

**ANNUAL REPORT OF  
THE HUMANITARIAN/RESIDENT COORDINATOR  
ON THE USE OF CERF GRANTS**

<b>Country</b>	<b>Guinea-Bissau</b>
<b>Humanitarian / Resident Coordinator</b>	<b>Ms. Giuseppina Mazza</b>
<b>Reporting Period</b>	<b>01 January - 31 December 2008</b>

**I. Executive Summary**

In 2008, a severe cholera epidemic hit Guinea-Bissau for several months, with cases rapidly spreading nationwide. Enormous efforts were deployed by UNICEF and WHO, with the support of a few national and international non-governmental organizations (NGOs). However, more than 14,229 persons were affected, of whom at least 225 people died, with a case fatality rate of 1.6 percent. The capital city of Bissau was the most affected area with 66 percent of cases and 33 percent of the total deaths; followed by the region of Biombo with 14 percent of the total cases. The case fatality rates varied between the regions and were very high, up to 8 percent in some regions. Nearly 6 percent of the cases occurred among children under five and 19 percent were under the age of 14 years.

At the onset of the epidemic, the United Nations Country Team (UNCT), NGOs and partners had mobilized resources to start an early response to the epidemic, including through the Italian Government and the African Development Bank. Actions were coordinated with the National Technical Committee for Epidemic Surveillance and Control (NTCESC). However, the funds available were limited especially given the Government's lack of significant financial support for the epidemic response. It was therefore critical to request CERF funding to support the life-saving response in the first three months of the epidemic. The initial proposal was based on the most urgent and immediate needs, assuming that 10,000 people would be affected by cholera during a period of six months. Despite the efforts of the UN system and other partners to contain the outbreak, the epidemic spread to all regions nationwide. The complex socio-political situation in Guinea-Bissau with the electoral campaign and the re-opening of the school year made accurate epidemiological predictions difficult. Therefore, a second CERF grant was requested by the UNCT.

A total of US\$ 1,201,967 were allocated to the Guinea-Bissau UNCT in two instalments through WHO (\$ 490,665) and UNICEF (\$ 711,302). The CERF funds enabled the UN agencies to provide needed financial assistance to the Government and NGOs to

1. support the treatment of 14,229 persons infected by cholera, responding to medical and non-medical needs,
2. provide hygiene materials to families affected and neighbours to ensure purification of drinking water and
3. support the promotion of preventive measures through information, health education and communication interventions to reach the whole population. CERF funding helped the UNCT, NGOs and Government to ensure a quality response to the cholera epidemic.

<b>Total amount of humanitarian funding required and received during the reporting year</b>	<b>REQUIRED:</b>	\$ 4,969,559		
	<b>RECEIVED:</b>	\$ 1,201,967		
<b>Total amount requested from CERF</b>	<b>FUNDS (IN TOTAL REQUESTED):</b>	\$ 1,201,967		
<b>Total amount of CERF funding received by funding window</b>	<b>RAPID RESPONSE:</b>	\$ 1,201,967		
	<b>UNDERFUNDED:</b>	\$ 0		
	<b>GRAND TOTAL:</b>	\$ 1,201,967		
<b>Total amount of CERF funding for direct UN agency / IOM implementation and total amount forwarded to implementing partners</b>	<b>UN AGENCIES/IOM:</b>	\$ 975,259.01		
	<b>NGOS:</b>	\$ 156,919.23		
	<b>GOVERNMENT:</b>	\$ 69,788.76		
	<b>OTHER:</b>	\$ 0		
	<b>TOTAL:</b>	\$ 1,201,967		
<b>Approximate total number of beneficiaries reached with CERF funding (disaggregated by sex/age if possible)</b>	<b>TOTAL</b>	<b>under 5 years of age</b>	<b>Female (If available)</b>	<b>Male (If available)</b>
	14,229 <sup>1</sup>	854	7,400	6,829
<b>Geographic areas of implementation targeted with CERF funding</b>	Across all nine administrative regions, however interventions focussed on the most affected areas.			

