

Haiti & Dominican Republic, 2024: Massacre River is Political Flashpoint between Two Nations

Haiti's construction of the Pittobert Irrigation Canal on the Haitian-Dominican border will likely disrupt Dominican irrigation withdrawals from the Massacre River, but the canal has come to represent more than just water.



For Haitians, the canal has become a symbol of **national pride**, of dignity, of sovereignty, and their food autonomy. For Dominicans, the canal illustrates the **lack of rule of law in Haiti**.

The Pittobert Canal will impact a small swath of land, but the series of events leading to the current tensions have made this a larger issue.

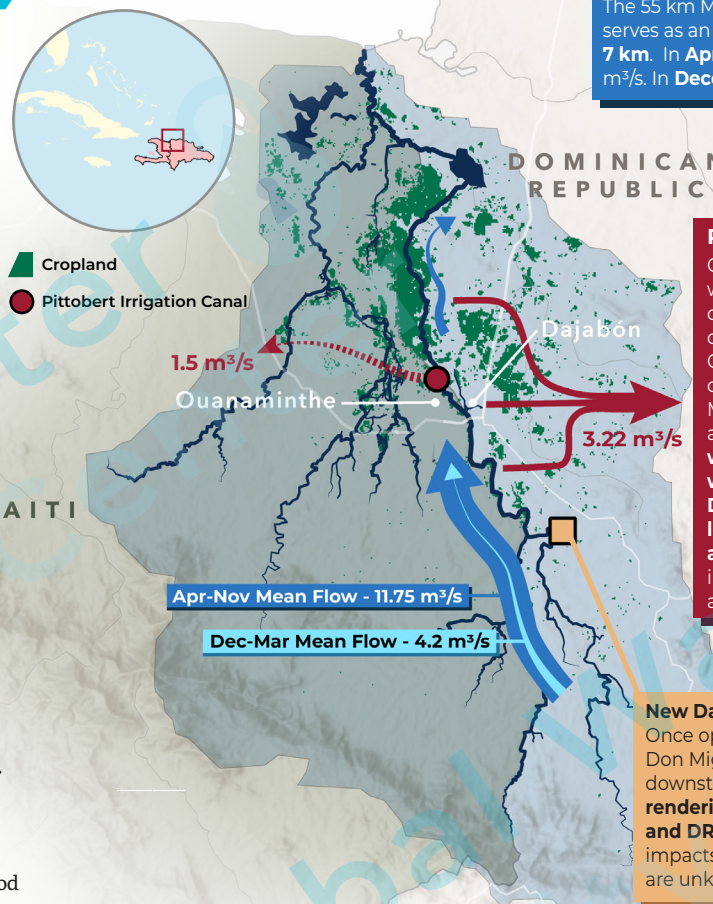
- 1929 A treaty between Haiti and the Dominican Republic states both sides have a right to use the border waters fairly and equitably.
- 2018 August, Haiti begins construction of Pittobert Irrigation Canal supplied by the shared Massacre River, also known as the Dajabón River. Dominicans are concerned about river flow reduction.
- 2021 May 27, A binational technical meeting is held to resolve tensions, but the countries have different takeaways: Haiti understands the canal is in accordance with the treaty, while the DR understands technical review of withdrawal infrastructure is required.
- 2021 July, Canal construction ceases for more than two years after the assassination of Haiti's president Jovenel Moïse.
- 2023 August, Canal construction resumes via grassroots efforts in response to drought. Canal is 60% complete.
- 2023 September, Haitian-Dominican border is closed and militarized in response to Haiti's construction of the canal. The DR starts construction of upstream Don Miguel Dam to control downstream water supply.

The canal impacts only ~2% of Haiti's cropland. Irrigation could improve food security in the region given that a 1.5°C temperature rise since 1980 has likely increased soil evapotranspiration, and wet-season precipitation variability has grown since 2000. However, gang violence and low-quality inputs are other constraining factors.

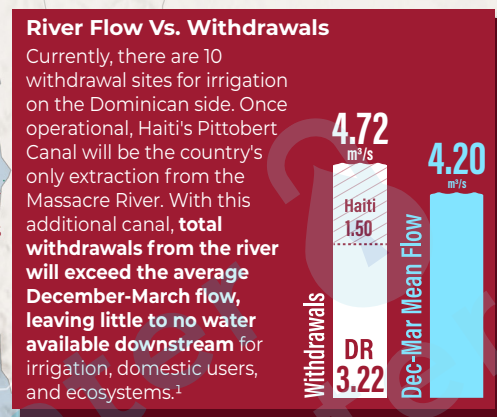
Pathway to Impact

The broader sociopolitical crisis is driving the decline of food security and economic conditions in Haiti. The border closure negatively impacts the economies in the Northeast and Center departments, further deteriorating food availability. The DR has permitted provisional commercial corridors to offset its internal economic impacts.

Upstream water extraction from the planned Don Miguel dam could increase household water insecurity and waterborne diseases such as cholera, especially during dry season low flows. Rainy season heavy flows that cause flooding, such as in November 2023, could also spread disease.



Massacre River Flow & Seasonality
The 55 km Massacre River originates in the DR, but serves as an international boundary with Haiti for 7 km. In April-November the mean flow is 11.75 m³/s. In December-March the mean flow is 4.2 m³/s.



New Dam Withdrawal Will Change Everything
Once operational, the addition of the Dominican Don Miguel Dam will reduce the flow of water for downstream withdrawal sites in the Massacre River, rendering downstream extraction sites in Haiti and DR non-viable without DR approval. The impacts of the in-progress Don Miguel Dam on flow are unknown and thus not depicted in this map.

Footnotes:

1. Streamflow data were obtained from the ACOE Rapid Assessment Fact Sheet. These data could not be independently verified. The locations of Dominican withdrawal sites are approximated.

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Map Sources:

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