

**Final report: SM140220
Donor: USAID**

REPORTING AGENCY: UNICEF COMOROS

**EMERGENCY RESPONSE TO EARTHQUAKE DISASTER
IN THE COMOROS**



Period: April 2014 to July 2014

Duration of Contribution	From 18/04/2014 to 31/07/2014
Period Covered by Report	From 18/04/2014 to 31/07/2014
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Funds Available	4.00 US\$
Partners	<ul style="list-style-type: none"> • Direction of Water and Energy • National Ministry of Education • Local Education Authorities • COSEP - Centre des Operations de Secours et de la Protection Civile • DGSC - Direction General de la Sécurité Civile • Comoros Red Crescent • UN Agencies

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Acronyms

COSEP : Centre des Operations de Secours et de la Protection Civile

DGSC: Direction General de la Sécurité Civile

WASH : Water Sanitation and Hygiene

1. Executive summary

At the beginning of 2014, the Comoros experienced an emergency crisis. On March 31 2014 a landslide occurred in the village of La Bandra Mahale, on the Djimlime peninsula, in the north-east of the island of Anjouan. This was the result of a seismic activity, followed by three days of torrential rains from 28 to 31 March 2014, accompanied by 60 km/h strong wind.

A total of 3,030 people were displaced and hosted in a temporary camp with two sites in the village of Bambao Mtsanga from March 30, 2014 to May 2, 2014. USAID provided a grant of 50,000 USD through UNICEF to respond to this emergency.

Through the USAID grant a rapid evaluation was conducted. Priority needs in the camp where the displaced population was relocated included health, protection-education, food security, WASH, shelter and basic items. Interventions and results through the USAID funded provision were:

Indicators	Results	Comments
Volume of drinking water distributed to populations in the designed area	9,000 liters/day	Upon closure of the camp, the land was disinfected to prevent the spread of diseases
Number of affected peoples who have access to safe water	3,030 people 325 households had daily access daily to safe drinking water	
Number of latrines set up in the camp	43 latrines (20 for men and 23 for women) 325 households had access to latrines and showers All latrines where disinfected with 2% solution of chlorine daily	
Number of hand washing facilities including showers	10 hand washing facilities and 16 community showers were installed and operational	
Number of training sessions on WASH	2-day training for 47 people of which 30 Red Crescent volunteers and 7 DGSC officers	
Number of children benefiting from school support	625 students received school kits and 6 classrooms were set up 245 under-5 children had access to temporary classrooms	

Main challenges were the late availability of funds, coordination due to lack of expertise and communication constraints and the coordination of the decisions on post-emergency follow-up actions.

2. Context

2.1 Background

At the beginning of 2014, the Comoros experienced an emergency crisis. On March 31, 2014 a landslide occurred in the village of La Bandra Mahale, on the Djimlime peninsula, in the north-east of the island of Anjouan. This was the result of a seismic activity, followed by four days of torrential rains from 28 to 31 March 2014, accompanied by 60 km/h strong winds.

The Comoros archipelago consists of four volcanic islands in the Indian Ocean. The islands are known for their difficult conditions during the rainy seasons, and for natural disasters, such as cyclones, storms, floods and for the seismic phenomena related to the activity of the Khartala volcano.

The 2014 rainy season in Comoros was preceded by a seismic activity for about a month. On Monday, March 31, cracks in several earth surfaces in the village of Bandra Mahale were detected. A mission of experts sent to the field to survey the damage confirmed the appearance of these cracks, with gaps as wide as 30 cm and as deep as 20-30 cm, going up to 50 cm in some places. Several buildings were damaged, with loose slabs and cracked walls. These phenomena exposed part of the village to a risk of landslides that could destabilize the entire area. With the threat of further earth collapse and landslide, this situation required the evacuation of the local population, under the supervision of the island authorities and the setting up of a camp for the displaced population.

2.2 Emergency intervention

The March 2014 emergency was the first ever crisis in the country where the local authorities had to manage a camp for hundreds of displaced households, and the consequent disruption of basic services. A total of 3,030 people were displaced and hosted in a temporary camp with two sites in the village of Bambao Mtsanga:

- 706 Men;
- 1,686 women (of whom 600 were of reproductive age and 70 at an advanced stage of their pregnancy, including 20 in full-term);
- 638 children under five years (including 300 children under one year and 338 children aged 1 to 5 years);

Classes were disrupted for 625 pupils.

