United Nations CERF Central Emergency Response Fund

RESIDENT / HUMANITARIAN COORDINATOR REPORT ON THE USE OF CERF FUNDS RAPID RESPONSE ON CHOLERA OUTBREAK IN MOZAMBIQUE 2015

RESIDENT/HUMANITARIAN COORDINATOR a.i	Ms. Bettina Maas

REPORTING PROCESS AND CONSULTATION SUMMARY

a. Please indicate when the After Action Review (AAR) was conducted and who participated.

The AAR was carried out on 1 October 2015 at RCO and the meeting was chaired by the co-chair of HCT WG. There were two agencies present namely, WHO and UNICEF during the session. Note that, in AAR for Flood response, the HCT WG also covered cholera response. The session started with project presentations, followed by a reflection on the CERF application and implementation. Actions were identified to improve the process. Suggestions and contributions from implementing partners not participating in the meeting were presented as well.

b. Please confirm that the Resident Coordinator and/or Humanitarian Coordinator (RC/HC) Report was discussed in the Humanitarian and/or UN Country Team and by cluster/sector coordinators as outlined in the guidelines.

YES ☒ NO ☐

c. Was the final version of the RC/HC Report shared for review with in-country stakeholders as recommended in the guidelines (i.e. the CERF recipient agencies and their implementing partners, cluster/sector coordinators and members and relevant government counterparts)?

YES ☒ NO ☐

The final version of the report was shared with WHO, UNICEF and implementing partners such as Health Provincial directorate of Tete (DPS), MSF, Municipality of Tete, Public Works and Housing Provincial directorate. Note that the report was developed in close collaboration with the implementing partners.

I. HUMANITARIAN CONTEXT

TABLE 1: EMERGENCY ALLOCATION OVERVIEW (US$)		
Total amount required for the humanitarian response: 5,000,000		
Breakdown of total response funding received by source	Source	Amount
	CERF	748,857
	COUNTRY-BASED POOL FUND (*if applicable*)	
	OTHER (bilateral/multilateral)	
	TOTAL	748,857

TABLE 2: CERF EMERGENCY FUNDING BY ALLOCATION AND PROJECT (US$)			
Allocation 1 – date of official submission: 25-Feb-15			
Agency	Project code	Cluster/Sector	Amount
UNICEF	15-RR-CEF-023	Health	301,217
WHO	15-RR-WHO-007	Health	447,640
TOTAL			748,857

TABLE 3: BREAKDOWN OF CERF FUNDS BY TYPE OF IMPLEMENTATION MODALITY (US$)	
Type of implementation modality	Amount
Direct UN agencies/ IOM implementation	541,902
Funds forwarded to NGOs for implementation	
Funds forwarded to government partners	206,955
TOTAL	748,857

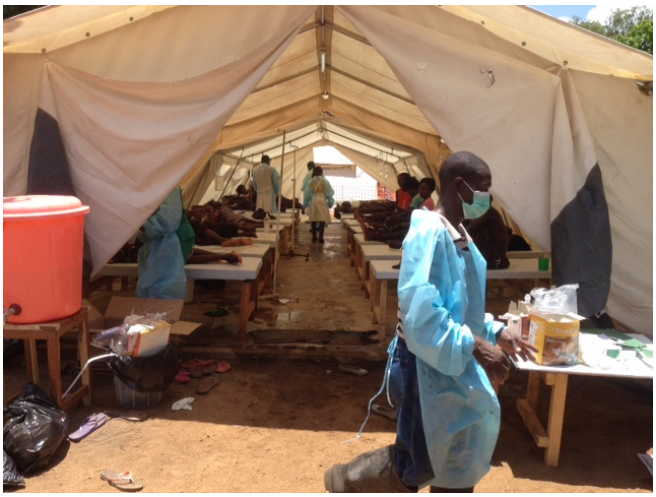
HUMANITARIAN NEEDS

Cholera cases in Mozambique were initially reported in December 2014, especially in the central and northern parts of the country. The provinces affected were Nampula, Niassa, Zambézia and Tete with the first case detected in Nampula on 25 December 2014.

The most affected province was Tete which recorded a rapid spread that the provincial capacity could not cope with. The first case was confirmed in Moatize district on 19 January 2015. The outbreak then spread to Tete city where the first case was reported on 2 February and to Mutarara district on 9 February 2015. Due to the response efforts put in place with external assistance the transmission was reported interrupted in March. In total 3,593 cases and 22 deaths were reported (CFR 0.6 per cent). Tete city with 2,311 cases was the most affected in the province followed by Moatize with 792 cases reported and Mutarara with 489 cases reported.

During the same period acute watery diarrhoea were reported and managed in districts of Angónia, Cahora-Bassa, Magoe, Doa, Chiúta, Changara, Marara and Marávia in Tete, with a total of 848 cases and 32 deaths (CFR of 3.8 per cent) but cholera was not confirmed by laboratory tests in these districts.

The main causes of this outbreak, especially in Tete, were related to the fact that access to safe water and improved sanitation in the province only reaches 46 per cent and 22 per cent of the population respectively. About 44 per cent of the households practice open defecation and proper handwashing still a challenge; only half (54 per cent) of households have hand washing facilities. Heavy rains in the region significantly contaminated the open water sources during the period. Furthermore, it was evident that there was poor case detection, confirmation and management abilities. Also the laboratory capacity was limited to diagnose cholera as well as dia other diarrheal diseases at district and province level.



The widespread number of cholera cases and other acute diarrhoea represented a huge challenge for the health authorities with its limited capacity of human resource and infrastructure. Hence a request letter was sent to the partners to support the response.

An immediate and effective response was required to break the chain of transmission and prevent an escalation of the situation. If this outbreak was not immediately responded to, and with the fact that the attack rate for cholera varies from 0.1 to 5 per cent and given that the total population of Tete municipality, Moatize and Mutarara districts is 835,518 (estimated for 2015), between 836 and 41,776 people were predicted to be affected and 20 per cent of those affected individuals with watery diarrhoea (167 and 8,355).

