# Collaboration on Tourism Policy Making: Environmental and Commercial Sustainability on Bonaire, NA

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**This paper applies Gray's model of collaboration to deliberations concerning sustainable tourism on The Island Territory of Bonaire in the Caribbean. It examines stakeholder logic and strategy in attempting to coordinate three policy areas during the period 1993–98: those relating to hotel-room inventory, airline capacity and water pollution abatement. Relying on in-depth interviews with key participants, the paper analyses how Bonaire stakeholders attempted to pursue both economic and ecological approaches to sustainability by combining these three. It also examines why this effort has not yet been successful, an examination that emphasises a decline in tourist demand and an approach to collaboration that was unsystematic and lacking in institutionalised structure. Implications for collaboration theory include the findings that there is vulnerability in informal modes of organisation and that progress from one stage of deliberation to the next does not necessarily require closure at the earlier stage. Implications for sustainable tourism include the confirmation of hypotheses concerning the critical role played by economies of scale and policy interdependence.**

## Introduction

Because of its inherent complexity and multi-dimensional nature, the quest for sustainable tourism provides a singular example of what students of collaboration term a 'problem domain' (Getz & Jamal, 1994), a system-level challenge composed of numerous parts over which no single organisation or societal-sector has complete authority. Multiple stakeholders are involved with the concept yet none has the breadth of knowledge, power or legitimacy to institute the required system-wide solutions. Around the world, participants in the search for sustainable tourism include governments, NGOs, tour operators, hoteliers and conservation officials to mention only the most obvious roles. Each of these can make decisions affecting part of the equation but the breadth of control required by the nature of the problem is beyond the grasp of each, acting individually. Thus, the value of collaboration, defined by Wood and Gray (1991: 146) as what

> occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms and structures to act or decide on issues related to that domain. (Wood & Gray, 1991: 146)

According to Waddock (1989) the issues in the problem domain are more likely to be effectively dealt with by collaboration and the formation of social partnerships than by an approach emphasising confrontation and the imposition of solutions from above. While sustainability is a collaborative goal for many tourism locations, small destinations like Bonaire that depend on a single resource, are particularly in need of attention to it.

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As a destination's volume of tourism grows, the difficulties experienced will frequently evolve from being small, discrete problems (congestion, air pollution, inflation, etc.) to being single but multi-dimensional and interdependent problem domains. When a domain level has been reached it is no longer possible for individual organisations to act in isolation, for each lacks the authority and ability required for concerted action. In a tourism context this would mean that as a destination grows, problems of crime and pollution, inflation and native alienation multiply and become highly salient. As this occurs, government leaders, resource planners and entrepreneurs are each unable to deal with the syndrome as long as they all continue to act in isolation. That is because it has become a domain-level problem that can only be addressed by some form of interorganisational collaboration.

## Purpose and Methodology

Because of the importance of this subject it is the purpose of the current study to apply collaboration theory to a single case study in an attempt to shed some empirical light on its relevance and utility. While numerous theoretical interpretations are available (McCann, 1983; Trist, 1983; Logsdon, 1991), we will rely on the work of Barbara Gray (1985, 1989), applying her process model to decision-making on The Island Territory of Bonaire in The Netherlands Antilles. The period under investigation covered the years 1993–1998. Gray's paradigm postulates the existence of three phases in the collaborative process and examines the dynamics involved as participants move from one stage to the next. The three phases are: (1) problem-setting in which the nature of the challenge is diagnosed, (2) direction-setting wherein some type of policy consensus is achieved and (3) structuring which is concerned primarily with implementation and programming.

In point of fact, the model applied here will be a truncated one, since Bonaire has not yet dealt effectively with Phase 3. The reasons for this shortcoming will be discussed in the article's concluding section. Until then we will examine the dynamics of the first two phases which may be dated as follows: (1) problem-setting: 1993–94 and (2) direction setting: 1995–96. Our analysis will show that the Structuring phase which might have been the focus of 1997 and 1998 fell victim instead to an economic reversal and to a series of ongoing inefficiencies in the collaborative process, itself. Another focus of this study will be on the ways in which specific policies were used during the middle years to generate consensus. In fact, one of the most interesting findings of this project is that the creation of agreement on specific policies during Phase 2 may be more useful than generating an abstract consensus at Phase 1. To the extent that this finding is generalisable, it has direct implications for how collaboration might be conducted and analysed at other tourism destinations.

Field research for the study was carried out in person on the island of Bonaire during the summer of 1997 and subsequently through extended mail and telephone interviews in 1998 and 1999. Key decision-makers on the island were initially identified by their formal positions (protected-area managers, tourism promotion officers, etc.) and then each person interviewed was asked to nominate others for inclusion in the survey process. This reputational, or referral,

methodology eventually resulted in the identification of 66 individuals; 48 of these were either interviewed in depth or administered a brief questionnaire. All shared a connection with tourism: government decision-makers, hoteliers, tour operators, NGO officers, resource managers, etc. Interviews and questionnaires sought responses of two types:

- closed-ended: assessing opinions and degrees of consensus on particular issues, and
- open-ended: eliciting information on goals, processes, problems, etc.

Many of the closed-ended items asked for respondent opinions on issues, leaders and problems. Others requested that they rank-order numerous options on a list or make some type of forced-choice selection. The findings of these inquiries will be utilised frequently later because they provide insight into the perceptions of key stakeholders, and it is perceptions that drive, or inhibit, a social process like collaboration.

## Tourism on Bonaire

Along with Aruba and Curacao, Bonaire is still popularly referred to as one of the 'ABC Islands'. Formally, it is part of a union with Curacao, St Maarten, St Eustatius and Saba known as The Netherlands Antilles (NA), an autonomous part of The Kingdom of the Netherlands. Aruba holds a separate status. Like many other locations in the Caribbean, The Island Territory of Bonaire has moved decisively in the direction of tourism in recent years. The 1986 figure of 25,000 visitors rose to 37,000 by 1990 and to 62,000 by 1998. For years, increasing numbers of travellers, primarily from the United States and Europe, have been journeying to this tiny desert island in the southeast Caribbean, approximately 50 miles from the coast of Venezuela, to experience its famous marine-tourism attractions (see Figure 1).

The waters surrounding this 112 square-mile dive mecca are home to an extensive system of coral reefs, and island leaders have followed a very conscious strategy of marketing this natural resource. Serving the visiting SCUBA divers, snorklers, yachtsmen and sunlovers has become the island's major source of income and employment, generating US$64m in receipts in 1996 and supporting approximately 2100 jobs (Tourism Planning and Research Associates, 1997). The proportionate size of the industry is emphasised when one considers the fact that Bonaire's total population is only 15,000. Of course, another reason for the primacy of tourism is quite simply the lack of other economic options. No agricultural sector has ever developed in the region's arid climate and, with the exception of salt, neither have mineral extraction nor manufacturing, due to the paucity of natural resources and the relatively high cost of energy.

Against such a background, the genesis of tourism on the island was ironic, for Bonaire's first hotel, which opened in 1952, was a renovated structure that had been part of a Second World War internment camp. During the 1940s the island had housed a detention centre for approximately 500 German nationals who lived in The Antilles and who were considered to be security risks. Seven years after the cessation of hostilities, a renovated version of one of the buildings was opened for guests of a different sort. From this modest start, tourism has grown to become Bonaire's primary industry.


**Figure 1** Location of Bonaire

Because of the island's natural assets, this industry was able to establish a strong dive-tourism niche by the mid-1960s, but with growth came recognition of the need for management. The early days of unregulated marine tourism on Bonaire impacted the reefs heavily with spearfishing, with anchor damage to corals and with siltation caused by on-shore development. As these problems became evident, a coalition of local leaders together with The World Wildlife Fund succeeded in convincing Holland and the Antillean Government to intervene. The result was the creation of the Bonaire Marine Park (BMP) in 1979. Although the Park was funded initially by a Dutch grant, today it is self-supporting with its operating income being generated by the proceeds from a US$10 annual user fee collected from all divers. BMP's jurisdiction covers all of the waters surrounding the island from the high-water mark to a depth of 200 feet. Within these boundaries it is responsible for enforcement of Bonaire's Marine Environment Ordinance, which created a management regime of the type that Orams (1999) calls a 'no take' marine protected area. Day-to-day management of the Park was vested in an NGO known as STINAPA. This latter name is a Dutch acronym denoting The Netherlands Antilles National Parks Foundation.

In addition to STINAPA and BMP, several other organisations have played significant roles in the development of tourism on Bonaire and in the collaborative activity that will be examined below. One of these is the elected Island Government which relies heavily on the industry as a source of revenue (Fletcher, 1997), but which has intermittently pursued policies to limit its growth,

as well. Another is a public corporation known as the Tourism Corporation of Bonaire (TCB). Technically an autonomous agency, it relies on both the public and private sectors for support of its main activities: tourism planning, monitoring and promotion. An additional stakeholder is the Bonaire Hotel and Tourism Association (BONHATA). With approximately 100 members drawn from the island's hotels, restaurants and other retail enterprises, it has served as the industry's main advocate since 1988 when it was formed to oppose an increase in public utility rates. Serving as a spokesman for the island's commercial interests, it pursues many of the same types of promotional activities that King (1997) described in Fiji and Queensland, Australia. These will be discussed later.

A related industry group is The Council of Underwater Resort Operators (CURO). The 12 members of CURO are the excursion operators who transport divers and snorklers out to the reefs each day. Because they are the immediate users of the reef, they have an enormous interest in the policies of STINAPA and in the operations of BMP managers. Island law gives them considerable influence with both of these entities since it has made them the user-fee collection agents for the Park. Finally, there is a group of environmental stakeholders largely drawn together by their focus on resource management and conservation: appointed, career officials housed in the government's Planning Department and the leaders of several environmental NGOs such as Friends of the Earth, Tene Bonaire Limpe (Keep Bonaire Clean) and the Save Klein Bonaire Foundation. In 1999 these latter groups created an association to coordinate their activities: The Nature Alliance.

Fundamentally, of course, there are two very different *raisons d'être* for these various organisations and constellations of interest: the promotion of tourism, on the one hand, and the promotion of conservation, on the other. In his classic analysis of this subject, Gerardo Budowski (1976) postulated three possible modes of interaction between tourism and conservation: coexistence, conflict and symbiosis. He reasoned that coexistence would be quite widespread in the early days of a country's experience with tourism, and this definitely was the case in Bonaire. In addition to the explanatory factors which he originally cited, there are numerous other reasons for the accuracy of this generalisation. In 'the early days' a great deal of growth can take place before carrying-capacity problems become obvious to decision makers (Liddle, 1997). Tourism operators, conservation officials and others can afford to minimise their interactions because initially their levels of perceived mutual threat and mutual interdependence are low. This was true of Bonaire in the 1960s and early 1970s when it was the members of CURO who managed both their businesses and the health of the reefs.

In addition, during this phase the role of government is frequently one of brokerage rather than of planning and regulation. While it is the authority mediating between two other stakeholders, these two participants are engaged in a non-zero-sum game, and thus a win for one side does not yet signal a loss for the other. Resources are more plentiful during the coexistence period. Tourism externalities are relatively small, or seem to be (Miezkowski, 1995) and thus calls for government regulatory action are minimal. Officials fortunate enough to be in office during such times have a growing number of public-sector jobs to fill and subsidies to dispense (Elliott, 1987). The industry tends to be decentralised

and hard decisions about waste and resource loss are not yet on the public agenda (Elliott, 1983). Accordingly, as it was on Bonaire, the perceived need for collaboration is low.

However, as the number of tourist arrivals begins to accelerate, noticeable environmental degradation frequently sets in as does host-community disenchantment or opposition (Nash, 1989), a syndrome to which Bonaire was not immune. Ecological and social limits may soon be reached and easy coexistence is then replaced by growing conflict and resentment. At this point, the role of government may shift from brokerage to that of either planner or guardian of the status quo (Smith, 1992). The externalities generated during this phase gradually become unacceptable to resource managers and various forms of mitigation are introduced. This, of course, is a juncture at which collaboration may become a much more valued tool, as also happened on Bonaire.

Following the logic of Butler's (1980) model of a tourist area cycle, we would expect that the third mode of tourism/conservation interaction, symbiosis, would be quite rare, and that even when it occurs that it would not last indefinitely. When symbiosis does occur, however, the presence and growth of tourism can generate extra income that may be utilised for conservation purposes (Driml & Common, 1995). If this happens, then the simultaneous pursuit of both tourism and conservation may help to assure the sustainability of both the industry and the resource base on which it depends. It will be argued later that while this has not yet happened on Bonaire, the collaborative processes used on the island during the mid-1990s did orient the stakeholders in that direction.

## Phase 1 – Problem-Setting

The first phase in Gray's collaboration model is termed problem-setting, and on Bonaire this phase covered the years 1993–94. Problem-setting involves the identification and acceptance of a domain's stakeholders by each other. As such, it rests on a mutual recognition of legitimacy; the idea that each participant has real concerns and interests and a right to be heard. More importantly, it also involves their search to define and acknowledge the common problems that impact them all. It is a phase that is most fundamentally about values, for as participants engage in their deliberations each normally has some set of preferred outcomes in mind, whether those emphasise the status quo or a major change in it. In a developmental, island context such value choices ultimately concern not only income, but basic questions of equity, as well (Beller, 1990).

With a problem domain as complex as sustainable tourism, an observation by Trist (1983) is especially relevant. Specifically, he noted that until the problem-setting phase has been resolved, none or few of the participants will normally be aware of the true dimensions of the domain. Instead, the attention of most will remain limited to their particular parts of it. To begin to determine whether this was the case on Bonaire, we asked interviewees to identify what they saw as the 'single biggest problem facing tourism on this island during the 1990s'. A summary of responses is presented in Table I.

**Table 1** Biggest tourism problem

| *Problem* | *Frequency* | *Percentage* |
|---|---|---|
| Too few visitors/low occupancy | 8 | 17 |
| Air service | 7 | 15 |
| People spend too little | 5 | 10 |
| Government taxes too high | 4 | 8 |
| Condition of the reef | 6 | 13 |
| Crime rate | 6 | 13 |
| Traffic/pace/congestion | 4 | 8 |
| Too many tourists | 3 | 6 |
| Don't know/NA/other | 5 | 10 |
| Total | 48 | 100% |

While there is a certain diversity to the items on the list, it is quite clear that when the 'DK/NAs' are eliminated all of the responses may be placed in either of two opposing categories of diagnosis:

(1) those relating to visitor/business volume and the need to increase it – the first four lines of Table 1 (56%); or
(2) those relating to resource/social damage and the need to mitigate it – the next four lines of Table 1 (44%).

The first focuses on the sustainability of business and the second on the sustainability of both the physical and social environments.

Of course, finding that such a bipolar distribution of opinion existed on Bonaire is consistent with treatment of this subject in the literature. For example, Jenkins (1980) assesses tourism policies in developing countries and asserts the near inevitability of tension between conservation and tourism interests. Profitability is certainly the most significant criterion in private-investment decision-making while public policy choices may include other factors: resource protection, attention to social and cultural impacts, etc. For businessmen in the tourism industry, the concept of sustainability must ultimately involve long-term earnings for no business can continue indefinitely if this concern is ignored (McKercher, 1993). Deliberations based on economic sustainability will, of course, emphasise such factors as return on investment, preservation of capital and the generation of sufficient income for owners, managers and employees (Sherman & Dixon, 1991).

However, for planning and enforcement agencies acting as the resource guardians (Lickorish, 1991) sustainability means staying within a destination's ecological and social carrying capacity (Ceballos-Lacurain, 1996), protecting both cultural heritage and natural biodiversity (Dasmann & Freeman, 1973). Here sustainability involves monitoring the impacts that visitors have on resources and managing these impacts in ways that minimise damage. Hoteliers and others need to maintain commercial viability while resource managers need to maintain environmental viability. Thus it is that in tourism destinations like Bonaire we frequently find two sets of players operating under very different

views about what is needed (Pigram, 1990; Shaw & Williams, 1990). In fact, in places where tourism is a significant economic force, the debate over public policy is frequently a debate between these two divergent views of the 'public good'. Such a debate was part of the problem-setting phase of collaboration on Bonaire in the years 1993 and 1994.

Earlier, we profiled the constituent organisations that were the parties to this debate. To understand the nature of their interaction with each other, we can adapt Trist's (1983), characterisation of domains as being either 'centred' or 'networked' in design. A centred or centralised pattern for collaborating organisations involves their coordinating with one another in an evolved and highly institutionalised structure of interaction. By way of contrast, the 'network' type is far more fluid and open. For example, rather than relying on the establishment of an explicit taskforce or similar device, the networked organisation remains informal and *ad hoc*, making decisions and coordinating actions in a more implicit manner.

The Bonaire experience with collaboration displayed the characteristics of the networked rather than the centred model and, as will be discussed later, this did prove to be a major shortcoming. Roberts and Bradley (1991) have generated a complex collaboration model that includes among its main elements an emphasis on task-specialised organisation and sustained interactions among the stakeholders. Informal, episodic and personality-sensitive, tourism collaboration on Bonaire in the early and mid-1990s tended, instead, to be conducted on a far less institutionalised basis than this model would prescribe, a condition that ultimately limited its effectiveness.

Instead of establishing a system that might allow all stakeholders to meet together on an ongoing basis in some type of umbrella group or peak association, collaboration occurred primarily through the mechanisms of overlapping membership, joint participation and periodic, general meetings. Specifically, the prevailing practice was for the island's tourism and environmental groups to have members on each others' boards of directors and/or attend each others' meetings, as will be discussed later when we consider Phase 2. *Ad hoc* gatherings that focused on particular issues were also utilised as a way of bringing interested parties together to discuss their problems and coordinate their operations. Although lacking a central, authoritative structure, this approach did create a policy network capable of quick and flexible response. It thereby allowed participants to coordinate their activities and thus begin the process of collaboration. According to Trist (1983), such 'networking initiatives' constitute the first of four steps in the emergence of a domain and during the period examined in this study, that is exactly where Bonaire was: at the beginning of the process. Thus, much of this paper's relevance to the analysis of collaboration is in terms of illustrating the emergence of an inter-organisational domain. The stakeholders' inability to move beyond this point, however, constituted a substantial weakness in their joint undertaking.

While collaboration on Bonaire was limited in this and other ways, one of its countervailing strengths was its inclusive nature, for it did manage to involve almost all of the stakeholder groups referred to earlier. Leadership of their discussions was taken by participants from the TCB, BONHATA and STINAPA, a phenomenon which was quite predictable since these three groups were seen

**Table 2** Lead organisations

| *Name* | *Frequency cited* | *Percentage* |
|---|---|---|
| Tourism Corporation of Bonaire | 13 | 27 |
| BONHATA (Hotel Association) | 11 | 23 |
| STINAPA (National Park Foundation) | 7 | 15 |
| Island Government | 4 | 9 |
| CURO (Dive operators) | 3 | 6 |
| Bonaire Marine Park (Management) | 3 | 6 |
| Friends of the Earth | 2 | 4 |
| Save Klein Bonaire Foundation | 2 | 4 |
| Don't know/NA | 3 | 6 |
| Total | 48 | 100% |

as possessing on-going and legitimate authority within the domain. The primacy of these three stakeholders was indicated in responses to the question, 'In the last few years, what group has been the real leader in Bonaire on the subject of tourism?' Results are provided in Table 2.

This table lists the organisations in order of the number of citations received, and we can see that the top three organisations were also the ones that took on the leadership roles. This finding is consistent with Gray's emphasis on the deference given such groups. The other pattern that can be seen in this table is that there are two different types of leadership clusters on Bonaire: commercial and environmental. The former is made up of representatives from the TCB, BONHATA and CURO while the latter is composed of members drawn from STINAPA, BMP and the several NGOs listed. Because the great majority of collaborators were drawn from these two constellations of interest, the remainder of this paper will adopt the terms 'Commercial' (cited by 56% in Table 2) and 'Environmental' (cited by 29% in Table 2) when discussing the backgrounds and interests of the respective groups of stakeholders. Relating the responses of these two groups to the treatment of issues and problems previously presented in Table 1, we were not surprised to find that the former emphasised business problems while the latter spoke almost exclusively of ecological and social difficulties. Returning to Table 2, we may note that the Island Government was mentioned by some. However, its record has tended more in the direction of mediating rather than siding with either alliance, and accordingly we do not include it under either label.

In his work on collaboration, Trist (1983) has emphasised the activity in which participants work to cooperatively diagnose the nature of the problem(s) confronting them. However, on Bonaire these two groups had very different diagnoses, and the contradictions between them initially intensified as tourism growth rapidly accelerated a decade after the creation of the Marine Park. Stakeholders still remember and report debates during this time on such subjects as growth, crime, land use, pollution and the need for seemingly more and more tourist arrivals. Nonetheless, it was during these debates that positions began to evolve, and it slowly became clear to many that the challenges were interdependent and thus required some type of cooperative solution. However, the ques-

tion that remained unanswered during most of Phase 1 dealt with what it was that needed sustaining: industry resources or natural resources. In this zero-sum formulation of the problem, participants had not yet moved beyond allegiance to their single sub-part of the domain.

This gap was partially closed by the publication of the 'Pourier Report' (1993), a document produced by a collaborative committee, reporting to the government and representing the major tourism stakeholders. The panel was established to survey the problem domain; to examine goals and, perhaps, chart a new course. Its report presented a vision of Bonaire based on slow, planned and controlled growth of the dominant sector of the island's economy: dive tourism. Even during interviews four years later, participants still referred to it as a kind of turning point, bringing stakeholders closer to a point where they could see their individual problems in terms of mutual impact, especially with the committee's emphasis on the policy connections between the condition of Bonaire's natural environment and the health of its economy. This approach may remind the reader of Weaver's (1991) assessment of policy choices in Dominica where the government has discouraged certain types of outside investment and moved to keep growth under control by such means as limiting airport expansion.

