

Occasional Papers

OP No. 12 - August 2019

El informe que se reproduce en esta edición de Occasional Papers fue presentado en una reunión del grupo de expertos en turismo y ambiente de las Naciones Unidas en diciembre de 1985. Estudios Técnicos, Inc. se creó pocos meses antes, en septiembre de 1985 y este trabajo fue de los primeros en que la empresa participó.

Muchos de los temas tratados en la presentación siguen siendo relevantes en torno a la discusión del turismo en el Caribe y en Puerto Rico. Se ha adelantado en muchos segmentos de la industria del visitante en Puerto Rico, pero queda mucho por hacer para lograr una industria más competitiva y a tono con el entorno global. Es sorprendente, dado el tiempo que ha transcurrido desde que Puerto Rico vio en el turismo un sector económico importante, que Puerto Rico no ha tenido, ni tiene, una política clara de lo que debe ser su industria de turismo. La creación del DMO es un paso positivo, pero no está claro aún si resolverá esta carencia.

Towards a Strategy for Tourism in Puerto Rico*

Por José J. Villamil
Estudios Técnicos, Inc.

Introduction

The purpose of this paper is to present some issues related to the definition of strategies for tourism development in the context of Puerto Rico and the Caribbean. Particular emphasis is given to the interrelationships between the environment, defined in a broad sense, and the strategies adopted for the travel industry.

The nature or mass tourism

If tourism were a relatively small scale process indulged in primarily by individuals seeking exposure to new cultures and environments, the issues related to the environment would most probably be limited to those oriented towards safeguarding those items in the environmental inventory which are attractive to tourism. The cultural impacts of tourism would not be an issue. Reality is very different in most of the region. Tourism is a mass phenomenon which brings to our region many times more people than the permanent population. This is true, if not for all of the Caribbean, certainly for many of the smaller islands. It is also a relatively recent development, one which we owe to the possibilities of convenient and cheap travel to the region from the United States, Canada and Europe.

Relatively little theorizing has been made with respect to tourism. One line of thinking has been the definition of life cycles. A description frequently made characterizes tourism in terms of four phases: discovery, growth, maturity and decay. Stanley Plog (Plog, 1972) has developed a

characterization of tourism which links the type of tourist with the phase in which the destination finds itself. One category of tourist is that which he calls *allocentric*. This is the type of tourist who travels frequently has a high income, prefers to travel to unknown places individually and not in groups, and is the type of person who likes to discover new destinations.

The second type of tourist is one which he calls *psychocentric*. This tourist travels infrequently, has a low income, prefers organized tourism to known destinations and, more often than not, destinations developed specifically for tourism. This is the type of tourist who prefers the safety of the known to the thrills of discovery. Of course, there are gradations between these two extremes. Plog portrays the transition from the first type of tourism to the second by means of a continuous bell shape curve in which tourism in the new destinations is initially characterized by the *allocentric* traveler, with relatively few tourists, growing and reaching a peak when the destination is at a midpoint, what he calls the *centric* phase. Thus, he would place some destinations in Africa and Asia in

Continued on page 2

In this issue...

Introduction.....	1
The nature or mass tourism.....	1
Puerto Rico as a tourist destination.....	2
Planning Tourism in Small Islands.....	4
An Alternative Approach.....	6
Conclusions	7
References	8

* This paper is a revised version of a paper presented at a meeting of the Group of Experts on Tourism and the Environment, United Nations Economic Commission for Latin America and the Caribbean, Port of Spain, Trinidad & Tobago, December 1985.



Continued from page 1

one extreme, the Caribbean and Mexico in the middle of the range and Miami and places like Benidorm, in Spain, at the other extreme.

One distinction related to Plog's scheme is that which distinguishes between induced and organic tourism (Noronha, 1979). The former refers to that tourism which characterizes most of the Caribbean, the mediterranean beaches, the developments in Cancun and Ixtapa in Mexico and others where the infrastructure was expressly built for tourism. This type of tourism is unstable because of the competition from many destinations, it is capital intensive, mainly because it is built from scratch (the case of Cancun, for example) and it operates at fairly large scales. It is also tourism based on beaches and gambling. More often than not, it provides a product which is indistinguishable from other similar destinations. Contacts with the local population and culture are limited to commercial transactions. Local cultural production becomes merchandise geared to the tastes of the tourist population. Thus, one tendency frequently found is the modification and miniaturization of folk art and its alienation from its original intent. This process has been documented by Noronha in Bali, by Gaviria in Spain (Villamil, 1983) and in other mass tourism destinations.

