Abstract:

In recent years, there is an increase in social and environmental awareness. As a result of this, tourists prefer tourism types which do not affect cultural and natural resources negatively. Thus, sustainable tourism and ecotourism activities in protected areas such as National Park and Natural Park have gained importance. Within this period, tourists and local community in these areas are most important stakeholders. There is no consensus about evaluation of sustainability, but overall approach is that sustainability can be defined with criteria and indicators. In this study it is aimed to evaluate possible criteria and indicators for sustainable ecotourism in protected areas within the context of Turkish forestry.

Key terms: Sustainable ecotourism management, criteria and indicators, Turkish forestry, protected areas

Introduction:

Tourism is an important sub-sector for national and regional development and tourism has close relationship with environment and natural resources. Protecting and enhancing economic development and environmental values as a result of tourism activities is the main purpose of “sustainable tourism”. Sustainable tourism is possible with interaction of people and environment. Basic principle of sustainable tourism is protecting of natural and rural areas against negative effects of tourism and providing tourists to join touristic activities in nature without environmental problems.

Sustainability of tourism depends on conservation and improvement of cultural heritage areas. Nowadays, tourism sector has become more environmentally conscious. Therefore, tourism sector provides service to tourists sensitive to the environment. Thus, a trend toward new tourism types such as alternative tourism, ecotourism, nature tourism, environmentally conscious tourism is increasing.

Ecotourism is used to mean forms of tourism which have the following characteristics (URL 1):

- All nature-based forms of tourism in which the main motivation of the tourists is the observation and appreciation of nature as well as the traditional cultures prevailing in natural areas.
- It contains educational and interpretation features.
- It is generally, but not exclusively organized by specialized tour operators for small groups. Service provider partners at the destinations tend to be small locally owned businesses.
- It minimizes negative impacts upon the natural and socio-cultural environment.
- It supports the maintenance of natural areas which are used as ecotourism attractions by:
  - generating economic benefits for host communities, organizations and authorities managing natural areas with conservation purposes,
  - providing alternative employment and income opportunities for local communities,
  - increasing awareness towards the conservation of natural and cultural assets, both among locals and tourists.

As being one of these tourism types, ecotourism has becomes more popular in recent years. Ecotourism is as a part of sustainable development strategy by providing sustainable usage of natural and cultural resources and placing environment to forefront. Generally, ecotourism and protected areas interact with each other. So it
is difficult to distinguish their effects on local people. Thanks to ecotourism, sustainable management of natural resources and sustainability of cultural integrity, ecological processes and biodiversity can be secured. As opposed to damages of mass tourism on environment and society, ecotourism is seen as an important instrument in providing sustainable development. Sometimes ecotourism is used as synonymous with sustainable tourism, but it is just a type of sustainable tourism (Avcıkurt 2003).

With the intent of ecotourism, people have started to construct tourism infrastructures in rural areas. As a result, wrong constructs and usage have damaged nature. As ecotourism was just seen as economic profit, natural and cultural resources were damaged. Thus it becomes necessary to make benefit-cost analysis of ecotourism and determine most suitable methods in application.

Sustainable management of resources and areas which are directly or indirectly affected by ecotourism activities is also essential. In Turkey forestry is no longer considered as just timber production activities. Now it is resource management process including multiple benefits. In this way the scope of sustainable forest management is broaden and ecological and socio-cultural aspects become more important. For this reason, monitoring, evaluation and assessment become necessary and sustainability criteria and indicators are developed.

Determination of sustainability of all activities related to forest resources, including ecotourism, is crucial but also difficult. As forest resource management includes complex and interacting processes, it is more difficult to develop sustainability criteria and indicators for forestry (Durusoy 2009). In order to prevent deforestation and increase forestry sector’s contribution to sustainable development, determination of sustainability criteria and indicators can be an effective way. In this context, developing ecotourism criteria and indicators will be beneficial, as ecotourism is a part of sustainable tourism.

