fishing camps around the lake shore. Chronic food insecurity is high, with many reliant every year on lean season support. The 2015/16 and 2016/17 agricultural seasons, mirroring much of the rest of Zimbabwe, resulted in significant levels of food insecurity in Kariba Rural: with peak season estimates at 22% and 64% respectively. Crisis was averted through drought emergency response projects from various actors, including the Red Cross in 2016/17. The communities are also highly vulnerable to, and often exposed to, a variety of different hazards with a high frequency of recurrent “small” disasters which progressively erode any of the small development gains that the communities might have achieved.

*Project Set-up:* this 30-month WB/GFDRR “Mainstreaming DRR in Local Development Planning” (co-funded by ACP-EU/WB-GFDRR and Danish Ministry of Foreign Affairs through the Danish Red Cross) is a component of a broader 39-month Community-based Resilience Programme (also funded by Danish Ministry of Foreign Affairs through the Danish Red Cross). They both target Kariba Rural and for logistical reasons ZRCS decided to group nearby villages into community clusters (comprising 1-5 villages). 9 Clusters were then assigned to the WB/GFDRR project – with an additional cluster being created for the 3 fishing camps. Early in implementation, one cluster which had two villages about 24km apart was split into two – making a total of 11 community clusters in the project.

*Project Start-up:* in the period between the submission of the initial proposal (September 2014) and the eventual project start-up (January 2016) there was restructuring within, and between, Government of Zimbabwe (GoZ) Ministries involved as Project Steering Group members under this project. Of significant note in relation to the project objectives was that previously the Department of Civil Protection (DCP) and the Department of Rural Local Authorities (DRLA) were both departments within the Ministry of Local Government and Urban Development – indeed, they shared offices on the same floor. Now DCP comes under the renamed Ministry of Local Government Public Works and National Housing; and DRLA now comes under the newly formed Ministry of Rural Development & Preservation of National Cultural Heritage. An additional, and positive, change was the establishment of a new department mandated with promoting best practices in climate change adaptation and mitigation strategies to enhance the country’s response and capacity to manage the impacts of climate change. The Climate Change Management Department (CCMD) falls under the Ministry of Environment, Water and Climate Resources.

*Further institutional changes:* in 2017, the DRLA was brought back under the same ministry as Department of Civil Protection – in the renamed Ministry of Local Government, Public Works and National Housing.

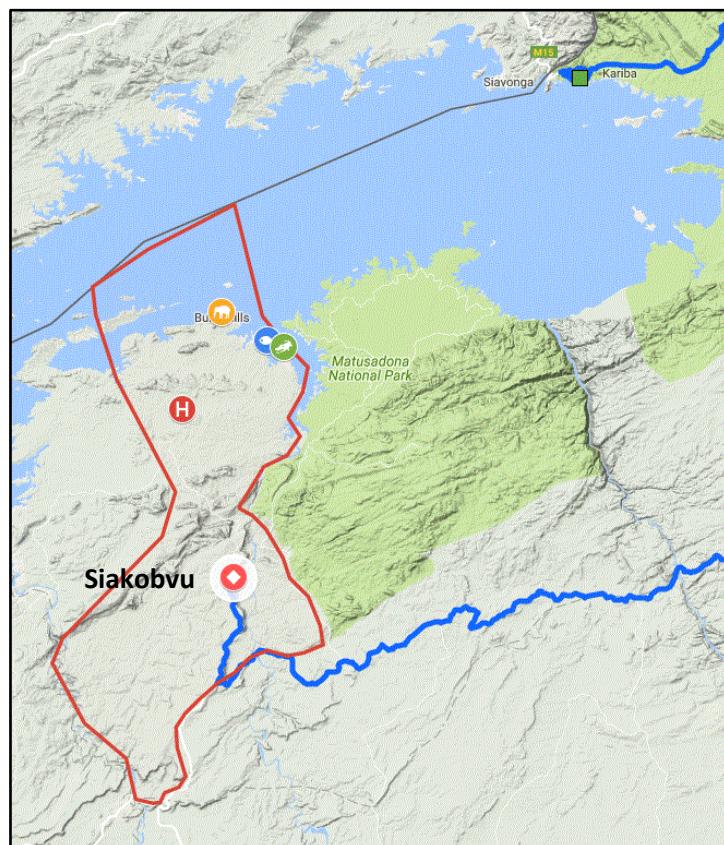


Directions from Harare North,  
Harare to Siakobvu

- A** Harare North, Harare
- B** Kariba Urban
- C** Siakobvu

#### Locations of interest

- Lake Navigation Control
- M'sampa Fishing Camp
- Mola Clinic/Hospital
- Bumi Hills
- Padenga Crocodile Farm



Map 01 & 02: WB/GFDRR Project Target Area



## Activity Progress - Overview

WB/GFDRR "Mainstreaming DRR/CCA in Local Development Planning"	Activity Progress		
	0	%	100
<b>Start-up Activities</b>			
Staff Recruitment		2016	
Logistics (Vehicle / Office space)		2016	
Key Stakeholder & Project Inception Meetings / Establish Steering Committee		2016	
<b>Evaluation &amp; Audit</b>			
Annual Audits	2016	2017	2018
Mid-term Technical Review & End-line Evaluation	Mid-term Technical Review	End-line & Final Evaluation	
<b>Outcome 01: Established program of DRR activities related to primary function of organization</b>			
<b>1.1 Community Trained in Participatory Risk Assessment</b>			
ToT for VCA (incl. climate risk assessment)		2016	
VCA (incl. climate risk) training (2016) and refresher training (2017)	2016	2017	
<b>1.2 Participatory Risk Assessments (incl. climate risk) Conducted</b>			
VCA (incl. climate risk) conducted by community (2016 & revised/updated 2017)	2016	2017	
Community prioritisation of elements at risk (2016 & updated 2017)	2016	2017	
<b>1.3 Community Disaster Reduction Action Plans (CDRAPs) Developed</b>			
3-year CDRAP developed (2016) and revised/updated (2017)	2016	2017	
<b>1.4 Structural &amp; Non-structural Micro-projects Implemented</b>			
Micro-project proposals developed by community (2016 & 2017)	2016	2017	
Micro projects implemented (2016 & 2017)	2016/17	2017/18	
Participatory Review of VCA/CDRAP/Micro-projects (2017 & 2018)	2016/17	2017/18	
<b>1.5 Pilot IFRC GIS-based Resource Management System (RMS)</b>			
RMS sensitization, training & follow-up technical support			
RMS project application (GIS & volunteer database)			
RMS demonstration and advocacy of project application to local authorities.			
RMS review & lessons learnt			
<b>Outcome 02: Compilation, dissemination &amp; DRR information becomes a practice</b>			
<b>2.1 Creating enabling environment for DRR in Local Development Planning</b>			
Project orientation meetings (local level)		2016	
District ToT & ward-level training on DRR/CCA for Civil Protection & LDP stakeholders		2016 & 2017	
Public awareness campaigns (national radio, social media)			
Advocacy & Awareness raising at local & national level meetings and fora			
International DRR day Commemorations (Oct 2016 & 2017)	2016	2017	
<b>2.2 Study tour and exchange visits</b>			
Mainstreaming DRR with Local Development Planning		2017	
<b>2.3 Integration of CDRAPs in Local Development Planning (LDP)</b>			
CDRAPs integrated by local authorities in village, ward & district development plans (2016)	2016	2017	
Advocacy & coordination with relevant local stakeholders (2016 & 2017)	2016	2017	
<b>2.4 Advocacy for DRR &amp; for mainstreaming of DRR/CCA in LDP process</b>			
Supporting DRR/CCA information sharing forum at national level			
Support 6-monthly DRR e-newsletter by the CPU			
Linkage for other fora (e.g. food security / environment)			
<b>2.5 Lessons learned workshops and dissemination of best practices</b>			
Lessons learnt workshop (district & national levels)			
Best practices document			
<b>Outcome 03: Early warnings reach and serve people at the community level</b>			
<b>3.1 Advocacy &amp; sensitization key influencers (local and national)</b>			
Conducting fishing camp/ward, district & national level sensitization meetings		2016	
Identifying EWS champions in the fishing camp		2016	
<b>3.2 Community-driven "first mile" early warning early action mechanism</b>			
Conduct EWS Knowledge Attitudes & Practices Survey		2016	
Training in Community Early Warning System		2016	
Study tour to functional first mile Early Warning System (storm-related)		2016	
Review and upgrade the existing 2-way VHF system			
Develop & implement SMS-based warning messaging system	2016/17	2017/18	
Install automated weather forecasting station at Lake Kariba Navigation			
Establish, training & equip community disaster response teams (2016 & 2017)	2016	2017	
Emergency response drills/simulations to adverse weather (2016/17 & 2017/18)	2016/17	2017/18	
Review of simulations and EWS	2016/17	2017/18	



<b>Immediate Objective</b>	
<b>Enhanced capacity of vulnerable rural communities to prepare for, mitigate and respond to recurrent disasters and the impacts of climate change in Kariba District.</b>	
<b>Indicator IO-1</b>	<p><b>% of community members (m/f) surveyed in target communities expressing feeling safer from locally prevalent hazards (E)</b></p> <p>90.9% of respondents from the target communities expressed that they felt a bit safer (50.1%) or much safer (40.8%) from locally prevalent hazards compared to when the project started. [End-line Survey]</p>
<b>Indicator IO-2</b>	<p><b>No. of people targeted reached through project activities (P/E)</b></p> <ul style="list-style-type: none"><li>• 2 project media/launch done. 1 in KBA urban and 1 in rural reaching about 69 people from government departments in KBA urban and approximately 500 in KBA rural.</li><li>• 3 inception meetings done in Harare, Kariba urban and rural.</li><li>• 14 people trained in VCA TOT 5 RCV, 3 EHTs, 1 NRDC, 5 ZRCS staff</li><li>• 96 people were trained in VCA/Climate Risk assessment- RCV, Headman, councillor, VHW, CCP</li><li>• 10 cluster based VCA community rollout completed which was attended by 825 people.</li><li>• 60 (20 per ward) participated in focus group discussions on climate risk assessment conducted by ZRCS and climate change department. The group comprised of people from different socio-economic groups.</li><li>• 3 climate profile reports produced by climate change department</li><li>• 68 people were trained in developing 3-year CDRAPs and micro-project proposal-builders, RCV, head secretary and capable community people.</li><li>• 11 -3year CDRAPs and micro-project proposals were developed for 10 clusters</li><li>• 79 volunteers trained in PHHE, the trainings were facilitated by Environmental Heath Technicians (EHT) using the ZRCS PHHE Toolkits</li><li>• 52 RCVs, EHTs, VHWs etc. have cascaded VCAs in 10 communities for communities to be able to identify different hazards</li><li>• About 825 people could identify hazards in their own perspectives, hazard impact and solutions during VCA processes</li><li>• 52 RCV together with community dwellers in the 10 clusters have identified actions to reduce hazard impact during Reflection on VCA results.</li><li>• 79 RCV trained in PHHE are conducting home visits educating the community on various health and hygiene topics</li><li>• 5 -3 full council and 2 social services meetings funded.</li><li>• 5 government departments (steering committee) participated in project activities- National and sub-national</li><li>• 3 steering committee meetings were held</li><li>• IDDR day commemorated and was attended by DCP members and other stakeholders reaching about 250 people including school children and teachers</li><li>• Climate change department produced 3 climate change profiles for the three wards</li><li>• 2 (40 people) CDRT established</li><li>• 2 CDRT Basic trainings completed 1 in urban and 1 in rural (40 people)</li><li>• 1 specialised training in KBA rural completed (16pax).</li><li>• 7 Early warning and project sensitisation meetings were held. 2 in KBA urban and 5 in rural.</li><li>• 1 Lake Navigation disaster simulation in KBA urban was done to measure the district's preparedness and response capacity</li><li>• 2 CDRT disaster simulations 1 KBA urban and 1 in KBA rural were conducted to measure the 2 CDRT's capacity in rendering first aid to the casualties</li></ul>



	<ul style="list-style-type: none"><li>• 99 Registered contacts of fisherman are receiving weather related messages.</li><li>• 16 EWS Champions trained to disseminate weather related warnings and information</li><li>• CBDRM meeting held in Kariba urban which reached 32 DCP stakeholders with 25 males and 7 females.</li><li>• CBDRM ToT training which was attended by 22 Males and 5 Females</li><li>• 122 pax retrained in VCA in 2017.</li><li>• 746 people participated in VCA community roll-out</li><li>• 795 people participated in VCA community reflections</li><li>• 57 people participated in updating the 3-year CDRAPs</li><li>• 45 people participated in proposal and budget development for 2017 projects</li><li>• 41 participants were involved in mainstreaming DRR &amp; CCA into LDP</li><li>• 45 participants from fishing camps trained in full first aid</li><li>• 16 CDRT members received Refresher Contingency planning training in Kariba rural and 18 trained in Kariba urban</li><li>• 43 volunteers received PHHE refresher training</li><li>• 34 lead farmers from Nebiri received training facilitated by Agritex</li><li>• 16 committee members of Nebiri Rehabilitation project received Asset Management training</li><li>• 22 participants were trained in Lead farmers refresher training</li><li>• 34 participants were involved in District lessons learnt workshop</li></ul>
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## Summary of achievements per specific objective

### OUTPUT 1: COMMUNITY-BASED DISASTER RISK REDUCTION

#### An established program of Disaster Risk Reduction activities related to primary function of organization

	<b>ZRCS has increased capacity to effectively and sustainably manage and implement community-based DRR linked with local Civil Protection Units &amp; Committees (E)</b>
<b>Indicator 1.1</b>	<p>The final evaluation concluded that ZRCS had “established an effective model for mainstreaming DRR and CCA into local development planning that can adapted and replicated in other Districts without any significant changes”.</p> <p>It also noted that “whilst ZRCS has a high level of technical expertise and experience and operational capacity through its Disaster Management unit, this project has added value to ZRCS’ existing capacity through the linkages with local and national Civil Protection structures, including the oversight of the National Steering Committee. This has also helped to highlight the national society’s role in civil protection processes, moving beyond just disaster response to also include disaster preparedness and risk reduction”.</p> <p>Complementing this, it noted that all the Project Steering Group members, the project “had contributed to fulfilment of their departmental mandates, in particular strengthening their capacity for engagement at the community level”.</p>
<b>Indicator 1.2</b>	<b>% of targeted communities that contribute with own resources (cash or in kind) in managing local risks (multi-hazard) (E)</b>  In the 2016/17 and 2017/18 cycles, all 11 community clusters contributed own resources for the DRR/CCA micro-projects (e.g. for latrines: labour, bricks, river sand & grass thatch; and for the weir/pipeline/community garden rehabilitation: labour, sand, fencing)
<b>Indicator 1.3</b>	<b>% of targeted households who can correctly identify key household or community actions to mitigate, prepare or reduce the impacts of local hazards (E)</b>  Unfortunately, the end-line survey did not ask this question directly. It asked, “ <i>what measures, if any, have your family, Red Cross Volunteers or the community implemented by themselves (not funded by the ZRCS) that in some way has helped to prepare for, or reduce the impact of disasters?</i> ”. The question was asked from two angles: (1) measures to prepare for the impact of a hazard; and (2) measures to respond to a disaster. (1) 73% indicated that they had built latrines; 53% had dug rubbish pits; 20% were linked to an early warning system; 13% had constructed protected wells; and 10% had planted trees. (2) 51% indicated that they practised safe storage of food; 47% had improved water storage capacity (agriculture); 32% had climate-risk informed farming methods; 23% had reinforced their houses; and 11% had made fireguards against veldt fires.



## 1.1 Training of leaders, Red Cross volunteers and community members to conduct participatory risk assessment and hazard mapping

### 1.1.1 TOT for climate risk assessments (with technical support from RC Climate Centre)

Although not created at the time of proposal writing, by the time of project start-up in January 2016, the new Climate Change Management Department (CCMD) had been established and was now operational (under the Ministry of Environment, Water and Climate). A key element of the project design was to encourage the integration/mainstreaming of Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) across GoZ ministries and sectors. This engagement with the new CCMD allowed the CCA inputs to move beyond the purely technical (RC Climate Centre) towards now incorporating local knowledge, developing local experience and institutional linkages & partnerships, and in strengthening sustainability. Staff from CCMD were assigned to provide technical inputs to the project – including for the Training of Trainers (ToT) for the participatory disaster and climate risk assessments and for conducting a district-level “Kariba District Climate Change Risk Profile” Report.

**Note:** in all reports and annexes the participatory disaster and climate risk assessments are referred to as the Vulnerability & Capacity Assessments (VCAs) – in which *inter alia* Climate Change Adaptation has been mainstreamed. For additional clarity this is abbreviated to VCA/CCA.

The VCA/CCA ToT workshop was conducted in both Kariba urban and rural. 15 participants (11M:4F) were drawn from Ministry of Health, Nyaminyami RDC, ward-based Environmental Health Technicians (EHTs) and the ZRCS field team. The ZRCS Disaster Management Officer (DMO) and Planning Monitoring Evaluation & Reporting (PMER) Officer co-facilitated the training. The ToT took place from 22<sup>nd</sup> to 28<sup>th</sup> May 2016: at the Cutty Sark Hotel in Kariba Urban for the theoretical sessions – to institutionalise the risk assessment process through the participation of GoZ officials from the district & provincial levels; and the practical sessions took place at the Nebiri Community Centre (Ward 7) in Kariba Rural.

The VCA/CCA ToT evaluation showed that over 90% of the participants were satisfied both in terms of the organisation of the workshop as well as the knowledge and skills gained from the training.

In Q2 2017, the Climate Change Management Department finalised the “Kariba District Climate Change Risk Profiling Report”. 40 hard copies were produced and shared with Nyaminyami District stakeholders (district & ward-level councillors; Agritex, Health and Veterinary officers; and NGOs) during the Nyaminyami Disaster Risk Management Plan workshop in Q3 2017. The report was then used in the development of the climate-informed Nyaminyami Disaster Risk Management Plan.

The full **VCA/CCA ToT report** and the **Kariba District Climate Change Risk Profile** conducted by the Climate Change Management Department are found as Annex 02-1.1.1a and 02-1.1.1b respectively.

**Activity 100% complete.**

### 1.1.2 Identify the cluster-level VCA/CCA facilitators (2 RC volunteers + 1 VIDCO and 1 WADCO)

In Q2 2016, ZRCS field staff together with VCA/CCA ToTs (volunteers and EHTs already trained to train VCA/CCA identified community level VCA/CCA facilitators from within their local villages. The core community VCA/CCA team comprised of ZRCS volunteers and representatives of the Village and Ward Development Committees (VIDCO & WADCO).

**Activity 100% complete.**

### 1.1.3 VCA/climate risk assessment training: 3-day classroom training & 2-day field-based training (incl. DRR solutions prioritization) (2016)

The whole month of June 2016 was dedicated to carrying out the VCA/CCA process:

1. Firstly, a 3-day classroom-based & 2-day field-based **training** at community level of 12 participants per cluster – where participants comprise amongst others Red Cross Volunteers, Village Health Workers, village leaders, VIDCO and WADCO members and Child Protection Committee members. A total of 96 people (57M:39F) in the 3 wards were trained (i.e. 1.1.3);
2. Secondly, a 1-day community VCA/CCA **Assessment** (see [1.2.1](#)); and
3. Thirdly, drafting the VCA/CCA **Report** (see [1.2.1](#) & [1.2.2](#)).



A total of 4 trainings were carried in the three wards: Mola (Ward 3), Negande (Ward 6) and Nebiri (Ward 7) from the 6<sup>th</sup> to 23<sup>rd</sup> June 2016 – with a total of 122 participants (62M:60F). There were approximately 12 participants per cluster. Participants included Red Cross volunteers, community members (incl. village health workers, teachers and youth), religious leaders, local leadership (administrative & traditional) and relevant district and ward-level staff from government technical departments. Trainings were conducted by the VCA/CCA ToTs at the respective community centres.

Cluster	Training	VCA/CCA	Report Writing
<b>Negande (W6):</b> Matibilila, Siakaginya & Mutombo	6 <sup>th</sup> - 8 <sup>th</sup> June 2016	9 <sup>th</sup> June 2016	11 <sup>th</sup> June 2016
<b>Negande (W6):</b> Mubhobho 2	6 <sup>th</sup> - 8 <sup>th</sup> June 2016	10 <sup>th</sup> June 2016	11 <sup>th</sup> June 2016
<b>Mola (W3):</b> Dove, Dundwe & Chiweshe	13 <sup>th</sup> - 15 <sup>th</sup> June 2016	16 <sup>th</sup> June 2016	17 <sup>th</sup> June 2016
<b>Mola (W3):</b> Fishing camps		18 <sup>th</sup> June 2016	19 <sup>th</sup> June 2016
<b>Nebiri (W7):</b> Nyamakara	21 <sup>st</sup> - 23 <sup>rd</sup> June 2016	24 <sup>th</sup> June 2016	25 <sup>th</sup> June 2016
<b>Nebiri (W7):</b> Chikuro	21 <sup>st</sup> - 23 <sup>rd</sup> June 2016	26 <sup>th</sup> June 2016	27 <sup>th</sup> June 2016

The VCA/CCA Training Report is included as a combined report as Annex 02-1.2.1a “Participatory Disaster & Climate Risk Assessment Report 2016”.

**Activity 100% complete.**

#### 1.1.4 VCA/climate risk assessment Refresher training: 2-day class & 1-day field (2017)

A 2-day *refresher* training in the VCA/CCA risk assessment process was conducted in advance of the 2017/18 cycle (the project’s 2<sup>nd</sup> cycle) of the risk assessment → action planning → DRR/CCA micro-project implementation process. The training developed further the capacity building of the Red Cross volunteers, community members (incl. village health workers, teachers and youth), religious leaders, local leadership (administrative & traditional) and relevant district and ward-level staff from government technical departments. It thus further entrenches the sustainability of the process.

A total of 4 refresher trainings were carried in the three wards: Mola (Ward 3), Negande (Ward 6) and Nebiri (Ward 7) from the 9<sup>th</sup> to 14<sup>th</sup> June 2017 (see table in [1.2.1](#)) – with a total of 122 participants (62M:60F). There were approximately 12 participants per cluster. The trainings were co-facilitated by selected Red Cross volunteers and Environmental Health Technicians who had received Training of Trainer (ToT) in 2016, and the district-level ZRCS project staff (field officer and field assistant). Those trained as ToTs proved to be well capacitated and able to drive community VCA/CCA and risk assessment processes; and were able to articulate and cascade information well to other community members. Compared to the 2016 VCA/CCA training, participants were better able to grasp the concepts and tools well. Facilitators noted the increased confidence and knowledge by the participants and use of the VCA/CCA manuals now translated into Shona resulted in high levels of active participation.

The VCA/CCA Refresher Training Report is included as a combined report as Annex 02-1.2.1b “VCA Refresher Training and Consolidated VCA Update Report 2017”.

**Activity 100% completed.**

## 1.2 Conduct participatory risk assessment (incl. climate risk), hazard mapping and prioritization of elements of risk

**Note:** For all activities 1.2 to 1.4 there were two cycles of the VCA/CCA risk assessment → action planning → DRR/CCA micro-project implementation → participatory review process. The first spanning 2016/17 and the second (an *iterative update*) spanning 2017/18.

It took about one month (June 2016 & June 2017) to conduct the participatory risk assessments in all the target communities. There were 3 steps involved:

1. VCA/CCA training: 5-day in 2016 (see [1.1.3](#)); and a 2-day *refresher* training in 2017 (see [1.1.4](#));
2. The community-led VCA/CCA assessment (see [1.2.1](#)); and
3. The VCA/CCA Report (2016) and updated & revised Report (2017) (see [1.2.2](#)).



For Activity 1.2 there are 5 key components as follows – where the 2<sup>nd</sup> cycle (2017) objectives were to review, update and revise what was done in the 1<sup>st</sup> cycle (2016). Overall the VCA/CCA process objectives were to:

- Support communities in **identifying and understanding potential hazards** in their context;
- **Analyse underlying causal factors** that make communities vulnerable to hazards and disasters;
- Support communities to **identify and map local resources and capacities** to reduce vulnerability and mitigate hazard/disaster impacts;
- Support communities to **prioritise three major hazards** and **prioritize associated actions and disaster risk reduction strategies**; and
- **Enable and empower** communities to **advocate** for, and request assistance from, **relevant authorities, duty-bearers and stakeholders**.

#### 1.2.1 *Volunteers facilitate community and stakeholders in VCA – including hazard mapping & CC (2 weeks) (2016 & updated 2017)*

2016/17: This activity followed on from, and was incorporated into, activity 1.1.3. On the day to conduct the VCA/CCA, communities met at their respective community centres. Participants included the village chiefs, ward councillors, village heads, Village Health Workers, Environmental Health Technicians, Child Protection Committee members, village police representatives and community members. Explanations were provided on the objectives, purpose and use of the information gathered – so that communities would appreciate the value of their participation in informing the planning for possible community prioritised DRR/CCA measures.

The process was led by community VCA/CCA facilitators – who started by explaining with examples the difference between a problem and a hazard. Once the community understood, then the whole hazard profile would be completed for the three most prevalent hazards identified by the community. Community members were grouped into 6 groups to match the six different “elements at risk<sup>1</sup>”.

