



Figure 1 © UNICEF/ECU/2016/Castellanos

Ecuador

Humanitarian Situation Report No.2



- An earthquake of 7.8 magnitude hit in the Northwest part of Ecuador in the evening of April 16th, 2016.
- Six most affected provinces have been declared in emergency and remain under red alert: Manabí, Esmeraldas, Guayas, Santa Elena, Santo Domingo and Los Ríos, with **Manabí being the hardest hit**.
- The worst hit Canton of **Pedernales** has been declared "**disaster zone**".
- A total of 541 aftershocks have been felt since April 16th, including the largest of the 6.3 magnitude in the early hours of April 20th. This is expected to continue in the next few weeks.
- **281 schools are damaged or destroyed** (Ministry assessments), affecting an estimated 170,000 students.
- The first batch of relief supplies from UNICEF (WASH, education and health) which arrived from Copenhagen and Panama will be dispatched to the affected regions for immediate response.
- UNICEF deployed 5 staff from the Global and Regional Offices as well as through the LACRO Regional Rapid Response Roaster. In addition, 10 national staff have been sent in the field to support UNICEF response operations.

Date: 22 April 2016

720,000 People Affected

587 People dead

155 People missing

113 People rescued alive

8,340 People injured

25,376 People in shelter

305,000 Children under 19 years affected

76,000 children under 4 years affected

1,125 buildings destroyed and **829** damaged

281 schools affected (29 destroyed; 122 require major rehabilitation)

UNICEF will issue a flash appeal of over USD 22M for its response as a part of the USD 72.7M appeal by the UN and partners.

Updated Situation Overview & Humanitarian Needs

On April 16th at 6:58 p.m. (local time), an earthquake of 7.8 at 19 km deep impacted the northwest of Pedernales, or 27 km (17 miles) southeast of Muisne¹. The six most affected provinces are: Manabí, Esmeraldas, Guayas, Santa Elena, Santo Domingo and Los Ríos, with Manabí the hardest hit. The worst hit Canton of Pedernales has been declared "disaster zone".

Over 7 million people live in the six affected provinces. It is estimated that the earthquake has impacted approximately 720,000 people currently suffering some effect and require assistance.

The Government of Ecuador is providing and coordinating response actions. The first efforts were focused in the search and rescue phase deploying 882 firefighters, 4,900 police and around 10,000 military personnel.

As assessments evolve and sectorial information arrives from the field it is clear that there is a significant level of damage and needs requiring urgent humanitarian support in nine sectors: WASH, Food security, Shelter, Health, Protection, Education, Early Recovery, Logistics and Coordination.

The health system is on maximum alert. The Chone General Hospital and Social Security Institute Hospital (IESS) have major structural damage. Zika virus and dengue fever pose an "immediate threat" to survivors. Heavy rains are causing stagnant water, greatly increasing the number of breeding sites for mosquitoes, resulting in a higher risk of mosquito-borne disease.

Education

Based on initial available information 281 schools are destroyed or damaged affecting 170 000 students aged 3 to 17. School activities have been suspended. The school year for the Coast was supposed to start May 2nd 2016. Children, adolescents and teachers have died, they have also lost family members, teachers and caregivers. There is significant concern about children suddenly separated from families. Homes, schools, recreation spaces have been lost or are disabled. School transport is partly disabled. Reports indicate the death of teachers and student counsellors which along with psychologists and social workers are key actors for psychosocial support in situations of crisis and prevention of violations of children's rights.

The educational district of Pedernales has been completely destroyed and the educational system is trying to function in tents in open yard. Additionally several rural schools were already suffering lack of access to safe water, sewerage and other basic services before the earthquake

Manabí and Esmeraldas provinces have the highest number of children out-of-school in Ecuador. The earthquake is aggravating the exclusion, thus It is urgent to immediately rollout education y emergencias mechanisms, not only because of the importance of the right of children to education but also because it is one of the main strategies for child protection and has a significant impact allowing community engagement to promote hygiene and prevent Zika, Dengue, chikungunya and other diseases. It is important to maintain the education system as the main enabler for school feeding programs to support nutritional situation of children and adolescents.

Health and Nutrition

The damage and needs assessment is still underway but initial reports indicate that the health sector has been severely impacted. According to PAHO and the Health sectorial group 6 hospitals of medium and high complexity of the province of Manabí (5) and Esmeraldas (1) are out of service due to important structural damages. Other hospitals have reported a series of non-structural damages including four hospitals in Quito.