II. FOCUS AREAS AND PRIORITIZATION

Although several districts have reported cases of acute water diarrheal, the priority intervention for this grant was in Tete city, Moatize and Mutarara where cholera was confirmed by laboratory tests. Tete city was the most affected and therefore received the majority of resources. Heavy intervention in Tete city was strategic for stopping further spread to the neighbouring provinces and countries due to its geographic location and rapid economic growth (triggered by coal mine industry) which attracted migrant workers.

The Cholera CERF proposal was based on the assessments conducted by WHO and UNICEF from 21st January to 18th Feb 2015. In addition, daily reports from MoH, Health Department of Tete, Tete and Moatize municipalities and MSF on the evolution of the cholera outbreak were also used to update and shape the proposal.

In Tete city alone, over 534 cases of cholera were reported in one week (from 08/02/2015 to 16/02/2015), while in the neighboring district of Moatize were reported 568 cases in three weeks. As of 22nd of February 2015, 1,619 cases and 20 deaths were reported (CFR 1.4 per cent) in Tete province. The high CFR of 1.4 per cent reported in the two districts exceeded the CFR reported over the last six years (2010 to 2015) where the CFR of < 1 per cent was recorded. The CFR for this (2015) outbreak in Tete province was the highest the country had in the last six years yet the outbreak was at its initial stage. In total, 3.593 cases and 22 deaths were reported (CFR 0.6 per cent), Tete city with 2,311 cases was the most affected in the province followed by Moatize with 792 cases reported and Mutarara with 489 cases reported.

The CERF proposal focused on the needs in the Cholera affected districts of Tete province and based on the assessments carried out, the HCT decided to assign the response within two clusters, Health and Wash. The Health and Wash cluster prioritized the people affected by cholera and those families at risk of contracting cholera because of living in the hot spots areas from where cholera cases have been reported. Approximately 42,000 people were at high risk in the three districts of Tete city, Moatize and Mutarara.

During the humanitarian assistance to the current outbreak, key gaps were identified in Tete province namely (a) inadequate water supply, sanitation and hygiene; (b) poor case detection and confirmation; (c) Poor case management (inadequate treatment centres; inadequate stock of diarrheal kit; lack of trained staff; and lack of treatment guidelines); (d) inadequate communication for cholera response; (e) inadequate capacity of the laboratory to diagnose cholera and other diarrheal diseases at district and province level.

Based on the gaps identified and in order to effectively contain the cholera outbreak, the following priorities were outlined:

- Provision of tents and equipment for cholera treatment centres;
- Basic water services in the cholera affected areas of Tete Province;
- Emergency health and hygiene promotion for water treatment, proper use of sanitation facilities, hand washing with soap;
- Cholera case management;

- Early detection, reporting and referral of cholera cases.

The priorities listed above were clearly assigned to UNICEF and WHO as the UN agencies that beneficiated from the CERF application. The first three priorities were under UNICEF responsibility while the remaining were implemented by WHO.

Water, Sanitation and Hygiene (WASH) was a critical initial response in any cholera emergency where the majority of affected people and their families are living in peri-urban and rural unserved areas in terms of availability of drinkable water and sanitation services. The majority of neighborhoods responsible for cholera cases in Tete city and Moatize were reported in areas where the drinking water was collected from rivers or other unsafe sources. For this reason, from the outset, provisions needed to provide safe drinking water and adequate sanitation to meet the minimum requirements for cooking, drinking, and bathing.

The health sector was key on supporting the response by providing medicines and other medical supplies, providing tents for the construction and furnishing of the treatment centres. The deployment of health workers to support case management, helped the districts to strengthen health information management systems to monitor the outbreak and institute appropriate interventions.

Coordinated social mobilization and behavior change communication was also key to ensure the adherence of the population to the desired practices to avoid further spread of the outbreak.

III. CERF PROCESS

The cholera outbreak was unexpected and not included as one of the possible scenarios of the Contingency Plan for 2014-2015. For this reason no funds were allocated by the Government for the response, nor were partners prepared for a cholera response. However, with little available resources, health and WASH partners were working together to support the Government efforts to respond to the cholera situation since the onset of the emergency.

The deterioration of the cholera outbreak in Tete Province triggered the CERF request because of the urgent need to respond to the outbreak to prevent further spread and escalation of the situation to other districts and beyond Mozambique.

During the preparation of the CERF grant, a prioritization of activities and projects were carried out through a consultative and participatory process by the Health and WASH clusters in consultation with their respective members and government counterparts at both provincial and national level; as well as with the rest of the HCT. The prioritization considered the following:

- The findings of the assessments conducted by WHO and UNICEF;
- Reports from local authorities in affect districts;
- Expert understanding of the evolution of cholera epidemics;
- The request by Government to the health and WASH clusters for support;
- The spread of the disease to neighbouring Malawi, where 39 cases – all linked to the Tete outbreak – have been recorded to date.

These consultations and factors indicated the urgent need to respond in the sectors of WASH and health – both of which are considered the critical sectors in a cholera response and must work in coordination. Therefore the WASH cluster lead (UNICEF) and the health cluster lead (WHO), together with cluster partners, worked in close coordination to ensure that WASH activities and health activities effectively bring the outbreak under control. There was a clear division of labour in responding the cholera epidemics, based on comparative advantage and agency mandates. Each of the UN agencies had NGO partners identified for implementation of various activities.

The criteria considered for the development of the CERF proposal were a) the immediate life-saving needs of the people in the cholera-affected districts; b) response gaps; c) the number of people affected; d) mortality rates; e) potential of the epidemic to spread; and f) funding available within the various agencies to support the response to the outbreak. Another factor considered was the limited capacity of local health authorities. Two UN agency proposals were submitted within the CERF application: one proposal submitted by WHO and focused on health; and a second submitted by UNICEF which includes health, WASH and social mobilisation/communication components.

