RESIDENT / HUMANITARIAN COORDINATOR REPORT ON THE USE OF CERF FUNDS SOUTH SUDAN RAPID RESPONSE CHOLERA 2015

RESIDENT/HUMANITARIAN COORDINATOR	**Mr. Eugene Owusu**

REPORTING PROCESS AND CONSULTATION SUMMARY

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

The After Action Review meeting was conducted on 23 May 2016, facilitated by OCHA and attended by representatives of WHO and UNICEF, and the Health and Water-Sanitation-Hygiene clusters. Achievements with the use of the CERF resources were reviewed, and additional inputs generated for the lessons learned section of the report.

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 ☐

Recipient agencies and related clusters have been involved in the reporting process, including the review of successive drafts of this report, and during the After Action Review. The final report, once cleared by the CERF Secretariat, will be circulated to agencies, clusters and partners.

I. HUMANITARIAN CONTEXT

TABLE 1: EMERGENCY ALLOCATION OVERVIEW (US$)		
Total amount required for the humanitarian response: 6,888,914		
Breakdown of total response funding received by source	**Source**	**Amount**
	CERF	2,637,025
	COUNTRY-BASED POOL FUND (*if applicable*)	752,433
	OTHER (bilateral/multilateral)	1,033,333
	TOTAL	**4,422,791**

TABLE 2: CERF EMERGENCY FUNDING BY ALLOCATION AND PROJECT (US$)			
Allocation 1 – date of official submission: 20 July 2015			
Agency	**Project code**	**Cluster/Sector**	**Amount**
UNICEF	15-RR-CEF-078	Water, Sanitation and Hygiene	1,870,338
WHO	15-RR-WHO-028	Health	766,687
TOTAL			2,637,025

TABLE 3: BREAKDOWN OF CERF FUNDS BY TYPE OF IMPLEMENTATION MODALITY (US$)	
Type of implementation modality	**Amount**
Direct UN agencies/IOM implementation	1,913,364
Funds forwarded to NGOs for implementation	686,858
Funds forwarded to government partners	36,803
TOTAL	2,637,025

HUMANITARIAN NEEDS

In June 2015, nineteen months following the outbreak of conflict in December 2013, humanitarian needs continued to increase in South Sudan. Some 4.6 million people faced severe food insecurity, the highest number since the start of the conflict. More than 1.54 million people remained displaced in Protection of Civilian (PoC) and non-PoC displacement sites primarily in Jonglei, Unity, and Upper Nile states. An estimated 248,000 children were suffering from severe acute malnutrition (SAM), many of whom lived in areas where nutrition services had been destroyed due to fighting. Malnourished children were more susceptible to disease, including cholera. The on-going conflict had negatively affected the WASH sector, with over 40 per cent of WASH facilities estimated to have been destroyed across South Sudan. The country also faced a rapidly escalating economic crisis, which compounded the impact of the conflict and reduced vulnerable people's access to basic commodities, including food and safe water, particularly in urban areas. The consequent fuel shortage had reduced the amount of safe water being delivered by Juba Urban Water Corporation and other service providers under the Juba City Council.

Within this massive humanitarian emergency, a cholera outbreak was declared on 23 June 2015, putting already vulnerable populations at further risk of morbidity and mortality. The initial cholera cases were traced back to 18 May 2015 in the UN House Protection of Civilians (PoC) site in Juba. As of 29 July 2015, some 1,429 cholera cases, including 42 deaths [case fatality rate (CFR) 2.94%], had been reported

in Juba and Bor Counties in Central Equatoria and Jonglei States respectively. In Juba County, 1,314 cases, including 41 deaths (CFR 3.12%), had been reported from seven Payams. In Bor, 115 cases, including one death (CFR 0.87%), had been reported from Malou in Makuach Payam and other areas within the County.

The key risk factors identified as contributing to the 2015 cholera outbreak included: residing in a crowded IDP camp with poor sanitation and hygiene; using untreated water from the water tankers; lack of household chlorination of drinking water; eating food from unregulated roadside food vendors or makeshift markets; poor and irregular disposal of solid waste in market places and household collection points; and open defecation/poor latrine use.

To manage the outbreak, the National Cholera Task Force (NCT) was re-activated under the auspices of the Ministry of Health (MoH), supported by UNICEF and WHO. However, the Ministry of Health had limited capacity to manage the rapidly evolving cholera outbreak, and existing partner-supported cholera treatment centres, community mobilization activities, enhanced surveillance and logistics were inadequate.

Cholera is an acute diarrhoeal disease that can kill within hours if left untreated. At the time of CERF application, the prevailing case fatality rate (CFR) was 2.94 per cent, nearly three times the emergency threshold (1 per cent). The high CFR was considered indicative of late presentation of people at health facilities and compromised quality of care, and highlighted the urgent need for a rapid and well-coordinated response.

