



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada

## Country Profile:

Haiti

## 1. PHYSICAL GEOGRAPHY

Haiti is a country of about 28,000 square kilometers, and one of two countries occupying the island of Hispaniola. It is the third largest country in the Caribbean behind Cuba and the Dominican Republic (with which it shares Hispaniola). Haiti is made of up three main regions on the mainland (the northern, central and southern regions), and several islands. Haiti is two-thirds mountainous, with the rest of the country marked by great valleys, extensive plateaus, and small plains. Many of the slopes are denuded and degraded, making much of the country vulnerable to disaster impacts, particularly from floods and landslides. The highest point is Pic La Selle in the Massif De La Selle, which stands at 2,680 m. The only major river is the Artibonite which flows across the border from its neighbour, the Dominican Republic. There are, however a few dozen smaller rivers and hundreds of (small) streams traversing the country. At an elevation of sixteen meters above sea level in the southern region, the salt-water Etang Saumâtre lake is twenty kilometers long and six to fourteen kilometers wide; it has a circumference of eighty-eight kilometers.

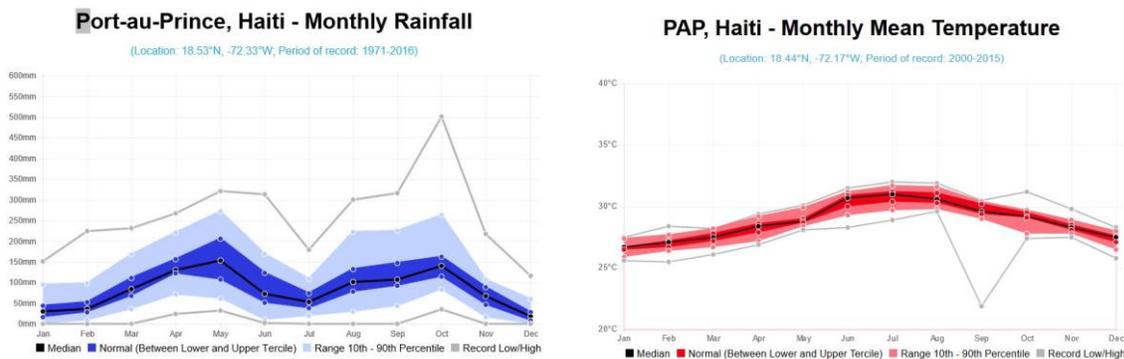


Figure 1 Map of Haiti. (Credit: Wiki Commons)

## 2. CLIMATOLOGY

Haiti has a generally hot and humid tropical climate. The average annual rainfall is 1400 to 2000mm, but it is unevenly distributed and varies with altitude. Heavier rainfall occurs in the southern peninsula and in the northern plains and mountains. Rainfall decreases from east to west across the northern peninsula. The eastern central region receives a moderate amount of precipitation, while the western coast from the northern peninsula to Port-au-Prince, the capital, is relatively dry. Port-au-Prince receives an average annual rainfall of 1148.1 mm (<http://carogen.cimh.edu.bb/>). There are two rainy seasons, April–June and October–November, with peaks in May (averaging 153.0mm) and October (averaging 140.0mm). There is much variability in monthly rainfall with months recording from as low as 0mm, particularly during the dry season to as much as 501.0mm in October 2003 (<http://carogen.cimh.edu.bb/>).

Temperatures are almost always high in the lowland areas, ranging from 15° C to 25° C in the winter and from 25° C to 35° C during the summer. At Port-au-Prince, as like most Caribbean stations, the annual temperature range is less than 5°C. The warmest month is July (averaging 31°C) and the coolest January (averaging 26.7°C).



