

Full Length Research Paper

Environmental, socio-cultural and economical effects of ecotourism perceived by the local people in the northwestern Turkey: Kiyiköy case

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In the study, examining the ecotourism opportunities in Kiyiköy town of Vize district of Kırklareli province situated on the northwestern Turkey, the awareness of the local people and their role-expectations in this subject have been determined and the perceptions of the local people towards the environmental, socio-cultural and economical effects of ecotourism have been exposed. In this study, the relationship between socio-cultural and economic impacts and local people support for tourism are examined. In parallel with this purpose, it was aimed at looking for an answer to questions of: “what might be the effects of ecotourism in the rural area?” and “what would be the opinions and contributions of the local people regarding the creation and development of ecotourism?” The judgments of the local people towards effects of ecotourism were explored through survey method and factor analysis was conducted. As a result of the study, it was revealed that the area has significant ecotourism potential and the local people have a positive attitude towards ecotourism planning to be developed. Six factors influencing ecotourism were determined at the end of the factor analysis.

Key words: Ecotourism, rural area, Kırklareli-Kiyiköy, factor analysis.

INTRODUCTION

Tourism has long been considered as a potential means for socio-economic development and regeneration of rural areas, in particular those affected by the decline of traditional agrarian activities. Peripheral rural areas are also considered to be repositories of older ways of life and cultures that respond to the postmodern tourists' quest for authenticity (Urry, 2002). Tourism development was seen by all those involved as having the potential to utilise local natural resources to diversify the local economy and tourism can be a powerful tool for successful economic development on a local and national scale. (Horn and Tahı, 2009; Ecotourism Australia, 2008). Tourism is not only a powerful social and economic force but also a factor in the physical environment as well. It has the power to improve the environment, provide funds

for conservation, preserve culture and history, to set sustainable use limits and to protect natural attractions. Ecotourism potentially provides a sustainable approach to development (Okech, 2009). In this scope, ecotourism is a form of natural resource-based tourism that is educational, low-impact, non-consumptive, and locally oriented: local people must control the industry and receive the bulk of the benefits to ensure sustainable development (D'Angelo et al., 2010). Ecotourism comes with a definitional promise to promote responsible travel to natural areas, to make a positive contribution to environmental conservation and to enhance the well-being of local communities (Angelica et al., 2010; Honey, 2008); therefore, ecotourism focuses on the local culture of a certain region (area) as well as the natural beauty, the geological structure, the natural vegetation and the fauna (Masberg and Morales, 1999), and is a tourism type which includes the subjects of conservation of natural areas, education, economic gain, qualified

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tourism and participation of local people (Benzer Kilic, 2006).

Ecotourism offers benefits for local residents, conservation support, low-scale development, low visitor numbers and educational experiences (Nepal, 2002). Ecotourism has attracted increasing attention in recent years, not only as an alternative to mass tourism, but as a means of economic development and environmental conservation (Schaller, 2010). Researchers have considered ecotourism as a solution for decreasing environmental and socio-economic problems and as a sustainable development tool in ecologically sensitive areas. Ecotourism is an important instrument used for contribution to preservation of the natural landscape and offers a solution to the poverty problem commonplace in underdeveloped regions. In addition, it produces a structure utility for the economic development and political progress of the local population, providing a resource for training of the visitors and for preservation (Barkin, 1996; Gregory, 2005; Robert and Santos, 2005; Williams and Ferguson, 2005; Açıksöz et al., 2010). In this scope, in order to be successful at and sustain ecotourism activities which local people and natural environment are at the center, first it is needed to know better the values of the people and the social environment. This demonstrates that in opening an area to ecotourism it definitely requires to begin with local organization and local people education (May, 1991). As Drumm and Moore (2002) suggest, a good planning depends on active participation of relevant groups. Since local people would be the group that would affect and would be affected mostly by ecotourism, provision of their power and participation would be crucial. In many studies conducted recently, too, how the developments experienced in the tourism were perceived by the local people have been analyzed and attitudes of local people towards effects of tourism have been examined (Kuvan and Akan, 2005; Ko and Stewart, 2002; Yoon et al., 2001; Teye et al., 2002; Bertan, 2010; Kiper and Arslan, 2007; Kiper et al., 2009; Mohammadi et al., 2010). Certain rural areas depending considerably on stock-breeding and forestry have retrogressed rapidly with the technological developments. This change has rebounded on the economic life styles and agricultural production. Therefore, unifying agricultural activities with recreation and tourism and carrying out plans all together matter within the scope of both enlivening agricultural activities, of the prevention of using agricultural for non-agricultural purposes and of the reunion of people who left nature and production with production processes.