It is in these groups that data was collected using VCA/CCA tools<sup>2</sup> such as seasonal calendar and risk mapping. Community involvement is crucial for ownership and sustainability – as they are the ones who understand and have full knowledge of the risks they face in their everyday life. The involvement of local leadership (administrative & traditional), religious leaders, village health workers, teachers and relevant district and ward-level staff from government technical departments, as key influencers, plays a crucial role in guiding the community members through the risk assessment process. For example, teachers advocated for hazards faced by school children: especially, human and animal conflict and flooding. Across the 10 clusters, a total of 841 community members (270M:573F) participated in the VCA/CCA update process – as per the table below.

Ward	Clusters	Male	Female (& %)	Total
Mola (Ward 3)	3	63	311 (83%)	374
Mola (Ward 3) / Fishing Camps	1	8	17 (68%)	25
Negande (Ward 6)	4	87	108 (55%)	195
Nebiri (Ward 7)	3	112	135 (55%)	247
<b>TOTAL</b>	<b>11</b>	<b>270</b>	<b>573 (68%)</b>	<b>841</b>

The consolidated VCA/CCA Report is included as a combined report as Annex 02-1.2.1a “Participatory Disaster & Climate Risk Assessment Report 2016”.

<sup>1</sup> In the ZRCS VCA/CCA Manual the 6 different “elements at risk” are categorised as (1) Individual – Male; (2) Individual – Female; (3) Social; (4) Physical; (5) Natural; and (6) Economic.

<sup>2</sup> VCA/CCA tools used include: Historical and future risk calendar; Community risk mapping (hazards, vulnerabilities and capacities / resources); Transect walk; Seasonal calendar (Hazards, Livelihoods & Capacities); Social, institutional and organisational Mapping; Connectors & dividers (Social Cohesion); and Problem tree [optional].



*Figures 01 & 02: Community Risk Assessments in Nyamakara and Chipiruka (Nebiri)*

2017/18: as in 2016, the 2017 update activity followed on from, and was incorporated into, activity 1.1.4. The dates for the related activities were as follows:

2017/18 VCA/CCA (Update) Process			
Cluster	Refresher Training	VCA/CCA	Report Writing
Mola (W3): Dove, Dundwe, Chiweshe and fishing camps	13 <sup>th</sup> - 14 <sup>th</sup> June 2017	15 <sup>th</sup> June 2017	16 <sup>th</sup> June 2017
Negande (W6): Matibilila; Mubhobho 1, Siakaginya and Mutombo	9 <sup>th</sup> - 10 <sup>th</sup> June 2017	11 <sup>th</sup> June 2016	12 <sup>th</sup> June 2016
Negande (W6): Peter and Mubhobho 2	13 <sup>th</sup> - 14 <sup>th</sup> June 2017	15 <sup>th</sup> June 2017	16 <sup>th</sup> June 2017
Nebiri (W7): Nyamakara, Chikuro and Maya	9 <sup>th</sup> - 10 <sup>th</sup> June 2017	11 <sup>th</sup> June 2016	12 <sup>th</sup> June 2016

For the actual VCVA/CCA assessment update itself: the activity took place on the 11<sup>th</sup> and 15<sup>th</sup> June 2017 at the cluster centres. It was again led by community VCA/CCA facilitators in each of the 10 clusters. The hazard and risk profiles were revised and updated by the 6 groups matching the six different “elements at risk”.

Across the 10 clusters, a total of 746 community members (291M:455F) participated in the VCA/CCA update process:

Ward	No. of clusters	Dates	Male	Female (& %)	TOT
Mola (W3)	4	15 <sup>th</sup> June 2017	90	218 (71%)	308
Negande (W6)	4	11 <sup>th</sup> & 15 <sup>th</sup> June 2017	115	116 (50%)	231
Nebiri (W7)	3	11 <sup>th</sup> June 2017	86	121 (58%)	207
<b>TOTAL</b>	<b>11</b>	<b>11<sup>th</sup> &amp; 15<sup>th</sup> June 2017</b>	<b>291</b>	<b>455 (61%)</b>	<b>746</b>

Rural Kariba received above average rainfall in the 2016/17 rainy season – unlike in recent years. However, drought is still strongly prioritised in many clusters as the major hazard. It is relevant to note the increased prioritisation of malaria in several clusters away from the lake: this may be attributable to the above average rainfall and to reduced coverage of indoor residual spraying campaigns by the increasingly resource-constrained Ministry of Health & Child Care.

In the fishing camps: due to construction of household latrines under the 2016 project DRR measures, diarrhoea was no longer prioritised as one of the major hazards. In 2017, strong winds & storms were less prioritised than 2016, potentially indicating the positive impact of the pilot early warning system (SMS-adverse weather alerts).



The table below illustrates the changing community-assessed hazard priorities in 2017 compared with 2016 in each cluster/ward.

Ward	Cluster	Hazard No.1	Hazard No.2	Hazard No.3
Mola (W3)	Dundwe	2016 Drought	Malaria	Diarrhoea
		2017 Drought	Diarrhoea	Human - animal conflict
	Dove	2016 Drought	Diarrhoea	Cancer
		2017 Drought	Diarrhoea	Human - animal conflict
	Chiweshe	2016 Drought	Diarrhoea	Malaria
		2017 Drought	Diarrhoea	Malaria
	Fishing Camps	2016 Human-Animal conflict	Strong wind / Storm	Diarrhoea
		2017 Human-Animal conflict	Drought	Strong wind / Storm
Negande (W6)	Matibilila	2016 Drought	Diarrhoea	Human-Animal conflict
		2017 Drought	Diarrhoea	Floods
	Siakaginya & Mutombo	2016 Drought	Diarrhoea	Malaria
		2017 Drought	Malaria	Diarrhoea
	Mubhobho 2	2016 Drought	Diarrhoea	Malaria
		2017 Drought	Diarrhoea	Human-Animal conflict
Nebiri (W7)	Maya	2016 Drought	Floods	Malaria
		2017 Drought	Malaria	Diarrhoea
	Nyamakara	2016 Drought	Diarrhoea	Veld fires
		2017 Drought	Human-Animal conflict	Diarrhoea
	Chipiruka	2016 Drought	Malaria	Diarrhoea
		2017 Drought	Malaria	Diarrhoea

The table below summarises the community assessment of the root causes and impacts of the 5 main hazards identified above – with 2017 adjustments in *italics in green*:

Hazard	Root Causes	Impacts
<b>Drought:</b> <b>Crop Failure &amp; Food insecurity</b>	<ul style="list-style-type: none"> <li>• Low rainfall</li> <li>• Changing rainfall patterns due to Climate Change</li> <li>• Heat waves and long dry spells</li> <li>• Poor soil quality and shortage of better farmland</li> <li>• Poor farming knowledge and methods</li> <li>• Lack of farming inputs (drought tolerant seeds, fertilizer, insecticides)</li> <li>• <i>Deforestation</i></li> <li>• Flooding of riverbank fields (food insecurity)</li> <li>• <i>Wild animals grazing on crops (food insecurity)</i></li> </ul>	<ul style="list-style-type: none"> <li>• Malnutrition, poor health</li> <li>• Food insecurity stress</li> <li>• <i>Asset disposal</i>: loss of livestock through barter trade for grain; <i>and low prices</i></li> <li>• Domestic instability and conflicts related to food – <i>incl. theft</i></li> <li>• School dropout rates increase</li> <li>• Early marriage cases increase</li> <li>• Prostitution and Sexual &amp; Reproductive Health risks</li> </ul> <p><i>Most vulnerable: the “economically inactive”: young children, elderly, widowed, disabled, lactating mothers and chronically ill.</i></p>

Hazard	Root Causes	Impacts
Diarrhoeal Diseases	<ul style="list-style-type: none"> <li>Bad water &amp; sanitation practices i.e. open defecation, not washing hands, dumping garbage at unsafe places, drinking unsafe un-boiled water.</li> <li><i>Unavailability of safe water sources and/or</i> long distances to safe water sources (in some cases up to 2.5km)</li> <li>Lack of Latrines</li> <li>Long distances to health centre</li> </ul>	<ul style="list-style-type: none"> <li><i>Dehydration</i>, body weakness and death</li> <li>Breakdown of social cohesion i.e. during cholera emergencies</li> <li>Assets disposal - <i>especially livestock, at low prices</i>, to meet medical costs</li> <li>Absenteeism from school</li> <li><i>Unable to carry out livelihood activities</i></li> </ul>
Malaria	<ul style="list-style-type: none"> <li>Mosquito bites</li> <li>Disused <i>and open</i> pits and long grass close to households – <i>providing good mosquito breeding sites</i></li> <li>Lack of awareness</li> <li>Low bed net coverage and low correct usage among those with nets</li> <li><i>Lack of mosquito repellents</i></li> <li>Some anti-drug use religious believes i.e. of apostolic sects hinder prevention efforts like spraying and treated net distribution</li> </ul>	<ul style="list-style-type: none"> <li>Illness and death</li> <li>Increase in orphans</li> <li>Absenteeism and dropping out of school</li> <li>Family conflicts related to witch hunting in the case of cerebral malaria</li> <li>Asset disposal - <i>especially livestock, at low prices</i>, to meet medical costs</li> <li><i>Unable to carry out livelihood activities</i></li> </ul>
Floods	<ul style="list-style-type: none"> <li>Storms and backflow caused by river confluences, Mawena, Sengwa rivers and several smaller streams in Negande (Ward 6)</li> <li><i>Flash floods: heavy rain</i></li> <li><i>Flash floods: river bank cultivation leading to siltation leading to flooding</i></li> <li><i>Flash floods: too much rain within a short period of time</i></li> </ul>	<ul style="list-style-type: none"> <li>Destruction of crops</li> <li>Environmental degradation</li> <li>Destruction of homes roads, bridges infrastructure</li> <li>Absenteeism from school (up to a month)</li> <li>Drowning and death</li> <li>Water borne diseases</li> <li>Crocodile infestation in smaller streams after floods and attacks on humans &amp; livestock</li> <li><i>Sick or injured people are not able to, or take a long time to be able to access health centres</i></li> </ul> <p><i>Most vulnerable: school children, bread winners and chronically ill.</i></p>
Human Wildlife Conflict <i>Crocodile, hyena &amp; hippo attacks; Elephants, porcupines, wild pigs, baboons - destruction of crops</i>	<ul style="list-style-type: none"> <li>Flooding results in movement of crocodiles from lake Kariba upstream into Negande</li> <li>Lack of game fence results in animals crossing into communities</li> <li>Drought &amp; poaching has led to decline in wildlife causing hyenas to opt for domesticated animals</li> </ul>	<ul style="list-style-type: none"> <li>Injuries and loss of life</li> <li>Loss of livestock</li> <li>Crop Destruction and poor harvests</li> <li>Seasonal migration of people to guard fields</li> </ul>



*Figure 03: VCA Refresher Training in Mola (Ward 3)*



*Figure 04: Community inputs to the updated VCA*

The consolidated and updated VCA/CCA Report is included as a combined report as Annex 02-1.2.1b “VCA Refresher Training and Consolidated VCA Update Report (2017)”.

**2016 & 2017 activity 100% completed.**

#### **1.2.2 Generation of draft VCA, reviews, finalization/approval of VCA (2016 & updated 2017)**

For both 2016/17 and 2017/18, those trained in facilitating the VCA/CCA in their communities compiled the VCA/CCA reports for each cluster. ZRCS provided guidelines on how to draft the VCA/CCA report. The dates for VCA report writing are indicated in 1.1.3 and 1.2.1. All the findings on vulnerabilities, capacities, coping strategies, possible solutions, and other related findings were included in the VCA/CCA reports. The different clusters are at different levels of capacity – and this is reflected in the quality of reports per cluster.

**2016 & 2017 activity 100% completed.**

#### **1.2.3 Community reflection on VCA outputs (2016 & updated 2017): identification & prioritization of elements at risk**

**2016/17:** Community reflection on the VCA/CCA output took place in late June and early July 2016. This process, facilitated by the ZRCS field team, involved gathering communities at cluster-level for reflection, prioritisation and planning for solutions using results that came out of the community-led VCA/CCA process. The community took a lead role in reflecting on the VCA/CCA results and came up with the solutions to mitigate and reduce the effects of each prioritised hazard. This process is critical as it helped communities to link findings of the VCA/CCA process with potential solutions to hazards identified in the VCA process itself. It was part of a continuous community-led process of understanding risk and development of local solutions. It provided the necessary information, through community-voiced reflection, to be packaged in 3-year Community Disaster Risk Reduction Plans (CDRAPs). Community participation throughout was strong – and showed the readiness and willingness of village leadership, as well as community members, to invest time and energy in disaster risk management.

The objectives were to:

- Ensure community consensus on the contents of the VCA/CCA report;
- Communities to prioritise “elements at risk”;
- Communities to brainstorm on possible solutions to prevent or mitigate prioritised “elements at risk”
- Capacitate volunteers & community leadership with facilitation skills to ensure sustainability of the processes

The expected deliverable for this process were 11 Cluster Disaster Reduction Plans (CDRAPs) and subsequent DRR/CCA micro-project proposals.

**2017/18:** In contrast to 2016, where this activity was facilitated by the ZRCS field team, in 2017 the community reflection on the updated VCA results was led by selected volunteers in each cluster. This was designed to enhance local capacity building, sustainability and community ownership. The steps were identical to 2016/17 – and incorporated revised and updated information through community-voiced reflection, to be packaged in 3-year Community Disaster Risk Reduction Plans (CDRAPs). Overall, it was part of a continuous community-led process of understanding risk and development of local solutions.



The community reflection meetings were held from 7<sup>th</sup> to 13<sup>th</sup> July 2017 in the 11 cluster sites – and involved 795 community participants (276M:519F). Participants included village heads, Village Health Workers, Zimbabwe Republic Police, Child Protection Committee members, Agritex extension staff, teachers, Red Cross Volunteers (and Youth volunteers) as well as community members. Stakeholders played a crucial role in providing guidance on the problem tree and possible solutions; and inclusion of community members was crucial in giving diverse and fruitful perspectives on hazard solutions – since these are the people who have in-depth knowledge of available capacities in preventing and mitigating prioritised hazards in their communities. There was balanced representation from all socio-economic groups in terms of religion, age, gender and disability.

### **Key Observations**

- Red Cross Volunteers were active and confidently led the reflection processes. Volunteers leading the process is crucial for sustainability – as well as effectiveness (as they can switch languages easily from Shona to Tonga making it easier for community members to better understand);
- although teachers provided inputs & guidance during the meetings, mainstreaming DRR in the school curriculum is critical to successfully change the attitude of the community and influence behaviour change on how they manage their local hazards;
- female representation increased significantly compared to the 2016/17 VCA/CCA cycle. Women contributed to the discussions and fearlessly voiced their views;
- in some clusters, participants arrived late as many were involved in the concurrent food for productive assets projects (part of the drought food security response by other actors).

Please see Annex 02-1.2.3 “Community Reflection on VCA Results & Updated Results” for more information.

**2016 & 2017 activity 100% completed.**

### **1.3 Development of annually revised & updated Community Disaster Reduction Action Plans (CDRAPs)**

#### **1.3.1 Development of 3-year Community Disaster Action Plan CDRAP (2016 & updated 2017)**

2016/17: in Q3 2016, the process of developing Community Disaster Reduction Action Plans (CDRAPs) was driven by the community itself. Community meetings at village cluster-level were organised and a total of 422 people participated (174M:248F). Participants included councillors, village heads, chief representatives, headman secretaries, Village Health Workers, Child Protection Committee members, Community police, Red Cross Volunteers & Red Cross members and community members. CDRAP development meetings were held in 11 clusters and 11 three-year CDRAPs and 11 micro-project proposals were produced. The table overleaf summarises participant numbers per cluster, dates and venue.

Ward	Cluster	Venue	Date	M	F	TOT
Mola (Ward 3)	Dundwe	Mola centre	26/07/16	13	37	50
	Dove	Dove community	26/07/16	7	40	47
	Chiweshe	Kalundu Primary school	28/07/16	0	25	25
	M'sampa fishing camp	M'sampa	29/07/16	13	10	23
Negande (Ward 6)	Matibilila	Matibilila homestead	19/07/16	11	16	27
	Siakaginya & Mutombo	Chilimba creche	18/07/16	18	21	39
	Mubhobho 2	Chibwezulu shops	22/07/16	27	23	50
	Peter & Mubhobho 1	Negande centre	25/07/17	22	35	57
Nebiri (Ward 7)	Chipiruka	Chikuro primary school	21/07/16	20	9	29
	Nebiri Maya	Nebiri centre	23/07/16	13	12	25
	Nebiri Nyamakara	Nyamakara centre	23/07/16	30	20	50
<b>TOTAL</b>	<b>11</b>			<b>174</b>	<b>248</b>	<b>422</b>



The objectives of the CDRAP meetings were to: (1) group potential solutions into effective vs less effective and easy vs difficult; (2) have a community agreement on the structural and non-structural prioritised DRR/CCA solutions for the next 3 years (2016-2018); (3) achieve community consensus on locally available resources they are able to contribute; and (4) engage the community to select community members to be trained in developing CDRAP and DRR/CCA micro-project proposal writing. In respect of (4), 6 to 7 literate and numerate people from each cluster were selected – comprised of councillors, Agritex officers, EHTs, builders, Red Cross volunteers, Village Health Workers, Village head secretaries or community members.

As part of the training provided for 1.3.1, the community members selected by the community were trained to draft their cluster's CDRAP document, and in micro-project proposal writing. The 1-day training was carried out during the period 19<sup>th</sup> to 28<sup>th</sup> July 2016 in the 3 wards at the respective community centres. A total of 68 participants were trained (36M:32F).

Please refer to Annex A02-1.3.1a "CDRAP & Micro-project Proposal Writing Training Report (July 2016)". Annex A02-1.3.1b "CDRAP example from Dundwe Cluster" can be found in the 2016 Annual Report.

2017/18: as in 2016/17, the process of developing Community Disaster Reduction Action Plans (CDRAPs) was driven by the community itself. Community meetings were organised from 14<sup>th</sup> to 18<sup>th</sup> July 2017 at cluster-level and a total of 740 people (252M:488F) participated, excluding children. This represents a 75% increase in total participants on 2016 – with a slight increase from 59% to 66% female participation. Participants included ward councillors, village heads, chief representatives, headman secretaries, Village Health Workers, Child Protection Committee members, community police, Red Cross Volunteers and community members. The objectives were as in 2016/17 – with an additional objective to re-examine the root causes of the disasters (and emerging hazards), and to re-explore and prioritise possible solutions/plans to reduce disaster risk.

In addition to identifying solutions to prioritised risks, the CDRAP is subsequently integrated into the village and ward-level development plans – which then feed in to the Nyaminyami Rural District Development Plan. The community involvement in the CDRAP process helps to instil strong ownership of the plan: and encourages communities (and their leadership) to share their plans with other actors and stakeholders; and enhances prospects of sustainability of the important planning processes.

CDRAP development meetings were held in 11 clusters and 11 three-year CDRAPs and 11 micro-project proposals were produced. Thee table below summarises participant numbers per cluster, dates and venue.

A significant challenge was the management of community leadership expectations: whilst the project emphasises the role of the CDRAP tool itself in leveraging potential support from a variety of developmental stakeholders, the community leadership were invariably focused on how much budget was available from the ZRCS project for individual DRR micro-projects. ZRCS field staff, Red Cross volunteers and the VCA/CCA facilitators had to continuously refocus the discussion away from specific micro-projects and back to the "plan".

Ward	Cluster	Venue	Date	M	F	TOT
Mola (Ward 3)	Dundwe	Mola centre	17.07.2017	17	27	44
	Dove	Dove Community	17.07.2017	22	87	109
	Chiweshe	Kalundu Primary School	18.07.2017	29	76	105
	M'sampa fishing camp	Community Church	18.07.2017	16	23	39
Negande (Ward 6)	Matibilila	Matibilila Homestead	16.07.2017	21	29	50
	Siakaginya & Mutombo	Chilimba Crèche	16.07.2017	25	50	75
	Mubhobho 2	Chibwezulu shops	15.07.2017	22	27	49
	Peter & Mubhobho 1	Negande centre	19.07.2017	20	13	33
Nebiri (Ward 7)	Chipiruka (Chikuro)	Chikuro primary school	15.07.2017	24	50	74
	Nebiri Maya	Nebiri centre	14.07.2017	24	55	79
	Nebiri Nyamakara	Nyamakara centre	14.07.2017	32	51	83
<b>TOTAL</b>	<b>11</b>			<b>252</b>	<b>488</b>	<b>740</b>

For further information, please refer to Annex A02-1.3.1c “Consolidated Updated CDRAP Report 2017” and 1.3.d “CDRAP Updated Sample - Maya Cluster & Fishing Camps 2017”.

**2016 & 2017 activity 100% completed.**

### 1.3.2 Participatory Ward Reviews: VCA/CDRAP/Micro-projects Review of action plans (2016 & 2017)

The main purpose of the reviews was to enable communities to carry out a self-assessment of the Community-based Disaster Risk Reduction processes: from risk assessment (VCA/CCA) → CDRAP action planning → DRR/CCA micro-project implementation; and through the review itself thus completing the first cycle of the CBDRR process. It allowed communities to appreciate their successful efforts, learn from challenges encountered during the process and identify solutions to mitigate the challenges in future.

2016/17: The participatory reviews were originally scheduled for late Q1 2017 but were delayed due to several factors: above average rainfall effecting access to communities, the on-going drought-related food insecurity response (ZRCs and other stakeholders), and resultant delays in the completion of DRR/CCA micro-projects themselves. A total of 169 (103M:66F) community members participated in 1-day review meetings held in each of the 3 wards. In Mola (ward 3) the fishing camp M'Sampa had a separate review since its context is different from the other clusters.



*Figures 05 & 06: Participatory Reviews – Negande participants and Negande Volunteer group participants*

#### Attendance breakdown

Ward	No. of clusters	Dates	Male	Female (& %)	TOT
Mola (W3)	3	13 <sup>th</sup> May 2017	26	20 (44%)	46
M'Sampa fishing camp	1	13 <sup>th</sup> May 2017	28	12 (30%)	40
Negande (W6)	4	12 <sup>th</sup> May 2017	27	15 (36%)	42
Nebiri (W7)	3	11 <sup>th</sup> May 2017	22	15 (37%)	41
<b>TOTAL</b>	<b>11</b>	<b>11<sup>th</sup> – 13<sup>th</sup> May</b>	<b>103</b>	<b>66 (39%)</b>	<b>169</b>

#### Methodology

In each participatory review meeting, community members were divided into 4 groups: (1) local leadership and stakeholders; (2) direct DRR/CCA micro-project beneficiaries; (3) DRR/CCA micro-project non-beneficiaries; and (4) Red Cross Volunteers. Two discussions were run concurrently – facilitated by the ZRCs field team. After the group work was completed, the community members were all brought back together to provide different views and perspectives, to discuss in plenary and agree summary responses for their ward.



### Challenges / Lessons learnt / Recommendations

- *Training:* some trainings were too short, and some participants were not able to fully understand the concepts: e.g. the PHHE (non-structural DRR measure) training took one week – participants wanted two weeks; and for Red Cross Volunteers the First Aid trainings were 6-hour refresher trainings – they would have preferred a repeat 5-day full training course.
- *Training:* manuals were usually in English which some participants found difficult to understand. Manuals should be written in Shona or Tonga as this would improve their understanding and allow for easier dissemination in the wider community.
- *Risk Assessment:* community members still find it difficult to differentiate between a hazard and a problem.
- *Trainings & meetings:* community members often travel long distances on foot to participate. In some activities, such as the VCA/CCA activity in the community itself, food was not provided. Given many of the participants are women with children, this resulted in hungry children crying and participants no longer concentrated fully.
- *DRR micro-projects:* procurement challenges (linked to the USD cash crisis in Zimbabwe) delayed delivery of materials (e.g. cement for latrines and wells); delayed material delivery coincided with peak livelihood activities for many households – who prioritised field preparation and planting; and unusually incessant rains in Q4 2016 and Q1 2017 hindered construction of micro-projects.

2017/18: participatory reviews were again conducted in all the three wards: Mola (W3) at Mola community centre, Nebiri (W7) at NRDC boardroom and Negande (W6) at Chilimba pre-school from the 10<sup>th</sup> to 12<sup>th</sup> May 2018. In this cycle the reviews focused predominantly on the implementation of the DRR/CCA measures (that were prioritised through the CDRAP). The reviews were facilitated by two officers from ZRCS HQ PMER (2M:OF). Participants included ward councillors, village heads and secretaries, volunteers and community stakeholders (EHTs, Agritex officers and teachers) participated in the review discussions. Key objectives of the review were:

- Review implementation of the DRR/CCA measures and the extent to which the micro-project objectives and outcomes were being achieved;
- Verify the continued relevance for the communities and local stakeholders of the DRR/CCA measures – in the light of possible changes in the operating environment after the micro-projects were planned;
- Assess the contribution of the various stakeholders in their contribution towards the inputs, outputs and outcomes of the DRR/CCA measures; and
- Enhance joint learning and understanding – to enable community ownership of successes and responsibility for any remedial actions necessary.

Many community members were able to highlight on the project activities carried out from project inception and how the activities have changed their lives. Community members were able to articulate the whole process of coming out with DRR measures to be implemented in their communities – including the various steps from the VCA to CDRAP development to DRR/CCA micro-project proposal writing to selection of micro-project beneficiaries and implementation of the DRR/CCA measures. Community leaders and the community in general were confident that the skills and experience they acquired through the process would enable them to tackle disaster risks independent of project support in future.

