

Impact of Tourism on the Environment of a Destination

EVA ŠIMKOVÁ, JOSEF KASAL
Department of Social Pathology and Sociology
Faculty of Education
University of Hradec Králové
Hradec Králové, Rokitanského 62
CZECH REPUBLIC
eva.simkova@uhk.cz, josef.kasal@uhk.cz

Abstract: - Tourism is an important part of national economy. On the other hand it can also be a source of some negative externalities. These are mainly environmental externalities, resulting in increased pollution, aesthetic or architectural damages. High concentration of visitors may also lead to increased crime, or aggressiveness. These may have negative effects on quality of life of residents and negative experience of visitors. The paper deals with the influence of tourism on destination environment. It highlights the necessity of sustainable forms of tourism and activities to prevent negative implication of tourism, such as education activities and tourism monitoring.

Key-words: - Tourism, Mass Tourism, Development, Sustainability, Tourism Impact, Monitoring.

1 Introduction

It is widely recognized that tourism is an important factor that significantly contributes to the development of national economy. It can be also stated that tourism is directly linked with the cultural, economic and intellectual potential of a country. On the other hand it may also be affected by negative effects. As an example, it can be natural disasters, wars, or current financial and economic crisis. These negative effects, together with unregulated or underestimated development, tourism can become a source of negative externalities.

These may be environmental externalities, such as pollution of the environment, or cultural damages. Increased concentration of visitors may lead to increased crime, or aggressiveness. Along with increased social tension, grow also risks of social deviations, which have negative impact on the environment of a destination, negative effect on economic and social climate of local people (residents). These may also have negative effects on experience of visitors (safety-related externalities).

2 Problem Formulation

2.1 Objective and Methods

The paper deals with the influence of tourism on destination environment. The aim of this paper is to describe risk factors that relate to tourism

development in a destination, and highlight the importance of focus on responsible forms of tourism, including prevention of negative implication of tourism, such as education activities and especially tourism monitoring.

The paper summarizes author's own experience gained in foreign countries (analysis of information from different tourism-related sources, especially those having sociological aspects). The paper also builds on research results on tourism from the sociologic aspects, such as social impacts of tourism on the host community, and accompanying problems.

Additionally, the paper presents findings of a survey done on general public interest in safe environment within tourism, which was performed in 2011 in three mountain resorts of the Czech Republic. The target group of respondents was 104 mayors of municipalities. The survey was done by direct questioning. First couple of questions related to the safety of tourism environment and its relation to negative features of pathological character. Remaining questions were focused on the quality of stay, and safety level in the tourism destinations under scrutiny. Survey results are presented in chapter 3.

2.2 Theoretical Framework of Impact of Tourism

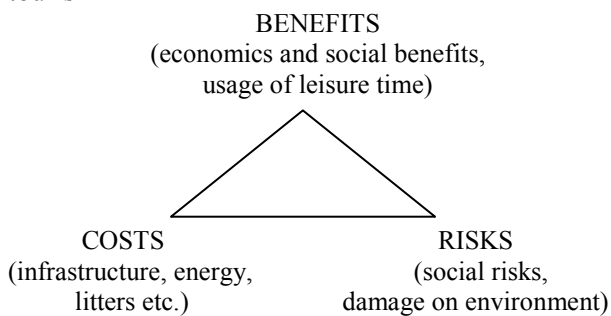
2.2.1 Importance and Consequences of Tourism

Tourism can be beneficial to almost any region. Tourism activity has impact on tourism

development, roads and other infrastructure. It is also an important socio-economic factor for the development of regions with limited development potential [1].

It can be also said that tourism is one of those human activities that significantly contribute to changes on environment [13]. Such changes are not only physical (construction of new buildings for accommodation, gastronomic, cultural and sport on the site), but also those with social, psychological and cultural features [27]. This relates to the use and prevention of natural and cultural potential of the area. The above may not be surprising. Cultural heritage and natural resources as most valued tributes to tourism are available to all of us. The main problem, however, is that any damage made on these is often irreversible. Yet, we can continue. It has been found that damages can be made also in social area [5]. That is the reason why tourism activities must be approached much broadly with respect on costs and risks that tourism activities carry (see Figure 1).

Fig.1: Relations between benefits, costs and risks of tourism



Resource: [24]

The figure shows that tourism is on one side a source of benefits, which proportionally correspond to input costs. However, as in any other activity it is also tourism that carries along some negative externalities and risks, such as environmental damages and social risks.

