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ABSTRACT

This study collected online secondary data in terms of tourism economic impact, human development, natural amenities, and self-employment income at the county level in the State of North Carolina and used GIS to conduct a spatial analysis of the distribution of and the interaction between tourism, poverty, and micro-entrepreneurship. It is aimed at identifying the areas where tourism can be utilized to cope with poverty by creating employment and tax revenues and where tourism micro-entrepreneurship might have an important role in enabling individuals to earn their way to equitable and sustainable prosperity. The results show variations across the counties and the four geographic regions in North Carolina. Tourism business startup factors, the ways to achieve success in business, and the potential of tourism micro-entrepreneurship as a strategy for enabling sustainable livelihoods at the state or national scale are also examined based on the findings.

Keywords: *spatial analysis, poverty, tourism, micro-entrepreneurship, North Carolina.*

Introduction

Similar to numerous US states coping with struggling economies reliant on agriculture and manufacturing, North Carolina is making slow progress in alleviating the specter of poverty in the state and is struggling to cope with large numbers of unemployed and under-employed residents (Johnson, 2003; McCallie, 2006). The tourism industry is an important contributor to North Carolina's economy (McGehee, Meng and Tepanon, 2006), accounting for 4% of the State's GDP (\$15.5 Billion) and 8.7% of all jobs (NCDC, 2009). As such, tourism development has made important contributions to the economic revitalization of North Carolina through job creation, tax revenues, and its synergies with other economic sectors. However, poverty, unemployment and tourism tax revenues and jobs are all unequally distributed throughout the state; therefore, the role of tourism in helping North Carolina cope with economic difficulties varies greatly across the state's 100 counties.

In addition to providing tax revenues and employment, tourism has the potential to create opportunities for self-help and economic innovation because the unemployed or underemployed are often able to produce experiences attractive to tourists without the need for very high start-up capital (Atelijevic, 2009; Harwood, 2010). Moreover, evidence shows that lack of formal business or marketing background and previous experience in the tourism industry is not an insurmountable barrier to tourism business entry (Mckercher and Robbins, 1998; Szivas, 2001). As a matter of fact, tourism offers opportunities for easy entry into various business types, often small (i.e., 50 employees or less) or micro (i.e., 5 employees or less) in size (Getz and Carlsen, 2005). Admittedly, besides the tourism resource base, financing capital, business advice and training may be necessary to facilitate the formation and long-term success of tourism entrepreneurial ventures (Szivas, 2001).

Tourism's role as a tool for poverty alleviation has increased over the last decade (Harrison, 2008; Zhao, Ritchie and Echtner, 2011). However, poor locals are among the most vulnerable to the volatility of the tourism industry. Even within pro-poor tourism initiatives, the poorest segments of society receive the least economic gains due to limited access to markets, inadequate education and training, and a lack of economic and social capital (Priskin, 2001; Torres and Momsen, 2004; Huang and Confer, 2009). On the other hand, community-based tourism is gaining popularity (Lopez-Guzman, et al., 2011; Morais et al., 2006). Communities wish to transform residents' lives and improve welfare, while at the same time maintaining local cultural traits and conserving natural resources (Ruiz-Ballesteros, 2011). Participation by members of host communities in tourism business and their empowerment can generate improved livelihoods, and revitalize symbolic connections with cultural and natural heritage, thereby enhancing host communities' social capital and agency (Hill, Nel and Trotter, 2006; Gallardo and Stein, 2007; Morais et al., 2006; Morais and Zinn, 2010; Kelly, Essex and Glegg, 2012). This emerging research focus termed, by Morais et al. (forthcoming), as People-First Tourism, focuses on examining ways in which (culturally and economically) peripheral communities and individuals may become involved in tourism micro-entrepreneurship to earn their way out of poverty and become invested in the sustainable use of their natural and cultural resources.

This paper uses spatial analysis to ascertain the degree to which North Carolina counties may leverage tourism to helping the state cope with poverty by creating employment and public

tax revenues; and to identify the areas in which tourism micro-entrepreneurship might have an important role in enabling individuals to earn their way to equitable and sustainable prosperity.

Method

Secondary data were obtained from the U.S. Census Bureau, U.S. Department of Agriculture, North Carolina Department of Commerce, the North Carolina Institute of Medicine and the Cecil G. Sheps Center for Health Services Research at UNC Chapel Hill. The variables included population size, per capita income, high-school completion rate for people greater than or equal to 25 years old, unemployment rate and per household self-employment income from 2005-2009 American Community Survey 5-Year Estimates, natural amenity scale, travel economic impact statistics and the percentage of population uninsured. All data include measured or estimated values for 2009. SPSS charts were used to examine the linearity between human development indicators.

