ANNUAL REPORT
ON THE USE OF CERF GRANTS
NIGERIA

Country	**Nigeria**
Resident/Humanitarian Coordinator	**Daouda Toure**
Reporting Period	**1 January 2010 – 31 December 2011**

I. Summary of Funding and Beneficiaries

Funding	Total amount required for the humanitarian response:		US$ 2,417,593
	Total amount received for the humanitarian response:		US$ 1,999,202
	Breakdown of total country funding received by source:	CERF:	US$ 1,999,202
		CHF/HRF COUNTRY LEVEL FUNDS:	US$
		OTHER: (Bilateral/Multilateral)	US$ 80,000
	Total amount of CERF funding received from the Rapid Response window:		US$ 1,999,202
	Total amount of CERF funding received from the Underfunded window:		US$
	Please provide the breakdown of CERF funds by type of partner:	a. Direct UN agencies/IOM implementation:	US$ 894,890
		b. Funds forwarded to NGOs for implementation (in Annex, please provide a list of each NGO and amount of CERF funding forwarded):	US$ 994,312
		c. Funds for Government implementation:	US$ 110,000
		d. TOTAL:	**US$ 1,999,202**
Beneficiaries	Total number of individuals affected by the crisis:		18,350 individuals
	Total number of individuals reached with CERF funding:		18,350 total individuals
			3,670 children under 5
			9,552 females
Geographical areas of implementation:		Six villages in Anka and Bukkuym Local Government Areas in Zamfara state of Nigeria	

II. Analysis

In March 2010, the Zamfara State Ministry of Health (MoH) reported that there was an ongoing pattern of childhood deaths and illness in at least six villages in the two Local Government Areas (LGAs) of Bukkuyum and Anka. Epidemiological investigations revealed high blood lead levels in affected children attributable to environmental exposure to lead from the processing of lead-rich ore for gold extraction. In 2010, the increase in the price of gold provided miners with additional incentives to augment their mining operations in LGAs. As a result, the increase in operations provoked an increase in the quantity of fine lead particles released into the air, which caused the world's greatest outbreak of lead poisoning.

Conservative estimates suggested that 18,350 persons including 3,670 under five children had been affected. The State and Federal health authorities made formal requests for assistance to the World Health Organization (WHO), the Centres for Disease Control and Prevention (CDC), Médecins Sans Frontières (MSF) and the Blacksmith Institute/Terragraphics to address the problem. WHO in collaboration with CDC, MSF, the United Nations' Children Fund (UNICEF) and Blacksmiths/ Terragraphics supported the State's initiative to conduct initial field investigations to examine the scale of the problem and assess the response needed. The UNICEF also coordinated the mobilization of international technical support. At the national level, a National Task Force and a presidential inter-ministerial committee were set up to support the State in the response activities by mobilizing both technical support and resources.

Humanitarian situation

At least six villages within Anka and Bukkuyum LGAs were initially identified to have high prevalence of lead poisoning among under five children. While the main concern with the lead exposure was in young children because of their vulnerability to the harmful effects of lead, adults were also at increased risk of chronic ill health, particularly renal impairment and hypertension. The UN system in Nigeria and CDC provided some analytical equipment (two LeadCare II Analysers plus kits) and trained laboratory personnel in their use. Medical personnel were also trained in the diagnosis and management of lead poisoning and assistance was provided on public health messaging.

Funds for the initial response activities came from Partners such as MSF, Terragraphics, CDC and UN system in Nigeria. Medical treatment of affected cases with chelating agents and other supportive therapy was initiated by MSF with support from the local authorities and UN system in Nigeria. The State Government earmarked the sum of US$1.6 million but only $134,000 was released. With limited access to funding and support from partners and local authorities, rock-grinding operations in the villages were moved away, which reduced continuing environmental contamination around habitations. An Initial environmental assessment was carried out, which revealed that the lead contamination in soil was relatively superficial and could be dealt with by removal and replacement of topsoil and thorough cleansing of habitations. Blacksmiths/Terragraphics conducted environmental remediation/decontamination in the Yargalma and Dareta. Local men were paid to assist with the clean-up operations in the two villages but breaks in the funding for the work led to short-term stoppages and delays in implementation.

