HAITI

Earthquake department profiles

CRISIS OVERVIEW

A 7.2 magnitude earthquake struck southwestern Haiti on 14 August at 8:30 am local time. The earthquake occurred 13km southeast of Petit-Trou-de-Nippes, in the department of Nippes, about 125km west of the capital Port-au-Prince. It occurred at a depth of 10km and was followed by a number of aftershocks, the strongest of which was 5.2 magnitude (CDEMA 14/08/2021; USGS 14/08/2021 a; Independent 17/08/2021). Tropical Depression Grace passed over Haiti on Monday 16 August, resulting in flooding and landslides (CDEMA 18/08/2021).

At least 2.2 million people were exposed to the earthquake, about 2,100 people have died, and more than 12,000 were injured as at 20 August. The death toll is expected to rise as the search for victims trapped under rubble continues. The Government has declared a month-long state of emergency for the most affected departments (LCI 19/08/2021; USAID 18/08/2021 a).

The most affected areas are in the departments of Sud, Nippes, and Grand’Anse. Jérémie (Grand’Anse department) and Les Cayes (Sud department) arrondissements recorded the most infrastructure damage (Le Temps 15/08/2021; Europe 1 15/08/2021; Government of Haiti 14/08/2021). At least 650,000 people need emergency humanitarian assistance – about 40% of the population of the three affected departments (CDEMA 19/08/2021).

More than 50,000 houses were destroyed and over 70,000 were damaged in Sud, Nippes, and Grand’Anse departments, leaving thousands of people homeless (CDEMA 19/08/2021). Severe damage to public buildings, including hospitals and schools, was reported. Those hospitals that are still functional are overwhelmed and likely to lack medicine and equipment to treat all wounded patients (AP 15/08/2021). There are reports of buildings that collapsed following aftershocks (CDEMA 19/08/2021).

Emergency shelter remains a priority, as well as access to water after earthquake damage to the local water systems (USAID 18/08/2021 a). Priority items include water, tarpaulin, food, medical assistance, and sanitary kits. Assessments are still taking place (CDEMA 19/08/2021).

Tropical Storm Grace resulted in heavy rains, strong winds, and flooding as it made landfall as a tropical depression, destroying some makeshift shelters and generating additional risk of collapse for damaged structures (USAID 19/08/2021).

INFORMATION GAPS

• There is very little information available on the extent or kind of sectoral needs, particularly in relation to WASH and food. The available information is preliminary and should be completed by upcoming needs assessments.
• Population numbers (including the number of people exposed to the earthquake) vary between different sources, and ACAPS has not been able to verify them.
• Damage assessments are underway, so numbers are subject to change and possibly underrepresent the number of people affected.
• This also implies that for some sectoral needs there is still too little information to draw adequate conclusions.

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Any comments or questions? Please contact us at info@acaps.org
<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>GRAND’ANSE</th>
<th>NIPPES</th>
<th>SUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department capital</td>
<td>Jérémie</td>
<td>Miragoâne</td>
<td>Les Cayes</td>
</tr>
<tr>
<td>Population</td>
<td>383,500 (33% in Jérémie) (OCHA 17/08/2021)</td>
<td>346,498 (29% in Miragoâne) (OCHA 17/08/2021)</td>
<td>675,117 (20% in Les Cayes) (OCHA 17/08/2021)</td>
</tr>
<tr>
<td>Number of communes</td>
<td>12</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Area</td>
<td>1,268km²</td>
<td>1,268km²</td>
<td>2,794km²</td>
</tr>
<tr>
<td>PIN, 2021 Haiti Humanitarian Needs Overview (HNO)</td>
<td>187,000 (OCHA 04/03/2021)</td>
<td>136,000 (OCHA 04/03/2021)</td>
<td>309,000 (OCHA 04/03/2021)</td>
</tr>
<tr>
<td>Household size</td>
<td>4.3 people (national average) (UN DESA 2019)</td>
<td>4.3 people (national average) (UN DESA 2019)</td>
<td>4.3 (national average) (UN DESA 2019)</td>
</tr>
<tr>
<td>Poverty</td>
<td>70% (USAID 02/11/2020)</td>
<td>50% (Ministère de la Santé Publique et de la Population 07/2018)</td>
<td>50% (USAID 02/11/2020)</td>
</tr>
<tr>
<td>Stunting IPC</td>
<td>21.6% (USAID 02/11/2020) Phase 3 level</td>
<td>17% of children under 5 (Ministère de la Santé Publique et de la Population 07/2018) Phase 3 level</td>
<td>19% (USAID 2013) Phase 3 level</td>
</tr>
<tr>
<td>Population exposed to earthquakes level VII and stronger on the modified Mercalli intensity scale (MMI)</td>
<td>45,304 people in Pestel commune (OCHA 17/08/2021)</td>
<td>97,000 (USGS 14/08/2021 b)</td>
<td>414,933 (ECHO 18/08/2021)</td>
</tr>
<tr>
<td>Number of confirmed deaths</td>
<td>218 (Le Nouvelliste 18/08/2021)</td>
<td>137 (Le Nouvelliste 18/08/2021)</td>
<td>1,832 (Le Nouvelliste 18/08/2021)</td>
</tr>
<tr>
<td>Number of injured</td>
<td>1,652 (Le Nouvelliste 18/08/2021)</td>
<td>1,458 (Le Nouvelliste 18/08/2021)</td>
<td>9,158 (Le Nouvelliste 18/08/2021)</td>
</tr>
<tr>
<td>Destroyed buildings</td>
<td>13,800 (Donees EDAB Light 16/08/2021) / 8,483 (Le Nouvelliste 18/08/2021)</td>
<td>5,760 (Donees EDAB Light 16/08/2021) / 14,348 (Le Nouvelliste 18/08/2021)</td>
<td>17,841 (Donees EDAB Light 16/08/2021) / 30,122 (Le Nouvelliste 18/08/2021)</td>
</tr>
<tr>
<td>Damaged buildings</td>
<td>27,925 (Donees EDAB Light 16/08/2021) / 19,371 (Le Nouvelliste 18/08/2021)</td>
<td>286 (Donees EDAB Light 16/08/2021) / 14,898 (Le Nouvelliste 18/08/2021)</td>
<td>18,744 (737 (Le Nouvelliste 18/08/2021) / 42,737 (Le Nouvelliste 18/08/2021)</td>
</tr>
</tbody>
</table>
CITIES AND POPULATIONS EXPOSED TO VERY STRONG AND SEVERE SHAKING

