

Full Length Research Paper

The contribution of thermal sources to tourism development: A case study from Çankiri Çavundur, Turkey

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Thermal tourism is a significant tourism type, which helps to improve people's health condition by providing a complementary therapy and also allows many recreational activities for the visitors. This study aims to search the existing tourism potential of Çankiri Çavundur thermal resources and make some recommendations with a comprehensive planning approach for the development of the region. Çankiri, Çavundur Thermal Region, is analyzed to make an inventory for tourism; public surveys are applied both in Çankiri and Ankara to reveal the recognition and use of the site. For the improvement of tourism developments in the region suggestions are made in relation to planning and management of the resources. It is seen that if the Çankiri Çavundur thermals; Çankiri's historical and cultural sites, assets and Ilgaz winter tourism area are integrated in a tour rout and introduced as a variety of opportunities, the popularity of Çankiri region would increase and it would make an important contribution to Çankiri's rural development.

Key words: Tourism, thermal tourism, Çankiri, Çavundur, Turkey.

INTRODUCTION

Human kind has always been in a state of change through history. As a result, many types of life styles were experienced which shaped various alternatives for recreational and social purposes. Tourism activity is one of the oldest recreational movements that involve a large number of people according to their needs over time.

Health tourism goes back to 6th century BC (Aslihak, 1998). Based on the findings from Iran, Egypt, Greece and Italy, people use thermal waters for healing purposes in the early days of the history (Bayer, 1997). Hittites, Phrygians and Helens are the Anatolian communities who had made use of thermal waters. The first constructions (thermal baths) on thermal springs are built and used for healing purposes by Romans in Anatolia (Kozak, 1996). Bathing and hygiene are the important cultural habits in Anatolian Seljuqs carried from the Middle Asia in the 16th century and united with the Islamic rituals. This tradition is combined with the rich potential of thermal

waters of Anatolia and introduced the "Turkish Bath" to the world and spread over other countries.

For the richness of geothermal sources in Turkey with around 1500 hot springs is of the seven countries in the world and the first one in Europe. It stands on an important geothermal energy line and the resources are in good quality in terms of flow rate, heat, physical features and chemical mineral content (Anonymous, 2007a). "The temperatures of hot springs range from 20 - 110°C with a water flow rate ranging from 2 - 500 L/s. (Ministry of Culture and Tourism, 2003). "These sources, widely dispersed over the whole country, are generally of self-rising type, with a high percentage of dissolved mineral salts and different physio-chemical compositions and of high flow rate" (Dal, 2007). Thermal sources are densely located in Marmara, Aegean and Middle Anatolia regions. There are around 190 thermal facilities in 46 provinces of Turkey.

However, use of thermal energy resources for tourism purposes is only 5% of the potential resources which is quite insufficient (Belkayali 2009). With the tourism incentive act of 2634, 50 thermal areas are announced as "thermal tourism centers" by the Ministry of Culture and

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Tourism. According to Dal (2007) "The developments in health tourism have been increasing in Turkey as the right of patients to seek treatment abroad has been extended in years and European Union (EU) clarified that health care provision is considered as a service under European Law. The candidate countries of EU, including Turkey, have a valuable potential for providing cheaper and high quality health services".

Thermal tourism as a branch of health tourism provides benefits both for health and recreation and requires services and facilities for accommodation, catering and cures etc. Thermal Tourism is the usage of thermal waters for human health and recreation except for usage of thermal waters for bath (Anonymous, 2006a, Dal, 2007; Tunç and Saç, 1998; Kaynar, 2005). Although the primary intend of the visitors is to be cured in the thermal tourism centers, many people who are healthy also prefer these sites for the quality of the recreational services. Thermal tourism or thermal springs and baths play an important part in health tourism which combines various fields and methods for curing such as mineralized thermal water bath, drinking and inhalation sources, mud baths and the complimentary therapies like climate cure, physiotherapy, rehabilitation, mecano-therapy, exercise, psychotherapy and diet (Özbek, 1991; Tengilimoğlu et al., 2001; Garcia Altes, 2004). Therefore thermal tourism which is a prospective field of tourism development can be seen as vital for responding the people's need for healing and sustaining a healthy life as long as resting and having pleasure.

Today, tourism activities are very important in terms of providing financial revenue to the host countries' economy. In this context health tourism is a significant revenue area since visitors stay a longer period for cures (around 7 - 15 days) than the other visitors who come for historical sites or sun and sand tourism (Aslan, 1992). Health tourism can be evaluated as an important investment area for Turkey as in many other countries.