Based on the deteriorating humanitarian situation and the impact of the economic downturn on access to safe water, partners carried out scenario development to forecast how many people may be affected by the cholera outbreak in the next four months. With a 1 per cent attack rate, it was estimated that up to 10,506 cases were projected in Juba, with 5 per cent needing admission and intense treatment. At the then prevailing CFR, more than 3,600 deaths could have occurred if prevention and control interventions were not strengthened urgently.

As no funds were available, the HCT agreed to request a CERF grant to support the management of the cholera outbreak.

II. FOCUS AREAS AND PRIORITIZATION

The humanitarian response to cholera was implemented under the overarching rubric of the National Cholera Response Plan and with guidance from the National Cholera Task Force and Humanitarian Country Team. Coordination meetings (including of the WASH and Health Clusters), technical working groups, and other coordination mechanisms were in place to ensure the minimum loss of life and containment of cholera cases.

The strategic objective of the cholera response was to reduce morbidity and mortality associated with cholera and prevent its spread through effective response and control mechanisms in cholera affected and high risk areas of South Sudan. Juba and Bor Counties were prioritized for action, as they were most affected by cholera cases, with 15 alerts responded to within 48hrs in the Juba and Bor PoCs. In addition, following alerts in Warrap, Northern Bahr El Ghazal and Kajo Keji County in Central Equatoria, which were linked to cases from Juba, epidemiologists and rapid response teams were deployed to help control the spread of the outbreak.

The priorities identified within the national response framework to be funded by this CERF Rapid Response grant included: procurement of life saving supplies and medicines for case management; emergency support supervision; deployment of qualified staff (epidemiologists and public health officers); and provision of life-saving WASH supplies. To maximize the use of limited resources, aid agencies prioritized activities that maximized impact and leveraged both human and financial resources to avoid duplication of activities.

The CERF proposal focused on the following: (1) Strengthening the technical aspects of the overall response to the outbreak at central and field level through Cholera Command and Control Centre (C4) and the national and state emergency multi-sectoral task force; (2) Reducing morbidity and mortality by ensuring effective case management for affected patients, timely access to health care services and safe isolation and infection control practices at health facility level; (3) Ensuring adequate medical and WASH supplies were distributed in all high risk areas; (4) Preventing and reducing the spread of cholera and limiting illness and death by early prevention, detection and treatment at community level; and (5) Improving case management and infection control at health facilities and treatment sites.

III. CERF PROCESS

Following the declaration and rapid spread of the cholera outbreak, the Ministry of Health (MoH) re-activated the National Cholera Task Force to coordinate the response. The National Cholera Taskforce was supported by five sub committees – Epidemiology/Surveillance, Case Management, Logistics/Coordination, WASH, and Social Mobilization. WHO led three of the sub-committees (Surveillance, Case Management, and Logistics/Coordination), along with the Ministry of Health, while UNICEF led the sub-committees on WASH and Social Mobilization. The national task force and technical working groups met regularly, with the responsibility of coordinating the response activities, identifying partners to fill gaps, providing technical support to the Health and WASH authorities and partners, and managing information through sharing daily situation reports and regular press.

In light of the urgent need to scale-up the response and stem the outbreak, in June 2015 a gap analysis of existing resources was undertaken by health and WASH partners, which established that no funding was available for the cholera response. The 2015 Humanitarian Response Plan had not envisaged a cholera outbreak for 2015, although it did reflect other outbreak and epidemic preparedness activities.

The Health Cluster presented the gap analysis, funding requirements and risk of delayed response to the Inter Cluster Working Group (ICWG), which referred the matter to the HCT for deliberation. The HCT decided to pursue a CERF application to support rapid response to the outbreak and OCHA subsequently commenced consultations with WHO and UNICEF in their respective roles as Health and WASH Cluster Lead Agencies.

The CERF proposal was developed on the basis of a prioritized sub-set of the most urgent actions, aligned with the broader Cholera Response Plan, and related operational framework, that had been developed in-country by UNICEF, WHO, Ministry of Health and other actors. Discussions were held with the ICWG and mobile response partners to identify the most urgent needs and gaps across the WASH and Health clusters in relation to the cholera response. This took into account analysis of the evolution of the outbreak, including the rapid increase in the number of cases in Juba, combined with the atypical pattern (multiple locations within Juba town were affected, suggesting that multiple water sources are contaminated).

A prioritization process was conducted jointly by WHO and UNICEF, with partners going through an iterative process of prioritization and re-prioritization to reach consensus around the most urgent, important, viable and greatest impact interventions for the population at risk. This included dialogue and planning between UN agencies and NGO partners. Following the prioritization process, WHO and UNICEF developed and submitted an integrated proposal to respond to the most urgent needs in the cholera outbreak.

