## Good adopted from: panama canal, 2014 case study example

Environment, Water



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The Panama Canal is a 77. 1 kilometer international waterway constructed by United States of America which was one of the largest public investments of its time. France started the project of the canal in 1881, but had stopped due to engineering issues and high mortality due to diseases like malaria. Later on the US took over the project and started construction in 1904 and was completed in 1914. This waterway links the Atlantic Ocean and the Pacific Ocean. The objective behind this project was to reduce shipping distance. The average time taken to traverse the canal is between 20 and 30 hours. The Panama Canal is one of the finest works of the 20th century. The project of Panama Canal was one of the most exclusive and expensive public works in American history completed by the amount of USD\$302 million. The canal surpassed its estimated construction cost by substantial margin. The net worth of project accounted USD 4. 4 billion (" Astoria city hall old, 2013")

The Panama Canal produced significant social returns for the United States of America in the first decade of its operation. Most of the returns were generated by shipping of oil from California to the East Coast. However, the government and Panamanian accrued few of these benefits. The direct benefits to the Panama City were relatively small. The United States of America used its military to force newly-independent Panama accept payment for the use of its region that was much smaller than the actual agreement.

American policy makers acted deliberately to minimize the spillovers from the Canal. The Canal Zone was also restricted for employing Panamanians. The Canal Zone administration did construct sanitary works in both Colon and the Panama City, but it charged the Panamanian government the full

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cost of construction and operation, including interest.

At the time before construction Panama Canal, Panamanian people were used to be suffered from yellow fever and malaria disease. The number of death had occurred due to the high rate of these diseases. After the construction of The Panama Canal, death rates in Colon fell from an average of 52/1000 to 17/1000. There were 2 major causes for the improvement in death rates. 1. Construction of water and sewerage works in Panama and Colon City. 2. Anti-malarial campaign in the region.

The anti-malaria campaign under Colonel Gorgas reduced the malarial deaths of Canal employees from 1. 16 %/ to 0. 12 %. . The malarial death rates decreased from 1. 62% to 0. 26% in the entire area covered by the campaign. The frequency of this fatal incidence of malaria accounted for approximately 37 to 40 percent of the total mortality in Panama City and Colon during period of 1900-04 and 1910-14 (Maurer & Yu, 2006). The US provided piped water supply to Panama City from reservoir located at Ancon at rate of 1. 8MGD . The water and sewage system was completed by 1906, but only 436 houses were benefited.. Rest of the houses of the Panama City had to depend on public hydrants for water. In Colon, railroad employees enjoyed access to piped water from the Mount Hope reservoir. The US had placed street water ports/hydrants at every 700 feet in order to insure wider access, and expanded the sewer systems to include the entire city.

The Panama Canal reduced the distance that benefited the world trade. America and Europe were forced travel along the transcontinental railroads. It cut the transportation cost which increased the revenue of the people.

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Since the distance was cut short, people enjoyed time saving by transportation through canal. The Panama Canal provided employment to 12, 852 people during 1921-1937, or 7 percent Panama's active population (Maurer & Yu, 2006; "Panama Canal, 2014").

One might have expected that Panama Canal has had a huge direct impact on the Panamanian economy, but this was not a reality in itself. Toll revenues were enforced with an average of USD \$44 per person per year during 1921-29. Altogether 4, 671 ships transited the Canal every year, and these ships required repairs and provisioning (Maurer & Yu, 2006). The American policy of recruiting immigrant labor meant that the increase in labor demand engendered by the Canal translated into an increase in the Panamanian labor force rather than an increase in real wages. In addition, the U. S. decision to restrict the Gold Roll to white Americans limited the ability of either native Panamanians or the new immigrants to benefit from on job trainings and moved up the skill ladder. (" Panama canal," 2014;

Maurer & Yu, 2006).

Moreover, the operation was expanded to build houses for the employs outside and inside the Canal Zone in 1913. According to Rompre Robinsonb & Desrochers (2008), Panama Canal changed landscapes of the city by balancing the humans and biodiversity. It influenced the socio-economic factors including economic, technology, infrastructure and culture. In short, the Panama Canal was proved to be a major milestone for the Panamanian population. It drastically cut down transportation cost and provided an opportunity to produce significant savings for world commerce. The Panama Canal also increased volumes of imports from Asia due to passing through the canal to the American East Coast (Astoria city hall, 2013; Maurer & Yu, 2006).

Conclusively, the Panama Canal made a positive impact on both social and economic life of the Panamanian people. It eradicated malaria and yellow fever from that region that resulted in the reduction of the death rate. People residing in the Panama City got jobs during the construction of the Canal. It also cut short the transportation and increased the trade.

## References

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