2.2.2 Social and Environmental Impact in Tourism

Despite of general understanding of tourism as being greatly beneficial, in case of its massive expansion, along with uncoordinated and ineffective management, negative effect may easily outbalance positive effects of tourism. Destinations are usually negatively affected by tourism activities when number of visitors exceeds a certain carrying level. That results in the loss of ability to accumulate excessive use, leading to degradation, devastation, or even collapse [e.g. 3, 7].

According to Shaw and Williams, mass concentration of tourists in areas with excess of natural and anthropogenic carrying capacity limits, may have extreme impacts not only on tourists, but also on local people. Mass tourism, according to the both authors, represents a very important industry, which very sophistically operate with human contacts and experience. It is also a driving force of globalization, by eliminating specific features or uniqueness of an area or product. [22]

Everyday reality is, however, different as subjects involved in tourism, such as businesses, tourism agencies, agents, administration, non-profit organizations, tend to perceive tourism as an economic-geographic activity. Very often they overlook social issues – the fact that tourism activities somehow reflect tourist's personality, attitude, values and life style. They also tend to forget that tourism is about meeting people, which of course may bring some conflicts between tourists themselves, as well as between tourists and local people [23, 27].

These conflicts may evolve from undesired behavior or activities of visitors, resulting in negative effects such as trail (soil) erosion, noise and water pollution, littering, decreased diversity of flora and fauna, and aesthetic degradation. Other undesired impacts relate to socio-cultural changes of an area. Exposure to different human cultures and religions may bring conflicts to a destination, change life style and values as well as authenticity, bring changes in value systems/behavior, threatening indigenous identity. Ignoring ethical norms may potentially result in a loss of traditions, indigenous lifestyle, and social stress of local people [e.g. 6, 12]. From the economic perspective, one negative effect may be that an area and local community becomes economically dependent purely on tourism [19].

2.2.3 Psychology of Tourism

As mentioned above, tourism shall not be seen merely from the economic (getting maximum revenues from maximum) and organizational (destination management issues), but also from psychological and social perspectives [9, 27]. Tourism-based business should be based on understanding of visitor's needs, or assumption that he/she seeks relax and wellness, wants to be away of everyday stress, others seek new activities and experiences, out of his/her daily routine. Tourism psychology looks at various aspects of why people travel and the psychological motivators that leads them. The following questions shall be asked:

How to define tourism? Who is a tourist? What kind of driver is it that makes a tourist to travel? What are his/her needs in respect of his age or personal status? How does the decision making process of tourists look like?

Note: Decision making factors are: goals for travelling; decision whether to go, or stay home; selection of destination; go on your own or take an organized trip through an operator etc.

As Villamira [27] also stated, from the psychological view, decision making can be viewed simply as „herd behavior” (to visit destinations that are at that time preferred by majority of people), or from sheer curiosity (tour-visits), adrenalin seeking and dream holidays (to escape everyday reality).

There is yet another activity that must be mentioned here – marketing. It has found its place in tourism as well. However, marketing cannot be efficient enough without understanding of drivers and motivation of tourists. It cannot be successful also in tackling negative impacts of tourism on the environment. Yet, the knowledge of applied psychology shall be used in tourism, and as such can help to define and start programs promoting responsible forms of tourism, e.g. sustainable relations of residents and visitors.

Note: Tourism psychology deals not only with tourists, but also with local population. The questions are how to make contact with tourists, what hospitality is, and which techniques there are in preventing or solving conflicts between individuals.

Contribution of tourism psychology can also be in preventing or predicting negative impacts of tourism on nature or social environment, as described in documents such as Tourism Bill of Rights and Tourist Code (1985), Agenda 21 (14 July 1992), Lanzarote Charters (27-28 April 1995), Manila Declaration on the Social Impact of Tourism (May 1997) etc. In the Czech Republic these are mainly documents of CzechTourism [4] and MRD [15]. It is therefore no doubt that understanding tourism psychology can contribute to attractiveness of tourism to wide spectrum of people and to application of social tourism [16].

3 Discussion about Problem Solution

3.1 Potential Social Conflicts and Destination

As described above, tourism is about meeting people from various places, cities, nations, cultures. Quite naturally, such meetings may, besides having positive effects such as exchange of experience, knowledge, attitudes, bring also conflicts between individual tourists or tourists with local people. These conflicts usually initiate between people with

different attitude, habits, religion, or simply different morale, mood. In some cases such conflicts may even end up in situations which eliminate any positives of tourism. [27]

This is also the result of a research performed by author in 2011 in three independent tourist destinations in the Czech Republic. The target group of respondents was 104 municipality mayors. It has been found out that most of the respondents (68%) experienced some negative effect of tourism in their destination. These negative effects related primarily to winter tourism (39%), during visits of cultural event (27%), cycle tourism (20%), and ecotourism in protected areas (14%). The most frequent types of pathologic features were crime (theft, assault etc.) (32%), alcohol abuse (alcohol abuse harassing neighborhood) (25%), ecological vandalism (23%) and cultural vandalism (damage on cultural heritage) (8%).