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: 300,000

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**
Water, Sanitation and Hygiene	68,376	90,256	**158,632**	62,905	51,965	**114,870**	131,281	142,221	**273,502**
Health	3,179	2,385	**5,564**	3,183	2,186	**5,369**	6,362	4,571	**10,933**

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

BENEFICIARY ESTIMATION

Through this CERF allocation, the recipient agencies reached about 273,500 direct beneficiaries through an integrated package of high impact Health and WASH activities, including a strong component of behaviour change communication targeting high risk practices and the distribution of lifesaving supplies in Cholera Treatment Center (CTCs), Oral Rehydration Point (ORPs), and treatment points. The number of beneficiaries was estimated by breaking down the number of beneficiaries reached per cluster respectively for Juba and Bor Counties and identifying the highest cluster caseload reached per activity per location [refer to annex 3]. On the whole, the highest numbers of beneficiaries in each county were reached through WASH behavior change activities.

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

	Children (below 18)	**Adults** (above 18)	**Total**
Female	68,376	90,256	158,632
Male	62,905	51,965	114,870
Total individuals (Female and male)	131,281	142,221	273,502

[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 contribution from CERF enabled UNICEF and WHO to reduce the morbidity and mortality rates associated with the cholera outbreak in South Sudan through the provision of an integrated package of high impact Health and WASH interventions, including a strong component of behaviour change communication targeting high risk practices. These interventions contributed to containing the spread of cholera and reducing the number of cases in the affected locations, through facility and community-based approaches. In addition to reaching 273,500 direct beneficiaries, the CERF funds enabled prevention activities which were essential to ensuring that the highly contagious disease did not spread further, especially along the River Nile and in other PoCs.

With the funding received from the CERF, the following results were achieved in relation with the three envisaged outputs:

1. *47 health facilities provided case management to cholera patients, helping reduce the Case Fatality Rate and contain the outbreak*

   Over the course of the project, 1,818 cholera patients accessed emergency health care funded by CERF, through 47 health facilities. This included:
   - 42 oral rehydration points (ORPs) in health facilities in Juba and Bor, which provided out-patient case management, including five ORPs in areas not originally targeted but which reported a high volume of cases over the project period. Of the 42 ORPs, six were supported as Cholera Treatment Centres (CTCs) to manage severely dehydrated patients.
   - Five in-patient CTC facilities (three in Juba, one each in Bor and Kajo Keji) which provided inpatient treatment of severely dehydrated patients.

   Some 22 module kits were delivered to the CTCs to assist patients presenting with severe dehydration. UNICEF also ensured that Oral Rehydration Salts (ORS) and Information Education and Communication (IEC) materials were available at the ORPs, ORS corners and CTCs to support cholera treatment and prevention.

   Following the receipt of CERF funds there was improved quality in case management and the Case Fatality Rate dropped from 12 per cent to 2 per cent by the end of the outbreak. ORPs offered immediate community-based treatment and outreach alongside hygiene promotion and distribution of essential WASH supplies, such as soap and household water treatment, to contain the spread of the disease. Thirty facilities (five more than the 25 targeted) received technical and treatment guidelines

for Cholera and Acute Watery Diarrhoea (AWD) cases. Some 78 health workers were trained on cholera identification and treatment at the facility level and deployed to support the response efforts in the Counties of Bor and Juba, while over 300 health workers benefitted from on the job supportive supervision, cholera management messages and support at community level. The Health Cluster was able to deploy six epidemiologists to provide technical support during the response in Bor and Juba, as well as in locations where alerts were received of cases potentially linked to the Juba outbreak, including Warrap, Northern Bahr El Ghazal, and Kajo Keji (Central Equatoria).

2. *Rapid Response and Surveillance Teams were deployed to detect and respond to cholera*

Following receipt of CERF funding, timeliness of reporting and data collection greatly improved, with community surveillance systems reporting all alerts within 48 hours. Rapid response teams were deployed in Juba and Bor Counties and public health officers were deployed at state level for eight weeks. A total of 108 community health workers were trained as surveillance focal points and deployed to identify, detect and report suspected cholera cases. Over 14 assessment and verification missions were carried out and 15 supportive supervision visits were conducted in the affected areas. To support the rapid response and confirmation effort of the team, 3,000 Cary-Blair swabs were procured and distributed to cluster partners. WHO also undertook strategic prepositioning and distribution of life-saving emergency supplies, especially Diarrheal Disease Kits, to ensure they would be accessible in a timely manner.