## II. Background

### The humanitarian situation in the country which prompted the request for CERF funding

Cholera is endemic in Guinea-Bissau, where outbreaks of different severity are recorded every year, with extremely severe outbreaks every few years. In addition to low access to potable water and sanitation, some of the other major reasons for these outbreaks are the high rate of illiteracy, inadequate disposal of human waste, poor quality of health care facilities, poor basic infrastructure, weak disease surveillance, lack of a culture of good hygiene and socio-cultural traditional beliefs and practices. In 2008, a severe cholera epidemic hit the country for several months. The first cases were recorded in May in the southern region of Tombali, on the border with Guinea, despite the attempt to contain the outbreak by the Ministry of Health (MoH), supported by UNICEF and WHO. After a few weeks lying dormant, the epidemic reached the capital Bissau in mid June, and then quickly spread throughout the country. Enormous efforts were made by the Government, UNICEF and WHO, with the support of a few national and international NGOs. As mentioned above, more than 14,229 persons were affected, and approximately 225 people died. The case fatality rates vary between the regions and were high (up to 8 percent) in some regions (Bafata, Quinara and Sao Domingo) indicating a failure of case management, or delayed decisions to seek medical care – as 70 percent of deaths occurred in homes. The attack rate was most severe in the regions of Bijagos (2.97 percent), Biombo (2.91 percent), and Bissau (2.26 percent).

Furthermore, turbulence in the second part of 2008 had an enormous impact on efforts to contain the epidemic, as well as the legislative election preparations distracting Government attention from the needed multi-sectoral epidemic control effort.

<sup>1</sup> The number in the box is the number of beneficiaries reached directly through life-saving interventions when in need of treatment. However, indirectly the entire population of 1.6 million have benefited from awareness raising interventions.

## How sectors/projects were prioritized for allocations

At the first reports of possible cholera cases in the south of the country, in May 2008, UNICEF and WHO mobilized the resources needed to support the MoH to control the outbreak. However, further priority areas and interventions were decided on in collaboration with the MoH, and NGOs (Medicus Do Mundo Portugal (MDM), and the Red Cross), with parties contributing based on their respective mandates and comparative advantages.

The main sectors of interventions identified were:

- **Health:** Regular active surveillance, case management of cholera, provision of sufficient life-saving medical and non-medical supplies and laboratory equipment/materials
- **Communication:** Behaviour change and social mobilization aiming at adherence of family members to systematically use disinfected water and systematically wash hands with soap
- **Water, Sanitation, and Hygiene (WASH):** Support to the main towns' waste disposal – including appropriate human waste disposal from health centres – to avoid contamination, disinfection of water reservoirs and other water sources in all regions and at the household level
- **Coordination:** Reinforce national coordination mechanisms for epidemic response.

### **III. Implementation and results**

#### **1. Coordination and implementation arrangements**

The Resident Coordinator and the UNCT supported the coordination mechanism put in place by the MoH (comprising Government counterparts, NGOs, and UN agencies), mobilized funds, and organized Humanitarian Coordination Forum Meetings to raise awareness and ensure additional support from bi-lateral donors. The Inter-Agency Emergency Preparedness Working Group (EPWG), composed of UN agencies and international NGOs, met regularly over the duration of the outbreak, as described below in Section 3 on partnerships.

The MoH chaired the National Technical Committee for Epidemic Surveillance and Control (NTCESC), which met three times a week over the height of the outbreak to review the trend of the epidemic by region, discuss the progress and constraints in the implementation, share information and propose actions – including discussion of effective CERF implementation. The NTCESC was led by the General Director of the MoH, and comprised of the Ministry of Natural Resources, the Mayor of Bissau, UN agencies, and NGOs (including MSF, MdM, Red Cross, NADEL), in collaboration with donors. The NTCESC was composed of all national and international actors intervening in the fight against cholera. The same coordination bodies were created at the regional level, lead by the Governor.

#### **2. Project activities and results, including actual beneficiaries**

##### Health

The health sector benefited from CERF funds, with WHO interventions targeting the estimated 10,000 infected persons, and 1.6 million people at risk of cholera benefiting from prevention activities nationwide. The working group of MoH, WHO and UNICEF proposed a plan to combat cholera based on the health cluster guidelines. CERF funds were quickly used to train 250 health personnel, including from the 11 regional health teams, on

- (a) Rapid case detection,
- (b) Cholera Treatment Centre (CTC) logistics and management particularly in vulnerable areas, which are often difficult to access,
- (c) Emergency medication stock management,
- (d) Support laboratory testing and confirmation, including analysis of vibrio antibiotic resistance and e) retraining of health personnel on case management and supervision, including support to health teams in all nine regions. UNICEF donated over 45,000 litres of bleach, 150 cholera beds and 10,000 ORS sachets (1,100 patients, however many less acute patients require much less ORS) to the MoH and 5,000 ORS sachets to the Red Cross (550 patients). UNICEF also provided a 72 square metres tent to increase the capacity of the National Hospital and other supplies. WHO was able to draw on African Development Bank (ADB) funded emergency health stocks to provide a rapid response.

