

A Preliminary Study of the Value of
Coastal Tourism In Rincón, Puerto Rico

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prepared by

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Executive Summary

Tourism is a vital part of the Puerto Rican economy. In 2000, 3,341,400 tourists visited Puerto Rico spending \$2,387,900,000 (\$714/visitor)– seven percent of the gross product recorded for that year (see Economic Report to the Governor, 2000, Statistical Appendix Table 19). Tourism plays an even larger role in the economy of Rincón. A recent breakdown of the direct contribution of the tourism sector to the Rincón economy does not exist. Nevertheless, certain data do exist to provide a brief sketch of the likely economic impact of coastal tourism in Rincón.

Conservative Estimates of Tourism in Rincón

A conservative estimate of the gross retail receipts of tourism shows that 6 major accommodations in Rincón are likely to generate in excess of \$4.5 million/year – nearly 11% of all earnings reported for Rincón in 1997 by the government statistics. Further, I estimate that tourists to these six establishments are likely to have spent \$12.8 million on other goods and services while visiting Rincón – a figure roughly equal to 56% of all retail earnings reported in Rincón during 1997. Taken together, expenditures on accommodations, food, beverages, and retail items by visitors to these 6 establishments generated \$17.3 million in revenues, more than 40% of all the income reported for Rincón in 1997.

Of course, the economic value of tourism extends beyond the direct revenues of hotels, restaurants, and retail businesses. I estimate that as many as 244 jobs are likely to be supported by tourism, representing more than 60% of the reported formal work force in Rincón. These workers in turn, spend their wages locally, generating a ripple effect in the economy that I estimate may be greater than \$34.6 million. Combined, the direct and indirect value generated by tourists to 6 major resorts in Rincón total as much as \$51.9 million, a figure that exceeds the total reported value of expenditures in manufacturing, wholesale, retail, and services. Further, these estimates are likely to be underestimates of the true value of tourism. An additional 29 establishments, not counted in these estimates, offer rooms and apartments for tourist accommodations. If each of these 29 other accommodations had an average of 6 rooms, the total room inventory for Rincón would be double that estimated here.

Additional Components of the Coastal Economy

In addition to standard tourism, coastal resources in Rincón also attract an undocumented, but significant, number of seasonal visitors and part-time residents. The contribution of these visitors to the local economy is unknown. Coastal resources support dive and fishing charters and a small scale commercial fishery that generated landings worth \$302,084 in 2000. Coastal activities also support surf shops, board shapers, and surfboard repair shops.

Introduction

Sun, sand, and sea are among the most lucrative and potentially renewable economic resources for many coastal localities. People of all ages and incomes flock to the sea to tan, swim, dive, and surf. Beach and coastal tourism generates cash, jobs, and can indirectly result in the provision of public services (e.g. airports, sewage treatment, water, and hospitals). In 1997 global tourism accounted for \$448 billion in revenues (Tennebaum 2000) and in the Caribbean tourism accounts for as much as 50% of the gross national product of many island nations.

Unfortunately, the reality of tourism often betrays the promise of tourism. Tourism development usually proceeds at a pace that exceeds the ability of local and federal agencies to plan and mitigate the impacts of tourists and the infrastructure they require. Tourism in any form means more people drinking more water and producing more waste. Further, tourists require food, shelter, and often luxury amenities. Often the demands generated by tourists exceed the supply of the local economy. Local resources are quickly consumed, and sometimes depleted, by tourists; food, construction materials, and even staff often are imported from outside the local area. The importation of goods and services drains away the value of tourism revenues, a phenomenon known as leakage. Further, the increased demand by the tourism sector for goods and services can additionally impact the local economy by raising prices for local consumers without simultaneously raising income. Ultimately, the value of tourism to a coastal community will depend on the degree to which: 1) revenues stay in the community, 2) the value of tourism can be harnessed (e.g. through taxes) to generate public goods and services, 3) impacts on the local natural and social environment can be minimized, and 4) tourism development is managed in a way that insures the sustainability of net revenues and the natural capital upon which tourism depends (e.g. the beaches, corals, and coastal ecosystems).

