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Interrupted Progress: Water and Sanitation in Haiti

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Background
Haiti has experienced interrupted progress towards clean drinking water and adequate sanitation facilities for it's over 10 million people. Over the past 25 years, Haiti has faced disease outbreak, natural disasters, political corruption and economic instability. Additionally, Haiti remains the poorest country in the Western Hemisphere with some of the worst health and social outcomes. The environmental and structural impacts on Haiti have affected basic needs, such as water and sanitation, for the Haitian people in urban and rural areas of the small, island country.

Objectives
- Identified any trends in water and sanitation improvements in Haiti since 1990.
- Explored whether adverse events, such as the 2010 earthquake and cholera outbreak impacted water and sanitation improvements.

Methods
- National data were compiled about household water and sanitation services and household service levels for at least 50% of Haiti’s population.
- Water improvement was defined as piped tap water, public stand posts; and non-piped protected wells, rainwater, packaged water, delivered water.
- Sanitation improvement was defined as networked, flush toilets to sewers; and on-site toilets, pit latrines or composting toilets connected septic or pits.

Results
Haiti experienced interrupted improvement in water sources and sanitation facilities from 1990 to 2015 (See Figure 1). Water sources improved in 2010 to 69% but declined back to 64% in 2015. Sanitation dropped to 17% in 2010 but grew to 31% in 2015. Water improvements began at 62%, in 1990 and sanitation improvements began at 18% in 1990.

Discussion
- Improvement interruptions for water in 2015 and sanitation in 2010 are likely linked to the 7.0 magnitude earthquake and the foreign-borne cholera outbreak, spread by feces-contaminated drinking water, both in 2010.
- Water improvements in 2010 are likely due to the influx of bottled and bagged water following the earthquake.
- Sanitation decline in 2010 is likely due to the destruction of living conditions following the earthquake and the cholera outbreak.

Conclusion
- Significant water and sanitation investments are needed for Haiti to reach national water and sanitation improvements.
- On a large scale, piped water and networked sanitation infrastructure needs to be updated or laid in Port-au-Prince, Haiti, especially as the earthquake site.
- On a small scale, rural areas can benefit from smaller projects including training and production of bio-sand filters.

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References

Figure 1. Percentage of population with improved water and sanitation