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A quantitative framework for assessing public investment in tourism – An application to Haiti☆

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HIGHLIGHTS

- This study examines the potential poverty impacts of a US$36 million investment in tourism in Haiti.
- The first social accounting matrix and economy-wide model for Haiti was developed.
- The investment results in a 2.0% increase in Gross Regional Product in 2040.
- The rate of unemployment falls by 2.6 percentage points, lifting some of the poorest out of poverty.
- This framework is a powerful tool for assessing tourism investments impacts on regional economies and poverty.

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ABSTRACT

This study develops a linked regional computable general equilibrium and micro-simulation (RCGE-MS) model to assess the regional economy-wide and poverty impacts of a US$36 million investment in tourism in the south of Haiti. The first social accounting matrix for Haiti with a base year of 2012/2013 was constructed to calibrate the model. This research addresses three key gaps identified in the tourism impact assessment literature. First, a destination-specific tourism demand and value chain analysis was used to calibrate the shocks implemented in the model. Second, the RCGE-MS approach moves beyond the representative household configuration to enable more robust analysis of tourism investment impacts on poverty and income inequality. Third, results of this modeling were used to inform a social cost-benefit analysis to provide greater transparency in the evaluation of trade-offs between investment alternatives. Results of this analysis showed a positive impact on sectoral activity, especially for the hotel and restaurant sector (182.1% in 2040) and a 2.0% increase in Gross Regional Product by 2040. The South's exports fell 4.7% below baseline and imports were 6.1% higher due to the inflow of foreign exchange, the appreciation of the regional real exchange rate, increased demand for most goods and services, and limited regional productive capacity. The rate of unemployment fell from 26% to 23%. The investment helped lift some of the region's poorest out of poverty, reducing the poverty headcount by 1.6 percentage points. Driving this result was an increase in employment, wages and non-labor income. The linked RCGE-MS approach proves to be a powerful tool for assessing how tourism investments affect regional economic activity and revealing the mechanisms through which tourism can contribute to increased employment opportunities and poverty reduction.

1. Introduction

Haiti is the poorest country in the Western Hemisphere and one of the poorest in the world. In 2012, Gross National Income per capita was US$760. Of Haiti's population of 10.2 million, over half

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live on less than US$1 per day and 80% live on less than US$2 per day. Haiti is also extremely unequal; based on 2012 household survey data, Haiti has a Gini coefficient of 0.61, which has remained constant since 2001 (World Bank, 2014).

International donors have re-doubled efforts to stimulate economic growth and development in Haiti following the devastating impact of the 2010 earthquake. Investment in basic public services and in key productive sectors such as agriculture and manufacturing is still needed, all within a context of regulatory reform. Recently, attention has been focused on catalyzing the resurrection of tourism. Haiti was once a well-known tourist destination considered the “pearl of the Antilles” and was one of the most frequented islands in the Caribbean from the 1950s to the 1980s. Thirty years of dictatorship rule and two decades of political and institutional crises, however, have all but erased Haiti from the tourist map for even the more adventure-minded global travelers (Trevelyan, 2013).

Despite these challenges, tourism demand has been growing in recent years. Since 2007, Haiti received the highest volume of tourists during the first quarter of 2013 and between 2007 and 2011, international tourist volumes increased on average by 4.9% per year. In 2013, tourism contributed US$355.4 million (4.2% of Gross Domestic Product) and 139,000 jobs (3.6% of total employment) considering direct and indirect linkages (WTTC, 2014).

The government led by President Michel Martelly is the first to actively support tourism as a driver of growth. Based on Haiti's Tourism Master Plan, the South Coast, extending from Port a Piment to Jacmel, is a priority region for development (Fig. 1). The government's vision calls for the development and consolidation of complementary new and improved tourism options. The Inter-American Development Bank has committed to support tourism development in Haiti through a US$36 million investment in the Sustainable Coastal Tourism Program. The Program's main lines of action include development of the tourism product through the enhancement of public tourist attractions; inclusion of local populations into the tourism value chain; basic infrastructure and services to attend to local and tourist needs, and; institutional strengthening and capacity building for improved management and development of the sector.