In addition, to ensure the quality of the interventions provided, UNICEF undertook regular supportive supervision of activities being implemented at the ORPs as well as at locations where Oral Rehydration Salts (ORS) were being distributed. On average, two weekly visits were undertaken by a multi-sectoral team (Health, WASH, C4D), with the frequency of visits increased at the height of the cholera outbreak. UNICEF also deployed a Cholera Coordinator to provide technical assistance to partners and support the coordination of the multi-sectoral interventions.

3. *Core supplies were provided, and systems established, to ensure access to safe and clean water*

The CERF funding supported UNICEF to ensure that vital WASH core pipeline supplies - such as water purification tablets, soap and jerrycans - as well as ORS, zinc sulphate, cholera beds and other essential items were available in a timely manner to support the cholera response. UNICEF provided Juba City Council and national Public Health Inspectors with High Test Hypochlorite (HTH) supplies for use at chlorination stations at 15 water collection points along the River Nile. An average of over 10,000m3 of water was chlorinated daily, reaching up to 100,000 people outside the PoC in Juba. In addition, UNICEF worked with implementing partners, The Health Support Organization (THESO) and Solidarites, to support the trucking of water in the PoCs in Juba and Bor.

UNICEF, Basic Education and Development Network (BEDN), Solidarites, and THESO monitored water tankers traveling from filling stations with chlorination services along the River Nile to their distribution destinations in Juba to assess the level of free residual chlorine (FRC). Random spot checks of the water quality in chlorinated water tankers were performed at the peak of the cholera epidemic. In addition, on average about 80 per cent of 30,000 targeted households were monitored to measure the level of FRC in high risk areas to ensure that an effective level of chlorination was present in the water being delivered. The level of monitoring was higher during the peak of the outbreak and was later scaled down bringing the average to 80 per cent.

While it was originally envisioned that surface water treatment (SWAT) systems would be set up, it was more effective to install a submersible pump for the borehole at Juba Teaching Hospital (JTH) where the main CTC was located. This upgrading ensured that, even at times when the Urban Water Corporation (the main supplier) could not supply treated water to JTH, the diesel operated pump supplied water into overhead tanks, avoiding water shortages. In addition, the CERF funding supported the renovation of the existing SWAT systems in Munuki payam in Juba County and in Bor. UNICEF, with the support of the Central Equatoria Directorate of Water and Sanitation, also facilitated the disinfection of the borehole at Al Sabah Children's Hospital in Juba to ensure a sustainable supply of safe water given the high risk of a cholera outbreak among children.

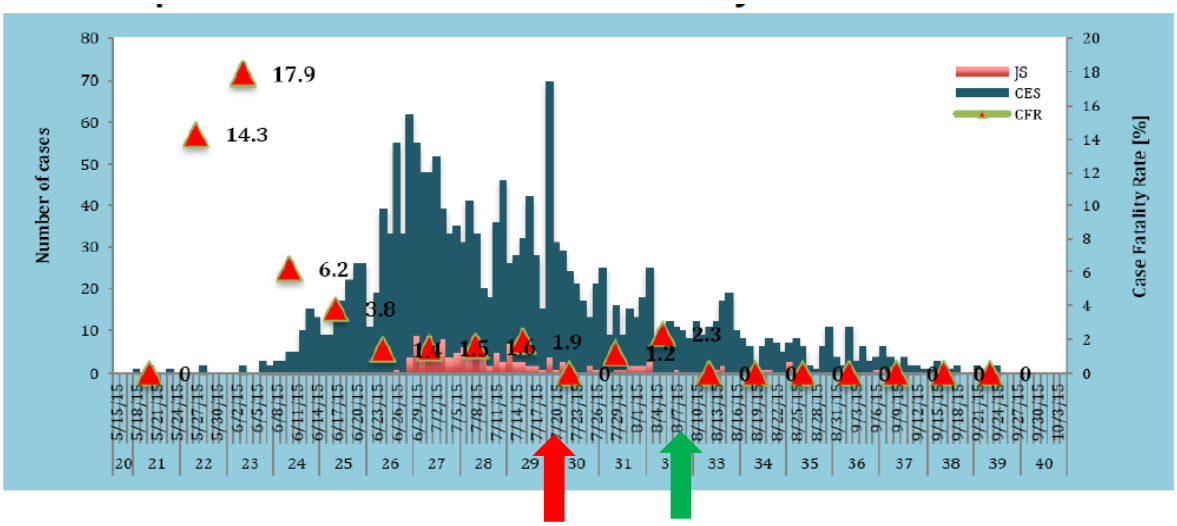
Household level hygiene promotion was a key part of the cholera response. Information, Education and Communication (IEC) materials - including banners, posters, job aids, and stickers - were distributed to partners for display at the community level (schools, market areas, health centres etc) and helped ensure harmonisation of messages. Door to door social mobilization was also undertaken, including counselling the beneficiaries on cholera preventive behaviours. Demonstrations were conducted on hand-washing with soap, use of chlorine tablets and PUR and the need for rehydration through ORS and Sugar and Solution. Beneficiaries also received NFIs, including soaps, chlorine tablets and PUR. Additionally, household water safety methods were demonstrated, including jerry can cleaning, safe household water storage, and treatment.