**Figure 2** The 1971 to 2015 of monthly rainfall totals (left) and mean near-surface air temperature (right) at Port-au-Prince, Haiti. Source: [rcc.cimh.edu.bb](http://rcc.cimh.edu.bb) (data from Centre national de météorologie, Haiti)

**Table 1. Summary statistics of rainfall and temperature in Port-au-Prince, Haiti**

Station Name	Port-Au-Prince (Year/Month of Occurrence)
<b>Mean Annual Rainfall</b>	1148.1 mm (1971-2015)
Wettest year/Month / three month period	2146.3 mm (1979) / 575.3 mm (Nov. 1996) / 1249.7 mm (Sep. to Nov. 1971)
Driest Year/Month / three month period	904.5 mm (1997) / 0 mm (Mar. 2000) / 17.7 mm (Dec. 2004 to Feb. 2005)
<b>Mean Temperature</b>	27.4 °C (2000-2015)
Warmest Year/Month / three month period	29.3 °C (2014) / 32.0 °C (July 2015) / 31.8 °C (Jun. to Aug. 2015)
Coldest Year/Month / three month period	28.0 °C (2005) / 21.9°C (September 2015) / 26.2 °C (January to March 2000)

Source: <http://rcc.cimh.edu.bb/>

### 3. SOCIO-ECONOMIC LANDSCAPE

Haiti, with its estimated population of 10.604 million (IMF 2015), is the poorest Caribbean nation. Its development has been stifled by a history of political and social unrest, and geophysical hazards, the most recently well-known being the earthquake of 2010. The country has GDP per capita of US\$ 1700 and an estimated GDP of US\$18.75 billion, which ranked number 148 out of 230 countries. The GDP is dominated by Services, Agriculture and Industry, comprising 56.3, 23.6%, and 20.1% of the GDP respectively (2015 est.) (<https://www.cia.gov/library/publications/the-world-factbook/geos/ha.html>). According to the World Bank, more than 6 million out of 10.4 million (59%) Haitians live under the

national poverty line of US\$ 2.42 per day and over 2.5 million (24%) live under the national extreme poverty line of US\$1.23 per day (<http://www.worldbank.org/en/country/haiti/overview>). The World Bank reports a Human Development Index of 0.463, ranking it 163 out of 187 countries. The country's life expectancy is 62.8 years.

#### 4. KEY NATIONAL STAKEHOLDERS AND THEIR NEEDS

To date, no information has been collected on the key Haitian user groups and their climate information needs. This signals that a targeted future research intervention may be needed to address this critical data gap.

#### 5. RANGE OF CLIMATE SERVICES

As of November 2015, the National Centre for Meteorology (CNM) in Haiti classified itself as a Category 1 climate services provider offering a basic range of climate data services and information products. The CNM reports that it has been delivering climate information for over 10 years. The organisation tailors 1 of the 7 regional climate products for the national context<sup>1</sup>.

The agriculture and water sectors currently benefit from climate services in Haiti. The CNM specifically interacts with the National Directorate for Water and Sanitation of the Republic of Haiti. The CNM believes that the construction sector could benefit from the provision of climate services in the future. The CNM has not convened a National Climate Outlook Forum, nor does the organisation interact with a wide range of sectoral stakeholders. Feedback is not routinely collected from users.

The recommendations made by the CNM for improving its climate services capability include:

1. The establishment of a good database; and
2. Establishing a research division and establishing research partnership with other agencies.

#### 6. REFERENCES

International Monetary Fund (IMF) (2015)  
<http://www.imf.org/external/pubs/ft/weo/2015/01/weodata/weorept.aspx?pr.x=87&pr.y=3&sy=2015&ey=2015&scsm=1&ssd=1&sort=country&ds=.&br=1&c=263%2C243&s=LP&grp=0&a=>

##### Web Sites

<http://rcc.cimh.edu.bb/>  
<http://carogen.cimh.edu.bb/>  
<https://www.cia.gov/library/publications/the-world-factbook/geos/ha.html>  
<http://www.worldbank.org/en/country/haiti/overview>  
<http://www.worldatlas.com/webimage/countrys/namerica/caribb/haiti/htland.htm>  
<http://countrystudies.us/haiti/19.htm>  
<http://www.infoplease.com/country/haiti.html>,  
<http://www.nationsencyclopedia.com/Americas/Haiti-CLIMATE.html>

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<sup>1</sup> This is the CariCOF Drought Outlook.