Better aligning the start of the DRR/CCA micro-project implementation with the seasonal livelihood calendar was again an animated talking point: although a significant improvement was noted compared with the previous cycle. However, it must be noted that this “timing” challenge applies to development as well as DRR/CCA micro-projects – in that the local development planning cycle process only generates a finalised (or updated) plan by mid- to late September. In many areas the rainy season (peak agricultural livelihood period) can start from early November – which leaves a very short window before community members focus their attention on their livelihoods and before rains begin to hinder logistics (access) and in some cases feasibility for construction. With longer-term projects these timing constraints can be ironed out.

2016 & 2017 activity 100% completed.

## 1.4 Community proposal submission, planning, implementation, monitoring & review of mitigation measures per village (non-structural and structural)

### 1.4.1 Community develop proposals for community resourced + project funded micro projects (2016 & updated 2017)

In the overall project design and original budget, a total of 9 clusters were allocated an average of \$3,000 each per year (2016 & 2017), and the 3 wards were allocated an average of \$5,000 each per year (2016 & 2017). The ward-level budget was conceived to give greater flexibility in decision-making – allowing either a larger DRR/CCA micro-project to be developed that has an impact over 2 or more clusters in the ward or allowing ward-level decision-makers to “top up” cluster micro-projects. This was also conceived to bring in, and achieve increased buy-in from, the more influential ward-level decision-makers into the VCA/CCA and CDRAP process.

Selected community members were trained to develop DRR/CCA micro-project proposals. The objectives of the training were to: (1) ensure participant understanding of the link between the CDRAP and the micro-project proposal; (2) familiarise the participants with the proposal format and requirements; (3) train the participants on how to develop a budget; (4) raise awareness on some of the locally available resources which are at the disposal of community that can contribute toward hazard mitigation; and (5) anticipated challenges and key success factors.

2016/17: as stated in [1.3.1](#), 68 community members (36M:32F) from the 3 wards were trained. Participants included village leaders, Village Health Workers, Agritex officers, Red Cross volunteers and local builders. Communities proposed the following DRR/CCA micro-projects:

#### Structural DRR/CCA measures (2016/17):

Clusters in Negande (W6) [Matibilila & Mubhobho 2; Peter & Mubhobho 1, Siakaginya & Mutombo]; in Nebiri (W7) [Chiperuka]; and in Mola (W3) [Chiweshe, Dove, Dundwe & Fishing Camps communities have prioritised construction of **upgradable Blair Ventilated Improved Pit (uBVIP) latrines** to reduce prevalence, severity & impact of diarrhoeal diseases. A total of 416 uBVIPs are originally planned (8 clusters – each with 52 household latrines). In Mola (W3), a total of 15 communal latrines (twin M/F BVIPs) were proposed for the ward centre market & fishing camps.

In Nebiri (W7) [Chiperuka] communities proposed **spring protection and water pipeline extension** (with water from the spring also used for gardening to minimise the effects of drought in the area). Communities and ward leadership decided to channel the 2016 ward-level budget for Nebiri (W7) towards the spring protection and pipeline extension. In Nebiri (W7) [Nyamakara], **9 traditional wells** were proposed to be **upgraded** to be better protected to fight transmission of diarrhoeal diseases – since safe water is a major challenge in the area.

#### Non-Structural DRR/CCA measures (2016/17):

Environmental Health Technicians (EHTs) will provide **training on uBVIP latrine construction**; (2) **Participatory Health & Hygiene Education (PHHE) trainings** – with focus on household campaigns in advance of seasonal risks (e.g. for diarrhoea: late dry season/early rainy season; for malaria: rainy season) and response to community epidemics of water-related diseases.

In relation to the proposed spring protection and pipeline extension, communities propose **trainings in good farming practice, seed variety & livestock management** – conducted by Agritex extension officers.

2017/18: 1-day refresher trainings were conducted in each ward centre (and M'Sampa fishing camp) for a total of 57 community members (35M:22F) from 20<sup>th</sup> to 26<sup>th</sup> July 2017 – slightly less than the 68 participants in 2016 (36M:32F). The training objectives were similar to 2016/17.

The DRR/CCA micro-project budgets were drafted from 19<sup>th</sup> to 21<sup>st</sup> August 2017 after the community proposed solutions were reviewed and approved by ZRCS technical staff. A total of 45 participants (of the 57 trained in July) were involved in the micro-project budget development (30M:15F).

#### **Challenges / Lessons learnt / Recommendations**

- In some clusters it was more difficult for consensus on the preferred DRR solution due to divergent views and competing needs. For example, in Matibilila cluster there was intense discussion as to whether opt for spring/well protection (as had been carried out previously) or to try borehole drilling (with question marks over water availability and quality; and also cost). Eventually they agreed on well protection.



- Available budget considerations, and substantially increased material costs (e.g. cement), meant that communities were not able to budget for as many latrines as they had originally proposed. In most clusters this meant reducing the number of latrines from 40 to 30 uBVIPs.
- From the experience with the 2016 micro-projects, communities and ZRCS agreed that all builders to be involved in latrine construction and well protection should receive refresher construction trainings (they had been trained several years previously by GOAL).

#### Structural DRR/CCA measures (2017/18):

Clusters in Negande (W6) [Mubhobho 2; Peter & Mubhobho 1, Siakaginya & Mutombo]; in Nebiri (W7) [Chikuro]; and in Mola (W3) [Chiweshe, Dove & Dundwe] prioritised construction of **upgradable Blair Ventilated Improved Pit (uBVIP) latrines** to reduce prevalence, severity & impact of diarrhoeal diseases. A total of 212 uBVIPs were planned.

In Negande (W6) [Matibilila] communities proposed **weir, pipeline and community garden rehabilitation** to minimise the effects of drought. In Nebiri (W7) [Nyamakara], a total of **6 traditional wells** were proposed to be **upgraded** to be better protected to fight transmission of diarrhoeal diseases – since safe water is a major challenge in the area. In Mola (W3) [fishing camp] and Negande (W6) [Matibilila] communities proposed a **borehole rehabilitation\*** and a new **borehole \*\*** respectively.

\* this was completed through the community's own initiative and resources

\*\* following discussions with NGOs supporting WASH in Kariba, the community realised that the likely costs far exceeded the budget available through the project – and focused on the PHHE training instead.

#### Non-Structural DRR/CCA measures (2017/18):

(1) in 8 of the 11 clusters **Participatory Health & Hygiene Education (PHHE) refresher trainings** – with focus on household campaigns in advance of seasonal risks (e.g. for diarrhoea: late dry season/early rainy season; for malaria: rainy season) and response to community epidemics of water-related diseases. (2) Environmental Health Technicians (EHTs) will provide **training on uBVIP latrine construction**; (3) in Mola (W3) [fishing camp] – a full 5-day first aid training; and (4) in Nebiri (W7) [Maya] a **training in good farming practice, seed variety & livestock management** for 30 lead farmers.

Please refer to Annex A02-1.4.1 “CDRAP & Micro-project Proposal Writing Training Report” for details.

**2016 & 2017 activity 100% completed.**

#### **1.4.2 Approval of micro project proposals (2016 & updated 2017)**

**2016/17:** From 5<sup>th</sup> to 7<sup>th</sup> October 2016, the ZRCS HQ Health and Social Services Coordinator and Disaster Management Officer visited the target area to provide technical support in reviewing the DRR/CCA micro-project proposals. The ZRCS Health and Social Services Coordinator (WASH specialist) assessed the wells and springs proposed for upgrade and protection; and held discussions with EHTs and communities regarding sanitation and hygiene – to inform the localisation of the proposed non-structural DRR measure: Participatory Health and Hygiene Education (PHHE). The 2 ZRCS HQ staff were also joined by 4 engineers from the Zimbabwe National Army to conduct a feasibility & technical study of the proposed Negande footbridge and Sangano bridge; and an output was a footbridge design and the Bill of Quantity for materials needed for construction. For the water pipeline extension for a community garden in Nebiri, local technical support was sought from the civil engineer working with another stakeholder – United Methodist Committee on Relief. From 15<sup>th</sup> to 19<sup>th</sup> October 2016, the ZRCS/HQ Resilience Advisor (an irrigation engineer) also made a technical field assessment of both the existing & proposed water pipeline systems in Nebiri and Negande.

Alongside the relevant external technical support, several community meetings were held (4<sup>th</sup> to 20<sup>th</sup> October 2016) to further review, finalise and approve the DRR/CCA micro-projects. The objectives of these meetings were to: (1) juxtapose external technical advice and know-how with community-derived action plans; (2) bring local leadership on board ensuring final consensus on the prioritised 2016 DRR micro-projects; (3) take account of any recent changes; and (4) plan for anticipated challenges.

Communities expressed keen interest to implement their prioritised DRR/CCA micro-projects. However, their main concern was possible delay in the delivery of construction materials: particularly for the household uBVIP latrines. As noted earlier, the rains herald a peak livelihood period and so could cause further disruption of micro-project implementation activities – as most households turn to farming during this time.



2017/18: from 8<sup>th</sup> to 11<sup>th</sup> August 2017, a ZRCS HQ team again joined the ZRCS field team to provide technical support in reviewing, finalising and approving the 2017/18 DRR/CCA micro-project proposals. The objectives were as for 2016/17. The ZRCS HQ team noted that to ensure effective management of the protected wells that water point committees would need to be established and trained – as per Ministry of Environment, Water and Climate Resources Climate guidelines.

2016 & 2017 activity 100% completed.

#### 1.4.3 Implementation of DRR/CCA micro-projects (2016-2017 and 2017-2018)

The table below summarises the DRR/CCA measures, implemented through project<sup>3</sup> and community resources, that resulted from the participatory risk assessment – community disaster reduction action planning process across the two cycles of activities:

Year		DRR Micro-Project Type (Structural vs Non-Structural)	Quantity		Beneficiaries		Budget USD	Comment	
			Planned	Achieved	H/H	POP			
2016	S	uBVIP Household Latrine	424	429	448	2,240	\$ 24,580	completed	101%
		Pipeline & Garden	1	1	194	753	\$ 45,000	completed	100%
		Protected Wells	9	9	176	632	\$ 3,000	completed	100%
	NS	PHHE Training	46	46	2,477	10,523	\$ 1,932	completed	100%
2017	S	uBVIP Household Latrine	212	212	212	1,060	\$ 15,072	completed	100%
		Protected Wells	6	6	176	632	\$ 2,242	completed	100%
	NS	PHHE Refresher Training	46	43	2,477	10,523	\$ 666	completed	93%
		First Aid training	45	45	376	692	\$ 5,190	completed	100%
		Lead farmer Training	34	34	194	753	\$ 996	completed	100%
		Lead farmer's refresher	30	22	194	753	\$ 80	Completed	73%
		Asset management training	16	16	194	753	\$ 328	completed	100%
		Structural DRR Measures					\$ 89,894		
		Non-Structural DRR Measures					\$ 9,112		
		<b>Total</b>					<b>\$ 99,006</b>		

More information on all the DRR/CCA micro-projects can be found as Annex "A02-1.4.3a DRR/CCA Micro-projects Summary Report 2016/17 and 2017/18" and A02-1.4.3b "DRR/CCA Non-structural Micro-projects Report 2016/17 and 2017/18"

Regarding CCA, additional focus was placed on:

1. Strengthening collaboration and integration between diverse stakeholders working on disasters, climate and development – *This is being done through continuous support to district coordination platforms. This is also being done through the DCP's CBDRM concept where district sub-committees prepare training packages on risk awareness and disaster preparedness/ climate change adaptation measures.*
2. ZRCS, MSD & Climate Change management have trained volunteers/DRR & EW Champions in DRR. They have also been trained in monitoring and collecting information on community hazards, vulnerabilities and risks and ensuring these are integrated and used at different scales. *As a result, they have capacity to periodically assess the effects of climate change on current and future disaster risks and uncertainties.*
3. ZRCS has established collaboration with the Meteorological Services Department (MSD). MSD have installed rain gauges in the project wards. Local extension workers have been trained to take rainfall measurements, establish rainfall patterns and disseminate these to farmers. *The expectation is that, the community receives and understands locally available weather information, and households know appropriate actions to take when inclement weather is approaching.*
4. There are plans to: (1) pilot energy-efficient cook stoves in one of the wards (replication of a ZRCS initiative in the adjacent Binga District); (2) explore strategies to reclaim degraded environments as well behaviours and practices that can reverse siltation and destruction of bridges; and (3) promote climate-smart agriculture techniques (with exchange visits seen as crucial to this).

<sup>3</sup> Structural DRR/CCA measures are ineligible costs under the WB/GFDRR 2<sup>nd</sup> Call for NDRR – and were funded through the 48% co-funding provided by Danish Red Cross / Danish Ministry of Foreign Affairs.

**Structural DRR measures (2016/17 and 2017/18):*****Household uBVIP latrines:***

Upgradable Blair Ventilated Pit latrines (uBVIPs) are Government of Zimbabwe standard latrine models where households receive a subsidy of 2 bags of cement, barbed wire for slab reinforcement, PVC vent pipes and a fly-screen for the vent opening. Households are expected to dig their pits, source bricks (or similar) for pit lining, and river sand for concrete slabs, and material that is required for the latrine superstructure. Environmental Health Technicians (EHTs) from the local government structures provide technical advice on design and construction and assist in monitoring implementation.

2016/17: a total of 429 uBVIP latrines were completed. During the course of implementation there were some small changes to the original plan: in the fishing camp, space limitations meant that 16 households elected to share 8 uBVIP latrines; and the cluster centres, where villagers congregate for market days and meetings, the communities decided to construct 3 additional “communal” latrines (a 2-room, twin-pit, 7-bag cement model). Implementation was initially affected by the short window between approval and the start of the rainy season and by delays in the procurement and delivery of materials (cement, barbed-wire & PVC vent pipes). Households protected the pits that they had dug by erecting temporary thatched roofs to prevent collapse from the rain. Completion of uBVIP latrines was thus delayed until the end of the 2016/17 rainy season.

2017/18: 7 clusters proposed a further 212 household uBVIPs. The uBVIP construction was again hindered by overlap with the agricultural livelihood season as well as in some areas where rivers were full and accessing sand for concrete work was not possible. That said, progress was improved compared with the 2016/17 cycle – this is attributed to improved awareness of the importance of health and hygiene which Red Cross volunteers had been disseminating through home visits. This importance was heightened by volunteers and EHTs disseminating cholera awareness messages in the wake of the Zambia and Chegutu cholera outbreaks. This motivated communities to speed up construction of latrines and protected wells before to prevent an outbreak in their communities. All 212 uBVIPs were completed in Q2 2018.



*Figures 07 & 08: Household uBVIP latrine under construction (at slab level) and completed*

*Protected Wells (upgrade of existing traditional wells):*

2016/17: as with the household uBVIPs, implementation of the upgrading of 9 traditional wells was delayed due to the short window between approval and the start of the rainy season and by delays in the procurement and delivery of materials. Well protection involved adding a concrete lining and well head, concrete apron and drainage channels and windlass lifting system. All 9 protected wells in the Nyamakara cluster in Nebiri (W7) were successfully completed by June 2017; and all wells were approved for safe water use by the EHTs.

2017/18: The Nyamakara cluster identified a further 6 wells for protection under the 2017/18 cycle and in Q2 2018 all 6 wells had been protected (as in 2016/17) and been approved for safe water use by the EHTs. Working together with the EHTs, the community established water point committees for all 15 wells protected through the project. The EHTs trained the Water Point Committees in April 2018 – equipping them with knowledge and information on how to maintain water points to prevent contamination, water wastage and to create sustainability of the project.

**Note:** Danish Red Cross received additional funds in late 2016 to add to the DRR/CCA micro-project budget through its broader community-based resilience programme (under which this ACP-EU/WB-GFDRR project is a component). These additional funds allowed ZRCS to consider two larger scale micro-projects: one a footbridge enabling school children to avoid a crocodile infested river and the other the rehabilitation of the Harudziva irrigation system. Both projects involved extensive stakeholder consultation and technical inputs from relevant GoZ departments; and both experienced start-up and implementation delays due to the impact of the national USD cash crisis (see note at end of Section 1.4.3).

Only the Harudziva irrigation system rehabilitation is reported on here, as the footbridge was constructed with a community cluster outside of the ACP-EU/WB-GFDRR project target area.

*Harudziva weir & pipeline rehabilitation and associated Nebiri community garden:*

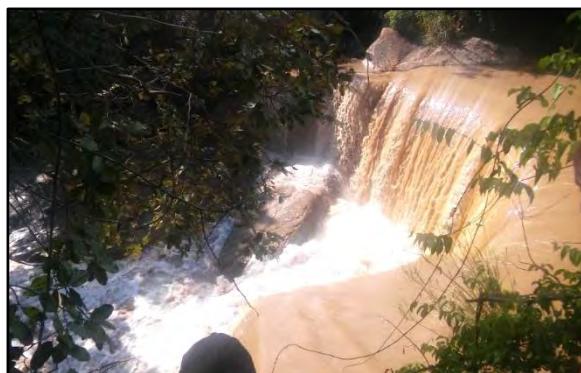
The Harudziva weir, dams a stream fed by 12 perennial springs, and the irrigation pipeline was constructed by the District Development Fund in 1998. It was used to irrigate a 4.4 hectare community nutrition garden (120 plot holders) and provide untreated water for domestic (74 - 220 households) and Nebiri primary school use (teachers and 150 students).

The weir, pipeline and garden had become unusable and fallen into disrepair: (1) the weir was silted almost to full supply level; (2) the galvanised iron outlet pipes had either been washed away or had silted up. The community has replaced these with PVC pipe - which had then been destroyed by seasonal floods and veldt fires; and (3) Nebiri garden water storage ponds had cracked, valves and taps broken, and fencing had collapsed. In the 2016/17 cycle the community prioritised rehabilitation of the entire system (weir, pipeline & garden) to improve accessibility to nutritional vegetables in an area characterised as semi-arid/arid and with livelihoods highly vulnerable to climate variability and climate change. A secondary aim was to provide all year round water to the community and school. As such, the domestic water was untreated and clear recommendations to all households was made to boil drinking water.

ZRCS, the District Development Fund and the Mashonaland West Provincial Irrigation Department finalised the rehabilitation design, bill of quantities and community labour & in-kind requirements in Q3 2017 and work began in early Q4 2017. The weir and pipeline rehabilitation was completed with the technical assistance from the Ministry of Agriculture Department for Irrigation and District Development Fund. The main elements of the weir and pipeline rehabilitation works carried out were: (1) De silting; (2) Raising of weir wall; (3) Upstream gabion box installation; (4) Pipe laying; (5) Water trough rehabilitation; (6) Pipeline anchoring; and (7) Flushing and testing.

In Q2 2018, following the lead farmer training and “garden starter pack” (see later), the plot holders started land preparation and planting. Vegetables grown included chomolia, rape, tomatoes, spinach, onion, cabbage (drumhead & sugarloaf), cucumber and carrots. Plot holders worked closely with Agritex officers to ensure recommended farming methods are followed.

In June 2018, the final part of the scheme: an 800m solar-powered electric fence to deter wild animals (especially elephants & baboons) was installed around the garden perimeter. The solar panels and energizer are physically well-secured and are protected by a lock. A 7-member garden committee (3M:4F), who were part of the lead farmer training, received training in human-wildlife conflict and problem animal control from the Bumi Hills Foundation. Plot holders working with Agritex and NRDC will ensure regular maintenance of the e-system and fence.



Figures 09, 10 & 11: Various stages of the Harudziva weir wall - before and after being raised and plastered.



Figure 12: Nebiri Community Garden – fed by the Harudziva weir.

**USD Cash Crisis & Procurement Challenges:** the implementation of all structural measures in both the 2016/17 and 2017/18 cycles have been significantly affected by the on-going economic and banking situation in Zimbabwe. Most notably this has affected procurement in terms of material costs (e.g. cement, steel reinforcement bars, GI pipes and valves) & payment modalities, quotation validity periods and delayed delivery of materials to the target area. The USD cash crisis has resulted in significant price inflation and price volatility – dependent on the payment modality. Although ZRCS has greater access to USD cash than most, the local banks do not allow USD cash to be withdrawn for materials, goods, pay roll and many service contracts. Further, many of the materials required for the micro-projects ultimately need to be sourced from outside of Zimbabwe (predominantly South Africa) by suppliers – for which the suppliers need USD cash to replenish their stock. Legally, the rates of USD RTGS (*nominally* USD in a bank account) to USD Cash are 1:1. However, the “market” rate has varied from 1.4 to 1.9:1 giving a price differential of 40-90% between the RTGS and the impossible to source USD cash. For several micro-projects the budgets became excessive and micro-projects had to be reduced in number (e.g. latrines) or cancelled/postponed (e.g. Harudziva pipeline & community garden rehabilitation). In one critical period, quotation validities were reduced from 30 days to 1 to 2 days adding considerably to procurement challenges when sourcing multiple quotes, conducting comparative bid analyses and convening the national level procurement committee.

#### **Non-structural DRR measures (2016/17 and 2017/18):**

##### ***Participatory Health and Hygiene Education (PHHE):***

**2016/17:** Participatory Health and Hygiene Education (PHHE) is a proven method of encouraging good health and hygiene practices, safe water management and ultimately reduction of communicable diseases in communities. The aim of PHHE training is to improve knowledge of, and change attitudes and practices toward, health and hygiene issues for the betterment of individual, household and community health. The training was facilitated by 2 Environmental Health Technicians (EHTs) from the Ministry of Health & Child Care and targeted ZRCS Red Cross Volunteers – with a total of 46 volunteers (22M:24F) completing the training. Two 5-day PHHE trainings took place at Siakobvu and Mola community centres respectively from 24<sup>th</sup> – 28<sup>th</sup> October 2016.

The PHHE training objectives were to: (1) equip participants with PHHE techniques adapted the local context; (2) improve the quality of life (and health) of the communities they serve; (3) dialogue and share information relevant to their environment; (4) be able to prevent water- and sanitation-related diseases; and ensure that the volunteers attain the good qualities of a teacher so that they will be able to teach effectively in their communities. The volunteers are expected to (a) cascade down what they have learnt into the communities through home visits and drama performances; and (b) be role models that demonstrate health and hygiene practices at an individual and household level.



Figure 13: PHHE training participants - Mola Community Centre



Topics/Tools covered in the PHHE training include:

- |                          |                                  |                                  |
|--------------------------|----------------------------------|----------------------------------|
| ✓ Diarrhoea Child        | ✓ Faecal oral route transmission | ✓ Blocking the route             |
| ✓ Catchment area mapping | ✓ Community mapping              | ✓ Nine dot Line                  |
| ✓ Water Ladder           | ✓ Sanitation Ladder              | ✓ Animal cracker                 |
| ✓ Kitchen hygiene        | ✓ Malaria                        | ✓ Transect walk                  |
| ✓ Gender role analysis   | ✓ Resistance to change           | ✓ Adaptation to change continuum |
| ✓ Story with a gap       | ✓ Three-pile sorting             | ✓ Cup exercise                   |

Throughout 2017, volunteers continued to promote improved hygiene practices in the community. Many households in the project area now have two-tier pot racks, rubbish pits, uBVIP latrine and tippy-tap: indicating significant movement towards achieving a “model household”. In M’Sampa fishing village, the Village Health Worker reported that “severe diarrhoea incidence has been significantly reduced from 120 to 30 cases per year” which she attributed to the PHHE efforts and the construction and use of household uBVIP latrines.

Further details can be found in the PHHE training report included within Annex “A02-1.4.3b Non-structural DRR/CCA Measures – Health & Hygiene”.

2017/18: under the 2017/18 cycle, 1-day PHHE refresher trainings were conducted in Mola and Nebiri on the 25<sup>th</sup> & 26<sup>th</sup> November 2017 respectively. A total of 43 (of 46) Red Cross volunteers (21M:22F) participated: again, facilitated by the 2 EHTs from the Ministry of Health & Child Care. The table below summarises the household actions that had been taken by community members as a result of the PHHE household visits by the volunteers.

Ward	No. of h/h	Total Pop	No. of households with				h/h visited (PHHE)
			Rubbish pits	Tippy taps	Safe water	Pot racks	
			No.	%	No.	%	No.
Mola (W3)	1,725	7,341	1,153 (67%)	628 (36%)	978 (57%)	1,399 (81%)	1,307 (76%)
Negande (W6)	305	1,335	254 (83%)	225 (74%)	94 (31%)	256 (84%)	250 (82%)
Nebiri (W7)	479	1,847	450 (94%)	267 (56%)	198 (41%)	454 (95%)	428 (89%)
<b>TOTAL</b>	<b>2,509</b>	<b>10,523</b>	<b>1,857 (74%)</b>	<b>1,120 (45%)</b>	<b>1,270 (51%)</b>	<b>2,109 (84%)</b>	<b>1,985 (79%)</b>

**Hygiene Competitions:** following PHHE training which was conducted, hygiene competitions were held to check if the communities are adhering to good hygiene practises. All members of the community were eligible for the competition – and many stakeholders were involved. The assessment and judging process involved VHW and EHTs from the Ministry of Health, and Hygiene promoters who were trained by Save the Children. On the 15<sup>th</sup> & 16<sup>th</sup> June 2018, Hygiene promotion prize giving ceremonies were held at each ward centre. There were a total of 185 participants (81M:104F).