In this direction, the study takes shapes on the basis of sample field to be a source for ecotourism with the natural structure and cultural values. The field has a position to create opportunities for visitors to be personally involved in nature, to be familiar with farm life, to be actively and passively involved in various natural activities, and to be acquaintance with local-specific

culture. According to Açıksöz et al. (2010) for the last five years, there have been significant initiatives concerning sustainable and environmentally sensitive tourism in Turkey. The 'national tourism strategy' is one of these initiatives and its primary objective is to ensure the integration of ecotourism within rural areas. According to the Ministry of Culture and Tourism Strategy of 2023 and 1/100.000 scaled Thrace Sub-region Ergene Basin Revision Environment Planning, the research field has been defined as a settlement having Agro-Eco tourism potential (Ergene Environmental Planning and Tourism 2023 Strategy Plan, 2007). This coincides with the defining the local people in the tourism image of the region as ecotourism. However, despite this potential, the economic structure of Kiyiköy has been deteriorated progressively and it has been immigrant region. Thus, while the development of ecotourism types in the region has been obtained via this study, alternatives would be presented to provide economic gain for the local population, too. The study is important because it demonstrates the perceptions of the local people towards the positive-negative effects of ecotourism in terms of environment, socio-culture and economics. However, at the same time this study would be guiding in terms of the creation of awareness regarding the conservation-improvement of natural and cultural values and sustainability of the sources.

From this point of view, the study would be means to create authentic identity in the development of ecotourism of the rural settlement of Kiyiköy and to be aware of unknown values, and it has revealed the power and expectations of the local people.

MATERIALS AND METHODS

The research material is composed of face to face questionnaires with the local people and observations in the research area, Kiyiköy town and the studies on ecotourism. Kiyiköy town of Vize district of Kırklareli province forms the main material of the research. Kiyiköy is 96 km away from Kırklareli, 40 km away from Vize and 164 km away from Istanbul (Figure 1). It is composed of a center and three villages (Aksicim, Balkaya and Hamidiye). According to the 2000 census, the population of the city center is 1666, and the populations of the villages are 827 and it is 2443 in total (<http://report.tuik.gov.tr/reports>, Kırklareli Province Environment Report, 2008). The economy of the district depends on stock-breeding, fishery and forestry. The history and natural and folkloric values of the research field were demonstrated in Table 1. Kiyiköy Cave at Table 1 is at 2 km southern part of Kiyiköy and its length is 305 m. The Kiyiköy Cave has stalactite sediments in patches and there is Cave of Captain with rich stalactite accumulations. The Kiyiköy Castle dates to Byzantium era (6th century) (Kırklareli Province Environment Report, 2008).

The ecotourism study was conducted in the area reasoning that the effective group would be the local people in applying the obtained results to application. In this respect, the questionnaire not only determined the expectations from tourism of local community, but also put forth their tendencies and socio-economic characteristics. In the determination of the sample dimension, the given formula was adopted and 95% reliability coefficient was taken as basis. The generally applied rule of: $(p) = (q) = 0.5$ in this type of



Figure 1. Geographical position of the research area ([_earth.google.com/intl/tr](http://earth.google.com/intl/tr)).

samples was adopted. In this respect the largest possible sample with constant sampling error has been achieved (May, 1991; Miran, 2007). The sampling formula is given in detail:

$$n = \frac{N \cdot p \cdot q}{(N - 1) \cdot \sigma_p^2 + p \cdot q}$$

n: sample size,

N: main mass size [2443 (<http://report.tuik.gov.tr/reports>)],

$\sigma_p = d / Z_{\alpha/2}$ (the variance of the rate),

$Z_{\alpha/2}$: reliability coefficient (1.96),

d: sampling error (0.05),

p: the possibility of the existence of the targeted feature in the mass (0.5),

q: 1-p (0.5),

n: 93.

Considering the research area, the number of participants to be given the survey was calculated as 93 people in the 95% confidence interval.

Analysis techniques

Factor analysis

Factor analysis is a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables. Factor analysis, based on correlations among many variables is multiple-variable statistical analysis type which enables data to be presented conceptually significant (interpretable) and in summary. Larger sample sizes with larger sets of concepts are aided by factor analysis of the concept interest measurements

Table 1. History, natural and folkloric values (Kirkklareli Province Environment Report, 2008).