Below is a picture of the camp where the displaced population was hosted.



- Zone déformée et déstabilisée avec traces de mouvements (Zone d'exclusion définitive)

Zone nécessitant des études détaillées en géotechnique.

Niche d'arrachement
- Zone nécessitant des études détaillées en géotechnique.

Sens du déplacement

Priority needs in the camp where the displaced population was relocated included health, protection-education, food security, WASH, shelter and basic items.

By a letter dated April 8, 2014, the Government officially requested support from the international community for a coordinated response to the emergency. Financial and technical partners, particularly the United Nations agencies, were mobilized and an emergency response unit under the leadership of the Government was set up in the field. The response team was composed of experts from Government, UN agencies (UNICEF, UNFPA, WHO, and UNDP), the Comoros Red Crescent Society. This team conducted daily assessments in the affected area.

USAID offered to assist the Government with a grant of 50,000 USD through UNICEF to respond to the emergency.

Once USAID funds were announced (AID-687-IO-14-00001), UNICEF held a meeting with the Centre des Operations de Secours et de la Protection Civile (COSEP), the Red Crescent and the Ministry of Education to ensure coordinated emergency response.

2.3 Expected outcomes

The two expected outcomes of the USAID grant were:

1. To reduce the risk for water borne diseases in the context of increased vulnerability in the camps of Bam-bao;
2. To ensure that 625 pupils in the camps would be back to school and protected.

2.4 Proposed Outputs

To achieve the above outcomes the following outputs had been planned:

1. Safe drinking water supplied in the camp using a water treatment unit which can provide 10,000 liters per day;
2. Sanitation facilities set up for men, women, and children separately for safety;
3. Hand-washing facilities set up to significantly improve hand washing practices;
4. Hygiene promoted in the camps, including training and sharing of communication tools; and
5. Temporary learning spaces set up for children from the displaced families.

2.5 Indicators

Indicators selected to measure the response were:

1. Volume of drinking water distributed to populations in the camp;
2. Number of affected peoples who have access to safe water;
3. Number of latrines set up in the camp;
4. Number of hand washing facilities including showers;
5. Number of training sessions on WASH; and
6. Number of children benefiting from school support.

3. Implementation strategy

3.1 *Type of response*

Through the USAID grant a needs-based rapid assessment was conducted in the affected areas. Besides the school disruption, the camp set up to host the displaced population presented several problems. There was neither a water supply system nor hygiene and sanitation facilities around the site. The population defecated in the open air. This posed a major risk of outbreak of epidemics of diarrheal diseases, malaria and parvoviruses but also of child malnutrition and violence against Women and girl in the camp.

The identified needs were considerable and urgent. In this context, the UN agencies swiftly coordinated their support to the government to organize the response to the emergency in the health, education and wash sector. Sharing of information on sectoral interventions was a priority to better coordinate all efforts. The government mainly supported the food and electrical power distribution in the camp. UNICEF coordinated activities in the two sectors it leads - WASH and education. The USAID grant was used mainly to carry out the Wash and education related activities to ensure the enjoyment of basic human rights by the affected population. UNICEF deployed its WASH Programme Officer in the field for three weeks to assist in camp management and in the implementation of planned activities with partners.

The activities were implemented through the local community based organisations under the coordination of the Direction General de la Sécurité Civile (DGSC), the government institution in charge of civil protection. It was agreed that all WASH and education related emergency response activities would be pre-financed by the partners and refunded once the USAID funds would be made available to UNICEF.

3.2 *The intervention site*

The emergency camp was opened with tents provided by the government from March 30, 2014 to May 2, 2014. It was set up in a field not far from Bambao Mtsanga village, the district administration center which hosts the townhall, a district hospital and a police station. The chosen site presented the best available environment to respond to the emergency. The camp site includes an abandoned warehouses and offices and enough land for the necessary tents. A small river crosses the field, which represented good opportunity to secure adequate treated water supply and sanitation for the affected population.