The number of tourists coming to Turkey increased 78% from 2002 to 2007. A total of 155.000 visitors came to Turkey for health reasons in 2007 (Anonymous, 2009a; Belkayali, 2009). After the recent agreements and co-operations with European Insurance companies to send their patients to Turkey and cover their health expenditures, the expected number of visitors for health tourism will increase up to 1.000.000 people/year for the future (Aydın, 2005; Dal 2007).

Geothermal capacity is one of the most important factors of health tourism in Turkey. Thermal water resources have much higher quality compared to Europe in terms of physical conditions and chemical compound (Anonymous 2007b; Dal, 2007).

Although, the number of people who comes to Turkey for health reasons is quite high management of thermal springs in Turkey is not developed properly in terms of service variety and quality (Kozak, 1996). Therefore, it is very important to reveal the existing potential of thermal resources to enable their sustainable use for the regional

development.

MATERIALS AND METHODS

The research area which is named Çankırı Çavundur Thermal Region located on the northern part of the Central Anatolia, between Kizilirmak and Western Black Sea river basins. Çavundur thermal spring, 80 km away from Çankırı, is in Kurşunlu District (Figure 1). The main material of the research is the household surveys which are implemented both in Çankırı and Ankara by random sampling. Through these surveys it is aimed to reveal the existing tourism potential of Çankırı Çavundur and to make recommendations to improve the development strategies about the region. User profile, existing use trends and awareness about the qualities of the thermal springs are questioned.

The research method is based on two stages. In the first stage, the research area is examined with various aspects to evaluate the thermal tourism opportunities. Information about the general characteristics of the research area is gathered and observations are made in Çavundur Spas. The second stage of the study is based on household surveys implemented both in Çankırı and Ankara.

Ankara is chosen for having a weekend tourism potential for its environs as being the capital and second densely populated city of Turkey. "Question-answer" method is applied face-to-face with the experimental subjects in order to collect data (Baş, 2003). SPSS 15 packet programs used in the evaluation of the data collected from the questionnaires. Data analyses are carried out using cross tables which enable the comparison of variables. A total of 225 questionnaires are filled out.

Çankırı Çavundur tourism facilities

Çankırı province is in the north of the Central Anatolia region and at a distance of 131 km from the capital of Ankara (Anonymous, 2009b). In spite of the small progress in industry and trade the economic environment has not developed much in Çankırı. Economy of the city depends on the agriculture and livestock. As a consequence of unemployment and income inequality, the city has the problem of migration specifically; there is a tendency of young people moving to metropolitans. Therefore, improving the tourism capacity in the region is crucial for a healthy rural development (Külekci, 2009).

Çankırı province has 20 drinking and mineral water resources of which the most important one is Çavundur Thermal Spring. The water temperature of the thermal resource is 54°C and flow is 47 lt/sn (Kuter, 2007; Çelmen, 2002). The thermal resource has an accessible location which is 1.5 km away from Gerede-Samsun (E80) highway, 9 km away from Kurşunlu town and 90 km away from Çankırı city. Around the resource, there is an accommodation facility which is owned by Çankırı Special Provincial Administration. It has two baths, modern swimming pools and 38 rooms with 76 bed capacity.

In addition, there is another accommodation facility with two outdoor pools and 100-bed capacity which is run by the municipality and a special hostel which has 20-beds. The content of thermal water is sodium bicarbonate, hyperthermal with hypotonic feature. It can be used for all painful patients due to its mineral content and natural temperature (Anonymous, 2006b).

Other than Thermal Spring Facilities in the region, Çankırı city and its environs is very rich in terms of natural, historical and cultural assets. There are 20 archeological fields, 5 historic baths, 7 graves, 20 mosques and madrasah, 3 rock tombs, 3 bridges and 7 historic fountains and a salt cave in the central of Çankırı and its districts. The various qualities of the region provide rich alternatives for tourism like winter sports (Ilgaz Ski Center), ecotourism, farm