Historical and natural values	
Archeological heritage (castle, cave, bridge etc.)	Kiyiköy cave. Captain's cave. Kiyiköy castle.
Religious structures (mosque, monastery etc.)	Ayanikola monastery.
Conventional architecture.	Wood and stone architecture compose unique character of district architecture.
Natural plant texture.	<i>Pinus nigra</i> , <i>Quercus frainetto</i> TEN, <i>Quercus petraea</i> , <i>Mattuschka liebl</i> , <i>Quercus cerris</i> L. var. <i>austriaca</i> Willd., <i>Acer platanoides</i> L., <i>Acer pseudoplatanus</i> , <i>Fagus</i> sp., <i>Tilia</i> sp., <i>Ulmus</i> sp.
Existing of natural wild animal.	Deer, wolf, jackal, marten, fox, badger, rabbit.
Level of natural protected area.	Kiyiköy.
Protected area of nature.	Kasatura Gulf.
Folkloric values	
Gastronomy	Bosnian pastry, keşkek, Zerde, evasive, nettle pastry, close, shepherd's pie, nettle soup.

to simplify the cluster analysis, yielding an appreciation of the underlying dimensions of the portfolio of tested concepts. Factor analysis identifies groups of concepts (factors) that are perceived to offer similar benefits, addressing similar needs. Cluster analysis is then applied to the factor scores to identify the preference groups (clusters of potential customers sharing common patterns of interest or preference) for the conceptualized product groups (factors) (DeCoster, 1998; Joreskog and Reymont, 1993; Gorsuch, 1983; Rummel, 2002; Daniel, 2006). The first step of factor analysis generally is to explain correlations between variables. The degree of a correlation is used as correlation coefficient. The correlation matrix prepared demonstrates that there is a positive correlation between the variables and that the correlations within certain subgroups of the variables are greater than the correlations among these subgroups. Analytic factor approach indicates whether the observed correlations could be explained or not by the smaller hypothetical

variables (Kim and Mueller, 1978). Factor analysis mathematically resembles a multiple regression analysis. Among the judgments, ones with certain features are loaded to a factor and form a group and the data are grouped considering the total variance. Whether the data coincide with factor analysis is determined by Barlett test of sphericity and Kaiser-Meyer-Olkin (KMO) test. Barlett test of sphericity tests the probability of high correlations among some of variables at least. According to Barlett test of sphericity, factor analysis should not be carried out if the hypothesis of "correlation matrix is unit matrix" is not rejected (Tucker and LaFleur, 1991). In order to test whether it is proper to carry out factor analysis on these influencing factors, KMO of sampling adequacy and Bartlett's test of sphericity have to be generated (Zhang and Huang, 2009). Another indicator of correlation between variances is partial correlation coefficient. Kaiser Meyer-Olkin (KMO) test is an index which compares the size of the observed correlation

coefficients. KMO value is labeled as follows:

- i) Very good if it is larger than 0.90,
- ii) Good if it is between 0.80 to 0.90,
- iii) Average if it is between 0.70 to 0.80
- iv) And as unacceptable below 0.60 (Pett et al., 2003; Yavuz, 2007).

Reliability test

In order to test the reliability of the scales used, Alpha (α) (Cronbach's Alpha Coefficient) model was used. This method analyzes whether k question in the scale represents whole which demonstrates a homogeneous structure. The coefficient valued between 0 and 1 is labeled as the Cronbach's Alfa coefficient. The reliability of the scale based on the Alpha (α) coefficient was interpreted as:

Table 2. The socio-economic features of the participants.

Socio-cultural feature of participants		Percent (%)	Socio-cultural Feature of Participants	Percent (%)	
Age groups	18-25	10.8	Income situation	About 600 \$ and the lower part	72.0
	26-50	52.7		About 600 \$ and above	28.0
	51+	36.6			
Educational situation	Primary school and the lower part	68.8	Experience in occupation	Agriculture - animal husbandry	15.2
	High school	22.6		Forestry	36.7
	University and its above	8.6		Fisheries	16.2
The number of members in the family	4 and the lower part	55.9	Other	42.0	

- i) If $0.00 \leq \alpha < 0.40$ the scale is reliable,
 ii) If $0.40 \leq \alpha < 0.60$ the reliability of the scale is low,
 iii) If $0.60 \leq \alpha < 0.80$ the scale is pretty reliable,
 iv) If $0.80 \leq \alpha < 1.00$ the scale is highly reliable one (Kalayci et al., 2005).

In the study, considering also the phases of data collection based on literature knowledge and the field observations and survey evaluations, SWOT analysis was conducted for problems, potentials and constraints.

