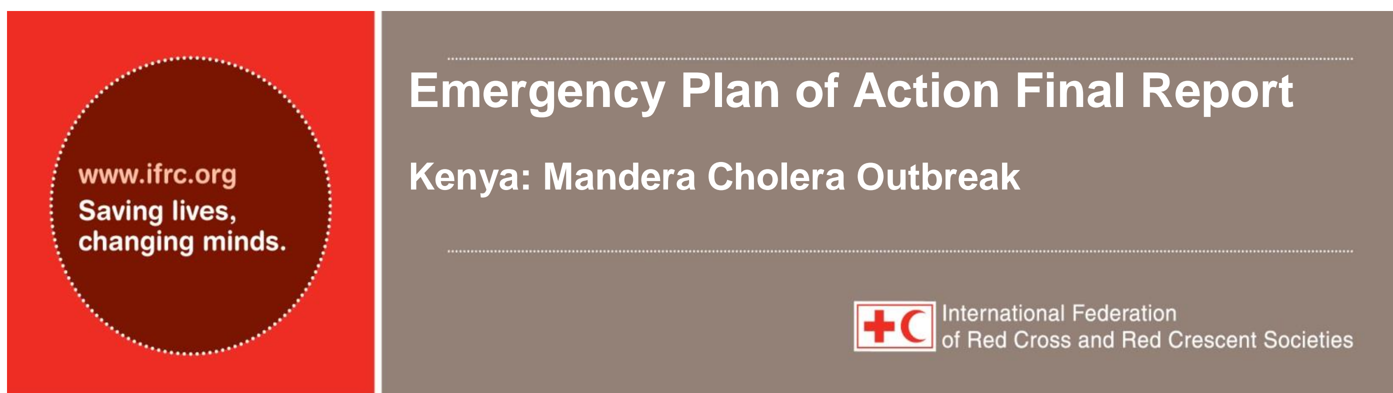


Emergency Plan of Action Final Report

Kenya: Mandera Cholera Outbreak

DREF no: MDRKE038	**Glide n°** EP-2015-000013-KEN
Date of Issue: 31/01/2017	**Date of disaster:** 12th April 2016
Operation start date: 12th April 2016	**Operation end date:** September 2016
Operation budget: CHF 276,165	**Final Financial Report:**
Number of people affected: 200,000	**Number of people assisted:** 391,941
Host National Society: 15 Branches, 40 staff and about 1200 volunteers engaged in operation (about 400 volunteers were implementing activities under this application) Kenya Red Cross Society (KRCS), 56 surge staff, 4 HQ staff and 14 field staff and 350 volunteers	
N° of National Societies involved in the operation: IFRC	
N° of other partner organizations involved in the operation: MoH, Médecins Sans Frontières (MSF), WHO, UNICEF, UNFPA, The African Medical and Research Foundation (AMREF) and The Kenya Medical Research Institute KEMRI	

A. Situation analysis

Description of the disaster

Kenya reported cholera outbreak that affected 30 of its 47 counties. The outbreak begun on 26 December 2014, in Nairobi County and was later reported in other counties with the latest being in Mandera and Tana River counties. Mandera County had also been experiencing a febrile illness presenting with joint pains that begun in May 2016. Based on past outbreaks of dengue fever experienced in the county, health officials suspected it to be another dengue fever outbreak, however laboratory tests conducted by KEMRI, confirmed it to be Chikungunya fever.

Situation in Mandera

Cholera Outbreak

Mandera County is in the North-Eastern Region of Kenya. It was the latest county to report cholera outbreak. Diarrhoea has been the leading cause of morbidity especially during the dry season, when water is scarce and the wet season, when water sources are contaminated.

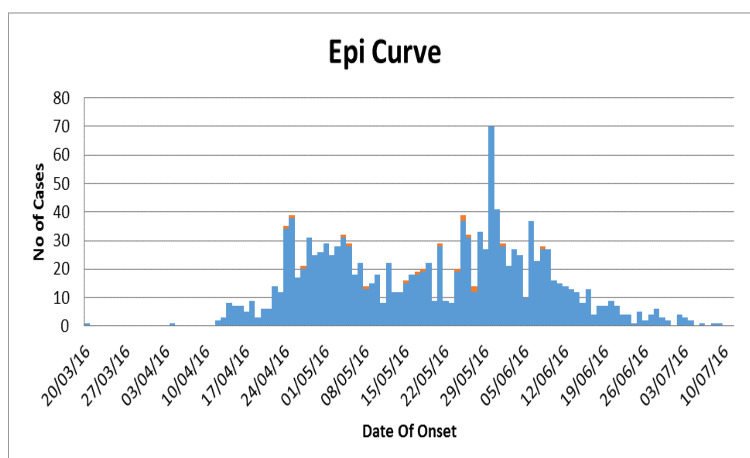
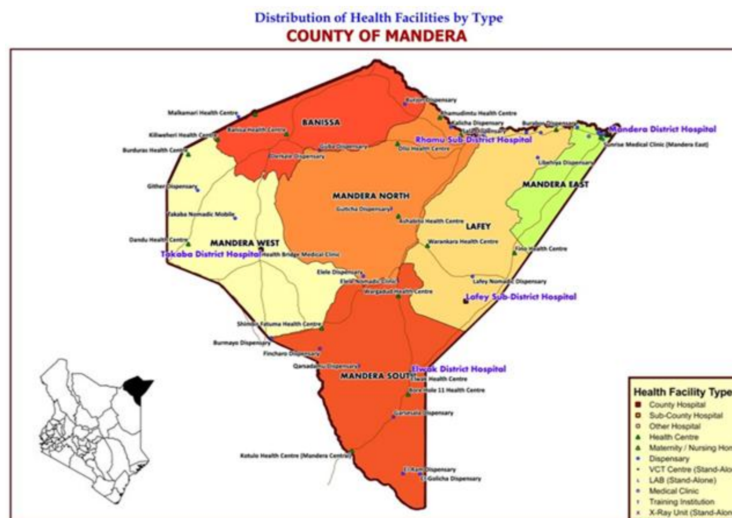


Figure 1: Mandera Cholera Outbreak Epi-curve

The outbreak was first reported in March 2016, with 894 cases reported by 12 April 2016. By the end of the response, 1629 cases had been reported with 18 deaths recorded - Case Fatality Rate (CFR) of 1.1%. KRCS reached a total of 391,941 people through

awareness sessions conducted in house to house visits including revisits, demonstration of hand washing and hand washing facilities. This represented almost double the target population due to revisits and the huge population affected by the outbreaks. The cases admitted at the CTCs were given a discharge package which included sensitization and distribution of soaps, buckets and water treatment chemicals. The response by the KRCS, MoH and other partners helped contain the outbreak within Mandera East Sub County.