CERF interventions contributed to the national effort, which reduced the case fatality rate from 4.3 percent initially to 1.6 percent.

### Water, Sanitation and Hygiene (WASH) / Communication for behaviour change

UNICEF has coordinated WASH and communication activities with the Government and other partners, such as WHO, the National Red Cross, MDM and Medecins Sans Frontieres Spain (MSF). UNICEF major interventions have focused on massive awareness raising on preventive measures and WASH interventions targeted at the capital Bissau and the most affected regions, including through procurement and distribution of emergency supplies. A sensitization and hygiene promotion campaign targeting schoolchildren was implemented through NGOs at the re-opening of the school year. UNICEF has been able to reach about 80 percent of the capital's population (estimated at approximately 400,000 people) with information on how to prevent cholera and demonstration of correct hygiene practices. Some 700 members of communication and disinfection brigades were trained to raise community awareness and follow up on cases at household level. UNICEF supported the Information, Education and Communication units of the MoH and NGOs to implement community and media communication activities, and print and distribute communication materials.

To ensure that households had access to safe water sources, more than 7,000 households benefited from the chlorination of all functioning water reservoirs, while over 1,500 traditional wells were treated in the capital. A further 4,000 families were supplied with bleach to treat their water in their homes and disinfect potentially contaminated surfaces, and soap to ensure effective hygiene behaviour.

### **3. Partnerships**

The EPWG lead by UNICEF (since May 2008) played a significant role in close relations with humanitarian NGOs to support the Government to respond to the cholera epidemic. The interaction and collaboration between this group and the MoH led to NTCESC strengthened operational action during the epidemic peak. Other agencies, such as UNFPA and UNDP have provided financial support to the cholera response. Supporting funds were also gained through the Italian Government and the ADB, including a contribution from the ADB to the MoH for capacity strengthening to fight epidemics.

### **4. Age, Gender and the Environment**

Special attention was given to children affected through disaggregated data by age group; and no death was reported among children. Some interventions funded with the CERF

funds, such as house disinfection and cleaning campaigns, involved building capacity of women in safe household practices in their role of waste disposal in households, providing family drinking water and as the main users of markets. Youth associations were supported through the MoH to conduct cleaning and sensitization campaigns in some areas (Bissau and Oio). The cleaning campaigns in the main markets and location of high population concentration in the capital city have contributed to environmental management.

## **5. Monitoring and evaluation**

The UNCT has ensured that the data and information collected and shared are consistent; only epidemiological data updated in the MoH daily cholera statistic updates, shared during the cholera task force meetings, were used by the UN agencies. WHO has supported the strengthening of the MoH national and local surveillance efforts through provision of petrol and telephone cards to the surveillance teams to ensure that information could be quickly and efficiently transmitted to the central level for rapid interventions to be made in locations where cholera was breaking out.

Monitoring was conducted nationally and locally through the MoH CNTSCE and the Directorate General of Health (DGSP). The CNTSCE discussed programmatic and fund monitoring issues during the regular meetings. The regional DGSP held bimonthly meetings to monitor and analyse the epidemiological situation in their respective regions based on which funds were made available to the sub-national levels.

UNICEF has produced periodic situation update reports and provided financial and technical support to the MoH to conduct community-based research (e.g. focus group discussions). Joint technical field visits were conducted between MoH, UNICEF and WHO to monitor intervention implementation, assess the situation and discuss constraints and the way forward with the regional teams.