However, the response activities were not sufficient and needed to be scaled up.

Environmental remediation in six villages of Abare, Tungar garu, Tungar Daji, Sunke, Duza and partly the big village of Bagega included treatment of more than 500 compounds (household complexes), common living areas, access roads within the village, exterior of houses and living rooms in most of the homes. Contaminated soil from the villages was replaced with fresh soil. Landfills were set up away from the villages to dispose safely of the contaminated soil.

The village level remediation activities were augmented with awareness creation and social mobilisation based on traditional modes of communication like town announcers, Emirates and street theatres. The response effort respected local culture and practices, and separate compound meetings were held for both genders. Numerous meetings were held to educate communities and their leaders. Moreover, the Emirs, Maulivis in mosques and Mallams played a major part in awareness creation. Anka Emirate set up a special social mobilisation group. At the same time, meetings with the top policy makers like the Governor, Commissioners, LGA Chairmen, Ward Heads, Village Heads and Emirs were held to reinforce their commitment, ownership and partnership.

In view of the foregoing, priority rapid response activities were identified as follows:

- Environmental decontamination/remediation
- Case identification and management
- Community health education on preventive measures
- Raising the awareness among health workers for early case detection
- Identification and management of additional affected villages
- Enhanced surveillance and data collection including rapid investigation of new areas.
- Sustaining multi-sectoral coordination and collaboration

The UN System in Nigeria under the guidance of the Resident Coordinator sought the assistance of CERF to bridge the funding gap in order to scale up activities and rapidly implement the above response initiatives to save more lives.

The added value of CERF

The CERF grant of $2,000,000 shared between UNICEF ($1,181,590) and WHO ($817,612) provided the needed impetus to save more lives by addressing the funding gaps and unmet emergency and life-saving needs of the affected communities.

- Under the CERF project, five additional villages were remediated/decontaminated thus providing clean and safe environments to an increased number of children and promoted access to chelation therapy.
- The CERF funds allowed for an effective synchronization of the implementation of environmental remediation and case management.
- Environmental remediation/decontamination of the villages was an essential part of the health management of the emergency since chelation could only be given to patients who were no longer being exposed to lead.
- The CERF funds were critical to the commencement of remediation work in the villages.
- CERF resources helped to free bed space at the treatment centres for the admission of additional cases for treatment thus improving access to chelation treatment.
- Five outreach clinics have also been established in the remediated villages by MSF to provide follow-up treatment for lead poisoning and co-morbidities in the villages involved. With the CERF grant, a centre of excellence for treatment of severe cases of lead poisoning and a laboratory has been kick-started.
- Case management has been improved by engaging the services of internationally renowned clinical toxicologists to assist in the review of treatment protocols after consultation with the caregivers on ground.
- Twenty doctors, 18 nurses, and four laboratory scientists have been trained on the management of cases and laboratory diagnosis. The laboratory is better equipped now with four LeadcareII machines and kits for field-based measurements of blood lead levels.
- A Graphite Furnace Atomic absorption spectrophotometer (GFASS) has also been procured for precise blood lead analysis. Supportive drugs and laboratory consumables have also been procured to improve medical care of affected children.

Additionally, lead poisoning surveillance activities such as active case search, case finding, alert investigation, weekly reporting, monthly review meetings, clinician sensitization and training of surveillance focal persons have been strengthened using the CERF funds. All the 17 LGA Disease Surveillance and Notification Officers (DSNOs) have received training on enhanced surveillance for lead poisoning using the IDSR strategy. Transport and communication in the field were reinforced. UN system in Nigeria's coordination of development partners in the overall response activities and provision of technical assistance were improved by the engagement of a technical consultant who was based in Zamfara State.