In order to ensure the safe disposal of cholera waste, UNICEF engaged a private contractor to dislodge all of the toilets at JTH and Al Sabah Children's Hospital while adhering to the national guidelines of cholera waste disposal. UNICEF also trained cleaning staff at JTH and Al Sabah Children's hospital on the dosage of chlorination required for water safety at CTC level, and operation and maintenance of their sanitation facilities.

CERF's ADDED VALUE

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

The CERF funding facilitated the quick delivery of services to the affected population, resulting in the containment of the spread of cholera transmission and a substantial reduction in the CFR. Humanitarian partners were able to easily and rapidly access the core pipeline services for both WASH and Health, enabling them to respond swiftly. The CERF fund enabled ORPs and CTCs to be established in key strategic areas at short notice, substantially contributing to the reduction of mortality associated with the outbreak. However, as there was a substantial delay in the processing of the application between the initial submission (20 July 2015, red arrow) and the final approval of projects (7 August 2015, green arrow), the full ability of the CERF to leverage fast delivery to people in need at the height of the cholera outbreak was not realized.



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

CERF funding enabled WHO, UNICEF and partners to contain the cholera outbreak by initiating and supporting emergency response in the affected states and counties. The funds improved the availability of essential medical drugs and other emergency supplies in two states and the primary health care facilities in the states. Rapid deployment of epidemiologists and technical officers to the field was critical in saving lives of the affected population. The grant was instrumental in ensuring the community surveillance system was in place to rapidly detect cholera cases. The CERF funding enabled WASH and Health partners to respond to the cholera outbreak in Bor in two weeks' time.

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

The CERF funding was among one of the first contributions received for the cholera response and complemented the other resources that were eventually provided by other donors.

[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.).

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

Implementation of the planned activities supported through CERF funding required effective coordination between humanitarian actors for the targets to be achieved. The funding supported the various health and WASH coordination fora at central and state level to coordinate the emergency response. The availability of the core pipeline supplies for the cholera response enhanced effective coordination by making available to key partners the supplies necessary to fill critical gaps in the response. However, as noted under Lessons Learned, stronger engagement with the Health and WASH Clusters may have further enhanced the response and utilization of CERF funding.

e) If applicable, please highlight other ways in which CERF has added value to the humanitarian response

The CERF grant enabled prompt and swift response to the needs of the affected population, thereby helping to avert ongoing high levels of mortality and the further spread of the disease.

V. LESSONS LEARNED

TABLE 6: OBSERVATIONS FOR THE CERF SECRETARIAT

Lessons learned	Suggestion for follow-up/improvement	Responsible entity
A significant delay was noted between the first submission to the CERF Secretariat on 20 July 2015 and the final approval of the projects on 7 August 2015.	CERF Secretariat to fast-track approval processes dealing with rapid response, particularly in relation to communicable diseases, such as a cholera outbreak.	CERF Secretariat
There was multiple round queries between the CERF Secretariat, OCHA and respective UN agencies (UNICEF and WHO) in relation to the appropriateness of having prevention activities as part of the package of activities for cholera response.	CERF Secretariat to ensure that preparedness activities are considered as part of the conventional package of activities in case of disease outbreaks such as cholera.	CERF Secretariat
Early start date beyond 6 weeks allowed by the CERF secretariat would encourage partners to kick-start the response while the approval process is ongoing.	CERF Secretariat to review rules and regulations regarding possible early start date beyond 6 weeks, with a view to enabling earlier start dates where there are delays in processing of applications.	CERF Secretariat
Lack of clarity about the allowable costs and thresholds made the application process more protracted.	CERF Secretariat to revise guidance on allowable costs and share as part of the application package.	CERF Secretariat

TABLE 7: OBSERVATIONS FOR COUNTRY TEAMS

Lessons learned	Suggestion for follow-up/improvement	Responsible entity
At planning stage, comprehensive discussions about programmatic priorities and planned response should more thoroughly involve concerned clusters; clusters may also be called upon to support reporting.	Need for comprehensive discussions involving all potential implementing UN agencies and related clusters about the programmatic priorities and planned interventions at the planning stage to reduce the length of the application clearance process.	WHO, UNICEF, OCHA, Health Cluster, WASH Cluster