## IV. Results

Sector/ Cluster	CERF projects per sector	Amount disbursed (US\$)	Number of Beneficiaries (by sex/age)	Implementing Partners and funds disbursed	Baseline indicators	Expected Results/Outcomes	Actual results and improvements for the target beneficiaries
Health	<b>WHO 08-WHO-042 and 08-WHO-071</b> Response to cholera epidemic in Guinea-Bissau	Total: \$490,665 (in two instalments of \$201,765 and \$ 288,900)	14,229 cholera patients of which approximately 57 percent are women and 6 percent are children under the age of 5	<ul style="list-style-type: none"> <li>▪ MoH</li> <li>▪ National Red Cross</li> <li>▪ WHO</li> <li>▪ PLAN-GB</li> <li>▪ Medicos Mundo Portugal</li> </ul>	Crude number of cholera cases Attack rate Case Fatality Rate	<ul style="list-style-type: none"> <li>▪ Appropriate public health action taken on the basis of accurate and timely information</li> <li>▪ Ministry of Health at central and regional levels effectively coordinate epidemic response</li> </ul>	<ul style="list-style-type: none"> <li>▪ All teams in the 11 health regions and one member of each 114 health centres received telephone cards to be used to notify cases on a daily basis;</li> <li>▪ All teams in the 11 health regions received fuel and per diem for regular active surveillance (one visit/ month for three months). The teams have had to access difficult locations, such as the islands which are only accessible by boat</li> <li>▪ The 11 health regions core services (DGSP, DHE, DRS) supported with office supplies to ensure they have capacity to complete their reports and epidemiological bulletins to support the work of the CNTSCE and partners</li> <li>▪ All 11 health regions benefited from local funds for supplies</li> <li>▪ All 11 health regions benefited from supervision from the central supervisor who utilises a specific monitoring framework, which includes elements of coordination and functioning of Regional Epidemic Control Committees, epidemic management for the regional health teams, CTC case management, and operational coordination of local partnerships</li> <li>▪ Technical support provided nationwide by the WHO/UNICEF inter-agency teams</li> </ul>

						<ul style="list-style-type: none"> <li>▪ Three weekly reports produced for national and regional partners</li> </ul>
					<ul style="list-style-type: none"> <li>▪ Cholera cases rapidly identified</li> </ul>	<ul style="list-style-type: none"> <li>▪ Retrained all CTC personnel in cholera case management across the 11 health regions – approx 55 persons. Personnel in all 114 health centres were trained nationwide, with 84 personnel from the medical team in the national hospital in Bissau trained</li> <li>▪ The National Public Health Laboratory (LNSP) benefited from financial support to send specimens to the Pasteur Institute in Dakar at the start of the outbreak. Also the 11 health regions received financial support for specimen transport</li> </ul>
					<ul style="list-style-type: none"> <li>▪ Cholera transmission interrupted</li> </ul>	<ul style="list-style-type: none"> <li>▪ The LNSP benefited from a cholera diagnostic kit made up of material and reagents, and a water quality testing kit</li> <li>▪ The National Transporter and Trucker Association and the Public and Private Driver`s Union were mobilised to undertake awareness raising and prevention sessions with their members. Information included the importance of immediately disinfecting vehicles following the transport of dead bodies. Nationwide, 44 members of the two associations were trained</li> </ul>

						<ul style="list-style-type: none"> <li>▪ Case fatality rate less than 1 percent resulting from rapid and effective case identification and emergency management</li> </ul>	<ul style="list-style-type: none"> <li>▪ Procured two medication kits to strengthen emergency stocks</li> <li>▪ Trained the NGO CARITAS to support the CTC in the national hospital in Bissau, with institutional disinfection, and training patients in home and personal hygiene practices</li> <li>▪ Health centres in areas of difficult access provided (1/3 of total) provided with mobile phones.</li> </ul>
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Sector/ Cluster	CERF projects per sector (Add project nr and title)	Amount disbursed (US\$)	Number of Beneficiaries (by sex/age)	Implementing Partners and funds disbursed	Baseline indicators	Expected Results/Outcomes	Actual results and improvements for the target beneficiaries
Water and Sanitation	UNICEF 08-CEF-053 and 08-CEF-091 Response to cholera epidemic in Guinea- Bissau	\$711,302 (in two instalments of 400,146 and 311,156)	14,229 cholera patients of which approximately 57 percent are women and 6 percent are children under age 5 1.6 million people nationwide reached with mass communication messages	<ul style="list-style-type: none"> <li>▪ Red Cross (\$ 89,567.05)</li> <li>▪ MdM-Portugal (\$ 42,135.96)</li> <li>▪ NADEL (\$ 17,301.67)</li> <li>▪ MOH (\$ 68,385.31)</li> <li>▪ MOE (\$ 1,403.66)</li> <li>▪ APRODEL (\$ 7,914.55)</li> <li>▪ UNICEF (\$ 436,428.87)</li> </ul>	Crude number of cholera cases Attack rate Case Fatality Rate	<ul style="list-style-type: none"> <li>▪ Communication and WASH activities will be coordinated among all partners involved, ensuring coherence, synergy and effectiveness of interventions</li> </ul>	<ul style="list-style-type: none"> <li>▪ The necessary technical human resources (communication and WASH consultants) were made available to help the coordination of the response and with implementation of communication interventions, including staff mobilized from other countries to support the team</li> <li>▪ These staff supported coordination both with the Government-led national and local technical surveillance and control committees and with the UN/NGO Inter-Agency Emergency Preparedness and Response Working Group which focused heavily on cholera over the duration of the outbreak</li> </ul>
						<ul style="list-style-type: none"> <li>▪ Families and communities will be aware of safe behaviours related to personal hygiene and sanitation; will have the knowledge and skills to be able to practice hygiene, water and food safety procedures</li> </ul>	<ul style="list-style-type: none"> <li>▪ Approximately 400,000 people reached in the capital city and the region of Bissau with information on how to prevent cholera and demonstration of correct hygiene practices</li> <li>▪ Over 110,000 people reached in Cacheu, Oio, Quinara and Sao Domingo by Red Cross with house-to-house sensitization activities on cholera prevention measures, hygiene promotion in public places and house disinfection</li> </ul>
						<ul style="list-style-type: none"> <li>▪ Cholera victims and their families will know that early referral to the closest</li> </ul>	<ul style="list-style-type: none"> <li>▪ In the framework of existing agreements with national</li> </ul>