The Health, Social Mobilisation and WASH Strategy were developed jointly by the Health and WASH clusters in consultation with the respective government sectors. This strategy was based on the priorities and gaps in the response to the cholera outbreaks, as identified by the health and WASH clusters'

CERF funds were used to rapidly contain the outbreak in Tete Province, reducing deaths by ensuring prompt access to treatment and control the spread of the disease by providing safe water, proper sanitation and health education for improved hygiene and safe food

handling practices by the community. The provision of safe water and sanitation is a formidable challenge but remains the critical factor in reducing the impact of cholera.

Gender considerations were reflected in all elements of this response, which was guided by National Cholera Response plan and by Global WASH cluster guidelines and SPHERE standards on gender-sensitive response. As women and girls are the primary household water managers, their preferences, use and safety are paramount and will be taken in consideration in the training and recruitment of activists. Gender disaggregated data was collected by DPS in terms of cholera cases.

IV. CERF RESULTS AND ADDED VALUE

TABLE 4: AFFECTED INDIVIDUALS AND REACHED DIRECT BENEFICIARIES BY SECTOR[1]

Total number of individuals affected by the crisis: 835,518

Cluster/Sector	Female			Male			Total		
	Girls (below 18)	Women (above 18)	Total	Boys (below 18)	Men (above 18)	Total	Children (below 18)	Adults (above 18)	Total
Health	4,303	2,445	6,748	4,237	2,787	7,024	8,540	5,232	13,772
WASH	42,490	36,195	78,685	42,037	37,278	79,315	83,740	74,260	158,000

[1] *Best estimate of the number of individuals (girls, women, boys, and men) directly supported through CERF funding by cluster/sector.*

BENEFICIARY ESTIMATION

Funds were used to support cholera response in Tete province where the population at risk of getting Cholera was estimated at 835,518 people. The primary beneficiaries were patients with cholera or acute watery diarrhoea and families at risk for cholera who received preventive interventions such as water supply, water purification solution and key best practice messages. During the intervention at least 171,772 people benefited from CERF of which 3,593 patients admitted for cholera, 10,179 patients with acute diarrhoea and 158,000 people at risk of getting the disease (39,500 families). Because of parallel interventions many of which happened in the same communities, it is possible that the same families received multiple services such as water, CERTEZA, and preventive messaging. These families have not been counted more than once but are assumed to be within the 158, 000 beneficiaries.

TABLE 5: TOTAL DIRECT BENEFICIARIES REACHED THROUGH CERF FUNDING[2]

	Children (below 18)	Adults (above 18)	Total
Female	46,108	39,407	85,515
Male	45,885	40,372	86,257
Total individuals (Female and male)	91,993	79,779	171,772

[2] *Best estimate of the total number of individuals (girls, women, boys, and men) directly supported through CERF funding This should, as best possible, exclude significant overlaps and double counting between the sectors.*

CERF RESULTS

The cholera response in Tete province was led by the Provincial Directorate of Health with support from the cabinet of the Governor of Tete, Public Work Provincial Directorate (responsible for Coordination and Oversight of WASH), Municipalities and partners. The most active partners in cholera response were UNICEF, WHO, MSF, World Vision, The Red Cross, FHI 360, PSI, CHASSS –SMT, ICRH. Local private sector including mining companies have also been involved on the response.

The response actions comprised of several areas of intervention relevant to cholera response of which this grant supported:

- Coordination and technical support: reactivation of multi-sectorial committees and development of response plan;
- Case management: (a) Setup of cholera treatment centres (CTC) – Tents and cholera beds; (b) procurement and supply of medicines (oral rehydration salts and Ringer lactate) and biosafety equipment;
- Water and sanitation: Water trucking and support for point-of-use treatment of drinking water with water purification solution known as *Certeza*; and use of latrines;;
- Social mobilization: (a) training of health workers and community volunteers, community leaders, religious leader, traditional lealers and teachers and media; (b) health and hygiene promotion at household level, focusing on the promotion of hand-washing with soap.

In the area of coordination and technical support the health cluster has used its coordination mechanism to mobilize all sectors to provide a coordinated support to government and partners.

In the area of case management, UNICEF, WHO and MSF played critical role which saved lives. In total three functional cholera treatment centres with 330 beds were stablished in Tete province and supplied with tents, medicines and equipment supported by this grant. This intervention ensured quality intervention in treatment centres. Although the province reported 22 deaths due to cholera, the average case fatality rate of the province was 0.6 per cent, and in Tete city 0.5 per cent. This case fatality rate is below 1 per cent, the maximum acceptable according to WHO guidelines.

During the outbreak were no reports of stock out of Ringer lactate and Oral rehydration salts (ORS).

In the area of WASH UNICEF provided technical and financial support to DPOPH-Tete for planning, implementation and monitoring of WASH interventions ensuring their integration into provincial multisectoral cholera response plan. As such, UNICEF provided water emergency storage tanks (water bladders) for provision, through water trucking, of safe drinking water in the most cholera affected neighborhoods. Furthermore a total of 47,160 bottles of CERTEZA - a water chlorine purifying and disinfecting solution - were provided for 'point-of-use' water treatment, of which 25,000 bottles were bought with CERF funds. The CERTEZA procured with CERF funds was distributed to 8,333 families to cover 3 months. The families were also provided with basic training in how to use the product and hygiene promotion activities.

In the area of Social Mobilization, UNICEF and WHO supported the development and implementation of cholera multisectoral response communication and social mobilization plans in Tete province, with tailored activities designed for Tete city, Moatize and Mutarara districts. UNICEF has also supported the Ministry of Health to develop an integrated multisectorial communication campaign of Cholera and Diarrhea prevention considering that cholera outbreaks reached two of the main cities of Mozambique, Beira and Nampula, and the provinces of Cabo Delgado, Zambezia and Niassa.