Chikungunya outbreak

Chikungunya fever was confirmed in Mandera East sub-county on 20 May 2016. In total 1574 cases were documented, with no deaths reported. Cases with severe debilitating joints pains were managed as short stay inpatients for 5 days, however most the cases were however treated as outpatients.

A KRCS surge team was deployed on standby due to the high risk of personnel getting infected with the Chikungunya virus. Measures were put in place through provision of mosquito repellents to protect the staff from bites by infected mosquitoes. During the response period, six of the KRCS personnel deployed were infected with the virus.

Meetings to discuss means of containing the outbreak were held with Mandera county, national government and Somalia (Somalia experienced outbreaks of Cholera and Chikungunya). The borders had to be closed to reduce number of cases.

Summary of response

Overview of Host National Society

During Cholera and Chikungunya outbreak, the County Government of Mandera in collaboration of the National Government initiated the outbreak response mechanisms. A rapid assessment was conducted led by the National and County Government Ministry of Health. The Mandera County Government requested the Kenya Red Cross Society (KRCS) and other partners to support with outbreak management. Consequently, KRCS mobilized a team of health and WatSan technical staff experienced in Advocacy, Communication and Social Mobilization (ACSM), active case finding, hygiene and sanitation and safe water provision. An additional team of medical personnel (medical doctors, nurses, clinical officers, public health officers and lab technicians) were deployed to provide services at the Cholera Treatment Centre (CTC) set up at the Moi stadium, Mandera for case management near the epicenter of the 2 outbreaks in Mandera town. The technical team worked closely with the County and National government teams, other partners on the ground and were supported by team of local volunteers.

The teams provided clinical care for case management, contact tracing services for all the patients at the CTC. They also supported the volunteers to undertake active case finding of Cholera and Chikungunya cases, conduct advocacy, communication and social mobilization activities at community level hygiene and sanitation promotion. In addition, the team also carried out integrated vector management interventions out at household and community level focusing on Chikungunya virus and the CTC patients identified during active case finding.

The Kenya Red Cross worked as part of the National and County outbreak response coordination mechanisms. The Kenya Red Cross at National level participated in the high-level consultation meeting convened by Cabinet Secretary for Health. These meetings were used to strategize on the outbreak response and lobby for support from other key development partners and actors. Kenya Red Cross also participated in the Kenya Humanitarian Partners (KHPT) meeting which brought together actors from the UN and other development partners that discussed the need and urgency for the UN and other actors to support the County of Mandera in the response to the outbreaks

Overview of Red Cross Red Crescent Movement in country

The International Federation of Red Cross and Red Crescent Societies (IFRC), through its Eastern Africa and Indian Ocean Islands Country Cluster Support Team, supports operations in 12 countries in the region, including Kenya. On 31 May 2016, the IFRC and KRCS came up with an agreed operational strategy in response to the Cholera and Chikungunya outbreak.

The ICRC works in partnership with KRCS in restoring family links (especially in the provision of phone call services to Dadaab and Kakuma camps), emergency preparedness and response, and promotion of IHL and Fundamental Principles. Additionally, joint assistance projects are ongoing at the Coast, including distribution of relief items, food, and seeds/tools in Lamu and Tana River, as well as support to waterworks project in Kilifi. The ICRC regional delegation is hosted in Nairobi which also serves as a hub for operations in Eastern and Central African countries. The ICRC provided samples of Cholera Information Education and Communication materials translated into Somali for use during the response.

The KRCS hosts several Participating National Societies (PNSs), including: Australian, Austrian, British, Canadian, Danish, Finnish, German, Japanese, Netherlands, Norwegian, and Swedish Red Cross Societies. The operation in Mandera was supported by Red Cross Society of China through provision of tents for the CTC.

Movement Coordination

In Kenya, all the components of the Movement exist and these are; the IFRC, ICRC, PNSs and the host National Society. Movement coordination is normally done through sector specific coordination forums or meetings, senior management and governance level meetings and forums.

Mandera County borders Somalia to the east and Ethiopia to the North. A cross-border meeting was conducted to discuss on the coordination towards the response for the Cholera and Chikungunya outbreaks between the IFRC, the ICRC, the KRCS, the Ethiopian Red Cross Society and the Somalia Red Crescent Society. On 31 May 2016, the KRCS held a briefing with PNSs, ICRC and IFRC, in which key elements of the Cholera and Chikungunya operation were highlighted.

Overview of non-RCRC actors in country

The Ministry of Health (MoH) at the National Government and the Mandera County Government put in place an outbreak response coordination mechanism at their respective levels. In response to Cholera, the Ministry of Health issued an alert in January 2015, to all the counties and advised all the health care workers to step up surveillance of diarrheal disease. This led to the early detection of cases in Mandera County and put in place the National and County outbreak mechanisms. The Ministry of Health from the National Government deployed a team of disease control experts to the county to provide technical assistance in conducting comprehensive outbreak investigation and response. The County Ministry of Health team worked with partners including Kenya Red Cross and MSF to actively search for suspected cases in health facilities and within communities. Contacts of individuals who presented with signs and symptoms were being tracked by surveillance teams and provided with pre-emptive treatment. The national government supplied the initial contingent of medical and non-medical supplies were used in the response. UNICEF developed Information, Education and Communication (IEC) materials on mode of infection, signs and symptoms, prevention and appropriate health seeking behaviour.

WHO provided the technical teams with overall outbreak response management and entomologists who supported in entomological survey in response to the Chikungunya outbreak. UNICEF provided WASH supplies, chemicals and general awareness on hygiene and sanitation. UNFPA sent technical teams on the ground to work with the counties to ensure continuity of essential services amidst the outbreak response. Médecins Sans Frontières (MSF) had set up a Cholera Treatment Centre with a bed capacity of 60 at the Mandera County Referral Hospital to facilitate timely management of cholera cases. This was handed over to MoH at the end of the operation.

The African Medical and Research Foundation (AMREF) provided support in the transportation of commodities and supplies. The Kenya Medical Research Institute (KEMRI) centre for viral research laboratory has the capacity to confirm viral infections including Chikungunya, dengue and yellow fever. KEMRI provided laboratory support for confirmation of the outbreaks and continued surveillance. Random samples were regularly sent to KEMRI laboratory to ascertain disease causing pathogens.

Other actors such as UNOCHA, UNDSS and World Bank availed support where needed. Trocare of Somali also supported in cross border control of the epidemic.

Needs analysis and scenario planning

A joint rapid assessment was conducted by the MoH in collaboration with Kenya Red Cross and other key actors noted that there existed an outbreak coordination mechanism at the County level for both the diseases. The National government had instituted heightened surveillance for both the diseases and deployed technical teams to support the Mandera County in comprehensive outbreak response for both Cholera and Chikungunya fever.