Organic tourism, on the other hand, is one in which the attractiveness of the destination is intrinsic to it and may derive from existing museums, the architecture of the place, archaeological sites and a rich folklore. Organic tourism utilizes existing infrastructure, is stable and is based on differentiating a particular destination from all others. Obviously, Plog's scheme refers primarily to induced tourism, that which characterizes the Caribbean.

The life cycle of a tourism destination can be described in these terms: Initially, a small group of tourists discovers a destination, heretofore undiscovered. This first stage is quickly superseded, mostly through the effects of the discoverers in transmitting the attractiveness of the newly discovered destination. The



place becomes attractive to other groups. As demand increases, tourism facilities are built, and the destination reaches its peak. Continued development makes the destination less attractive to the original group, a lower income but larger group is attracted. This group, with a lower propensity to travel requires inducements which makes promotion a central aspect of the industry. Lower income tourists have lower disposable incomes, thus promoting establishments which sell lower quality goods. The decay of the destination is assured and the eventual reduction in the number of tourists. The life cycle is completed.

This transition need not occur, although the instances in which it has are too many to avoid confronting the possibility that it could affect Caribbean destinations. In the case of Puerto Rico, one can describe a sequence in the development of the two major tourism areas which is very similar to that described by Plog. Thus, the homogenization of facilities and the proliferation of fast food franchises is certainly an indication of this transition.

The development of tourism as a mass phenomenon is related to this type of tourism cycle. Increasingly, tourism is controlled by relatively few travel organizations which handle all aspects of the tourism package and, in effect, decide which destinations will experience growth. World Tourism Organization figures indicate that over 50% of all tourist travel is handled through wholesalers which sell packages. This means essentially that the wholesaler purchases blocks of space in those countries in which he is able to obtain lower costs.

This new organization of the travel industry generates additional costs to destination countries, reduces income and introduces a new element of instability. Wholesalers can simply shift their efforts to other destinations with pretty much the same characteristics: beaches, casinos and relatively low costs. Let's consider the experience of Puerto Rico within this context.

Puerto Rico as a tourist destination



Mass tourism in Puerto Rico dates from 1948, when the Government built and leased to the Hilton chain, the Caribe Hilton Hotel. Its inauguration that year was significant for two reasons. One is that it provided the impetus for the development of tourism in the Island, against all expectations. But, perhaps of greater importance, that first international operation by Hilton led to a rapid expansion in its global activities. The Hilton had a third impact in that it defined a paradigm for tourism development in the rest of the Caribbean and in other parts of the world. The hotel where we are meeting is

a reflection of this. It uses the same basic model as the original Hilton.

Tourism in Puerto Rico expanded rapidly in the fifties and into the sixties, reaching a peak in the latter years of the decade and then basically stagnating, not only in terms of the number of visitors, but more significantly in terms of investment in the industry. The number of rooms reached 9,800 in the early seventies and then slowly declined to 7,400 in 1984. Recent investments and remodeling of existing structures will probably push the number of rooms back up to approximately 8,500 rooms.

The total number of visitors to P.R. had reached 2.1 million in 1980 but has fallen to 1.5 million in the year ended 6/30/85. The number of hotel registrations by non-residents has been decreasing from a high point in 1979 of 563,428 to 452,180 in 1984 (Table I, Graph I). The issue of greater relevance to this seminar, however, is the nature of tourism development in Puerto Rico rather than its numbers.