Thereafter, ArcMap 10 was used to turn data into maps, to illustrate and examine the spatial distribution of economic impacts of tourism, and contrast these with the spatial distribution of poverty indicators, and tease out counties in which tourism micro-entrepreneurship might be most instrumental in addressing poverty in the State. Map overlay, the process of overlaying one thematic map of the same area on top of the others to form a new map layer, is used as the main spatial analysis tool to achieve the study objectives. Concretely, values for each variable in point are classified into five quantile categories and each county is assigned a new value in place of its original value for the variable. Among the 100 counties, those with the 20 highest values are assigned 5, while those with the 21st-40th highest values are assigned 4, and so on. At the most, there will be 25 kinds of combination of variables after the map overlay between two thematic maps is completed. The maps shown in this paper and in the poster identify counties with both variables of a relatively high value (1st-40th highest) or those with one variable of a relatively high value (1st-40th highest) and another variable of a relatively low value (1st-40th lowest). The new map layer formed through map overlay and corresponding selection can still be overlapped with another thematic map.

Results

Map 1 illustrates results from an overlay of tourism tax revenues with population in poverty to highlighting the counties where tourism tax revenues can be used to fund public expenses to address poverty concerns and provide safety net and welfare services to the poor. According to the map, the intersection between tourism tax revenues and population in poverty tends to cluster primarily in Piedmont and inner coastal counties and not as much in the mountain and tidewater region.

Map 2 illustrates an overlay of tourism employment rate with overall unemployment rate. This map reveals that in a cluster of counties in the westernmost part of the mountains region (in yellow), where tourism is providing a critical number of jobs in communities with high levels of unemployment. In these counties employment is highly tourism dependent. Additionally, there are several other counties distributed across the State (in blue) where tourism generates a significant number of jobs, but unemployment rate is relatively low. In these counties, employment options are diverse, with tourism occupying a significant yet non-dominant role.

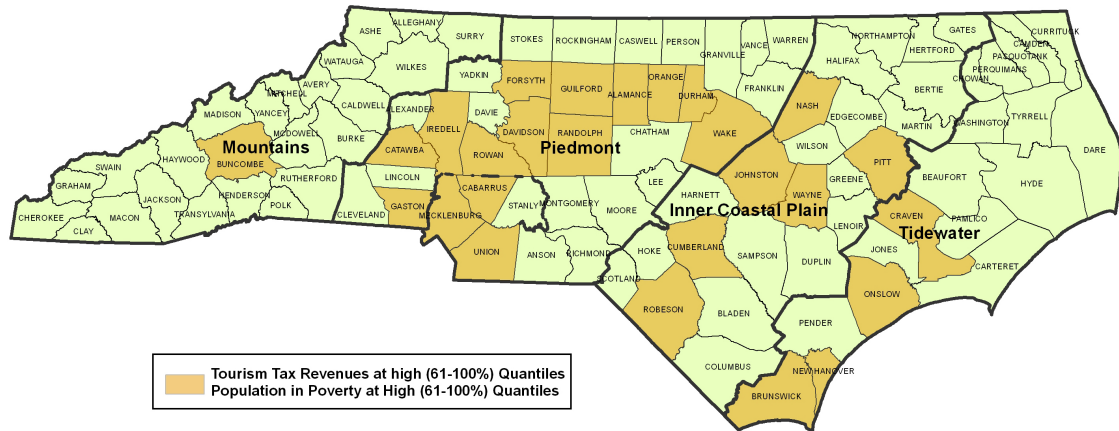


Figure 1. Higher Tourism Tax Revenue vs. Higher Population in Poverty at the County Level in North Carolina