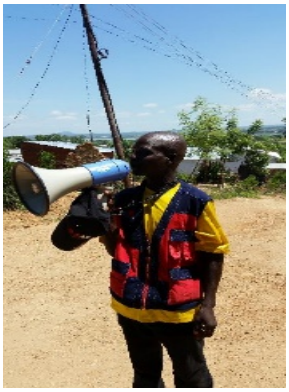
Through field missions and field based communication and social mobilization consultant in Tete, UNICEF provided technical and financial assistance in the following main areas:

- Advocacy at provincial and municipal level has been a crucial factor of success to ensure high level involvement of key political, economic, social and community actors in the first month of the epidemic.
- Implementation of decentralized interpersonal communication interventions through home visits by community volunteers and group discussions at community level. Approximately 39,500 family visits have been conducted by more than 120 trained activists (this number is

calculated using the monitoring sheets that are completed by the DPS activistas who visited the houses)

- 218 education sessions have been organized at school level with more than 230,000 students reached with preventive messages.

- In Tete province more than 22,000 people have been mobilized through 48 community sessions organized by two Institute of Social Communication multimedia units. In each education sessions, videos on cholera prevention in local languages were broadcasted and debated with the community.
- Engagement and training of religious, community and local leaders to support the spread of preventive messages have been supported by UNICEF in Tete city also
- Support 60 mass media activities through provincial and community radio, community programs and 48 community theatre sessions;



- In order to strengthen the communication and social mobilization activities, UNICEF supplied partners in the province with 30 megaphones, more than 5,000 hygiene promotion flipcharts for health activists and 15,000 leaflets and posters for communities with the focus on below key messages:
    - Water treatment with bleach (Certeza) or boiling before drinking
    - Use and cleaning of latrines or safety disposal of feces.
    - Hand washing with soap and water at critical times;
    - Early detection and referral of cholera suspected cases at community level.

CERF's ADDED VALUE

CERF funds were effective for supporting the government of Tete in its response to the outbreak although delays in disbursement of CERF funds influenced the initial response. This led to larger participation from NGOs and private sector. UNICEF advocacy and technical assistance have been key in strengthening the response. UNICEF managed to provide a regular support to partners through the constant presence of UNICEF provincial coordinator and the social mobilization consultant in Tete in all coordination meetings. Technical missions from UNICEF Maputo-based Health, WASH and Communication for development specialists have also contributed to adjust the interventions as a result of direct monitoring.

Another added value of CERF funds was the knowledge and ability acquired by health staff on cholera case management and strengthening of lab diagnostic capacity, which will be used also in the next similar events. The experience and lessons learned on the community surveillance focal persons training and involvement in active case search, early detection and referral, that was implemented using funds provided by this CER project, is something that will also be used in the future for any other case of outbreak in these districts, but will also be replicated to other districts countrywide, using other funding opportunities.

The cholera outbreak was controlled in 8 weeks and the transmission was successfully interrupted around the three affected districts (Moatize, Tete city and Mutarara). Outbreaks of acute diarrhoea from other causes were also detected on time and controlled in other districts.

a) Did CERF funds lead to a fast delivery of assistance to beneficiaries?
YES ☒ PARTIALLY ☐ NO ☐

Despite delays in the allocation of CERF funds, CERF funds were crucial to augment government's initial response to the cholera outbreak. Furthermore, CERF funds allowed fast procurement of locally available emergency supplies such as water purification solution, water trucking and communications material to replenish pre-positioned commodities. Other commodities were also crucial but assistance was quicker using the pre-prepositioned materials such as tents for cholera treatment centres, medicines and equipment.

b) Did CERF funds help respond to time critical needs[1]?
YES ☒ PARTIALLY ☐ NO ☐

Yes. Water trucking, water purification solution, payment of fuel and allowance for community volunteer was timely and crucial for outbreak control.

c) Did CERF funds help improve resource mobilization from other sources?
YES ☒ PARTIALLY ☐ NO ☐

Yes. There was a movement around cholera response in Tete, which lead to the involvement of local partners, municipalities and private sector including mining companies. UNICEF's high level advocacy with provincial and municipal authorities has been a key success factor in mobilizing other partnerships.

d) Did CERF improve coordination amongst the humanitarian community?
YES ☒ PARTIALLY ☐ NO ☐

Yes. Although the cluster coordination was not so strong before and during the emergency, CERF was instrumental to bring partners together on addressing the outbreak needs. There were meetings in Maputo and Tete province including lesson learned meetings.

V. LESSONS LEARNED

TABLE 6: OBSERVATIONS FOR THE CERF SECRETARIAT

Lessons learned	Suggestion for follow-up/improvement	Responsible entity
Pre-position of key emergency commodities is key to allowing a timely response and to off-set any delays in CERF allocation.	Ensure that CERF is made available to HCT within 72 hours after the request.	CERF secretariat
Over emphasis on cholera led to neglect of other areas of humanitarian response (sexual and reproductive health, HIV, psychosocial sport)	If CERF funds are to be used for humanitarian response during natural disaster or disease outbreak, it need to consider broad range of needs of the affected people and different aspects of health need to be taken care of in holistic manner.	CERF secretariat

[1] Time-critical response refers to necessary, rapid and time-limited actions and resources required to minimize additional loss of lives and damage to social and economic assets (e.g. emergency vaccination campaigns, locust control, etc.).

