Brittany Sheffield
22 February 2019

***Impacts of Botswanan Dependence on Environment***

**Executive Summary**

Botswana’s economic dependence on natural resources to generate Gross Domestic Product (GDP) leads to environmental degradation that could potentially affect key industries and the citizens. The country relies primarily on mining and tourism to support the economy. Consequences that stem from this reliance effects the standard of living within the nation.

**Discussion**

Botswana relies on natural resources as a source of economic production. Many cities center around the various mines and resources prevalent in the country. Diamond exports encompassed 85 percent of exports in the first nine months of 2014.[[1]](#endnote-1) Population density focuses around large mines, including cities such as Gaborone and Francistown.[[2]](#endnote-2) Officials expect growth of the sector due to increased production at two mines.[[3]](#endnote-3) Industry generates 27 percent of GDP composition, and services such as tourism account for an additional 71 percent.[[4]](#endnote-4) The government designated approximately 18 percent of land in the country as national parks.[[5]](#endnote-5) These parks contain campsites and offer a diverse location for many of the safari companies that operate in the country.[[6]](#endnote-6)

Botswana’s reliance on natural resources increases the negative impact on the environment. The mining sector relies on underground water; currently, the rate of use surpasses the recharge rates and sustainable levels of these aquifers.[[7]](#endnote-7) A study conducted in neighboring Zambia identified levels of mercury, lead, nickel, and copper from a river near a prominent mining area.[[8]](#endnote-8) This provides an example of the potential impact in Botswana, where there is an absence of dedicated studies. Tourism also contributes to environmental problems within Botswana. Increased traffic from tourism requires the creation of illegal road systems and causes higher levels of noise pollution.[[9]](#endnote-9) Additionally, greater numbers of tourists in areas such as the Okavango Delta lead to elevated levels of waste, which strains the sewage system and further impacts the water resources.[[10]](#endnote-10)

**References**

1. Thomas R. Yager, “The Mineral Industry of Botswana,” 2014 Minerals Yearbook (Botswana: United States Geological Survey, December 2017), https://minerals.usgs.gov/minerals/pubs/country/2014/myb3-2014-bc.pdf. [↑](#endnote-ref-1)
2. “Debswana Diamond Mines,” *Mining Technology* (blog), accessed February 20, 2019, https://www.mining-technology.com/projects/debswana/. [↑](#endnote-ref-2)
3. Yager, “The Mineral Industry of Botswana.” [↑](#endnote-ref-3)
4. “Africa :: Botswana — The World Factbook - Central Intelligence Agency,” accessed February 14, 2019, https://www.cia.gov/library/publications/the-world-factbook/geos/bc.html. [↑](#endnote-ref-4)
5. “Environment - Botswana - Problem, Farming,” Nations Encyclopedia, accessed February 21, 2019, https://www.nationsencyclopedia.com/Africa/Botswana-ENVIRONMENT.html. [↑](#endnote-ref-5)
6. “Safari Companies - Botswana Travel Guide,” accessed February 21, 2019, http://www.botswana-travel-guide.com/bradt\_guide.asp?bradt=931. [↑](#endnote-ref-6)
7. “Water Policy Brief: Reflecting on the Challenges of Attaining a Green Economy for Botswana” (United Nations Development Programme, 2012), https://sustainabledevelopment.un.org/content/documents/1007National%20Report%20(Water)%20-%20Botswana.pdf. [↑](#endnote-ref-7)
8. Michael B. Kwesi Darkoh, “Socio-Economic and Environmental Impacts of Mining in Botswana: A Case Study of the Selebi-Phikwe Copper-Nickel Mine” (University of Botswana, January 2015). [↑](#endnote-ref-8)
9. Joseph E Mbaiwa, “The Socio-Economic and Environmental Impacts of Tourism Development on the Okavango Delta, North-Western Botswana,” *Journal of Arid Environments* 54, no. 2 (June 2003): 447–67. [↑](#endnote-ref-9)
10. Mbaiwa. [↑](#endnote-ref-10)