Basically, tourism in Puerto Rico has been characterized by concentrating on large beachfront hotels, with emphasis on gambling and beach tourism, aimed at the U.S. market, more specifically the Northeast, and at fairly high income groups. In general, tourist facilities are concentrated in two areas of metropolitan San Juan, the Condado sector and Isla Verde. In both areas the decay has been rapid in the past few years and a rebuilding effort is underway. A number of indications lend support to the idea of placing Puerto Rico in the psychocentric extreme of Plog's scale. The length of stay has decreased and is now the lowest in the Caribbean. Package groups are increasingly important, occupation rates have also been falling and are now about 59% for the year. In part, the sorry state of tourism in Puerto Rico can be blamed on the world wide recessions of the mid and late seventies. However, the impact on Puerto Rico was sharper than on the rest of the region, thus indicating that some internal factors might have been at work. Puerto Rico's share of Caribbean tourism has been falling. Thus between 1975 and 1984, the share of Puerto Rico in the total number of travelers to the Caribbean fell from 32.8% to 26.4%. Between 1970 and 1983, annual rates of growth for global tourism was 4.25%, for the Caribbean it was 4.40% and for Puerto Rico it was only 2.93%. Between 1982 and 1984, P.R. experienced a drop of 4% in tourist arrivals, while all other Caribbean destinations experienced an increase. This trend was reversed in 1985 when Puerto Rico experienced a growth rate of 2.4% in regular visitor arrivals (Table II, Graphs II & III).

Surveys made over the years have identified a number of issues which have affected the evolution of tourism in the Island (Comité para el Desarrollo Económico de Puerto Rico, Inc., 1985). These include the following:

1. The absence of adequate transportation facilities
2. Increasing competition from other destinations not available in the fifties and sixties
3. High operating costs and thus high prices
4. The organization of the tourism sector
5. The definition of tourism
6. Poor quality

Let's take a closer look at the last two, for they are the ones most closely related to the purpose of this seminar. The definition of tourism which has been implicit in Puerto Rican tourism

TABLE 1:
HOTEL REGISTRATION BY NON-RESIDENTS

Year	Non-Resident Hotel Guests		
	Total	U.S.	Other
1978	533,358	434,125	99,233
1979	563,428	443,159	120,269
1980	549,619	407,669	141,95
1981	520,645	360,417	160,228
1982	517,372	347,238	170,134
1983	473,251	348,318	124,933
1984	452,110	353,711	98,399
1985	469,465	376,860	92,605