In this paper we develop a regional recursive dynamic Computable General Equilibrium (RCGE) model to evaluate the economic impact of this $36 million investment in tourism. The model shock is calibrated using the results of survey-based tourism demand projections (Banerjee, Velasco, & Torres, 2014) with and without the investment. A tourism value chain analysis was conducted to provide information on how tourism expenditure is allocated across sectors (Armitt, Ashley, & Goodwin, 2014). To understand the impacts of the investment on poverty, the RCGE model is linked with a microsimulation model (RCGE-MS) which enables poverty and income inequality indices to be estimated.

The section that follows provides a brief discussion on how tourism is thought to affect local economies and populations. Section three presents the data and methods while section four describes the scenarios and results. The final section concludes with a discussion of the key findings and their relevance for informing future tourism investments in regions with high levels of poverty and incipient tourism development.

2. Background

The conventional view of tourism investment is that it can be a driver of economic growth and development, and has significant potential for poverty alleviation. In developing country contexts, tourism can provide a major source of new off-farm income in rural areas and help bridge inequalities between overpopulated urban areas, such as Port-au-Prince, and rural areas such as the South Coast. An increase in tourism demand can stimulate increased output from tourism-related sectors through direct, indirect and induced impacts where links between the tourism sector and other economic sectors exist. Where these linkages are strong, the well-publicized and often misused, multiplier effects of tourism investment arise (Gretton, 2013; Vanhove, 2005). Direct impacts can include: employment generation, skill creation, higher wages, and new or improved access to basic services and infrastructure, while indirect channels include price and demand effects for land and local products including agriculture and food/beverage processing (Klytchnikova & Dorosh, 2012).

Contrary to this conventional view, some argue that expansion

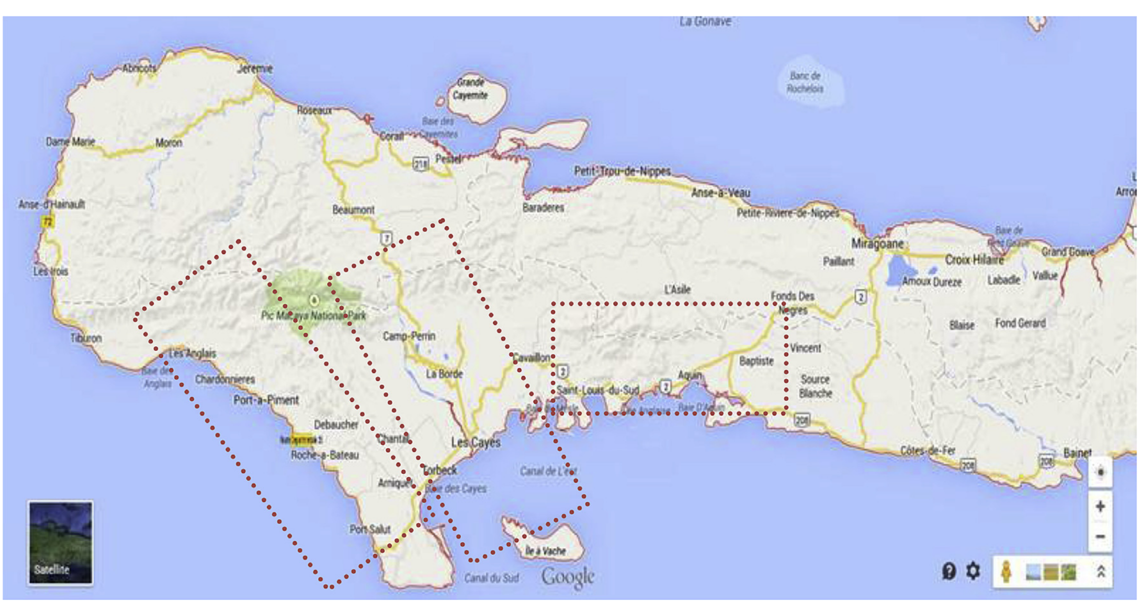

Fig. 1. Haiti's South Department and Program primary Zones of Influence.
Source: Google Maps, 2014.