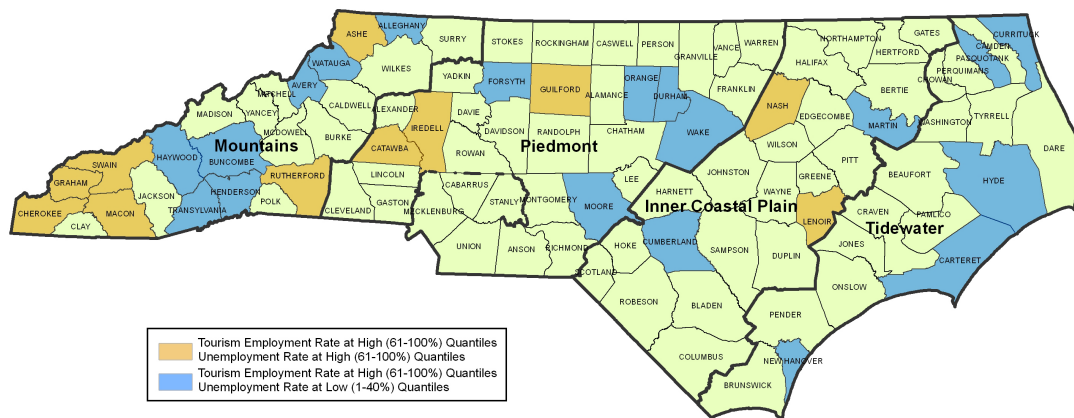


Figure 2. Tourism Employment Rate vs. Unemployment Rate at the County Level in North Carolina

Map 3 illustrates an overlay of each county’s natural amenities with average self-employment income. According to this map, counties with high levels of natural amenities and a relatively anemic entrepreneurial culture (in yellow) are clustered in the north and westernmost counties in the mountains and in the north of the tidewater region. Several counties east of the mountains region, along the eastern margin of the Piedmont region, and in much of the tidewater region have good natural amenities and have a lot of self-employment (in orange). Both sets of counties have potential for nature-based tourism, which might be leveraged to support micro-entrepreneurship; however, the clusters reveal greatly different degrees of entrepreneurship which would call for complex interventions aiming at enabling nature-based tourism small business development.

Map 4 illustrates an overlay of map 3 with human development index to identify the counties in which nature-based tourism micro-entrepreneurship would be most instrumental in mitigating poverty in North Carolina. The map essentially removes counties that have healthier and more diversified economies, allowing us to visualize those counties that have potential for

nature-based tourism development and where such development would make the most critical contribution to supporting sustainable and dignified livelihoods.

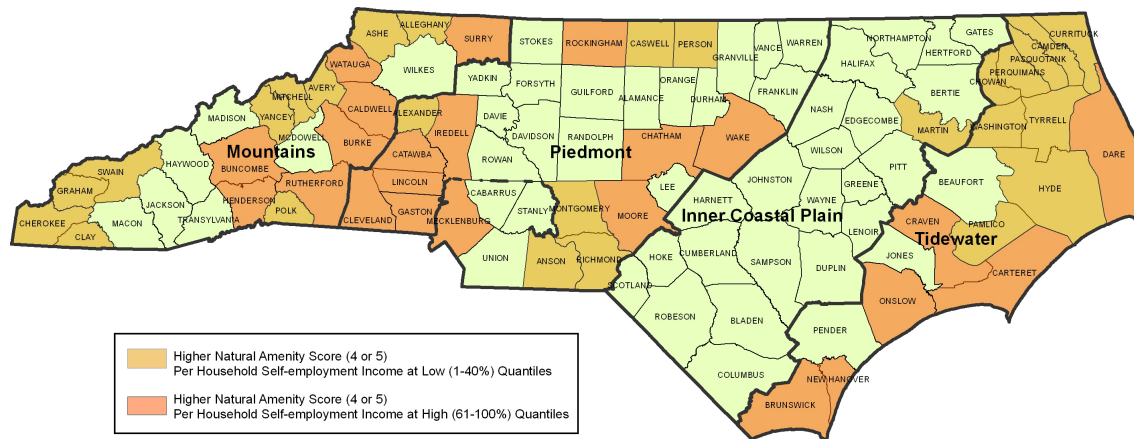


Figure 3. Higher Natural Amenity vs. Per Household Self-employment Income at the County Level in North Carolina