RESEARCH RESULTS

Findings obtained from the surveys were analyzed under the five main titles as findings on the socio-economic structure, the natural-cultural characteristics of the study field and awareness degree regarding agricultural tourism and the ones regarding the agricultural tourism potential of the research field.

The findings regarding socio-economic structure

The data regarding socio-economic characteristics of people attended to the survey were given in Table 2. The low level of education

in the research field (68.8%) is very worrisome. The sizes of families are mostly (55.9%) less than 4 members. 52.7% of the attendants are between 26 and 50 ages and 72% of them have level of income under about 600 Dolars. When we look at the distribution of source of income, it is seen that only 15.2% of them are engaged in agriculture and stockbreeding. This is because a clear majority lack field (68.8%) and 35.3% lack animal. 31.2% of ones with land work for 11 years or more and generally families provide the labor. Poaching and marine pollution have resulted in the decrease of number of families living on fishery (16.2%). Whereas the lower degree of the possibility of consideration, the majority of the attendants to be active labor, very low level of income and limited source of income like agriculture-stockbreeding are concerning this active population could be considered to be positive in terms of the creation of opportunity of employment for ecotourism.

Finding regarding the degree of awareness towards the natural cultural characteristics of the research field

The expectations of the attendants regarding the

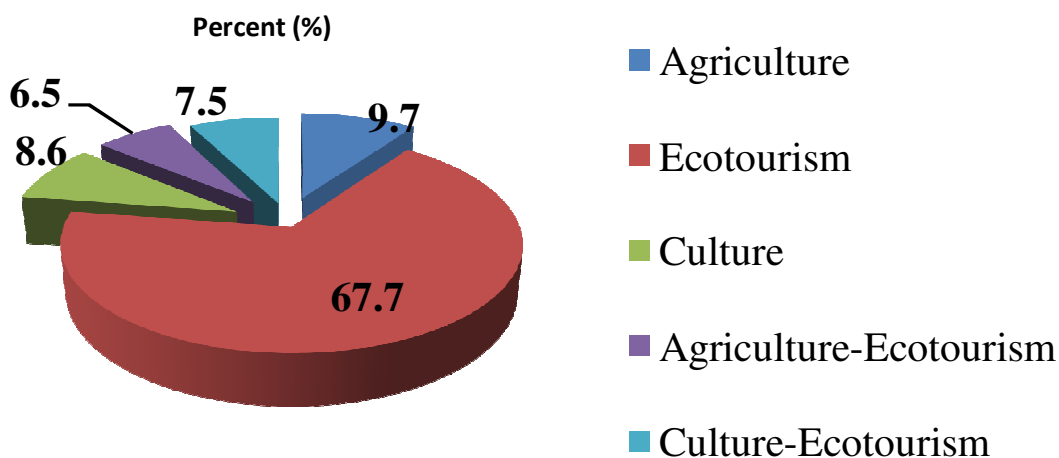
priorities for the development of the research field were presented in Table 3. According to Table 3, when the attendants were asked "what are the priorities for the development of Kiyiköy?", tourism came first by 48.4% and agriculture and stockbreeding was followed by 21.5%. Here, that agriculture and forestry are the sources of income of local population have an impact on the priorities. The local people are mostly engaged in stockbreeding. However, the stockbreeding is sort of small family business. Furthermore, forestry is popular, too. The local people are also occupied with non-wooden forest products (mushroom and medicinal plants). When the attendants were asked what the tourism types that would be developed in their region, ecotourism came first by 67.7% (Figure 2).

Findings regarding the awareness towards ecotourism

The attendants primarily consider that the opinions and attendance of the local people are important (48.4%) (Table 4). This indicates that they are disposed and participative for ecotourism. Ecotourism is a major factor for a

Table 3. Development priorities of Kiyiköy.

Importance level	Agriculture - animal husbandry (%)	Fisheries (%)	Forestry (%)	Tourism (%)
1	21.5	10.8	19.4	48.4
2	25.8	39.8	14.0	19.4
3	19.4	36.6	37.6	9.7
4	33.3	12.9	29.0	22.6