TABLE 7: OBSERVATIONS FOR COUNTRY TEAMS		
Lessons learned	Suggestion for follow-up/improvement	Responsible entity
Delays in cluster coordination processes during preparedness and response stage. WHO is the cluster lead for Health but during the last cholera outbreak the representative and other relevant officials were out of the country	Review options for improving cluster coordination in case where gaps may exist – business continuity plan for cluster coordination	HCT
Inadequate translation of MoH national cholera prevention and response plan into provincial response plans/lack of plan at province and district level for cholera	Improve planning process for cholera preparedness and response planning and strengthen planning process at province level	HCT/cluster leads
Prepositioned medicines and equipment by UNICEF and MSF was critical to save lives	As part of the preparedness MoH should ensure adequate quantification and preposition of medicines and equipment in risk areas	HCT/cluster leads/MoH
Inadequate/lack of disease surveillance and monitoring at community level and lack of real time monitoring system of cholera cases to support cholera response efforts	During the planning process at province level set up data management system in case of emergency or disease outbreak	HCT/cluster leads/MoH
Inadequate laboratory capacity at facility and district level for cholera case confirmation during outbreak	MoH should adopt and scale up cholera rapid diagnostic test as part for preparedness stage.	MoH
During the outbreak there were an attempts to apply for cholera vaccine stockpile but was not approved.	Application for cholera vaccine should be considered in preparedness stage and target high risk and vulnerable population; Preparedness actions, including prevention should be taken prior to an emergency.	MoH
During the outbreak in two setting the terrain was not adequate for conventional latrines (one setting was rocky and another with high underground water table), which made impossible to intervene during outbreak with available resource.	Partners should work with local municipalities to promote latrines adequate for these settings.	HCT/cluster leads
Community action including work with religions and media is critical to ensure adequate prevention and response	Partners should strengthen capacity of the communities for cholera preparedness and response.	HCT/cluster leads
Cholera is endemic in northern provinces of	There are three strategic documents aproved in the	Cluster leads/MoH

the country and requires approach that will ensure its control	goverment: Plano nacional integrado para o acesso a água; Plano integrado de saneamento and Estratégia nacional de promoção de saúde. Partners should advocate for the implementation of the strategies	

VI. PROJECT RESULTS

TABLE 8: PROJECT RESULTS

CERF project information

1. Agency:	UNICEF	5. CERF grant period:	31.01.15 – 30.07.15
2. CERF project code:	15-RR-CEF-023	6. Status of CERF grant:	☐ Ongoing
3. Cluster/Sector:	Health		☒ Concluded
4. Project title:	Cholera outbreak response - Tete Province		

7.Funding			
	a. Total project budget:	US$ 1,500,000	d. CERF funds forwarded to implementing partners:
	b. Total funding received for the project:	US$ 301,217	▪ *NGO partners and Red Cross/Crescent:*
	c. Amount received from CERF:	US$ 301,217	▪ *Government Partners:* US$ 8,313

Beneficiaries

8a. Total number (planned and actually reached) of individuals (girls, boys, women and men) directly through CERF funding (provide a breakdown by sex and age).

Direct Beneficiaries	*Planned*			*Reached*		
	Female	*Male*	*Total*	*Female*	*Male*	*Total*
Children (below 18)	11,668	11,588	23,256	46,108	45,885	91,993
Adults (above 18)	9,399	9,121	18,520	39,407	40,372	79,779
Total	21,067	20,709	41,776	85,515	86,257	171,772

8b. Beneficiary Profile

Category	*Number of people (Planned)*	*Number of people (Reached)*
Refugees		
IDPs		
Host population		
Other affected people	41,776	171,772
Total (same as in 8a)	41,776	171,772

In case of significant discrepancy between planned and reached beneficiaries, either the total numbers or the age, sex or category distribution, please describe reasons:	The grant reached more beneficiaries than predicted. This was due to social mobilization activities. Initially activists trained were expected to work with the same family beneficiaries. However, has the demand for social mobilization increased, the activists increased they out-reach which resulted in increased number of social mobilization and beneficiaries reached To increase the effectiveness of communication activities local volunteers were trained to provide interpersonal communication through home visits which increased significantly the number of beneficiaries.

CERF Result Framework			
9. Project objective	To provide immediate and life-saving assistance to approximately 42,000 people in the highest risk areas of Tete province, through strengthening case management in Cholera Treatment Centers with tents and essential biosafety equipment and medicines, providing emergency water trucking operations, distributing water treatments products at household level and strengthening the social mobilization activities working at community level.		
10. Outcome statement	By the end of April 2015, approximately 42,000 people (10,000 families) living in the most at risk areas of cholera contamination in Tete city, Moatize and Mutarara are supported with access to emergency health and water facilities and hygiene promotion interventions.		
11. Outputs			
Output 1	Procurement of tents and equipment for two cholera treatment centres		
Output 1 Indicators	Description	Target	Reached
Indicator 1.1	Cholera treatment centres are established and functional	2	One treatment centre was setup and equipped in Tete city,: 20 tents procured of which 11 supplied; 48 cholera beds of which 44 supplied; 300,000 ORS procured of which 7,000 supplied; 21,000 Ringer Lactate of which 5,000 supplied; 20,000 IV cannula; biosafety materials procured and supplied.
Indicator 1.2	Cholera case fatality rate	<1%	0.6
Indicator 1.3	Nr of patients (severe cases) treated with Ringer Lactate	2,600	3,593
Indicator 1.4	Nr of patients treated with ORS	8,500	10,179
Output 1 Activities	Description	Implemented by (Planned)	Implemented by (Actual)
Activity 1.1	Procure 30 tents, 160 cholera beds; essential	UNICEF	UNICEF

	medicines for cholera treatment for 8.500 patients (8.500 with ORS and 2.600 will also receive ringer lactate) and biosafety supplies and setup treatment centres		
Activity 1.2	Setup and equip treatment centres in Tete and Mutarara	DPS and MSF	DPS and MSF -
Output 2	Provision of emergency water trucking operations to 10,000 families in the most cholera affected areas of Tete province.		
Output 2 Indicators	Description	Target	Reached
Indicator 2.1	Families in the five high risk areas of Tete city and Moatize receive daily water supplies	10,000	9,500
Indicator 2.2	10,000 families have received 'Certeza' to treat water at household level for a period of three months	10,000	8,333
Output 2 Activities	Description	Implemented by (Planned)	Implemented by (Actual)
Activity 2.1	Provision of fuel costs and DSAs for emergency water supplies in the areas at higher risk of cholera contamination in Tete city, Mutarara and Moatize	DPOPH	DPOPH; FIPAG, Municipalities
Activity 2.2	Procure 25,000 additional packets of Certeza to be distributed by activists at household level (2 bottles for 10,000 families once a month) and in CTCs and public spaces such as markets and water points (5,000 packets).	DPOPH and DPS	DPOPH, DPS
Output 3	**Provision of emergency health and hygiene promotion for water treatment, proper use of sanitation facilities, hand washing with soap and health seeking behaviours for suspected cholera cases**		
Output 3 Indicators	Description	Target	Reached
Indicator 3.1	Cholera prevention sessions are conducted in all risk areas and at least 10,000 families living in high risk areas receive a bottle of Certeza for water treatment purposes	10,000	39,500 families living in high risk areas visited by 120 trained activists and reached with multimedia preventive messages for three months.