The objectives of the competition were: (1) assess good hygiene practises in the communities; (2) encourage all community members to practise good hygiene methods; (3) encourage community and stakeholders to work together in fighting against diarrhoeal diseases; and (4) hygiene awareness campaigning.

Further details can be found within Annex “A02-1.4.3b Non-structural DRR/CCA Measures – Health & Hygiene”.



#### *First Aid Training:*

In the fishing communities, owing to the high incidents of drowning (waves and strong winds) and human and animal conflict (crocodile and hippo attacks whilst fishing, collecting water or clothes washing), the community prioritised first aid training. A 5-day “Basic First Aid” training was conducted from 13<sup>th</sup> to 17<sup>th</sup> November 2017 at M’Sampa fishing camp. The 45 participants (25M:20F) came from the 3 fishing camps (M’Sampa, Sibilobilo and Masviakabola). The participants (and gender balance) were selected by the community.

The training objectives were to: (1) equip the members of the fishing communities with basic first aid techniques; (2) provide knowledge on safe keeping of first aid kit materials; (3) make an inventory of available first aid kit materials; (4) share the roles and responsibilities of trained first aiders during emergencies or disasters; (5) give the trained first aiders a guide on reporting format about casualty management or emergencies; and (6) come up with plans on how to refill the first aid kits. The technical part of the training focused primarily on most likely injuries and conditions: cardiac arrest, respiratory failure, drowning, shock, fainting, severe bleeding and fractures.

To enhance sustainability, it was agreed that the participants meet once every month for first aid drills; seek monthly payments by all fishermen to replenish of first aid kits; and liaise closely with Mola and Chalala Health Clinics and the Padenga Crocodile Farm, Bumi Hills and Musango Safaris for supply of first aid materials. Participants developed and agreed an incident reporting format and committed to roll out basic first aid skills to other members of the community during their routine meetings. Participants also developed a comprehensive Fishing Community Contingency Plan to identify resources (materials, skills & capacities) available and responsibilities.

*First Aid Simulation Exercise:* in Q1 2018, the 45 first aiders from the three fishing communities (Sibilobilo, Masviakabola and Msamba) undertook a simulation exercise – joined (and led) by the Community Disaster Response Teams established through the Early Warning component of the project (Output 3). The simulation helped assess the level of preparedness through two scenarios: boat capsizing due to strong wind/waves and hippo or crocodile attack. among disaster response teams Responding to disasters and hazards involve a lot of resources and skills that can reduce the negative impact of the disasters. The expected actions and management during the exercises were:

- Rescue – correct transportation of the casualties from the lake to the safe place
- Safety precautions before rescue
- Diagnosis or identification of the injuries
- Correct management of injuries/conditions
- Loading of the casualties on the stretchers
- Evacuation of the casualties to the hospital
- Clearing of the area and leaving the scene
- Report writing on accident management

#### *Lead Farmer Training:*

In support of the pipeline and community garden rehabilitation, a 5-day Lead Farmer training for 34 participants (8M:26F) was conducted at the Nebiri ward centre from 22<sup>nd</sup> to 26<sup>th</sup> November 2017 by two Agritex extension officers. The participants were selected by the community to be lead farmer – who would then cascade the training to the remaining Harudziva garden beneficiaries. The lead farmer training is based on non-formal education approach where beneficiaries learn by doing, experimenting, observing and reflecting in the garden.

The training objectives were to: (1) empower farmers with knowledge and skills relevant to their context; (2) sharpen the farmer’s ability to make critical and informed decisions which strengthen their coping mechanisms; (3) improve knowledge of the nutritional value of different vegetables; (4) have greater understanding and knowledge of the stages that are involved in farming e.g. seedling management, transplanting and application of manure, safer use of pesticides; and (5) enabling farmer’s livelihoods to become more resilient and less vulnerable to drought.

The Agritex officer conducted a 1-day Lead farmer’s refresher training on 12<sup>th</sup> February 2018 to ensure the garden farmers were ready for the garden farming activities. The farmers were advised to construct fire guards to avoid veldt fires during hot dry season. One starter pack for each plot holders was procured – and distributed once farmers had completed land preparation. The starter pack included various vegetable seeds, fertilizer and pesticide. Due to the continuous rains, the local Agritex supervisor has advised farmers not to sow seeds when the soil is wet, as well as not to use ox-drawn plough, because that may cause rotting of seeds and soil compaction.



*Figure 14: Lead farmer's refresher training participants and Agritex officer.*

#### *Asset Management Training:*

The Maya cluster community had highlighted lack of knowledge on maintaining and rehabilitating their resources as the main cause that led to continuous damage to the original Harudziva pipeline and community garden. The community therefore prioritised Asset Management training for both the Harudziva Garden and the Harudziva Pipeline committee. The 2-day Asset Management training was conducted at Maya cluster centre from 20<sup>th</sup> to 21<sup>st</sup> November 2017 and was facilitated by Agritex extension officers. A total 16 committee members participated (10M:6F). The training aimed to increase awareness of the committee responsibilities and operation and maintenance tasks. A recommendation that came out of the training was that committees be additionally trained in leadership and business development.

#### *Builders' Refresher Training:*

A 1-day Builders' Refresher training – for uBVIPs and well protection – took place in Mola and Nebiri on 24th and 27th November 2017 respectively. A total of 39 community members (34M:5F) participated – facilitated by the 2 Environmental Health Technicians. The refresher training covered for: (a) latrines – siting, pegging, pit lining, casting slabs, superstructure construction (incl. flooring & plastering); and (b) protected wells – pegging, lining, casting well head and apron, drainage and windlass installation.

**2016 & 2017 activity 100% completed.**

#### **1.4.4 Micro-project monitoring & review (2017 and 2018)**

Throughout 2017 and 2018, ZRCS in collaboration with Nyaminyami RDC (Social Services department), Ward Councillors and Environmental Health Technicians, has regularly monitored the progress of 2016/17 and 2017/18 cycles of DRR/CCA micro-projects – both structural and non-structural. The main objectives of micro-project monitoring were to:

- Obtain statistical progress updates for both structural and non-structural micro-projects (incl. implementation status of uBVIPs and protected wells; and results of the PHHE training (i.e. adoption of pot racks, waste pits, tippy-taps etc.);
- Check quantity, quality, storage and timeliness of the delivery of materials (project and in-kind); and
- Engage the community and listen to the challenges being faced in implementation and devise solutions to overcome those challenges and ensure successful completion of micro-projects;

In addition to monitoring by the ZRCS field team and local government counterparts, the ZRCS Provincial Manager and ZRCS HQ teams (Disaster Management Officer and Health and Social Services Coordinator) also visited to monitored progress and provide recommendations. In Q1 2018, the ZRCS Risk and Quality Assurance Manager and PMER Officer visited the district to monitor implementation – conducting interviews with community members, volunteers and stakeholders.



In the 2016/17 cycle the main challenges related to late delivery of procured materials (e.g. cement and PVC pipe) due to the USD cash crisis and then the early & above average rainfall in the upstream parts of the river catchment in Gokwe resulting in rivers becoming impassable (most of the bridges in the target area have been flood destroyed). The early floods had also compromised the community efforts to extract sand from river beds for cement work. A number of households had dug pits which had then become liable to collapse with the heavy rainfall locally. A community solution to this quickly spread among the uBVIP latrine building households: a small temporary thatched roof was placed on the empty pit. One observation of note in the fishing camps was that the fish drying process inevitably attracts a lot of flies. If the community are really to achieve significant reduction in water- and sanitation-related diseases, then the volunteers' efforts on PHHE would need to be intensified if the full benefits of the uBVIPs are to be realised. Another recommendation that was fed into the 2017/18 cycle was the need for uBVIP construction refresher training for the community builders.

#### 2016 & 2017 activity 100% completed.

##### 1.4.5 Advocate for additional fund raising for 2016 & 2017 to support micro-projects

Advocacy with Nyaminyami RDC and other stakeholders has been on-going through the 2016/17 and 2017/18 cycles. In some cases, e.g. the borehole rehabilitation in M'Sampa fishing camp, the community identified resources within the community to complete a DRR measure without accessing the project micro-project budget. For the more substantial Harudziva weir & pipeline rehabilitation & Nebiri community garden the community set up a local committee, to specifically advocate for local resource mobilisation and provide technical guidance on design & construction and also operation and maintenance. The 7-member (6M:1F) committee comprised local representatives from the Nyaminyami RDC, Agritex, District Development Fund, Zimbabwe National Water Authority, Ministry of Health & Child Care and a ward councillor. In Q3 2017, the committee held a meeting with the Bumi Hills Foundation (a conservation and anti-poaching organisation associated with the Bumi Hills lodge) based in the target area. As a result of the meeting the Bumi Hills Foundation agreed to provide technical support to design the electric perimeter fence for the nutrition garden, and training & advice on other strategies to reduce human-animal conflict related to the community garden.

Advocacy for additional funding was also carried out during the "Mainstreaming DRR & CCA into Local Development Planning" workshop held from 7<sup>th</sup> to 8<sup>th</sup> September 2017 at Tiger Bay Fishing Resort in Mola (Ward 3). There were 41 participants (34M:7F) including District Administrator, Nyaminyami RDC members, traditional chiefs, ward councillors, ZRCS staff and the project steering committee. The main thrust of the workshop was the development of a Disaster Risk management annex to the Nyaminyami Rural District Development Plan which would trigger the Nyaminyami RDC to specifically set aside funds for DRR/CCA. Within this a resource matrix for rural Kariba was developed. The Nyaminyami RDC Disaster Management Annex is annexed as A02-2.1.7 "Draft Nyaminyami RDC DM Plan".

#### 2016 & 2017 activity 100% completed.

#### 1.5 Piloting of relevant modules from IFRC GIS-based resource management system (RMS)

##### 1.5.1 RMS training & follow up technical support

In Q2 2016, ZRCS began discussions with the International Federation of Red Cross and Red Crescent (IFRC) at regional and zonal levels regarding piloting their Resource Management System (RMS) and (GIS) vulnerability module. ZRCS submitted a request for the required "user rights" from IFRC. IFRC advised ZRCS to organise an RMS orientation and study tour with a sister national society already implementing RMS. IFRC identified the Malagasy Red Cross as a potential host and ZRCS opened communication with the Malagasy Red Cross. In the meantime, the regional International Committee of Red Cross (ICRC) office in Harare was also approached, and had accepted, to provide technical GIS support to ZRCS.

However, the proposed study tour to Malagasy Red Cross in Q2 2017 could not be realised due to the loss of the key human resource capacity within the Malagasy Red Cross. Further, within ZRCS, the early enthusiasm for piloting the RMS, evaporated when the ZRCS staff member responsible on a more institutional level was seconded for 12 months to the IFRC in Nairobi. As a result, the project was only able to move forward with its approach to the International Committee of Red Cross (ICRC) office in Harare to provide technical GIS support to this activity.



From 27<sup>th</sup> to 31<sup>st</sup> March 2017, the ZRCS project District Field Officer and the Mashonaland West Provincial Manager participated in a 5-day introductory GIS workshop facilitated by a GIS specialist analyst from the American Red Cross. The Objectives of the training were for ZRCS staff to:

- learn the process from data gathering, manipulation and presentation;
- learn how GIS can be used as a tool in various areas of work including: vulnerability capacity assessments, visual presentation of interventions impact and in project decision making;
- appreciate different packages and how to use already existing ZRCS and from online data sources; and
- learn how to create maps (including use of Open Street Maps and Open Data Kit).

Activity 100% completed.

#### 1.5.2 RMS project application (GIS & volunteer database)

The GIS component of this activity was dependent on 1.5.1 being completed. As described above – there were both delays and compromises in what could be achieved. Although ZRCS did not in the end pilot the IFRC's RMS GIS module they worked with ICRC to develop, in terms of output, a similar product.

In Q2 2017, the ZRCS field staff and volunteers, with technical GIS support from ICRC, began pilot mapping in one village. This exercise hoped to demonstrate locally that GIS mapping is an important part of disaster risk management – where it can serve as tool for decision-making in terms of preparedness and response. In Q3 2017, again with support from ICRC, a based map for Siakobvu was developed on which the field team will subsequently overlay location specific preparedness and response-related resources (hazards, skills, capacities and materials). From 27<sup>th</sup> November to 2<sup>nd</sup> December 2017, the ZRCS Project Manager and ICRC GIS staff, worked with the ZRCS field team and local authorities to collect relevant GIS data in Mola (Ward 3) and Nebiri (Ward 7). The first trial maps were developed with active involvement of Nyaminyami RDC members in Q1 2018.

Activity 100% completed.

#### 1.5.3 RMS demonstration and advocacy of project application to local authorities

The GIS trial maps developed for all the 3 target wards show the capacities (including institutions and skills by area and type), and hazards by type and location. During the National lessons learnt workshop in May 2018 (see [2.5.3](#)) the Nyaminyami RDC staff presented the maps. The maps were positively received by the audience and importantly by the Nyaminyami RDC Chief Executive Officer, the Kariba District Administrator and chair of the Department of Civil Protection sub-committee. The maps were hailed as a useful tool in planning for risk reduction, preparedness and response; and Nyaminyami RDC also viewed the maps as a tool for risk education among the traditional leaderships and communities – as well as potentially for resource mobilisation.

Activity 100% completed.

#### 1.5.4 Lessons Learnt/review on RMS application

In the last week of June 2018, ZRCS held the lesson learnt for the GIS mapping. This was conducted in Siakobvu and involved 57 participants (46M:11F) – including Nyaminyami RDC staff, Project Steering Group members from the national level, local government departments, NGOs and the Zimbabwean National Army engineers.

Although, the IFRC's RMS could not be piloted, the GIS maps implemented within the project created excitement among the national and local stakeholders about the relevance of these maps.

Activity 100% completed.

**OUTPUT 2: MAINSTREAMING DRR IN LOCAL DEVELOPMENT PLANNING****Compilation, dissemination and use of Disaster Risk Reduction information becomes a practice**

<b>Indicator 2.1</b>	<b>X% of villages development committees having their expressed DRR &amp; CCA priorities reflected in Local Development Plans (E)</b>
	For both the 2016/17 and 2017/18 cycles, the 11 target clusters (100%) presented their Community Disaster Reduction Plans at ward level and their priorities were then reflected in Ward- and District-level Development Plans – in Q3 2016 and Q3 2017 respectively.
<b>Indicator 2.2</b>	<b>Increased coordination and cooperation between and within local authorities, ZRCS, civil society organizations and communities to reduce risks posed by natural disasters and climate risk in Kariba district (E)</b>  The final evaluation found “increased coordination and cooperation between all relevant stakeholders was evident at all levels. At the national level members of the Steering Committee stated that the integrated multi-stakeholder approach had now been adopted as standard practice, such that when the Civil Protection Unit is called to conduct training they now include relevant members of the Department of Rural Authorities and Climate Change Department as part of their team, having seen the value of this integrated approach through the project.  At the local level the creation of and support to the Civil Protection Sub-committee focusing on the NRDC area has enhanced cooperation and coordination between local level stakeholders, bringing together [ <i>inter alia</i> ] the Zimbabwe Republic Police (ZRP), Ministry of Agriculture (Extension Department), Ministry of Health (Environmental Health and Siakobvu Hospital), and the Zimbabwe National Water Authority (ZINWA).”
<b>Indicator 2.3</b>	<b>MoLG and DCP endorse project DRR/CCA best practices (E)</b>  At the time of final report writing the Best Practices document had been drafted by ZRCS in collaboration with the Project Steering group members. They plan to finalise and have this endorsed by MoLG and DCP by end 2018. The final evaluation noted that “during the focus group discussions [in Kariba] the [District] Civil Protection Unit Training Manager indicated that if resources are available they would like to replicate the approach across all districts, and that the Nyaminyami RDC plan and approach is used as an example of good practice for other rural districts to learn from.”

**2.1 Awareness-raising & stakeholder sensitization and creating enabling environment at local level (DRR to LDP)****2.1.1 Conducting project orientation meetings including information sharing in existing coordination platforms (Kariba and Siakobvu)**

In early 2016, sensitisation and orientation meetings were held at national, district and local levels – along with a national project launch in Kariba Urban and a local project launch in Siakobvu. The objectives of the local level sensitisations were to introduce the WB/GFDRR project to, and elicit views from, key community stakeholders; build rapport between field team and key community people; and assess the potential for partnership and coordination. Key stakeholders included Nyaminyami RDC representatives, councillors and representatives of all 3 target wards, ZRCS field staff, ZRCS branch representatives and volunteers.

The inception meetings were held in Harare, Kariba Urban and Kariba Rural. The meetings were vital because that is where all stakeholders became aware of the WB/GFDRR project, its objectives, its target groups and area, its components, activities and indicators. The platform created an environment of information sharing with different experts from national, provincial and district level from different departments – such as Civil Protection (DCP), Rural Local Authorities (RLA), Meteorological Services (MSD) and Climate Change Management (CCMD). In addition, the platform enabled all stakeholders to have an appreciation of DRR and resilience building efforts of ZRCS throughout Zimbabwe. The ZRCS Communication Department played a crucial role in publicising the project through national television, national and local radio, and national print media (newspapers, online & social media).

*Harare inception meeting:* took place at the ZRCS National Training Centre in Westwood from 25<sup>th</sup> – 28<sup>th</sup> January 2016. A total of 24 participants joined (18M:6F) – comprising 19 ZRCS staff from national, provincial and field level, 4 project steering group members (DCP, MSD and RLA) and the DRC Country Coordinator. The meeting objectives were to (1) introduce the WB/GFDRR project to key project staff and other stakeholders; (2) discuss project components - objectives, outputs, outcomes (LFM); (3) discuss roles and responsibilities; (4) build rapport among project staff and coordination stakeholders; and (5) harmonise expectations and work on project activity plans.

*Kariba Urban inception and project/media launch:* took place at the Carribea Bay Resort in Kariba Urban on 17<sup>th</sup> February 2016. There was a total of 71 participants (62M:9F). Key stakeholders from different government departments (national, provincial and district), ZRCS Kariba District board members & youth, ZRCS staff (HQ, Provincial and field) and the Danish Red Cross Country Coordinator participated in the meeting. The Kariba Urban inception had similar objectives to Harare – but with the additional objective of building the profile of the project, enhancing donor visibility and facilitating information dissemination. The key presenters were the ZRCS Secretary General; the Guest of Honour – the Minister of State for Provincial Affairs (Mashonaland West); and the ZRCS Communications Manager, Disaster Management Coordinator and Disaster Management Officer.

The project was officially launched by the Minister of State for Provincial Affairs (Mashonaland West) who acknowledged the efforts of ZRCS and its funding partners across 5 provinces. He noted that “the 2016 declaration of drought as a national disaster is largely attributed to the effects of climate change: thereby strengthening the importance of WB/GFDRR project and its incorporation of climate change adaptation strategies, early warning & early action and resilient components which are important in strengthening community adaptive capacity and saving lives”; and that “the project is crucial in saving the maximum number of lives and livelihoods from various hazards – especially in communities who depend on the lake for livelihoods”. The ZRCS Secretary General emphasised on building a good rapport with the community and the importance of changing people’s minds towards building a culture of safety. The presence of national and local media was very crucial as it also witnessed the cooperation between ZRCS and stakeholders.



*Figures 15 & 16: Kariba Urban Inception Meeting & Project Media Launch*

*Kariba Rural Inception meeting:* took place in Siakobvu on 19<sup>th</sup> February 2016 – at the Nyaminyami RDC boardroom. There were 25 participants (23M:2F) – including Nyaminyami RDC representatives, Council Chairperson, traditional chief representatives, ward councillors, village heads, NGO representatives, Red Cross Volunteers and members. The objectives of the meeting were identical to Kariba Urban.

*Kariba Rural project launch:* took place on 13<sup>th</sup> April 2016. This event brought together the Kariba rural community and leadership to witness the official start of the project in the target communities. This community and local stakeholder launch aimed to showcase the work of ZRCS; increase WB/GFDRR project and donor visibility; and build community awareness on project objectives and components. An estimated 490 people participated – comprising ZRCS, DRC and ICRC staff and ZRCS governance representatives (23); local leadership – councillors, chiefs & headmen (14); Government of Zimbabwe staff and partners (50); media (3) and community members – including volunteers (approx. 400). The launch was officiated by the Nyaminyami RDC Chief Executive Officer and the Kariba District Administrator.

Activity 100% completed.

#### 2.1.2 District-level ToT & ward-level cascade training on DRR/CCA for Civil Protection committees & LDP stakeholders in 3 target wards

ZRCS has engaged with national-level and district-level Civil Protection throughout 2016 and 2017 – with the aim to support the roll-out/cascade of Department of Civil Protection (DCP) Community-Based Disaster Risk Management (CBDRM) trainings including in the project's 3 target wards. The expectation was that participants would include ward-level local officials who would receive a basic grounding in CBDRM and so would be more receptive to, and have better understanding of, the CBDRR approach that ZRCS uses in their communities. Through this engagement, and through bringing together DCP and the Climate Change Management Department (CCMD) at the project steering group level, DCP has also been exploring ways to involve CCMD in their CBDRM roll-out.

On 4<sup>th</sup> August 2016, a district-level multi-stakeholder Training of Trainers on CBDRM was conducted at Nyaminyami RDC. Participants were drawn from the national-level project steering committee (ZRCS, DCP, MSD, CCMD, RLA and LNC), local government extension workers, and duty bearers such as councillors and local authority officials. The objective was to create a platform at district level where local stakeholders discuss, share information and coordinate on DRR & CCA; as well as a forum to advocate for additional DRR/CCA support within Nyaminyami RDC budgeting and for developing a robust strategic plan which mainstreams DRR and CCA.



Figure 17: Sibanda (from DCP) creating awareness on Sendai Framework for DRR

DCP and the other project steering group members also attended-ward level meetings to appreciate the presentation of CDRAPs and their subsequent integration to ward development plans.

In Q1 2017, through the encouragement of the ZRCS project team, the project supported District Civil Protection to convene a 1-day follow-up meeting to plan the operationalization of the District Disaster Risk Management (DRM) Plan developed in 2016. The District DRM Plan included a hazard-risk profile, SWOT analysis and allocated stakeholder roles and responsibilities for implementation. A total of 27 participants (20M:7F) from a broad spectrum of government district departments, non-government organisations and private enterprise attended: facilitated by 5 district-level government officers (5M:0F) at the Cutty Sark Hotel (Kariba) on 23<sup>rd</sup> February 2017. Outputs of the meeting included: (1) District Civil Protection Unit sub-committees were given roles in the CBDRM roll-out plan; (2) Subsectors were assigned to cascade CBDRM ToT sessions to selected community members in all wards; and (3) a proposal of review the District DRM Plan to better include voices



from the community and emerging risks; and update ward-level risk profiles (e.g. wards 9 & 10 have had progressively increased risk of foot and mouth, from low to medium to high) due to shared border with neighbouring Gokwe wards.

As part of the project commitment to the planned CBDRM cascade to ward level, a 4-day CBDRM workshop was conducted from 7<sup>th</sup> to 10<sup>th</sup> March 2017 at the Nyaminyami RDC boardroom. There were 19 ward-level participants (14M:5F), 4 ZRCS field staff (4M:0F) and 10 facilitators from various district-level government technical departments.

The objectives of the workshop were to: (1) disseminate the Kariba District DRM Plan to ward level; (2) train 20 community leaders in Disaster Risk Management; (3) provide an engagement and exchange platform for district- and ward-level stakeholders to reach a common technical understanding on hazards, risks, and risk management messages and actions required in the communities; and (4) have Government departments share their yearly risk management cycle activities in line with the DRM Plan. At the end of the workshop participant teams came up with risk management actions (awareness, early warning, mitigation and response preparedness) they will carry out in their communities in line with the District DRM plan. The workshop participants & facilitators also identified various DRM challenges:

Area	Challenges
Health	<ul style="list-style-type: none"><li>• No functioning water testing kits at Siakobvu hospital</li><li>• Rise in rabies cases (highly expensive rabies vaccine not available in local health centres)</li><li>• no reliable ambulance services for Siakobvu hospital; and, no boat ambulance services for lakeshore communities</li></ul>
Climate Change Adaptation	<ul style="list-style-type: none"><li>• Need to enhance/develop local knowledge on climate change and on elaborating the link between climate change and associated disaster risks e.g. water and food and livelihoods security.</li><li>• the Climate Change Management Department does not have representation at district or province.</li></ul>
Agriculture	<ul style="list-style-type: none"><li>• Reluctance of farmers to adopt small grains instead of maize is a major challenge: compromising efforts to mitigate food insecurity.</li></ul>
Infrastructure, Communication and other resources	<ul style="list-style-type: none"><li>• Damage to roads and bridges makes it hard to access communities and for communities to access essential services.</li><li>• No/limited radio and mobile communication infrastructure in some areas to convey early warning and action messages</li><li>• No life jackets &amp; limited first aid kits</li></ul>
Coordination	<ul style="list-style-type: none"><li>• Poor coordination between GoZ departments means that those without enough resources (vehicles and/or fuel) end up not being able to make the trip from Kariba town to meet communities. This particularly affects departments like MSD and EMA who do not have extension workers in the field.</li><li>• Revenue Collection harmony between NRDC, National Parks and Lake Navigation needs to be worked on as this was noted as a key factor in illegal and unregistered fishing which exposes fishermen to hazards.</li></ul>

For more information, please see Annex A02-2.1.2 “CBDRM ToT Training Report – Kariba & Siakobvu”

[Activity 100% completed.](#)

### 2.1.3 Identify local DRR champions to promote DRR/CCA & DRR to LDP

In Q2 2016, sensitizations on project activities were carried out with GoZ district- & ward-level counterparts – including at educational and health institutions. Teachers at some schools (e.g. Chilimba & Nebiri primary schools) appreciate and support the project to the extent that they are well positioned to promote DRR/CCA.