Fast or Large Scale Tourism

Beach and coastal tourism can vary considerably in scope and scale. “Fast tourism,” is characterized by the rapid development of mass tourism – large hotels and condominium complexes. In the short-term, fast tourism can generate large revenues for both hoteliers, condominium management corporations, local land owners, and developers. The economic benefits to the local community, however, are less certain. Frequently, the demand for tourism labor (e.g. housekeepers, bellmen, front desk staff, gardeners, cooks, etc.) exceeds the local labor supply. As a result, labor migrates to the coast seeking to fill job vacancies at wages often far above those available in other, more impoverished areas. In doing so, the influx of labor adds to the pressures on public infrastructure already imposed by tourism development.

Many argue that careful planning is the key to better managing large scale beach and coastal tourism. Following the environmental and economic disasters that have resulted from unplanned tourism in Acapulco, the Mexican government created FONATUR – an agency charged with the careful planning and management of tourism, especially coastal

tourism. Pursuing the promise of sun and sea tourism, FONATUR has undertaken a series of ambitious coastal tourism planning and development including the resorts of Cancún, Ixtapa, and Huatulco. Despite planning the process and implementation of hotel development, almost from the ground up, many of FONATUR's most famous projects are now recognized as environmental disasters. Local coastal habitats in Cancún have been lost and Ixtapa's neighboring Zihuatenejo Bay endures what may be the worst coastal water quality in rural coastal Mexico. In many cases, the zeal of tourism planners has not been met by demand from tourists; in Huatulco, hotels sit empty and Ixtapa occupancy rates are far less than hoped for. Further, environmental degradation has taken an economic toll not foreseen by tourism planners. In Zihuatenejo, small scale hotels on the bay have suffered from problems of bacterial coastal water contamination and the local fishing industry has been plagued by illnesses (including lesions) on many local food fish.

Slow or Small Scale Tourism

Unlike fast tourism, "slow (or small scale) tourism" favors long-term guests that may buy houses, time shares, or lengthy vacations that can last up to a month or longer. These "slow tourists" are, in essence, seasonal locals and expatriates who shop locally, buy local produce, employ local services (over long periods of time), and contribute to the development of local neighborhoods. These slow tourists often demand public services and, as tax payers, many feel the right to demand such services. Slow tourists tend to spend more in the long run than other types of tourists and often do so at less expense – both to the local economy and the local environment.

In the absence of proper planning and inspection, slow tourism may result in the same environmental degradation and aesthetic failure that plagues unplanned fast tourism. The number of new guesthouses, seasonal homes, and rental properties in Rincón continues to climb. Individually, each new development has only limited impact on the local environment and infrastructure. Taken as a whole, however, small scale development can quickly create environmental disaster and infrastructural overload. Furthermore, careful inspection and permitting of small scale development is considerably more difficult than for larger developments.

The Coastal Economy in Rincón

The Basics

The coastal economy of Rincón has grown dramatically over the last decade (See Table 1). In 1997, the last year for which economic census data are available, four primary sectors (manufacturing, wholesale, retail, and services) generated \$42.5 million worth of gross revenues. Half of all revenues in Rincón come from retail businesses – a sector that grew in value by more than 91% between 1992 and 1997. For the same period, the gross product of Puerto Rico grew by 36.5% and inflation for the period was 16.6%. Revenues in Rincón's "services sector" also grew substantially between 1992 and 1997, rising almost 44% during the period. Officially, the "services sector" includes tourism related

businesses including hotels, small inns, guesthouses, and paradors. (All figures are from the Economic Report to the Governor, 2000).

While revenues have risen, the output per capita for this small town of 14,317 (U.S. Census 2000) remains relatively low at only \$2,968.50/person. Similarly, the total numbers of jobs generated by the local economy is small. Table 1 provides estimates of the number of jobs supported by each sector. Not surprisingly, the majority of Rincón's work force (293 jobs) is employed by the retail and service sectors. These estimates assume that the ratio of revenues to jobs is the same in Rincón as it is in all of Puerto Rico. In fact, employment in Rincón probably differs from employment on the island as a whole in two important ways: 1) wages are likely to be lower in Rincón than in the metropolitan districts and 2) many employees in the Rincón tourism industry are undocumented seasonal workers, many from North America. As a result, it is likely that far greater numbers of the population work in the retail and services sector than is estimated here.

