

LINKING TOURISM, THE ENVIRONMENT, AND CONCEPTS OF SUSTAINABILITY: SETTING THE STAGE

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ABSTRACT

The tourism and recreation industry is at a crossroads in its development. Now one of the world's largest industries, it is increasingly confronted with arguments about its sustainability and compatibility with environmental protection and community development. Consideration of tourism, the environment, and concepts of sustainability should consider four key challenges: (1) a better understanding of how tourists value and use natural environments; (2) enhancement of the communities dependent on tourism as an industry; (3) identification of the social and environmental impact of tourism; and (4) implementation of systems to manage these impacts.

THE CHALLENGE

The tourism and recreation industry is confronted with serious and difficult choices about its future. The decisions made now will for decades affect the lifestyles and economic opportunity of residents in tourism destination areas. Many of these decisions are irreversible because once communities lose the character that makes them distinctive and attractive to nonresidents, they have lost their ability to vie for tourist-based income in an increasingly global and competitive marketplace.

One option is to continue the road of the past, focusing on delivering the service and retail sectors that have provided the bulk of economic benefit to local communities—lodging, transportation, food and retail sales—without considering the emerging concerns about the industry. This option is based on assumptions about stability in values and preferences of travelers, and it delays answers to vital questions about the tourism product, appropriate scale and type of development, sustainability, and hosts' quality of life. These assumptions are questionable in an era of rapid social change where the future is no longer a straight-line projection of the past.

Worldwide, tourism is undergoing fundamental change, from the experiences and settings travelers demand to the regulations governments impose to

protect the environment. Signs of these shifts are everywhere, from tourism industry statements on the value of the environment (Cook and others 1992) to the demand for "ecotourism." This transformation of demand and values leaves the industry no alternative other than to pursue a different, yet difficult, course—one that builds upon the key questions of purpose, objectives, values, and strategies.

Decisions about tourism development are difficult. The fundamental questions they imply—such as the visions we have for our communities, how changes brought about by development will impact these visions, and how the community can absorb such changes—have largely been ignored in the past. These decisions are controversial because they will prevent or diminish some traditional uses of natural resources and affect the people who have or who might have benefited from those uses. Powerful economic forces entrenched in the current direction are reluctant to open dialogue. The decisions are essentially judgments reflecting divergent value systems and how those value systems will be integrated.

Our clients, primarily the public, are communicating through changes in tastes and preferences and, consequently, they are demanding that the industry pursue sustainability and care of the environment. We need to systematically explore the linkage that exists, whether recognized or not, between tourism, the environment, and sustainability. To begin that exploration, I will briefly review the significance of sustainability and the environment and the questions that implies for tourism researchers.

CONCEPTS OF SUSTAINABILITY

As we humans become more aware of our impact on the Earth and its life support systems, we increasingly look for examples of economic and community development other than unconstrained growth. Some have argued that gross national product or per capita income are incomplete measures of well-being. These measures may not accurately portray the distribution of economic benefits among people, they do not faithfully capture important quality of life factors, and they do not measure the temporal or social distribution of existing and anticipated costs and benefits of resource development programs.

Many argue for the development of "sustainable" economies as the new guidepost to deal with issues of growth, economic and community development, and environmental protection. Sustainable growth and natural resource development will help communities use natural resources more prudently and sensitively than in the past and ensure their continued survival.

Sustainability contains the appeal of an attractive model for action but is difficult to implement practically or operationally. Sustainability is often associated with such terms as "sustainable development," "sustainable management," "sustainable agriculture," "sustainable forestry," and "sustainable tourism." In the tourism and recreation context, it is frequently associated with discussions of "ecotourism" and "nature-based tourism" (Boo 1990; Whelan 1991).

Sustainability has become an attractive ideal for both scientists and activists, but operational details, objectives, or actions provided by advocates are scarce. Dixon and Fallon (1989) conclude that the sustainability debate involves "how to pursue the goal and how to measure progress toward it." Sustainability, as Dixon and Fallon note, was originally a biophysical concept that is now being applied in a social and policy context, contributing to confusion about what is to be sustained and for whom. For example, by sustainability do we mean sustaining physical outputs, such as board feet of timber or room occupancy, or do we mean the ecological patterns and processes that maintain naturally occurring ecosystems? Or by sustainability are we concerned with the ongoing social, political, and cultural processes that give communities character and individuals security?

Gale and Cordray (1991) defined eight approaches to the concept of forest sustainability, then in 1994 expanded this to nine (table 1). Gale and Cordray portray the discussion about sustainability as answers to four defining questions: What is to be sustained? Why sustain it? How is sustainability measured? And what are the politics? One of their approaches emphasizes the economic sustainability of natural resource-dependent social systems. This is a narrow approach, however, and does not address other relationships communities have with natural resources that make them dependent on these resources, such as access to forests for recreational, educational, and spiritual purposes. A related approach, also defined by Gale and Cordray, is the sustainability of human benefits that flow from natural resources. Again, this approach is narrowly focused on specific product benefits.

Often, discussions of sustainability are presented within the context of stability, particularly about communities (defined in a territorial versus an interest sense). We generally want our communities to be stable and predictable and to provide a sense of belonging. Sustainability goes beyond economic considerations and biophysical issues; it must deal with important concepts of social order, such as hierarchy, territory, and norms (Burch and DeLuca 1984). We must understand how tourism development may impact the distribution of wealth or power, may affect land uses and zoning laws, and may interject new behaviors or institutions. We

must discuss the acceptability of tourism-based interventions in the normative social order: What do these changes mean for community stability? And we must consider factors affecting a community's capacity to deal with such interventions. In other words, how do the type and intensity of tourism-induced disturbances affect our social world?

Sustainability definitions also frequently speak to intra- and intergenerational equity and option maintenance. The tourism industry receives substantive criticism about the distribution of jobs and income (Barrett 1987; Smith 1989). While job quality encompasses more than wages and monetary benefits, inequities in income are a major concern that residents hold about tourism development (Martin and McCool 1992). Nearly 58 percent of the adult Montanans participating in the Martin and McCool (1992) study agreed that tourism industry jobs are low paying, and over 55 percent disagreed that their household standard of living was higher because of tourist expenditures. What is an equitable distribution of options and income?

Sustainable tourism allows visitors to enjoy an attraction, community or region with a volume and impact in such a way that the local culture and environment are unimpaired (Hill 1992). Strictly speaking, tourism and recreation use always lead to some level of impairment in natural systems. The question is primarily how much change is acceptable. Hunt (1993) argued that the tourism industry should care both for visitors and for the places they visit: "the communities in which we live." Clearly, researchers view sustainability as more than physical commodities from natural ecosystems.

Despite the extensive discussion about sustainability since the 1987 report from the World Commission on Environment and Development, which popularized the issue, few answers have been found. Entering sustainability-based management is essentially a value judgment, a decision that says that current management is inadequate or inappropriate. Sustainability is a concept decisionmakers can use to assess the consequences of actions on human communities. A human focus is deliberately taken here because it is the human population that places values on social structure, cultural values and traditions, economic opportunity, and ecosystems and their species. Maintenance of ecosystems and the protection of individual species are human-based values and, therefore, can be described from only a human viewpoint.

Human communities are impacted in a variety of ways by tourism, including social structure and function, cohesiveness, economic and educational opportunity, community stability, provision of and payment for

services (police protection, fire), physically (architecture, location and design of highways), competition in access to recreation opportunities and other services, and interaction with the natural environment and the noncommodity values it produces. The general concept is that sustainability is not only a goal for specific industries, but it is also an objective for the human communities that benefit and that are impacted from various economic development scenarios. Industry sustainability goals are most likely physical output or net revenue goals, such as board feet of timber, room-nights occupancy, and skier visits. These sustainability goals, however, may not achieve broader community sustainability goals, goals that may be difficult to quantify and measure.

Several other questions must be dealt with. At what spatial or social organizational scale do we want to measure sustainability—globally, regionally, locally? We also are concerned about the temporal scale of sustainability—tomorrow, next week, next year, and the next generation. We need to examine not only industry-specific sustainability, generally addressed by physical commodities, but also the impacts of distinctive economic development actions on the larger community.

Returning to Gale and Cordray's four defining questions, can we determine what should be sustained, for what reason, and how? Would our clients have similar answers to these defining questions about sustainability? What processes would we use to address these questions and resolve differences? These questions would certainly confront the tourism researcher. While discussions of sustainability may not result in on-the-ground applications, the discussions do force debate about scale (both temporal and spatial), fundamental purposes, and appropriate means. The result is that sustainability discussions require biologists and sociologists.

Tourism and the Environment

Cook and others (1992) state that "environment is the travel industry's base product." While many tourism promotion efforts banner the climate, sun, warmth, and sand of particular destinations, tourism's dependency on environments, in particular, nature-dominated environments, does not appear to be well understood within the tourism and recreation industry. That dependence is rarely discussed in the literature. Cook and others, for example, focus more on how the tourism industry is meeting legal obligations for environmental protection (such as emissions) than the dependency of tourism on high-quality natural environments.

The importance of the environment in attracting vacation travel is significant, and as Williams (1992)

studies, "natural beauty and cultural heritage represent a competitive advantage" for many areas. In a recent poll (Angus Reid Group 1993), 65 percent of California travelers stated that "a place that takes care of its environment" is very important in choosing a destination outside of the state. "A chance to see wildlife and undisturbed nature" was rated as very important by 44 percent of the respondents. While there is a question about the congruence of attitudes and behavior, such relatively high ratings of environmental attributes signal the increasingly important role of ecosystem amenities in tourism development. In their study of visitors to Montana during the fall, Menning and McCool (1993) report that potential visitors who hold both an environmental motivation and an image of a destination as "natural" were more likely to visit the area than were other respondents

The linkage between environment as an attraction and economic impact can be substantial. Yuan and Moisey (1992) estimated that about half of the economic impact from Montana's tourism industry can be attributed to recreation activities occurring in wildland settings. Obviously, impacting these settings negatively could significantly affect the jobs and employment of thousands of people.

Our examination of linkages should consider four key questions. First, we need to better understand how tourists value and use natural environments. We know that outdoor recreation activities (pursuits that are heavily dependent on natural environments) are important components of many states' tourism industries. For example, in Idaho, about 42 percent of the nonresident visitors participate in these activities. Among vacationers in Montana, scenery is the most important reason for visiting the state and is the most frequent source of visitor satisfaction. Research not only can help us better understand the motivations of visitors attracted to natural environments (Eagles 1992) but can also identify attributes important to visitors, how to maintain those attributes, and how visitors interact with them. Science can also play an important role in identifying the benefits visitors derive from interactions with the environment and how those perceived benefits can be measured. Through research we may find specific linkages between benefits sought, recreation behavior, and money expenditures.

Second, research can help tourism development agencies use this information to enhance the livability of communities that are dependent on this industry. All too often, we have viewed tourism agencies as concerned with promotion, but not concerned with the fundamental rationale for their marketing efforts. I submit that the reasons we are interested in tourism are to provide communities with the necessary resources to

enhance their livability, to protect their natural and cultural heritage, and to provide economic opportunity for their citizens. Tourism agencies narrowly view their mission as one of promotion and have neither considered the effects of promotion nor placed their efforts within a larger context of community development. Understanding alternative theories of economic development—in this case sustainability—may help put promotion within a context that helps communities identify their goals and the role of tourism in achieving them.

Third, researchers play an important role in identifying the social and environmental impact of tourism. Rigorous discussions of impacts on the environment as well as useful conceptual models of impact processes are sadly lacking in the tourism literature. While a body of literature has been developed to deal with impacts at the micro scale (see Cole 1987 for an example), few tourism researchers have concerned themselves with identifying impacts on the natural environment. Because the environment is the product, we need to understand how people may negatively affect the very values they seek.

Fourth, we need systems to manage both the environmental and social impacts to tourism. This concern has been popularized in the phrase "tourism destroys tourism," although a paraphrase could be applied to many resource extractive industries and, therefore, the concern is not a differentiating characteristic of this industry. In marketing terminology, we need more knowledge of product quality management. Any amount of tourism use results in some impact. So the questions that most tourism communities and environmental managers are confronted with deal with acceptability and manageability of tourism impacts. While some (for example Getz 1983) advocate a carrying-capacity approach, such approaches may be too simplistic for the complexity and range of issues presented by tourism development. Williams and Gill (1991) conclude:

Despite the rhetoric concerning tourism use 'limits,' 'ceilings,' 'thresholds,' difficulties with traditional numerical carrying capacity indicators exist. As for recreation, little evidence exists to suggest that by simply lowering or raising a specific carrying capacity standard, predictable changes in an area's ability to handle tourist use will occur. Instead, the key appears to lie in how change associated with tourism is managed.

An adequate framework would (1) recognize that the interface between tourism and the environment involves primarily social questions as opposed to biotechnical ones, (2) avoid the excessively reductionistic and limited perspective provided by a carrying-capacity-

based approach, and (3) include the wide range of stakeholders affected by tourism development choices in the planning and management processes (McCool and Stankey 1993). One such framework was proposed by Williams and Gill (1991) in their monograph on growth management. The limits of acceptable change process (McCool 1994; Stankey and others 1985) is another.

CONCLUSIONS

Sustainability and the linkages to both social and natural environments that the concept implies provide new challenges for tourism researchers. Our research must now be more holistic, more encompassing, and more sensitive to the needs for relevant policy.

The science of tourism can play an important role in discovering implications for the choices facing the industry. If not pointing the way, it can inform the industry of the consequences of alternative paths to economic development, resource protection, and enhancement of our quality of life. It can illuminate both the costs and benefits of alternative economic development scenarios and provide challenges to the conventional wisdom of tourism development.

We must begin to think in terms of appropriate frameworks of tourist-environment-community interactions, how these can be modeled, how hypotheses can be tested, and how results can be implemented. We need to define the role of the researcher in tourism and community development issues. How the industry and the research community respond to value changes will have much to say about the industry's continued viability .

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