4. Results achieved

4.1 Main results and summary of interventions

The table below summarizes results and intervention. Each indicator and intervention is discussed in detail further below.

Indicators	Results	Comments
Volume of drinking water distributed to populations in the camp	9,000 liters/day	Upon closure of the camp, the land was disinfected to prevent the spread of diseases
Number of affected peoples who have access to safe water	3,030 people 325 households had daily access daily to safe drinking water	
Number of latrines set up in the camp	43 latrines (20 for men and 23 for women) 325 households had access to latrines and showers All latrines where disinfected with 2% solution of chlorine daily	
Number of hand washing facilities including showers	10 hand washing facilities and 16 community showers were installed and operational	
Number of training sessions on WASH	2-day training for 47 people of which 30 Red Crescent volunteers and 7 DGSC officers	
Number of children benefiting from school support	625 students received school kits and 6 classrooms were set up 245 under-5 children had access to temporary classrooms	

4.2 Water supply in the camp

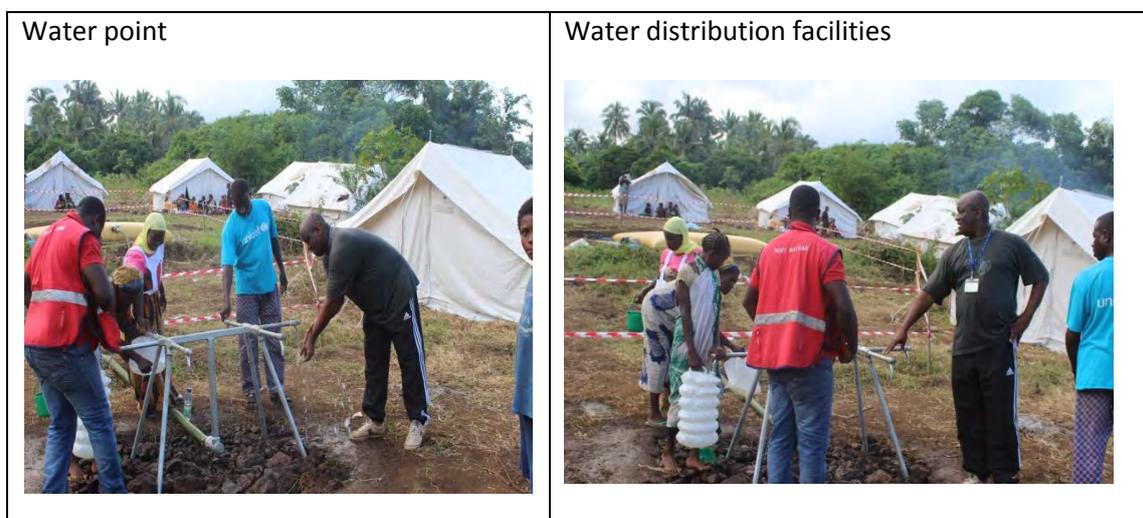
Indicators	Results
Volume of drinking water distributed to populations in the camp	9,000 liters/day
Number of affected people who have access to safe water	3,030 people 325 households had daily access to safe drinking water

With the USAID grant, UNICEF through its implementing partners, the Red Crescent and the DGSC, supported access to safe drinking water for 2,392 water users in the camp. All users were provided with safe water supply. Fuel, water treatment products and logistical support were also provided.

Initially, all the affected population received a basic family kit including soap, jerry cans, buckets, and aqua tabs for 10 families. The basic family kits allowed to ensure basic hygiene conditions for the affected population.

UNICEF also mobilized the water treatment unit which was prepositioned on the Island of Anjouan. The water treatment unit is able to treat unsafe water through in a long chain process through filtering, flocculation, and chlorination. Before distributing the treated water, UNICEF and Red Crescent carried out quality control on it.

The pumped water was stored in water bladder tanks having a capacity of 10 m³ and then distributed by gravity to the water point where 6 taps were set up.



As regular crowds of women were observed around the six-tap water point, a second water bladder tank and water point were set up on the other side of the camp at some distance from the first unit. The aim was to be in compliance with the Sphere norms and to reduce the pressure around the managed water point, but also to reduce the distance the women had to walk from the tent to get water.