The assessment identified the following gaps in the both the Cholera and Chikungunya outbreak responses which included:

- Lack of outbreak response plan for both Cholera and Chikungunya diseases

- Inadequate number of health workers since 50% had been affected by Chikungunya fever and had taken medical leave. The county government health care system was functioning at less than 50% capacity and thus not able to contain the outbreaks. There was a need to quickly mobilize a surge team to step in to boost the county capacity to manage the outbreaks
- Knowledge gap among health workers on management of Cholera and Chikungunya outbreak.
- Water safety and sanitation
- Low latrine coverage 30%.
- No water treatment at household level.
- No cross-border coordination activities for both outbreaks which may likely contribute to increase patient load.
- Advocacy Communication and Social Mobilization.
- Had no Advocacy, Communication and Social Mobilization (ACSM) plan for community mobilization.
- MoH didn't not have enough IEC materials for both diseases.
- Weak laboratory Capacity at the county.
- Vector Control: Have no fogging machines, no larvicides and no pyrethroids for the dengue response.
- Poor Infection prevention and Control.
- At the CTC in Mandera
- No safe burials.

From the gaps identified, the National Government Ministry of Health and partners including the Kenya Red Cross, developed an outbreak response plan for the two diseases to address the identified gaps based on their areas of expertise and areas of focus to address different areas. The National government availed all the training materials and trained health workers on case management of the 2 diseases. This was done through on the job training and short sensitization sessions.

A surge team of 8 people comprised of medical doctors, clinical officers and laboratory technicians was deployed by the Kenya Red Cross for one month to increase the capacity to contain the outbreaks as the County Government health care system had been affected with several personnel affected by the Chikungunya virus. Kenya Red Cross was the only agency that had the capacity the quickly mobilize a surge team in this type of emergency and thus the request from the county for the Kenya Red Cross to pull in the surge team.

The CTC put up by the MSF was overloaded and not able to cope with the caseload of Cholera in the county. KRCS deployed an addition 60-bed capacity CTC to decongest the one run by MSF.

The Kenya Red Cross worked together with the National Government and the County Government to develop an advocacy communication and social mobilization plan for the two diseases. The awareness messages were broadcast to the public in local language for wider reach. This was through the agreed messages by the National Government and the volunteers from KRCS. Printing of the same messages was done at the headquarters level in which 1000 IEC materials for each of the 2 diseases.

The National Government conducted vector control through fogging by use of deltamethrim and temaphos for larviciding. Kenya Red Cross provided spraying pumps to supplement the motorized pumps supplied by the national government. KRCS volunteers also worked with the households and communities to implement other vector control measures such as environmental manipulation and self-protection and promoting use of repellents, mosquito nets and clean up exercises.

Protective gear was provided to the team operating in the CTCs to avoid cases of contamination. MoH ensured safe burial of the dead by directly supervising 16 burials in the community. Community education was enhanced through awareness sessions and campaigns as well as radio broadcasts through the local radio.

Considering the gaps identified, the role of other actors including the National, County Government and, the Kenya Red Cross focused on the following areas:

- Set up an additional CTC at the Moi Stadium Mandera
- Provided health workers surge capacity
- Conducted advocacy communication and social mobilization
- Integrated Vector Management actions at household and community level in collaboration with the county government
- Conducted hygiene and sanitation promotion by provision of soap, hand washing facilities and hygiene promotion messages

- Promotion of household water treatment options through provision of water treatment chemicals and chlorination of water tanks for domestic use
- Ensuring access to safe water for domestic use through chlorination and treating water sources

Beneficiary selection

KRCS interventions targeted 3 groups of people in the county for Cholera response and 2 groups of people in the county for Chikungunya Response.

For Cholera, the 3 groups were as follows:

- The first group of beneficiaries were those diagnosed with Acute Watery Diarrhoea (AWD) and required rehydration and management, either at community rehydration points or at the CTCs being set up at Moi Stadium Mandera.
- The second group of beneficiaries were those persons who had been in contact with the first group during the period of incubation or during the period that the patient was showing signs of illness (AWD with or without vomiting).
- The third group comprised the general public living in villages where cases of cholera had been confirmed or where there was an upsurge of AWD

For Chikungunya, the groups were as follows:

- The first group was the general population who were benefitting from the Integrated Vector Management interventions targeting the individuals, the households and the community.
- The second group were those who were presenting with signs and symptoms of the Chikungunya Virus. These were the beneficiaries of active case finding and referrals to health facilities for effective management of the fever.

Risk Analysis

While KRCS continued to have adequate humanitarian access to Mandera County, the unpredictable nature of attacks from Somalia presented a challenge in operational areas. During the operation period, there had been four different terrorist attacks in a span of one month. These were along the road near Elwak town. The attacks led to the killing of 2 police officers and 3 civilians. The town is approximately 250km from Mandera town which is the operation base and did not therefore have a direct impact on the operation. In a bid to maintain the security level, Kenya Police Reservists and prison wardens were deployed to man the areas surrounding the CTCs.

There was also a general restriction of movement of the personnel deployed who were expected to settle within their accommodation not later than 1800 hours. Twenty-two (22) members of the KRCS surge team who had been deployed from Nairobi were evacuated following unconfirmed reports of a planned attack. This was during the operation was coming to an end. Only staff from North Kenya were left behind to wind up the operation

The rapid spread of Chikungunya also posed a risk to the staff with 3 staff and 3 HCWs getting infected by the virus. This number was however minimal and did not cause a strain on the response.

Strategy

Contribute to the Cholera and Chikungunya outbreak containment and control (management of cases and prevention) in Mandera County targeting 200,000 people (affected and at risk) in support of the MoH.

KRCS reached a population of 391,941 people were reached through advocacy in public meetings and house to house visits. To assist in creating community awareness and serve in the CTCs, 350 KRCS volunteers were trained on simple ways of assessing dehydration levels and issuing of ORS, hygiene promotion, simple ways of managing cholera cases and prevention of contamination. In total 2,666 households received NFIs including soaps and jerry cans with a total of 7,998 sachets of aqua tabs were distributed to the general population in the affected areas of Mandera East. KRCS also conducted disinfection of latrines to 36,637 households and chlorinated 31,924 water storage tanks. Religious leaders were sensitized through two sessions on the prevention and control of the outbreak. Similar sessions were conducted among the chiefs, sub chiefs and village headmen, bringing on board opinion leaders and other villagers. These were done through four sessions. The KRCS team also conducted demonstrations on hand washing reaching a direct population of 50,141.

B. Operational strategy and plan

Through the DREF operation, the following strategies were prioritized;

Strategy 1: Outbreak Confirmation and Continuous Joint Assessments

KRCS worked closely with the MoH (national) and the Mandera County Government in establishing the extent of the cholera outbreak, by ensuring the maintenance of line-listing, as well as establishing factors enhancing the sustained transmission of vibrio cholera. Kenya Red Cross also worked with the MoH at National and County level to monitor the extent of the Chikungunya fever. The Kenya Red Cross supported in surveillance to inform active case finding using the MoH approved case definition for both the diseases and referrals of the identified cases for management at facility level.