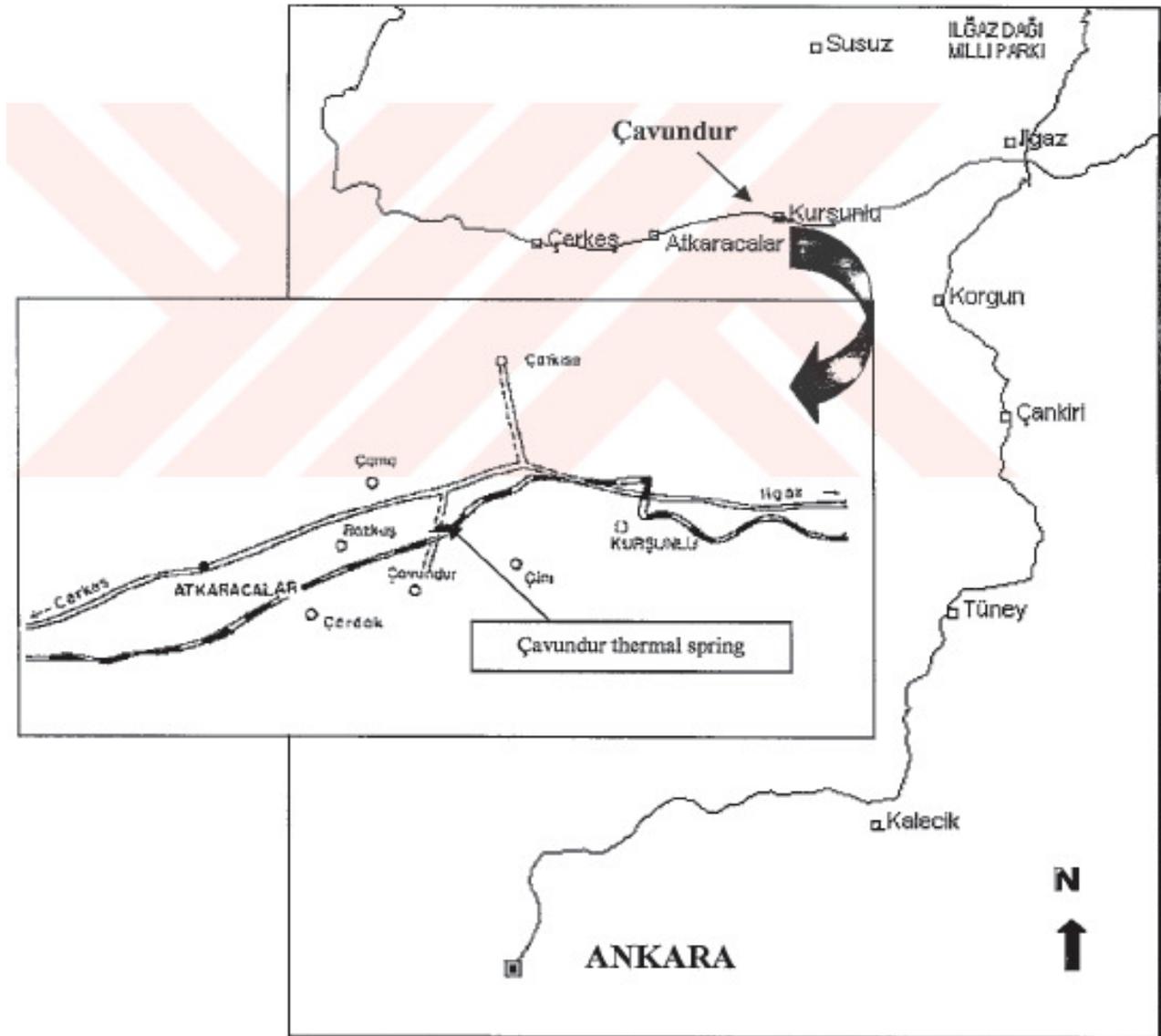


Figure 1. The location map of Çavundur thermal region (Kasapoğlu, 2003).

tourism, plateau tourism, ornithology etc. (Külekci, 2009).

SURVEY RESULTS

Survey results are presented in two aspects namely, user features and uses trends.

User features

Within the scope of this study two different types of surveys are administered, one in Çankırı and the other in Ankara. Therefore, 96 surveys were done in Çankırı and 129 surveys were applied in Ankara. According to survey results 42.7% of the respondents are female and 57.3% are male. While 31.2% of the respondents are between

(25 - 35) age group, other age groups are almost in similar ratios: 20.8% are between (18 - 24) , 20.8% are between (35 - 44), 16.7% are between (45 - 54), 7.3% are between (55 - 64) but only 3.1% of the respondents are over 65.