From 5<sup>th</sup> to 9<sup>th</sup> October 2016, a total of 18 local DRR champions (14M:4F), 6 per ward, were identified and comprise GoZ technical staff people such as Agritex officers, EHTs and the Kariba Rural Food Security chairman. These technical people have good rapport with the communities and have some existing knowledgeable of DRR and CCA.



Throughout 2017 and 2018 they have been engaged various activities to promote both DRR/CCA and its mainstreaming with local development planning. This included awareness raising and vaccination campaigns for various human and livestock diseases outbreaks; and awareness raising on veldt fires.

**Activity 100% completed.**

#### 2.1.4 Public awareness campaigns (national radio, social media)

On 26<sup>th</sup> June 2017, the ZRCS Communications Manager accompanied a media team (5M:0F): 2 from the national print media and 3 from radio stations (incl. local community radio station – Nyaminyami FM) to the project target area. The main purpose was to profile and appreciate the activities being implemented as well as the collaboration and coordination between ZRCS, local authorities and other stakeholders. Meetings were held with the Nyaminyami RDC and several focus group discussions were held with Community Disaster Response Teams (CDRTs), volunteers and community members. DRR/CCA-related public awareness campaigns were broadcast live on the radio: with volunteers speaking on the hazards & risks they face, types of training received and DRR/CCA measures they are carrying out. The media team also gathered information on how the Community Early Warning System is working and benefiting the fishing communities. An example story published in "The Standard": [Red Cross comes to fishermen's rescue \(The Standard: 11th July 2017\)](#).

This was followed by a similar visit for print media and radio stations on the 26<sup>th</sup> to 27<sup>th</sup> July 2017. There was a live broadcast from M'Sampa fishing village on Nyaminyami FM – with local fishermen, Red Cross volunteers and the ZRCS Project Manager. Examples stories were published in "The Standard" and "The Daily News": [Red Cross fights open defecation \(The Standard: 30th July 2017\)](#) and [37 years no toilets \(Daily News: 31st July 2017\)](#).

The ZRCS Communications team visited the target area again from 12<sup>th</sup> to 16<sup>th</sup> December 2017. The purpose was to generate articles, materials and visuals to document the work being undertaken by ZRCS throughout the country. This included a visit to the Harudziva weir & pipeline rehabilitation & Nebiri community garden.

The official project commissioning and handover was carried out in Nyaminyami from 26<sup>th</sup> to 29<sup>th</sup> May 2018 – and was covered by both electronic and print media. Participants included the Permanent Secretary for the Ministry of Defence (Guest of Honour), ZRCS Secretary General, ZRCS Humanitarian ambassador (Alick Macheso), Project Steering Group members, ZNA engineers – as well as the Kariba District Administrator and Nyaminyami RDC Chief Executive Officer. The handover included visits to the Automatic Weather System and EWS, the rehabilitated pipeline and community garden, and in the other target area, the footbridge. [Red Cross rescues Nyaminyami villagers \(The Standard: 2nd July 2018\)](#). Further, there are now indications that the ZRCS advocacy efforts at all levels – highlighting the unmet development and risk reduction needs in Nyaminyami – have put the target areas back on the resource allocation map: [GoZ to develop marginalised Nyaminyami area - VP Chiwenga \(ZBC: 28th Sept 2018\)](#)

**Activity 100% completed.**

#### 2.1.5 Active awareness raising at local level meetings & fora (e.g. District food security committees)

The ZRCS field team participated in district-level coordination meetings throughout 2016, 2017 & 2018: mainly in Nyaminyami RDC meetings and in coordination fora for food security and WASH. The Community Disaster Reduction Action Plans (CDRAPs) in 2016/17 and in 2017/18 were facilitated through the project are also discussed in these meetings. In Q2 2017, a meeting was held with Nyaminyami RDC – who made a commitment to review their Strategic Plan with the objective of annexing a district DRR/CCA Plan – based on the CDRAPs.

At provincial level, the ZRCS Provincial Manager for Mashonaland West held meetings with, and participated in meetings convened by, provincial stakeholders: where he raised awareness of the project, its status and advocated for mainstreaming of DRR/CCA in local development plans. From 15<sup>th</sup> to 18<sup>th</sup> August 2017, the ZRCS provincial and field teams participated in the Mashonaland West Agricultural Show in Chinhoyi. During the event, Provincial and Community Disaster Response Teams, and the ZRCS communication team, profiled the DRR/CCA and Early Warning System work from the project.

In the Nyaminyami RDC meetings in late 2017 and early 2018, ZRCS focused on advocating for stronger coordination, cooperation and collaboration between the DRR/CCA micro-projects and the local extension worker implementation plans.

**Activity 100% completed.**

## 2.1.6 Commemorate International Day for Disaster Reduction (Oct 2016 & 2017)

The International Day for Disaster Reduction (IDDR) was established in 1989 by the United Nations General Assembly to promote a global culture of risk-awareness and disaster reduction. The day is commemorated on the 13<sup>th</sup> October every year and celebrates communities' and people's efforts in reducing exposure to disasters. For 2016, the new "Sendai Seven" campaign was launched – based on the seven targets of the Sendai Framework – the first of which is "reducing disaster mortality". Under the theme "Live to Tell" events were expected to showcase through real life stories how disaster mortality can be reduced possible through investments in early warning, preparedness, and resilient infrastructure.

On 13<sup>th</sup> October 2016, ZRCS joined commemorations at a national event held in Victoria Falls and at a district-level event held in Kariba town. Both events were coordinated by the Department of Civil Protection. In Kariba Urban, the venue was the Cutty Sark Hotel. A total of 60 people (43M:17F) participated – including District Civil Protection Unit stakeholders and the media. Additionally, approximately 80 School children and teachers from Nyamhunga primary marched on the day raising awareness in the community. The objectives of the day were to: (1) Celebrate the combined efforts carried out in reducing disaster risks in the district; (2) Demonstrate the issue of resilience through the 'Live to tell' story from a victim of a disaster – narration of his lives, risk profile of his environment, in short what it means to live with disasters and possible lessons on how to manage them; (3) Encourage every citizen and stakeholders to take part in building more disaster resilient communities; and (4) to coincide with the project supported disaster simulation exercise on Lake Kariba.

The guest of honour was the Kariba District Administrator who emphasized the importance of collaborative efforts in reducing disasters and ultimately mortality. The Live to Tell story was from a surviving victim (fisherman) of a crocodile attack in the project target area.



*Figures 18 & 19: Pupils marching on IDDR commemoration; and crowd listening to guest of honour speech*

The 2017 theme was "Home Safe Home" with a focus on accidents in the home and its surrounding environment. It was also an opportunity to create awareness of the Sendai Framework – and its critical contribution towards the achievement of the 2030 Agenda for Sustainable Development: notably the Sustainable Development Goals and the Paris Agreement on Climate Change.

The ZRCS contribution towards commemorating IDDR took place nationally on 13<sup>th</sup> October 2017 in Gwanda District (Matabeleland South), and locally on 3<sup>rd</sup> November 2017 in Kariba District (Mashonaland West). The national celebrations were coordinated by the Department of Civil Protection: with ZRCS supporting through visibility materials (t-shirts) and first aid coverage for the day. In Kariba urban, there were a total of 47 participants (34M:13F). Media coverage resulted in a newspaper article in the leading national newspaper "The Herald" in which the Kariba District Administrator, as chair of the District Civil Protection Unit, and local community lauded the DRM work of ZRCS in Kariba: [Communities laud Red Cross \(The Herald: 8th Nov 2017\)](#)

[2016 & 2017 activity 100% completed.](#)



### 2.1.7 Advocacy for mainstreaming of DRR/CCA in LDP for % of development funding and/or matching funds for DRR/CCA related measures (local level) - incl. support to local level coordination mechanisms; and Red Cross branch meetings every quarter

Several local level coordination fora were supported throughout the project time frame – with the dual aim of strengthening ZRCS and project coordination with GoZ counterparts and other stakeholders; and providing opportunity for ZRCS advocacy on mainstreaming DRR/CCA in local development planning and in seeking budget contributions to implementing DRR/CCA measures.

On 12<sup>th</sup> February 2016, Nyaminyami RDC convened a coordination meeting with local stakeholders, through ZRCS encouragement, to focus specifically on DRR. Non-Governmental Organisations present included World Vision, United Methodist Committee on Relief (UMCOR), Save the Children, Family Aids Caring Trust, Community Technology Development Organisation, Cordaid, and Christian Care – as well as ZRCS. World Vision shared a local example of a CCA strategy – where they had supported a fishing project in Gache Gache for farmers whose returns from farming had diminished considerably as a result of climate change. ZRCS shared information regarding the WB/GFDRR project – on mainstreaming DRR/CCA and on the adverse weather early warning early action system for lake Kariba fishing communities. Later that same month, on 28<sup>th</sup> February 2016, Nyaminyami RDC held a budget performance meeting – attended by 86 people (82M:4F) including the local Minister of Parliament and business leaders. The WB/GFDRR project partially supported the Nyaminyami RDC full council meeting on 14<sup>th</sup> July 2016 – attended by all organisations operating in Kariba Rural (District).

On 18<sup>th</sup> November 2016, the ZRCS field team were joined by the ZRCS HQ Disaster Management Coordinator and Disaster Management Officer to participate in the Kariba District Development Committee meeting. A total of 51 people participated (40M:11F). The purpose of the District Development Committee meeting was to bring all development stakeholders together to share updates on their work and develop a strategic framework for the coming year. Stakeholders were divided into 4 sub-groups: Economic, Infrastructure, Production and Social Services. This provided a great opportunity for ZRCS and the project to advocate for mainstreaming of DRR/CCA and for dedicated funding. The ZRCS HQ & field team also took side-meetings to (1) Follow up with the District Development Fund (DDF) staff regarding the feasibility of construction of Chigoya and Sangano bridges on the Mola road – and ZRCS was referred to the Ministry of Transport & Infrastructure Development provincial engineers; and (2) meet with key District Civil Protection members (both District Administrator Assistants, Agritex and Ministry of Women's Affairs officers) – to discuss the CBDRM roll-out in Kariba Rural.

As reported in Section 2.1.2, from 7<sup>th</sup> to 10<sup>th</sup> March 2017, District Civil Protection Unit stakeholders, as well as the Climate Change Management Department from national level, attended the CBDRM workshop at the Nyaminyami RDC boardroom. One of the aims of the meeting was to raise awareness, enhance knowledge and dispel misconceptions in relation to DRR and to CCA – as a step at local institutional level towards advocating for allocations towards DRR and CCA. The workshop identified a number of issues: (1) the need to enhance community appreciation of climate change, associated risks and impacts on lives and livelihoods; (2) the need to develop strategies to better protect the fragile livelihoods highly susceptible to climate change that characterise the target area; (3) no Climate Change Management Department representation at local, district or provincial levels – and little coordination between relevant departments (e.g. with the Environmental Management Agency); and (4) available CCA information is considered too scientific or technical, and difficult to disseminate, to communities in rural Kariba.

Throughout 2017, the project continued to support the local level coordination meetings.

In Q4 2017, the Nyaminyami RDC was supported to update its 4-year Strategic Plan. A workshop was held in which the Project Steering Committee, Nyaminyami RDC management, ward councillors, District Civil Protection Unit members, and traditional chiefs participated. A draft DRR/CCA Plan for Nyaminyami (Annex A02-2.1.7) was developed to guide the implementation of DRR/CCA activities – with the oversight role assigned by the Nyaminyami RDC to the District Social Services Department (which normally coordinates stakeholder development activities).

On 17<sup>th</sup> February 2018, a meeting was held at Chilimba primary school in Negande (W6) – chaired by the WADCO chair. Although the main purpose of the meeting was to discuss the food insecurity situation several observations were made by ZRCS field staff: (1) community leaders had more active and fluent in voicing issues related to hazards, possible solutions and the link to local development planning. They referred to the VCA/CCA process which they had participated in – and which enabled them to have skills on participatory risk assessment, prioritization and developing solutions. They also had an increased understanding on their own role in the development planning cycle; and importantly they now valued the development planning process and how it



can be used to tackle risks associated with disasters – even with drought. A volunteer ToT present at the meeting said that the CBDRM training they received can be applied to support local development planning. He envisaged mobilisation of volunteers to work with extension workers to disseminate drought early warning information to farmers, awareness raising on climate change and potential ways to deal with it and updating risk profiles (including climate risk).

Endorsement and adoption of NRDC Disaster Risk Management (DRM) Plan: through earlier ZRCS and Department of Civil Protection support, Kariba district developed a DRM plan which looked at the hazards, vulnerabilities, capacities and mitigation measures across the district (urban & rural). The District administration realised that many hazards and emergencies in Kariba rural cannot be managed efficiently from Kariba Urban – so a District Civil Protection Unit (DCPU) sub-committee based in Siakobvu was established to deal with rural disaster management issues. Through the VCA/CCAs and CDRAPs from the communities, the DCPU sub-committee and Nyaminyami RDC have adjusted the DRM Plan to address the rural disaster management issues. The ZRCS field team, along with ward councillors and Nyaminyami district stakeholders, supported Nyaminyami RDC to draft their Nyaminyami RDC DRM Plan. On 24<sup>th</sup> April 2018 the workshop was held at Siakobvu to finalise, endorse and adopt the NRDC DRM plan document. It was endorsed and adopted by the full council and is now an operational document. The total number of the participants was 28 (26M:2F). The availability of the Nyaminyami specific DRM plan will enhance the analysis for the Nyaminyami RDC's development planning: leading to better design and prioritization of interventions that are intended to reduce risks to and vulnerability of exposed population and infrastructure. Please see Annex A02-2.1.7 "Nyaminyami RDC Disaster Risk Management Plan: Endorsement and Adoption Report".

District Civil Protection Meeting: on 26<sup>th</sup> April 2018, District Civil Protection Unit (DCPU) met in Kariba Urban to review the (full) Kariba Disaster Risk Management Plan. Present were 38 members (28M:10F). The meeting was co-supported by the WB/GFDRR project and UMCOR. Part of the agenda was to review combined ward resilience plans and adopt them as a District Resilience Plan annex to the DRM plan. ZRCS was asked by the DCPU Chair to facilitate the review of the DRM plan.

Rural District Development Committee (RDDC) Meeting: the above meeting fed into the RDDC meeting at Pat McLean's Hall (Kariba Urban) on 27<sup>th</sup> April 2018. 40 participants (30M:10F) attended from different GoZ departments, NRDC and key partners such as ZRCS and UMCOR. The main objective of the meeting was to review the 2017 plan and agree the 2018 Kariba District Development Plan – and was again an opportunity and platform to highlight how, in Kariba Rural, DRR/CCA was integrated into the local development planning process.

*Quarterly Red Cross Branch (ward-level) meetings:* throughout the project timeframe, meetings were held on a quarterly basis in each of the 3 target wards. ZRCS is a grassroots volunteer-based organisation – and the ward-level ZRCS branches form its backbone. Branches are involved in various activities aimed at alleviating human suffering – and consist of local volunteers and members. As such, these quarterly meetings focus on institutional issues such as volunteer & membership recruitment drives; Red Cross mandate, values and 7 fundamental principles of humanitarian support; volunteer activity reports; and income generating activities – as well as share information on project activities. The Branches are an essential aspect of the ZRCS coordination efforts with the local authorities and traditional chiefs; and in this project play a vital reinforcing role in ensuring that through the village and traditional chiefs the CDRAPs and DRR/CCA micro-projects are incorporated in the village, ward and district development plans.

Activity 100% completed.

## 2.2 Study tour and exchange visits (DRR to LDP)

### 2.2.1 Study Tour – 4 to 5 participants

In 2016, the Danish Red Cross Country Coordinator was engaged in seeking a suitable host country, organisation and programme to serve as a study tour for mainstreaming or integrating DRR in local development planning. Discussions with the WB/GFDRR focal person in Malawi suggested strong potential for such a visit to Malawi. As a result, and in coordination with the WB/GFDRR focal person in Malawi, the project organised a 4-day study tour to visit the Save the Children "United in Building and Advancing Life Expectations" project near Blantyre, and then the Malawian "Department of Disaster Management Affairs" in Lilongwe.



The study tour took place from 30<sup>th</sup> May to 2<sup>nd</sup> June 2017 and involved 6 participants (4M:2F) from Zimbabwe: 2 ZRCS project staff, from Kariba district – the District Administrator and the Nyaminyami RDC Chief Executive Officer, and from the national level Project Steering Committee representatives from the Ministry of Rural and Local Government and from the Climate Change Management Department.

The objectives were to learn about: (1) how the district is organised (administratively; and in respect to disaster management; (2) how they have mainstreamed DRR into Local Development Planning; (3) advocacy and coordination between Save the Children and the local development and civil protection committees; (4) climate change adaptation strategies being practiced by the communities; and (5) DRR/CCA in Development Planning documents that have been developed and can be shared.

The team identified number of observations and these are documented in the “Study Tour - Mainstreaming DRR/CCA into Local Development Planning – Mission Report” that is included as Annex A02-2.2.1 “DRR in LDP Malawi Study Tour Report”. Key observations at national level were:

- The current Act regulating Disaster Management in Malawi is response oriented and efforts are underway to review it and ensure it incorporates preparedness, risk reduction and is aligned with the Sendai Framework;
- The Department of Disaster Management Affairs (DoDMA) spearheads advocacy efforts for increased funding towards DRR issues – and hopes an agreed annual percentage of the national budget can be allocated;
- DoDMA has also been working on DRM institutional development for key actors, and the integration of DRR into the school curriculum;
- The main focus of DRM actors is the decentralisation of disaster management responsibilities to district and other lower structures of the Civil Protection. The Government of Malawi is committed to this process and some districts already have technical staff responsible for DRM.

At local level, observations were:

- There is significant evidence that the local Civil Protection Committee structures are vibrant and fully operational. Although there were questions about how sustainable this was beyond the lifespan of the project;
- In terms of governance, the Zimbabwean visitors noted that their Malawian counterparts have a very strong and vibrant grassroots and local level development committees. It was felt that Zimbabwe needs to emulate by resuscitating the VIDCO and WADCO committees if any meaningful development is to be realized; Further, that the Malawian governance system makes it possible for the local level Village Civil Protection Committees and Village Development Committees do have a voice in decision-making;
- In contrast to Malawi, climate change experts in Zimbabwe are not represented at district or ward level – making it challenging for communities to address climate change adaptation; and
- Although the Zimbabwean visitors felt there was good gender balance and diversity in Zimbabwe they were surprised about the high level and empowerment of women in Malawi – with many Village Civil Protection Committees and Village Development Committees being chaired by women.

Activity 100% completed.

## 2.3 Integration of CDRAPs in current development planning at village, ward and district level

### 2.3.1 Presentation of VCA/CDRAP and consultations with the local authorities to raise awareness on the CDRAPs (ward and district) (2016 & 2017)

From 2<sup>nd</sup> – 5<sup>th</sup> August 2016, Ward-level and District-level meetings were held with the aim of integrating the 3-year CDRAPs into ward and district plans. Ward-level meetings were held at their respective ward community centres and the 1-day district-level meeting was held at the Nyaminyami RDC boardroom. Participants included WADCO committee members & community members alongside EHTs, teachers, Agritex officers and ZRCS volunteers. In Mola (Ward 3) there were 44 participants (30M:14F); in Mola fishing camps there were 33 participants (18N:15F); in Negande (Ward 6) there were 41 participants (12M:29F); and in Nebiri (Ward 7) there were 50 participants (40M:10F).



At district-level: A total of 20 participants (17M:3F) – included the ZRCS field team who were joined by the ZRCS/HQ Disaster Management Coordinator and Disaster Management Officer; and national-level representatives from different government departments namely the District Civil Protection, Meteorological Service Department, Ministry of Rural and Local Government, Ministry of Transport (Lake Navigation Control) and Climate Change Management Department.

The objectives of the meetings were to: (1) share the 3-year CDRAPs and the ward plans with community members, stakeholders and the project steering committee; (2) integrate CDRAPs into ward-level plans and district-level plans; and (3) ensure practical context-based appreciation by the project steering group members about the VCA/CCA, reflection on VCA results and development of CDRAPs.

Please see Annex A02-2.3 “Integration of CDRAP into Local Development Plans (August 2016)” Report.

*2016/17 cycle:* during the CBDRM workshop (6<sup>th</sup> to 10<sup>th</sup> March 2017), village leaders and Red Cross volunteers presented 10 CDRAPs. At the workshop, the District Civil Protection Unit and Nyaminyami RDC representatives integrated CDRAPs into the annual Development Plan for 2017. At the same time, various Government departments presented their annual risk management cycles to the CBDRM workshop participants who then designed local actions – informed by the CDRAPs.

*2017/18 cycle:* from 7<sup>th</sup> to 8<sup>th</sup> September 2017, the VCA findings and CDRAPs were presented to the local leadership (District Administrator, Nyaminyami RDC CEO and ward councillors), traditional chiefs, local authorities, other local stakeholders and the Project Steering Committee. The meeting took place at Tiger Bay Resort (in Mola [Ward 3]) – with a total 41 participants (34M:7F). Deliberations centred on DRR/CCA issues that might hinder or slow developmental progress such as flooding, climate change, human and animal conflict, drought and the consequences of not taking corrective action when adverse warning messages disseminated.

See [Section 2.1.7](#) in relation to the formal adoption of the Disaster Risk Management Annex to the Nyaminyami Development Plan in April 2018.

[2016 & 2017 activity 100% completed.](#)

### 2.3.2 Advocacy and coordination with relevant local participants in the local development planning cycle (2016 & 2017)

Advocacy and coordination regarding local development planning is incorporated in, and has been reported in, activities [2.1.7](#) and [2.3.1](#). At district level, there is a DRM Plan and a Preparedness and Response Plan. However, given the geographical distances between Kariba Urban and Kariba Rural (Nyaminyami), it was proposed by the District Civil Protection Unit to have a sub-DM, Preparedness and Response Plan specifically for Nyaminyami to better ensure timely and effective response to disasters in Kariba Rural. It was agreed also that for operationalization of this sub-Plan that the Nyaminyami RDC together with District Civil Protection Unit representatives based in Siakobvu regularly hold sub-DCP meetings in Siakobvu (Kariba Rural) – but reporting directly to the District Civil Protection Unit in Kariba Urban. Several other recommendations were also made by the District Civil Protection Unit in terms of the sub-Plan for Nyaminyami:

- Nyaminyami RDC to continue advocating that construction and resettlement plans should avoid flood plains and other low-lying areas prone to flooding;
- Traditional leaders should take an active role in the raising awareness of the importance of environmental management, indigenous knowledge systems early warning signs, and DRR/CCA in their communities;
- Stream bank cultivation should be prohibited – backed by stringent enforcement of by-laws;
- People should be educated on CCA strategies and building structures resilient to climate change;
- National parks should educate people on living together with animals (reduce human-animal conflict); and
- Disaster Risk Management need to be integrated in schools.

[Activity 100% completed.](#)



## 2.4 Advocacy for DRR & for mainstreaming of DRR/CCA in LDP for % of development funding and/or matching funds for DRR/CCA related measures (National level)

### 2.4.1 Supporting DRR/CCA information sharing forum at national level

This activity was originally conceived as a small informal national-level DRR/CCA practitioners' forum, chaired or co-chaired by the Department of Civil Protection for information and good practice exchange – that could evolve into a broader platform for knowledge sharing and coordination. However, several factors have contributed to a re-orientation of this activity. These include that (1) the Disaster Management Bill assigning responsibility for DRR coordination to DCP has still not been passed – and DCP is hesitant to formally take on that role in the absence of a legal basis; and (2) in the current political environment, ZRCS has reservations about being too closely aggregated by GoZ with NGOs and Civil Society Organisations.

The WB/GFDRR Project Steering Group – comprising relevant GoZ national-level departments and the Red Cross – now constitute the DRR/CCA information sharing forum. In Q1 2016, the Project Steering Group was established and draft Terms of Reference (ToR) for roles and responsibilities were developed and finalised. The Project Steering Group comprises ZRCS, DRC and 4 GoZ departments: (1 & 2) Department of Civil Protection Directorate (DCP) and Department of Rural Local Authorities (DRLA) / Ministry of Local Government, Public Works and National Housing; (3 & 4) Meteorological Services Department (MSD) and the Climate Change Management Department (CCMD) / Ministry of Environment, Water and Climate Resources; and (5) a sub-national level member: Lake (Kariba) Navigation Control (LNC) / Department of Inland Waters Control / Ministry of Transport and Infrastructural Development.

The Project Steering Group had its first formal meeting at the ZRCS HQ boardroom on 25<sup>th</sup> July 2016; and met again on 25<sup>th</sup> October 2016 as part of the WB/GFDRR monitoring visit – attended by Francis Nkoka and Michael Mainje from the World Bank's Malawi office.