Set up initially with the support of UNICEF, the daily maintenance and exploitation of the water treatment unit was supported by a team from the Comorian Red Crescent and the DGSC. The maintenance included refueling of the pump, cleaning of all system, chlorination, and other necessary actions.

The USAID-funded water-treatment unit allowed UNICEF to provide safe drinking water for all affected populations in the camp and to ensure that the volume of water storage facilities was adequate to cover the daily water needs in the camp.

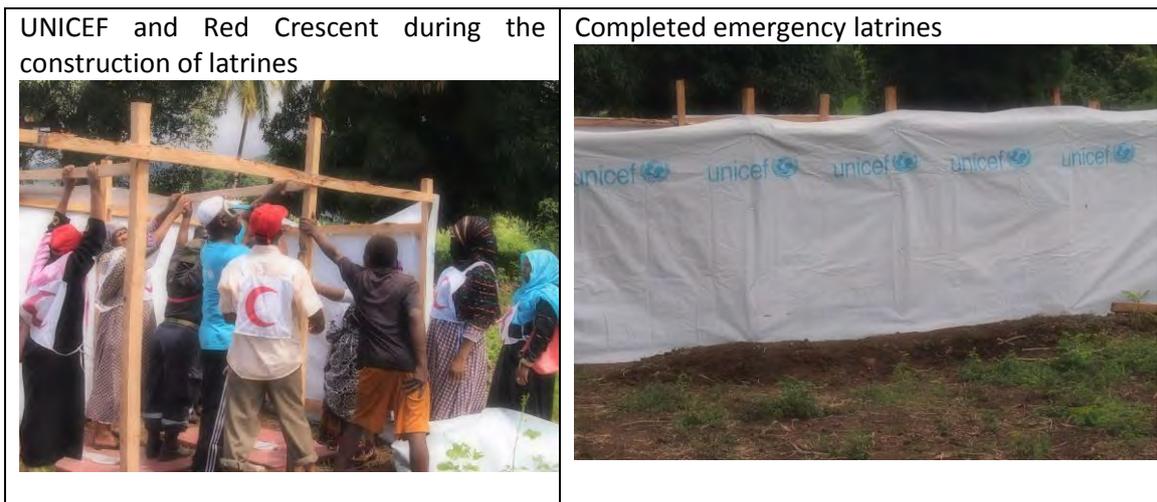
4.3 Improving hygiene (sanitation and hand-washing facilities)

Indicators	Results
Number of latrines set up in the camp	43 latrines (20 for men and 23 for women) 325 households had access on managed latrines and showers All latrines were disinfected with 2% solution of chlorine daily Upon closure of the camp, the land was disinfected to prevent the spread of diseases
Number of hand washing facilities including showers	10 hand washing facilities and 16 community showers were installed and operational

Access to adequate sanitation for all displaced populations in the camp was the biggest issue and challenge for UNICEF-supported response, its implementing partners, and the local authorities. The first week after the opening of the camp the affected population had only 3 latrines and open defecation in the nearby river of Bambao became a common practice and was a major hygiene risk for the affected population and all river side inhabitants.

The camp coordination committee prioritized the construction of latrines. The necessary materials were procured and workers were mobilized amongst the camp dwellers, joined by Red Crescent volunteers, to dig pit latrines. UNICEF provided a tarpaulin, slabs, small equipment, tools and technical assistance for the construction of the latrines. The DGSC and the city of Bambao provided the wood required to build the latrines.

As anal washing is a common practice in the country, all the latrines where equipped with a large bucket, cups and soap in line with the camps safe hand-washing strategy.



4.4 Training and hygiene awareness promotion

Indicators	Results
Number of training sessions on WASH	2 day training for 47 people of which 30 Red Crescent volunteers and 7 DGSC officers

It was observed that the latrines set up in the camp were mainly used by women and children, while men carried on the practice of open defecation outside the camp. To increase hygiene awareness, training activities were organized in the camp.

The overall objective of the training was to:

- Prevent water-borne diseases and poor hygiene in the camp;
- Strengthen participants' knowledge of sanitation and water-borne diseases; and
- Strengthen participants' knowledge of how to conduct communication for behavior change.