GRAPH 1:
HOTEL REGISTRATION BY NON-RESIDENTS

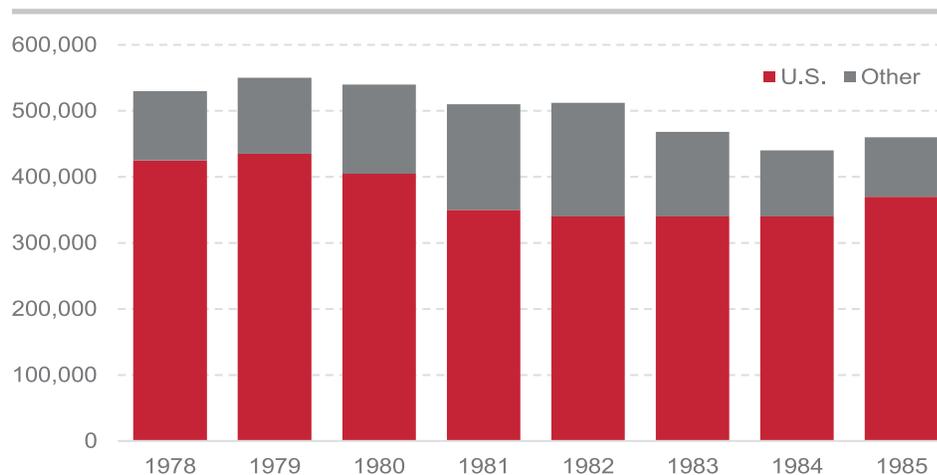


TABLE 2:
REGULAR VISITOR ARRIVALS & EXPENDITURES

Year	Total Regular Visitor Arrivals	Rate Of Change	Total Regular Visitor Expenditures	Rate Of Change
1970	1,088,379		\$229,497.00	
1971	1,088,965	0.05%	\$227,978	-0.66%
1972	1,185,616	8.88%	\$257,782	13.07%
1973	1,349,158	13.79%	\$312,727	21.31%
1974	1,439,058	6.66%	\$349,761	11.84%
1975	1,329,139	-7.64%	\$360,636	3.11%
1976	1,287,303	-3.15%	\$377,414	4.65%
1977	1,337,227	3.88%	\$400,975	6.24%
1978	1,465,647	9.60%	\$464,054	15.73%
1979	1,620,207	10.55%	\$543,233	17.06%
1980	1,627,444	0.45%	\$594,672	9.47%
1981	1,573,351	-3.32%	\$626,032	5.27%
1982	1,563,676	-0.61%	\$677,638	8.24%
1983	1,529,791	-2.17%	\$670,435	-1.06%
1984	1,496,420	-2.18%	\$659,431	-1.64%
1985	1,532,283	2.40%	\$689,200	4.51%

Note: Cruise ship passengers not included.

Continued on page 4

Continued from page 3

policies has been that which defines tourism as being beach and casino oriented, based in relatively large hotels and concentrated in the winter season. This definition of tourism forces Puerto Rico to compete with a large number of other destinations, since the tourism product is hardly distinguishable from that provided by any number of them.

The final item in the list refers to the poor quality of the product. The problems included in this category include those related to the deterioration of the urban areas, particularly those sectors in which tourist facilities are concentrated. In at least the two principal ones, it is clear that the carrying capacity has been exceeded and decay has set in as a result. The problem, however, transcends the one mentioned. Pollution of the Northern coast has impeded in many instances the use of beaches for swimming.

...the particular definition of tourism utilized, narrowed the scope of environmental resources available for promotion of travel to Puerto Rico and the approaches aimed at optimizing their use.

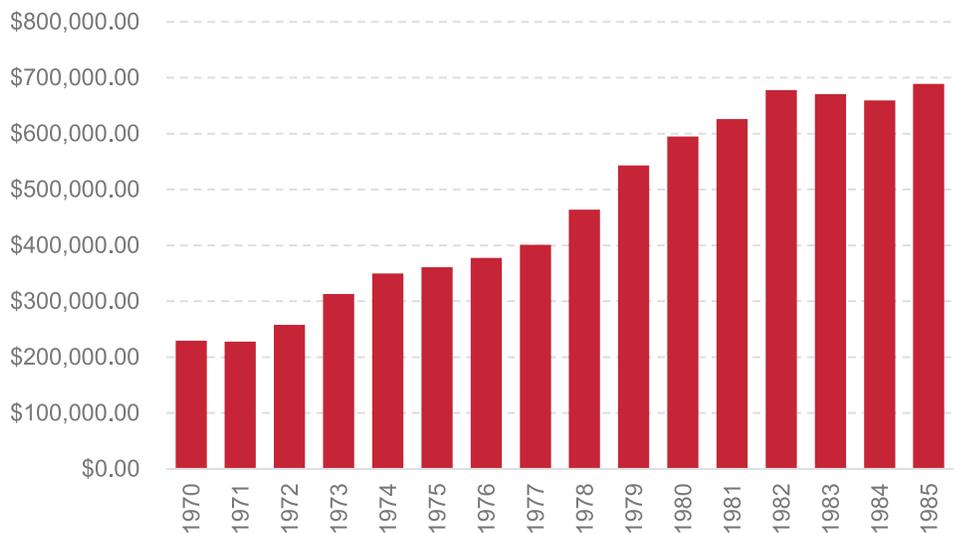
From this very brief summary of the Puerto Rican experience, a number of conclusions can be derived. One is that the environment has been integrated in tourism policymaking only to the extent that it includes beaches. In that sense, pollution of the beaches is an obstacle. Another conclusion is that the style of tourism adopted has had much to do with its eventual decay and with generating the problems which brought about this decay. A third conclusion is that the particular definition of tourism utilized, narrowed the scope of environmental resources available for promotion of travel to Puerto Rico and the approaches aimed at optimizing their use.

The definition of tourism as beach tourism has meant that a number of important resources have been left out of the tourism equation, while others have been exploited beyond carrying capacity limits.

