The Integration of the Dadia Eco-Tourism Area in SOUFLI Dadia Settlement: Suggestions

By Pınar Kısa Ovalı*
Gildis Tachir‡

The tourism sector, which provides employment opportunities for the local population and which has significance in the economic development of the region, has entered into a rapid change process with the concept of “sustainability.” The sector, which gives importance to the evaluation of the physical and socio-cultural environment within protection-usage balance, tends towards “eco-tourism,” looking out for the future generations by protecting ecological balances, highlighting the social value-identity, increasing the regional income, and suggesting the sustainability of local development. Suggestions are developed for the integration of the “Dadia Eco-Tourism Area” in the Dadia Forests in the city of Soufli in Greece in the Dadia settlement. Following the literature review regarding eco-tourism, environmental analyses of the Dadia settlement and Dadia eco-tourism area have been given a place. The physical potentials of the areas have been determined as a result of analyses, including on-site observation, interviews with users, photographing and mapping works. Within the scope of these potentials, suggestions regarding the economic and social integration have been developed, such as the inclusion of the settlement within the parkour routes, assessment of unused building stock, and increasing the sportive-cultural action variety.

Keywords: Eco-tourism, Dadia, Integrated Tourism Potentials

Introduction

The dimensions of tourism are increasing day by day and have important positions in state economies, parallel to the rapid economic, political and technological developments and changes in the world. All kinds of development activities conducted in the tourism sector give an action to the economy and form a reviving impact. According to the World Tourism Organization (WTO), International tourist arrivals are forecast to reach 1.8 billion by 2030 according to the newly released UNWTO long-term forecast, Tourism Towards 2030 (UNWTO, 2011). As the number of tourists increases, the activity types they select during their trips also vary. In addition to the continuation and growth of the traditional tourism (mass tourism), new tourism types reveal the sustainability approaches of the New Age (Hawkins and Lamoureux, 2001).

The concept of Eco-Tourism has become popular by coming to the fore with discussions of sustainability and an increase in the importance of tourism-environment relations in the Brundtland report titled “Our Common Future.”

---

* Assistant Professor, Trakya University, Faculty of Architecture, Department of Architecture, Turkey.
‡ Instructor, Trakya University, Faculty of Architecture, Department of Architecture, Turkey.

https://doi.org/10.30958/ajt.4.3.3
doi=10.30958/ajt.4.3.3
and it has started to be used frequently (WCED, 1987). Eco-tourism, which developed in the 1990s as an alternative and reaction to mass tourism (Butler, 1990; Wheeller, 1991; Zell, 1992; Pleumarom, 1993; Wheeller, 1994; Glasson et al., 1995, Kısa Ovalı, 2007), includes elements of rural and cultural tourism. It is also expressed as the most convenient tourism type that could be developed in delicate natural and cultural areas. Eco-tourism is seen as an important tool in the provision of sustainable development against the damages of mass tourism on the environment and society (Fennell, 1999; Kısa Ovalı, 2007). Eco-tourism is used in the same meaning as sustainable tourism, and it is one of sustainable tourism’s primary methods. Eco-tourism protects the environment, gives importance to the wealth of the local people, and is sensitive towards natural areas (Honey, 1999). Thanks to sustainable tourism policies, eco-tourism has a chance of existence and improvability. Now the togetherness of ecology and economy is considered as a whole, and the conducted activities should improve both economic and ecological productivity together (Fennell, 1999).

Eco-tourism is defined as “a complex phenomenon containing the integration of many actors including the tourists, residing people, suppliers, managers and multiple functions” (Ceballos-Lascuráin, 1993). Furthermore, these actors or shareholders are in a symbiotic relationship uniting under the eco-tourism idea as a tool for economic development and protection of natural resources (Backman et al., 2001).

If eco-tourism industry is to become more developed and sustainable for future generations, it is necessary to establish the connections between settlements and eco-tourism implementations (Backman et al., 2001). This necessity has been determined as the main problem of the study. The fact that Greece could not integrate with the “Dadia Eco-Tourism” area in the neighborhood (500m south) of the “Dadia settlement” in Soufli, and also the fact that both systems cannot support each other in the desired level, is problematic in terms of the sustainability of the eco-tourism industry.