<table>
<thead>
<tr>
<th>CITY</th>
<th>DEPARTMENT</th>
<th>LEVEL OF EXPOSURE (MMI)</th>
<th>POPULATION EXPOSED</th>
<th>TOTAL POPULATION OF ARRONDISSEMENT (2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Les Cayes</td>
<td>Sud</td>
<td>VIII</td>
<td>126,000</td>
<td>154,850</td>
</tr>
<tr>
<td>Aquin</td>
<td>Sud</td>
<td>VIII</td>
<td>5,000</td>
<td>106,382</td>
</tr>
<tr>
<td>Anse-à-Veau</td>
<td>Nippes</td>
<td>VIII</td>
<td>2,000</td>
<td>35,556</td>
</tr>
<tr>
<td>Petite-Rivière-de-Nippes</td>
<td>Nippes</td>
<td>VIII</td>
<td>2,000</td>
<td>29,331</td>
</tr>
<tr>
<td>Cavaillon</td>
<td>Sud</td>
<td>VIII</td>
<td>1,000</td>
<td>49,699</td>
</tr>
<tr>
<td>Miragoâne</td>
<td>Nippes</td>
<td>VII</td>
<td>89,0001</td>
<td>64,232</td>
</tr>
<tr>
<td>Fond-des-Blancs</td>
<td>Sud</td>
<td>VII</td>
<td>3,000</td>
<td>Part of Aquin arrondissement</td>
</tr>
<tr>
<td>Corail</td>
<td>Grand'Anse</td>
<td>VII</td>
<td>3,000</td>
<td>20,098</td>
</tr>
<tr>
<td>Torbeck</td>
<td>Sud</td>
<td>VII</td>
<td>2,000</td>
<td>77,664</td>
</tr>
<tr>
<td>Saint-Louis-du-Sud</td>
<td>Sud</td>
<td>VII</td>
<td>2,000</td>
<td>66,274</td>
</tr>
<tr>
<td>Petit-Trou-de-Nippes</td>
<td>Nippes</td>
<td>VII</td>
<td>2,000</td>
<td>30,807</td>
</tr>
<tr>
<td>Chantal</td>
<td>Sud</td>
<td>VII</td>
<td>2,000</td>
<td>34,830</td>
</tr>
<tr>
<td>Baradères</td>
<td>Nippes</td>
<td>VII</td>
<td>2,000</td>
<td>42,103</td>
</tr>
</tbody>
</table>

Source: (USGS 14/08/2021 b; OCHA accessed 15/08/2021)

3 ACAPS was not able to verify the number of people exposed in Miragoâne against the current population numbers. Current data suggests that the number of people exposed exceeds 100% of the total population. Possible explanations include outdated population numbers and administrative divisions used by different sources.
**Grand’Anse Department Profile**

**CRISIS OVERVIEW**

The department of Grand’Anse was exposed to moderate, strong, and very strong levels of shaking (levels V, VI, and VII MMI) (MapAction 17/08/2021). As at 18 August, 205 fatalities were recorded in Grand’Anse overall (European Commission 18/08/2021). At least 187,505 people in four communes were exposed to strong shaking (level V MMI); these communes are Jérémie (125,315 people), Corail (11,011 people), Roseaux (32,878 people), and Beaumont (18,301 people). 45,304 people in Pestel were exposed to very strong shaking (level VI MMI) (OCHA 17/08/2021; MapAction 17/08/2021).