Health facilities are also suffering of the loss of electricity, ruptures of water pipes and gas pipes, water leaks, wall cracks, detachment of roof, fallen walls, etc. forcing patients to be evacuated and/or transferred to other health facilities nearby. In the most affected municipality of Pedernales, the health clinic remains fully

¹ Source: The U.S. Geological Survey (USGS).

operational but healthcare delivery capacity is saturated with the increased demand of services. In the province of Manabí, health facilities are working at full capacity 24/7 and are overwhelmed with patients while local health workers are facing important fatigue and exhaustion. The regular rotation of health personnel is a priority to ensure continuity of health services.

The epidemiological profile for the area reports vector-borne diseases, foodborne diseases and waterborne diseases as well as zoonotic diseases (leptospirosis) among others². The displacement of large numbers of people to temporary high population density locations, combined with the degradation of environmental conditions, is increasing the risk of transmission of communicable diseases and other conditions and leading to increased mortality, particularly from outbreak-prone diseases. This is particularly true for acute diarrheal diseases and acute respiratory infections, especially among children; as well as food-borne diseases due to the deterioration of the preparation and handling of food.

The province of Manabí already registers the highest incidence of *Aedes Aegypti* related to the spread of Dengue, Chikungunya and Zika. The expected of rainfalls and possible flooding in the affected areas will contribute to the increase of risk of the most vulnerable populations.

The mental health of the surviving populations is also a concern. Such stressful situations boost the number of cases of anxiety, depression; as well as increased consumption of alcohol, drugs, and forms of social and domestic violence. All these risk factors have significant consequences for children rights protection.

Protection

Thousands of people have been displaced and are exposed to several protection risks. According to available preliminary protection assessments, there is concern that impact of the earthquake might increase the protection risks in areas with preexistent issues of human trafficking, SGBV (with a 51% SGBV rate in Esmeraldas Province prior the earthquake). A significant number of directly affected people in need of protection are also either on the move or hosted by communities and families, and therefore exposed to several protection risks such as family separation, exploitation, violence and abuse.

The most vulnerable persons include children, adolescents, women, and people with reduced mobility, undocumented foreigners and other vulnerable groups. In addition, a yet unknown number of people are in need for psychosocial attention (especially in remote areas with minority groups) in order to recover from severe trauma and are likely to require protection assistance.

A total of 164 children under 18 years are reported to be separated from their families and temporarily placed in secure locations.

WASH

With reduced access to the public water supply due to rupture of water pipes, and collapse of home and local stores, risk of water contamination and outbreaks of water-borne diseases are high and the supply of bottled drinking water has also been reduced. Water supply systems and needs in clean and potable water are still being assessed. The requirement of the provision of water storage solutions and water treatment supplies and equipment, as well as support to water quality monitoring are anticipated. Support to ensure adequate sanitation and hygiene in shelters and temporary schools, proper waste management and clean-up efforts is also needed to avoid the deterioration of hygiene and sanitary conditions in shelters and affected communities.

Access to safe water, proper sanitation and hygiene is one of the main concerns in the affected areas. According to the National Secretary of Risk Management the principal problem is the provision of safe water as drinking water is limited because of the lack of electricity, water trucks, and damage in pipes in some affected areas. Water quality testing is an urgent request, as well as hygiene promotion to prevent diseases such as dengue, chikungunya, Zika, malaria, diarrhea, and others.

² (Gaceta Epidemiológica Semanal No. 53)

There are significant concerns about chronic gaps in water and sanitation in some affected zones with higher priority at health centers, schools and for displaced families. Water & sanitation is a major challenge in the coastal region, which is also exposed to heavy rainfall & flooding during this season.

Affected provinces are also high risk for Zika, Dengue, Malaria and Chikungunya viruses. In the provinces of Esmeraldas, Manabí and Los Rios there is a high risk of new cases of Dengue, Zika and Chikungunya that could increase quickly, due to increasing mosquito breeding sites. All efforts should be made to prevent a wider propagation of these viruses in the affected areas.

Initial Estimate Affected Population

As of 21st April, the number of the casualties increased to: 587 people dead; 155 people missing; 113 people rescued alive; 8,340 people injured; and 25,376 people in shelter.³

Also, the extent of the structural damage increased to: 1,125 destroyed buildings, 829 damaged buildings as well as 281 schools damaged (29 destroyed; 122 require major rehabilitation). The total number of students affected is 170,000.

There are an estimated 720,000 people affected by the earthquake, of which 305,000 people are under the age of 19 years with the further break down of: 15,000 children under 1 year, 61,000 children between 1 and 4 years, 156,000 children between 5 and 14 years, and 71,000 aged between 15 and 19 years.