KRCS and MSF, together with the county and administrative government of Mandera and Trocare (of Somalia) conducted a cross border meeting to discuss on the coordination of cross border control of Cholera and the Chikungunya virus.

Strategy 2: Case Management

KRCS deployed a surge team to support with case management at the CTCs and other key facilities. The team comprised of 7 medical officers, 22 nursing officers, 10 clinical officers, 14 public health officers, 2 laboratory technicians and 1 nutrition officer. A team of 406 personnel (56 staff and 350 volunteers) were deployed and taken through an on -the-job-training on infection prevention, case identification and management of dehydration. The surge team was drawn from the KRCS emergency database.

A surge capacity was also put on standby to boost staffing levels based on caseload in the CTCs. The supplies used in this response included 15 tents, consumables (including Ringers Lactate, Normal Saline, 5% Dextrose and infusion sets), 50 cholera beds, infection control supplies (90kg Chlorine, which was also be used for chlorination of wells by Hygiene Promotion Teams). Others are lab supplies, including specimen collection kits, Cary Blair [1]transport media and cold boxes.

Strategy 3: Hygiene Promotion and Advocacy, Communication and Social Mobilization of Communities

A team of KRCS surge public health officers (14 PHOs) working with 200 volunteers at the community level worked on sensitizing the community regarding the outbreak and the need to participate in efforts to contain the outbreak. The team carried out health and hygiene promotion, including promotion of safe faecal matter disposal, promotion of hand-washing, take part in promoting hygienic food handling, chlorination of water storage tanks (as well as distribution of point of use water treatment chemicals), community level integrated Vector control actions and delivered key messages on outbreak prevention and control to individuals and families. The initiative was led by the Government.

Community sensitization was conducted through public meetings, with the participation of religious leaders and local administrators. The team, equipped with cholera kits and hygiene promotional materials, also carried out frequent disinfection of compounds and vector control within and around CTCs. Environmental cleaning was also conducted. The community was sensitized and made aware on chikungunya prevention measures at household and community level through the public health team and volunteers.

The use of public service announcements, the local media and the production of cultural-sensitive information, education and communication (IEC) materials was enhanced to increase levels of awareness.

As a key lesson learned from previous operations, this response incorporated a strong advocacy approach with the County authorities aimed at ensuring smooth phase out of the operation and strengthened health systems that were crucial in mitigating the impact of the outbreak.

Strategy 4: Active Case Finding and Enhanced Surveillance

The KRCS team collected information relating to patients admitted at the CTCs (one run by MSF and second one that was run by KRCS), as well as in community rehydration points, with case contact tracing done to their villages and households together with local administrators and volunteers. This was aimed at ensuring the spread of disease is minimized as much as possible.

People who had been in contact with patients were monitored for development of symptoms, and where possible, and in consultation with the county department of health, targeted prophylaxis was provided to the case contacts to minimize the risk of becoming cases in line with the MoH guidelines for targeted prophylaxis. This team also carried out community surveillance and mortality surveillance. All mortalities were audited by the team to identify the immediate cause of death. The results of community and mortality surveillance were then fed into the County Health Information System. KRCS also participating in continuous coordination efforts at the County and National level.

Strategy 5: Integrated Vector Management

Kenya Red Cross working with the County public health teams undertook Integrated Vector Management which included sensitization of the community on individual, household and community actions on vector control. The teams conducted fogging and larviciding at the community level to help in reducing the density of both adult and larvae of the mosquitoes to cut the transmission of the Chikungunya Virus.

Operational support services

[1] Cary Blair Transport Medium is a container box used in the transportation and preservation of clinical specimens

Human resources (HR)

The DREF operation deployed the following personnel:

- Surge team to support case management at the CTCs and other key facilities: 7 Medical Officers, 22 Nursing Officers, 10 Clinical Officers, 14 public health officers, 2 laboratory technicians and 1 nutrition officer. The surge team was drawn from the KRCS emergency data base.
- For purpose of water and sanitation hygiene, 1 WASH officer was also deployed in the operation.
- To ensure good documentation, reporting and visibility, 1 audio-visual officer and 1 communications officer were further deployed as part of the operation.
- 350 volunteers were deployed to support the operation in different capacities. The volunteers were given on-the-job training on infection prevention and case identification and management of dehydration.
- Of the 350 volunteers deployed, 200 volunteers were involved in conducting community awareness creation, hygiene promotion and health education. The other 150 remained on standby to back the response teams due to the high risk of disease infection even to the response teams.
- Contact tracing was also carried out by the volunteers through the coordination by 10 public health officers to cover three zoned areas reporting highest number of cases. The officers also carried out community level surveillance and mortality surveillance and referring cases traced at village levels to the CTCs.
- The KRCS Mandera branch supported the operation through volunteers and storage of supplies as well as other logistics.
- All the staff and volunteers in the field were supported with allowances for the duration of the deployment.

Information Communication Technology

Field and Headquarter based ICT equipment was used in supporting the cholera response. Mandera presents challenges in communication as mobile networks, internet connectivity and power supply are not stable. Vehicles deployed to the operation were fitted with radios to enhance coordination within teams. Cell phone airtime for staff assigned to the operation was budgeted. The headquarters provided technical and back up support.

Logistics and supply chain

Logistics support to the DREF operation included delivering a range of relief items in line with operational priorities and activities. These were:

- Through the procurement guideline, KRCS procured, prepositioned and delivered medical consumables, cholera beds. Tents and PPEs to be used in CTCs.
- Through the supply chain department, KRCS provided transportation for prepositioning of cholera response water treatment chemicals, hygiene promotion materials and IEC materials in line with MoH, IFRC and KRCS guidelines.
- Reception and storage of items before delivery to distribution sites was managed according to KRCS supply chain management rules and regulations, as well as coordination of the transport of all relief items at the headquarters and regional level.

Communications

Through the DREF operation, the KRCS worked closely with the National and County level ACSM committees to design media messaging. The messaging targeted various groups, including key stakeholders, opinion leaders and affected communities. KRCS took advantage of the local volunteers to carry out public sensitization in the local language using public address systems. Further communication was done through 3 sessions in the local radio broadcasting key messages on both Cholera and Chikungunya. The aim was to build trust and raise awareness among the communities on the Cholera and Chikungunya responses. KRCS through the Mandera County Branch ensured appropriate information on the unfolding humanitarian situation was delivered to the branch and other relevant partners for information, awareness and response planning. The KRCS PR team also carried out media monitoring to ensure high publicity and reach as well as to gauge impact of the messaging and stations communication materials.

Security

From the beginning of the operation, KRCS worked to ensure high security was enforced through deployment of a security officer who was conducting security assessments, liaising with security contacts and gathering intelligence information in the field. The information collected was triangulated with information from other sources by the security manager to inform decisions relating to security risks. Movement was also restricted among the team deployed under the operation to ensure everyone is within one area. Security was also maintained around the CTC through deployment of Kenya Police Reservists and Prison officers.