Indicator 3.2	At least 50,000 people are mobilised through awareness sessions organised by ICS	50,000	22,000 people mobilized through 48 community sessions; 30 megaphones, more than 5,000 hygiene promotion flipcharts for health activists and 15,000 leaflets used by activists and distributed to families
Indicator 3.3	At least 120 activists are equipped with C4D tools and IEC materials to distribute to families at risk of contracting cholera and are trained on interpersonal communication skills and lifesaving messages	120	120 activists trained, supported and equipped
Output 3 Activities	Description	Implemented by (Planned)	Implemented by (Actual)
Activity 3.1	Through family visits and community sessions, distribute to at least 10,000 families living in high risk areas a bottle of Certeza per month	DPS	DPS; DPOPH; ICS
Activity 3.2	Organise daily Behaviour Change Communication (BCC) sessions with community video sessions and debates on key cholera preventive behaviours by two multimedia units	ICS	ICS
Activity 3.3	Deploy C4D tools and IEC materials to implementing partners and train 120 activists on interpersonal communication skills and C4D messaging on cholera prevention, identification of cases and referrals.	DPS	DPS

12. Please provide here additional information on project's outcomes and in case of any significant discrepancy between planned and actual outcomes, outputs and activities, please describe reasons:

The three outcome of this project were to ensure that at least 42,000 people (10,000 families) living in the most at risk areas of cholera contamination in Tete city, Moatize and Mutarara are supported with access to emergency health and water facilities and hygiene promotion interventions. These outcomes were achieved and the transmission of cholera was interrupted within 8 weeks. However, due to additional support received from others partners the project contributed to setup one treatment centre instead of two as planned. Medicines took longer to procure offshore and when arrived the number of case were on decline due to strong prevention interventions. The medicines are store and will be used in case of cholera outbreak during the upcoming rain season.

For hygiene proportion, the house to house visits (indicator 3.1) was required to focus on densely populated communities and, as a result of the extended emergency period the number of beneficiaries reached was higher than planned. In addition, the ICS Multimedia sessions (indicator 3.2) were requested to prioritize in high risk neighbourhoods, with a focus on public spaces such as markets, schools and squares.

13. Please describe how accountability to affected populations (AAP) has been ensured during project design, implementation and monitoring:

UNICEF works closely with government departments responsible for implementation. In addition, UNICEF field teams working closely with front-line providers and non-governmental organizations conducted regular site visits to assess performance and gaps. These engagement with providers and beneficiaries have informed the UNICEF and partners alike on the priorities needed

to address the outbreak.	
14. Evaluation: Has this project been evaluated or is an evaluation pending?	EVALUATION CARRIED OUT ☐
As part of the implementation process, extensive data collection and review formed central elements of the overall design. This include process indicators around case and supplies and ultimately impact indicators on the case fatality rate and conclusion of the outbreak. Extensive post outbreak reviews led by governors of the concerned provinces have highlight gaps in the response and proposed critical actions going forward. Within the ambit of improved preparedness and response efforts, UNICEF is working closely with government to action identified actions for improved preparedness and response.	EVALUATION PENDING ☐ NO EVALUATION PLANNED ☒

TABLE 8: PROJECT RESULTS

CERF project information

1. Agency:	WHO	5. CERF grant period:	11.03.15 – 10.09.15
2. CERF project code:	15-RR-WHO-007	6. Status of CERF grant:	☐ Ongoing
3. Cluster/Sector:	Health		☒ Concluded
4. Project title:	Emergency health response to outbreak of cholera in Tete City, Moatize and Mutarara districts in Tete province		

7.Funding			
	a. Total project budget:	US$ 3,500,000	d. CERF funds forwarded to implementing partners:
	b. Total funding received for the project:	US$ 447,640	▪ *NGO partners and Red Cross/Crescent:*
	c. Amount received from CERF:	US$ 447,640	▪ *Government Partners:* US$ 198,642

Beneficiaries

8a. Total number (planned and actually reached) of individuals (girls, boys, women and men) directly through CERF funding (provide a breakdown by sex and age).

Direct Beneficiaries	*Planned*			*Reached*		
	Female	*Male*	*Total*	*Female*	*Male*	*Total*
Children (below 18)	11,668	11,588	23,256	764	647	1,411
Adults (above 18)	9,399	9,121	18,520	1,095	1,088	2,183
Total	21,069	20,709	41,776	1,859	1,734	3,593

8b. Beneficiary Profile

Category	*Number of people (Planned)*	*Number of people (Reached)*
Refugees		
IDPs		
Host population		
Other affected people	41,776	3,594
Total (same as in 8a)	41,776	3,594

In case of significant discrepancy between planned and reached beneficiaries, either the total numbers or the age, sex or category distribution, please describe reasons:	Please, note that while 41,776 people were to be reached by CERF project through all outbreak control activities (WASH, Communication & social Mobilization and Case Management/Surveillance), WHO CERF proposal was specifically on WHO core function in emergency, namely disease surveillance (including data management and lab confirmation) and case management. These activities are strictly related to those identified cholera cases, that is, people who present symptoms of cholera. All other people that do not have symptoms, even though infected, or present with minus to

	moderate symptoms and do not go to health facilities, are not captured by surveillance system. Therefore, the difference noted here between the expected 41,776 to be reached by the whole CERF project, and the 3,594 captured by surveillance system.