**Figure 2.** Tourism image of the research area.

community to function and develop in a greener way and more sustainable for its inhabitants than traditional activities like stockbreeding, forestry or fishery, which are more destructive for environment and no so good in generating sustainable earnings for enterprises, inhabitants or local authorities and providing future development. Ecotourism can be understood as environmental, sociological and economic category. At economic category it can contribute to sustainable rural development and it is at the same time a motor of development. As sociological category, it can contribute to higher awareness of public about importance of nature protection, at the same time visitors have impression that with their appropriate treatment contribute to protection and maintaining. As economic category, ecotourism assure promotion and marketing of products from protected areas like nature, cultural heritage, clean water, fresh air, local authentic products (also from ecological farming). But all kind of tourism activities and their development should be adjusted with local population been protected (Udvoc and Perpar, 2006). Therefore, the individuals surveyed in ecotourism economic, sociocultural and environmental impacts were asked their ideas about it. The attendants consider that ecotourism will economically attract new investments to the region and will create new job opportunities. This situation coincides with the limited job opportunities in the region and with having potential to be evaluated in terms of employment (Table 5).

While the attendants generally lean towards ecotourism considering the region to be a center of attraction socio-culturally and environmentally, they consider that it has a negative impact on transportation and population density (Tables 6, 7 and 8).

Evaluations of the judgments of the attendants regarding the effects of ecotourism on the region by factor analysis

Factor analysis was used to evaluate the judgments of attendants about the effects of ecotourism on the region. In the research, the judgments of attendants about environment were measured using 5 point Likert scale. The reliability of the scale was measured by Cronbach's Alpha and because this value was determined close to 1 (0.855), the scale was accepted reliable. In order to test conformity of judgments with the factor analysis, the statistics of KMO and Barlett test (Bartlett's test of sphericity approx. Chi-square) were used. The KMO (Kaiser-Meyer-Olkin measure of sampling adequacy) value was determined as 0.767. The values between 0.70 and 0.80 were labeled as "average" (Figure 3). The results of the factor analysis applied were presented in Table 9. Considering variance which is 0.50 or larger in the factor analysis, it is seen that six dimensions explained this. According to this, 22 variables were gathered in six factor groups. According to the results,

Table 4. Opinions about eco-tourism.

Opinions	Certainly agreed	Agreed	Disagreed	Certainly disagreed	No idea
Natural values must be unique.	44.1	48.4	3.2	2.2	2.2
Socio-cultural values must be unique.	44.1	50.1	4.3	0.0	1.1
Local management is the first responsible enterprise.	36.6	43.0	19.4	0.0	1.1
A strong cooperation is a must.	47.3	47.3	4.3	0.0	1.1
The opinions and participation of district people are important.	48.4	45.2	3.2	0.0	3.2

Table 5. Economic effect of eco-tourism.

Economic effects	Certainly agreed	Agreed	Disagreed	Certainly disagreed	No idea
New opportunities for employment can be composed.	34.4	50.5	12.9	0.0	2.2
New investments come to region.	35.5	45.2	15.1	0.0	4.3
Diversity can be provided for agricultural products.	19.4	31.2	32.3	10.8	6.5
Life standarts rise.	33.3	51.6	9.7	1.1	4.3
It supplements women employment.	28.0	49.5	17.2	1.1	4.3
The quality of agricultural production rises and in quality production has its real value.	28.0	47.3	16.1	2.2	6.5

Table 6. Socio-cultural effects of eco-tourism.

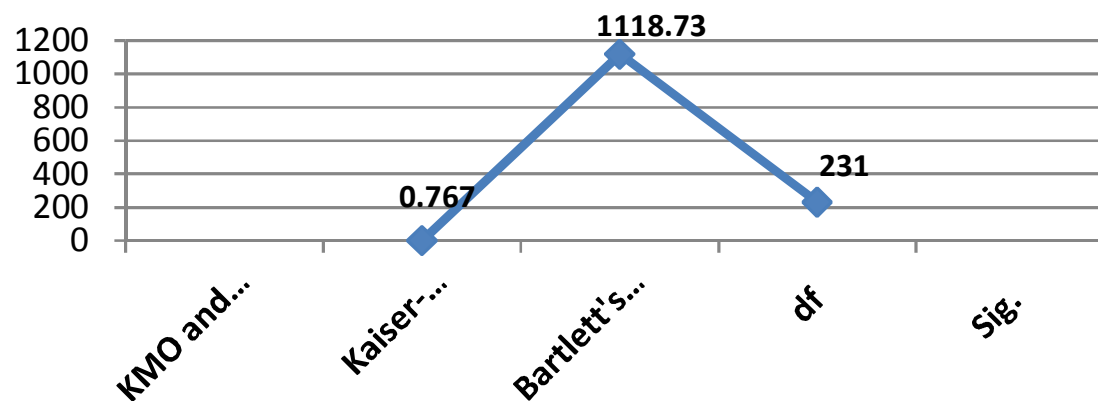
Socio-cultural effects	Certainly agreed	Agreed	Disagreed	Certainly disagreed	No idea
Internal migration happens with tourism.	23.7	41.9	26.9	7.5	0.0
Festival etc. activities rise.	23.7	55.9	18.3	1.1	1.1
It supplements intersectoral cooperation.	26.9	50.5	17.2	11	4.3
The convention and tradition of district area are affective factor for the region.	31.2	46.2	17.2	32	2.2
Conventional culture is lived by protected.	26.9	41.9	25.8	1.1	4.3

Table 7. Environmental effects of eco-tourism.