Towards the middle of the operation period, however, four terrorist attacks were reported in Elwak on the outskirts of the County near the Somalia border. This however did not have a direct impact on the operation. However, due to the rumors and threats on planned attacks, 22 staff deployed in the operation had to be evacuated back to Nairobi since they were not residents of the area and therefore were more at risk of being targeted by the Al Shabaab. The operation was concluded a week after therefore there the team ended its mission.

Planning, monitoring, evaluation, & reporting (PMER)

The National Society Headquarters (through the Monitoring, evaluation and learning department, Health and Social Services and operations team) supported the implementing teams to ensure effective, timely and efficient delivery of operation. Monitoring visits were conducted to assess levels of adherence to minimum standards in humanitarian service delivery, compliance to humanitarian principles guiding the Movement's humanitarian operations, timeliness in delivery of supplies and services to beneficiaries, management of supplies during storage, accuracy, completeness and timeliness of reporting among others. Field monitoring and technical support visits were also conducted where necessary. The KRCS worked closely with the IFRC East Africa and Indian Ocean Islands regional representation to strengthen the implementation of the operation. Joint monitoring visits (IFRC and KRCS) were conducted and it was subjected to security clearance by the security unit at KRCS and IFRC. At the end of the intervention, operational review/lessons learned workshop were organized.

Administration and Finance

The KRCS has a permanent administrative and financial department, which is ensuring the proper use of financial resources in accordance with conditions discussed in the Memorandum of Understanding between KRCS and IFRC. The management of financial resources was per the procedures of the KRCS and guidelines specific to DREF. All the activities were done in close cooperation with the community and through advocacy to the community, religious and traditional leaders as well as other actors.

C. DETAILED OPERATIONAL PLAN

Quality programming / Areas common to all sectors

Health & Care

Needs analysis: The Mandera County Government officially requested support from KRCS in management of the Cholera and Chikungunya outbreaks. The support requested included setting up and running a CTC at Moi Stadium, provision of health workers to fill in the gap of health workers that had been taken ill and therefore could not provide essential health services and case management of the ongoing outbreaks, ACSM for prevention and other measures necessary for the control of the cholera and Chikungunya outbreaks and Integrated Vector Management for control of Chikungunya. KRCS also supported counties where active transmission is ongoing, to scale up hygiene promotion and social mobilization.

Population to be assisted: In total, 200,000 beneficiaries in Mandera East Sub-county.

Quality programming / Areas common to all sectors
Outcome 1: Continuous joint assessments and analysis is used to inform the design and implementation of the operation **Output 1:1: Monitoring of service provision in the areas of intervention** **Activities:** **1.1.1.** KRCS county teams carry out joint visits with MoH to verify information and confirm outbreak. Information to be used locally and shared with national team to inform decisions and to enhance coordination for effective management and prevention of the disease. Support to emergency operations centre including TERA messaging and analysis of feedback **1.1.2.** KRCS at Headquarters level to liaise with Disease Surveillance and Response Unit to continue implementing a common approach based on national guidelines for cholera outbreak control **Output 1.2: The findings of evaluations lead to adjustments in on-going plans and future planning as appropriate** **Activities** **1.2.1.** Operational review/lessons learned **1.2.2.** Conduct media monitoring to establish visibility and impact of response
Achievements
1.1.1. Initial assessments were completed in the county which corroborated the projections made by MoH on the caseload, scale and coverage in the affected areas. KRCS has also carried out joint visits with the MoH to verify

information and confirm outbreak. The information gathered was shared with the national team to inform decisions and enhance coordination.

1.1.2. The KRCS headquarters worked closely with the disease surveillance and response unit to implement a common approach based on national guidelines for cholera control and ensure that the current situation was documented at every level. A video of the operation was developed by the multimedia and communication team that had been deployed to support with documentation.

1.2.1. An operational review/lessons exercise was carried out at the end of the operation led by the IFRC and KRCS M&E, department. The review brought together 80 participants who took part in the twin Cholera and Chikungunya outbreak management in Mandera (copy of the Draft review report to be shared with the DREF officer). A household survey was also conducted in which 383 HHs were reached. The discussion revealed that among the interviewed individuals (n=383) of the total interviewed, 136 (35.5%) had either their relatives infected (indirect) or they themselves were infected (direct), 70 individuals (51.4%) were directly infected by cholera and chikungunya, 29% had a family member infected by cholera, 13.2% were unable to go to work due to the outbreak and unfortunately 6% had lost a family member. During the FGD with community members (men and women) the following were mentioned as the effects of the Epidemic.

- Deaths, leading to orphanage and in some instances loss of bread winner in the household hence increasing the vulnerability in the community Social lives affected, religious institutions such as duksi's and madrasa's were temporarily closed, while social gatherings such as weddings were restricted.
- Businesses were affected, especially hotel, butcheries and miraa businesses were negatively affected.
- Movement of people in and out of Mandera town was restricted due to the outbreak.
- Economic burden, the cost of treating cholera patient especially prior to KRCS intervention was very high, case in point one community member said during the FGD that she used 17,000KSH to treat her ailing mother at a local chemist, before KRCS intervention while her neighbour was treated for free at KRCS CTC.

In response to the epidemic, KRCS, MSF, County Government of Mandera and other partners including UNICEF initiated emergency response activities targeting case management and curbing further spread. Response activities included mass media cholera campaigns through radio and hygiene promotion activities by KRCS volunteers with supervision of KRCS staff, distribution of water purification tablets, Jeri cans, buckets and soap, distribution of aqua-tabs, public address systems, use of pamphlets and posters, contact tracing while coordinating with MSF. This led to increase in community knowledge on causes. This can be linked with responses from the households on the causes of cholera with 99.7%(382 individuals) of those interviewed knowing at least one cause of cholera, 25% mentioning drinking of feacal contaminated fluid, 22% not disposing faeces properly, 21% not washing hands with soap and water at critical times, 18%, 14% not using latrines and eating food with feacal contamination respectively as a cause of cholera.

On critical ties of hand washing, among those interviewed (n=383), 350 (91.3%) could recall at least 3 critical times of washing hands with soap, this can be attributed to KRCS staff, Volunteers and other partners' intense hygiene promotion campaigns during the cholera outbreak, notably almost all of those interviewed (93%) could remember it is essential to wash hands with soap prior to eating food. 33 interviewees (8.7%) could recall at least 2 critical times of handwashing.

Since the outbreak of cholera eighty seven percent of the interviewed individuals treated their water, majority (68.5%) using chemicals such as Pur and Aqua tabs provided by KRCS and partners, 30% boiled water and 1.5% strained water as a method of treatment.