**Literature Review**

Eco-tourism is a rapidly developing tourism type within the tourism industry. Especially changes in the structure of the international demand, increases in educational, and increases in interest and consciousness towards environmental issues encourage demand for eco-tourism trips. Despite the fact that the concept of eco-tourism is new, the activities taking place within the scope of this tourism type have been conducted for a long time. Eco-tourism is important in terms of taking these activities under a discipline via the principles it brings. The declaration of the year 2002 as “International Eco-Tourism Year” by the United Nations was an indicator of the rising importance of eco-tourism (Demir and Çevirgen, 2006). When the reasons for eco-tourism are examined, we see that negative environmental impacts are dominant. The environmental problems experienced within specific years and their integration with tourism are mentioned in Table 1.
Table 1. Environmental Problems and the Reasons for the Occurrence of Eco-tourism

<table>
<thead>
<tr>
<th>Periods</th>
<th>Environmental Problems</th>
<th>Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950s</td>
<td>Benefit and use</td>
<td>Mass tourism beginning in exploration and interest period</td>
</tr>
<tr>
<td>1960s</td>
<td>Consciousness, the interest and protests of public</td>
<td>Development, growth and environment components as attraction</td>
</tr>
<tr>
<td>1970s</td>
<td>Institutionalization, the establishment of the department of environmental protection in the USA, visible pollution and anxiety such as air and water pollution</td>
<td>Marketing in the growth and success period. Studies of academicians in the issue of the enviromental impacts</td>
</tr>
<tr>
<td>1980s</td>
<td>Anxiety regarding the toxine materials in environment, the problem of heating and the tearing of the ozone layer of the world</td>
<td>Widening world market and technological growth</td>
</tr>
<tr>
<td>1990s</td>
<td>Destruction of forests, climate changes, desertation, global warming</td>
<td>Occurrence of eco-tourism and sustainable development</td>
</tr>
<tr>
<td>2000s</td>
<td>Destruction of nature and water resources, climatic problems increasing.</td>
<td>Sustainable tourism plannings and ecological approaches.</td>
</tr>
</tbody>
</table>


The first official definition of eco-tourism was made by Lascurain in 1987. Lascurain defines eco-tourism as “travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas.” While the definitions of Ceballos-Lascuráin (1987) and Boo (1990) tend to emphasize the nature-based experiences sought by the tourist, current definitions tend to emphasize various principles related to the concept of sustainable development. Wight (1993) draws attention to the nature-based education aspect of sustainable eco-tourism. Although this approach has not been clearly stated in the previous discussions, the concept has clearly turned into a normative pattern in the last decade. The eco-tourism definitions within the development process and the relation of the definitions with the basic concepts are given in Table 2.
### Table 2. Selected Definitions of Ecotourism

<table>
<thead>
<tr>
<th>Source</th>
<th>Definition</th>
<th>Main Related Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceballos-Lascurain, 1987</td>
<td>Travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery</td>
<td>Nature-based</td>
</tr>
<tr>
<td>Fennel and Eagles, 1990</td>
<td>Local people, resource management and tour operators are the necessary components of an eco-tourism development model.</td>
<td>Relation between protection and service</td>
</tr>
<tr>
<td>The Ecotourism Society, 1991</td>
<td>Responsible travel to natural areas which conserves the environment and improves the well-being of local people</td>
<td>Giving importance to the benefit of the local people</td>
</tr>
<tr>
<td>Ecotourism Association of Australia, 1992</td>
<td>Ecologically sustainable tourism that fosters environmental and cultural understanding, appreciation and conservation</td>
<td>Ecologic sustainability</td>
</tr>
<tr>
<td>National Ecotourism Strategy of Australia, 1994</td>
<td>“natural environment” includes cultural components and that “ecologically sustainable” involves an appropriate return to the local community</td>
<td>Related to sustainability and ecology</td>
</tr>
<tr>
<td>Norris, 1994</td>
<td>This kind of tourism is not tourism as long as the provision of local economic benefits and the protection of resources are not carried out together.</td>
<td>Related to protection and local economy</td>
</tr>
<tr>
<td>Weaver, 1999</td>
<td>Eco-tourism has a sustainable character due to being nature-based and supporting natural and cultural resources.</td>
<td>Being sustainable</td>
</tr>
<tr>
<td>Sinclair, 2005</td>
<td>What attracts the tourists in ecotourism is to know the factors such as plant, animal, extraordinary properties, history and culture; and it is very important to reveal their potentials.</td>
<td>Determination of the potentials</td>
</tr>
<tr>
<td>Campbell, 2007</td>
<td>Travel to enjoy the world’s amazing diversity of natural life and human culture without causing damage to either</td>
<td>Planning of ecologic sustainability by protecting the environmental values</td>
</tr>
</tbody>
</table>

Source: adapted from Blamey, 2001 and Kisa Ovali & Tachir, 2015
Although there are different definitions for eco-tourism in the literature, analysis of the basic definitions shows that eco-tourism can be represented under three main concepts:

- Nature-basedness (action variety and protection)
- Environmentally-educated tourists (awareness)
- Sustainable planning (sustainable development)

Eco-tourists, or the actual customers of eco-tourism, consist of people who love travelling to natural areas and cultural environments and who want to understand and learn local cultures. The reasons and aims of ecotourists are integration in natural and rural life, social interaction, knowing, recognition, exploration, education, scientific curiosity, information, search for risk, self-discovery, self-realization, knowing the value of nature in theoretical meaning in eco-tourism, watching the nature, using without any disturbance, integration with nature, enjoying nature in a way, causing to the least negative impacts on the environment, active cohesion with local people and providing economic benefits for the local society (Erdoğan, 2003; Kişı Ovalı, 2007).

Sustainable planning is nature-based and includes also environmental education. It is necessary to evaluate the ecologic and economic decisions together for an environmentally compatible life with sustainable development. Within this scope, the protection of natural areas as tourism areas for the future, but those protected from the negative environmental impacts of tourism could be realized with decent eco-tourism plannings (Özbey, 2002). Eco-tourism is an area that is mostly dependent on efficient planning and policy development. For this reason, eco-tourism planning covers many actions, participants, information areas, decision-making processes, and implementation levels (Branch, 1985). According to Gunn (1994), the comments of operations, local people and government should be combined, and they should be taken into consideration as a whole with eco-tourism planning, in which the campus and tourism area integrate with an interactive approach.

Methodology

In this study, which utilizes both qualitative and quantitative research methods, suggestions are developed for the integration of “Dadia Eco-Tourism Area” taking place in the natural protected area of Dadia Forests near the city of Soufli. Within this scope, following the literature review regarding the eco-tourism, environmental analyses of Dadia settlement and Dadia eco-tourism area have been given a place. The physical potentials of the areas have been determined as a result of specific analyses, including on-site observations, interviews with users, photographing and mapping works. Suggestions regarding economic and social integration have been developed, such as the inclusion of the urban settlement within the parkour routes, the assessment of unused building stock (hostel, rent a room etc.), and an increase of the sportive-cultural
action variety (festivals and activities etc). In this context, the created with process of integration model will provide two fields to work together.

Dadia Forests: General Specifications

The Dadia Forests are in the province of Evros in the eastern Macedonian and Thracean region of north east Greece. This is an ecological area in which natural eco-system cycles are seen. It has been protected as a national park with the cooperation of INCN/WWF since 1980. The total protected area of Dadia Forests is 42,460 h. and a 7,290 h. core region of the forests is defined as an “Absolute Nature Reserve/Wild Area,” in which all usages are forbidden (IUCN, 1994- www.gnto.gr, 2016), (Figure 1-2).

Figure 1. The Location of Dadia Forests in Greece

Source: www.greecemap.com, 2016 , Dadia ecologic tourism museum archive, 2017

Figure 2. Dadia Forests

Source: www.dadiamap.com developed Tachir, 2016

Dadia Forests exists in the intersection of Asia and Europe and near the eastern migration route of many bird species. The forests provide shelter for many bird species belonging to Asian and European flora and fauna. It is one of some rarely found shelters in which 36 out of 38 raptors in Europe are seen.
Some of these raptors pass from Dadia Forests during migration, and some of them spend the winter in the forest. There are almost 20 types of nests in the forests. This area also provides shelter for 3 out of 4 European Vultures (Black Vulture, Scavenger Vulture and Griffon). Black vultures are the last colonies of their species, and they reside in Dadia Forests. The reason why the fourth species, Lammergeyer, visits these forests is that it can easily find food (carrion) for itself in the forest (Svoronou and Holden, 2005).

The forest area has been shaped with Maritza and rough land structure. The ecological importance of the region is not limited to raptors. In terms of flora variety, the forest is covered with maquis bush, as well as piney wood and mature forests. The forest area is covered with Turkish Pine (Pinus brutia) (Quercus spp.) mixed with Pinus nigra and oak. Greek Strawberry trees (Arbutus adrachne), Sclerophyllous bushes, Phillyrea (Phillyrea latifolia), Treeheath (Erica arborea) and Cistus creticus can be found in the south west region of the forest. The forest also contains little rivers, small areas, grasses and rocks (mostra). It has been observed that 219 bird species, 40 different types of reptiles and frogs, and 48 mammal species exist in the forest with the unique eco-system cycle (Skartsi and Poirazidis, 2002).

About 360-400 plant species have been recorded in the protected region until today. “Minuartia greuteriana” and “Onosma” kittanae, which are flower types, are seen in the area as two endemic species. In addition, “Cephalanthera epipactoides,” “Salix xanthicolakai,” and “Zygophyllum album,” which are three rare flower types, also are in this forest area. Furthermore, 25 orchid species, especially a very rare species called “Eriolobus trilobatus,” are observed in this area. 29 types of plant species in wild apple tree types are under protection (http://dadia-mp.gr, 2017).

The following areas in Dadia Forests host these unique natural formations:

1. Dadia Settlement (Urban Area)
2. Dadia Eco-Tourism Center

**Figure 3. Locations of Settlement Units**

Source: www.google.earth.com, 2017
Field Study: Dadia Settlement (Urban Area)

The Dadia Settlement sits at a 282m altitude and is 14km to the city of Soufli. It is a natural settlement area with genuine character. It is takes its name from Dadia Forests with unique natural beauties. This urban settlement, taking place right at the beginning of Dadia forests, is the most popular eco-tourism destination in Greece (Hovardas and Stamou 2006).

When the natural geomorphologic land properties of the area are examined, we find volcanic rocks and neogene formation rocks rich in minerals in the region. The northern part of the area, consisting of two main geological zones, contains chalcogen volcanic and sedimentary rocks, which experienced intense erosion. The southern part of the area contains rock outcrops and complex land formations (Figure 4).

**Figure 4. Geo-morphologic Properties of Dadia**

Source: www.atlasvisual.com/dadia-greece-thrace, 2017

The land is characterized by various hydrographic networks with small and big rivers, as well as little and big valleys, and plain and steep slopes. The highest hill of the National Park is Kapsalo hill at 620m (Figure 5). The topographic structure and locations of the settlement between the settlement and Natural Park can be seen in Figure 5.

**Figure 5. Land Properties**

Source: Catsodorakis -developed Tachir, 2017

The Dadia Settlement is a village with 200 houses and a population of 533, according to the census in 2011. Local people primarily retired and old
individuals deal with farming, bee culture, animal breeding, and forestry for additional income. Much of the young population emigrates, because the area does not have business opportunities (interview local people, 2017). When the built environment analyses of the settlement are examined, we see that there is dispersed settlement, depending on the rural area character. The settlement area is limited to the forest and agricultural lands. The transportation network has an organic character. The roads consist of double lanes (7m wide), and there is no pedestrian road. The urban framework of the area is positioned in the center of the settlement. The housing settlement has been planed in a dispersed and discrete order, depending on the center. Generally, the houses whose construction is reinforced concrete have one or two stories (Table 2a-2b).

Table 2a. Built Environment Analyses of Dadia Settlement

<table>
<thead>
<tr>
<th>Analyses</th>
<th>Deductions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SETTLEMENT LAYOUT</strong></td>
<td>• A settlement with an orientation towards the centrum accepted as the center</td>
</tr>
<tr>
<td></td>
<td>• All the structures are in discrete order as an urban area</td>
</tr>
<tr>
<td><strong>TRANSPORTATION ANALYSIS</strong></td>
<td>• Transportation network of the settlement has an organic character</td>
</tr>
<tr>
<td></td>
<td>• Roads consist of double lane (7m) transportation networks</td>
</tr>
<tr>
<td></td>
<td>• There is no pedestrian road</td>
</tr>
<tr>
<td><strong>REGISTERED BUILDINGS</strong></td>
<td>• Square Church</td>
</tr>
<tr>
<td></td>
<td>• Municipality</td>
</tr>
<tr>
<td></td>
<td>• Primary School Building</td>
</tr>
<tr>
<td></td>
<td>• Chapel</td>
</tr>
</tbody>
</table>

Source: Tachir, 2016
Table 2b. Built Environment Analyses of Dadia Settlement

<table>
<thead>
<tr>
<th>Analysis Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| Function Analysis | - Mostly house buildings are existent  
|                | - There are unused buildings that could be assessed in the area            |
| Story Analysis   | - Single-story is dominant in the settlement  
|                | - There is no high building in the area                                    |
| Structure Analysis | - Reinforced concrete is used as the structure system  
|                | - Unused buildings are existent as stone and wooden construction system   |
| Full-Empty Analysis | - Settlement with a dispersed character  
|                | - Urban area is limited to the forest and agriculture lands               |

Source: Tachir, 2016

Dadia Eco-Tourism Center

An office of the World Wildlife Protection Foundation (WWF) was established in 1980 for the purpose of protecting and developing this area. The foundation, in an effort to provide sustainability and economic wealth to the
Dadia region, decided to construct the “Dadia Eco-Tourism Center” to be the focal point of the area for visitors. The center was completed in 1988. The Dadia Eco-Tourism Center (DNP: Dadia Natural Park) was planned in a way that it includes an information building, accommodation unit, birdwatching area, and pedestrian parkour routes (Figure 3).

Tourism in Dadia area has firstly been assessed within the scope of few visitors within the frame of the theories regarding nature protection. At the beginning of the 1990s, the main visitor infrastructure was established, and the area started to develop as an eco-tourism destination. While the number of visitors coming to Dadia was 10243 in 1995, this number increased to 50,592 in 2003. There was an increase of 394% in the eight-year period (Svoronou and Holden, 2005). Within a general process evaluation, it is seen that there has been a regular increase in the number of tourists from 1995 until the 2000s. However, a partial decrease was seen in the number of tourists in 2001, and after that, the rising curve sustained until 2003. Following this, another decrease was experienced. We also see that the highest number of tourists came to Dadia in 2003 (approximately 50,000) as an impact of the declaration of the year 2002 as an eco-tourism year by the UN. In the following years, the number of tourists decreased, though the number remained stable after the final decrease in 2006. The attained data are limited to the year 2008, with the number of tourists visiting the area a little above 40,000 (Table 3).

**Table 3. Number of Tourists according to years**

![Graph showing number of tourists from 1995 to 2008](image)

Source: Liarikos, 2010

When the distribution of the number of the tourists (with an acceptance of 40,000 tourists on average) to the months in 2008 and the densities are considered; it is observed that the eco-tourism area has been parallel to the movement in world tourism and it has experienced its most intensive period in August. Although May has also become intensive after that; the lowest number of visitors are seen in January and February. The numbers include domestic and foreign tourist information and the information of how many of them are
domestic tourists and how many of them are excursionists could not be reached (Table 4).

**Table 4. The Number of Visitors coming to the Area according to the Months in 2008**

<table>
<thead>
<tr>
<th>Month</th>
<th>% of total visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>1</td>
</tr>
<tr>
<td>Feb</td>
<td>1</td>
</tr>
<tr>
<td>Mar</td>
<td>3</td>
</tr>
<tr>
<td>Apr</td>
<td>6</td>
</tr>
<tr>
<td>May</td>
<td>9</td>
</tr>
<tr>
<td>Jun</td>
<td>12</td>
</tr>
<tr>
<td>Jul</td>
<td>15</td>
</tr>
<tr>
<td>Aug</td>
<td>18</td>
</tr>
<tr>
<td>Sep</td>
<td>10</td>
</tr>
<tr>
<td>Oct</td>
<td>8</td>
</tr>
<tr>
<td>Nov</td>
<td>4</td>
</tr>
<tr>
<td>Dec</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Liarikos, 2010

The Eco-Tourism Information center is in the entrance of the area. The building is a two-story, reinforced, concrete structure with a gallery showcasing a museum, publicity cinevision hall, and souvenir sale hall (Figure 6).

**Figure 6. Dadia Eco-Tourism Center**

Source: Original, Tachir, 2017

Eco-Tourism Hotel completed and coming into service in 1990 takes place near the ecologic information center. The hotel is a single-story reinforced concrete structure with a cafeteria and 20 rooms with an accommodation capacity of maximum 40 people (Figure 7).

Although there are domestic excursionist visitors in the eco-tourism area (their number is not known), mostly there are foreign tourists in the hotel. The hotel serves with complete fullness the daily maximum of 40 people, especially in April, May, June, July and August. The number of tourists residing in the hotel in other months of the year is scarcely any (Georgitsi, 2017). These data
show that the Eco-Tourism Hotel is intensively used in five months of the year, and thus the accommodation system should be supported within these months.

**Figure 7. Dadia Eco-Tourism Hotel**

Source: Original, Tachir, 2017

The Birdwatching is established in 1994 within the scope of eco-tourism activities is a single-story wooden structure with a lean-to roof which is 3.5 km away from the Information Center. Trips are arranged with minibuses, which have a capacity of 14 people and move once every 20 minutes from the center each day of the week. On average, 13 tours are made to the area in a day and a maximum of 182 (13 people x14 tour) people visit the area. Information regarding whether the carrying capacity of the area has been taken into consideration in the organization of the tour numbers could not be accessed. It is possible to observe the vultures among the raptors from the birdwatching observatory. First, information is given to the tourists about the vultures and then binoculars are given to them to conduct observation (Figure 8).

**Figure 8. Birdwatching Place**

Source: Original, Tachir, 2017

Pedestrian Parkour Lines have been arranged as four different natural walking lines whose difficulties and lengths are different and which have been organized within the scope of nature walking and nature observation as eco-tourism activities (Figure 9, Table 3).
Figure 9. Four Different Walking Parkour Lines

![Four Different Walking Parkour Lines](source)

Source: [www.dadia-np.gr, 2016](source)

Table 3. Parkour Routes

<table>
<thead>
<tr>
<th>Parkour Names</th>
<th>Parkour routes</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="source" alt="Parkour 1" /></td>
<td>This is a parkour that includes paths with little hardship and slight slopes. It starts from the Information Center and finishes at the birdwatching observatory. The parkour is 3.5 km and its completion takes almost 60 minutes. People can walk in the old carriage road passing inside the forest and the unique vegetation, traces of great and little mammals, blackstork flying above the rocks, brachydactylic eagle, sparrowhawk, hawk and other birds could be seen in this parkour.</td>
</tr>
<tr>
<td><img src="source" alt="Parkour 2" /></td>
<td>This parkour turns back from the birdwatching observatory to the information center. The parkour has a light slope of 2.5 km and it takes 45 minutes. The old carriage path going down the lira river from the fields in the parkour is followed. In this path, the wild flowers growing in the forest could be seen. Also; the little birds, Finch, Canker and Woodpecker voices around the area could be heard.</td>
</tr>
<tr>
<td><img src="source" alt="Parkour 3" /></td>
<td>The parkour starting from the Information Center finishes at the hill of Gibrena mountain taking place in 520 m. It is a parkour ascending upwards. This parkour taking 150 minutes is 4.7 km. Black glass and acorn trees could be seen in this parkour. Colorful flowers in the open grasses before reaching Gibrena hill, Byzantine ruins on the hill and panoramic view of Dadia front could be watched.</td>
</tr>
<tr>
<td><img src="source" alt="Parkour 4" /></td>
<td>It is the road back from Gibrene mountain, it takes approximately 90 minutes and it is 4.5 km. The parkour passes inside the forest during the walk and Oak, Hornbeam, Kumara, Matey, Shrub and many other bushes and wild flowers could be seen. The cultivation areas are reached by following Diavlorem river.</td>
</tr>
</tbody>
</table>

Source: [www.dadia-np.gr, 2016](source)

Findings

In areas of eco-tourism the comments of operations, local people, and the government should be combined so that plans can be made so that the settlements
and tourism areas can support. These should integrate with each other within the scope of an interactive approach. Although the Dadia Eco-Tourism Area takes place in a 500m walking distance to the settlement, it has not integrated with the campus. The following problems have been detected as a result of the individual interviews, observations and analyses within the field study: The settlement is used only as a transition (transportation line), tourists cannot be attracted to the settlement, the cafeteria cannot provide alternative food variety, the local people cannot get economic benefits, entrepreneurship is low because of the age profile of the local people, emigration of young people is high due to unemployment and accommodation capacity is insufficient for the high season.

At this point, the main problem is that the settlement and the eco-tourism area do not support each other in economic and social terms. Three options for integration could solve this problem:

1. **The inclusion of urban settlement in the parkour routes (increasing the socio-cultural interaction, attracting the tourists to the settlement)**
2. **Assessment of the unused building stock (prevention of additional structuring in terms of accommodation support)**
3. **Increasing the sportive-cultural action variety (using the urban potentials, economic income)**

1. **Urban settlement should be included in the parkour routes.** The walking routes on the yellow, orange, red and blue paths are inside the forest area. The tourist profile of eco-tourism desires the dialogue with local people, so that social interaction can be enhanced via the stations (the existent restaurants, cafes or stores in the settlement) that can be formed with the transition of parkour routes inside the settlement. This demand can only be realized by attracting the tourists in the social environment. In addition, the economic contribution of the tourists to the local people is important in terms of the development of the place with local dynamics. It can also prevent undesired migration.