Protected Areas and Sustainable Ecotourism:

International Union for the Conservation of Nature (IUCN) has developed the protected area management categories system to define, record, and classify the wide variety of specific aims and concerns when categorizing protected areas and their objectives. There are six protected area management categories (URL 2):

- Strict Nature Reserve/ Wilderness Area
- National Park
- Natural Monument or Feature
- Habitat/Species Management Area
- Protected Landscape/Seascape
- Protected Area with sustainable use of natural resources

Demand for tourism in such protected areas is increasing. Tourism in protected areas is originated from three main components: protected area, tourists and tourism organizations, and local communities (Strickland-Munro et al. 2010).

Local communities are key stakeholders. For an efficient protection and providing sustainability, all the resource values of the area should be known and promoted. In this way, sustainability is a way of maintaining social, economic and cultural aspects together (İzgi 2007).

There are not any generally valid criteria about sustainable tourism in an area. This is also valid for ecotourism activities. Although there are not defined criteria and indicators for sustainable ecotourism, there are three aspects (economic, social and environmental) which should be taken into consideration (Butler 2000). These aspects match up with aspects of sustainable forestry.

Criteria that can be used in sustainable tourism plans can be listed as below (Somuncu and Yiğit 2009):

- Providing sustainable area management
- Maximizing social and economic benefits for local community, minimizing negative effects
- Maximizing benefits for society, visitors and cultural heritage, minimizing negative effects
Sustainable Ecotourism Management in Protected Areas

- Maximizing environmental benefits, minimizing negative effects.

It is possible to say that these four criteria is closely related with social, economic and environmental aspects of sustainability.

Possible Criteria and Indicators of Sustainability of Ecotourism Activities in Protected Areas in Turkey:

Turkey is located in three biogeographical regions: Anatolian, Mediterranean, the Black Sea region, and their transition zones. Thanks to its location, Turkey’s biological diversity can be compared to that of a small continent: the country’s territory consists of forests, mountains, steppe, wetlands, coastal and marine ecosystems and different forms and combinations of these systems. As a result of this extraordinary ecosystem and habitat diversity, there is considerable species diversity in Turkey. Turkish fauna biodiversity is quite high compared with the biodiversity of other countries in the temperate zone. The total number of invertebrate species in Turkey is about 19,000, of which about 4,000 species/subspecies are endemic. The total number of vertebrate species identified to date is nearly 1,500. Of the vertebrates, over 100 species are endemic, including 70 species of fish (URL 3).

As Turkey is very rich in biodiversity and natural resources and as Turkey plays a crucial role in protection of all these sources, there are many protected area status. Number of protected areas is shown in Table 1 (Yalınkılıç 2010). In Turkey ratio of protected areas to national area was 2.96 % in 1990 (DPT and BM 2010) and this ratio increased to 7.24 % (5,647,568 ha) in 2012.

### Table 1. Number of protected areas in Turkey

<table>
<thead>
<tr>
<th>Conservation Status</th>
<th>Number</th>
<th>Related Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Park</td>
<td>41</td>
<td>Law on National Parks</td>
</tr>
<tr>
<td>Nature Reserve Area</td>
<td>31</td>
<td>Law on National Parks</td>
</tr>
<tr>
<td>Natural monument</td>
<td>105</td>
<td>Law on National Parks</td>
</tr>
<tr>
<td>Nature parks</td>
<td>36</td>
<td>Law on National Parks</td>
</tr>
<tr>
<td>Wild life reserve areas</td>
<td>88</td>
<td>Law on Terrestrial Hunting</td>
</tr>
<tr>
<td>Conservation forest</td>
<td>56</td>
<td>Law on Forest</td>
</tr>
<tr>
<td>Genetic conservation areas</td>
<td>188</td>
<td>Law on Forest</td>
</tr>
<tr>
<td>Seed stands</td>
<td>337</td>
<td>Law on Forest</td>
</tr>
<tr>
<td>Specially protected areas</td>
<td>14</td>
<td>Law on Environment</td>
</tr>
<tr>
<td>Nature sites</td>
<td>947</td>
<td>Law on Conservation of Cultural and Natural Heritage</td>
</tr>
<tr>
<td>Ramsar sites</td>
<td>13</td>
<td>Ramsar Convention</td>
</tr>
</tbody>
</table>