As to the scale of tourism, The Pourier Report built on an earlier development plan produced by the Caribbean Development Centre (1990) and emphatically rejected the mass-tourism approach taken by Bonaire's sister islands, Aruba and Curacao. Recognising that biodiversity can be made to pay (Pearce & Morgan, 1994), The report instead emphasised Bonaire's 'environmental product' and the need to sustainably develop it by pursuing only a very selective type of tourism: one that would cater to a small but affluent clientele. In this way, incomes could be kept high without necessarily relying on a constant increase in visitor volume. Operationally, however, the problem remained. If the numbers were too low, the hoteliers and other commercial interests would oppose the process. If they were too high, the natural-resource community would not accept the outcome because of concerns relating to carrying capacity.

Although the carrying capacity of any tourism resource may be extremely difficult to document and monitor (Innskeep, 1991), that of Bonaire's reefs had been estimated at 200,000 dives per year in a study done for the World Bank (Scura & van't Hof, 1993) early in Phase 1. However, the growth projections available to stakeholders indicated that by 1996 the island could annually be playing host to as many as 65,000 visitors who would make a combined total of some 250,000 dives. Because of the imbalance in these figures, both BMP documents and government reports (Tourism Planning and Research Associates, 1997) soon declared the reefs to be at or beyond their physical carrying capacity. This assessment was resisted by others because even during Phase 1, with visitation reaching 56,000 arrivals annually, hotel occupancy rates hovered near only 50%. Members of BONHATA and others believed that they needed better rates, with 60–70% being the consensus range cited most frequently during our interviews. Such a target would, of course, push the annual number of dives into the vicinity of 300,000, fully 50% beyond the World Bank figure. Thus, in terms of the island's primary natural resource, there were two opposing diagnoses during most of the problem-setting phase: one seeing the reefs as capable of absorbing no more growth in visitation rates and the other demanding such growth. Until

**Table 3** Tourist arrivals (000)

| *Source* | *Year* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* | *2000* | *2005* | *2010* |
| Economic Impact Study | 57 | 61 | 66 | 70 | 74 | 77 | 80 | 100 | 119 |
| TCB* Report | | | | | | | | | |
| Trend | 56 | 59 | 65 | 69 | 73 | 78 | 82 | 103 | |
| Low | 56 | 59 | 63 | 64 | 66 | 67 | 68 | 70 | |
| High | 56 | 59 | 67 | 74 | 82 | 90 | 98 | 149 | |

* Tourism Corporation of Bonaire

*Source*: Tourism Planning and Research Associates, *Bonaire Tourism Strategic Plan*, May 1997, Appendix p. 3.

another alternative was found, continued conflict seemed inevitable, given the island's tourism growth statistics for the recent past and the predicted future. See Table 3.

The next section of this paper will use this table to show how such projections made possible the stakeholders' approach to dealing with these conflicting problems of hotel capacity and reef capacity. The paper's conclusion will discuss the gap that subsequently developed in the late 1990s between the predicted and the actual numbers of arrivals and how this discrepancy negatively impacted Phase 3 of collaboration.

## Phase 2 – Direction Setting

Direction-setting is a collaborative activity in which the participating organisations deal with the question of what, if anything, should be done about the problem domain and discoveries made during Phase 1. Combining both agenda-setting and policy formulation, the stakeholders assess their preferred outcomes and the alternatives available for reaching them. Emphasis is on the development of mutually acceptable courses of action (Gray, 1989). On Bonaire, as we have seen, consensus on the nature of the domain was never really achieved during Phase 1. Interestingly, it was during Phase 2 that real progress was made, a fact that may lead us to speculate that a group's movement from one phase to the next does not necessarily require prior closure during the earlier phase. In fact, Phase 2 collaboration on Bonaire helped resolve certain Phase 1 issues that previously seemed intractable.

Guided by leaders at the TCB, BONHATA and STINAPA, Bonaire stakeholders shifted the focus of their collaborative efforts during 1995. Our delineation of this second phase is not predicated on a finding of any significant change in the nature of their interaction, however. It is based, instead, on an assessment of how they used their overlapping memberships and shared participation to formulate a policy agenda. Phase 2 was defined by a new vision of their shared policy preferences, not by changes in their shared, deliberative processes.

It must be remembered that Bonaire is a very small island, dominated by a single industry and that its components interlock with each other. BONHATA works directly with the TCB, and the latter holds monthly meetings with the former. A TCB representative sits on the STINAPA board as do delegates from

BONHATA and the Island Government. CURO holds an organisational membership in BONHATA and serves along with several environmental NGOs on the Marine Park's Oversight Committee. Responsibility for the marine park, itself, is vested with STINAPA. Several NGO members also belong to both STINAPA and BONHATA. Ultimately this study was able to calculate that some two dozen networked individuals fill most of these key, overlapping positions. Because of their connected roles they are in frequent communication with each other and they have used their overlap to create a kind of implicit collaboration. With it, they have been able to discuss and plan numerous policies without having to create a separate layer of organisation to bring them together. While this approach has provided great flexibility, over-reliance upon it has also militated against structuring the collaborative effort into a more institutionalised form. This, in turn, has greatly limited its effectiveness.