On latrine coverage, the area access to sanitation facilities is low with only 40% of those household interviewed owing latrine and 60% using different defecation practices such as open defecation and other shared latrines with mosques or the neighbours. Low coverage of latrine was notice during the focus group discussion with the community members, in the discussion it was said for example in Shafshafey one latrine is shared among ten families. Reasons for low latrine coverage is associated with high cost of construction.40% of those households with latrine 37% had constructed latrine prior to the disaster

When asked about the assistance they needed, 336(87.7%) individuals mentioned medical assistance 32% of those received medical assistance from KRCS in form of qualified staff, setting up and operation of CTC, and emergency ambulance. 287 needed assistance on water treatment .98% received water treatment assistance from KRCS in form of aqua tabs, PuR and chlorine. 109 households received water storage from KRCS out of 206 who needed assistance on water storage buckets. Other assistance provided by KRCS mentioned during FGD and household survey included;

door to door sensitization on cholera prevention and management, contact tracing and spraying of toilet with chlorine

In summary, the operation was relevant and appropriate since it targeted affected communities and addressed their needs as identified during assessments throughout the operation

1.2.2. Refer to 1.1.2.

Challenges

- Although the response was managed locally, it was initiated at headquarter and mobilization of resource and communication breakdown between headquarter and the county were repeatedly reported as challenges. This had led to delays in data collection. However, it was addressed in the later stage of the operation. It is therefore important that response capacities are strengthened at county level and emergency preparedness including contingency planning is intensified especially at disaster prone counties.
- The surge team who were deployed did not get sufficient induction and were not psychologically prepared to the circumstances they were in during the response. Two young men who were deployed from Nairobi mentioned during the one to one briefing session that they were given less than 24 hours to report at airport and be at the response site without a proper briefing. This kind of situation could damage the relationship and reputation of KRCS especially if there was not strong leadership and human resource management to ensure staff adhere to code of conduct and international humanitarian principles.

Lessons Learned

- The engagement of Kenyan Association of Muslim Medical Professionals in the response is a very effective way of effective mobilization of resources and the initiative is very appreciated by the organization. It also has contributed to the effective management of the CTC and filled the gap in shortage of clinicians which was created due to the Chikungunya epidemic. It is however important that KRCS takes the time and energy to disseminate the Principles of the Red Cross among potential partners well ahead of time and ensure that there is proper induction at the start of the response.
- The issue of cultural and religious awareness has long been recognized as key during response operations. It is thus important to include in the surge teams, people who share the same cultural and religious beliefs which helps to reduce tension between communities and deployed responders as was the case with inclusion of Muslim Association of Medics in this operation.
- The availability of a huge number of KRCS volunteers in Mandera County enabled the training and deployment of a huge number. The same strength was also harnessed during social mobilization in which volunteers used local languages to disseminate key messages to the affected populations.

Health & care

Outcome 2: Cholera Treatment Centres are set up and operational for up to 2 month in Mandera East

Output 2.1: Mandera County are supported to control the outbreak by training volunteers on CTC function and deploying staff

Activities:

2.1.1. Deliver materials and supplies required for set up which include: 15 tents, consumables (including Ringers Lactate, Normal 15 tents, consumables (including Ringers Lactate, Normal Saline,5% Dextrose and infusion sets), 50 cholera Beds, patient infection control supplies (90kg Chlorine), lab supplies, including specimen collection kits, Cary Blair Transport Media and cold boxes

2.1.2. Putting up of tents, demarcation of isolation areas, construction of temporary sanitation facilities at CTC

2.1.3. Deploy technical staff

2.1.4. Hold consultative discussions with county health departments

2.1.5. Identify and train volunteers to provide support in the CTCs. Initial one day sensitization followed by on-job training

2.1.6. Manage cholera patients based on MoH protocols and guidelines

2.1.7. Replenish medical consumables in CTCs

Outcome 3: Immediate risk of cholera and Chikungunya transmission in communities is reduced and the outbreak contained in Mandera county within 6 weeks

Output 3.1. Capacity of KRCS to respond to the epidemic in the affected area is strengthened

Activities
3.1.1. Train volunteers on Cholera and Chikungunya prevention and control
3.1.2 Source and distribute protection (boots, gloves, sanitizers and disinfectants) and hygiene promotional materials 80 volunteers
3.1.3 Source and deliver Epidemic Control Manuals for volunteers and sensitize the volunteers based on these manuals
3.1.4 Involve the volunteers in translating key messages into local languages to standardize messaging in collaboration with MoH
3.1.5. Sensitize local administrators (chiefs and assistants, village elders etc.) on outbreaks prevention and control measures
3.1.6. Sensitize religious leaders in Mandera East as well as other opinion leaders in all target counties on outbreak prevention and control

Output 3.2: Target population in the affected areas are provided with information to improve knowledge and practices on the prevention and control of cholera
Activities:
3.2.1 Conduct awareness sessions on cholera and Chikungunya through community meetings and religious gatherings A total of 49,877 households were reached through house to house visits to disseminate messages on prevention and control of the Cholera and Chikungunya outbreak

3.2.2. Conduct house to house visits for cholera and Chikungunya prevention messaging, and to conduct community level surveillance

3.2.3. Production and distribution of IEC materials, including posters, banners, flyers, factsheets

3.2.4. Production and distribution of short videos on the response
3.2.5. Production and airing of short awareness PSAs on radio

Output 3.3: Community based cholera management
Activities:
3.3.1. Establish oral rehydration points in affected villages and train volunteers to prepare and administer ORS (with pre-delivered ORS sachets) (Target: One oral rehydration point per cluster of villages)

3.3.2. Train volunteers on simple ways to assess levels of dehydration and appropriately refer patients

3.2.3. Production and distribution of IEC materials, including posters, banners, flyers, factsheets

3.3.3. Source and distribute water filters to community Oral Rehydration Points to improve safety of water in use with the support of MoH
3.3.4. Conduct case detection and referral of cases to nearest Rehydration points and to nearest CTCs
3.3.5. Provide back up support and supervision to volunteers manning Oral Rehydration Points
3.3.6. Hygiene promotional messages are delivered to households and communities. Mortality surveillance is done and decent burials are supervised
3.3.7. Carry out active case finding and contact tracing of all cases at household and Community level

3.3.8. Carry out daily briefings and weekly reviews with all volunteers involved. Weekly reviews to continue during entire period of sensitization and hygiene promotion

Output 3.4: Conduct advocacy and coordination in the affected areas

Activities:
3.4.1. Provide a platform for meetings with the government at all levels: County, Sub-county and ward level on quarterly basis in line with the lessons learnt recommendation on exit plan.