In 2017, the Project Steering Group met in July – with the main agenda items being: (1) project update & sharing of plans for Q3 & Q4 2017; and (2) detailed planning for the workshops to (a) review/update the Kariba DRM Plan in Kariba, and (b) in Siakobvu, finalise the Nyaminyami RDC DM Plan to be annexed to the Nyaminyami RDC Development Plan. The Project Steering Group members unanimously applauded (2) and considered it fully aligned with their respective department's vision for mainstreaming DRR into Local Development Planning – as well as the project objectives. The Department of Rural Development emphasised that they were currently drafting a concept note for a policy to compel Rural Development Councils to budget for DRR (the concept note is included as Annex A02-2.4.1). The Department of Civil Protection expressed that they wished to see the decentralisation and institutionalisation of Disaster Risk Management to all sub-national levels. An output of the Project Steering Group meeting was a draft Terms of Reference, Plan and Agenda for the proposed workshop – which was then shared within their respective departments.

From 4<sup>th</sup> to 8<sup>th</sup> September 2017, the Project Steering Group participated at the workshop to review/update the Kariba DRM Plan in Kariba, and to finalise the annexed Nyaminyami RDC DM Plan in Siakobvu. The Steering Group members applauded the Nyaminyami RDC for being the first Rural District Council in Zimbabwe to develop a DM Plan annexed to their Strategic Development Plan, and recommended the process be replicated and cascaded to other areas. The Steering Group members also used this field-level interaction to inform best practices – and generate ideas for the planned e-newsletter (see section 2.4.2 below).

On 14<sup>th</sup> December 2017, the project received a visit from a consultant contracted by the project's co-back donor, the European Union, to conduct a mid-term evaluation of the projects implemented through the World Bank / Global Facility for Disaster Reduction and Recovery under the 2nd call for Natural Disaster Risk Reduction. As part of the evaluation the consultant met with the Project Steering Group members – on the 14<sup>th</sup> December as a group and then individually on the 15<sup>th</sup> December. The project used this opportunity of bringing together the Steering Group members to also hold a Project Steering Group meeting on 14<sup>th</sup> December 2017 – where they received a progress update from ZRCS and discussed plans for Q1 and Q2 2018. The Steering Group was convinced that best practices had emerged from the project; and the Department of Rural Development and Rural Local Authorities shared a draft concept note on how they envision their role in mainstreaming DRR/CAA into Local Development Planning.



On 23<sup>rd</sup> February 2018, ZRCS were invited to join national-level workshop organised by the Climate Change Management Department and UNDP at the Holiday Inn Harare: to discuss tools for the integration of DRR/CCA into local development plans. Overall, the organisers felt this was still a new approach in Zimbabwe and welcomed the inputs from the ZRCS experience. ZRCS made significant contributions, sharing their experiences and documents with UNDP who were funding the initiative and hoped this dialogue will continue to unlock support towards scaling up this process.

**Activity 100% complete.**

#### 2.4.2 Support quarterly DRR e-newsletter by the DCP

In 2016, ZRCS opened dialogue with the Department of Civil Protection (DCP) regarding project support to a quarterly DRR e-newsletter. However, other DCP commitments meant that nothing was realised. In 2017, ZRCS approached the Project Steering Group (of which DCP is a member) to agree a way forward. In Q3 2017, this resulted in: (1) a draft e-newsletter based on two workshops to review/update the Kariba DRM Plan and to annex the Nyaminyami RDC DM Plan to its Development Plan; and (2) 200 copies of the Project pamphlet. It was planned both the e-newsletter and the project pamphlet would be shared to the Project Steering Group members for them to distribute through their relevant email lists. Hard copies were also shared locally within the project areas to those without internet access – such as traditional chiefs.

In Q4 2017, a draft best practice document focusing on district response capacity was produced. This was derived from events of the International Day for Disaster Reduction commemorations and emergency response simulations on Lake Kariba in early November 2017. DCP finalised and distributed the e-newsletter in Q1 2018. It is included as Annex A02.2.4.2.

**Activity not completed as planned: a once off rather than quarterly newsletter delivered.**

#### 2.4.3 Coordinated approach to the International Day for Disaster Reduction

Please refer to Activity [2.1.6](#).

#### 2.4.4 Raise profile and creating linkages with other DRR fora (e.g. food security and environment)

Refer to Activity [2.1.5](#), [2.1.7](#) and [2.4.1](#).

### 2.5 Lessons learned workshops and dissemination of project best practices

#### 2.5.1 Mid-term Technical Review

This 30-month “Mainstreaming Disaster Risk Reduction and Climate Change Adaptation into Local Development Planning” project sits within a broader 39-month Community-Based Resilience Program implemented by ZRCS with funding from the Danish Red Cross. A considerable part of the broader program undertakes similar DRR/CCA and preparedness activities in neighbouring communities and other wards in Kariba Rural. A mid-term technical review is a requirement of the Danish Red Cross back-donor, Danish Ministry of Foreign Affairs (it was also a contractual deliverable for the WB/GFDRR project).

The purpose of the joint DRC and ZRCS mid-term technical review was to assess and track program progress and challenges in relation to the set program plans and activities and recommend how future programming can be more effective and efficient. The review considered relevance, effectiveness, efficiency, ownership, sustainability and harmonisation. The review took place from 24<sup>th</sup> April to 2<sup>nd</sup> May 2017 and included semi-structured interviews in Harare and semi-structured interviews and focus group discussions in 3 of the 4 combined target wards: Mola (Ward 3), Negande (Ward 6), and Nebiri (Ward 7). The review team was led by the DRC International DRR Advisor from Copenhagen and comprised as team members the ZRCS Planning Monitoring Evaluation and Reporting Officer and a ZRCS Disaster Management Officer. The team was accompanied, as resource persons, by the DRC Country Coordinator and the ZRCS Provincial Manager for Mashonaland West.



*Major findings and recommendations from the review include:*

- The program objectives, outputs and activities implemented are highly relevant to address the needs for risk reduction and preparedness measures of the vulnerable people living in rural Kariba district;
- The program is well managed and implemented with highly qualified ZRCS HQ, Branch and field staff members in place. The team noticed that the field level staff are excellent in organizing their work as a team and in approaching and supporting both the volunteers and the target communities;
- Tensions with different authorities and institutions are experienced by the communities. Especially for human-animal conflict – on the land and on the lake – often communities are pushed back and forth between the Nyaminyami Rural District Council, its constituent government departments and the Zimbabwe Parks and Wildlife Management Authority);
- Local fishermen and the Community Disaster Response Teams (CDRTs) are receiving the SMS-based adverse weather warnings provided by the Lake Navigation Control and Meteorological Services in Kariba Urban. These alerts are well-received and are being cascaded throughout the community. The warnings would be even more visible, if the CDRTs were provided with coloured flags (red, yellow and green) and by this were able to display warnings more easily. In addition, it is recommended that a focal point is appointed within the communities to provide EWS feedback from the communities to the Lake (Kariba) Navigation Control.
- There was encouraging evidence of ownership and some prospects for sustainability for the program: for example, all volunteers interviewed expressed strong ownership of the program activities. The review team assessed that the presence of Red Cross volunteers and members within the target communities is the main driver for sustainability; and
- The review team noted positive changes in knowledge, attitudes and practices towards addressing health risks. Those interviewed reported increased self-respect, as they no longer use open defecation and now have access to latrines, and that handwashing was now a common practice among community members. Evidence of improved healthy living is noted through decreasing cases of diarrheal diseases and fewer cholera outbreaks reported by key informants.

For more comprehensive findings and recommendations please see the A02-2.5.1 “Joint Mid-term Technical Review of the ZRCS Community-based Resilience Program Report”.

**Activity 100% completed.**

### 2.5.2 Lessons learnt workshop (district level)

On 16<sup>th</sup> & 17<sup>th</sup> May 2018, stakeholders involved in development planning at village, ward, district, provincial and national level were invited to the Nyaminyami RDC boardroom to reflect on lessons learnt from implementing a 30-month pilot project on mainstreaming disaster risk reduction and climate change adaptation into local development planning. There were 27 participants (19M:8F): comprising 6 ZRCS staff (5M:1F), 4 community leaders ((4M:0F), 6 volunteers (2M:4F), 6 local stakeholders from the DCP sub-committee (4M:2F) and 5 members from the Project Steering Group (4M:1F). The workshop focused on the different roles and responsibilities of the actors involved, how the actual process of mainstreaming happened including evidence or documentation of the process.

In the workshop, it was felt that the project had helped directly to highlight the need for significantly increased integration of DRR/CCA into the local development plans. Within the project momentum had been generated to such an extent that the GoZ departments on the Project Steering Group had drafted a concept paper on mainstreaming DRR/CCA with rural development. Currently, an effective from 2019, there is a new thrust emerging which compels all councils to integrate and ultimately have a budget for DRR. Nyaminyami RDC now has a strategic plan which is sensitive to DRR/CCA and combined with the commitment and efforts shown by Nyaminyami RDC to mainstream DRR/CCA, this has made it a model and is emerging as a best practice. Several factors<sup>4</sup> were seen by participants as cross-cutting in creating an enabling environment for mainstreaming DRR/CCA: (1) gender and participation of women – where female leadership is affected by religious and cultural issues, lack of more advanced formal education and early child marriages; (2) community participation in non-funded non-food projects and meetings; (3) participation and representation of people with disability; (4) support by District heads towards Ward assembly meetings; (5) community perception about being marginalised and learned helplessness; and (6) meetings for District Civil Protection Unit sub-committee and secretarial services.

<sup>4</sup> These equally apply to development planning itself



Key points of note identified by the participants were:

- there had been an increase in understanding of disaster risk and in capacity for multi-hazard planning and Disaster Risk Management at both local and district level;
- Climate change trainings enable local people to update local climate change profiles and understand forecasts for practical uses;
- the time-bound CDRAPs that clearly showed hazards, risks and structural and non-structural solutions was viewed as commendable;
- DRR/CCA measures implemented were worth replicating;
- the creation of the District Civil Protection Unit sub-committee for Nyaminyami better matched the logistical and coordination realities of Kariba district;
- the sub-committee was functioning and active in the coordination of disasters and simulations;
- DRM Plan had been developed and integrated into Nyaminyami RDC strategic plan;
- The importance of a livelihood map and plan aimed at protecting and promoting these livelihoods;
- Local fishermen receive and understand the adverse weather alerts; and
- Project success hampered by unmet development needs.

A summary of the district-level lessons learnt workshop appears as Annex A02-2.5.2

[Activity 100% completed.](#)

#### 2.5.3 Lessons learnt workshop (national level)

On 23<sup>rd</sup> May 2018, following on from and informed by the district-level lessons learnt, a national-level lessons learnt workshop was held at the Jameson Hotel in Harare. There were 31 participants (19M:12F) including representatives from Nyaminyami RDC (3M:1F), the project steering group (4M:3F), ZRCS/DRC staff and management (7M:1F), community and local stakeholder representatives (3M:2F) and the national media (2M:5F). The Director of the Department of Civil Protection commented that such projects are worth replicating across the country as a best practice; while the District Administrator acknowledged that the project had improved Kariba district's capacity to combine disaster management and development planning in creative ways. It was noted that ZRCS has an important role due to its nationwide presence through volunteers and future synergies such as the one generated through the project are worth replicating in future projects as a best practice.

Please see Annex "A02-2.5.3 District & National Lessons Learnt Consolidated Report (2018)" for details.

[Activity 100% completed.](#)

#### 2.5.4 Best practices document

A meeting to reflect on the lessons learnt from the project and its subsequent translation into a best practice document was held in Kariba Rural in week 27<sup>th</sup> to 30<sup>th</sup> June 2018. This also coincided with the project commissioning and handover. ZRCS and the Project Steering Group have drafted a Best Practices document – with a Forward drafted by the Department of Civil Protection. It will be finalised and distributed electronically to relevant local and national stakeholders by end 2018.

Please see Annex "A02-2.5.4 Best Practices Report (2018)".

[Activity 100% completed.](#)

**OUTPUT 3: EARLY WARNING-EARLY ACTION****Early warnings reach and serve people at the community level.**

	<b>% of fishermen in target communities express feeling safer from storm &amp; wind hazards as a result of adverse weather warnings (E)</b>
<b>Indicator 3.1</b>	95.1% of fishermen respondents expressed that they felt a bit safer (41.0%) or much safer (54.1%) from storm and wind hazards on Lake Kariba following implementation of the ZRCS-supported Early Warning System for adverse weather on Lake Kariba. [End-line Survey] The Final Evaluation noted “Fishermen in the Msamba fishing camp that participated in the evaluation FGD indicated that they are now better informed about conditions on the lake. Most people heed the warnings and do not enter the lake when conditions are poor, whilst those few who might still go out are at least aware of the conditions and can take appropriate precautions”.
<b>Indicator 3.2</b>	<b>Target communities and local authorities have increased capacity to effectively &amp; timely respond to adverse weather-related disasters on Lake Kariba (E)</b>  The Final Evaluation noted “the project supported simulation exercises for responding to disasters on the lake were well supported by the local authorities and local communities. In Kariba town the exercise went as far as to trigger a national alert to the Zimbabwe Defence Forces. However, the Lake Navigation Authority noted that they had limited resource for effectively responding to disasters on the other side of the lake, in particular limited fuel for reaching the more distant locations.”; and  “At the community level community members valued the first aid training and the training of Community Disaster Response Teams, although noting that lack of motorised boats within the camp reduced their capacity to respond in a timely manner, whilst other response actors are too far to mount a timely response within the camp’s fishing grounds. As well as weather-related incidents the trained first aiders had also provided life-saving assistance following a hippo attack, with human-wildlife conflict also ranked as a priority risk in the fishing communities”

**3.1 Advocacy & sensitization key influencers (local and national)****3.1.1 Conducting fishing camp/ward & district level sensitization meetings**

Early in the project, ZRCS HQ and field team met with District Administrator in Kariba Urban to sensitize him about the WB/GFDRR project components and activities. The District Administrator emphasised the need for the Knowledge, Attitudes and Practices (KAP) survey especially on climate change and early warning systems “since communities in Kariba Rural are culturally conservative”. The ZRCS HQ and field team also met with the Lake (Kariba) Navigation Control Surveyor and Controller – who is stationed on the top of the hill that looks out over Lake Kariba. One of the Lake Navigation Control’s roles is to receive weather information from MSD and disseminate it to boat operators. Lake Navigation Control indicated that although they rely on disaster awareness campaigns for information dissemination there is no proper communication between Lake Navigation team and the communities living around and working on the lake. They therefore strongly welcomed Output 3 of the WB/GFDRR project – improving access to adverse weather information and developing preparedness and early action capacity for the lakeside fishing communities. The meeting also came against a surge in the number of boat accidents due to extremely strong winds, overloading and lack of adequate information between November and December 2015.

On 2<sup>nd</sup> February 2016, ZRCS field staff met with the Nyaminyami RDC Chief Executive Officer to sensitize her on the WD/GFDRR project components and activities. In particular, she was very supportive of the intended efforts to train and educate fishing communities on proper and safer methods of fishing on the lake.



On 4<sup>th</sup> March 2016, meetings for community members to voice about common hazards faced by their community and hear about the project's early warning system component were held at the Chalala clinic for people from Sibilobilo fishing camp and at the M'sampa community centre for the M'sampa fishing camp. There were 14 participants (9M:5F) and 26 participants (17M:9F) respectively. Participants comprised of the Fishing Camp Committee (Camp Chairman and committee members), Red Cross members, fishermen and community members. In almost all fishing camps strong winds and wild animals were cited as major cause of several deaths and injuries to the fisherman.

Issues raised in Sibilobilo and M'sampa fishing camp sensitizations included:

- Strong winds are the major hazard in the lake which results in boat capsizing and death of many people.
- Requests for training on life-saving skills and first aid – to allow community members to immediately assist the injured before taking them to the clinic or hospital.
- The lake is the main source of livelihood for the fishing camp communities – but is inhabited by dangerous animals such as hippos and crocodiles. Fishermen reported that in the last week one fisherman from M'sampa capsized and was eaten by a crocodile, and one school pupil was attacked by a crocodile at the Mawena River. Crocodile attacks are very common both the lake and rivers.
- Most of the fishermen possess poor quality fishing materials, life jackets and boats which also threaten human life.
- There are no health facilities in either fishing camp and people from Sibilobilo fishing camp have a long 25km walk to the Chalala clinic, or about 7 km by boat – which is risky in the rainy and windy seasons. People from M'sampa fishing camp have a 20km walk to Mola clinic.
- Communication between Lake Navigation Control in Kariba and the fishing communities is poor: and the EWS component through SMS or VHF radio alert was greatly welcomed by the communities.
- The prevalence of HIV/AIDS was reported to be high in the fishing camps and the community challenged ZRCS to explore HIV/AIDS preventive actions such as condoms; early marriages are common in the fishing camps as young girls are lured by money.

On 16<sup>th</sup> May 2016, a fishing camp sensitisation in Kariba Urban was held at Mash Fishing Enterprises. Participants included 12 fishermen from different fishing companies and the Lake Navigation Control Surveyor of Vessels. On the same day, ZRCS and Lake Navigation Control held a meeting with Patsaka Radio station. In addition to working works directly with Kariba Urban municipality in the dissemination of messages of water availability & refuse collection Patsaka radio station have a bulk SMS system that functions across all network providers.

On 8<sup>th</sup> and 9<sup>th</sup> October 2016 further sensitisations were conducted in M'sampa, Masviakabola and Sibilobilo fishing camps – regarding upcoming activities such as CDRT basic and specialised trainings and the Community Early Warning System (CEWS) training and Community Disaster Response Team (CDRT) specialised training. Recommendations from the fishing communities included: (1) CDRTs should be equipped with lifesaving skills and first aid; (2) CEWS champions to quickly disseminate adverse weather warnings soon after receiving it; (3) CDRT to be equipped with relevant response materials such as first aid kits, speed boats, whistles, reflector flags etc.; (4) every activity carried in the community by either project volunteers or CDRT should be accompanied by a report; (5) a wind vane/cup anemometer which enables the fishers to quickly detect the wind speed and direction; (6) High-visibility materials for the CDRT and CEWS champions.

**Activity 100% completed.**

### 3.1.2 Identifying EWS champions in the fishing camp

On 18<sup>th</sup> May 2016, the ZRCS field team met with the 3 fishing camp communities (M'sampa, Sibilobilo and Masviakabola) to seek those interested in joining the CDRT teams - teams that will be trained and equipped with necessary skills and kits needed in responding to hazards/disasters. The meetings had a number of objectives: (1) identifying CDRT teams and CEWS champions; (2) registering fishermen & women for the SMS adverse weather alert component; (3) build community interest in accepting Red Cross programming; (4) establish Red cross branches in the fishing communities; and (5) officially announce *within* the fishing community about the coming of the WB/GFDRR project and raise awareness about its components and activities.

The team met with a total of 122 community members (78M:44F): 37 from M'sampa (31M:6F); 32 from Sibilobilo (18M:14F); and 53 from Masviakabola (29M:24F).



The roles of the CEWS Champions are to: (1) disseminate timely early warning information to everyone in their community; (2) advocate and campaign on the importance of early action; and (3) monitor hazards & risks in their area.

**Activity 100% completed.**

### **3.2 Development of community-driven hazard “first mile” early warning early action mechanism linked to national & regional forecasting institutions**

#### **3.2.1 Conduct Early Warning System (EWS) Knowledge, Attitudes & Practices survey**

Terms of Reference were developed in Q1 2016 and in early Q2 2016 a consultant team were identified and subcontracted to carry out the survey. The objectives of the EWS KAP survey were to: (1) identify and prioritize hazards faced by target fishing communities in specific relation to fishing activities on Lake Kariba (and the rivers that feed it); (2) understand the knowledge, attitudes and practices of at-risk fishing communities in relation to these hazards and towards existing and future early warning systems; and (3) recommend strategies that would improve and build on the effectiveness of the current project design with regard to disaster risk communication and awareness raising.

Dr Chipo Mubaya, a lecturer at Chinhoyi University of Technology, led the research team – and was joined by two research assistants for the 7-day field data collection in May 2016. The ZRCS HQ Disaster Management Officer and ZRCS field team accompanied the research team in the field – in both Kariba Urban and in the fishing camps in Kariba Rural. Interviews were conducted with Lake (Kariba) Navigation Control in Kariba Urban as well as key stakeholders in Kariba Rural. Focus group discussions were held with communities in the 3 fishing camps: M’sampa, Masviakabola and Sibilobilo. The draft Early Warning System (EWS) Knowledge, Attitudes & Practices Survey was shared in the 2016 Annual Report. The authors finalised the report in 2017; and after quality assurance from the ZRCS Planning Monitoring Evaluation & Reporting unit the report was approved. 20 hard copies were printed and distributed to selected national, district and local stakeholders in Q2 2017. The final report appears as Annex “A02-3.2 EWS KAP Survey Report”.

**Activity 100% completed.**

#### **3.2.2 Review and upgrade the existing 2-way VHF system**

In April 2016, a joint technical assessment visit by ZRCS and MSD was carried out in Kariba Urban and Kariba Rural to ascertain the status of existing VHF/HF and other communication equipment, and the requirements for Lake (Kariba) Navigation Control to be able to disseminate timely and effectively to small-scale fishermen and other lake users about adverse weather conditions. Later in Q2 2016, ZRCS was offered various HF/VHF radio equipment<sup>5</sup> no longer required by ICRC and ZRCS engaged with MSD and the Department of Inland Waters Control regarding protocols and particularly licensing (e.g. annual fees) issues associated with such a donation. In Q3 2016, MSD agreed to second 3 technicians to work with the ZRCS Information Technology Officer for the installation of the VHF/HF radio equipment; and they received training from ICRC on this. The equipment was handed over by ICRC in Q4 2016. These radios have been earmarked for installation at the following points: (a) Lake Navigation Control [Kariba] = 5 x VHF and 1 x HF; (b) Meteorology Department – Kariba = 1 x VHF and 1 x HF; (c) Lake Navigation Control [Binga] = 1 x VHF and 1 HF; (d) Fishing Camps = 1 x VHF and 1 x HF; (e) ZRCS [Siakobvu] = 1 x VHF and 1 x HF; and (f) MSD [Harare] = 1 x HF. For installation and sustainability of the donated equipment batteries and cables had to be procured. This was done in early 2017.

A key issue encountered in 2016 continued into 2017 – regarding potentially significant annual licencing fees. Several avenues were explored through the ZRCS’ parent ministry (Ministry of Defence), Department of Civil Protection and Lake Navigation Control. Eventually, in Q4 2017, the Ministry of Transport and Infrastructural Development granted a written letter of acceptance of the VHF and HF radio equipment and gave authority to Lake Navigation Control to go ahead with final installation and use of the radios (with no annual licence fee required).

The rehabilitated VHF radios were installed at Lake Navigation Control and the District Meteorological Department in Kariba Urban. A joint assessment by MSD, Lake Navigation Control and ZRCS in December 2017 identified sites for the HF radios in M’Sampa, Masviakobola and Gache Gache fishing camps in Kariba rural and proposed additional sites in Binga. There were then installation delays to coincide with the anticipated arrival of

<sup>5</sup> 9 VHF radios (Motorola GM360) and 6 HF radios (Codan NGT SRX)

the [Automatic Weather Station](#) (AWS) repeater so that the activities could be combined; and MSD had requested to postpone the installation to Q2 2018. Between 4<sup>th</sup> to 6<sup>th</sup> June 2018, a VHF radio was installed at M'sampa fishing camp as a way to improve communication early warning communication between MSD, LNC and the fishing communities. Six focal persons were also trained by the LNC on the use and maintenance of the radio. The communities were advised to communicate important information with major communication to LNC, Bumi Hills or the District Development Fund boat which provides lake transport between Bumi/M'sampa and Kariba urban. The radio will also be used to coordinate early action in the event of an emergency. It was recommended that more fishing camps should also receive the radios since they have proved to be effective in areas of erratic cell phone network.

Activity 100% completed.

### 3.2.3 Develop SMS/voice-based warning messaging system

In late June 2016, ZRCS & DRC met with the Econet<sup>6</sup> Head of Technical Sales and Support to discuss about information technology solutions on SMS-based platforms for the project's early warning system for lake Kariba fishing communities. Econet recommended the use of aggregators to develop an SMS-based solution.

In Q3 2016, an IT company was engaged to support the operationalisation of the bulk-SMS "adverse weather alert" facility. It was agreed that the initial trial run would use a database of 100 fishermen from 3 fishing camps in Mola (Ward 3). Consultations with Lake (Kariba) Navigation Control, the Meteorological Department in Kariba and M'sampa camp fishermen were held to discuss how the system would operate:

- ✓ MSD/Meteorological Department in Kariba to generate weather forecast and send to Lake (Kariba) Navigation Control for dissemination;
- ✓ Weather report will be current weather and a 24-hour forecast (6pm – 6am) everyday issued at 3pm<sup>7</sup>;
- ✓ Message example: "Today (30.09.2016) - Tonight wind is expected to be NE force 2 to 3 with slight chances of shower and isolated thunderstorm. Tomorrow wind is expected to be variable force 1 to 2 becoming force 2 to 3 with slight chances of rain"<sup>8</sup>,
- ✓ When necessary Lake Navigation Control will issue adverse weather alert (and this is more readily understood by fishermen) – prompting suspension of activities on the lake until further notice;
- ✓ Although the initial idea was to send only adverse weather alert messages; all stakeholders felt that weather forecast messages should be send continuously in order for the fishermen to appreciate weather forecasts in general; and
- ✓ There is need to train CEWS champions to understand the whole concept on early warning - early action.