III. Results

Sector/ Cluster	CERF project number and title	Amount disbursed from CERF (US$)	Total Project Budget (US$)	Number of Beneficiaries targeted with CERF funding	Expected Results/ Outcomes	Results and improvements for the target beneficiaries	CERF's added value to the project	Monitoring and Evaluation Mechanisms	Gender Equity
Health	10-CEF-044 10-WHO-052 Response to an Outbreak of Lead Poisoning in Zamfara State of Nigeria Focusing on Addressing the Gaps/Unmet Emergency and Life-Saving Needs	1,181,590 817,612 TOTAL: 1,999,202	10,000,000	Children under five: 3,670 Female: 9,552 Male: 8,798	▪ Drastic reduction of human exposure to lead	▪ Environmental remediation completed in six villages of Abare, Tungar Guru, Tungar Daji, Sunke, and Duza. ▪ All contaminated compounds, living and domestic use areas, external areas, roads and walls were cleaned. Contaminated soil was safely packed and disposed of in landfills away from the village.	CERF funds provided the impetus for scaling up priority rapid response activities thus saving more lives.	▪ The work of BI was verified and certified by MOEn officials. In addition, UNICEF staff monitored the work in progress. ▪ All remedied villages were logged with GPS readings and provided with detailed maps. UNICEF arranged for Veolia Experts to visit the remediation work to validate the processes adapted by BI. ▪ The State Rapid Response team and National Task force members embarked on periodic field visits and submitted comprehensive reports on the different aspects of the implementation. ▪ Weekly Stakeholders review meetings were held. ▪ Monthly surveillance review meetings were held. ▪ Progress reports were written.	▪ Male and female under-five children were given equal special consideration since they were the most vulnerable. ▪ Women were also given special attention including females involved in ore processing activities in the sensitization and awareness creation activities on lead poisoning, preventive and safe mining measures. ▪ Respecting the cultural practices in northern Nigeria, separate compound meetings were conducted for both genders.

					▪ Improved access to effective case management	Case management: ▪ Improved access to medical treatment. ▪ 1052 under five children received treatment. ▪ Treatment protocol developed by MSF in consultation with international clinical toxicologists, including WHO consultants, revised based on experience to date, enabling a better use of resources. ▪ Reduction in case fatality rate by over 50 per cent. ▪ Twenty doctors and 18 nurses were trained on case management. ▪ Four laboratories trained on laboratory diagnosis and monitoring.			

					▪ Increased community awareness on preventive measures against lead exposure and proper treatment	Community participation, Social mobilization activities: ▪ Four meetings were held by the Emir of Anka with district heads in two LGAs. ▪ Messages to control and contain the situation reached 250 persons. ▪ Active involvement in mobilising, monitoring and reporting new cases in communities and directives to suspend all illegal mining activities in affected areas. One meeting with 28 District Heads, their secretaries and members from the Ministry for Chieftaincy Affairs mobilised to facilitate Community Dialogue for positive practices, monitoring and reporting of cases by NOA Zamfara. ▪ 109 Community dialogues/Compound meetings were conducted with 1,085 men and women reached with correct messages about positive behaviours and practices in 13 affected villages. ▪ Eight community dialogues were held with miners, traditional healers and local Mallams and 400 persons reached with correct messages on risk, health hazards and preventive measures to contain the cases and deaths and prompt reporting of cases. Information, Education, Communication (IEC) Materials: ▪ Development, pre-testing, printing and distribution of IEC Materials in local language (Flyers, posters,			

						billboards, sign post and community information boards were placed in strategic locations (Emir palaces, Treatment sites, and markets). ▪ At least 50 per cent of community members in affected communities reached with messages and adopted positive behaviours and practices to mitigate the effects of lead intoxication in affected communities. Capacity building: ▪ The capacity of 840 health workers was developed on case definition, identification, risk and preventives measures including correct messages for dissemination. ▪ Thirty CSOs capacity developed to mobilise, monitor and report in 2 LGAs. ▪ Thirty TBAs in affected Communities capacity developed for house to house mobilization and prompt reporting. ▪ As many as 225 youth volunteers were trained in affected community to assess, evaluate and take action at the community level and then disseminate messages and report. ▪ Thirteen focal officers were identified and trained to monitor each affected settlement and report. ▪ Orientation of 144 town announcers ▪ Six focal persons trained to			

						monitor compliance by miners and community members to prevent further deaths of children. Media Partnership/ Engagement:: ▪ 150 core groups of journalists were identified from radio, TV and print media engaged and trained for effective reporting, provide feedback, media coverage, review meetings on progress and write articles and features on situation. ▪ Two jingles (one with interactive message) produced and aired for six months on two radio stations. ▪ Six part drama series for public and miners produced and aired. ▪ Three phone-in programmes aired. Media engagements and activities reached approximately 90 per cent population in Zamfara and 60 per cent of population in affected communities with key messages.			
					▪ Early warning and response system operational for all outbreak alerts	Surveillance/Epidemiology: ▪ Seventeen DSNOs trained on lead poisoning surveillance. ▪ Identification of 110 villages that processed ore for gold			