Humanitarian Response Coordination

- The Government of Ecuador is leading the response, search and rescue operations, the distribution of foods and other relief item as well as the provision of emergency shelters. The Ministry of Interior is coordinating actions with the National Police, the National Risk Management Secretariat, the Metropolitan Municipality, firefighters and armed forces.
- Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator Stephen O'Brien completed his two-day mission to Ecuador on the 20th, calling for more support for people affected by the deadly earthquake that struck on Saturday. The UN and our international partners are supporting the Government by mobilizing international support for immediate and life-saving assistance, to bolster relief, intensify recovery and help people get their lives and livelihoods back on track. ERC O'Brien allocated **US\$7 million from the Central Emergency Response Fund to kick-start vital operations in logistics, shelter, water, sanitation and hygiene, and emergency health.**
- The RC for Ecuador: Mr. Diego Zorrilla, has been designated as Humanitarian Coordinator, for an initial period of three months.
- UNICEF, building on its longstanding relationship with Ministries of Health and Education, co-leads WASH, Education and Child Protection sector coordination.
- UN and partners have launched the **full Flash Appeal of USD 72.7 million for the Ecuadorean relief operation on Friday 22nd April, to help some 350,000 people with immediate relief and initial recovery assistance within the next three months.**
- As a part of this overall appeal, **UNICEF is issuing its appeal in total of USD 22 million with the break-downs of: USD 2 million for Health, USD 2 million for Child Protection, USD 5.5 million for Education and USD 14 million for WASH.**
- UNICEF has mobilized US\$1 million of internal resources to launch its response.

³ Source: Situation Report #32 by the Secretaría de Gestión de Riesgos and OCHA Situation Report No. 04.

Humanitarian Response overall

- Search and rescue teams (SAR) deployed along with UNDAC/OCHA teams for rapid assessment.
- Rapid response by ministries who have deployed teams to the affected areas to evaluate damage and coordinate immediate response. National, provincial and municipal emergency committees all activated.
- UNHCR, UNICEF, UNFPA, WFP, HIAS, Ecuadorian Red Cross, Action Against Hunger and the Norwegian Refugees Council (NRC) are coordinating activities to assess the situation.
- UNICEF has activated its rapid response protocol and has been deploying staff in the areas of education, water and sanitation, communication and warehousing and logistics. UNICEF staff arrived on 20th April in Ecuador to support the WASH sector coordination and communications in general.
- UNICEF Ecuador deployed three teams in the field to support rapid assessment and sectoral coordination response in the Cantons of Pedernales, Muisne and Esmeraldas, covering wider needs, WASH, health and child protection sectors.
- UNICEF is assessing shelters for nutritional and psychosocial impact to childhood and adolescence.
- UNICEF Supply Division in Copenhagen established a supply airlift totalizing 435.2 m³ 86 MT for the sectors of water and sanitation, Education, Child Protection and Health as well as shelter and non-food items). They also deployed a warehouse management team to support local operations.
- UNICEF LACRO is sending emergency supply of 3.5 MT (WASH supplies, education kits and tents, and protection supplies) through UNHRD in Panama. They will arrive in the affected region on Friday, 22nd.
- The priority strategy for the Ministry of Education is the establishment of educational and temporary protection space for children and adolescents where the various components of the response, such as child protection, health care, hygiene promotion and vector control are included to prevent the spread of Zika, dengue and chikungunya.

WASH

- Ecuador's Secretariat for Water (SENAGUA) reports that dams and flooding control systems do not have structural damage or filtrations. However, there is an estimated coverage of 57% in the province of Manabí. While the electricity service has been restored, the drinking water systems have also to be reestablished in the province. The system is operating at 80% in the province of Esmeraldas.
- Six mobile water treatment plants of 4,000 liters/hour property of the armed forces were moved to Pedernales, Portoviejo, Jama, San Vicente and Canoa. Four additional plants of 1,800 liters / hour from SENAGUA will be installed in Portoviejo.
- UNICEF has provided 20,000 water purification tablets.
- Support will be provided to the population of the provinces of Manabí and Esmeraldas, which suffered the highest impact of the earthquake. Within those two provinces an estimated 350,000 persons will be prioritized through response operations, with an emphasis on urban areas.

Education

- Minister of Education suspended classes in the 6 provinces affected (Esmeraldas, Manabí, Santo Domingo, Los Rios, Guayas and Santa Elena) and also educational institutions with high and medium level of damage in the provinces of Pichincha; Cotopaxi; Bolivar and Cañar.
- So far, a total of 281 schools were affected, including 29 significantly damaged and may not be used

and 122 which will require rehabilitation of an estimated 3 months.