**GRAPH 2:
REGULAR VISITOR ARRIVALS**



**GRAPH 3:
REGULAR VISITOR EXPENDITURES**



Planning Tourism in Small Islands

The comments made on the Puerto Rican experience suggest some thoughts on the need to develop appropriate planning approaches for tourism in small island systems. Obviously, Puerto Rico, Jamaica, Trinidad and the Dominican Republic and Cuba present a very different situation from that of the smaller islands. Nevertheless, the generalizations that follow have some applicability even to the larger islands in the region in their tourism planning.

Small islands are characterized by a number of features. In terms of the environment and its relation to tourism planning, it is useful to mention some of the more relevant. One is, of course, the fact that small islands have a fixed supply of the major environmental resources. This means that scarcity is a continuous problem, particularly in view of demands which arise from exogenous sources. Tourism, for example, as it has been defined, imposes strains



on the natural and cultural systems beyond what the local population would generate. This stress is concentrated on the land sea interface and can become particularly severe in small densely populated areas. Thus, in St. Thomas, for example, close to 90% of beaches are controlled by hotels and condominiums.

In this context, land is a particularly scarce resource. Thus, tourism (as well as planning in other sectors) must deal with tourism in terms of optimizing with respect to a very scarce resource subject to demands not only from the transient population but from the resident population. The decision then hinges on which utility function is to be optimized, that of the tourist population or that of the resident one. In this sense, the particular style of tourism which we described for Puerto Rico and which characterizes a number of destinations in the Caribbean, tends to be intensive in the use of land and skews decisions against local access to land, particularly beaches and other scenic areas. There are two approaches for dealing with these problems. One is simply to approve legislation which makes beaches a public good, available to all, effectively prohibiting hotels from shutting off access. A second approach is to adopt a style of tourism which protects access through limits on the scale of developments and by placing emphasis on other resources.

Another problem present in small island systems is the fact that their ecological systems are very fragile and vulnerable. This is due to the fact that they are not very diverse and because the reduced scale means that transmission of impacts is quite rapid. Small island systems

tend to be also highly integrated ones. Isolation is not an easy possibility. Earth moving in the mountains will affect erosion, this will in turn affect sedimentation in rivers and lakes and will ultimately affect beach formation.

In this context, market failures have particularly calamitous effects because the margin for error is much reduced. In the particular context of tourism, the degradation of scenic resources is particularly serious. Thus, for example, the construction of the international airport in Grenada eliminated one of the principal tourist attractions in the island, the black and white beach in Point Salines.

The major consequence of the poor utilization of these resources is the fact that future generations simply have no options concerning the uses to which they should be allocated. Once the large hotels have been built in the Isla Verde section of San Juan, they may be empty and deteriorated, but the fact is that there is no viable alternative use for that space, at least without incurring in major investment costs.

The problem of small islands is that on the supply side the conditions mentioned tend to predominate, and on the demand side, the major stimuli come from external factors with very different characteristics. Thus, for example, the phenomenon that I have called Imposed Complexity is a result of the imposition of technologies which were developed where scale considerations were different. Thus, the building of large airports to accommodate jumbo jets might introduce system-wide impacts in a small island. Technology is developed on the basis of system needs that have no relation to the island system in which

it is to be used. This is what Towle has called "unplanned technological encounters" (Towle & McEachern, 1974). It is obvious that the consequence will be disruption in the island social, economic and environmental systems. Thus, the increasing hegemony of large hotel chains can present this type of technological encounter with unexpected consequences in the destination country. One impact mentioned elsewhere (Villamil, 1983), is that the transnational chains recruit management personnel, not on the basis of knowledge of national or local conditions, but on the basis of knowledge of the chain's operating procedures. The preference for expatriates is then not a result of prejudice against locals, but a requirement of the particular type of system

This suggests a different approach to planning of tourism from that usually utilized. Tourism planning must be based on the idea that in small island systems the environment is particularly fragile and that major components of the environment are not only fixed but in very short supply. Tourism, by its very nature means an increase in the demand for the use of these resources beyond what the local population would generate. In this sense, the role of resources and the environment is twofold. On the one hand it imposes limits on what can be done. On the other, it provides the resource base for the industry. In the words of Kenneth Boulding, as quoted by Towle and McEachern, the goals of a closed system must be to assure that the "nature, extent, quality, and complexity of the total capital stock is maintained. In fact failure to pursue this goal condemns tourist destinations to decay.