					<p>Treatment Centre is key to prevent death.</p>	<p>community radios (six in Bissau and eight regional), cholera prevention messages were broadcast over the course of the epidemic. National and local radios broadcast life-saving messages on a daily basis in different local languages reaching nationwide to the 1.6 million population</p> <ul style="list-style-type: none"> <li>▪ Messages on the locations of the CTCs were included, and the population was informed on the importance of immediate seeking of care</li> </ul>
					<ul style="list-style-type: none"> <li>▪ Communication materials will be developed/reproduced/printed, and widely distributed to communities and health workers; messages related to cholera will be continuously disseminated through radios, other media and through traditional channels including community leaders who will receive appropriate training</li> </ul>	<ul style="list-style-type: none"> <li>▪ 12,000 posters and 6,000 leaflets on water disinfection and hand washing printed and distributed across all regions</li> <li>▪ Sensitisation of Local Traditional Leaders in Bissau and religious leaders nationwide, encouraging them to influence their community to adopt preventive measures including for funerals and cultural practices</li> </ul>
					<ul style="list-style-type: none"> <li>▪ Mobilization Brigades and Red Cross volunteers will be trained to ensure house-to-house information, education, demonstration of correct hygiene practices, including hand washing and water disinfection, food safety, latrines and households' disinfection, safe care practices to the patients</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some 700 members of sensitization brigades and disinfection brigades were trained for (i) information and sensitization of the population on cholera preventive measures and (ii) disinfection of houses, follow-up on cases at household level and distribution of soap and bleach to families</li> <li>▪ 50,000 households of cholera patients and neighbours (approximately 77,000 people) in the most affected areas of Bissau and Biombo were reached by the brigades, with disinfection materials (soap, bleach) and information</li> <li>▪ 12 latrines constructed in six</li> </ul>

						<p>primary schools for the benefit of some 11,800 students</p> <ul style="list-style-type: none"> <li>▪ Agreements signed with NGOs for nationwide cholera prevention campaigns before the 2009 rainy season</li> </ul>
					<ul style="list-style-type: none"> <li>▪ Necessary supply (ORS, calcium hydrochloride, bladders, bleach, residual chlorine test kits, etc.) will have been procured/made available, distributed and properly utilised in affected areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Needed supplies procured and distributed through NGOs and Ministry of Health to regions, treatment centres, households, with a focus on the most affected regions of Bissau and Biombo</li> <li>▪ Provision of a 72 square meters tent to increase the capacity of the cholera treatment centre (CTC) in National Hospital and 150 cholera beds for the CTC</li> <li>▪ Free distribution campaign of bleach to 210,000 persons in the big markets and ports of capital Bissau through 10 disinfection points installed in the most affected areas</li> <li>▪ Distribution of 15,000 ORS sachets (1 litre) in the CTCs and communities through the MoH and the Red Cross</li> <li>▪ Replenishment of the emergency stock of medical and non-medical supplies</li> </ul>
					<ul style="list-style-type: none"> <li>▪ Water wells, boreholes, and reservoirs will be disinfected, ensuring potable water to the population in affected areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Wells disinfection campaign in Bissau: some 1,500 wells were disinfected</li> <li>▪ Chlorination of all functioning water reservoirs benefiting more than 7,000 households</li> <li>▪ Seven primary schools connected to water supply network of Bissau benefiting 11,000 students</li> <li>▪ 300 latrines disinfected (Biombo)</li> </ul>