When the education level of respondents is examined 41.7% of them are university graduates, 28.1% are high school graduates, 10.4% are secondary school graduates, 9.4% are primary school graduates and 8.3% of the respondents are illiterate. In addition, 27.1% of the participants are in the public sector, 21.9% are in the private sector, and 19.8% are students, 16.7% are unemployed and 5.2% are in other sectors.

In Ankara, the gender of the respondents is in similar ratios: 49.6% of them are female, 50.4% are male. 39.5% of respondents are between (25 - 35), 27.7% are

Table 1. Recreation preferences of local people according to education level.

Tourism Trends	Education Level						Total (%)
	Primary School (%)	Secondary School (%)	High School (%)	University (%)	Graduate level (%)	Illiterate (%)	
Camping	0 (0)	0 (0)	6 (26.10)	17 (73.90)	0 (0)	0 (0)	23 (100)
Picnicking	4 (6.60)	7 (11.50)	18 (29.50)	28 (45.90)	1 (1.60)	3 (4.90)	61 (100)
Thermal visits	2 (6.90)	5 (17.20)	6 (20.70)	12 (41.40)	2 (6.90)	2 (6.90)	29 (100)
Historical visits	2 (5.40)	3 (8.10)	12 (32.40)	19 (51.40)	1 (2.70)	0 (0)	37 (100)
Attend Festivals	2 (7.70)	3 (11.50)	7 (26.90)	14 (53.90)	0 (0)	0 (0)	26 (100)
Plateau Visits	1 (3.70)	5 (18.50)	8 (29.70)	12 (44.40)	0 (0)	1 (3.70)	27 (100)
Mountain Climbing	0 (0)	0 (0)	5 (35.70)	9 (64.30)	0 (0)	0 (0)	14 (100)
Marine Tourism	0 (0)	0 (0)	19 (44.20)	23 (53.50)	1 (2.30)	0 (0)	43 (100)
Hunting	0 (0)	1 (7.10)	5 (35.80)	8 (57.10)	0 (0)	0 (0)	14 (100)
Other	0 (0)	0 (0)	3 (42.90)	4 (57.10)	0 (0)	0 (0)	7 (100)

between (18 - 24) age group, 15.1% are between (45 - 54) age group, 8.4% are between (35 - 44), 7.6% are between (55 - 64) and 1.7% are over 65 years old.

The education level of the respondents are quite high with 60.5% of them are university graduates, 19.3% have graduate degrees, 12.6% are high school graduates, 4.2% have primary school education and 3.4% are secondary school graduation and 4.2% are illiterate. They are mostly in private sector (40.3%), 20.2% of them in the public sector, 19.3% are students, 10.9% are retired and 8.4% were unemployed. It can be seen that both in Çankiri and Ankara the profiles of respondents are quite similar, which can be characterized as middle aged, well educated middle class people.

Use trends in Çankiri

In the first part of the survey, general tourism trends and expectations of local people in Çankiri for thermal facilities are investigated. According to the survey that is applied in the Çankiri city center, 82.3% of the participants attend to some kind of tourism activity for their enjoyment and relaxation purposes. Only the 36.7% of the participants preferred thermal and spa visits. The

most preferred activities are picnicking (77.2%), sun and sand tourism (54.4%) and visits to historical sites (46.8%), respectively.

In the survey the relation between the education level of the local people of Çavundur and their recreational preferences is examined (Table 1). When the education level raises participation of activities also increases. 41.37% of the people who visit Çavundur Thermal region are university graduates, 20.68% of them are high school graduates.

The most preferred recreational area in Çankiri province is Ilgaz region with (79.7%). When the respondents' visits to different recreation areas, they are questioned: 44.3% of the participants prefer plateaus, 36.7% of them picnic areas, 26.6% of them Çavundur Thermal Spring and 10.1% other activities.

Local people are asked if they have ever been in Çavundur Thermal Resort; while 38.5% of the participants give positive responses, 61.5% of them respond negatively. It can be seen that most of the local people do not use the thermals.

When the people who visit the thermal resort are questioned about their frequency of visit in a year, 40.6% of them respond that they have been in the area quite

Table 2. Frequency of visits and satisfaction degree of users in Çankiri.