Prior to the earthquake, the 2021 Haiti HNO had identified 187,000 people in need in Grand’Anse (HNO 04/03/2021), and it is likely that the severity of their needs has increased because of the direct and overall impact of the earthquake.

**KEY CHARACTERISTICS**

<table>
<thead>
<tr>
<th>DEPARTMENT CAPITAL</th>
<th>JÉRÉMIE</th>
</tr>
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<tbody>
<tr>
<td>Population</td>
<td>383,500 (33% in Jérémie) (OCHA 17/08/2021)</td>
</tr>
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<td>Population exposed to earthquakes (VII and stronger MMI)</td>
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</tr>
</tbody>
</table>

Grand’Anse is located in the southwest of Haiti. Along with the Sud and Ouest departments, it constitutes the Tiburon Peninsula. Grand’Anse is prone to hurricanes, earthquakes, and floods; these natural hazards are a major threat to the department (ACAPS 21/10/2016).

**CRISIS IMPACT AND PRE-CRISIS VULNERABILITY**

**Shelter**

- Housing was significantly damaged in Grand’Anse.
- Approximately 35% of all the damaged houses in southwestern Haiti (26,516 out of 76,100) and 22% of the destroyed houses (13,525 of 60,700) were in Grand’Anse department (CBI, OCHA 18/08/2021).
- These damages were particularly in the communes of Jérémie and Pestel (Donees EDAB Light 16/08/2021).
- 1,000 people were in need of emergency shelter in Jérémie as at 17 August (USAID 18/08/2021 a).

**Health**

- Five healthcare facilities were affected by the earthquake (Pestel Health Center, Beaumont Health Center, Carrefour Charles health centres, Saint Antoine Hospital, and St. Pierre de Corail Health Center). Two of these facilities were destroyed, and three were structurally damaged (PAHO 18/08/2021).
- All five healthcare facilities in Jérémie are experiencing fuel, medical supply, and personnel shortages (USAID 18/08/2021 b).
- Displacement and the continuous rains combine to increase the risk of disease, including cholera, acute respiratory infections, diarrhoeal diseases and malaria, and COVID-19 – all of which are more difficult to manage in the context of disrupted health facilities (OCHA 18/08/2021 a).

**WASH**

- The full extent of damage to water infrastructure caused by the earthquake is not known. In Pestel commune, 1,810 water cisterns were damaged or destroyed, resulting in the need for urgent support for safe drinking water and sanitation (OCHA 18/08/2021 a).
- Prior to the earthquake, water, sanitation, and hygiene were identified as areas of serious need in Haiti (HNO 04/03/2021), as 65.2% of households in Grand’Anse did not have access to clean water, soap, and hygiene products.
• During previous humanitarian emergencies, WASH has been one of the priorities because of the lack of water connection networks in the regions (Ministère de la Santé Publique et de la Population 07/2018; UNICEF 29/10/2016). During the earthquake emergency, drinking water transport flows have been interrupted, so people may also be without access to clean water (USAID 18/08/2021 b).

Food

• Post-earthquake, food assistance is urgently needed, particularly in Jérémie (USAID 18/08/2021 b).
• 187,000 people in Grand’Anse were estimated in need of food assistance by the HNO (HNO 04/03/2021).
• 77.9% of the population in Grand’Anse is food-insecure (USAID 02/11/2020).
• Food insecurity in Haiti is driven by the economic situation and the climate affecting harvests, and it is aggravated by COVID-19 and natural disasters (IPC 30/06/2021).

Nutrition

• 21.6% of the population of Grand’Anse is stunted (USAID 02/11/2020).
• Between 15% and 25% of the population in Grand’Anse reported never consuming vitamin A (USAID 02/11/2020).

Education

• Across Grand’Anse, 63 schools have been destroyed and 39 damaged.
• In Pestel commune alone, 32 schools were destroyed and 25 damaged (Donees EDAB Light 16/08/2021).
• Literacy rates in Grand’Anse are 73.8% for women and 77.1% for men (Ministère de la Santé Publique et de la Population 07/2018).

Protection and vulnerable groups

• In general, the most vulnerable population groups in Haiti are women and girls, children, the elderly, and people with disabilities, particularly if displaced, as well as people living in remote or landlocked areas (HNO 04/03/2021).
• These groups are more vulnerable to sexual and gender-based violence, discrimination, and exclusion from assistance (OCHA 18/08/2021 a).

HUMANITARIAN ACCESS

Security

• The main road between the capital Port-au-Prince and the southwestern peninsula had been blocked by criminal groups for months prior to the earthquake. Following the earthquake, access for relief convoys through the blockaded area has been negotiated by UN and government representatives, allowing the passage of humanitarian aid for at least a week. In spite of this, access remains uncertain because the affected communities have blocked access, demanding that their needs are met (OCHA 16/08/2021; OCHA 18/08/2021 b).