The following five training modules were developed to roll out the training sessions, namely:

Module 1: The WASH project in the in current emergency situation.

In this module the purpose and objectives of the WASH interventions, roles and responsibilities of volunteers and teachers were clarified.

Module 2: Hygiene

Through this module, participants learned how to define health and its various aspects and how to maintain hygiene for each of these. This module includes five course units:

- Unit 1: Definition of hygiene
- Unit 2: Personal hygiene
- Unit 3: Healthy Food
- Unit 4: Water hygiene
- Unit 5: Environmental Health

Module 3: Facility Maintenance

Through this module, participants learned how to use the water treatment unit and how to improve sanitation in the camp. This module includes three course units:

- Unit1: Maintenance of the water treatment plant
- Unit 2: Maintenance of latrines
- Unit 3: Maintaining good sanitation in the camp

Module 4: Water borne diseases

Through this module, participants learned about the most common water-related diseases in our country, their modes of transmission and methods of prevention. This module includes two course units:

- Unit 1: Diarrheal diseases (typhoid, cholera, etc.)
- Unit 2: Vector-borne diseases (malaria, dengue)

Module 5: Hygiene promotion

Through this module, participants learned about hygiene promotion and its various components in emergency situations. This module includes three course units:

- Unit 1: Definition of hygiene promotion
- Unit 2: The components of hygiene promotion in emergencies
- Unit 3: Key steps in hygiene promotion

4.5 Education support

Indicators	Results
Number of children benefiting from school support	625 students received school kits and 6 classrooms were set up 245 under-5 children had access to temporary classroom

Following the displacement of the population of Mahale, classes were interrupted as pupils joined the camp in Bambao. During this emergency, UNICEF worked with the head of Primary Education in the island. A needs assessment was carried out to identify the teaching and learning materials and furniture required; data were provided by the Government.

Initially, it was very difficult to ensure that all children attend classes because the priority of the displaced families was food and water. The coordination unit set up to respond this emergency identified a former warehouse no longer in use. Prior to partitioning the warehouse into classrooms based on the number of children in the camp, UNICEF and partners provided building materials and mobilized local artisans to set up the temporary classrooms.

As the affected population is very poor, one of UNICEF priorities was to provide the following school supplies all children, and to facilitate their return to school:

Items	Quantity
Exercise books - 32 pages	350
Exercise books - 192 pages	1,110
Blue pens	1,090
Red pens	525
Rulers	410
Blackboards	7
Snacks	For 625 pupils

5. Constraints

The biggest constraint was the lateness in securing adequate funding to respond to the emergency. Agencies and other partners also faced difficulties in mobilizing the necessary supplies for the affected people. Initially coordination was also a challenge, due to communication hurdles between agencies.

One further constraint was the timing between the USAID grant approval and the fund disbursement which required for some of the activities to be pre-financed by partners and suppliers in a context where funding is a challenge.

The lack of prior experience in the setting up of an emergency camp for internally displaced populations was also a challenge, as the Comoros has no expertise in this area.

Finally, one major challenge was reaching a consensus on the post-emergency follow-up priorities for the population and the local authorities, and good planning for the closure of the camp.

6. Expressions of Thanks

The Comoros Government and UNICEF Comoros are very thankful to the Government of America and the American people through USAID for the timely financial funding assistance to the emergency response to the green disaster in Comoros. The USAID grant helped to reduce risks for water-borne diseases in the context of increased vulnerability in the camps of Bambao and to ensure that 625 pupils in the camps were back to school and protected, and hence contributed significantly to improved child survival and development due the earthquake and heavy rainfalls of March 2014.