Continued on page 6

Continued from page 5

Approaches to tourism planning are varied and can take place at different levels. This paper is concerned with planning, not at the firm or sector level, but rather at the aggregate or system level. The instruments which are available to planning in terms of defining tourism activities which are compatible with environmental protection include the following:

1. Zoning - This is perhaps the most commonly used and most countries have designated tourist zones in which the planning regulations limit the types of activities which can take place. Restrictions have to do with compatibility of uses and aesthetic considerations. This scheme has all the

limitations usually applied to zoning. It is a control and not a development tool.

2. National parks - One instrument which has been used successfully is the designation of national parks in areas in which the risk of damage to a major ecological system is present.
3. Coral reef reserves and marine parks- These are related to the establishment of national parks and serve the same purpose.
4. Buffer zones - These are zones set up between areas which should be preserved and areas of heavy tourist or other types of traffic. They are zones in which a certain

amount of interaction occurs between different uses, although at a lower level than would otherwise be the case.

The use of these instruments assumes that the style of tourism is necessarily harmful to the environment and essentially limits it to a predetermined zone or zones, and excludes it from others. All these instruments consider the need to establish the carrying capacity of the reserve or national park. In that sense, each of these approaches implies setting limits on the intensity of the activity as well as the location of the tourism activity. By themselves, however, this type of instrument is not sufficient.

An Alternative Approach

One way of dealing with the tourism planning problem is to consider the style as a neutral element and develop instruments geared at preventing the worst manifestations of the activity, however it is conceived. An alternative approach is to define the set of activities included within the field of tourism as activities which enhance the environment and strengthen cultural and social structures.

The first thing to be considered in designing a strategy is the external context within which that strategy is to be developed. In general, the conclusion is that economic growth in the major countries of origin will be slow and thus, competition for the tourist dollar will be sharp. In addition, everything indicates that the United States will not grow as a major generator of trips and will be substituted by Japan, Germany

and other countries, all of which exhibit much higher rates of growth in terms of originating trips (Villamil and Villamil, 1986).

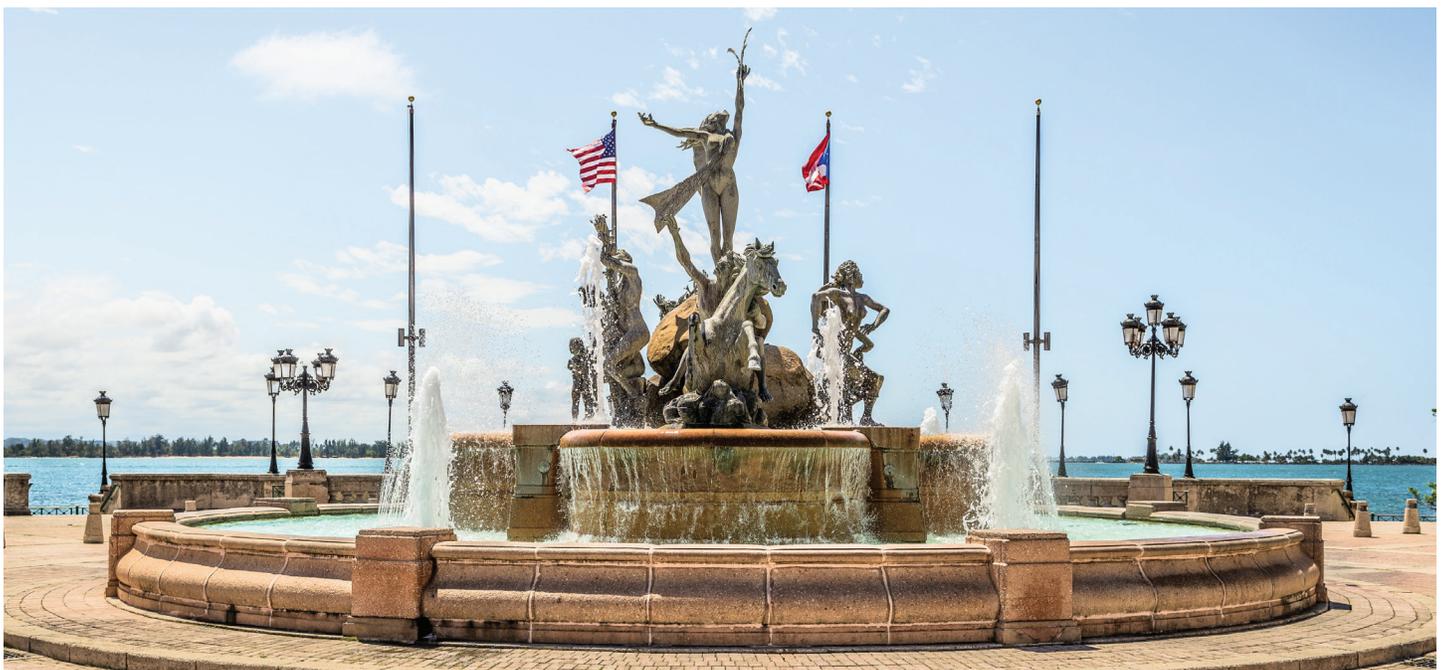
Another item which is present in any appreciation of the context for future developments of the travel industry in Puerto Rico is the fact that competition will almost certainly increase. An estimate from Caribbean Tourism Research Centre figures is that over the next two years some 4,000 to 5,000 hotel rooms will be built in the Caribbean. Over a ten year period, the number of additional rooms will be close to 20,000. In Cancun alone, it is estimated that by the middle of the next decade the total number of rooms will exceed 20,000.