In Q4 2016, the trial bulk-SMS system became functional – with a beneficiary database of 90 people (63M:27F). 60 of these reside in the 3 fishing camps (M'sampa, Masviakabola and Sibilobilo); and the remaining 30 are drawn from members who could potential assist in search and rescue coordination efforts and those who contribute directly or indirectly to the maintenance of the system (many of these are drawn from the Civil Protection structures e.g. District Officials, ZRCS staff and volunteers, Nyaminyami RDC and local MSD staff).

An example forecast from 10<sup>th</sup> November 2016: "*Weather forecast for the period 1800hrs on 10/11/16 to 1800hrs 11/11/16. All area forecast: due to an active westerly cloud-band we are expecting evening and afternoon thunderstorms with rain. Wind tonight is expected to be North Easterly Force 2 gusting to Force 4. Tomorrow wind is expected to be South Easterly Force 2 to 3.*"

SMS-feedback from users acknowledge that information received through the SMS-based forecasts & alerts have enhanced their own observations, awareness and local understanding of weather patterns – and have contributed positively to their decision-making regarding fishing on the lake. Interestingly, others have commented that some local weather experience is not always reflected well in the forecasts they receive. Plans for the establishment of an Automated Weather Station (AWS) near the fishing camps are at an advanced stage and will strengthen observations and increase accuracy of MSD's weather forecasts and alerts.

The pilot 2G SMS-based adverse weather alert system developed in 2016 started dissemination in the 2016/17 fishing season. Throughout Q1 2017, the weather forecasts and adverse weather alerts issued by the District

<sup>6</sup> Econet is one of the largest (market share & coverage) mobile phone network providers in Zimbabwe. For the fishing communities in the project target area it is the only provider – with cell towers in Bumi Hills and Chalala.

<sup>7</sup> Considered the ideal time before fishermen embark on their fishing activities which they normally do during the night.

<sup>8</sup> This message format is standard for MSD daily forecasts: however, it is complex for the fishermen and there is need to continue engaging MSD & Lake Navigation Control to make the message more externally user friendly.



Meteorological Department were relayed by the Lake Navigation Control in Kariba at 15.00 every day. Fishermen recognised the importance of these messages and take corrective action; Red Cross volunteers who are early warning champions helped to disseminate forecasts and warning alerts deeper in the fishing communities. Concerns had been voiced about the forecast accuracy. However, fishermen noted the accuracy had greatly improved since February 2017 as messages were more location specific – giving the name of the area/basin affected by type of wind and its direction. Further, once the Automatic Weather Station (AWS) in Bumi Hills became operational the weather data and hence forecasts were more accurate and more relevant to the fishing camp and fishing ground locations. The SMS-based EWS faced some challenges in the 2016/17 season in that: (a) weather forecasts were not generated when the District Meteorological officer was not working on weekends or public holidays; and (b) internet connectivity (and service provider payment) issues affected both Lake Navigation Control and District Meteorological Department staff. This was solved by Lake Navigation Control and the District Meteorological staff agreeing to provide cover for each other to avoid interruption of the alert service; and the project agreeing to contribute to the cost of internet connectivity.

In Q3 2017, there was a change of staff at Lake Navigation Control, and the incoming officer was trained by the ZRCS Project Manager and a consultant from the bulk-SMS supplier to receive the weather forecasts and alerts from the District Meteorological Department and relay them to the fishing communities. In the 2017/18 season the database of fishermen registered was updated – as some had changed numbers and some new fishermen had registered. There are currently 108 fishermen registered (an increase of 18 on the 2016/17 season).

Fishermen reported that the trainings they received on interpreting weather forecast information and adverse weather alerts was still useful. They report that they have found these messages to be important (especially the wind strength) and have observed a decline in incidents of boat capsizing. Fishermen have also highlighted that it is the open communication channels that they now have with Lake Navigation Control and the District Meteorological Department that makes the early warning mechanism to work.

On 17<sup>th</sup> December 2017, an adverse weather alert was sent showing a wind strength of force 4. Fishermen, who were now more knowledgeable of the risks – especially of boat capsizing, decided not to fish on the lake that night. Fishermen also report a reduction in the number of crocodile attacks – and attribute that in part to the being more risk aware – and to being better organised. Local contingency plans developed by the CDRTs have helped “create a framework in which the CDRT can spring into action triggered by the early warning or alert”. The CDRTs have established response protocols, identified potential shelters and evacuation routes, and encouraged communities to initiate mock drills and create linkages with other stakeholders.

Along with the VHF/HF radios, an additional redundancy was generated by those involved – showing strong ownership and initiative. At one point the SMS system was non-operational for 3 days due to a service provider technical fault. The District Meteorological Department staff create a WhatsApp group for the EWS Champions (see section [3.1.2](#)) and a smaller group of fishermen who had 3G capable phones to disseminate the messages – who acted as “town criers” to cascade the messages to fishing community.

By Q1 2018, the database of fishermen and people receiving the early warning messages had increased to 112. EW messages were received almost every day at 15.00. However, as in 2016/17 there were again issues related to project-funded SMS data bundles that had not been paid. This effected both the Lake Navigation Control’s ability to broadcast SMS-alerts and also the accuracy of forecasts as the AWS was also not operational. A meeting held between Lake Navigation Control and the District Department of Meteorology agreed that the SMS forecasts and alerts could be sent directly from District Department of Meteorology. A WhatsApp group was formed by the District Department of Meteorology to act as another level of redundancy – to ensure at least for 3G phone users – that the forecasts and alerts are sent even when SMS bundle has not been paid. The messages are sent to fishermen and stakeholders with WhatsApp phones and the messages are then relayed to other fishermen and fishing communities by early warning champions. Another level of redundancy was built in when in Q2 2018 the project procured a VHF radio repeater for the AWS: this ensures that the AWS real-time weather data is broadcast to the District Department of Meteorology whether the AWS SMS-data bundle is paid up or not. Realising the positive impact of the SMS-weather forecasts and adverse weather alerts to the fisherman (and other stakeholders), MSD added an additional weather forecaster to be stationed in Kariba. It is very encouraging to note that: (1) the fishing communities have promised to continue with SMS subscriptions if they are given full information about payment procedures – and MSD have since shared how the payment can be done; and (2) other lake users such as the tourist lodges, kapenta companies and the DDF ferry have shown a strong interest and have benefitted from the messages.

Activity 100% completed.

### 3.2.4 Funding automated weather forecasting system

In April 2016, as part of the technical assessment by MSD and ZRCS on early warning systems in Kariba Urban and Kariba Rural discussions were held with the Meteorology Department in Kariba and Lake (Kariba) Navigation Control to identify the optimum site for an automated weather station. The site would have to yield useful information to improve the accuracy and reliability (and thus credibility) of the forecasts for the fishing communities – and be secure and serviceable (maintenance). The Bumi Hills Foundation, close to the fishing camps, was technically ideal and agreeable to “hosting” the automated weather station.

In Q3 2016, technical specifications for the automated weather station were drawn up by MSD to ensure compatibility with their existing systems and the procurement and tender process initiated. All potential suppliers are external to Zimbabwe – and the on-going foreign exchange challenges and delays in Zimbabwe have slowed the procurement process. The winning tender from Scientific Campbell (South Africa) received payment directly from DRC HQ in Denmark in December 2016.

Coincidentally a Harare-based businessman has recently constructed the only residential house in Bumi Hills<sup>9</sup> – to which he flies on a regular basis. For flying purposes, he has installed a less sophisticated automated weather system in Bumi Hills that has also been made accessible to the project. MSD state that they are not able to formally incorporate its readings within its forecasts – but for reference, real-time weather information for Bumi Hills can be viewed by anyone with the link <http://www.weatherlink.com/user/bumifoundation/>

However, expected delivery in Q1 2017 was further delayed. The South African supplier had to assemble the system and configure the radio link that will enable the AWS to relay data to the Meteorological Services Department (MSD). It was only from 8<sup>th</sup> to 9<sup>th</sup> June 2017, that the supplier was able to host an engineer from MSD and the ZRCS logistics officer to inspect and validate the equipment and be trained in the installation, operation and maintenance of the AWS. The AWS meets all requirements in terms of the World Meteorological Office standards and compatibility with MSD’s existing systems. Eventual delivery and installation of the AWS was completed in from 23<sup>rd</sup> to 25<sup>th</sup> August 2017 – just in time for the peak 2017/18 fishing season.

The AWS was installed at three sites: (1) the “main” site at Bumi Hills where all the weather parameters will be recorded; (2) at the Lake Navigation Control office – for automated wind measurements and local display; and (3) at Kariba airport (where the District Meteorological office is located) – for display of all the parameters recorded from Bumi Hills. The main site at Bumi Hills is in a wildlife rich game area: and as a result, the AWS is protected by a small electric fence to damage by elephant, baboons and monkeys. During installation it was discovered that one of the sensors for temperature and humidity was giving incorrect values. It was not possible to correct, and the supplier agreed to replace the faulty sensor.

As highlighted in [3.2.3](#) to add another level of redundancy in case the SMS-data plan was not paid up, the project installed a VHF repeater station so that the AWS weather data could be relayed at no cost (except recurrent maintenance costs) to the District Department of Meteorology.



*Figure 20 & 21: Installation and Handover of the AWS near Bumi Hills foundation*

The AWS has indeed greatly improved the accuracy of forecasts issued by MSD and the District Meteorological Department. The AWS is a significant upgrade of MSD’s weather observing systems: and has allowed forecasting services to be significantly more relevant to the target communities. The District Meteorological Department is better able to predict localised rainfalls patterns, strong winds and storms.

<sup>9</sup> Bumi Hills is the name of a collection of small hills and a high-end safari resort that overlook Lake Kariba  
DRC/ZRCS “Mainstreaming DRR in Local Development Planning in Zimbabwe” – Final Report 2016-2018



In February 2018, the ZRCS field team visited to the AWS to check if the station was still functioning well; and with local volunteers did some routine grass cutting around the AWS. MSD identified remotely that the AWS battery voltage was fluctuating, and a maintenance visit was scheduled. The battery was indeed faulty and was replaced on 7<sup>th</sup> June 2018. The AWS was left fully functioning transmitting real data every 15 mins to MSD. On 28<sup>th</sup> June 2018, the AWS was officially handed over to MSD who will assume responsibility of the station beyond the project.

**Activity 100% completed.**

### 3.2.5 EWS Study Tour: 4 participants (national/provincial/district/ward)

In Q2 2016, after considerable searching and networking across Asia and Africa, DRC identified a suitable and willing host in for an EWS study tour: to the Tanzania Meteorological Agency's "Mobile Weather Alert" (MWA) project in Sengerema, Lake Victoria. The MWA project is embarking on a scale-up on a similar SMS-based weather alert system for fishermen and farmers around Lake Victoria.

From 21<sup>st</sup> – 26<sup>th</sup> November 2016, a 4-person study tour team 2M:2F comprising ZRCS staff (Disaster Management Officer & Field Officer), the Lake (Kariba) Navigation Control Surveyor of Vessels and a ZRCS volunteer from M'sampa fishing camp were hosted by the Tanzania Meteorological Agency (TMA). The tour involved a briefing by the host in Dar-e-Salam followed by field observations and discussions at the Mwanza District Meteorological Office and visits to two different fishing communities in Sengerema.

The detailed study tour report is included as Annex A02-3.2.5 "Early Warning System Study Tour – Tanzania Report (Nov 2016)". However, some of the key observations were:

- warning messages should not be sent every day – it is crucial to send EWS messages only when necessary;
- where recipients have not taken precautionary action after being warned and injuries or drownings have resulted – then use these incidents as case studies to raise awareness by referring to these recent real-life incidents;
- it is more cost effective to target a limited number of people (CEWS focal people) to be recipients of the alerts and be responsible for subsequent cascade of the alert to the rest of the fishing community;
- ensure two-way communication between the recipients of messages and lake navigation. This helps ground truth forecasts with reality;
- need for transparency and levelling of expectations of forecast accuracy (e.g. timing and strength) to ensure alerts maintain credibility – and the project gains beneficiary trust, buy-in and commitment; this includes the inclusion and training of school children to ensure sustainability and replication;
- recipients with low educational levels took a long time to understand the messages and alerts;
- mobile phone network coverage can pose geographical and temporal blind spots; and
- inclusion of policy makers in the project enhanced ownership and smooth takeover by government departments after external funding for the project ends.

**Activity 100% completed.**

### 3.2.6 Establish, training & equip (basic+ specialist) ZRCS community disaster response teams (CDRTs) 1 in fishing camp; 1 in Kariba Town

**Stakeholder sensitization:** sensitization meetings were held in Kariba Urban at the Tamarind Conference Centre (16<sup>th</sup> August 2016) and in M'sampa fishing community (18<sup>th</sup> August 2016). The objectives of the meetings were to: (1) ensure that urban & rural fisherman are aware of the upcoming CDRT training; (2) have knowledge on the major stakeholders that assist during disasters or other emergencies on the lake; (3) gain an understanding of the current roles and responsibilities, and disaster response capacity, in the fishing camps and Kariba Urban; and (4) guide and assist the selection process of, and then register, people to be trained in CDRT. A total of 25 people (19M:6F) participated in the Kariba Urban sensitisation – comprising among others GoZ district departments, Zimbabwe Republic Police, and fishing associations. 23 people (18M:5F) participated at M'sampa fishing camp – including fishermen, Nyaminyami RDC representatives, Zimbabwe Republic Police and the Padenga Crocodile Farm. Each stakeholder identified their roles and relevant available resources:



Disaster response roles of stakeholders in Kariba Urban	
Agency	Roles and available resources & equipment
Zimbabwe Republic Police (ZRP)	<ul style="list-style-type: none"><li>Mandate is to save lives. In case of a disaster the ZRP are the first to be contacted.</li><li>ZRP notifies Lake Navigation and other stakeholders (e.g. DA, DDF, Boat Squadron) to rescue people in the event of boating incident; and Kariba hospital, CAAZ and Fire brigade in the event of fire.</li></ul>
Lake Navigation Control	<ul style="list-style-type: none"><li>Ensure that all boats being used on the lake meet the required standards.</li><li>Register boats and ascertain the safe carrying capacity.</li><li>Check and ensure that there is safety equipment in each boat for a vessel with a carrying capacity of more than 10, and if &gt; 5 km away from the harbour, they should have radios.</li><li>Early warning from the Lake Navigation is in a “command form” – with corrective action.</li><li>Have emergency boat – but has no budget for fuel.</li></ul>
Fishing Cooperative Chairman (Kapenta fishing cooperative)	<ul style="list-style-type: none"><li>Ensure fisherman have all the required life-saving equipment which meets the required standards such as life jackets, fire extinguishers, boat lights etc.; and carry out harbour patrols and border patrols to ensure that fishermen adhere to the rules and regulations.</li><li>Once had radio communication system (to allow quick transfer of information to stakeholders once a disaster strikes) but failed to meet the costs of operating it.</li></ul>
National Parks and Wildlife	<ul style="list-style-type: none"><li>Save lives through wildlife awareness and educational campaigns - including fishing camps; and ensure fisherman operate with designated fishing areas, respecting wildlife.</li><li>Moving from conservation against the people to conservation with and for the people</li><li>Conduct lake shore and lake patrols to enforce rules such as no fisherman or anyone should be on the lake after 6pm in order to reduce disasters “after hours”. Most disasters happen during late hours from 6pm onwards.</li><li>Have many boats ready to rescue people in danger &amp; enough human resources; but no longer have resources to compensate property and belongings lost to animals.</li></ul>
Civil Aviation Authority of Zimbabwe (CAAZ)	<ul style="list-style-type: none"><li>Have a fire tender: they are well-equipped to respond to fire outbreaks.</li><li>However, rescue or assistance is mainly for the airport and not for communities.</li><li>Any hazard that happens 8 km away from the airport is not considered an emergency by CAAZ. As such, they rarely assist communities.</li></ul>
Boat Squadron	<ul style="list-style-type: none"><li>Retrieve drowned bodies.</li><li>Have speed boats and enough human resources.</li></ul>
Kariba Municipality	<ul style="list-style-type: none"><li>Have trained personnel in fire-fighting and rescuing; and respond to any disaster.</li><li>They do not have boats designed to rescue people in the lake.</li></ul>
Zimbabwe Power Company (ZPC)	<ul style="list-style-type: none"><li>Have a minimum of 25 First Aiders.</li><li>Member of the rescue team and usually offer an ambulance; but do not have the capacity to respond to disasters on the lake (only land &amp; underground disasters).</li><li>Have a fire-fighter team which is not well equipped.</li></ul>
Ministry of Women Affairs	<ul style="list-style-type: none"><li>Their role in DRR is that of being whistle blowers and raising awareness as a way of reducing disaster impact and encouraging preparedness.</li><li>Ensure that relevant information reach the communities.</li></ul>
Social Welfare	<ul style="list-style-type: none"><li>Provide social &amp; psychological support (adults &amp; children) during and after a disaster.</li><li>Respond to disasters by providing food, accommodation and clothing.</li><li>3 functional motorbikes; and a currently non-functional vehicle.</li></ul>

Kariba Urban stakeholders identified CDRT resource and equipment needs as: (1) boat fuel and communication means: the major constraints in responding to lake disasters; (3) first aid training; (4) emergency boats for both rural and urban fishing cooperatives; (4) life-jackets and fire extinguishers; and (4) hotline for all hazards & disasters on the lake. They felt that the CDRT should mainly be composed of fishermen.



In M'sampa fishing camp participants set criteria for and identified CDRT members. Criteria included: (1) being permanent residents of the fishing camp; (2) being physically fit and literate. Four participants were selected from each fishing camp, and from the other stakeholders: one from Padenga Crocodile Farm, one from Nyaminyai RDC Wildlife and Environment management and one from ZRP. In terms of existing capacities: Padenga is located very close to M'sampa fishing camp – they have people trained in fire-fighting and 2 speed boats. ZRP has fully trained staff but their response activities are slowed down by lack of resources & budget. ZRP has a boat based at Bumi Hills that is used when disasters or accidents happen in water. The ZRP has their Disaster Management Plan which states the ZRCS as the major stakeholder in disaster response.

**CDRT Needs Assessment Report:** From 14<sup>th</sup> – 26<sup>th</sup> September 2016, a Disaster Management intern from DRC Head Quarters in Copenhagen joined with the ZRCS field team to carry out a needs assessment on CDRT and CEWS in Kariba District. The specific objectives of the assessment were to: (1) identify, map and assess existing skills, equipment and fishing routines relevant for the establishment of CEWS and CDRTs within the three target fishing communities; (2) identify opportunities and resources including skills, search and rescue capacities, communication equipment and willingness/concerns towards the CEWS and CDRT's; and (3) make recommendations towards the structure and composition of the CDRTs and CEWS.

The key findings and recommendations were in terms of: (1) *Emergency Response Procedures* – formalize the response structure and make pre-agreements with all stakeholders; develop clear coordination structure; and carry out emergency simulation exercise to test, evaluate and improve the new response-structure; (2) *Community Disaster Response Teams* – priority is for life-saving first-aid skills (incl. CPR, treatment of bleedings, open wounds, lesions, fractures and psychosocial first-aid) and assessment of need for professional healthcare); communication equipment (cell phones, VHF Radios & contact details on all relevant response actors; and for swimming and rescue skills; (3) *Mitigation & preparedness measures within the fishing camps* – lifejackets & whistles; and “go-together” campaigns (fishermen should be urged to go in pairs to increase their safety); (4) *Community Early Warning System* – warning messages should be delivered via SMS or WhatsApp and can be complimented by verbal warnings via VHF Radios. The warnings should be in simple language – without technical terms. The detailed report appears as Annex “A02-3.2.6a CDRT Needs Assessment Report (Sept 2016)”.

**CDRT Equipment Procurement & Distribution:** based on recommendations from the CDRT sensitisations and the CDRT Needs Assessment Report procurement was initiated in December 2016. Two sets of CDRT equipment were delivered in Q2 2017: one set to the CDRT in Kariba urban (to Lake Navigation Control who are responsible for coordinating search and rescue on the lake in conjunction with the local Civil Protection and CDRT/Red Cross volunteers); and the other set to the CDRT in M'Sampa fishing camp. The kit content and distribution were as follows:

CDRT Kit Item	Kariba Urban	M'Sampa
Life-jackets	7	10
Life-rings	11	7
First Aid Kits (& box)	3	2
Whistles	14	7
Uniforms	<i>35 – delivered in Q2 2018</i>	

The CDRT equipment is used to render first aid, search and rescue, and promote an increased culture of safety. CDRTs have used first aid equipment to respond to hippo and crocodile attacks<sup>10</sup>; and temporarily by teachers and students who were being ferried from M'Sampa fishing camp to Matusadona Primary school to write their final Grade 7 exams. These activities raise awareness, educate and encourage everyone to be safety conscious by putting on a life jacket when crossing the lake or rivers: thereby promoting an increased culture of safety in the fishing communities and in children.

**CDRT Basic Training:** a 3-day basic CDRT training was held at the Tamarind Conference Centre for the Kariba Urban CDRT from 19<sup>th</sup> – 21<sup>st</sup> September 2016 and at the Chalala Primary School for the Kariba Rural CDRT from 24<sup>th</sup> – 26<sup>th</sup> September 2016. ZRCS in collaboration with the Zimbabwe National Army (ZNA), Zimbabwe Republic Police (ZRP), District Administrator, Nyaminyami Rural District Council (NRDC) and Social Services trained and equipped the CDRTs to carry out emergency first response when disasters occur. The objectives of the basic

<sup>10</sup> At the contingency planning training that followed it was reported that at M'Sampa fishing camp about 20 people had died from hippo & crocodile attacks (and 15 severely injured) from 2015 to date – more than at the other two fishing camps.

CDRT training included: (1) empower communities to better prepare for and respond to emergency situations; (2) save lives and property by providing effective and timely first response; (3) assist in relief and assessment after a disaster as directed by the local disaster and development plan; (4) obtain full understanding of the call-out system and coordination during emergencies; and (5) equip the CDRT with information on agreed response standards and humanitarian principles. Community participants in Kariba Urban were drawn from 7 different commercial/cooperative fisheries and in Kariba Rural from 3 fishing camps. For Kariba Urban, there were a total of 18 participants (15M:3F) and 5 facilitators (5M:0F); and for Kariba Rural there were a total of 19 participants (12M:7F) and 4 facilitators (4M:0F). The CDRT Basic training sessions for the 3 days were as follows:

<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>
<ul style="list-style-type: none"> <li>• Pre-training Test</li> <li>• Disaster Management Overview</li> <li>• Stakeholder Coordination</li> <li>• Safer Access (Framework)</li> <li>• Disaster Risk assessment</li> <li>• Relief Management</li> <li>• Public Health in Emergencies</li> </ul>	<ul style="list-style-type: none"> <li>• Camp and Shelter Management</li> <li>• Team planning and coordination</li> <li>• Media in Emergencies</li> <li>• Cross Cutting Issues in Disaster Management</li> <li>• Sphere Project</li> </ul>	<ul style="list-style-type: none"> <li>• Water and Floods Safety</li> <li>• Local Disaster Response Coordination and Communication / Early Warning and Callout Systems</li> <li>• Resource Mobilisation Plan</li> <li>• Post Training Test</li> </ul>

Pre- and Post-test scores increased from 41% to 68% (Kariba Urban) and from 36% to 73% (Kariba Rural). The detailed report appears as Annex "A02-3.2.6b CDRT Basic Training Report (Nov 2016)".

CDRT Specialised Training: a 2-day specialised CDRT training was held at the Tamarind Conference Centre for the Kariba Urban CDRT on the 4<sup>th</sup> & 5<sup>th</sup> November 2016 and at the Nyaminyami RDC Boardroom for the Kariba Rural CDRT on the 19<sup>th</sup> & 20<sup>th</sup> November 2016. A total of 19 people (15 fishermen and 4 ZRCS Youth) were trained in Kariba Urban (17M:2F); and in Kariba Rural 16 fishermen and women (9M:7F).

The training objectives were to ensure CDRT members: (1) have the first aid skills to save lives, prevent injuries and conditions from getting worse, and promote quick recovery; (2) understand the types of injuries and conditions they can face while operating in the lake; (3) understand safety procedures to take when attending to injured people; and (4) know the correct assistance to provide when an emergency happens. Topics covered included fractures, pulmonary failure & cardiac arrest (incl. drowning), unconsciousness, fainting & shock, muscle and joint injuries, bleeding & wounds, burns, poisoning and snake bites, first aid and HIV/AIDS, transportation methods and the triage system.



*Figures 21, 23 & 24: CDRT first aid support to fisherman attacked by crocodile*



The CDRTs have responded on a number of occasions – including human-animal conflict. Two examples where prompt correct first aid was administered by CDRT members before the victims were assisted with transportation to Siakobvu – were a hippo attack in M'Sampa and (above) a crocodile attack in Masviakobola.