						<ul style="list-style-type: none"> <li>▪ Sanitary human waste disposal will be assured in National Hospital and Treatment Centres.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support to safe removal and disposal of contaminated waste from the National Hospital</li> <li>▪ Hygiene promotion in public places, active search of cholera affected cases and disinfection of HH</li> </ul>

## V. CERF IN ACTION

### Prevention and Hygiene Awareness Efforts Aim to Stave off Cholera in Guinea-Bissau

Jose Turé is a metal worker in one of the poorest countries in the world, and his life has been marked by hardship. He left his family behind in the town of Bafata when he moved to Bissau, the capital, in hopes of earning a better living. But the move to the bigger town brought with it a new danger: cholera.

It was a rainy Friday, not long ago, when Mr. Turé's 12-year-old son, Saliu, who was visiting from Bafata, first complained of feeling a terrible pain in his stomach. Mr. Turé did not realize at the time that it could be cholera.

"I had heard about cholera several times," he said. "Every year during the rainy season, radios all over the country tell the population about the disease. But I never thought it could come my way."

Mr. Turé started panicking as his son's health deteriorated. "Saliu was becoming pale and skinny after only one day," he recalled. "A young man in the neighbourhood helped me to rush him to the main hospital in Bissau, and when I got there I was stunned by the number of patients I saw in the block they called the 'cholera wing.'"



**Main hospital overwhelmed:** Cholera outbreaks have been a fact in Guinea-Bissau for more than a decade. Every rainy season carries with it the threat of a cholera epidemic. The outbreak in 2005 was particularly devastating, with more than 20,000 cases and several hundred deaths.

Such outbreaks are the unfortunate consequence of the country's aging water and sanitation infrastructure, much of which dates from the colonial era. Many residents use untreated and non-potable water sources, as only 20 percent of the residents in Bissau have access to tap water. Poor sanitation practices add to the risk of contamination.

Mr. Turé's son is only one of more than 14,000 victims of the current epidemic, which has killed over 225 people. This year's outbreak started in May in the south of the country. By July, the epidemic had reached the capital. The main hospital was quickly overwhelmed with new patients.

**Raising hygiene awareness:** To help the hospital deal with the influx of patients, UNICEF and WHO supported the team to set up a cholera treatment tent, with further support including beds, improved sanitation, and a clean water supply.

UNICEF also has trained teams of young people and deployed them to various Bissau neighbourhoods to raise awareness and to train the local population in preventive behaviours.

The same teams have been disinfecting water sources and demonstrating water purification methods for local households.

Working with the Ministry of Health and non-governmental partners – including traditional and religious leaders in communities – UNICEF and WHO are working to train health teams and educate the population about how to prevent and treat cholera. There is stigma around the disease in Guinea-Bissau, and affected people are often too ashamed to go to the health centres for treatment.



**A nationwide problem:** Mr. Turé is back at home now with his son, who is recovering. However, the boy's father is thinking of leaving Bissau.

"I think I will soon go back to Bafata, where I will not have these problems," he said.

Yet such a move may be in vain; cholera is a problem in the countryside, as well. Unprotected wells and rivers, from which more than half of the rural population collect their water, are exposed to external contamination and thus pose a high risk for waterborne disease.

## **Annex: Acronyms and Abbreviations**

APRODEL	Association to Promote Local Development
CREPA	Regional Centre for Potable Water and a Clean Environment
CTC	Cholera Treatment Centre
DGSP	Directorate General of Health
DHE	Directorate of Hygiene Epidemiology
DRS	Regional Directorate of Health
HH	Households
MdM-P	Medicus do Mundo Portugal
MoE	Ministry of Education
MoH	Ministry of Health
MSF	Medecins Sans Frontieres
NADEL	National Association for Local Urban Development
NTCESC	National Technical Committee for Surveillance and Epidemic Control
UN	United Nations
UNCT	United Nations Country Team
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation