PLANNING FOR THE EFFECTIVE MANAGEMENT AND SUSTAINABLE DEVELOPMENT OF COASTAL RESOURCES IN CARIBBEAN SMALL ISLAND STATES

Klaus de Albuquerque
Jerome L. McElroy

Introduction

International tourism is being touted around the globe as the gold mine of the 21st century. It has become the largest industry in the world, surpassing trade in oil and arms. Today, tourism involves some 500 million visitors spending US$300 billion and supporting nearly 130 million jobs. It accounts for nearly 10 per cent of world trade and for one out of every 15 jobs. Tourism is even more significant in most Caribbean small-island states (CSIS). It represents a third of all trade, a fourth of foreign exchange earnings, and a fifth of all jobs. In a sample of 23 CSIS (defined as having a population of less than 500,000 people) the average ratio of visitor spending to GDP was 64 per cent (de Albuquerque and McElroy 1992).

Given the very significant importance of tourism in the Caribbean, it is surprising that few CSIS have undertaken the task of developing and implementing an integrated National Development Plan (NDP), which seeks, among other things, the preservation, protection, and sustainable development of coastal resources (shorelines, beaches, bays, harbours, mangrove areas, salt ponds, reefs, offshore cays and islands etc.). These coastal areas are of course the focal point of tourism development, and yet, despite a general understanding among politicians, planners, and developers, that the long term viability of tourism is linked to the proper stewardship of coastal resources, the normative pattern has been one of uncontrolled coastal development. Given the fragile nature of the ecology of CSIS, and their propensity to promote large-scale mass tourism with its seeming inevitable dynamic towards overrunning the natural resource amenity base, the need for integrated development planning becomes all the more critical (see de Albuquerque and McElroy 1994).

The case for integrated planning is particularly compelling for those CSIS in the mature high-density stage of the tourism life cycle, i.e. island characterised by intense crowding and mounting pollution, declining repeat visitation and length of visitor stay, and the substitution of man-made attractions (duty free shopping, casinos, conventions) for lost or degraded natural amenities (see de Albuquerque and McElroy 1994). Such CSIS, whose average daily visitor density year-round exceeds 100 tourists per 1,000 residents include Aruba, the Bahamas, Bermuda, the British and US Virgin Islands, the Cayman Islands and St. Maarten/St. Martin (McElroy, de Albuquerque, and Dioguardi 1993). A similar case can also be made for second-tier tourist-dependent CSIS like Antigua, Barbados, Bonaire, Turks and Caicos, and other islands approaching the threshold of high-density tourism.
Planning in CSIS

Both short-term and long-term planning in CSIS has been vitiated by a number of technical, institutional, and structural constraints. We have catalogued many of these constraints elsewhere - the routine lack of data, overburdened staffs, skill deficiencies, jurisdictional disputes, fragmented planning functions, top-down planning, the inability of planners to communicate with the public or with policy makers, the persistent disregard of policy input from planners by decision makers, the limitations of size on traditional planning mechanisms, how the politics of personalism and patronage foster insecurity and caution among civil servant planners and technicians which result in "do-nothingness" (McElroy, de Albuquerque, and Towle 1987).

In addition, the steady stream of expatriate planners on secondment creates a weak institutional memory, and the numerous short-term externally funded conservation projects create a kind of project mentality, so that, when the external funding dries up and the expatriate staff are reassigned, the project essentially dies.

The most critical of these internal planning deficiencies, however, has been the failure to appreciate how the various interlocking island subsystems - environmental, economic, demographic, socio-political - interact and affect each other. In addition, there is a poor understanding of the interactive nature of insular terrestrial and marine ecosystems. For example, the carving of hillsides with roadways, and hotel/condominium and residential developments, accelerates soil run off, causing the siltation of salt ponds and mangroves, and increasing sedimentation in nearshore waters. Likewise, the seeming beneficial policies of property tax concessions for retaining land in livestock, particularly in the drier Leewards, may produce overgrazing on marginal hillsides. This results in damaged watersheds, accelerated surface run off, drying up or perennial streams and similar productivity losses in downstream systems (see McElroy and de Albuquerque 1990).

Or, as another example, take the greatly increased demand for sand in CSIS, brought about primarily by the tourism related boom in building construction and changing construction techniques (block), which in turn are a result of building codes and changing public tastes. Given the high cost of sand, even in those states like Antigua and Barbuda where it is commercially mined (currently issued by the Courts), many contractors and private citizens are driven to mine beach sand illegally. Continuing sand removal in several CSIS has precipitated serious beach erosion and undermined groyness and protective shoreline vegetation. This has heightened coastal vulnerability to flooding and other natural disasters. In addition, the resultant nearshore turbidity has destroyed coral reefs and sea grass beds.

Even where stringent regulations designed to protect coastal resources are in place, political and economic realities often intrude. The US Virgin Islands, which has long had a functioning comprehensive Coastal Zone Management Plan (CZMP), is an interesting case in point. While this plan has a permitting process, involving, in the case of large-scale coastal developments (usually tourism related), the submission of detailed plans, environmental impact assessments (EIA), cultural and historical resource inventories, public hearings, and the like, the end result has been to slow the pace of development but not significantly alter its scale or quality. The short term promise of jobs, and other tangible economic benefits, has invariably won out over the long term impact on coastal resources, the overall viability of the tourist industry and the quality of life for local residents, notwithstanding. What the US Virgin Islands' CZMP has failed to do is institutionalise a process whereby economic, social and environmental impact assessments are integrated, and the interlocking nature of various island sub-systems is recognised and not violated.

However, even comprehensive integrated impact assessments are only necessary but not sufficient conditions for safeguarding coastal resources. They can be unduly influenced or overruled by political, economic, and/or other criteria. Witness the St. Kitts Southshore Peninsula project with its rubble filled and underutilised road or the West Coast road in St. Lucia. Both were planned with the requisite impact assessments, the various actors (donor agencies, government ministries, consultants) being fully cognizant that decisions had been made by the political directorate in both countries to go ahead with the projects since external funding had been obtained; in some cases they failed to anticipate some serious impacts, and
in other instances were ignored to the detriment of two of the region's most environmentally sensitive areas.

The most difficult problem, then, facing most CSIS is not so much the absence of an appropriate planning framework, but more importantly the lack of a long-term institutionalised political commitment to the implementation and ongoing financing of conservation efforts. This commitment involves a serious attempt to delink the conception and approval of large-scale tourism development projects from the political and economic fortunes of local elites. Such sustained delinking can only come about through an extensive public awareness and public education campaign, and the establishment of a participatory planning process. An informed and actively involved public is the only safeguard against the continuing pattern of coastal degradation.

Stages of Action

We are aware that numerous action plans for revamping the entire planning process in many CSIS have been proposed by multilateral banks, donor agencies, and the development assistance agencies, but these have seldom entered the public domain and, to our knowledge, have never been the subject of public debate. We hope that the five stage action plan for the effective management and sustainable development of coastal resources proposed below will promote much needed public dialogue in the region.

Stage 1

The first stage must involve the development and implementation of the necessary planning framework. Such a framework must include the following:

1. A Comprehensive Land Use Plan, which besides the usual residential, commercial, agricultural, and industrial zoning designations, sets aside special areas for tourism development, parks, open spaces and sanctuaries (marine, wildlife, etc.), identifies significant historical and archaeological sites, and so forth.

2. An Operative Master Plan for Tourism Development, which has as its main objective, given the limitations imposed by current levels of tourism development, the creation of a sustainable industry. This should include the usual recommendations - strengthening ties between the tourism sector and other sectors of the economy, creating a more balanced tourism plant (e.g. through a wide range of accommodations etc.), improving amenities, strict zoning, broadening the base from which tourists are drawn, encouraging more local participation in the industry by providing training and various economic incentives, and so on.

3. The creation and implementation of a National Parks System to include coastal resources such as beaches, mangrove areas, reefs, off-shore islands etc. Most CSIS have already adopted the enabling legislation to set up parks and protected areas, but progress towards fully fledged parks systems has been slow, and those systems that are operational have been plagued by funding and staffing problems, an indication of their secondary budgetary priority.

4. A CZMP to protect, preserve and enhance coastal resources. This plan, must, as part of its permitting process for all major coastal developments, require environmental, economic and social impact assessments, as well as historical and cultural resources inventories. The plan must impose setback requirements, establish height ordinances, maintain windows to the sea and beach access, mandate open spaces, preserve shoreline vegetation, require proper sewerage treatment facilities, and require all large-scale projects to have backup fa-
ilities to meet their power and water needs. The CZMP must create a Council to review and approve all projects. Private citizens should be appointed to this council through a consultative process between the different branches of government and private sector organization.

5. The Streamlining of Government Operations and the creation of a Coastal Conservation Agency (CCA), with decision-making autonomy and the necessary resources. Such an agency would probably fall under the umbrella of a much larger National Conservation Agency. The inter-agency task-force approach commonly employed in this coordination effort generally has no juridical authority nor the requisite financial resources or technical expertise.

The CCA's major function would be to ensure that the various Government ministries, agencies, and statutory bodies are doing what they are supposed to be doing - providing effective stewardship of the island's coastal resources and enforcing laws and regulations. Besides serving in a watchdog role, the CCA should be charged with coordinating environmental policies, that affect coastal resources among the different Government ministries. It must be responsible for ensuring monitoring protocols (e.g. water quality testing, reef monitoring, etc.) are being observed, that all the relevant data are being gathered and evaluated, that coastal parks and protected areas are being operated effectively, and so on. The CCA should also be charged with ensuring that the CZMP is being properly implemented, and it must provide technical and other assistance to the CZM Council.

Stage 2

To help finance the activities of the CCA, the National Parks System, the CZMP, etc., a number of financing options are proposed. At the national level, these should involve specific budgetary allocations from government, and grants and loans from development assistance agencies, multilateral banks, regional banks and the like. At the local level the options would include graduated user fees (tourists, locals, school children), licensing fees (e.g. dive boats, glass bottom boats), fees from concessions, donations, and so forth.

Stage 3

The third stage of action should concentrate on creating public awareness of critical environmental and development issues, and educating the public on these issues. Part of the effort should involve the implementation of an environmental curriculum in the schools and the training of teachers through a series of workshops.

Responsibility for the public awareness/education campaign should be apportioned among different ministries and agencies, but overall coordination should again be the function of the CCA. In addition, local and regional NGO's engaged in coastal conservation must be brought in as partners in this campaign. Many such organizations are already involved in sensitizing the public about the fragility of coastal resources in small-island states and the critical need for their proper management.

Stage 4

This stage should establish a process for disseminating information through public hearings like CZM Council hearings, hearings on requests for variances and re-zoning, public briefings by NGO's, the Coastal Conservation Agency, etc. Such hearings and briefings should occur at all levels, starting first with the local affected community.

Stage 5

The final stage is the institutional involvement of the public in policy planning. Here, emphasis should be placed on creating a variety of fora and decision-making mechanisms for involving all community segments - NGO's, community groups, sectoral interest groups (e.g. Fishermen's association), special interest groups (e.g. the Hotel Association and the Chamber of Commerce and Industry), in all stages of the planning process so that planning becomes a participatory exercise. Thus, for example, if the Fisheries Department, as part of
its mandate, decides to introduce a reef monitoring system, it should involve, for example, local dive tour operators and fishermen's groups in the planning and implementing process. Bermuda is one of the few notable exceptions among small-island states to have successfully institutionalized public involvement in the planning process, especially the physical planning process (see de Albuquerque and McElroy 1994).

The three most important expected outcomes from this proposed five stage action program are the crucial ingredients for achieving coastal sustainability. The first is the emergence of a shared collective consensus of the community's identity as manifest in its personality, its heritage, and its environmental assets. Pride in this self-consciousness is necessary to catalyze citizen commitment to coastal protection of the "native genius of the place," and to stimulate local entrepreneurial resources and a tradition of service excellence that support a durable and internationally competitive tourism industry into the next century. The second is a growing community appreciation of the delicate nature of insular marine and terrestrial ecosystems and their vulnerable interface with human economic and socio-political subsystems. Some basic awareness of this systems' complexity and interdependence is a prerequisite for successful and widespread participatory planning. The third is the creation of formal and informal conflict resolution channels to ensure that the future development of tourism is not only in harmony with the natural and cultural patrimony of the community, but also compatible with the "social comfort zone" of present-day residents and the aesthetic and recreational aspirations of future generations.

Conclusions

Policy recommendations such as we have set forth in this paper have been made throughout the region by different agencies and through various forums. The problem in the region is not the lack of appropriate policy formulation, but rather the lack luster record of policy implementation. Besides the usual excuses of the dearth of resources (monies, manpower, technical skills, equipment etc.) for implementation, there is a decided absence of political will in the region when it comes to implementing policies that directly affect the environment.

As has been argued elsewhere (de Albuquerque 1991), various NGO's and the public must actively conspire to keep the environment in the news. The media (print, radio, television) must be co-opted to recognize the importance of environmental issues and they should be urged to cover such issues on a regular basis. Regional information programmes such as the "Caribbean Today" and "Caribscope" are already moving in this direction. The environment must become an important element in public policy debates, and NGO's and concerned citizens must impress upon politicians the importance of a "green" political record on environmental issues.

If the region's people and their representatives fail to prize and preserve their unique coastal and heritage resources, and if the past is any harbinger of the future, the unframed market will inevitably degrade and perhaps destroy much of the Caribbean's celebrated natural and cultural patrimony. This would be a double tragedy for residents and visitors alike, in islands where delicate marine, littoral, and terrestrial ecosystems have nourished for millennia a very rich and varied flora and fauna – the common property resource of the region.
References