Frequency of visit		Satisfaction degree				Total
		Not satisfied	Very satisfied	Satisfied	Poor satisfied	
Frequency	59	0	0	0	59	
Percent %	100	0	0	0	100	
Once	Frequency	0	0	3	4	7
	Percent %	0	0	42,90	57,10	100
Twice	Frequency	0	0	9	2	11
	Percent %	0	0	81,80	18,20	100
Three times	Frequency	0	1	2	1	4
	Percent %	0	25	50	25	100
Quite often	Frequency	0	3	6	6	15
	Percent %	0	20	40	40	100

often, 10.9% of them used the area three times, 29.7% of them used twice and 18.9% of them visited the area only ones. Most of the participants state that they visit the area for the facilities of health and recreation. Surveys find out that, 54.1% of the participants are aware of the area via an acquaintance, 5.4% via an advertisement, 2.7% via the news in the papers and magazines about the region.

Satisfaction of users for the facilities of the resources is average, 18.9% of the respondents who benefit from the resort evaluate the facilities of the resort as adequate in every sense, while 51.4% of them find it partially sufficient, and 29.7% of the participants evaluate it inadequate. The survey results put forward that, in Çankiri, the majority of the participants have not benefited from Çavundur thermal facilities. However, the vast majority of the respondents that visit the Çavundur thermal facilities use the site quite frequently. This fact, also points out the high satisfaction level of the respondents since there is a correlation between the frequency of visits and the degree of satisfaction (Table 2).

The reasons for the non-use of Çavundur Thermal facilities are also searched. The stated reasons for non-use are lack of advertisement for the facilities (54.2%), the low income level (40.7%) and difficulties of transportation (16.9%), respectively. Besides, survey results reveal that, 69.5% of the participants are unaware of the existing facilities in Çankiri Çavundur thermal resort, 18.6% of them are partly aware, 11.9% of them are aware of the facilities. In the region, it is seen that participants do not have adequate information about Çavundur Thermal Spring's health feature. The non-use of thermals stem from lack of information about the site and inadequate infrastructure.

Most of the respondents indicated the need for publicity and promotion for Çavundur thermal facilities which can be organized by tourism agents and tour operators (86%). The need for the improvement of accommodation facilities and infrastructure (transport, water, sewage,

etc.) is also mentioned by many people (84%). Of the respondents, 73% declare that, if special package tours and programs are organized they would use the Çavundur thermal facility more frequently. It is also specified that if a transportation service from city center is provided they would use Çavundur Thermal Facility more often (54%). In addition to these, it is stated that, if a trip route is determined they would use the area efficiently (46%). When tourism trends are examined in the region, it is observed that, Ilgaz winter sports center is a well known and mostly preferred location. However, Çavundur Thermal region is not known sufficiently and therefore, it is preferred by only a certain number of locals.

Use trends in Ankara

In Ankara, residents' awareness about the Çavundur Çankiri thermal resources is investigated. The survey results of Ankara reveal that 95.8% of the respondents participate in some kind of activity for their enjoyment and relaxation and 85.1% of these participants prefer sun and sand tourism. The mostly preferred activities of the participants are picnicking 52.6%, visits of historical sites 45.6%, participation to festivals 26.3%, camping and thermal tourism 24.6%. By means of transport 91.6% of the participants prefer cars and buses. When the respondents are questioned if they have ever visited Çankiri, while 37.8% of the participants respond positively, 62.2% respond negatively. The main reasons of visits are also questioned: business 26.7%, vacation 24.4%, family visits 20.0% and other purposes 31.1% are stated, respectively.

The respondent's awareness about the attractive features of the city (historical and archeological buildings and assets of Çankiri region) is questioned as well. According to the survey results 58.8% of the participants are uninformed, 29.4% partially informed and 11.8% were

Table 3. Respondents desire to take part in a tour to Çavundur region.

Condition of participation	Have you ever been in Çavundur		
		Yes	No
Yes I participate	Frequency	38	64
	Percent %	84.40	86.50
No I would not participate	Frequency	7	10
	Percent %	15.60	13.50
Total	Frequency	45	74
	Percent %	100	100

Table 4. Education level of the residents of Ankara and awareness about the thermal region.

Do you know about Çavundur thermal region		Education Level					Total
		Primary school	Secondary school	High school	University	Graduate level	
Yes I know	Frequency	2	1	2	7	4	16
	Percent %	12.50	6.25	12.50	43.75	25.00	100
I partly know	Frequency	0	0	2	6	1	9
	Percent %	0	0	22.20	66.70	11.10	100
No I do not know	Frequency	3	3	11	59	18	94
	Percent %	3.20	3.20	11.70	62.80	19.10	100

informed. While local festivals of Çankiri are not known by the residents of Ankara (75.6%), 18.5% of them are partly informed and 5.9% of them are completely informed. Of the participants, 79% are unaware of Çavundur Thermal Facilities that is only 90 km away from Çankiri. If a tour is organized from Ankara to Çankiri's historical and tourism regions, consisting Ilgaz winter and plateau tourism region and Çavundur Thermal Spring, 85.7% of the participants state that they would like to participate in it. Respondents who have never been in Çankiri would like to join the tour by 86.5% (Table 3).

In general, there is a direct relation with the tourism demand and income status of the tourists. It is determined that, the most preferred tourism type is coastal tourism which is mostly offered in the form of mass tourism. Picnicking and visits to historical places are the common leisure activities. In addition, participating to various festivals, plateau visits, camping, thermal and spa tourism are preferred by a small proportion of the respondents.

Survey results reveal that, residents of Ankara do not visit Çankiri for tourism purposes and only a small part of the participants visited Çankiri for vacation. It is seen that a very large part of the participants do not have information about Çankiri's regional, social, cultural, and historical values. Education level of the respondents is not related to having information about Çankiri's urban and regional values. The relation between the education level of the residents of Ankara and their awareness about the thermal region is examined as well (Table 4). It seems that most of the participants are not been informed

about Çavundur Thermal Region (79%). It can also be considered that education level of the respondents does not play an important role on their awareness about the thermal region.

However, Ilgaz region which is well known and has a high potential for winter and mountain tourism, is visited by part of the tourists but, it is seen that majority of the participants has not visited Çavundur region yet.

Conclusion

In today's living conditions, individuals are more careful about the health issues. Within this situation thermal tourism becomes a priority issue for tourism supply. Significant investments are made in many countries for thermal tourism with an expectation of efficiency in a very short time. Within this context, it is clear that the existing thermal tourism potential in Çankiri Çavundur is not efficiently used. Presently, observations on site reveal that the hot spring sources are not utilized at optimum level. Reasons for quite limited usage of thermal resource can be classified as the poor marketing, technical infrastructure and equipment capacity. Most of the demand for the facilities still emerges from the domestic market due to provision of services at reasonable prices.

In both surveys, respondents complain about the lack of information. As a result the thermal area and characteristics of it are not fully known by the people. As most of the small thermal facility has not fulfill the European standards, there still exists inefficiency of organizational

service management, ineffective promotion, and insufficient marketing resulted in low demand from other countries (Dal, 2007).

Therefore, thermal facilities should be developed so as to improve technical infrastructure and equipment capacity to a standardized level and licensed by Ministry of Culture and Tourism. Advertisement and marketing of thermal resources should be done by both local authorities, and tour operators. With an accurate advertisement policy, it would be possible to achieve recognition of the region by a broader user group. In addition to thermal resource developments, a holistic approach for the development of region should be formed.

In this context, the various opportunities for alternative tourism in Çankiri region should be reconsidered. It should be noted that Çankiri, an old settlement in proximity to Ankara, is chosen by various civilizations. In many parts of the city, the remnants of these civilizations and historical sites can be seen as well as examples of Ottoman architecture and the Republican era. Çankiri has a rich diversity for recreation opportunities both in the city and its environs like picnic areas, Çankiri Castle and Salt Cave. Besides these places, Ilgaz National Park and Winter Tourism Zone, Işık Mountain district which is one of the popular destinations for mountain climbers are located within the boundaries of the Çankiri Province. Therefore, Çankiri is also a suitable region for winter tourism in terms of its climate and vegetation. Considering the potential of Çankiri by the help of a comprehensive tourism planning, the city may increase the tourism income and improve the city's economy which is still based on agriculture and livestock. This would also provide employment possibilities for local people and decrease the migration of young population from the city. In this context, different stake holders should undertake responsibilities to make Çankiri and its environs a tourism region. With this aim public and private sector, central and local governments, research centers and universities should all collaborate.

As a first step tourism potential of Çankiri region should be presented with an accurate advertising and promotion policy. For example, a tour route can be suggested that starts from Ankara and include Çankiri's urban, historical and cultural places and Çavundur Thermal Springs by the help of tourism companies or various leading tourism investors.

Moreover, public awareness campaigns should be organized by educational seminars, dissemination of flyers- brochures. Health benefits of thermals springs should be told to have the attention of public through mass media. Furthermore, highway infrastructure and accessibility should be improved to enable an easy and comfortable transport. It would increase the tourism activities between Ankara and Çankiri.

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