CERF Result Framework			
9. Project objective	Control the outbreak of cholera in Cidade De Tete and Moatize district and avoid the spread of the disease to other districts		
10. Outcome statement	Outbreak of cholera in Tete city, Mutarara and Moatize district under control		
11. Outputs			
Output 1	41,776 people effectively and promptly management for cholera in order to reduce morbidity and mortality due to cholera in Cidade de Tete and Moatize districts		
Output 1 Indicators	Description	Target	Reached
Indicator 1.1	Case Fatality Rate reduced to acceptable level	< 1%	At the time of application for CERF funds the CFR was > 1%, at 1.4% and at the end of the epidemic it had reduced to less < 1%, at 0.6%
Indicator 1.2	Number of people directly benefiting from the cholera treatment kits	At least 5,000	A total of 3,594 people were treated for cholera. This represents a reduction in 57% in the number of expected cases of cholera (8,355) if no control measures were implemented, which is a significant achievement. Further, the 3,594 people reached directly reflect those who presented in the CTC for treatment. However, indirectly the remaining 37,822 expected to fall sick to cholera if no control measure, including treatment, were implemented, have also benefited from the project. Therefore, number of people reached directly and indirectly was of 41,776.
Output 1 Activities	Description	Implemented by (Planned)	Implemented by (Actual)
Activity 1.1	Orientation of 180 health workers on cholera case management; (60 health workers per district) noting that each health worker works 8 hrs per shift.	MoH/DPS Tete	MoH/DPS Tete – conducted training of 218 health workers on disease surveillance and cholera case management, all affected and at high risk districts in Tete province. This has improved case detection and quality of treatment in the CTCs, contributing to leading to reduced CFR, and indirectly contributing to reduction in the number of cases through treatment of cases – symptomatic carriers – that reported to health facilities, that otherwise would be shading the vibrio choleric and spread

			infection in communities.
Activity 1.2	Procure 8 cholera kit	WHO	WHO – has procured 10 cholera kits. These kits were used to treat approximately 1,000 severe cases and 4,000 of middle cases of cholera. It is noted that approximately 3,000 cases required IV treatment and given the magnitude of the epidemic and its potential to spread to more districts, WHO was requested to provide additional IV giving sets. In this context, it was procured 9,000 IV cannulas of different sizes (18, 20, 22, 24 and 26)
Activity 1.3	Procure of 1 IHEK Kit	WHO	WHO – has also procured 2 IHEK kits, containing medicines to treat Cholera patients and other medical conditions at the CTC.
Activity 1.4	Procure 1,100 sets of Personal Protective equipment	WHO	WHO – has procured and delivered to Tete Personal Protective Equipment composed of gloves (9,500), disposable gowns (4,600), boots (200) and 6,000 kgs of hypochlorite (not equipment itself, but used for disinfection of equipment, floor, bodies, etc, thus protecting workers and population from infections. WHO also bought 110 cans of different sizes to conserve water for ORT, prepare solution of hypochlorite for disinfection of utensils used in the CTC (cholera treatment centre) and 10 pump spray, all within the staff and environment protective framework.
Activity 1.5	Delivery of the supplies (cholera kits, IEHK kits and protective sets)	WHO	WHO – has also delivered the above mentioned cholera kits, IEHK kits and PPEs.
Activity 1.6	Printing and distribution of 1000 cholera outbreak investigation and response hand books	WHO	WHO – has procured 500 case management protocols and 500 case and outbreak definitions to be applied in the health facilities and community level settings
Activity 1.7	Conduct supportive supervision (technical support, active case search, etc.) to cholera affected districts by MoH, WHO and DPS	MoH, WHO, DPS	WHO, DPS Tete – DPS Tete supported by WHO experts provided supportive supervision to treatment centres and conducted community visits for case search and referral in affected and non-affected communities, with support of community focal persons
Activity 1.8	Redeployment for 45 days of 30 health workers, drawn from other district to Cidade De Tete, Mutarara and Moatize districts (Per diem for staff to support case management in the CTCs). They	MoH	DPS Tete – has supported per-diem for 90 health workers redeployed to support cholera outbreak control activities in the treatment centres and cholera affected areas

	will be deployed from March to middle April 2015 in cholera affected areas, including the new areas that might be affected.		
Activity 1.9	Support operation costs directly related to the implementation of the project (daily logistic operations and active case search and referral by community health workers and surveillance focal persons)	MoH	MoH through DPS Tete supported logistic for cholera control activities, including hiring of transport means used in the outbreak settings, fuel for distribution of supplies and referral of cholera cases
Output 2	Early detection, reporting and referral of cholera cases from among 835,518 people in Tete City, Mutarara and Moatize district		
Output 2 Indicators	Description	Target	Reached
Indicator 2.1	All suspected case of cholera investigated within 24 hours	<24 hrs.	Surveillance focal points at community level have conducted active case search and referral and health education in their communities contributing this way for early case detection, early treatment and reduced case fatality rate. As a result of high community sensitization and active search by community surveillance focal persons, newly affected areas were identified in less than 24 hours.
Indicator 2.2	Completeness and timeliness of weekly IDSR reporting from health facilities to MoH increased to >90%	> 90%	Target achieved as all affected districts (100%) improved the frequency and regularity of reporting. Data received at central level was subject of analysis in the weekly coordination meetings, chaired by Deputy National Director for Public Health.
Output 2 Activities	Description	Implemented by (Planned)	Implemented by (Actual)
Activity 2.1	Print 1,000 community based surveillance tools booklets (which include field guideline (3 pages), community case definition and degree of severity with illustrations (6 pages), and reporting forms (daily, weekly and monthly) for all community health workers in the Tete province, with priority given to the three districts (Tete City, Moatize and Mutarara). It is noted that community surveillance (for early warning system) has to be conducted in all districts within the province, not only in the ones already affected by cholera, considering that there are new districts with suspected cases. This activity will be completed in the first month upon receiving funds.	WHO	WHO – produced and printed 500 cholera case definitions for community level and 500 guidelines for diarrhoea management at community level, to be used by community focal persons, which contributed to reduced case fatality rate by preventing severe dehydration at community level of many cholera affected patients