- The Local Governments of Manabí and Esmeraldas have established shelters in schools that will require the identification of other alternatives for the education services and as well as the organization of a water and sanitation facilities.
- UNICEF is supporting and participating in the joint sectoral assessment of the Education sector and the sector coordination.
- In order to restore the education services in the worst-affected areas, the Ministry of Education approved **the five points of action proposed by UNICEF to contribute to the national plan “back to school”**. They will be implemented in partnership with the Plan International, Save the Children national partners UNESCO, UNICEF and other local partners. The five actions will include: (1) establishment of 50 safe temporary learning and protective spaces; (2) distribution of 700 School-in-a-Box kits; (3) implementation of the minimum components of the education-in-emergencies curriculum; (4) dissemination of key communication messages of the importance of inclusive education, and (5) promotion of the role of parents and teachers, including protection of the students. This is expected to benefit approximately **120,000 children and adolescents and 700 teachers in the affected Cantons of Muisne, Pedernales, Jama, Portoviejo and Manta**.
- The Peruvian Ministry of Education is preparing a mission to support the education response plan focusing on curriculum adaptation to emergencies. As well as support the continuity of education services in most affected areas.

Health and Nutrition

- The Ministry of Health is coordinating the delivery of medical supplies and equipment to the affected zones, with the support of PAHO/WHO deployed response personnel for logistics and coordination. In particular, PAHO/WHO is assisting in the implementation of the LSS/SUMA to support efficient management of supplies and external assistance, but additional support is required.
- The entire health system is on high alert and mobilized towards response efforts. Distribution of emergency medical and health assistance is progressing gradually due to difficulties of access to affected areas and poor organization. The Government is rapidly rehabilitating alternative road accesses to facilitate land mobilization of personnel and distribution of medicines, and other response supplies. However, secondary road networks are quickly getting saturated by traffic from response efforts, at least doubling the time necessary to reach affected areas.
- UNICEF will carry on the following response activities: Identify key areas to gather priority nutrition information through initial rapid assessment; Ensure proper feeding of infants and children under 5 years; Social mobilization in maternal and child health and hygiene; Community engagement for reducing the impact of Zika, dengue and chikungunya as well as water-borne diseases Ensure provision of Vit A, ORS, Zinc, Kits Diarrhea.
- PAHO / WHO reports 17 national emergency medical teams deployed to the affected provinces and it is coordinating with the Ministry of Health and supporting evaluation of hospital Infrastructure and supporting coordination of health sectoral group led by the MoH. The Logistics Support System for Supply Management (SUMA / LSS) has been implemented.
- The mobile hospital has been moved to Portoviejo (capital of the Manabí province).
- There is concern about the use and acquisition of substitutes for breast milk without a careful assessment of needs, UNICEF and partners, including WFP and other UN agencies and NGOs advocates to ensure no general distribution of breast milk substitutes and / or milk powder. Donations of breast milk substitutes should not be accepted. Artificial feeding with breast milk substitutes in an emergency situation carries a high risk of child malnutrition, morbidity and mortality.

Child Protection

- UNICEF has been working very closely with the Government of Ecuador to help strengthen the protection of children in the aftermath of the earthquake
- In the last days, UNICEF deployed field monitors to identify and address child protection concerns and psychosocial needs in the six most affected districts. Detailed assessments will be available within the next days in order to build a concrete and consistent response strategy.
- At national level UNICEF is closely working with the Ministry of Social and Economic Inclusion to ensure a child-friendly response to various protection-related issues such as responding to family separation, preventing violence in temporary shelters, and psychosocial support for children.
- Protection response actions will mainly be carried on under the following four strategies:
 - a. Preventing and responding to violence/abuse against children in emergency through the establishment of a Referral System and Child friendly spaces;
 - b. Preventing family separation and institutional care – Family Tracing and reunification.
 - c. Psycho-social support to children ‘Return to Happiness’ (currently systematizing diagnosis of psychosocial situation of children in shelters of the most affected area);
 - d. Assessment and monitoring of documentation, registration (for children and adolescents who have lost their documents).
- IOM will monitor security incidents, gender-based violence (GBV) and child protection in temporary shelters.
- World Vision is setting up child-friendly spaces in affected areas in order to provide psychosocial treatment of adolescents and children to alleviate emotional trauma. WV has collected 1,000 hygiene kits to be delivered to affected families with water supplies.

Security

There are several routes impassable limiting access to the most affected communities in Esmeraldas and Manabí provinces.

Damages in road infrastructure, particularly on the main roads were worsened by multiple landslides caused by the saturation of soil in areas hit by preceding rains.

The province of Esmeraldas (mainly cantons of Esmeraldas, Eloy Alfaro y Muisne) is considered a high risk area for security reasons (crime). These areas require special attention to security measures in case assessment and response missions are carried out.

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