VI. PROJECT RESULTS

TABLE 8: PROJECT RESULTS			
CERF project information			
1. Agency:	UNICEF WHO	**5. CERF grant period:**	14/08/2015 – 13/02/2016
2. CERF project code:	15-RR-CEF-078 15-RR-WHO-028	**6. Status of CERF grant:**	☐ Ongoing ☒ Concluded
3. Cluster/Sector:	Water, Sanitation and Hygiene		
4. Project title:	Responding to the acute needs of the cholera epidemic in Juba and Bor South Counties of South Sudan		

7.Funding				
	a. Total project budget:	US$ 6,888,914	d. CERF funds forwarded to implementing partners:	
	b. Total funding received for the project:	US$ 4,422,791	▪ *NGO partners and Red Cross/Crescent:*	US$ 686,858
	c. Amount received from CERF:	US$ 2,637,025	▪ *Government Partners:*	US$ 36,803

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)	77,060	74,030	151,090	68,376	62,905	131,281
Adults (above 18)	55,800	53,610	109,410	90,256	51,965	142,221
Total	**132,860**	**127,640**	**260,500**	**158,632**	**114,870**	**273,502**

8b. Beneficiary Profile

Category	***Number of people (Planned)***	***Number of people (Reached)***
Refugees		
IDPs	50,000	59,921
Host population	210,500	213,581
Other affected people		
Total (same as in 8a)	**260,500**	**273,502**

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 total number of people reached was slightly higher than the target due to the success of behaviour change campaigns. It is important to note that more women were reached through the WASH package of activities, particularly through the component of behaviour change communication targeting high risk areas.

CERF Result Framework			
9. Project objective	Reduction of mortality and morbidity due to cholera in Juba and Bor		
10. Outcome statement	People affected by the cholera outbreak have access to quality case management for cholera cases and the CFR is reduced to below 2 %		
11. Outputs			
Output 1	62 health facilities are able to provide case management to cholera patients		
Output 1 Indicators	**Description**	**Target**	**Reached**
Indicator 1.1	Number of health facilities that are supported and established and are able to provide treatment of cholera case (ORPs) by UNICEF	62 (52 Juba;10 Bor)	42
Indicator 1.2	Number of health facilities that are supported and established and are able to provide treatment to severe dehydrated patients (CTC /CTU) by WHO	5 (4 in Juba and 1 in Bor)	5 (3 in Juba, 1 in Bor and 1 in Kajo Keji)
Indicator 1.3	% of health facilities in affected areas that are provided with treatment guidelines for diarrhoea treatment (WHO)	80% of the 25 Health facilities	120% (30 Health facilities received cholera/AWD treatment guidelines)
Indicator 1.4	Number of deployed health care providers with regular supportive supervision for Cholera case management (UNICEF)	80 people	78 people
Indicator 1.5	Number of Community Outreach Workers provided with supportive supervision on watery diarrhoea early case detection and containment (WHO)	300 people	325 people
Indicator 1.6	Number of Epidemiologists deployed in areas to support containment efforts of the epidemic (WHO)	4 Epidemiologists	6
Indicator 1.7	Number of Diarrheal Disease kits procured and distributed (WHO)	22	22
Indicator 1.8	Number of ORS cartons procured and distributed (UNICEF)	1595	1,500
Output 1 Activities	**Description**	**Implemented by (Planned)**	**Implemented by (Actual)**
Activity 1.1	Establish and support case management of severely dehydrated patients with Cholera at 5 health facilities in Juba and Bor	Ministry of Health, WHO	WHO/UNICEF
Activity 1.2	Establish and support case management of suspected cholera cases without complication at ORP and ORS corner sites within Juba and Bor	UNICEF supporting Health Link, AFOD,	UNICEF, HealthLink, SMoH

		Sudan Medical Care and MoH	
Activity 1.3	Provision of treatment guidelines and protocol to newly established facilities that are managing cholera cases	WHO	WHO
Activity 1.4	Supportive supervision to health care providers and Community Outreach workers in order to strengthen the technical aspects of the overall response to the outbreak	Ministry of Health, UNICEF, Health Link, AFOD , Sudan Medical Care	MoH, UNICEF, Health Link, IMC
Activity 1.5	Deployment of trained staff to key identified facilities offering case management of severe cases of cholera	MOH/WHO	MOH/WHO
Activity 1.6	Rapid deployment of epidemiologists (by WHO) and for outbreak response and containment efforts for the epidemic	WHO	WHO
Activity 1.7	Procurement of Diarrhea Disease Kits for CTC/CTU by WHO to enhance the case management of the admitted patients	WHO	WHO
Activity 1.8	Procurement of ORS and IEC materials for the ORPs and ORS corners in Juba and Bor	UNICEF	UNICEF
Activity 1.9	Distribution of Diarrhoea Disease Kits to CTCs/CTU by WHO for case management	WHO	WHO
Activity 1.10	Distribution of ORS and IEC materials for the ORPs and ORS corners in Juba and Bor	UNICEF	UNICEF, Health Link, AFOD,
Output 2	Formidable Rapid Response Surveillance Teams are operational and responding to cholera		
Output 2 Indicators	**Description**	**Target**	**Reached**
Indicator 2.1	Number of community surveillance focal points are deployed that are actually functional and have reports produced (WHO)	90	108
Indicator 2.2	Number of verification missions conducted by the rapid response team at field level (WHO)	10	14
Indicator 2.3	Number of Rapid Response Kits and Cary-Blair procured for rapid response teams (WHO)	3,283	3,000
Indicator 2.4	Number of support supervision visits conducted at field level by technical officers on a monthly basis at CTC /CTU (UNICEF & WHO)	16	15
Indicator 2.5	Number of support supervision visits conducted at field level by technical officers on a weekly basis at ORP and ORS corners (UNICEF)	4	2
Output 2 Activities	**Description**	**Implemented by (Planned)**	**Implemented by (Actual)**
Activity 2.1	Support timely collection and response to cholera alerts at community level through the community surveillance focal points	MOH, WHO, UNICEF	WHO, UNICEF
Activity 2.2	Conduct outbreak investigations and as such improve case reporting turnaround times and	MOH, WHO	WHO