2. **Unused buildings should be evaluated.** 40,000 tourists came in 2008. It could be presumed within the scope of this value that 3333 tourists come to the area on average per month (40,000/12=3.333) and 111 tourists come to the area on average per day (3.333/30=111) (Table 4). The hotel accommodation capacity will meet the demand for the low season (winter months) within the scope of the information that the tourists visiting the area in this season are generally domestic and excursionist tourists. However; it is also foreseen that the demand formed by the foreign tourists in the intensive season (summer months) will not be able to be met by the supply. The current accommodation supply deficit could be met with the lodging (room renting) in a way that will develop the local economy. In addition, the eco-tourism center could be supported with the evaluation of the unused building stock detected in the built environment analyses. Furthermore, the intensive season will need the support of gastronomy, as well as accommodation,
and meeting this demand with alternative food operations (local supply) in the settlement is important in terms of integration.

3. **Action variety of the sportive-cultural rituals should be increased.** There are religious eids and festivals (Dadia Church Day, Monastery Day, Youth Festival and Mushroom Festival) peculiar to the urban area. Moreover, the cultural action variety expected by the eco-tourist could be increased, while ensuring the inclusion of the old population forming the general profile within active urban life by arranging special religious celebration days and festivals.

**Results**

Support is necessary under four main areas within the scope of eco-tourism planning. These areas offer a holistic viewpoint in the general assessment, regarding the integration of eco-tourism and the settlement.

**Table 3. Process of Integration Model**

**Conclusions**

For the two systems to support each other in a socially and economically desirable way, integration should be provided in the following four headings. These are first, accommodation support: The unused building stocks in the settlement should be considered within the scope of small-scale accommodation. Second, gastronomy support: Service of the operations in the settlement should be provided as an alternative to the hotel cafeteria. Third,
Planning support: Parkour routes in the eco-tourism area should pass inside the settlement. Fourth, service support: Cultural-sportive potentials of the settlement should be determined and on-site festivals and activities should be arranged. The introduction of them could also be made via WWF as well as municipality.

The organization of the aforementioned supports within the frame of a healthy program will ensure the integration of economical and social aspects of the Dadia Eco-Tourism Area with the Dadia Settlement.

Acknowledgments

This manuscripts was prepared from the unpublished doctoral thesis, that is titled “A Method for Integration in Coastal Cities for Ecological Tourism in Context of Tourism Potential: Sample of Alexandroupolis” Gildis Tachir to Trakya University Institute of Science conducted by Assist. Prof. PhD.Pınar Kisa Ovalı. This manuscript is original.

References


Kısa Ovalı et al.: The Integration of the Dadia Eco-Tourism... 


IUCN (1994) Guidelines for Protected Area Management Categories. Gland: IUCN.


Pleumarom A (1993) What’s Wrong with Mass Tourism. Contours: concern for tourism; the quarterly newsletter of the Ecumenical Coalition on Third World Tourism. 6: 15–21. ISSN: 0857-491X


Tachir G (2016), A Method for Integration in Coastal Cities for Ecological Tourism in Context of Tourism Potential: Sample of Alexandroupolis, unpublished doctoral thesis study, fourth six month study report, Department of Architecture, Trakya University Institute of Science, Edirne/Turkey


234


http://dadia-np.gr/?page_id=3134, date of access: 09.03.2017

**Figure References**

Figure 1a.www.greecemap.com, [date of access: 18.02.2016]

Figure 1b. 2017. Dadia eco-tourism museum archive, 2016

Figure 2. http://www.malawicichlidhomepage.com/aquainfo/evros_dadia.html [date of access: 07.01.2016]

Figure 3.www.google.earth.com-dadia-[date of access: 03.03.2017]

Figure4.www.atlasvisual.com/dadia-greece-thrace,[date of access: 07.02.2017]

Figure 6-7-8. Tachir, G., 2017, photograph archive

Figure 9. http://dadia-np.gr/?page_id=3134, date of access: 09.03.2017

Table 3. Tachir,G.,2017,photograph archive.
Kısa Ovalı et al.: The Integration of the Dadia Eco…