Environmental effects	Certainly agreed	Agreed	Disagreed	Certainly disagreed	No idea
The affective factor of region rises.	38.7	50.5	7.5	0.0	3.2
Natural texture is protected.	36.6	46.2	12.9	1.1	3.2
The opportunities of underwork and bodywork rise.	36.6	49.5	9.7	0.0	4.3

Table 8. Negative effects of eco-tourism.

Negative effects	Certainly agreed	Agreed	Disagreed	Certainly disagreed	No idea
Conventional life style changes.	5.4	40.9	35.5	12.9	5.4
The decays of natural resource happen.	3.2	26.9	54.8	9.7	5.4
Population rises.	29.0	51.6	17.2	1.1	1.1
Transportation density rises.	28.0	57.0	11.8	2.2	1.1
Visual and noise pollution happen.	9.7	50.5	30.1	7.5	2.2
Environmental pollution rises.	10.8	46.2	29.0	7.5	6.5
Hotel, motel or other usages cause environmental decays.	9.7	37.6	40.9	8.6	3.2
Feasible population rise effects local peoples' daily life in a negative way.	6.5	33.3	41.9	16.1	2.2

**Figure 3.** KMO and Barlett test statistics.

the first group was named "economic effects". This group includes the effects like new investments to the region, job opportunities and women employment. Besides, physical, environmental and negative socio-cultural effects and immigration effect constitute the other factors. Variances within the scope of physical factor are preservation of natural structure, increase of attractiveness of the region, revival of the traditional culture and improvement of the infra/super- structural facilities. Variances within

the scope of environmental factors are intensification of environmental pollution, emergence of noise and visual pollution, and intensification of structural use. Variances within the scope of socio-cultural factor are provision of diversification of agricultural products, improvement of the quality of agricultural production and conservation of the local culture.

The factor regarding negative impacts of ecotourism is identified with three variables. These are change of life style, change of habits

and disturb of natural sources. Another factor, immigration, is defined with one variable.

CONCLUSIONS

Two major approaches to the application of the principles of planning can be identified in the context of ecotourism. The first, which tends to be associated with more formal planning systems, places a considerable emphasis on the potential

Table 9. Factor matrix.

Estimations	Factors (components)					
	1	2	3	4	5	6
New opportunities for employment.	0.825	0.091	0.098	-0.036	0.142	0.157
Festival etc. growth.	0.751	0.070	0.075	0.246	-0.061	-0.050
Population density growth.	0.675	0.449	0.213	-0.003	0.021	0.134
High life standart.	0.639	0.340	0.218	0.290	0.025	0.334
New investments.	0.618	0.316	0.147	0.273	-0.172	0.260
Contribution of women employment.	0.549	0.279	-0.119	0.401	0.178	-0.096
Growing stronger intersectoral cooperation.	0.497	0.489	-0.088	0.405	0.110	-0.028
The protection of natural texture.	0.326	0.780	0.065	0.128	-0.065	0.113
The affective factor of region growth.	0.311	0.773	0.244	0.118	-0.101	0.168
Brisking of conventional life culture.	0.021	0.755	-0.077	0.344	-0.031	-0.086
underwork and bodywork oppotunities growth.	0.157	0.570	0.337	0.014	0.014	0.567
Density of transportation.	0.106	0.424	0.032	-0.177	0.063	0.055
Environmental pollution growth.	0.096	0.078	0.862	0.034	0.109	0.070
Formation of visual and noise pollution.	0.050	0.040	0.848	-0.061	0.220	0.159
Density of structural usages.	0.189	0.137	0.714	0.133	0.230	-0.273
Diversity for agricultural product.	0.130	-0.139	0.023	0.792	0.100	0.303
The quality of agricultural production growth.	0.313	0.050	0.099	0.776	-0.102	0.116
The protection of local culture.	0.094	0.387	0.034	0.688	-0.050	-0.048
Change of conventional life style.	0.266	-0.167	0.080	-0.190	0.806	0.081
Change of local peoples' habits.	-0.239	0.231	0.231	0.055	0.800	0.023
Decays of natural resources.	0.064	-0.115	0.438	0.135	0.740	0.030
Exist of internal migration.	0.174	0.100	-0.056	0.220	0.104	0.802
Eigen value.	3.612	3.331	2.574	2.557	2.103	1.471
Variance (%).	16.420	15.139	11.701	11.624	9.557	6.687
Cumulative variance (%).	16.420	31.560	43.261	51.885	64.442	71.129

benefits of ecotourism development. Under this approach, the role-played by planning is to overcome the physical and practical barriers to ecotourism development, thereby enabling the benefits associated with such activities to be experienced more fully and more widely in the local community. The second approach which tends to be associated with the term 'participatory planning' is more concerned with establishing and maintaining a suitable balance between development and planning restraint. As a result, local participation is increasingly being regarded as fundamental to the effectiveness of the planning and management of tourism. In this study which was conducted in order to reveal the perceptions of local people towards positive-negative impacts of ecotourism environmental, economically and socio-culturally in Kiyiköy, survey method was used as a data collection technique and factor analysis was carried out in order to determine variable clusters of impacts of ecotourism. Six factors obtained from the factor analysis were identified as positive and negative impacts of ecotourism. When the attitudes of the local community towards ecotourism were examined, the majority of the local people stated that ecotourism has positive impacts. Accordingly, in

promotion of ecotourism, the positive impacts of ecotourism should be emphasized and necessary steps to prevent negative impacts should be taken.

SWOT analysis was performed based on the field observations carried out, the surveys and literature review (YDBP, 2010). It is as follows:

The strong sides

- i) High organic potential in animal and vegetative production,
- ii) The existence of enterprises that have already started on a small informal scale,
- iii) Apiculture activities considered to be within the scope of ecotourism,
- iv) Existence of natural sources for ecotourism (esplanades, hand line fishing, stud farms, lodgings for example),
- v) Existence of coast to the Black Sea,
- vi) Proximity to Istanbul,
- vii) Allowing the pursuit of traditional life of various cultures (Bosnian),
- viii) Natural features with rich biodiversity,

- ix) Existence of young and active population,
- x) Local people's willingness to take part in ecotourism activities,
- xi) Undistributed natural and cultural landscaping values.

The weak sides

- i) Decreasing source of income from the forest,
- ii) Lack of education and awareness of the local people regarding tourism,
- iii) Marketing problems,
- iv) Scarcity of agricultural lands,
- v) Lack of pasture areas,
- vi) Decreasing stockbreeding practices,
- vii) Lack of professional knowledge and ability in managing natural resources.

The opportunities

- i) Increasing attention to ecotourism,
- ii) Vast potential to develop multi dimensional tourism,
- iii) Vast potential of biodiversity and species richness,
- iv) Ample scope for research,
- v) Possibilities of developing packages to attract visitors,
- vi) Rising demands towards organic agriculture and organic local products and integrated marketing potential of sustainable products in the Area,
- vii) Strategic location as a gateway for the 'trace' due to its coast to the Black Sea,
- viii) Potential for development of the awareness for the stakeholders related to the area,
- ix) Convenient environment for education and scientific research.

The threats

Disorganized and uncontrolled tourism activities:

- i) Forgetting limits to growth and carrying capacity;
- ii) Lack of community participation in ecotourism projects;
- iii) Absence of multi-stakeholder mechanism for planning, implementing and monitoring ecotourism projects;
- iv) Over-expectations created by tourism activities;
- v) Fishing, losing its economic importance as a local economic activity;
- vi) Threats to be posted on aquatic life (the construction of a dam on Kazandere brook in order to provide water for Istanbul);
- vii) Potential negative environmental impacts.

As it is also seen in the results of SWOT analysis, the region was considered to be having potentials due to the reasons like being one of the richest areas of Turkey in terms of flora and fauna, the provision of non-disturbance