Earthquake impact

• Humanitarian access is a challenge because of the infrastructure damage caused by the earthquake, the presence of criminal groups, and grievances of the affected communities.
• There are significant infrastructure damages in the remote areas surrounding Jérémie commune (USAID 18/08/2021 b). The impact on critical infrastructure is highest in Pestel commune, as it was exposed to very strong shaking (level VI MMI) because of its proximity to the epicentre of the earthquake (MapAction 17/08/2021).
• An aerial assessment of earthquake impact on infrastructure in Pestel commune shows that most roads are damaged; this is likely disrupting vehicle movement, services, and humanitarian aid (USAID 18/08/2021 b).
• Seaport, airport, and telecommunications infrastructure in the affected departments was not critically damaged (OCHA 18/08/2021 b).

Please also see the 2016 Department Profile.
Source: ACAPS (21/10/2016)
Topographic map showing earthquake shake intensity

Data Sources:
- OSM - Topographic data
- SRTM - DEM
- USGS - Shake intensity
- WorldPop 2020 - Populated areas
- UN OCHA - Admin boundaries

Created 18-Aug-2021 17:00 EDT
UTC-05:00

Projection & Datum
WGS 1984

GLIDE Number
EQ-2021-000116-HTI

The depiction and use of boundaries, names and associated data shown here do not imply endorsement or acceptance by MapAction.

Supported by The German Federal Foreign Office
Nippes Department Profile

OVERVIEW

At least 97,000 people in five communes of Nippes were exposed to very strong or severe shaking (level VII and above MMI). Anse-à-Veau and Petite-Rivière-de-Nippes were exposed to severe shaking (level VIII MMI). Petit-Trou-de-Nippes, Miragoâne, and Baradères were exposed to very strong shaking (level VII MMI) (USGS 14/08/2021 b). Prior to the earthquake, there were 136,000 people in need of humanitarian aid in Nippes because of food insecurity and natural disasters, out of the approximately 346,000 inhabitants of the department (OCHA 04/03/2021).

KEY CHARACTERISTICS

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>NIPPES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department capital</td>
<td>Miragoâne</td>
</tr>
<tr>
<td>Population</td>
<td>346,498 (29% in Miragoâne) (OCHA 17/08/2021)</td>
</tr>
<tr>
<td>Number of communes</td>
<td>11</td>
</tr>
<tr>
<td>Area</td>
<td>1,268km2</td>
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<tr>
<td>PIN (2021 HNO)</td>
<td>136,000 (OCHA 04/03/2021)</td>
</tr>
<tr>
<td>Household size</td>
<td>4.3 people (national average) (UN DESA 2019)</td>
</tr>
<tr>
<td>Poverty</td>
<td>50% (Ministère de la Santé Publique et de la Population 07/2018)</td>
</tr>
<tr>
<td>Stunting</td>
<td>17% of children under 5 (Ministère de la Santé Publique et de la Population 07/2018)</td>
</tr>
<tr>
<td>IPC</td>
<td>Phase 3 level</td>
</tr>
<tr>
<td>Population exposed to the earthquakes (VII and stronger MMI)</td>
<td>97,000 (USGS 14/08/2021 b)</td>
</tr>
<tr>
<td>Number of confirmed deaths</td>
<td>137 (Le Nouvelliste 18/08/2021)</td>
</tr>
<tr>
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<td>Destroyed buildings</td>
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</tr>
<tr>
<td>Damaged buildings</td>
<td>286 (Donees EDAB Light 16/08/2021) / 14,898 (Le Nouvelliste 18/08/2021)</td>
</tr>
</tbody>
</table>

Nippes is located in the southwest of Haiti. Along with the Sud, Grand’Anse, and Ouest departments, it constitutes the Tiburon Peninsula. It covers 1,268km2. Until 2003, Nippes was part of Grand’Anse department. Nippes has 11 communes, and its capital is Miragoâne. 50% of households in Nippes are in the two lowest quintiles of economic wellbeing (Ministère de la Santé Publique et de la Population 07/2018). Although the entire territory of Haiti is susceptible to earthquakes, some of the communes in Nippes are more vulnerable because of their location in places prone to other natural disasters, their constructions, and their socioeconomic indicators. In Nippes, the communes of Anse-à-Veau and Petite-Rivière-de-Nippes and some sectors of Miragoâne are situated in critical vulnerability (5 on a scale of 1 to 5) (OCHA 20/02/2019). Nippes is home to at least 346,498 people. About 29% of its population (99,183) lives in Miragoâne. Four other communes account for 40% of the department’s population (10% in each): Anse-à-Veau, Baradères, L’Asile, and Plaisance du Sud. Each of these communes is home to 34,000–39,000 people (OCHA 17/08/2021).