Achievements

2.1.1. KRCS delivered the following materials for the CTC: 60 cholera beds, 15 tents, Normal Saline, 90kg of Chlorine, lab supplies
2.1.2. KRCS set up 15 tents and a CTC with a bed capacity of 60 with approximately 60 patients being treated in CTC facility. Isolation areas were demarcated with temporary sanitation facilities set up to serve the population in the

CTCs. Nine pit latrines were constructed during the operation.
2.1.3. KRCS deployed a surge team of 56 medical personnel drawn from the organisational data base to increase the capacity of HCWs in order to manage the patients at the CTCs and referral centres and manage the control of spread of the disease.
2.1.4. A total of 50 consultative meetings were held with the county health departments to ensure coordination in the management of cases.
2.1.5. A total of 350 volunteers were deployed to serve in various capacities including case management and community sensitization within the operation so as to increase the capacity care givers to manage cases. The volunteers were divided into different groups and were sensitized on vector control, ORS care treatment, and hygiene promotion.
2.1.6. The cholera patients admitted to the CTCs were given health care based on the MoH protocols and guidelines to reduce risk of further infections.
2.1.7. Medical consumables {Intravenous fluid R/L 500MLS (72bottles), intravenous paracetamol 100mls (20 vials), capsules doxycycline 100mg (10tins)} at the CTC were replenished through procurement at the local level (using the KRCS procurement guidelines) to support the management of patients.
3.1.1 350 volunteers trained were on Chikungunya and Cholera management. This was aimed at increasing the capacity of the response team to enable the disease control within the shortest time possible.
3.1.2 In order to reduce risk of infection among the team managing the patients, the caregivers were provided with personal protective equipment aimed at retaining a high number of care givers is maintained to work on the control of the epidemic. These include 20 gum boots, 100 nose masks, 30 leather gloves, 20 safety goggles and mosquito repellent to prevent bites from mosquitoes carrying Chikungunya virus.
3.1.3 Epidemic control manuals were distributed to the 11 team leads volunteers to sensitize them on the control and management of cholera and Chikungunya so as to increase their knowledge skills and capacity to help control the disease.
3.1.4, 3.1.5, 3.1.6, 3.2.1 and 3.2.2. In response to the epidemic, KRCS, MSF, County Government of Mandera and other partners including UNICEF initiated emergency response activities targeting case management and curbing further spread. Response activities included mass media cholera campaigns through radio and hygiene promotion activities by KRCS volunteers with supervision of KRCS staff, distribution of water purification tablets, Jeri cans, buckets and soap, distribution of aqua-tabs, public address systems, use of pamphlets and posters, contact tracing while coordinating with MSF. This led to increase in community knowledge on causes. This can be linked with responses from the households on the causes of cholera with 99.7%(382 individuals) of those interviewed knowing at least one cause of cholera, 25% mentioning drinking of feacal contaminated fluid, 22% not disposing faeces properly, 21% not washing hands with soap and water at critical times, 18%, 14% not using latrines and eating food with feacal contamination respectively as a cause of cholera.
3.2.3 Distribution of 60,802 posters was done around the areas affected by the outbreak to increase level of awareness. Among the areas covered include Bulla Mpya, Bulla Jamhuria, Shafeshafey, Bulla Central, Bulla power, Bulla Barwako, township, Bulla Nguvu, Bulla Kamor and Tawakal.
3.2.4 A video documentation on the response was developed to help improve future response and educate the public on the prevention and control of cholera. This will be uploaded on the KRCS YouTube account for wide circulation.
3.2.5 KRCS conducted 3 radio sessions to create awareness of the control and prevention of cholera. This was aired in the local radio to target the affected population.
3.3.1. Oral rehydration points were not established due to the long distances between areas affected. However, the volunteers trained on simple ways of supervision distributed ORS to the affected persons and referred extreme cases to the nearest CTCs.
3.3.2. A total of 350 volunteers were trained on simple ways of assessing dehydration such the signs and symptoms of dehydration which include sunken eyes, generally weak condition of the patient, excess thirst. A referral mechanism was set where the volunteers would contact their supervisor who would in turn call the ambulance for quick evacuation of cases to the CTC.
3.3.3. Source water filters were not distributed. Instead, the community were supplied with water treatment chemicals and water tanks chlorinated for domestic water use. Results from the household survey indicated that up to eighty seven percent of the interviewed individuals treated their water, majority (68.5%) using chemicals such as Pur and Aqua tabs provided by KRCS and partners, 30% boiled water and 1.5% strained water as a method of treatment. This, thus, indicates that over half the affected population, treated their water with chemicals supplied KRCS and partners.
3.3.4. The volunteers deployed conducted case detection and referred cases to the nearest CTCs. A total of 803 cases were detected and referred to the CTC. During the DREF review with the case management discussion group, the team pointed out that the CTC layout/design and patient flow was perfect and each team (volunteers, doctors,

nurses, lab-technician and Public Health Officer) played its role well. There was no mortality in the CTC (out of 270 cases treated) and cooperation among staff was very good. Though at times there was run-out of supplies in the CTC, most of the time there were adequate stock. There was good acceptance of the staff by the community and the CTC operation was running smoothly. 3.3.5. The volunteers were divided into 11 teams with others serving as backup for the response teams who were also at a high risk of being affected by Chikungunya virus. 3.3.6. The MoH has ensured supervision of 16 decent burials to avoid cases of contamination among the community members living within the burial sites. 3.3.7. Contact tracing were conducted in which a total of 443 cases were successfully traced and sensitized. 3.3.8. Daily briefs were conducted among the staff and volunteers working under the response since the start of the operation for purposes of reviews and plans. Weekly briefs were also conducted during the entire period. The reviews focused mainly on achievements, challenges and areas needing improvement in the operation. 3.4.1 The KRCS team under the operation has been carrying out meetings with the government both direct and through the County Steering Group. KRCS also took part in cross border meetings with the National and County Government of Mandera, MSF and Trocare (of Somali) to discuss on cross border control of the epidemic to minimize cross border infection. As part of the exit plan, KRCS has scaled down on the number of staff and volunteers deployed under the operation and closed the CTC. Plans are underway to deliver the medical consumables to the MoH.
Challenges
Cultural traditions created challenges in management of cases at the CTC in that some patients refused to be attended to by male clinicians. This was a significant challenge at the beginning of the operation given the shortage of staff at the initial stages of the outbreak, but was however sorted out following deployment of surge teams that included female clinicians.
Lessons Learned
The ability of KRCS to mobilize such number of surge team members for the response is commendable. However, the profiles of the response team members and the level of experience is not comparable to the demand and responsibility taken by KRCS especially since it engaged in management of CTCs. If Kenyan Red Cross decides to continue to deploy response team from a standby data base, it should consider training of roster members to develop their skills on selected fields including Cholera response.