7. Financial execution

Funds Utilization Report

Donor: USA USAID
 Sponsor Code: G45602
 External Reference: AID-687-IO-14-00001

Recipient UNICEF Office: Comoros - 6620

UNICEF Grant Reference: SM140220

Grant Description: USAID/COMOROS/EMERGENCY RESPONSE TO THE GREEN EARTHQUAKE DIS
 Grant Duration: 18 April 2014 - 31 July 2014
 Reporting Period: 18 April 2014 - 31 July 2014

Part 1. Cumulative Total Funds Utilized from Grant by Results and Activity (1 Jan 2012 - 31 Jul 2014)

Cost Category	Commitment Reference	Posting Date	Commitment Description	Funded by this Grant	Funds Utilized for Reporting Period	Funds Utilized 1 Jan 2012 - 17 Apr 2014	% of Grant Utilized
006 - YK 2 SERVICES ORIENTÉS VERS LES GROUPES							
004 - IR2.4 2013-2014 LES ÉLÈVES DE 60% DES				\$36,296	\$36,292	\$0	100%
001 - PRÉ-POSITIONNER DES STOCKS D'URGENCE				-	\$175	\$0	-

TRANSFERS AND GRANTS TO COUNTER-PARTS	0100118361	16/07/14	Remboursement depenses urgences MAHALE/S. d'Ecoute	-	\$175	\$0	-
			TRANSFERS AND GRANTS TO COUNTERPARTS Sub-total	-	\$175	\$0	-
007 - 2013-2014 5. DANS LES ZONES D'URGENCE				-	\$36,117	\$0	-
TRANSFERS AND GRANTS TO COUNTER-PARTS	0100110485	21/05/14	Remboursement Evaluation rapide Urgence Mahale	-	\$738	\$0	-
	0100114933	20/06/14	Remboursement des depenses Urgence Mahale	-	\$20,371	\$0	-
	0100115370	24/06/14	Appui aux sinistrés suite Urgence Mahale Anjouan	-	\$5,354	\$0	-
	0100117329	08/07/14	Remboursement depenses Urgence Mahale-COSEP	-	\$9,654	\$0	-
			TRANSFERS AND GRANTS TO COUNTERPARTS Sub-total	-	\$36,117	\$0	-
010 - YE-3 DEVELOPPEMENT DE LA SWAP EN MATIÈRE							
006 - 2013.IR3.5 EDUCATION/SITUATION-URGENCE				\$10,000	\$10,000	\$0	100%
001 - APPUI MISSION EVALUATION URGENCE				-	\$3,662	\$0	-
TRANSFERS AND GRANTS TO COUNTER-PARTS	0100117997	14/07/14	Carburant Anjouan pour 2eme trimestre/urgence	-	\$3,662	\$0	-
			TRANSFERS AND GRANTS TO COUNTERPARTS Sub-total	-	\$3,662	\$0	-
002 - PREPOSITIONNEMENT/DISTRIBUTIONS KITS URG				-	\$4,651	\$0	-
TRANSFERS AND GRANTS TO COUNTER-PARTS	0100107062	21/05/14	Fournitures scolaires pour les urgences à Mahalé	-	\$4,651	\$0	-
			TRANSFERS AND GRANTS TO COUNTERPARTS Sub-total	-	\$4,651	\$0	-
003 - REDUCTION DES RISQUES EN MILIEU SCOLAIRE				-	\$1,688	\$0	-
TRANSFERS AND GRANTS TO COUNTER-PARTS	0100115600	25/06/14	Remboursement CEIA Anjouan,urgences MAHALE.classes	-	\$1,688	\$0	-
			TRANSFERS AND GRANTS TO COUNTERPARTS Sub-total	-	\$1,688	\$0	-
Total				\$46,296	\$46,292	\$0	100%

Part 2. Cumulative Total Funds Utilized from Grant by UNICEF Cost Category

Cost Category	Funds Utilized			
	For Reporting Period	1 Jan 2012 - 17 Apr 2014	Prior to 2012	Total
CONTRACTUAL SERVICES	\$0	\$0	\$0	\$0
EQUIPMENT, VEHICLES AND FURNITURE	\$0	\$0	\$0	\$0
GENERAL OPERATING + OTHER DIRECT COSTS	\$0	\$0	\$0	\$0
INCREMENTAL INDIRECT COST	\$0	\$0	\$0	\$0
STAFF AND OTHER PERSONNEL COSTS	\$0	\$0	\$0	\$0
SUPPLIES AND COMMODITIES	\$0	\$0	\$0	\$0
TRANSFERS AND GRANTS TO COUNTERPARTS	\$46,292	\$0	\$0	\$46,292
TRAVEL	\$0	\$0	\$0	\$0
Total	\$46,292	\$0	\$0	\$46,292