In 1995 the attention of the interlockers shifted away from their unresolved differences about sustainability to the consideration of specific policy options of particular interest to each. The Phase 1 use of a visioning committee had produced the 'Pourier Report', but that document had been unable to generate a real consensus on values between the Commercial and Environmental groups. Rather than continue with a seemingly impossible task, the stakeholders set aside their search for common values and turned their attention instead to the question of whether there were certain things that each side wanted separately that the other could support. As they did this, their collaborative activity gradually evolved into the direction-setting phase, and three issues emerged as most salient:

- airline capacity,
- hotel capacity, and
- pollution abatement.

All three of these issues were highly interdependent, and thus extremely relevant in terms of collaboration theory. The first was concerned with demand generation for the national airline, ALM, while the second focused on both growth limits and growth incentives for hoteliers. The pollution-control question concentrated on the need for construction of the island's first wastewater treatment facility. This public-works project was seen as a way to reverse the decline that had begun on Bonaire's coral reefs. At the same time it was hoped that it would allow for an expansion in the size of the tourism industry, as will be discussed later.

For the Commercial Group the policy of augmenting airline capacity had very high priority because it was seen as the key to raising hotel occupancy rates. The Environmental Group, on the other hand, was just as committed to the idea of building the wastewater treatment plant. Their concern was based on data showing that the thousands of the divers entering Bonaire's waters each month did far less direct damage to the reefs than did the hotels' discharging of untreated effluent into the same waters (Roberts & Hawkins, 1994). Most hotels have cess pits or septic tanks, but their capacity and effectiveness are severely limited. Excess grey water is also used for landscape irrigation and often finds its way into the sea. This situation, combined with the island's porous limestone base, has resulted in serious reef damage through eutrophication (Tourism

Planning and Research Associates, 1997). In this process, the additional nutrients discharged into the island's off-shore waters generate an increased production of algae. Algae, in turn, is a major factor in coral mortality.

In order to examine the fit between these reports and participant perceptions, interviewees were presented with the following statement: 'A lot of people say that the reef is not as healthy today as it was ten years ago. Do you agree or not?' There were 10 'disagrees' or 'don't knows'. The 38 individuals expressing agreement were given a forced-choice list of possible explanations for the decline and asked to rank them. Table 4 presents the distribution of frequencies for those explanations ranked highest. Significantly, a majority of those believing that the island has a problem with its marine ecology diagnosed the absence of a wastewater treatment plant as the main reason.

Still, many failed to see the problem because it was invisible for such a long period of time. For more than two decades it remained undetected, as the volume of nutrient discharge steadily grew to measurable levels. This growth was, in the eyes of many, the direct result of the government's failure to account for the environmental impact of 20 years' worth of development. A similar phenomenon has been documented with small island states in the South Pacific (Fairbairn, 1990). According to this view, what Bonaire shares in common with Fiji, Tonga and The Cook Islands is a failure to deal with the dangers of large investment projects at any time before they start to actually threaten the environment.

Once this occurred on Bonaire, there was little dispute about the need for a wastewater treatment plant – a consensus mirrored in the responses of a plurality of our interviewees, as seen in Table 4. However, a shared diagnosis could not overcome the obstacle generated by the enormous costs involved. These, in turn, created an obvious disincentive to action which initially kept the Environmental and Commercial Groups from arriving at a common ground. Unable to move forward on this issue, they shifted their attention to the subject of visitation numbers and hotel capacity, concerns not unrelated to wastewater questions. These consultations, in turn, became the key to action on direction-setting and retrospectively on problem-setting, as well. This was so because the subject of growth dealt with fundamental needs relating to both airline and wastewater planning. Hoteliers wanted to fill their rooms, and environmentalists wanted to build the treatment plant. Responding to consultant reports on

**Table 4** Main reason for reef decline

| *Reason cited* | *Frequency* | *Percentage* |
|---|---|---|
| Sewage/lack of treatment plant | 21 | 55 |
| Too much shore development | 6 | 16 |
| Too many divers | 5 | 13 |
| Divers lack training | 3 | 8 |
| Boat pollution | 2 | 5 |
| Over-fishing | 1 | 3 |
| Total | 38 | 100% |

airline needs, the network participants envisioned a policy of allowing the island's hotel inventory to grow to 1600 rooms (Pieters & Gevers, 1995).

At first such a policy seems paradoxical. At that time there were still only 1000 hotel rooms and they were experiencing a 50% occupancy rate, a situation that raises a very logical question. If a hotelier cannot fill the number of rooms s/he has on hand, why would s/he want to build more? The answer provided by Bonaire planning officials concerned the fact that if a destination does not have enough rooms it cannot justify any extra airlift. Only by building the additional rooms would hoteliers be able to entice the airline into adding more capacity. According to the plan, such an addition would, in turn, generate enough additional passengers to increase the overall occupancy rate. Tour operators cannot work with destinations that do not have a sufficiently large pool of rooms. Lacking necessary allotments, they cannot vary their pricing in order to sell enough seats and in the absence of sold seats the airline reduces capacity and room occupancy rates tumble further. Direction-setting emphasised a policy that viewed airlift capacity and hotel occupancy as intimately related and mutually reinforcing strands in the tourism mosaic. On one side was the fact that a critical mass of room capacity was needed in order to assure adequate air service by making it profitable for the carrier. On the other side was the equally clear fact that without a certain level of air service, the existing inventory of rooms could not be filled at needed rates.