Community Early Warning System (CEWS) Training: a 3-day CEWS training was at the Nyaminyami RDC Boardroom from 2<sup>nd</sup> – 4<sup>th</sup> November 2016. A total of 16 CEWS champions primarily drawn from the 3 fishing camps participated. The training was co-facilitated by ZRCS/HQ Disaster Management Officer, MSD and Lake (Kariba) Navigation Control. The main objective was to build an understanding of CEWS principles and its 4 core components. The training programme first explored risk knowledge where volunteers outlined the different hazards they face on the lake. Then MSD presented on common hydro-meteorological hazards. On hazard-monitoring there were discussions on various technical and indigenous signs & parameters used to monitor local hazards. A case study was carried out using the 2016 – 2017 seasonal forecast. A comprehensive presentation on CEWS was completed: definitions, principles and components. This was followed by a discussion on early warning communication – and checking whether monitoring information is being translated into actionable messages understood by those that need, and are prepared, to hear them. A mock early warning message from Lake Navigation Control was used for discussion. The final session was on response capability – where contingency/response plans were drafted. The detailed report appears as Annex “A02-3.2.6c CEWS Training Report (Nov 2016)”.

CDRT Contingency Planning Training: Following a disaster, there is always a lag-period before emergency services can be mobilised – often due to a combination of the size of the area affected, communication problems, impassable roads and lack of adequate resources (e.g. fuel). Contingency planning allows the CDRT (and community) to better prepare for and respond to anticipated disruptions and potential disasters following a hazard event.

2-day Contingency Planning trainings - with draft contingency plans as an output – were carried for the CDRTs in Kariba urban and in Kariba rural. 16 CDRT members (9M:7F) from M'Sampa, Sibilobilo and Masviakobola fishing camps participated in the training facilitated by the ZRCS field staff at M'Sampa fishing camp from 11<sup>th</sup> to 12<sup>th</sup> November 2017. 18 CDRT members (11M:7F) from Kariba urban participated in the second training facilitated by the ZRCS field staff and the District Administrator (DCPU Chair) at Tamarind Lodge (Kariba) from 4<sup>th</sup> to 5<sup>th</sup> December 2017. The objectives of the trainings were to: (1) empower the community to better prepare for, and respond to, disasters; (2) develop a practical contingency plan to assist their fishing community to respond to disasters; (3) assist in relief and assessment after a disaster as directed by the District Civil Protection Unit and informed by the District Emergency Response Plan; (4) understand the call-out system and coordination during emergencies in fishing communities; and (5) equip the response team with a guiding document that will enable them to prepare for and respond to disasters or emergencies.

For further information, please see Annex A02-3.2.6d “CDRT Refresher Training & Contingency Planning Report”.

**Activity 100% completed.**

### 3.2.7 Fund and participate in emergency response drills/simulations (August 2016 & 2017)

On 12<sup>th</sup> October 2016, the day before International Disaster Risk Reduction Day, and as part of the IDDR Day commemoration, a disaster simulation led by Lake (Kariba) Navigation Control was conducted on Lake Kariba. However, only 3 stakeholders (Zimbabwe Republic Police, Ministry of Health and Zimbabwe National Army) responded to the scene of disaster as directed by the Lake Navigation. That said, they did respond within the “golden hour” to medical emergency response: 38 minutes after a distress call was made. Ministry of Health managed to utilize their locally available resources by releasing a city council vehicle which was to be used as an ambulance since the hospital ambulance was broken down. The post-simulation evaluation revealed that most Kariba Urban stakeholders have insufficient resources for preparedness and/or response. Findings and recommendations included: communication of accident information is critical – and GPS coordinates should be shared; mobile network challenges highlight the need for other options such as VHF radio and aircraft with loudspeakers; emergency numbers directory should be updated; and for Lake Navigation Control some boats do not have radio systems, they use mobile cell phones.

“More needs to be done to increase the level of response by all the stakeholders in order to save the maximum number of lives” concluded the Kariba District Administrator.

Hazard specific simulations were held in Kariba Urban at the Cutty Sark Harbour on 16<sup>th</sup> December 2016 and at Chalala Harbour on the 18<sup>th</sup> December 2016. The objectives were to: (1) check available resources needed for response; (2) identify skills and knowledge gaps in terms of disaster response; (2) understanding the coordination process with other stakeholders when managing hazards; (3) check the attitudes of the fishing communities during hazard management; make affected communities and CDRT realise that they can deal with hazards in their localities with little resources they may have; and (5) evaluate their disaster preparedness.

The most common hazard faced in Lake Kariba are waves resulting from strong winds. Hence the simulation scenario was “*a wave happened in the lake while fishermen were inside a boat in the lake. Their boat capsized, and the fishermen were injured but managed to hang on the edges of the boat. These fishermen should be rescued and need to be assisted by the CDRT.*” The simulations were attended by the ZRCS Operations Director and Disaster Management Officer, ZRCS field staff, and a Zimbabwe National Army representative and Lake (Kariba) Navigation Control. In Kariba Urban, there was a total 26 participants (22M:4F) and in Kariba Rural a total of 23 participants (14M:9F).



*Figure 25: Kariba Rural – simulation exercise at Chalala Harbour*

The CDRT action and management that was supposed to be followed was:

- ✓ Rescue – correct transportation of the casualties from the boat to the safe place
- ✓ Correct positioning of the casualties
- ✓ Diagnosis or identification of the injuries
- ✓ Correct management of the identified injuries/conditions
- ✓ Loading of the casualties on the stretchers
- ✓ Evacuation of the casualties to the hospital.
- ✓ Mope up/ Cleaning (Clearing of the area) and leaving the scene.

The simulation exercise was given 30 minutes and both the teams in urban and rural managed to assist the victims within the stipulated time. The casualties were transported from the boat to the side of the water where the first aid management was offered. The transportation of the casualties from the boat was done using stretchers and blankets – and with the degree of urgency required. Communication to the ambulance, police and other emergency organisations was done so that a multi-stakeholder approach helped save the victims. Diagnosis of injuries by the team was perfectly done as all the injuries were identified and managed. During the management process the team leader gave instructions and delegated duties to other team members, and also monitored progress. Reassurance of the casualties reduced stress and trauma. The CDRT was able to improvise first aid materials with available materials since there was limited first aid kit materials.

Debriefing was done and the CDRT members expressed gratitude to the simulation and promised to continue practising. The CDRT asked for more resources to be channelled towards response activities – and were encouraged to fully utilise locally available resources when disasters happen. The fishermen also asked for more trainings especially on first aid and lifesaving as this will boost their capacity during response time.

Please Annex A02-3.2.7 Lake Kariba Emergency Response Simulation 2016, 2017 & 2018” for further details.

The 2017 emergency response simulation was postponed from August 2017 to coincide with the International Day for Disaster Reduction commemoration that was held in Kariba urban on 2<sup>nd</sup> November 2017. Spearheaded by the Lake Navigation Control and the District Civil Protection Unit, a major simulation exercise was held on and around Lake Kariba. The simulation exercise was evaluated by 47 participants (34M:13F).

The main objective of the simulation was to test the District Preparedness and Response capacity. In addition, the simulation aimed at checking the following:

- ✓ Perception of risk
- ✓ Response time
- ✓ Responsibility for response
- ✓ Resource mobilisation
- ✓ Coordination & collaboration
- ✓ Communication mechanisms

The simulation scenario was as follows:

- ⇒ A boat with 2 passengers on board capsized near western end of Redcliff Island;
- ⇒ A distress call to the Lake Navigation who then relays it to the DCPU Chair, the District Administrator;
- ⇒ District Administrator alerts all stakeholders and leads coordination and resource mobilisation for response;
- ⇒ Stakeholders deployed to Andora harbour and at Redcliff Island.
- ⇒ Stakeholders responded naturally (as per in real-life accident situation)

ZRCS staff observed several key improvements compared with the 2016 simulation:

- District Civil Protection Unit members, private sector and the communities showed a significant improvement in understanding disaster risk – as indicated by their much quicker dissemination of the incident information and release of resources at their disposal, and quicker organising of the response;
- the role of the private sector was significantly more prominent in 2017 – where they managed to be the first responders to reach the accident scene. This is attributed to on-going DRM workshops, and increased and better-managed coordination and collaboration between public and private sector;
- The role of media in information dissemination cannot be underestimated. The incident information reached many in Kariba and across Zimbabwe – and people believed it was a real situation prompting many inquiries from people outside Kariba as to whether the victims were rescued.

There were however still some challenges, as in 2016. Resources made available by stakeholders were still considered inadequate (e.g. speed boats, fire brigade and ambulances); and poor and unstable network coverage still, at times, negatively affected the response.

The District Civil Protection Unit, ZRCS field team and participant evaluators made several recommendations:

- increase VHF radios to ensure reliable communication between stakeholders;
- need for a 4x4 off-road motor vehicle with the primary function of responding to disasters and emergencies;
- Emergency response materials need to be safely kept at an accessible central place (e.g. Nyamhunga clinic); and fundraising activities should be carried out to replenishment first aid;
- ZRCS should train District Civil Protection Unit stakeholders in Basic First Aid for effective and appropriate first aid services to victims;
- Simulation exercise should also focus on road accidents – which are also claiming many lives.



Figure 25: Rescue team travelling to victims



Figure 26: Nurses attending the casualties at Kariba Hospital

The Kariba Rural major simulation took place on 25<sup>th</sup> April 2018 at M'sampa fishing camp. The most common hazards they face in Lake Kariba are strong winds/wave – especially during windy months of July and August, and hippo and crocodile attacks. Responding to disasters and hazards involve a lot of resources and skills that can reduce the negative impact of the disasters. The simulation involved 65 participants (33M:32F) – including 48 fishing community members (21M:27F) and 9 M'Sampa CDRT members (4M:5F). The simulation exercise was coordinated and led by the district civil protection sub-committee chairperson. The simulation objectives were similar to the Kariba urban simulation. The exercise scenario was:

*"A boat with three fishermen was hit by a hippo while they were carrying out their normal fishing activities. Their boat capsized, and fishermen were injured in the process but one managed swim to the lake side while others hang on the edges of the boat. These fishermen should be rescued and need to be assisted and taken to the hospital."*

The expected response action and management to be followed is described earlier in this [section](#). There was no specific time set for the simulation, allowing an assessment of how much time was taken by the first responders to reach the accident scene. The poor communication network in the fishing camp reinforced the need for a multi-stakeholder approach – so that there are a multitude of communication routes to the ambulance, police and other emergency organisations. Indeed, the major rescue teams failed to receive the emergency information – and it was only the Msamba fishing camp CDRT and community members that were able to respond. The CDRT used a small boat without engine to rescue the casualties (as there are no motorised boats in the fishing camp). The casualties were transported from the boat to the side of the lake where the first aid management was offered. The transportation of the casualties from the boat was done using stretchers. Community members assisted the CDRT team and that showed togetherness of the community when the emergencies happen. Diagnosis of injuries by the team was perfectly done as all the injuries were identified and managed. During the management process the team leader gave clear instructions and delegated duties to other team members and monitored progress. Later the CDRT members cleared the area of casualty belongings and used first aid materials.

CDRT members committed to continue to practise so that they are well-prepared for similar incidents. The CDRT asked for more resources to be channelled towards DRR especially speedboats – as using rowing boats considerable increases the response time - with serious potentially life-saving consequences for casualties.



*Figure 27 & 28: Msamba CDRT lifting a casualty from the boat; and simulation debriefing by DCP Chair*

#### A02-3.2.7 Lake Kariba Emergency Response Simulation 2016, 2017 & 2018

[2016 and 2017 activities 100% completed.](#)

#### 3.2.8 Review of simulations and EWS (Feb/March 2017 and Feb/March 2018) – in cooperation with Lake Navigation Control (Kariba) and MSD

The review of the simulations and Community Early Warning System (CEWS) were conducted in Kariba urban on 24<sup>th</sup> May 2017 at the Lake Navigation Control office, and in M'Sampa fishing camp on 26<sup>th</sup> May 2017 at the M'Sampa community centre. The review team had 8 members (6M:2F) and comprised 2 staff from Lake Navigation Control in Kariba, 3 from the Meteorological Services Department (national & district) and 3 from ZRCS (national & field). The review team met with various stakeholders including the CDRTs in Kariba urban and



Kariba rural, and the M'Sampa fishing camp community. There were a number of important findings & recommendations noted by the team:

- consensus that warning messages have been useful and had resulted in a decline in the number of fishermen affected by wind storms;
- however, there is a need to further tailor the SMS text to simpler and more easily understood wording;
- Lake Navigation Control & District Meteorological Department experienced periods of no internet connectivity (due to insufficient data bundles) effecting the dissemination of SMS weather forecasts to fishermen. During such times, they reverted back to the radio system (which had coverage limitations);
- the CEWS has not yet developed a strong feedback loop from the end recipients (the fishermen) to the source (Lake Navigation Control & District Meteorological Department);
- sometimes a mismatch between scientific weather forecast generated by MSD and local weather signs recorded by EW champions;
- CDRTs in Kariba urban and Kariba rural are known to the local Civil Protection structures;
- there is strong community ownership of the CEWS;
- participation by community members in the various project activities (not just CEWS) had brought the community together and heightened the propensity to share information. They reported how they now “feel for each other” more than before;
- strong community appreciation for the role played by external stakeholders – such as Nyaminyami RDC, Lake Navigation Control, MSD and various private sector enterprises (e.g. Padenga crocodile farm) – to the extent that they describe “a creative relationship is emerging”;
- the community is now more risk-informed

A female EWS champion who participated in the review summarized:

*“We have been receiving weather forecasts from Lake Navigation Control since October 2016. I was part of the team who received training on CEWS in November 2016 and was also trained by MSD on how to interpret weather information such as strength and direction of the winds. I learnt the importance of recording local signs for purposeful comparison with forecasts sent through Lake Navigation Control. Before this useful intervention, no warning communication came our way, except the lucky few who had connections with big boating companies (who have direct communication with the Lake captain). But now, we receive daily forecasts, and this has brought us closer to issues which affect our life and our work and how to deal with them.”*

*“We are not only more risk-aware but we are active participants in our ‘own’ CEWS. Just as an example, we used to receive ‘general forecasts’ covering the whole country or Kariba. In February 2017, when Cyclone Dineo affected several parts of the country, we requested MSD to provide ‘an area forecast’, one which is closer home. Since then, we have been receiving forecasts disaggregated by name of basin and this improved the relevance and accuracy of the forecasts.”*

*“there were heavy winds between 20<sup>th</sup> and 25<sup>th</sup> December 2016 which were accurately predicted through warning messages and fishing activities were suspended. On 21<sup>st</sup> January 2017, there was a violent wind storm which reportedly destroyed houses in Zambia, but this period we were not getting messages perhaps due to a communication breakdown with Lake Navigation Control.”*

*“As CDRTs, we have also responded to cases of crocodile attacks through provision of first aid and facilitating transportation of victims to a health facility.”*

The 2017/18 review of the CEWS was carried out in Kariba urban at the community hall on 7<sup>th</sup> June 2018. 12 fishermen participated (8M:4F). Lake Navigation Control, District Department of Meteorology and CDRT members were also interviewed. The Kariba rural review was carried out in M'sampa fishing camp with 25 participants (15M:10F). Overall, it was observed that there was increased uptake, interest and use of early warning information across the different lake users. Fishermen were willing to pay data/SMS costs to ensure the forecast and adverse weather alerts continued after the project finished; and District Civil Protection Unit, District Department of Meteorology and Lake Navigation Control will advocate to nurture and possibly scale up the initiative.

For further information, please see Annex A02-3.2.8 “Review of Community Early Warning System 2016/17 Report”.

**2016 and 2017 activities 100% completed.**

**OUTPUT X: OTHER ACTIVITIES/COSTS****Project support and where costs are to be shared pro-rata across outputs****4.1 Project Management, Monitoring & Evaluation****4.1.1 Quarterly Project Planning Meetings (*Chinhoyi & Siakobvu*)**

Quarterly review and planning meetings took place throughout the project timeframe: either in Siakobvu at the ZRCS field office, or in Chinhoyi (Mashonaland West provincial town). Core participants were the ZRCS field team; the Provincial Manager and Provincial Accountant; from HQ the Disaster Management Coordinator, Disaster Management Officer (Project Manager) and Senior Finance Officer; and the Danish Red Cross Country Coordinator.

ZRCS Senior Management (i.e. Secretary General, Operations Director, Finance Director, Human Resources & Administration Director and Communications Manager) participated twice in 2016, twice in 2017 and once in 2018.

Activity 100% completed.

**4.1.2 Provincial Monitoring Visits (*Provincial Manager & Provincial Accountant*)****4.1.3 HQ ZRCS (& DRC) Monitoring Visits**

Provincial and HQ monitoring visits took place throughout each year: and were generally tied in with a field implementation activity. In addition to monitoring, the visits also provided technical, financial and administrative support to the project; as well as opportunities for ZRCS national-level advocacy towards local GoZ structures and other stakeholders. The visits were useful in strengthening coordination, management and accountability mechanisms - contributing to the effective and efficient implementation of the project.

Activity 100% completed.

**4.1.4 Project Steering Group Meetings**

Please refer to Activity [2.4.1](#)

**4.1.5 Final Evaluation**

The end-line survey was conducted in June 2018 and the draft survey report shared in September 2018. Delays were encountered as the ZRCS PMER staff involved had extensive other commitments due to the national elections and then the cholera response in Zimbabwe. The draft end-line Survey appears as Annex A02-4.15a.

The Final Evaluation had originally been scheduled for late July/early August. However, in March 2018, the national elections were then scheduled for 30<sup>th</sup> July 2018. The period immediately around the election day is politically sensitive and carries some security risks. As a result, the evaluation was delayed until ZRCS gave a green light that the local situation would accept such a visit. The Final Evaluation was conducted in mid-September 2018. The draft Final Evaluation appears as Annex A02-4.15b.

**4.1.6 Annual & Final Financial Audits**

The 2016 audit by BDO Zimbabwe of ZRCS expenditures took place in February 2017 (and field-level visit in December 2016). The audit report was included as Annex 01 “2016 Audit Report WB/GFDRR DRR in LDP Project” in the 2016 Annual Report.

The 2017 audit was considerably delayed – due to a lengthy ZRCS process regarding the appointing of, and transition to, the new auditors Ernst & Young. This delay effected all ZRCS project audits. The 2017 audit was conducted in June 2018 and ZRCS & DRC Management comments submitted. Ernst & Young expect to finalise the audit report by end October 2018.is yet to be finalised.

The audit of the 2018 expenditures is similarly delayed. Ernst & Young are yet to conduct the audit.

## 4.2 Visibility

In Q1 2016, project visibility in terms of banners, t-shirts & caps were produced for the inception meetings and project launch in Kariba Urban.

In Q3 2016, 100 T-shirts, 50 caps, 50 visibility jackets and 50 bags were procured and distributed to ZRCS volunteers together with local leadership such as chiefs and headmen.



*Figure 18: Red Cross volunteers from Nebiri Maya and Nyamakara clusters.*

During the project launch in Kariba, various media outlets captured the event. The table below provides the links to the stories in both the print and electronic media.

News headline	Link
Red Cross launches disaster risk reduction project in Kariba. The Standard / 21st February 2016	<a href="http://www.thestandard.co.zw/2016/02/21/red-cross-launches-disaster-risk-reduction-project-in-kariba/">http://www.thestandard.co.zw/2016/02/21/red-cross-launches-disaster-risk-reduction-project-in-kariba/</a>
Red Cross in disaster risk reduction scheme. Daily News / 19th February 2016	<a href="https://www.dailynews.co.zw/articles/2016/02/19/red-cross-in-disaster-risk-reduction-scheme">https://www.dailynews.co.zw/articles/2016/02/19/red-cross-in-disaster-risk-reduction-scheme</a>
Disaster risk reduction programme launched. ZBC / 18th February 2016	Link no longer exists
Weather station for Kariba. The Herald / 19th February 2016.	<a href="http://www.herald.co.zw/500k-weather-station-for-kariba/">http://www.herald.co.zw/500k-weather-station-for-kariba/</a>
Zimbabwe: Red Cross launches disaster risk reduction project in Kariba. Preventionweb / 21st February 2016	<a href="http://www.preventionweb.net/news/view/47930">http://www.preventionweb.net/news/view/47930</a>

As mentioned in earlier sections a project pamphlet was produced for distribution to national and local stakeholders; and a number of newspaper articles and radio spots also provided opportunities to profile ZRCS, ACP-EU and WB/GFDRR.

In Q3 2017, designs were drafted for a series of visibility boards to be erected in communities where more significant DRR/EWS interventions are being carried out. This included the Harudziva weir & pipeline rehabilitation & Nebiri community garden, the household uBVIPs latrines, and the EWS/automated weather station. The visibility boards were installed in 2018.

At the end of the project, ZRCS together with senior officials from the Government of Zimbabwe and the Project Steering Group converged in Nyaminyami to commission the various DRR/CCA and EWS measures implemented in the three wards. The commissioning was covered by electronic and print media.



#### 4.3 Lease & Transport

In Q1 2016, one Nissan Navara was procured by DRC with DRC funds via the IFRC Global Logistics in Dubai (ECHO accredited Humanitarian Procurement Centre) and delivered to the ZRCS field office (Siakobvu). The vehicle has IFRC global and ZRCS local insurance and is fitted with a GPS tracker. The terrain and road conditions in the target area are demanding, requiring careful use, inspection of & replacement of tyres; and regular 5,000km servicing in Harare.

In April 2017, the vehicle developed a fault with the steering rack – requiring repairs of \$2,500 at the AMC garage in Harare. The vehicle later developed issues with the diesel turbocharge unit requiring further repairs in Harare. Whilst the Navara was out of service, ZRCS provided a replacement vehicle, a Toyota Land Cruiser, to cover the field operations.

#### 4.4 Office Equipment

At the start of the project, with DRC funds, various items of office furniture and equipment were procured for use by the 2 ZRCS field staff in Siakobvu: 2 laptops, 2 GPS capable smart phones, 1 tablet, 1 digital camera and 1 external hard-drive. The project also contributed funding towards the upgrade of the office solar inverter system.

The laptop originally purchased for the ZRCS field officer malfunctioned – and was assessed as irreparable by the ZRCS Information Technology Officer. A replacement laptop was procured by the project. Similarly, the office printer in Siakobvu also needed to be replaced.

#### 4.5 Office & General Costs

In Q1 2016 a 2-year lease for ZRCS field office space with Nyaminyami RDC was agreed.



## ANNEXES

- A01a WB/GFDRR DRR in LDP Project Audit [ZRCS expenditures] 2017 (*to follow*)  
A01b WB/GFDRR DRR in LDP Project Audit [ZRCS expenditures] 2018 (*to follow*)

### **OUTPUT 01: COMMUNITY-BASED DISASTER RISK REDUCTION**

- A02-1.1.1a VCA / CCA ToT Report (May 2016)  
A02-1.1.1b Kariba Rural District Climate Change Risk Profile (June 2016)  
A02-1.2.1a Participatory Disaster & Climate Risk Assessment Report (2016)  
A02-1.2.1b VCA Refresher Training and Consolidated VCA Update Report (2017)  
A02-1.2.3 Community Reflection on Updated VCA Results (July 2017)  
A02-1.3.1 Consolidated and Updated CDRAPs and sample CDRAPs (2016 & 2017)  
A02-1.4.1 CDRAP & Micro-project Proposal Writing Training Report (2017)  
A02-1.4.3a DRR Micro-Projects 2016/17 & 2017/18 Summary Report  
A02-1.4.3b Non-structural DRR/CCA Measures 2016/17 & 2017/18 – Health & Hygiene  
A02-1.4.3c Non-structural DRR/CCA Measures 2016/17 & 2017/18 – Others

### **OUTPUT 02: MAINSTREAMING DRR/CCA IN LOCAL DEVELOPMENT PLANNING**

- A02-2.1.2 CBDRM ToT Training Report – Kariba & Siakobvu (Feb & March 2017)  
A02-2.1.7a Draft Nyaminyami Disaster Management Plan (Sept 2017)  
A02-2.1.7b Nyaminyami RDC DRM Plan: Endorsement and Adoption Report (April 2018)  
A02-2.2.1 DRR in LDP Malawi Study Tour Report (May/June 2017)  
A02-2.3 Integration of CDRAP into Local Development Plans Report (August 2016)  
A02-2.4.1 Draft Concept Note – Department of Rural Development “Mainstreaming DRR in LDP”  
A02-2.4.2 e-newsletter “Mainstreaming DRR-CCA into Local Development Planning”  
A02-2.5.1 Joint Mid-term Technical Review of the ZRCS Community-based Resilience Program  
A02-2.5.2 District Lessons Learnt Report (2018)  
A02-2.5.3 District & National Lessons Learnt Consolidated Report (2018)  
A02-2.5.4 Best Practices Report (2018)

### **OUTPUT 03: EARLY WARNINGS REACH AND SERVE PEOPLE AT THE COMMUNITY LEVEL**

- A02-3.2.1 EWS KAP Survey Report – Kariba (July 2016)  
A02-3.2.5 Early Warning Study Tour - Tanzania Report (Nov 2016)  
A02-3.2.6a CDRT Needs Assessment Report (Sept 2016)  
A02-3.2.6b CDRT Basic Training Report (Nov 2016)  
A02-3.2.6c CEWS Training Report (Nov 2016)  
A02-3.2.6d CDRT Refresher Training & Contingency Planning Report (Nov 2017)  
A02-3.2.7 Lake Kariba Emergency Response Simulation 2016, 2017 & 2018  
A02-3.2.8 Review of Community Early Warning System 2016/17 Report (May 2017)

- A02-4.1.5a Draft End-line Survey (June 2018)**  
**A02-4.1.5b Final Evaluation (Sept 2018)**

- A03 Logical Framework Matrix for Mainstreaming DRR in LDP**