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Student Research Conference Abstract

### The Socioeconomic Impact of Hydroelectric Dams on Developing Communities

This undergraduate research thesis examines the socioeconomic impact of hydroelectric dams on developing communities through a case study of the Macal River Valley in Belize, Central America and the Chalillo Dam. By analyzing the sample population, as well as comparing demographics within the sample population, I determine the socioeconomic impact of hydroelectric dams on the communities of the Macal River and factors influencing levels of impact on the local people. I employed a questionnaire with a likert response scale as my research tool, which resulted in quantitative data. By statistically examining the quantitative data, I determine the overall impact of the dam, as well as variables that influence impact including: gender, urban/rural, and occupation based on industry sector. This socioeconomic impact analysis of a large infrastructure development provides insight to the relationship between a water body, the local people, and the local economy; it determines the portion of the population that benefits and the portion of the population that pays the cost.