Pieters and Gevers (1995) explain that growth was also to be limited to the 1600 room figure. In other words, that number would not be just a target, but a cap as well. Once it was reached no additional rooms would be built. With an attractive, natural destination to offer and with enforceable limits on the number of visitors, scarcity rents could be raised quite high (Caribbean Development Centre, 1992, 1996). Such rates would, in turn, mean stable profits at the same time that resources were being preserved. What is fascinating for students of sustainability, however, is the fact that this figure of 1600 was initially reached by extrapolating from the capacity and profitability requirements of the airline, ALM. It was not reached by starting with estimates of the number of divers that the reefs could accommodate without degradation. In other words, commercial sustainability rather than environmental sustainability was the operative criterion, at first.

Because this was the case we must now reconstruct the other major element of Phase 2 collaboration, that concerning the wastewater treatment plant. While most stakeholders could see its value, few in the Commercial Group were willing to agree to its authorisation because of the estimated construction/implementation cost of US$14m (Tourism Planning and Research Associates, 1997: A3.3). Not only would it add enormously to the cost of operating individual properties, but it was also feared that since most of the bill would have to be passed along to guests, it would further erode Bonaire's competitive position, vis à vis other Caribbean dive destinations.

However, as the stakeholders discussed this problem during 1995 and 1996 one of the lead organisations, TCB, constantly and persuasively made the case that the plant could be made affordable if its cost was spread over a larger number of rooms. Of course, it was also an increased room inventory that had been presented as a means of addressing the airlift problem. Eventually, it was

this approach to the problem domain that prevailed, for it proposed to deal with two issues (profitability and conservation) through a single growth policy that relied heavily on economies of scale. Combining numerous interview responses, we may reconstruct their collaborative reasoning as follows. If construction funds could not be found from external sources such as the European Union or the central government in Holland, then an effective way to pay for the wastewater treatment system would be through a major increase in the number of rooms. This was so because much of the funding for this project would be devoted to fixed costs such as the building of the plant itself, laying the piping to connect it to the hotel properties, constructing the pumping stations, etc. If these fixed costs were to be divided by a larger number of rooms then the per-unit cost for the entire project would be considerably lower. Exactly what this means can be seen by an examination of Table 5.

**Table 5** Treatment plant cost estimates

| *Room inventory* | *Cost per room US$ total* | *Cost per room (30 years)* |
|---|---|---|
| 1100 | $12,700 | $423 |
| 1600 | $8,750 | $292 |

Here the cost of the treatment plant is presented on a per-room basis, first in terms of total cost and then, in the third column, by amortising this total over an expected life-span of 30 years. As these figures make dramatically clear, the larger pool of rooms decreases the per-unit cost by 31%. This was seen as an effective economic argument in favour of raising the number of rooms to 1600 and it also complemented the island's projected airlift requirements. If such an increase were to make the construction of the plant feasible, we would then have the seemingly paradoxical result of an increase in tourism leading to greater resource sustainability, exactly the kind of outcome postulated by Budowski (1976).

Thus it was that the direction-setting phase of Bonaire's collaborative effort emphasised economies of scale to create common ground for both of the previously conflicted groups (Commercial and Environmental). A room inventory of 1600 could make it profitable for the airline to increase its capacity. More rooms could also generate the funds needed for construction of the treatment plant. The existence of just such a dynamic regarding the size and cost- efficiency of tourism infrastructure was demonstrated years ago by Jenkins (1982). Of course, such a policy carried dangers, as well, not the least of which concerned whether the cap would be respected once it was reached. In addition, there were obvious social problems posed by the projected increase in visitor volume: inflation of land values, increased crime rates, etc. However, these have not happened because, as is discussed later, the three-part policy initiative has yet to be implemented.

## Conclusion

In one sense Bonaire's attempt at collaboration was instructive, for it demonstrated how a tourism policy agenda can evolve and how stakeholders can move toward a consensus that would not have been possible previously. Participant

interactions generated a convergence of airline, hotel and pollution-abatement policies. Coming together, these three were like the sides of a triangle, in that the elimination of any one of them would compromise the integrity of the whole. Collaboration is about interdependent problem solving and about decision-making at the system level, precisely what occurred in Bonaire during Phase 2. No longer were two mutually exclusive positions seen as the only ones available. Instead an approach to sustainability was visioned that created common ground and a new definition of both the problem and its possible solutions.

However, in another sense, it might be argued that collaboration on the island has been ineffective, since Phase 3's structuring process has not been completed. Structuring involves the implementation of plans made during Phase 2 and may include an acceptance of such devices as regulation, tax increases, external mandates, redistribution of power and a commitment to re-allocate resources toward the new end. Goals and timetables are set and specific tasks are assigned to organisational players. Structuring relies on the explicit ratification and execution of a practical action plan that was previously just a statement of policy intent. Its most fundamental indicator is an actual change in behaviour. Since this is so, one test of Phase 3's success quite simply involves asking whether the plans of Phase 2 were ever put into effect. On Bonaire they were not. Although the triangulated policies were interdependent, one was fundamental: that dealing with the supply of hotel rooms. As seen by Bonaire planners, this was the variable that would drive the other two. Building the additional rooms was seen as the initiative that could cause the airline to add capacity and that could also generate revenue for construction of the wastewater treatment plant.