Activity 2.2	Printing of 1,000 cholera outbreak investigation and response hand books for all health facilities and surveillance focal persons, with priority given to the affected districts (Tete City, Moatize and Mutarara). This activity will be accomplished in the first month upon receiving funds.	WHO	WHO – supported MoH to develop, print and disseminate cholera outbreak investigation guidelines.
Activity 2.3	Print 500 SOPs (standard operational procedures) guidelines for collection, transport and laboratory testing of samples collected from cholera suspected patients. These will be distributed tom all health facilities in the province, with priority given to those in the three affected districts (Tete City, Moatize and Mutarara). This activity will be completed in the first month upon receiving the funds.	WHO	WHO – supported MoH though national Institute of Health (INS) to develop, print and disseminate SOP for collection and transport of samples and laboratory diagnostic of cholera.
Activity 2.4	Print health facility based and community based surveillance tools for all health facilities and community health workers (reporting forms – daily, weekly and monthly), with priority given to the three districts (Tete City, Moatize and Mutarara).	WHO	WHO made available surveillance tools for both health workers and community surveillance focal persons with signs, symptoms and standard case definition for health workers and community level focal points
Activity 2.5	Distribution of materials (community based surveillance booklets, outbreak investigation and response hand books, lab SOPs guidelines and reporting forms) to all districts in Tete province, with priority given to the three affected ones (Tete City, Moatize and Mutarara). This activity will be completed in the first month upon receiving funds.	WHO	WHO – supported development and printing of guidelines and SOPs for case definition for health workers and community volunteers, and outbreak investigation and response guidelines.
Activity 2.6	Orientate 225 community health workers (75/district) on the use of the surveillance tool	MoH	MoH/DPS Tete conducted orientation of 232 community surveillance focal persons in affected districts
Activity 2.7	Provide airtime to the surveillance focal person at MoH, provincial, district and health facility level to aid daily transmission of surveillance information	MoH	MoH/DPS Tete provided airtime to 12 emergency focal persons at provincial and district level of affected districts.
Activity 2.8	Provide rapid diagnostic tests for cholera, etc.	WHO	WHO provided cholera related lab reagents, as the RDT tests available in the local market give high percentage of false negative/positive results, according to MoH experience. Instead, the MoH

			preference was to use the lab confirmation, using the reagents and culture means, which WHO provided accordingly, considering that the objective was the same: test for confirming cholera cases.
Activity 2.9	Provide funds for transport of specimens	MoH	MoH/ DPS Tete received from WHO funds to support transport of specimen to reference labs at provincial and national levels
Activity 2.10	Procurement and prepositioning of 500 specimen collection and transport medium	WHO	WHO provided specimen collectors, transport medium and cholera related lab reagents to Tete province.

12. Please provide here additional information on project's outcomes and in case of any significant discrepancy between planned and actual outcomes, outputs and activities, please describe reasons:

The outcome of this project were to reduce morbidity and mortality by cholera amongst 41,776 people living in high risk areas for cholera in Tete City, Moatize and Mutarara districts, through early detection and effective treatment of cholera cases and control of the outbreak through interruption of transmission of disease. These outcomes were achieved and the transmission of cholera was interrupted within 8 weeks, due to treatment of cases and reduction of carriers and also, due to implementation of other control interventions at community level. While it was expected that 20 per cent (8,355) of these people living in high risk areas would develop severe diarrhoea due to cholera, and therefore targeted by the project, a total of 3,594 people were treated for cholera in the CTC, representing a reduction in 57 per cent in the number of expected cases of severe cholera, which is a significant achievement.

Further, the 3,594 people reached directly reflect those who were present in the CTC for treatment. However, indirectly, the remaining 37,822 in the high risk areas also expected to be affected if no control measure, including treatment, were implemented, have also benefited from the project. Therefore, number of people reached directly and indirectly was at least of 41,776.

13. Please describe how accountability to affected populations (AAP) has been ensured during project design, implementation and monitoring:

Accountability of affected population was ensured during the project design through integration of their representatives in the planning process in order to reflect their needs. During the implementation process, selected community focal persons were trained and provided education health materials and were allocated areas of their communities for them to conduct health education, case search and referral, chlorination of water at source level and households, distribution of certeza (water purification), and check hygiene and sanitation at household and public places. During the monitoring process, the local government at various levels, including community leaders, participated in the meetings held every morning with stakeholders and partners to discuss the evolution of cholera in different neighbourhoods of these districts and solutions under implementation or to be implemented.

14. Evaluation: Has this project been evaluated or is an evaluation pending?	EVALUATION CARRIED OUT ☐
No evaluation was planned for this project as it has been secured the presence in the field of WHO officers to provide technical support and follow up the implementation of planned activities, as well as provide supportive supervision to staff on the field. This allowed continuous monitoring of the process, with necessary corrections, adjustments and evaluation being made in real time as the activities were being implemented. For instances, after the training on case management at CTC, the expected results, in this case, the improvement in the compliance with case management protocol and reduced case fatality rate (CFR), was observed little after, and was evaluated during supportive supervision and the data analysis processes, respectively. The same with all other activities planned in this project, including the delivery of goods as cholera kits, IEHK kits, PPE, etc.	EVALUATION PENDING ☐ NO EVALUATION PLANNED ☒

ANNEX 1: CERF FUNDS DISBURSED TO IMPLEMENTING PARTNERS

CERF Project Code	Cluster/Sector	Agency	Partner Type	Total CERF Funds Transferred to Partner US$
15-RR-WHO-007	Health	WHO	GOV	$198,642
15-RR-CEF-023	Health	UNICEF	GOV	$8,313