						▪ Rapid Response Team in place in eight affected settlements conducted field visits, identifying new mining sites and taking blood samples for lab investigations, monitoring compliance and prompt response and feedback on situation in affected LGAs.			
					▪ Adequate logistics and supplies for response operations	Logistics/supplies purchased: ▪ Four LeadCareII Analysers and kits for 3000 tests ▪ A graphite furnace Atomic absorption spectrophotometer for precise blood lead analysis ▪ Equipment for sample preparation ▪ Laboratory consumables ▪ Supportive drugs ▪ Intravenous and oral chelating agents ▪ Transportation motocycles ▪ Communication equipment, internet and computer. ▪ Fresh soil was used to replace contaminated soil. Lead contamination levels have been brought down within acceptable limits.			

					▪ Effective coordination and collaboration among partners	Advocacy and Sensitization: ▪ Two advocacy workshops in state for 230 policy makers (Governor, deputy Governor, SHA members, Honourable commissioners of line ministries sensitized and mobilised. Renewed commitment, funds released for activities and additional five motorcycles for monitoring in affected communities. Three sets of Majigi equipment donated, 300 T-shirts, trousers and face caps for youth volunteers and 100 Hijab for Female TBAs for H2H mobilization in affected communities. ▪ LGA Chairmen and Hon Councillors 120 sensitized and reached with data for action and correct messages. ▪ Six state level coordination meetings were organised with 198 persons including WHO, MSF, UNICEF, MOE, MOH. Media participated, leading to improved coordination, joint planning and monitoring. ▪ Eight State Social Mob Committee meetings held with 256 participants. Work plans were developed to monitor activities and Community Dialogues in the affected communities. ▪ Four LGA coordination meetings were held at LGA Level and LGA mobilization action plans developed and LGA Task Force established on Lead poisoning and monitoring and reporting in two affected LGAs			

Annex 1: NGOS and CERF Funds Forwarded to Each Implementing NGO Partner

NGO Partner	Sector	Project Number	Amount Forwarded (US$)	Date Funds Forwarded
Blacksmith Institute	Environmental remediation	10-CEF-044	448,702	6 September 2010, First instalment
Blacksmith Institute	Environmental remediation	10-CEF-044	371,030	2 November 2010, Second instalment
Blacksmith Institute	Environmental remediation	10-CEF-044	124,580	10 December 2010, Third instalment
Blacksmith Institute	Environmental remediation	10-CEF-044	50,000	3 March 2011, Final instalment
Total			**994,312**	

Annex 2: Acronyms and Abbreviations

BI	Blacksmith Institute and its associate Terragraphics
CBO	Community Based Organizations
CDC	Centres for Disease Control and Prevention
CSO	Civil Society Organization
DMSA	Dimercaptosuccinic acid
DSNO	Disease Surveillance and Notification Officer
GFASS	Graphite Furnace Atomic Absorption Spectrophotometer
GPS	Global Positioning System
H2H	House-to-House
IDSR	Integrated Disease Surveillance and Response
IEC	Information Education Communication
LGA	Local Government Area
MOH	Ministry of Health
MSF	Médecins Sans Frontières
NGO	Non Government Organization
NOA	National Orientation Agency
SHA	State House of Assembly
SOP	Standard Operating Procedure
SMC	Social Mobilization Committee
SMOEn	State Ministry of Environment and Solid Minerals
SMOH	State Ministry of Health
TBA	Trained Birth Attendant
UN	United Nations
UNICEF	United Nations Children's Fund
WHO	World Health Organization