Table 1: Revenues and Jobs by Sector in Rincon (1997)

Sector	Value (\$US million)	% changes since 1992	Jobs/\$million	Estimated ¹ # of Jobs	Average Wage in Sector	Estimated Wages Paid
Manufacturing	\$12.90	n/a	4.49	58	\$20,286	\$1,175,345
Wholesale	\$2.20	n/a	3.14	7	\$21,497	\$148,634
Consumer Retail	\$22.80	91.60%	9	205	\$10,363	\$2,125,758
Services	\$4.60	43.80%	19.08	88	\$13,913	\$1,221,374
Tourism	n/a	n/a	18.87	n/a	\$15,999	

Income per capita \$2,968.50

source: Informe Económico a la Gobernadora 2000

¹See Table A1 in the appendix for a worksheet showing wage and employment calculations.

The Tourism Economy

Tourism is a vital part of the Puerto Rican economy. In 2000, 3,341,400 tourists visited Puerto Rico spending \$2,387,900,000 (\$714/visitor)— seven percent of the gross product recorded for that year (see Economic Report to the Governor, 2000, Statistical Appendix Table 19). Tourism plays an even larger role in the economy of Rincón. A recent breakdown of the direct contribution of the tourism sector to the Rincón economy does not exist. Nevertheless, certain data do exist to provide a brief sketch of the likely economic impact of coastal tourism in Rincón.

Conservative Estimates of Rincon Tourism

Virtually all of the tourism industry in Rincón could be accurately described as coastal tourism. Tourists venture to Puerto Rico's western, and most remote, coast to surf, tan, fish, snorkel, and scuba dive. Alamed and Irizarry Mora (1994) provide detailed estimates of tourist spending and its impacts in the Western Region of Puerto Rico for the fiscal year 1991-1992. The authors estimated total tourism spending in the region during the fiscal year 1991-1992 to be \$90,582,050; tourism spending in Rincón alone was estimated to be \$8,589,290 (1992 dollars). In the following pages, I provide basic information regarding coastal tourism in Rincón. Using these data, I then provide very rough and conservative estimates of the potential current value of tourism to Rincón.

In its "Overview of the Tourism Industry in Puerto Rico 1998-2000", the Tourism Company provides room inventories for 5 hotels, guesthouses, and paradores in Rincón (see Table 2). In addition, the Amirage gives its room inventory on its web site. Using these room inventories, average occupancy rates as reported by the Tourism Company, and lowest posted room rates (from establishment websites), I estimate that these six establishments alone generated at least \$4.5 million in gross room receipts for the fiscal year 2000-2001 (this assumes normal occupancy rates and does not take into account reduced occupancy rates that may have resulted after September 11, 2001). In their study, Alamed and Irizarry Mora (1994) estimated that for every \$1 spent on accommodations by guest house visitors \$2.8 were spent on other goods or services (e.g. food, drink, charters, etc.). Using this figure, I conservatively estimate that visitors to these 6 establishments spent approximately \$17.3 million during the year 2001 (\$4.5 million on accommodations and \$12.8 million on other goods and services). Of course, these 6 establishments represent only a fraction of the accommodations available in the Rincón area. For completeness, a more detailed listing (with rates) of many of the hotels, small inns, guesthouses, paradores, and vacation rentals in Rincón can be found in Table 3.

Table 2: Estimated Revenues for Selected Hotels , Guesthouses, and Paradores^a

Name	Lowest Rate	# Rooms	Mean Occupancy Hotels and Guesthouses = 60%	Mean Occupancy Paradores and Apartments= 50%
Amirage Oceanfront Villas	\$125.00	9		\$205,312.50
Horned Dorset Primavera	\$280.00	30	\$1,839,600.00	
Villa Cofresí Hotel	\$95.00	63	\$1,310,715.00	
The Lazy Parrot Inn	\$85.00	7	\$130,305.00	
Parador Villa Antonio	\$96.30	55		\$966,611.25
Sandy Beach Inn	\$39.00	12	\$102,492.00	
			\$3,383,112.00	\$1,171,923.75
Total Revenues				\$4,555,035.75

^a # rooms taken from P.R. Tourism Co. 2000, rates taken from webpages 2/22/02.

Table 3: Room Rates for Selected Accommodations in Rincón, P.R.