CRISIS IMPACT AND PRE-CRISIS VULNERABILITY

Shelter

- At the time of writing, there are no estimates of the number of displaced people. However, the fact that at least 14,348 houses were completely destroyed and 14,898 were damaged by the earthquake in Nippes suggests that there is a significant number of people in need of shelter. The most affected communes were L’Asile (2,500 houses destroyed), Baradères (2,515 houses destroyed), and Petit-Trou-des-Nippes (603 houses destroyed) (Le Nouvelliste 18/08/2021; UNOSAT 16/08/2021; ACT Alliance 15/08/2021). On average, a household in Haiti is made up of 4.3 people, meaning that there are approximately 61,696 people displaced by the destruction of their homes and another 64,061 with partially damaged homes who may choose not to return in fear of aftershocks or risk of house collapse.

- In addition to houses, several churches and schools (which are normally used as temporary shelters) have also been destroyed (UNICEF 17/08/2021; The New York Times 17/08/2021). In the absence of shelters, people are sleeping in the streets, with plastic sheets covering their bodies (The Wall Street Journal 17/08/2021). Recent rains in the aftermath of Tropical Storm Grace in Haiti make it more urgent to provide shelter for those affected. The storm is expected to move away from Haiti over the next few days (Reuters 17/08/2021; NDN 18/08/2021). As at 18 August, 33 makeshift shelters in Nippes have been registered (gathering points on public spaces or empty land) (OCHA 18/08/2021 b).
Health

- As at 16 August, at least one hospital in Nippes has reported damage to its infrastructure. The large number of patients seeking treatment from earthquake-related injuries has resulted in the need for supplies and equipment to treat orthopaedic problems and additional health personnel (OCHA 16/08/2021; Radio-Canada 16/08/2021).

- In l’Asile, a hospital was damaged (Système national de gestion des risques de désastre 14/08/2021).

- Four hospitals in Nippes were exposed to shaking level VI and above MMI (PAHO 15/08/2021). The Sainte Thérèse hospital in Miragoâne, the Paillant Hospital, l’Asile Hospital, and the Baradères Health Centre were affected, although they continue to function (Rezo Nòdwes 17/08/2021). As the damage assessment has not yet been finalised, these numbers are likely to increase. As at 19 August, seven health facilities were reported damaged and two destroyed.

- The conditions of hospitals in Petit-Trou-de-Nippes, the most severely affected arrondissement, are still being assessed (MSF 16/08/2021). A preliminary assessment in Miragoâne revealed a lack of medical staff and equipment; in Baradères, hospitals are overwhelmed and lacking medicines (PAHO 15/08/2021).

- In addition to immediate treatment for injuries and medical needs, earthquake-affected people may be in need of mental health support, given the human and material losses they have experienced (Action Against Hunger 17/08/2021).

- In 2019, Nippes department had a total of 34 hospitals (Ministère de la Santé Publique et de la Population 11/2019). The inpatient capacity of these hospitals is 135 people (based on bed availability) – a ratio of 3.8 beds per 100,000 inhabitants, below the national average of 6.7. In 2019, there were 240 medical staff members in Nippes: 67 doctors, 95 nurses, 76 auxiliary nurses, and two midwives, for a ratio of 6.8 medical staff members per 100,000 inhabitants, below the national average of 10.47 (Ministère de la Santé Publique et de la Population 11/2019).

- Prior to the earthquake, health facilities in Haiti were already known to be short of essential supplies, and emergency units were overwhelmed by a combination of COVID-19 and violence-related casualties (The New Humanitarian 05/07/2021).

WASH

- 25 water supply piped systems were damaged because of the earthquake in Haiti. People are in need of safe drinking water and hygiene kits (UNICEF 17/08/2021). In Nippes, around 10% of households reported by 2018 that one of their members had had cholera since 2010 (when an outbreak associated with the earthquake occurred) (Ministère de la Santé Publique et de la Population 07/2018). Although this is a relatively low percentage compared to other departments, the number of damaged sanitation facilities (in houses and public buildings) may be conducive to a new outbreak. While no cholera cases have been officially diagnosed in Haiti since February 2021, this does not mean that the vibrio cholerae bacterium (the bacterium that causes cholera) is absent in the ground (World Bank 07/04/2021).

- The earthquake may make it harder for people to observe key preventative hygiene practices (such as handwashing with soap) and more prone to risky ones (such as drinking unsafe water and open defection), which could lead to a new outbreak. 64% of households in Nippes do not have access to clean water, soap, and hygiene products. During previous humanitarian emergencies, WASH has been one of the priorities because of the lack of water connection networks in the regions (Ministère de la Santé Publique et de la Population 07/2018; UNICEF 29/10/2016).

Food

- 58% of the inhabitants of Nippes are food-insecure (WFP 21/02/2017).

Nutrition

- 17% of children under 5 in Nippes are stunted as a result of insufficient nutrition. Nippes has the lowest percentage of underweight children in Haiti (Ministère de la Santé Publique et de la Population 07/2018).

Education

- Seven schools were damaged and one destroyed. In l’Asile, a hospital was damaged (Système national de gestion des risques de désastre 14/08/2021).

- Literacy rates in Nippes are 80.3% for women and 83.2% for men (Ministère de la Santé Publique et de la Population 07/2018).