In our findings, most of the respondents (56 %) agreed that undesired phenomena have negative impact on quality of lifestyle in the region. Issues specifically mentioned were mainly these: outbalanced overall atmosphere and perception of well-spent holidays, bad mood, disgust or even displeasure, subsequently also awareness, environmental quality (waste). Further on, most of the respondents (67 %) stated that they felt safe in a destination. However, reasons that had affected their own feeling of safety were: thefts, worries about themselves and their family, fear of diseases (e.g. from wasted needles), fear of aggression from drunken tourists or residents, fear of potential problems with delinquent people, fear of psychical or physical harm etc. [25]

Now, let have a look at when tourists can be dangerous to a destination and what negative impacts there may be. Tourists become simply a dangerous factor for the environment when they come in large numbers - number of tourists exceeds some critical amount (this is called carrying capacity), tourism in a locality develops too fast and the development is not coordinated (in case of a lack of destination management). These facts, together with antisocial behavior of some tourists can cause frustration and irritation of local people. Interaction of these factors may have negative effects on overall atmosphere or mood that in fact determinates the relation tourist v. resident (tourism irritation index).

It is also timing and structure of tourism activities, which may very easily cause stress, and as such initiate antisocial behavior. Similarly, in case of organized (mass) activities, negative feelings may be initiated by frequent needs on individuals to adapt to others, such as in cases of different physical

or psychological status, handicapped or orderly people. As for impacts of antisocial behavior of tourists on destination, these can be the following: ignorance of local rules and habits, waste of natural resources, littering, abnormal noise, superiority over others, crime, vandalism in respect to cultural heritage, archeology sites, prostitution, collecting of rocks, fossils, animals and flowers etc. [27]

From the above it is apparent that negative effects associate to psychological, social, cultural, economic, urban changes, and may be of material or immaterial form. As a result, local spirit, often called *genius loci* can vanish or disappear completely.

Note: The term "genius loci", is often translated as "spirit of place" - it is often understood as specific atmosphere of an area or a place.

3.2 Elimination of Negative Impacts of Tourism

According to Kraus and Hroncová, negative social events with pathology character as well as socially deviant behavior can be found in every community. They can be eliminated by:

1. Applying of strict banning and punishing.
2. Preventing negative features.
3. Scope of the responsible forms of tourism.

Elimination of negative features and negative impacts of tourism activities is a very complex issue. The most effective seems to be prevention through discussion sessions, seminars, courses and other educational activities. [11]

Quality of decision making in area development that helps to prevent negative features is dependent on existence and level of **monitoring** and **evaluation** used. Both processes should form a sort of a compact system. The role of monitoring is in systematic gathering and analyzing of information about the development in the region, while during evaluation there is actual situation compared with that in the plan. [14]

And what should be the subject of monitoring and evaluation? Since environment protection is among the core priorities of strategic development, and quality of environment is highly valued in tourism, environment protection is inevitable. That is why specific requirements arise during planning of events, but, as well, during continuous monitoring and evaluation of local conditions (information management, creation of indicators, organization of monitoring – physical inspections, measuring methods, etc.) from the point of view of the environmental quality. [17]

It is therefore desirable to have in mind **sustainability** (to have processes under control and

know development limits), and **responsibility** (to know activities and events, and their consequences), when destination development is planned. There must be a general assumption that only responsible and sustainable tourism is able to contribute with its strategy and tools to the protection of cultural and natural heritage of tourism destination and to ameliorate living standard of local community.

Current practice shows that strict focus on “standard” or “mass” tourism can lead to excessive vulnerability of economic and social development in a given region [3]. Therefore, the concept of sustainable development includes also sustainable tourism (sometimes called “soft”, “responsible”, or “alternative” tourism). Pásková and Zelenka define sustainable tourism as “tourism activities when organizers as well as users manage and respect own responsibility towards nature, cultural heritage and local community” [20, p. 201].

Some existing definitions of sustainable tourism are, however, too general. Sustainability principles are based on environmental, economic and social aspects of tourism development while keeping adequate balance between these three areas. Having in mind all three pillars, main tasks of sustainable tourism are:

- Economic – reaching stable economic development and better quality of life in a region;
- Social – local people cooperate on and coordinate future development of the area;
- Ecological – responsible use of natural and cultural resources, environment protection.

From the above presented characteristics of sustainable tourism it is apparent that reaching sustainable tourism requires also process called education. Both, a host as well as visitor, must be pro-active in economic, social and ecological issues without losing their own identity. At the same time, however, they must be driven by internally educational transformation about protection of nature and of social issues. Responsible tourism has therefore extraordinary position that it can be economically as well as socially beneficial to local community, while protecting the environment. Sustainability is, however, task for all subjects involved. [26]

As an example of sustainable tourism in the Czech Republic, we can mention „Heritage Trails“. The “Trails” are an international marketing tourist product, facilitating the promotion and development of tourism and Czech cultural heritage in selected regions. They are a network of selected locations, significant due to their natural, cultural and technical riches, folklore elements, and the quality

of service and tourism facilities. Along with the Heritage Trails as the most well-known cultural product, some further tourist products develop in the Czech Republic, such as wine trails [more at <http://www.stezky.cz/uvod.aspx>], beer trails [more at <http://pivni.info/>], or horse trails [more at <http://www.konske-stezky.cz/>], which also influence (directly or indirectly) the regional cultural identity and contribute to the location's development.

3.3 Monitoring of Tourism Activities (examples in the Czech Republic)

As stated in chapter 3.2, one of the main objectives of destination management of given region is monitoring of tourism development in respect to sustainability. That is why one of the protective activities is searching for carrying capacity limits of the destination potential development, which means finding the sustainable measure of activation of tourism region potential. [18]

Monitoring of tourism development (sustainability) shall be done by local governing bodies. Monitoring in tourism actually means “periodical gathering and evaluation (in respect to prediction) of selected indicators in space and time, such as gathering data on the environment, health of human population, and migration” [20, p. 182].

As for the use of monitoring in tourism, very often it is monitoring of visitors (and transport intensity). Monitoring also includes qualitative research of visitors through direct questioning. In protected areas, monitoring of tourism impact on the environment is performed (especially monitoring of visitor impact on trails and paths, monitoring of tourism impact on animals), but sometimes also monitoring of economic benefits of visitor for the region. Socio-economic monitoring should then assess overall satisfaction of visitor with services and attractions being offered. [2]

Tourism-related monitoring in the Czech Republic is very often based on statistics. It is monitoring of supply and demand in tourism performed by many organizations, such as Czech Statistical Office, CzechTourism, Czech National Bank, MagConsulting, ministries (especially Ministry of Regional Development, Ministry of Agriculture, Ministry of Trade and Industry), non-profit organizations (Association of Rural Tourism, ECEAT) etc.

The use of statistics, enquiries of regional subjects of tourism, while knowledge and experience of tourism staff is a significant leading aspect of tourism management for the product and program preparation and for the improvement of services in the region. [4]

Monitoring is necessary also in creation of program or strategy of regional development. According to the authors, the process of monitoring should be a part of all program documents and should contain also a proposal of indicator system, which would help with the monitoring. If monitoring is missing in one of the parts of a strategy or program for regional development, it is possible to consider it as incomplete. [8]

Monitoring of visit rate and its impact on the environment, is therefore a logical part of the spectrum of activities of competent bodies. Thereby, the number of visitors is beside recreational use of destination and state of natural and social environment one of the necessary indicators when observing.

The long-lasting monitoring of visit rate is held for ex. in the Bohemian Switzerland National Park. Counter machines that record number of passers periodically in one-hour intervals, are used there for monitoring. Thanks to the software used, the data are evaluated and the process of visit rate available in daily-intervals. Given results then play important role in planning nature protection measures, planning maintenance priorities of tourism trails and selection of locations for tourism infrastructure. The administration of national park thus gains a complex picture of tourists' activities in the protected area. [10]

Other research activities are focused on consumer's behavior in contemporary marketing era and its influence on sustainable tourism. Pospíšil, for example, defines influence of new knowledge from behavioral economics to the sustainable tourism [21].

4 Conclusion

The paper shows tourism as currently one of the most important socio-economic and cultural phenomena. On one hand tourism positively forms both cultural identity as well as social bonds of local people, and has positive effect on local economy (mainly in economically secondary areas). On the other hand, however, it may cause some qualitative and social fall of an area. This may lead to degradation in biological, socio-cultural and economic diversity. Competent authorities must seek ways of sustainable tourism development, so that negative effects are eliminated and promoted the positive ones.

Tourism attractive areas in the Czech Republic are exposed to intensive investment pressures. It is

therefore difficult to secure “optimal space” for sustainable tourism development. One of the important processes in the elimination of tourism negative impacts is monitoring and evaluation. These activities are important during planning of activities for tourism development, in task definition and prevention of negative features. Monitoring and evaluation is therefore necessary to include into a decision making process. All these activities are much cheaper and painful than removal of negative impacts and subsequent revitalization.

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