It is also clear from the statistics that the growth segment in travel to Puerto Rico was made up of

those groups not staying in hotels, suggesting that a large potential clientele exists in Puerto Ricans which reside in the United States. Clearly, this group would not be interested in the large beachfront hotel with casino.

No significant transformation in relative cost structures can be expected that are favorable to Puerto Rico in relation to other competing destinations. Certainly, the fall in the value of the dollar will help, but it will not be sufficient to place the Island in a position of being able to compete in terms of cost. Emphasis must be placed on quality rather than cost competition, and in the nature of the offerings.

The scenario drawn suggests a strategy for the development of tourism which would not only place Puerto Rico in a much better



competitive position, but would be ecologically and culturally more appropriate (Comité para el Desarrollo Económico de Puerto Rico, Inc. 1985). The basic strategic orientation should include the following:

1. Extension of the life cycle of traditional tourism by improving the environment. This means investing in the major tourist areas of The Condado and Isla Verde, cleaning up the beaches and improving areas which, while not tourist areas, border on them.
2. Promote social tourism and tourism by Puerto Ricans which reside abroad by providing facilities in small inns and holiday villages in areas which at present have no tourist facilities.
3. Stimulate internal tourism as a means of stemming the flow of dollars abroad. Almost as much was spent by Puerto Ricans travelling abroad as by travelers coming to Puerto Rico.
4. The above are basically aimed at extending the life cycle of traditional tourism. New products such as travel to Puerto Rico based on educational programs, on scientific and technological training and on language programs should be developed. These not only generate income but are ecologically more favorable than large scale beach tourism, and probably more stable.
5. Together with the above types of new tourist products, a basic strategic component would be the integration of cultural, environmental and tourism policies. At present these tend to be formulated independent of each other, with resulting conflicts.

Strategies depend on the objectives adopted. What follows is based on the assumption that the major policy objective is to increase the travel industry's contribution to Puerto Rico's

GNP, while at the same time contributing toward the strengthening of social, environmental and cultural structures and resources.

From the general strategic orientations, a number of specific projects can be identified. One of these is the formulation of a policy on the museum resources of Puerto Rico. The basic idea would be to convert the present situation, in which museums are seen as specialized depositories, into a more dynamic resource which would serve Puerto Rican interests as well as act as a tourist resource. A second project is the creation of internal tourism circuits utilizing, for example, the properties of the Conservation Trust Fund as central elements in these circuits. The Fund has purchased a number of key properties throughout the Island, including an old sugar plantation and a coffee plantation, both now being restored, the land around the phosphorescent bay in the Southwest of Puerto Rico, and a number of other properties which are not only scenically important but have, in some cases, cultural significance.