Protection

- People are at risk if they return to damaged or partly destroyed houses to retrieve possessions or seek shelter from the rain. During the 2010 earthquake, several people died after the event, either because they were injured and could not be found or because they returned to their damaged houses, and smaller aftershocks (or even the damages alone) caused them to collapse (Reuters 17/08/2021). Given the large number of houses destroyed or damaged, people in Nippes are still at risk of death. The number of missing individuals is currently unknown.

- In Chalon (Miragoâne), gangs are present and have attacked people trying to transit to other areas of Nippes. Gangs are also present in Anse-à-Veau (Leader-Telegram 18/08/2021; UN Security Council 25/09/2020; AyiboPost 02/12/2019).
HUMANITARIAN ACCESS

Security

• In the first days after the earthquake, gangs in Miragoâne attacked those entering from Port-au-Prince with humanitarian aid (Leader-Telegram 18/08/2021). Miragoâne is the gateway from the capital to the Tiburon Peninsula, so the attacks restricted access to not only Nippes but also other affected departments (Sud and Grand’Anse).

• On 18 August, the gangs announced a truce to allow the transport of humanitarian aid from Port-au-Prince (where they have a major presence) to southern Haiti (Notimérica 18/08/2021).

Earthquake impact

• In the north of the department, between the roads linking Petite-Rivière-de-Nippes, Anse-à-Veau, and Baradères, there are no major access restrictions. A municipal road is damaged near Saint-Marc, in Petite-Rivière-de-Nippes, and a landslide in Petit-Trou-de-Nippes restricts access to certain areas (Système national de gestion des risques de désastre 14/08/2021).

• In Rey Pond (located in Paillant, part of Miragoâne), several landslides and rockslides impede mobility (European Commission 15/08/2021). Paillant is the area with the most access restrictions in Nippes. The roads connecting Miragoâne to Saint-Michel-du-Sud present access restrictions.

• As at 17 August, telephone lines were not functioning in Petit-Trou-de-Nippes, which could hamper damage assessments and communications between organisations operating in the area (The New York Times 17/08/2021).

Tropical Storm Grace

• Since 16 August 2021, Tropical Storm Grace has brought heavy rains in southern Haiti, triggering mudslides and hampering relief efforts. The landslides in Petit-Trou-de-Nippes and Paillant are the result of rainfall caused by this storm (UNICEF 17/08/2021; The Washington Post 17/08/2021).

Please also see the 2016 Department Profile.
Source: (ACAPS 2016)
Topographic map showing earthquake shake intensity

Data Sources:
OSM - Topographic data
SRTM - DEM
USGS - Shake intensity
WorldPop 2020 - Populated areas
UN OCHA - Admin boundaries

The depiction and use of boundaries, names and associated data shown here do not imply endorsement or acceptance by MapAction.
Sud Department Profile

OVERVIEW

Sud is the most affected department, with more than 1,800 people dead, over 9,000 injured, and more than 72,000 houses destroyed or damaged (Le Nouvelliste 18/08/2021).

In addition to the direct impact of the earthquake, the passage of Tropical Depression Grace has caused flooding in the south, increasing safety risks for damaged homes and worsening conditions for those homeless since the earthquake (OCHA 18/08/2021 b).

The 2021 Haiti HNO estimates that 309,000 people in Sud were in need of humanitarian assistance prior to the earthquake (OCHA 04/03/2021). According to the first assessments, emergency needs in Les Cayes are hygiene kits, plastic protection sheets, and drinkable water (USAID 18/08/2021 a).

KEY CHARACTERISTICS

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>SUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department capital</td>
<td>Les Cayes</td>
</tr>
<tr>
<td>Population</td>
<td>675,117 (20% in Les Cayes) (OCHA 17/08/2021)</td>
</tr>
<tr>
<td>Number of communes</td>
<td>18</td>
</tr>
<tr>
<td>Area</td>
<td>2,794km²</td>
</tr>
<tr>
<td>Pin (2021 HNO)</td>
<td>309,000 (OCHA 04/03/2021)</td>
</tr>
<tr>
<td>Household size</td>
<td>4.3 (national average) (UN DESA accessed 19/08/2021)</td>
</tr>
<tr>
<td>Poverty</td>
<td>50% (USAID 02/11/2020)</td>
</tr>
<tr>
<td>Stunting</td>
<td>19% (USAID 2013)</td>
</tr>
<tr>
<td>IPC</td>
<td>Phase 3 level</td>
</tr>
<tr>
<td>Population exposed to the earthquakes (VII and stronger MMI)</td>
<td>414,933 (European Commission 18/08/2021)</td>
</tr>
<tr>
<td>Number of confirmed deaths</td>
<td>1,832 (Le Nouvelliste 18/08/2021)</td>
</tr>
<tr>
<td>Number of injured</td>
<td>9,158 (Le Nouvelliste 18/08/2021)</td>
</tr>
<tr>
<td>Number of destroyed buildings</td>
<td>17,841 (Donees EDAB Light 16/08/2021) / 30,122 (Le Nouvelliste 18/08/2021)</td>
</tr>
<tr>
<td>Damaged buildings</td>
<td>18,744 / 42,737 (Le Nouvelliste 18/08/2021)</td>
</tr>
</tbody>
</table>