	Hotel, Small Inn or Guesthouse	Vacation Rental or Apartment	Lowest Rate ^a	Highest Rate ^a
Amirage Oceanfront Villas		X	\$125.00	\$150.00
Beside the Pointe		X	\$60.00	\$175.00
Caribbean Dream Resort		X	\$90.00	\$175.00
Casa Isabel		X	\$100.00	\$125.00
Casa Isleña Inn		X	\$105.00	\$155.00
Casa Serena (rents by week)		X	\$100.00	\$135.71
Casa Tamara (rents by week)		X	\$128.57	\$178.57
Casa Verde		X	\$65.00	\$200.00
Casa Vista del Mar		X	\$85.00	\$95.00
Coconut Palms Guesthouse		X	\$75.00	\$150.00
Colina Linda		X	\$100.00-	
Corcega Beach Condos		X	\$135.00	\$250.00
El Faro Guesthouse	X		n/a	n/a
El Mirador		X	\$132.00	\$184.00
El Quijote Beach Cabañas			n/a	n/a
Fish Eye View		X	\$100.00-	
Flores del Mar Inn	X		n/a	n/a
Horned Dorset Primavera	X		\$280.00	\$800.00
Island West Properties		X	\$79.00	\$480.00
Kplash			n/a	n/a
Lemontree Waterfront Cottages		X	\$95.00	\$185.00
Parador Villa Antonio		X	\$96.30	\$144.45
Pipón's Resort		X	\$115.00	\$135.00
Pool's Beach Rentals		X	\$100.00	\$150.00
Puntas Rentals	X		\$85.00	\$145.00
Rincon Beach Resort	X		\$155.00	\$625.00
Rincon Del Mar Beach Resort	X		\$165.00	\$375.00
Rincon Surf & Board Surfari	X		\$20.00	\$175.00
Sandy Beach Inn	X	X	\$39.00	\$100.00
Sunset Paradise Villas		X	\$150.00	\$365.00
The Lazy Parrot Inn	X		\$85.00	\$125.00
The Vista Vacation Resort	X		\$75.00	\$169.00
Tropicabanas		X	\$75.00	\$95.00
Villa Cofresí Hotel	X		\$95.00	\$155.00
Villa Ensenada		X	n/a	n/a

^aRates taken from webpages 2/22/02*Employment and Indirect Effects*

Alamed and Irizarry Mora (1994) provide a detailed analysis of the economic impact on employment and indirect and induced effects of tourism in the Western Region for 1991-

1992. I do not attempt such an analysis here, but I do provide some insights into the likely magnitude of these effects.

The Economic Report to the Governor (2000) indicates that the hotel industry supports 18.87 jobs for every \$1million of gross revenues. Following this basic formula, the six major tourist establishments in Rincón (as listed in the Overview of Tourism in Puerto Rico, 1998-2000) could support as many as 92.5 full and part-time jobs with average salaries of \$16,000 (See Table 2) for a total payroll of \$1,480,000. The additional estimated tourist spending of \$12.8 million for guests to these establishments would generate an additional 244 full and part-time jobs (assuming that this spending is in the “services sector,” see Table 1b). In addition to the direct benefits of employment, tourist spending also generates further income and employment in the local economy. In a recent study of tourism impacts in the Channel Islands Marine Sanctuary (California), Wiley and Leeworthy (2001) use multipliers of 2 and 2.5 to estimate the potential range of indirect and induced impacts that tourism spending could have on the local economy. Following Wiley and Leeworthy, I tentatively estimate the potential indirect and induced impacts of the \$17.3 million in estimated spending by tourists to the 6 major establishments in Rincón to be between \$34.6 million to \$43.25 million.

Long-term and Seasonal Visitors

A significant, but undocumented, number of visitors to Rincón own or rent houses, cabanas, and apartments in the Rincón area. These visitors represent the “slow tourism” described in the introduction. Many of these seasonal visitors eventually become full or part-time residents. The economic impact of slow tourists is likely to be significant and potentially highly sustainable. Any formal (future) analysis of the economic value of coastal resources in Rincón should pay particular attention to the value of this hidden sector of the Rincón economy.

Other Components of the Coastal Economy

Briefly, I outline other important components of the coastal economy in Rincón.