	response mechanisms by rapidly detecting and treating new cases of Cholera		
Activity 2.3	Procure and distribute laboratory diagnostics to enable prompt testing of specimen at community level	MOH, WHO	WHO
Activity 2.4	Conduct regular supervision, monitoring of service provision to improve case management of cholera cases	MOH, WHO (CTC and CTU), UNICEF (ORP and ORS corners)	WHO, UNICEF
Output 3	80-90% of cholera affected areas have improved domestic water quality monitoring through bulk chlorination and household level water treatment options		
Output 3 Indicators	**Description**	**Target**	**Reached**
Indicator 3.1	Number of water filling stations being chlorinated regularly (UNICEF)	15	15
Indicator 3.2	Number of locations conducting random water quality testing of water being ferried in trucks (UNICEF)	53	53
Indicator 3.3	% of 30,000 targeted households monitored for Free Residue Chlorine (FRC) in all high risk areas (UNICEF)	100%	80%
Output 3 Activities	**Description**	**Implemented by (Planned)**	**Implemented by (Actual)**
Activity 3.1	Procurement and distribution of cholera prevention and preparedness supplies	UNICEF	UNICEF
Activity 3.2	Chlorination of water sources in high risk areas especially at water filling stations	UNICEF, WASH Cluster partners	UNICEF and Juba City Council
Activity 3.3	Provision of safe water through water trucking in the PoCs to meet the Sphere Standard of 15l/person/day	UNICEF, WASH Cluster partners	UNICEF, THESO, Solidarites
Activity 3.4	Conduct systematic water quality testing for water being trucked to households measuring free residual chlorine levels	UNICEF, WASH Cluster partners	UNICEF, Solidarites, THESO
Activity 3.5	Rehabilitation of water supply systems in cholera affected and high risk areas including installation of emergency surface water treatment (SWAT) facilities	UNICEF, WASH Cluster partners	UNICEF, BEDN, Solidarite, CES MINISTRY OF PHYSICAL INFRASTRUCTURE
Activity 3.6	Conduct household level hygiene promotion for water quality monitoring, treatment, and safe storage, along with distribution of WASH supplies (soap, water purification chemicals)	UNICEF, WASH Cluster partners	UNICEF, IAS, Islamic Relief WorldWide
Activity 3.7	Support management of solid and liquid waste disposal in cholera affected and high risk locations including cholera waste management in CTCs/CTUs	UNICEF, WASH Cluster partners	UNICEF and contractors
Activity 3.8	Undertake monitoring and evaluation of the ongoing activities in the high risk and cholera affected areas	UNICEF, WASH Cluster partners	UNICEF and cluster partners

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 initial target of 62 health facilities to provide case management to cholera patients was based upon a projection of the outbreak reaching a similar scale to the 2014 outbreak. However, the scale of the actual outbreak in 2015 was smaller than in 2014 and therefore required a smaller scale-up. Only 47 health facilities (76 per cent of target) were therefore ultimately supported during project implementation. In addition, 30 of the 47 health facilities supported by the CERF received cholera treatment guidelines to enable them to provide the required quality of cholera case management. The guidelines were provided to those facilities where high cases of Cholera/AWD were recorded.

In terms of monitoring the level of Free Residual Chlorine (FRC), 80 per cent of 30,000 households were monitored on average, compared to an initial target of 100 per cent. Random spot checks of the water quality were performed to complement the monitoring of FRC at the household level. The level of monitoring was higher during the peak of the cholera outbreak, but reduced once the outbreak tapered, leading to the overall figure of 80 per cent.