of the area comparing the other parts of Turkey, various naturally growing medicinal and aromatic plants, richness of wildlife *Silvius alpinus*, *Chrysops caecitiens*, *Philipomyia graeca*, *Atylotus loewianus*, *Atylotus quadriflorus*, *Hybomitra caucasi*, *Tabanus bifarius syn.*, *Dasytabia langa*, *Tabanus bromius*, *Tabanus eggeri*, *Tabanus glaucopis*, *Tabanus lunatus*, *Tabanus maculicornis*, *Tabanus portschinskii*, *Tabanus prometheus* (Kiliç, 1999) the abundance of socio-cultural assets for ecotourism, and that certain parts of the area have different conservation statues like nature reserve area and natural protected area. This potential has not been utilized even though the local people lean towards this subject. In addition to this, young population's attitudes to leave the region, the limited level of agricultural activities, the underdevelopment of agriculture-oriented industry, the lack of organization of the producers, the lack of posture areas and the decreasing stock-breeding are also among the problems determined. If ecotourism is considered to have economically, socio-culturally and environmentally positive impacts on the region, it is clear that it is definitely necessary to utilize ecotourism potential. The issue is sustainable use and conservation. In the attempts of conservation; the views, opinions and active participations of the local people must also be obtained. This is because a step taken without considering conditions of the local people or the practices influencing their economic and sociological life styles might lead to the worse results.

Starting from these, in all these practices, policies and investments taking the priorities of the local people into consideration and making them an active actor would make protective and sustainable precautions more active. Kiyiköy has stockbreeding, forestry, fishery and tourism oriented economic structure. Lacking agricultural lands and being a town covered mostly by trees cause straits in the economy of the region. Besides, the problems like collection of mushroom in an unconscious manner, the pressure of illegal grazing in the forest and the poaching have been confronted. Poor agricultural productivity and lack of agricultural lands lead people to the stockbreeding. Besides, increasing demand for animal products and culture fishing regionally and nationally is a plus value for the region. Within this scope economic sectors like active stockbreeding and fishery in the region should be integrated with the ecotourism sector. In order to hand down the natural and cultural heritage of the local people, who pursue their traditional life styles without losing cultural infrastructures, to the next generations, and to preserve and evaluate within the scope of ecotourism, awareness raising programs should be carried out. In this context, the fact that ecotourism is an economic opportunity should be emphasized in order to preserve the local people and culture and to hand down a preserved nature to the next generations. Besides, it should be emphasized in the awareness-rising programs

that an ill-planned, underdeveloped and unorganized tourism development might cause disturbance of natural landscapes of Kiyiköy, might threaten wildlife and biological diversity, may cause poor quality of water sources, may lead to the immigration of local people and the erosion of cultural traditions.

Within this scope, some recommendations have been made to increase ecotourism opportunities to be developed in the research field. These are:

- i) Traditional production styles (animal products like yogurt, clotted cream, cheese) should be arranged according to needs of ecotourism and should be integrated with ecotourism.
- ii) Forests have not contributed to the district economically. The forest areas should be preserved and evaluated within the scope of ecotourism.
- iii) Flora expedition (between May and September) sportive trekking (May to August) in the area.
- iv) Old houses should be preserved via lodging and boutique hotel identity in tourism.
- v) Stockbreeding might be developed even if it will be at minimum level. It is appropriate to give courses about environment and natural resources in schools.
- vi) Training projects regarding preservation, sustainable production and marketing of the medicinal and aromatic plants growing naturally in the region (daisy, centaury, wild pear, wild plum, rose hip, dock, common plantain, lime, salep, mint, thymus, milfoil, patience dock, cranberry for example), of seed growing, of arboriculture, of seedling growing and of biodiversity and endemic species could be developed. Besides, for participators, guided tours should be arranged in the period between April and September.
- vii) With the objects of diversification of the sources of income of the people and of offering alternatives, side income generating sources in the areas especially like ecotourism, organic agriculture, agricultural product processing and merchantable plants growing should be put in practice. In this scope, the products produced in the region such as honey, butter, buffalo yogurt, cheese, egg, salmon, Bosnian pastry, baked potato and the likes could be served to the visitors.
- viii) Network regarding conservation works among the government agencies, universities, NGOs and private sector should be constituted and this network should be strengthened. Task sharing and coordination should be made among these institutions and organizations.

In conclusion, ecotourism activities which are not performed according to the purpose, the principles and the characteristics cause the disturbance in environmental, economic and socio-cultural fields due to over-intensification to be occurred especially in sensitive ecosystems like rural areas. Therefore, in order to provide sustainability in the ecotourism, it is necessary to know environmental, social and economical effects of ecotourism activities and to consider these effects during

the planning. From this point of view, informing the local people who are the most affected group by ecotourism about the effects caused by the ecotourism to be developed in their region is primarily important. Community-based ecotourism could be a catalyst for economic, social and environmental development in Kiyiköy that local communities and natural environment benefit from sustainable ecotourism operations through job creation, investment returns and environmental protection.

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