MANAGING RISKS AND CRISIS FOR SUSTAINABLE TOURISM: COASTAL ENVIRONMENTAL CONCERNS

H. GÖKÇEKÜŞ*, U. TÜRKER, T. RIZZA*, Ö. OLGAC TÜRKER**

1 Near East University, Department of Civil Engineering, Nicosia, Northern Cyprus
2 Eastern Mediterranean University, Department of Interior Architecture, Gazimağusa, Northern Cyprus

ABSTRACT

This exploratory paper will examine how, from the environmental point of view, improvements in tourism can affect coastal regions of the Northern part of Cyprus. It is especially important to consider how development in tourism should be handled by political forces so that it minimizes the environmental concern. Unfortunately, the impact of political instability in politically troubled countries does give way to unhealthy tourism operations thus causing environmental concerns. It is argued that development of tourism lacks sensitivity for the sustainability of the environment. The outline for sustainability in a coastal environment is discussed with the situation of the island in mind. The stakeholders on the island, although generally satisfied with local, cultural and natural qualities, address themselves to various sustainability issues. The issues to be discussed here cover natural resources and cultural heritage. The question of water management in a hotel or tourist resort is the main issue for places where water shortage is a problem. According to the international standards water consumption in tourist places like in hotels is high. Lower consumption of water protects the resources and also saves money. The consumed water as a wastewater pollutes the coastal regions especially where precautions taken by local authorities are insufficient. Although the input is the initial problem in the water balance system the output is another in addition to being a big problem for the survival of the coastal environment.

Sustainability management is urgently needed to fulfill two tasks: a) creating awareness of issues and possible solutions and b) assisting policy makers in directing sustainable resources development and managing the waste in such a manner that it can be reusable.

INTRODUCTION

Environmental protection became a major issue in the 1990s after the introduction of the concept of sustainable development by the Brundtland Commission (World Commission on Environment and Development) in Our Common Future (1987). This report was seen as an expression of the increasing environmental awareness towards the latter part of the 1980s. Tourism as an economic activity has an inevitable effect on the environment of the destination. The environment is often regarded as the major pull factor of tourist movements, contributing to the desirability and attractiveness of a tourist destination. As the environment is an indispensable asset to the tourism industry, the protection and conservation of environmental resources that include natural, cultural and historic resources, are prime considerations for the tourism industry, upon which it depends as primary inputs in the production of the tourist output. (Lim and McAleer, 2003)

Over the last two years, tourism has proved to be the fastest growing economic sector in North Cyprus. Therefore, tourism should be seen as a major industry and a boost to the economy following the education industry due to the universities available around the
island. Generally, since 1974 there has been no apparent growth in tourism because of various political instabilities. However, after the Annan Plan (2004) (peace plan to reunite the island of Cyprus), the situation has changed and foreign investors started to explore the possibilities of investing in the northern part of the island.

This was followed by the rapid development process at the northern part Cyprus parallel to the global change process changes in socio-cultural, economical and political issues. The result is the struggling for the survival of a rich system of environment, beliefs and values.

At the same time the intensive and growing use of natural coastal resources has had a negative effect on the quality of the waters, the availability of water resources, the stability of the beaches, the marine and coastal ecology, the landscapes and the atmosphere, very frequently meaning that these zones are found in an at risk condition. This intensive use can lead to a devaluation of the natural capital of these zones and the resulting negative social and economic effects.

On the other hand, it is realized that the increase in the rate of people coming from abroad for both migration and temporary accommodation does not reflect the rate of increase on construction and developing issues in the northern part of Cyprus (Figure 1). Under these circumstances, the sustainable tourism developments can be achieved under the consideration of sustainable tourism investments. Such a solution without a doubt will minimize the possibilities of risks and crises for environmental concerns. It is evident that such sustainable tourism honors Cyprus culture and history, protects our unique natural environment, engages the local community, supports the economy, and pleases our visitors.

![Figure 1. The decrease in amount of tourist between years 2005 and 2006.](image)

**VISION FOR SUSTAINABLE TOURISM FOR COASTAL ZONE**

The question of sustainability is particularly appropriate in the context of coastal tourism, which is an activity that deals with the coastal ecosystems including sand dunes, coastal vegetation, coastal aquifers, land cover, and marine and estuarine waters.

It is thus clear that sustainability for environmental concerns and tourism cannot be seen in isolation, hence, a focus on the interactions between tourism and nature needs to be defined. The focus on environmental sustainability means a path of tourism development that lasts so that it does not put a risk of the coastal ecosystems of interest.
At the same time the tourism activities have their ability to provide humans with the goods and services that are required for their continued well-being over time (Costanza, D'Arge, de Groot, et al. 1992; Jacobs 1997; Munasinghe and Shearer 1995). However, it is essential to believe that a focus on 'sustainability' ensures a concern with examining not only the pros of but also “what is going wrong, has gone wrong, and can go wrong” as a result of selected development paths (Noronha et al, 2002). Such a focus reminds us to monitor and evaluate these impacts of development policy that will sustain economy, environment, culture, social harmony and planning not necessarily in hundreds of years in the future, but in the next few decades. The economic improvements will provide good jobs, economic vitality, and diversity; provide opportunities for all sectors of the community; and retain as much of the benefit as possible within our own economy.

Figure 2. Places to be offered as sustainable tourism investment areas

Environmental satisfaction will operate in harmony with our ecosystems, enhancing natural beauty and protecting the islands’ natural resources. Cultural satisfaction will be part of a larger effort to enable the customs and traditions of our culture, especially our mystic host culture. Social harmony will reinforce Cyprus’ heritage of tolerance, diversity, respect, and peace among our various ethnic and social groups, and among residents and visitors. Planned sustainable tourism will protect both the communities’ sense of place for current and future generations.

The risk and the crises that cannot be managed due to any misleading activities results with the failure in environmental sustainability. This will finally end the survivability of tourism along the island. Potential results of any failure can be; construction without planning; the environment under the attack of urbanization; increase in scarcity of fresh water resources; no infrastructure studies; flooding due to watershed damages; groundwater pollution due to infiltration; coastal erosion and destruction; urbanization increasing pressure on ecosystem; construction of hotels putting additional pressure on already stressed coastal areas; water stress increasing and expected to continue as a result of increasing tourism, irrigation and climate change (Figure 3). If these problems are not solved;

- Groundwater will take decades to clean up.
- Coastal ecosystems will undergo large-scale changes resulting from human activities.
- Increased sedimentation/nutrients from deforestation and agricultural practices.
- Destruction of wetlands and habitats.
- Coastal erosion and destruction.

are the main problems to be faced in near future.

![a) construction without infrastructure](image1)

![b) unplanned urbanization](image2)

![c) coastal damages](image3)

![d) watershed damages](image4)

Figure 3. Potential results of failure in environmental sustainability

Satisfaction with Sustainable Tourism

The term “sustainable tourism” can mean different things to different people, often according to the perspective of the individual stakeholder. The private tourism industry views it largely in economic and marketing terms: How can the tourism market be sustained and grow in the long term? The local community may see it in terms of socioeconomic benefits and cultural preservation: How can tourism help sustain a community and its culture rather than degrade them? An environmenta nongovernmental organization (NGO) would present more of an ecological perspective: How can tourism help to sustain natural systems?