Located in the southwest of the Tiburon Peninsula, Sud has five districts divided into 18 municipalities. Its surface area is 2,654km2. Les Cayes is the capital of the department (Haiti Culture accessed 18/08/2021). The communes of Aquin, Cavaillon, Les Anglais, Saint Louis du Sud, and Tiburon have territories in critical geographic vulnerability to earthquake (5 on a scale of 1 to 5) (OCHA 20/02/2019). In Sud department, 53% of household walls are made of cement, 16% of bricks or rocks, and 13% of earthen material. 73% of the roofs are sheet metal, and 16% are thatch or straw (IHSI 03/2014).

CRISIS IMPACT AND PRE-CRISIS VULNERABILITY

Shelter

- Around 30,122 houses were destroyed and 42,737 damaged as at 17 August (Le Nouvelliste 18/08/2021).
- The provision of shelter supplies and building materials for the department is centred in Les Cayes (PI 10/2016). With the city among the most affected locations, the supply chain is likely to be disrupted, making access to shelter materials more difficult.
- In Les Cayes, thousands of people fled their homes in fear that they may collapse (OCHA 15/08/2021). Those who are homeless are taking refuge in assembly points – mainly public squares and empty land. Five assembly points are reported in Sud department (OCHA 18/08/2021 b). More than 200 people started to build temporary shelters on a football field, which quickly flooded as a result of persistent wind and rain (Le Point International 18/08/2021). Displaced people are staying in neighbouring communes and not moving towards the capital (Direct Relief 18/08/2021).
- Based on initial assessments, around 20% of the buildings in Les Cayes and in the neighbouring commune of Camp-Perrin, which has been affected by mudslides, have been destroyed or damaged (USAID 18/08/2021 a).
- In Les Cayes, some homeowners are patching cracks caused by the earthquake to reoccupy damaged homes before engineers’ assessment. This exposes them to the risk of new collapses because of the frequent aftershocks in Sud department (Le Nouvelliste 19/08/2021).

WASH

- In Les Cayes, drinking water is needed because water storage tanks were destroyed, and water pipes exploded (Americares 14/08/2021; France Info 18/08/2021).
- The impact on communal and household infrastructure will have implications on WASH for people in the affected areas. The destruction or damage of more than 72,000 houses creates a need for access to temporary toilets to prevent the public health implications of open defecation and the associated protection risks (OCHA 16/08/2021; Action Against Hunger 17/08/2021; Le Nouvelliste 18/08/2021).
• In Sud department, WASH infrastructures were weakened by Isaias and Laura storms in 2020. Access to basic hygiene was particularly difficult, with affected people dependent on the supply of water by truck and the distribution of hygiene kits (OCHA 04/03/2021).

• Sanitation facilities often consist of a simple latrine dug at a distance from the house. There is no tap water in some houses (Encyclopaedia Britannica accessed 20/08/2021).

Food

• The lack of food reported prior to the earthquake raises concerns about the deterioration in the nutritional status of children, who are already weakened by food insecurity due to the lean season (UNICEF 17/08/2021).

• COVID-19, reduced mobility caused road blockages, and increasing insecurity had already affected access to food across Haiti, including in Sud (FAO 31/08/2020).

• While Sud department is classified as Crisis (IPC Phase 3), the southern coastal areas are of major severity, with 15% of the population in IPC Phase 4 (OCHA 04/03/2021).

• In Sud department, 65% of households use gas lamps (kerosene) for lighting. Only 8% of households have an individual electricity meter. 68% of households use wood and straw as an energy source for cooking, while 30% use charcoal (IHSI 03/2014).

Nutrition

• 19% of children in Sud are stunted as a result of insufficient nutrition (USAID 2013).

Health

• Ten health facilities were reported damaged and 12 severely damaged (out of 79 health facilities reported in 2018) according to an assessment carried out on 10 of the 18 communes in Sud (PAHO 19/08/2021; Ministère de la Santé Publique et de la Population 11/2019).

• In Les Cayes, the three main hospitals for the region (especially HIC Cayes and Hôpital OFATMA) are overwhelmed by the influx of injured people. There is a shortage of required medicines and medical supplies (Haiti Libre 17/08/2021; OCHA 16/08/2021). The hospitals are also running on generators and with a limited stock of fuel (USAID 18/08/2021 a). Two out of the five operating rooms in Les Cayes are not usable due to earthquake damage (USAID 18/08/2021 a).

• The infant mortality rate is 40 children per 1,000 births in Sud department. Haiti is ranked 190th out of 237 countries (Population Data accessed 19/08/2021).

Education

• 94 schools (out of 225 schools in Sud department) were completely destroyed or suffered partial damage as at 18 August, making it difficult to begin school as initially scheduled for 7 September (UNICEF 18/08/2021).