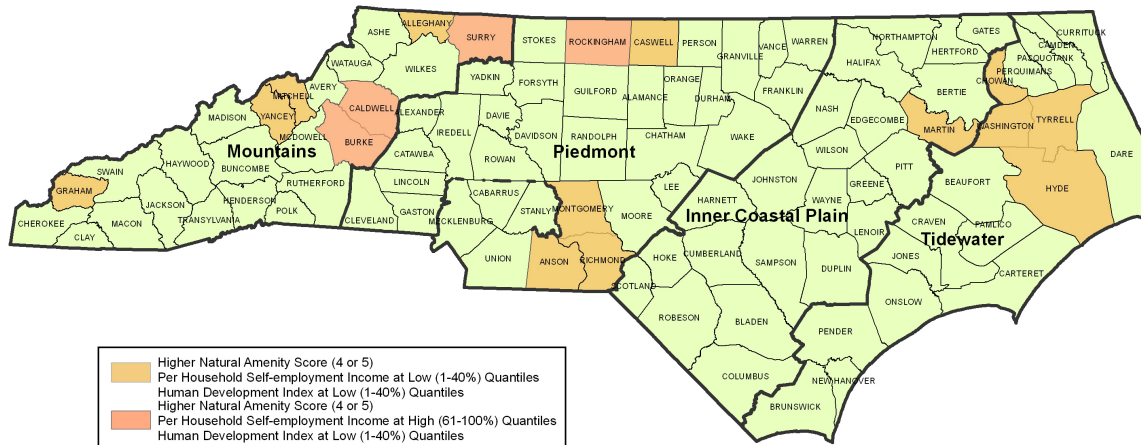


Figure 4. Higher Natural Amenity vs. Per Household Self-employment Income vs. Lower Human Development at the County Level in North Carolina

Discussion

The purpose of this paper was to ascertain the degree to which North Carolina counties may leverage tourism to helping the state cope with poverty by creating employment and public tax revenues; and to identify the areas in which tourism micro-entrepreneurship might have an important role in enabling individuals to earn their way to equitable and sustainable prosperity. While dominant narratives of poverty in NC often focus on poor communities in the mountains and coastal plains, the findings reveal that the most economically distressed rural counties in these regions did not succeed in accruing a significant amount of tourism tax revenue. Instead, the most significant tourism tax earnings occur in the Piedmont and in urban centers. Accordingly, these findings suggest that tourism in North Carolina is not contributing to trickle-down economics that channel wealth from growth centers to the rural periphery (Morais et al., 2005) – at least not as much as tourism proponents like to claim.

The contribution of tourism to employment is markedly more geographically dispersed throughout the State. The importance of tourism jobs is most evident in the cluster of westernmost counties where labor-intensive tourism businesses account to a critical portion of all jobs in communities with relatively vulnerable economies.

The tourism appeal of each county was measured in this study with an imperfect indicator – a natural amenity score. Subsequent efforts should attempt to create more nuanced measurements of tourism appeal; nevertheless, the findings reveal poor counties with appeal for nature-based tourism but with varied degrees of entrepreneurial activity. Nature-based entrepreneurship will likely involve a complex set of businesses; some owned by lifestyle entrepreneurs (Ateljevic & Doorne, 2000), some by families (Getz & Carlsen, 2005), and some by necessity entrepreneurs (Altjevic, 2009). The degree to which tourism may address poverty in the state will, in part, depend on the extent to which vulnerable individuals start businesses as necessity entrepreneurs. Some research has been devoted to understand the important role of lifestyle entrepreneurs in community development and tourism product diversification (Anteljevic & Doorne 2000), but less attention has been given to examining how these entrepreneurs might embrace or resist the incubation of necessity entrepreneurs providing complementary tourism services. In addition, when considering the utilization of natural resources to enable micro-entrepreneurship, it will be critical to examine how resource management agencies will engage in partnership agreements with these relatively informal enterprises.

Conclusion

Overall, this study is to conduct a spatial analysis of the distribution of and interaction between tourism, poverty, and micro-entrepreneurship in order to identify areas where tourism and tourism micro-entrepreneurship can be most instrumental in alleviating poverty in North Carolina. The findings reveal that while tourism brings important economic revenues to the state government, many of the most economically distressed counties receive very modest tourism tax revenues. Although unemployment is a national challenge, some of the counties with high tourism employment have very diversified economies and do not depend heavily on tourism jobs. However, there are very clear cases of counties in which tourism plays a very critical role in providing jobs where few other alternatives are available. In addition to tourism tax revenues and employment, the findings show that there are counties in which tourism micro-entrepreneurship may provide opportunities for vulnerable individuals to earn their way out of poverty. Subsequent in-depth place-based research is needed to examine the motivations out of which the existing entrepreneurs started business, the factors influencing individuals' interests in starting tourism businesses, the ways in which their success can be enabled, the key constraints and support needs of their entrepreneurial activities and the potential of tourism micro-entrepreneurship as a strategy for enabling sustainable and dignified livelihoods at the state or national scale.

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