The central idea of this approach is that tourism and environmental protection can not only be compatible, but that they can be synergistically related in such a manner that they are both reinforced. Obviously, such an approach will require very careful planning. In the case of integrating the Trust Fund properties into internal tourism circuits, the problem of carrying capacity becomes central.

At the present time, preliminary planning of the development of one of these properties as a tourist destination is taking place. The property, an old sugar plantation, is being restored to its original condition. Both the old house and the machinery are being carefully restored. An old building is being converted to a small conference room; a steam locomotive

is to be installed that will take visitors to the old plantation as well as the nearby beach. The project will not only generate income which will provide for better maintenance and development of the property, but the train will avoid the car traffic towards the beach which is causing serious environmental damage. This project provides an excellent example of a new strategic orientation of the industry. At the same time that an attractive resource is being developed and maintained for the enjoyment and education of the local population, tourists are being provided attractions other than the beach and the casinos.

The development of these internal circuits would require the establishment of new tourist facilities and the improvement of existing ones. The advantage is that new developments would take place mostly in areas not already developed and the scale of developments would be relatively small.

Finally, the idea of "escrow resources" must be recognized by the creation of tourism development zones. These are areas in which tourism development is either taking place or which have an important potential for future tourism development. Essentially, these would be zones in which the government would not only have the power implicit in zoning regulations but it could go further in establishing the types of commercial activities which can be developed in such zones, setting aside specific areas for future development so as to prevent future choices from being co-opted by present uses, create local development corporations to carry out specific tourism projects and establish special incentives aimed at promoting particular kinds of developments in these zones. It is encouraging that the Planning Board is considering the establishment of just such a zone in the Cabo Rojo area.

Conclusions

A new strategy for the development of the tourism industry of Puerto Rico must adopt a very different path from that which has prevailed historically. Among the elements which should characterize it are the following:

1. It must recognize that the type of beach and casino tourism which was promoted in the fifties and sixties is not the most desirable for the future because of the competition from other destinations and because it is the segment of the industry which is experiencing the slowest growth rates.
2. The strategy for the travel industry must conceive tourism as being synergistically related to local needs, not only with respect to the natural environment, but also with respect to cultural and educational needs.
3. Puerto Rico must conceive the travel industry as one made up not only of the traditional tourism related activities, but also as one which includes converting Puerto Rico into a regional educational, health care and training center.
4. In view of the fact that the United States, our principal market, is not growing as a source of international travel, a major thrust of the strategy has to be to orient its efforts towards those markets that are growing the fastest, Germany, Japan, Spain and other European countries.
5. In many ways, the strategy implied by these comments suggests that Puerto Rico differentiate itself from the rest of the Caribbean as a tourist destination.

Continued from page 7

References

1. Comité Para el Desarrollo Económico de Puerto Rico, Inc., Estudio Sobre la Industria de Viajes de Puerto Rico, 1985, San Juan
2. McEachern, John & Towle, Edward, "Resource Management Programs For Oceanic Islands" in Frankenhoff, Charles, Environmental Planning And Development In the Caribbean, University of Puerto Rico, 1974.
3. Noronha, Raymond, Social and Cultural Dimensions of Tourism, World Bank staff working paper #326, 1979.
4. Plog, Stanley, "Why destination areas rise and fall in popularity", mimeo, October 1972.
5. Salm, Rodney V., "Integrating Marine Conservation and Tourism" International Journal of Environmental Studies; Volume 25, 1985.
6. Villamil, Jose, "Apunte sobre el impacto del turismo: la experiencia del Caribe" in CLACSO, Medio Ambiente Y Turismo Buenos Aires, 1983.
7. Villamil, Jose and Villamil, Gian Pablo, "Perspectivas para el Sector de Turismo, 1986 y 1987", Taller sobre Perspectivas Económicas: Puerto Rico, 1986 y 1987, Cámara de Comercio de Puerto Rico y Asociación de Economistas de Puerto Rico, 30 de enero de 1986.