• The primary school attendance rate was 79% in 2012 in Sud department. The literacy rate was 85% in 2012 for 15–24 year-olds (85.9% for women and 84.2% for men). Younger generations are better literate than older ones, whether they are women or men. Only 13% of women aged 15–19 cannot read compared to 57% of those aged 45–49. Among men, the rates are 17% and 41%, respectively (UNICEF 06/07/2016).

HUMANITARIAN ACCESS

Insecurity

• The roadblocks along national road 2, which connects Port-au-Prince to the southern peninsula of the country, are expected to continue to pose logistical and security problems for humanitarian organisations (OCHA 16/08/2021).

• An informal truce between gangs is allowing the passage of aid, and some humanitarian organisations have started negotiating humanitarian corridors (France Info 19/08/2021; USAID 18/08/2021 a). Other routes and alternative modes of transport for reaching affected people, especially by sea are also being explored (OCHA 16/08/2021).

• Insecurity along the land routes connecting Port-au-Prince to earthquake-affected areas has prompted humanitarian actors to rely heavily on air and sea transport, thus limiting the frequency and volume of aid deliveries (USAID 18/08/2021 a).

• As at 17 August, some humanitarian convoys with food and emergency kits arrived at Les Cayes with police escort (USAID 18/08/2021 a).

Earthquake impact

• National road 7, which connects Les Cayes and Jérémie, has been cut off as a result of a landslide; access by road to the affected areas is further limited (OCHA 16/08/2021). The national road that cut off again to traffic after the passage of Cyclone Grace, is reportedly reopened towards Rivière Glace (AlterPresse 17/08/2021).

Please also see the 2016 Department Profile.
Flood risk zones

- Risk
- High risk
- Very high risk

Population
by commune

 Sources CNIGS, SNGRO

Source: ACAPS (21/10/2016)
Topographic map showing earthquake shake intensity contours in South Département, Haiti (HT07).

**Data Sources:**
- OSM - Topographic data
- SRTM - DSM
- USGS - Shake intensity
- WorldPop 2020 - Populated areas
- UN OCHA - Admin boundaries

**Elevation (m):**
- High: 2667
- Low: -11

**Legend:**
- EQ Epicentre
- CAPITAL
  - City
  - Town
  - Seaport
  - Airport
- Roads
  - Primary
  - Secondary
  - Tertiary
- Residential
- Track
- Path
- Populated Areas
- ADMIN 1 - DÉPARTEMENT
- ADMIN 2 - COMMUNE
- River
- Lake

**Source:** MapAction (18/08/2021)

**Created:** 18 Aug 2021 17:00 EDT
**Projection & Datum:** WGS 1984
**GLIDE Number:** EQ-2021-000116-HTI

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Hazard susceptibility map, showing flood zones and landslide susceptibility mapping together with earthquake shake intensity information and rainfall isohyets from the last 7 days (excluding the time period that Tropical Storm Grace moved through the area).

Source: Map Action (19/08/2021)
**Haiti | 7.2 M Earthquake and EU Response**

**IMPACT OVERVIEW**

- As of 17 August
  - **1,941*** Fatalities
  - **9,900** Injured people

* Including 2 fatalities in Nord-Ouest Department (situated outside the map coverage)

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**EU RESPONSE**

As of 18 August

- On 14 August, a 7.2-magnitude earthquake hit the south-western part of Haiti.
- On 16 August, the ERCC received a request for assistance for technical expertise and in-kind assistance.
- The EU is allocating €3 million in humanitarian funding to address urgent needs.
- An EU Civil Protection Team (EUCPT) of 12 experts will be deployed from 18 August till 3 September, consisting of: team leader (FR), deputy team leader (CZ), 2 info management experts (CZ, ES), 2 health experts (IT, ES), operational expert (FR), logistic expert (ES), security expert (SE), 2 structural engineers (ES) and a WASH expert (SE). The experts will be accompanied by 2 ERCC Liaison officers and a Technical Assistance and Support Team (TAST) of 8 experts (SE).
- Offers for in-kind assistance: water purification module (FR), medical equipment and medicines (ES), and 200 family tents and 15 support facility tents (multiuse large tents) (SE).
- Copernicus Emergency Mapping Service was activated on 14 August and has produced 6 grading maps since.

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**Rainfall accumulation (mm)**

- 11-17 August
  - 25-50
  - 50-100
  - >300
  - 100-200

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**Earthquake**

- Source: GDACS, USGS
- **7.2 M**
- Depth: 7.2 km
- **14 Aug 2021**
- 12:29 UTC (8:29 local)
- Main earthquake
- Focal mechanism

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**Copernicus EMSR536**

- Activation date: 14 August
- Area of Interest:
  - with grading
  - with planned grading

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**Tropical Cyclone**

- Source: GDACS, NOAA
- Past track
- **Intensity**
  - < 63 km/h (tropical depression)

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**Source:** (ECHO 18/08/2020)

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