However, none of this has yet happened and the explanation has to do with two other variables, one external to the process of collaboration and the other internal to it. The external factor involved a problem over which participants had insufficient control: visitation numbers. During most of the 1990s, Bonaire's tourism base was expanding, frequently at annual rates of near 10%. Under such circumstances, long-range plans for increasing the room inventory by some 50% were both predictable and financially defensible. However, as can be seen in Table 6, the trend in visitation numbers changed dramatically starting in 1997. The first column of this table shows the upward projections on which so much of the collaboration was based. The actual arrival numbers are presented in the second column and a very dramatic change can be seen, beginning in 1997, the year when stakeholders might have been entering Phase 3. In that year there were 6200 fewer visitors than expected, a deviation of 9%. By 1999, the discrepancy had risen to 17%, as an estimated 64,700 divers and others arrived, instead of the projected 78,000. This widening gap is presented in graph-form in Figure 2.

Due to this downturn and its associated economic uncertainty, investors were unwilling to risk substantial and coordinated levels of new development that would raise the room inventory much above its existing level. The stakeholder policy previously described had been generated in an atmosphere of economic expansion and in many ways was fundamentally dependent upon its continuation. Although initially sceptical, the Commercial players had been interested in the plan of inventory expansion in order to maximise their own gains. When the situation changed and they were confronted with a contracting market at the

**Table 6** Tourist arrivals: projected versus actual

| *Year* | *Projected* | *Actual* | *Deviation* | *% deviation* |
|---|---|---|---|---|
| 1994 | 56,000 | 55,800 | (200) | - |
| 1995 | 59,000 | 59,400 | 400 | - |
| 1996 | 65,000 | 65,000 | - | - |
| 1997 | 69,000 | 62,800 | (6,200) | (9%) |
| 1998 | 73,000 | 61,700 | (11,300) | (15%) |
| 1999 | 78,000 | 64,700* | (13,300) | (17%) |

*Source:* TCB
* Estimated by TCB

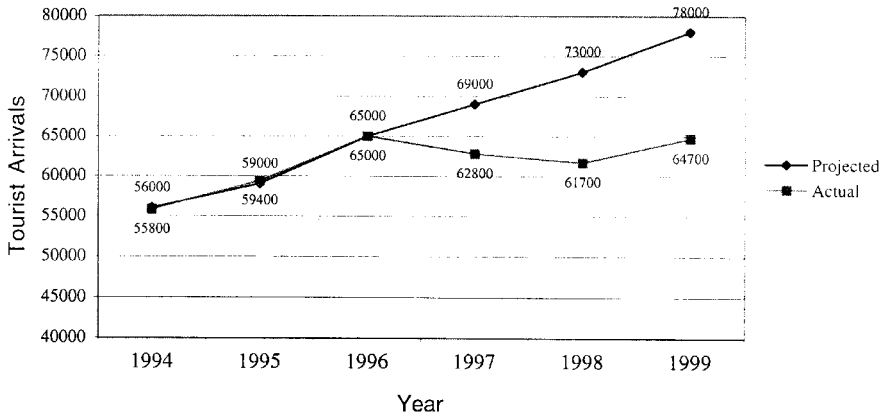


**Figure 2** Tourist arrivals: projected versus actual

completion of Phase 2, the same participants needed to switch to a strategy of loss minimisation, instead. Such an altering of priorities meant a loss of support for the plan and this, in turn, crippled the Phase 3 attempt at structuring. The target figure of 1600 rooms was also abandoned. In programmatic terms, it can be said that no coordinated progress has been possible on hotel construction, the treatment plant or the question of airline capacity since 1997.

What such a situation suggests for collaboration theory is that changes in the strategic, external environment can easily threaten what is already a fragile policy consensus. After extensive bargaining and information exchange, collaboration assumes certain external conditions and then moves forward. When the assumptions change or prove to be unfounded, retrograde movement can occur and the collaborators may be returned to earlier stages in their cooperative process. In the case of Bonaire, the main exogenous variable was tourism demand. For stakeholders, the competing definitions of the problem domain in Phase 1 were modified and softened by ever-growing demand statistics until 1997. When this situation changed, so did the prospects for success of the collabo-

rative enterprise. Such a conclusion, in turn, raises questions about research methodology and the identification of relevant systems and stakeholders. For example, there may be a need to include institutions and processes beyond the system that is initially being analysed. In the current context, this indicates a direction for further study that would include factors such as regional/hemispheric economic conditions, market forces and Bonaire's overall competitive position, not as variables that stakeholders can control directly, but as elements that condition any collaborative process.

A second type of variable relevant to the outcome on Bonaire was internal. As has been mentioned numerous times before, the collaborative process there functioned in ways consistent with Trist's (1983) 'networked' model, rather than his 'centred' one. It was decentralised. Its communications process was informal and it relied on *ad hoc* meetings in combination with overlapping and interlocking memberships rather than creating a set of institutionalised, deliberative procedures. Lacking a durable framework, it was unable to sufficiently motivate participants to continue and redirect the problem solving when tourism numbers stagnated and the tripartite policy convergence disintegrated. These difficulties were, no doubt, exacerbated by the earlier (1993–94) lack of consensus on problem-setting, a condition discussed in Gray's (1985) writings on collaboration.

In addition, the process suffered from the fact that there was a power differential between the two groups of stakeholders, as previously indicated above in our discussion of leadership during the problem-setting phase. Thus, when the period of uncertainty began in 1997 and members of the dominant Commercial Group withdrew their support, there was little that the others could do. Such an outcome offers support for Gray's (1985) proposition that collaboration is facilitated when power is more evenly dispersed among several stakeholders. Ultimately, the mode of organisation, the process and the power discrepancies made success much less likely, especially when joined by the problems of economic contraction which occurred after 1996. In conclusion, it may be said that together, the twin variables of unexpected economic change and a collaborative process that was too informal undermined Bonaire's effort at sustainability.

## Correspondence

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