There are several ecotourism activities in these protected areas such as Camili Biosphere Reserve Area, Sultan Sazlığı National Park, Köprülü Canyon National Park, İğneada Longoz Forest National Park and Kürê Mountains National Park (in the context of Protected Area Network). Properties of four criteria of sustainable tourism are (Gebhard et al. 2008; Somuncu and Yiğit 2009):

- **Social welfare**: development of sustainable tourism supports economic, social and cultural development of local communities
- **Protection of natural and cultural environment**: while sustainable tourism allows usage of natural and cultural resources, it also guarantees conservation of these resources
- **Product quality and satisfaction of tourists**: product quality is key factor for economic success of tourism. This quality is necessary for both tangible criteria (transportation, accommodation and catering) and intangible criteria (hospitality of local people and tourist experience )
- **Management and monitoring**: to realize these three criteria, it is essential to set up management and monitoring systems. Without these systems, practice of sustainable tourism is impossible.

If criteria and indicators of sustainable tourism is taken into consideration, it is easier to define ecotourism criteria and indicators by considering environmental, social and economic aspects of ecotourism. Owing to
ecotourism, income and employment of local communities in protected areas will increase. As local people understand the importance of ecotourism for economic and social development, their sense of protection will progress (Swarbrooke 1999).

Table 2. Sub Criteria and indicators of sustainable tourism management

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Sub-criteria</th>
<th>Indicators</th>
<th>Sub-criteria for ecotourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social welfare</td>
<td>• Income</td>
<td>• Income type</td>
<td>• Income</td>
</tr>
<tr>
<td></td>
<td>• Employment</td>
<td>• Number of small and medium sized enterprises</td>
<td>• Employment</td>
</tr>
<tr>
<td></td>
<td>• Enhancement of local economy</td>
<td>• Number of participants of planning</td>
<td>• Enhancement of local economy</td>
</tr>
<tr>
<td></td>
<td>• Participation</td>
<td>• Attitude toward tourists</td>
<td>• Participation</td>
</tr>
<tr>
<td></td>
<td>• Tourism satisfaction</td>
<td></td>
<td>• Ecotourism satisfaction</td>
</tr>
<tr>
<td>Protection of natural and cultural environment</td>
<td>• Sustainable usage of natural and cultural resources</td>
<td>• Number of enterprises having proper resource management</td>
<td>• Sustainable usage of natural and cultural resources</td>
</tr>
<tr>
<td></td>
<td>• Conservation of cultural heritage</td>
<td>• Types of protected areas in the region</td>
<td>• Conservation of cultural heritage</td>
</tr>
<tr>
<td></td>
<td>• Increase in environmental awareness</td>
<td>• Types and attempts intending local people participation to protection activities</td>
<td>• Increase in environmental awareness</td>
</tr>
<tr>
<td>Product quality and satisfaction of tourists</td>
<td>• Sustainable communication with tourists</td>
<td>• Evaluation of education and informing</td>
<td>• Sustainable communication with ecotourists</td>
</tr>
<tr>
<td></td>
<td>• Services and experience</td>
<td>• Evaluation of hospitality</td>
<td>• Services and experience</td>
</tr>
<tr>
<td>Management and monitoring</td>
<td>• Planning and management</td>
<td>• Monitoring and management plans</td>
<td>• Planning and management</td>
</tr>
<tr>
<td></td>
<td>• Bearing capacity</td>
<td>• Visitor record system</td>
<td>• Bearing capacity</td>
</tr>
</tbody>
</table>

References


DPT and BM, 2010, Binyıl Kalkınma Hedefleri Raporu-Türkiye 2010. 69 s.


Gebhard, K., M. Meyer and S. Roth. 2008. Criteria For Sustainable Tourism For The Three Biosphere Reserves: Aggtelek, Babia Gora And Sumava. Ecological Tourism In Europe, Bonn, Germany


545 | International Caucasian Forestry Symposium