Until recently, the World Tourism Organization defined “sustainable tourism” as follows: Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems. (World Tourism Organization 1998). Satisfaction in sustainable tourism which is made possible by special interest tourism developments therefore requires also satisfaction of the local stakeholders, communities and tourists. The economic point of view requires economic satisfaction.
DEMANDS OF SUSTAINABLE TOURISM

In islands and coastal areas, the main types of pollution in coastal waters resulting from tourism include sediment run off, sewage, solid waste, high nutrient loads, synthetic organic chemicals, oil, and pathogens. These result in eutrophication, and the deterioration of water quality, which have adverse effects on coastal ecosystems and their living resources, and so impair their value for tourism as well as other uses. The demand of sustainable tourism is thus asking for energy and water management and conservation, and management of sewage and solid waste that is a by product of sustainable tourism. The list is directly related with sustainability on environment and the natural resources which can be protected by

- Environmental Improvement
- Environmental Rehabilitation
- Urban Development Program
- Environmental Sanitation
- Tourism Development Program
- Sustainable Development of the island

*Environmental Improvement*

The rate of increase in visiting per capita will increase the demand for water and natural resources. The necessity of environmental quality improvement through the financing of urban drainage works, collection and treatment of solid and liquid waste systems and small scale potable water projects will be required, specially at local coastal regions. The only fresh water resources of the island, groundwater, is being polluted, hence the improvement in wastewater treatment plants is a must for reuse for irrigation or groundwater recharges. Solid waste treatment at the coastal regions is another sector that needs institutional reform.

*Environmental Rehabilitation*

Urbanization is already accumulated all around the flooding areas without any precautions and legal approvals. All the communities distributed along the river beds and flood areas should be evacuated. This is important for the recovery of the degraded environments. Environmental and cultural educational initiatives will help the implementation of rehabilitation projects. The involvement of the private sector should be sponsored by the institutional strengthening of policymaking units and improvement for loan servicing. The rehabilitation of natural resources can be achieved by optimization and expansion of sewage and potable water systems especially at the lower coastal areas. This can be achieved by the modeling and monitoring of the hydrologic environment.

*Urban Development Program*

The creation of parks in environmental conservation areas, the identification and promotion of sustainable natural resource development and conservation opportunities, the reordering of urban areas, paving works are the main programs that must be activated in order to survive the environmental and tourism sustainability. The governmental acts play an important role in the programming and implementation.
Environmental Sanitation

Sewerage can be identified as one of the main impacts that the tourism industry has on the environment. The sea is a repository for liquid waste including waste generated from tourism activity. The tourism industry generates significant amounts of largely untreated liquid waste from the activities of hotel or restaurant kitchens, raw sewage, the presence of increasing quantities of oil and other waste from recreational vehicles (including cruise ships) along with herbicides, pesticides, and fertilizers. The increased percentage of concreted areas, roads and other impervious surfaces normally associated with hotel and resort development aids in the level of rainwater runoff to coastal areas. Therefore, construction of collection sewage systems, collector, interceptors, and waste water treatment plants should be considered. Dredging and constructing channels for the rivers and removing the settlements from river basins and construction of sea outfall control systems should be handled under these circumstances.

Tourism Development Program

While, the environmental impacts and potential impacts of tourism are fairly well documented but not well scientifically examined, the positive developments that should be carried out for the healthy tourism development program should also be mentioned. Little priority seems to have been placed on the regular tourism policy that is followed throughout the years. It is certain that positive impacts of new developments will encourage the contribution of heritage tourism to the conservation of natural areas and biodiversity. The consolidation and strengthening of the North East part of Cyprus as a tourist destination is a wonderful opportunity for the creation of an alternative special interest tourism to attract additional tourists. Financing sustainable tourism projects involving private sector resources and participation of local communities for the recovery of historical and cultural sites will be promoting factors for marketing and training.

CONCLUSIONS

After the UN Solution Plan (Annan Plan), the net increase for the investment of tourist places in northern part of Cyprus is increasing enormously. However, the available data analysis shows that the tourist capacity is decreasing. Much progress is needed and we believe that it is possible to achieve valuable management in a cost-effective manner. A sustainability management is urgently needed to fulfill two tasks:

a) Creating awareness about issues and possible solutions and
b) Assisting policy makers in directing sustainable resources development and managing the waste in such manner that it can be reusable.

Knowledge is a powerful source to in assisting governments, organizations and communities to plan for prevention, mitigation, and recovery from environmental problems. Destinations need knowledge and education.
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