Following alerts from Warrap and Northern Bahr El Ghazal, two additional epidemiologists were deployed to support response efforts in these two areas, bringing the total number of epidemiologists deployed during the project to six, rather than the initially planned four. In addition, following reports of suspected cholera alerts in Kajo Keji (Central Equatoria), four additional verification missions (health assessments) were conducted in the area with the support of Rapid Response Teams. Though not in line with the geographic areas initially targeted with CERF funding, these alerts were linked with cases reported in Juba and therefore related to the overall response.

Some 3,000 rapid response and Cary-Blair kits were procured and distributed to enable prompt testing of specimen at both community and facilities levels. The quantity procured was slightly less than planned, because this was all that the supplier had in stock.

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

The interventions were targeted towards all members of the vulnerable communities, with special interest paid to the needs of women and children. In South Sudan, females (irrespective of age) are much more likely than males to take on the role of caregiver and are therefore key in introducing and implementing behavioral change. Women have a strong role in the management of household water supply and sanitation, therefore emphasis was placed on reaching women through the interventions. In addition, children were seen as a key driver of behavioral change to stem the spread of the outbreak, and were therefore targeted with a number of interventions (such as handwashing demonstrations, videos etc) at schools to promote good hygiene and good practices. To ensure accountability the project plan was communicated to beneficiaries through women groups, WASH committees and school hygiene and health clubs who involved in the implementation of the project and also provided feedback throughout the project which was used for adjusting project activities on type and use of water purification products and water containers and location of water points.

14. Evaluation: Has this project been evaluated or is an evaluation pending?	EVALUATION CARRIED OUT ☐
While this project was not formally evaluated, lessons learned from the 2014 response informed the 2015 response. , that the 2014 response highlighted that consumption of safe water; handwashing with soap at critical times; food hygiene; and improved sanitary conditions both at household and neighbourhood levels are the most critical WASH interventions in containing cholera. It also highlighted that smooth coordination between surveillance, case management and social mobilization teams is critical for timely and effective response. Preparedness activities in 2015 - such as prepositioning of cholera supplies and awareness raising activities to ensure that there is early detection and improved treatment seeking behaviour - were factors that ensured that the 2015 cholera outbreak was smaller than in 2014.	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-CEF-078	Health	UNICEF	NNGO	$144,605
15-RR-CEF-078	Health	UNICEF	INGO	$70,000
15-RR-CEF-078	Water, Sanitation and Hygiene	UNICEF	NNGO	$18,421
15-RR-CEF-078	Water, Sanitation and Hygiene	UNICEF	GOV	$36,803
15-RR-CEF-078	Water, Sanitation and Hygiene	UNICEF	INGO	$27,505
15-RR-CEF-078	Water, Sanitation and Hygiene	UNICEF	INGO	$143,728
15-RR-CEF-078	Water, Sanitation and Hygiene	UNICEF	INGO	$251,813
15-RR-CEF-078	Water, Sanitation and Hygiene	UNICEF	NNGO	$30,786

ANNEX 2: ACRONYMS AND ABBREVIATIONS (Alphabetical)

AFOD	Action For Development
AWD	Acute Watery diarrhoea
BEDN	Basic Education and Development Network
C4	Cholera Command and Control Centre
CERF	Central Emergency Response Fund
CFR	Case Fatality Rate
CRP	Cholera Response Plan
CTC	Cholera Treatment Center
CTU	Cholera Treatment Unit
FRC	Free Residual Chlorine
HCT	Humanitarian Country Team
HTH	High Test Hypochlorite
IAS	International Aid Services
ICWG	Inter Cluster Working Group
IEC	Information Education and Communication
JTH	Juba Teaching Hospital
MOH	Ministry of Health
NCT	National Cholera Taskforce
OCHA	Office for the Coordination of Humanitarian Affairs
ORP	Oral Rehydration Point
ORS	Oral Rehydration Salts
POC	Protection of Civilians
SAM	Severe Acute Malnutrition
SWAT	Surface Water Treatment
THESO	The Health Support Organization
UN	United Nations
UNICEF	United Nations Children's Fund
WHO	World Health Organization

ANNEX 3: NUMBER OF BENEFICIARIES REACHED PER CLUSTER AND PER LOCATION

UNICEF									
	Juba				Bor South				
	Girls	Boys	Women	Men	Girls	Boys	Women	Men	TOTAL
WASH activities	54,701	50,324	72,205	41,572	13,675	12,581	18,051	10,393	273,502
Health activities	69	63	91	52	138	127	182	105	827
WHO									
	Juba				Bor South				
	Girls	Boys	Women	Men	Girls	Boys	Women	Men	TOTAL
Health activities	1717	1788	1461	1403	1255	1205	651	626	10,106