Water, sanitation, and hygiene promotion

Water, sanitation, and hygiene promotion
Outcome 4: Risk of cholera transmission is reduced through the provision of safe water and hygiene promotion for up to 2 months **Output 4.1** Immediate risk of cholera reduced through the provision of safe water supply and hygiene promotion in Mandera County over a period of 2 months **Activities** 4.1.1. Distribution of Point of Use Water Treatment Chemicals to affected households. Supplies to include those donated by other partners 4.1.2. Distribution of jerry cans to improve safe water storage to affected households. Supplies to include those donated by UNICEF 4.1.3. Distribution of chlorine to carry out disinfection of water supply source (shallow wells as applicable). 4.1.4. Chlorination of water supply sources (MoH lead) **Output 4.2:** Target population in the affected areas are provided with hygiene promotion activities, which meet Sphere standards **Activities** 4.2.1. Distribution of soap to affected households (UNICEF and MoH) 4.2.2. Promotion of hand-washing in communities 4.2.3. Conduct hygiene promotion campaign targeting hand-washing at key times promoted through demonstration at market, schools (once they reopen) and other public places 4.2.4. Conduct environmental clean ups, larviciding and fogging for destruction of the Chikungunya vector

4.2.5. Installation of hand washing kits in schools (UNICEF and MoH)

4.2.6. Promotion of use of other HHWT methodologies e.g. Filtration and SODIS, especially to affected and risk communities

Achievements

4.1.1. Refer to 3.1.4.

4.1.2. To improve safe water storage, 5332 water jerry cans were distributed to 2666 households that were considered most vulnerable. Each household received 2 jerry cans, 2 buckets and aqua tabs. In addition, a total of 2568 households received each with 2 bars of soap

4.1.3. Chlorination of water tanks was done to provide safe water for domestic use with a total of 31,924 water tanks chlorinated at community level

4.2.1. Chlorination of water supply sources was done at two water points that pump water from the river. Refer to 4.1.2

4.2.2. Promotion of hand washing was done through distribution of soaps, demonstrations and installation of hand washing facilities.

4.2.3. To promote hand washing, demonstrations were done reaching a total population of 54,483 people.

4.2.4. KRCS conducted an approximate of 5 environmental clean ups to eliminate parasites and larviciding through spraying.

4.2.5. A total of 12,487 hand washing facilities were installed

4.2.6. Promotion of use of other household water treatment methodologies such as the use of water treatment chemicals were done

Challenges

- There were problems with regards to procedures of chlorination and monitoring of residual chlorine level at various points (Intake, transportation and storage) however there were not repercussions to the people.
- The provision of sanitation facilities did not meet the demand per the standards in the time of operation. For example, the number of people using a single toilet exceeded the number recommend by the Sphere standards. KRCS carried out advocacy for construction of more toilets by the county government
- The uptake of knowledge on solid waste management was slow among the community and sustaining the community action on waste management at household level was also difficult due to inadequate support by the local administration.

Lessons learned

It is important to strengthen the existing solid waste management system and advocate with local authority to actively support solid waste management in the community. This would increase uptake of safe faecal disposal.

D.THE BUDGET

Financial report, herein attached, shows a balance of 1,575 which will be returned to the DREF Kitty.

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How we work

All IFRC assistance seeks to adhere to the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO's) in Disaster Relief and the Humanitarian Charter and Minimum Standards in Disaster Response (Sphere) in delivering assistance to the most vulnerable.

The IFRC's vision is to inspire, encourage, facilitate and promote at all times all forms of humanitarian activities by National Societies, with a view to preventing and alleviating human suffering, and thereby contributing to the maintenance and promotion of human dignity and peace in the world.

The IFRC's work is guided by Strategy 2020 which puts forward three strategic aims:

1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of nonviolence and peace.

Find out more on www.ifrc.org

Disaster Response Financial Report

MDRKE038 - Kenya - Cholera
Timeframe: 06 Jun 16 to 06 Sep 16
Appeal Launch Date: 06 Jun 16

Final Report

Selected Parameters			
Reporting Timeframe	2016/6-2016/12	Programme	MDRKE038
Budget Timeframe	2016/6-2016/9	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

I. Funding

	Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability	TOTAL	Deferred Income
A. Budget		**276,165**				**276,165**	
B. Opening Balance							
Income							
Other Income							
DREF Allocations		*276,165*				*276,165*	
C4. Other Income		***276,165***				***276,165***	
C. Total Income = SUM(C1..C4)		**276,165**				**276,165**	
D. Total Funding = B +C		**276,165**				**276,165**	

* Funding source data based on information provided by the donor

II. Movement of Funds

	Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability	TOTAL	Deferred Income
B. Opening Balance							
C. Income		276,165				**276,165**	
E. Expenditure		-274,629				**-274,629**	
F. Closing Balance = (B + C + E)		1,536				**1,536**	

Disaster Response Financial Report

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Selected Parameters			
Reporting Timeframe	2016/6-2016/12	Programme	MDRKE038
Budget Timeframe	2016/6-2016/9	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

III. Expenditure

Account Groups	Budget	Expenditure						Variance
		Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability	TOTAL	
	A						B	A - B
BUDGET (C)			**276,165**				**276,165**	
Relief items, Construction, Supplies								
Water, Sanitation & Hygiene	2,716							**2,716**
Medical & First Aid	41,732							**41,732**
Total Relief items, Construction, Sup	44,447							**44,447**
Logistics, Transport & Storage								
Transport & Vehicles Costs	25,842							**25,842**
Logistics Services	6,779							**6,779**
Total Logistics, Transport & Storage	32,621							**32,621**
Personnel								
National Society Staff	88,579							**88,579**
Volunteers	59,870							**59,870**
Total Personnel	148,449							**148,449**
Workshops & Training								
Workshops & Training	11,798							**11,798**
Total Workshops & Training	11,798							**11,798**
General Expenditure								
Travel	750		2,158				**2,158**	**-1,408**
Information & Public Relations	17,211							**17,211**
Office Costs	1,221							**1,221**
Communications	2,313							**2,313**
Financial Charges	500		2				**2**	**498**
Total General Expenditure	21,995		2,160				**2,160**	**19,834**
Contributions & Transfers								
Cash Transfers National Societies			255,707				**255,707**	**-255,707**
Total Contributions & Transfers			255,707				**255,707**	**-255,707**
Indirect Costs								
Programme & Services Support Recove	16,855		16,761				**16,761**	**94**
Total Indirect Costs	16,855		16,761				**16,761**	**94**
TOTAL EXPENDITURE (D)	**276,165**		**274,629**				**274,629**	**1,536**
VARIANCE (C - D)			**1,536**				**1,536**	

Disaster Response Financial Report

MDRKE038 - Kenya - Cholera

Timeframe: 06 Jun 16 to 06 Sep 16

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Final Report

Selected Parameters			
Reporting Timeframe	2016/6-2016/12	Programme	MDRKE038
Budget Timeframe	2016/6-2016/9	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

IV. Breakdown by subsector

Business Line / Sub-sector	Budget	Opening Balance	Income	Funding	Expenditure	Closing Balance	Deferred Income
BL2 - Grow RC/RC services for vulnerable people							
Disaster management	276,165		276,165	276,165	274,629	1,536	
Subtotal BL2	276,165		276,165	276,165	274,629	1,536	
GRAND TOTAL	**276,165**		**276,165**	**276,165**	**274,629**	**1,536**	