Surf Shops, Shapers and Glassers

The 1968 World Surfing Championship in Rincón forever changed surfing in Puerto Rico. In the last three decades, Puerto Rico has become a hot bed of surfing and a world class destination for dedicated surfers. At least three surf shops and as many as a half dozen shapers and glassers (surfboard makers) may operate within the immediate Rincón area serving visiting tourists, expatriate residents, and Puerto Rican surfers. At least two surfshops, West Coast Surf Shop and Closeout Surfshop, are owned and operated by Puerto Ricans. These surfshops generate direct revenues from surfboard sales, clothing, watches, and other surf-related gear. Surfboard shapers and glassers earn revenues through the small-scale manufacture of handmade surfboards and through the repair of broken and damaged surfboards (ding repair).

Local Commercial Fishermen

Local commercial fishermen depend on the near shore waters directly for harvest and indirectly as an important nursery of commercially important fish species. Puerto Rico Sea Grant (data provided by Edgardo Ojeda, M.S.) reports that in 2000, 120,509 pounds of fish were landed in Rincón with a value of \$302,084. (This is high for both catch and value for the last 10 years for which data were provided.)

Dive Shops and Charters

Only one dive charter operation (Taino Divers) provides regular dive charters in the Rincón area. Other dive shops serve primarily as retail stores, selling clothes and souvenirs. Taino Divers employs mostly resident expatriates. Charter lunches and refreshments are purchased locally.

Dive operators utilize the species rich waters around Desecheo Island for daily two-tank dives. Nevertheless, heavy weather in the passage between Rincón and Desecheo often force dive operators to find more sheltered, coastal destinations closer to Rincón. Fortunately, the coastal waters from the marina north are home to some of Puerto Rico's best Elkhorn Coral and a substantial population of reef fish, turtles and invertebrates. Taino Divers estimate that approximately 2% of their dive charters are to the reef around the Tres Palmas area.

Fishing Charters

Fishing charters consist of a mix of local and expatriate ownership. Fishing charters provide seasonal income for commercial fishermen. Charters may also conduct whale watching tours and snorkeling trips.

Conclusions

Rincón's small but vibrant economy depends importantly upon coastal resources. Tourism, recreation, and fishing all play a role in fueling Rincón's economic engine. Beach and ocean recreation are the primary attractions for visitors to Rincón. Should the quality of the coastal and ocean resources of the area become impaired, it is likely that a large portion of Rincón's economy will be lost.

A conservative estimate of the gross retail receipts of tourism shows that 6 major accommodations in Rincón are likely to generate in excess of \$4.5 million/year – nearly 11% of all earnings reported for Rincón in 1997 by the government statistics. Further, I estimate that tourists to these six establishments are likely to have spent \$12.8 million on other goods and services while visiting Rincón – a figure equal to roughly 56% of all retail earnings reported in Rincón during 1997. Taken together, expenditures on accommodations, food, beverages, and retail items by visitors to these 6 establishments generated \$17.3 million in revenues, more than 40% of all the income reported for Rincón in 1997.

Of course, the economic value of tourism extends beyond the direct revenues of hotels, restaurants, and retail businesses. I estimate that as many as 244 jobs are likely to be supported by tourism, representing more than 60% of the reported formal work force in Rincón. These workers in turn, spend their wages locally, generating a ripple effect in the economy that may be greater than \$34.6 million. Combined, the direct and indirect value generated by tourists to 6 major resorts in Rincón total as much as \$51.9 million, a figure that exceeds the total reported value of expenditures in manufacturing, wholesale, retail, and services. Further, these estimates are clearly conservative. An additional 29 establishments, not counted in these estimates, offer rooms and apartments for tourist accommodations. If each of these 29 other accommodations had an average of 6 rooms, the total room inventory for Rincón would be double that estimated here.

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APPENDIX

Table A1: Employment and Payroll worksheet

figures are aggregate for all of Puerto Rico

Sector	Total Value(\$million)	Total employees	Jobs/\$million	Payroll (\$million)	Payroll/job
Manufacturing	\$36,426.60	163,605	4.49	\$33,18.9	\$20,286
Wholesale	\$12,594.60	39,582	3.14	\$850.9	\$21,497
Consumer Retail	\$17,088.00	153,746	9	\$1,593.2	\$10,363
Services	\$5,823.00	111,125	19.08	\$1,546.1	\$13,913
Hotels in Puerto Rico	\$791.50	14,932	18.87	\$238.9	\$15,999