

## **The national park of Ifrane as an essential pillar of ecological tourism development in the province of Ifrane (Morocco)**

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### **Abstract**

The main objective of this article is to present the great tourism potentials of the National Park of Ifrane and its contribution to ecological tourism development through protecting the natural resources. To achieve this aim, we conducted a fieldwork survey in the National Park of Ifrane which was spread over a period of fifteen days from 15<sup>th</sup> to 30<sup>th</sup> August, 2018. The fieldwork was carried out through a number of samplings that targeted the local actors of the province. Furthermore, the results show that the ecological tourism product can play a crucial role in the development of tourism activity.

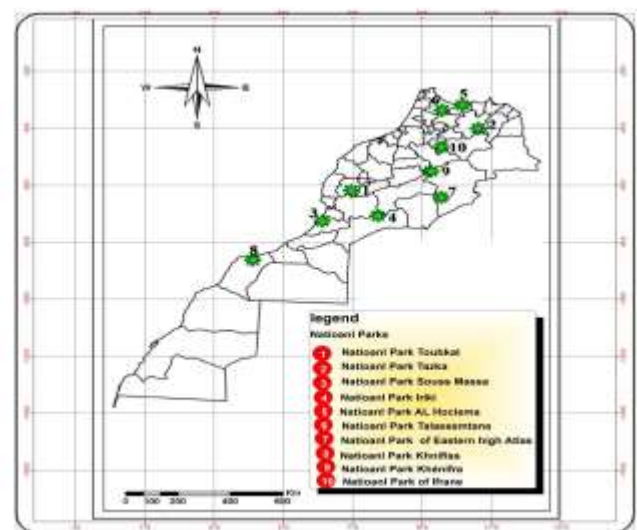
**Keywords:** Ifrane national park, ecological tourism, natural potentials, local development, Ifrane, Morocco

### **1. Introduction**

Morocco is considered as one of the Mediterranean countries that have a rich environmental diversity as it is ranked second in the Mediterranean sea after the Anatolia region in Turkey, due to its availability of 40 ecosystems with 4200 kinds of vascular plants, 92 species of mammals, as well as 324 species of birds and 96 kinds of reptiles with a great percentage of settlements due to its specific geographical location and its two sea fronts. The result is a multiplicity of landscapes and views such as (deserts, mountains, wetlands, beaches, lakes and fountains ... etc.). For that reason, Morocco considered these sites as a national heritage that plays an importance role in the environmental field.

In order to enhance and preserve this natural heritage, Moroccan authorities set up about 10 national parks (Figure 1). During the period of 1942 and 1991, four national parks were created: Toubkal in 1942, Tazekka in 1950, Souss-Massa in 1991 and Iriki in 1994. The implementation of this plan helped to strengthen the national network of protected areas by establishing four other national parks in 2004, which are presented as follows: The National Park of Al Hoceima, the National Park of Talassemtane, the National Park of Ifrane and the National Park of the Eastern High Atlas. Then, two other national parks were created: The

National Park of Khnifiss in 2006 and the National Park of Khénifra in 2008. This brings the total area of national parks to 829.5525 <sup>[1]</sup>.



**Fig 1:** Geographical map of the National Parks in Morocco, the Administration of Ifrane National Park in Azrou, modified and completed by A. Laghman, 2019.

<sup>1</sup> Data provided by the Administration of the National Park of Ifrane, Azrou, 2019.

**2. Literature review**

For Ziffer (1989, p. 6) [8], the ecotourism is « a form of tourism inspired primarily by the natural history of an area, including its indigenous cultures. The ecotourist visits relatively undeveloped areas in the spirit of appreciation, participation and sensitivity. The ecotourist practices a non-consumptive use of wildlife and natural resources and contributes to the visited area through labor or financial means aimed at directly benefiting the conservation of the site and the economic well-being of the local residents... ». Then, Weaver (2004, p. 15) [7] defines ecotourism as “a form of tourism that fosters learning experiences and appreciation of the natural environment, or some component thereof, within its associated cultural context. It has the appearance (in conjunction with best practice) of being environmentally and socio-culturally sustainable, preferably in a way that enhances the natural and cultural resource base of the destination and promotes the viability of the operation”. Further, Honey (2008) [4] defines ecotourism as “responsible travel to natural areas which conserves the environment and improves the welfare of local people.”

**3. General context of the National Park of Ifrane**

In recent years, serious reflection has begun to develop mountainous areas in general and the mountains of the Middle Atlas in particular, by exploiting its natural and human potentials and developing its economic resources (Chetou, 2006 and 2007) [2]. The Middle Atlas is an important tourist area, because of the resources it has (natural scenes, water resources, cultural diversity, and traditional rural housing ...), which make it as a destination for tourism that has become a rival to beach tourism, so that these potentials constituted an incentive to attract tourism investments, especially the reception structures, which are considered as the most important element of the tourism development and the basis for valuing its local resources on it (Hamdouni *et al.*, 2014) [3]. In this context, the Moroccan government started to transform its forest spaces into national reserves since the thirties of the last 20th century with several initiatives taken by different institutions and administrations, including the Water Forests Administration, the Institutes and the Moroccan Association of Natural Sciences), which expressed their dissatisfaction from the overexploitation and deterioration which are subjected to the natural resources. There was an enormous effort resulting from deep awareness of the seriousness of the damage of the natural heritage. The environmental forest belts of the Middle Atlas, especially the cedar trees which are represented a rich natural and biological heritage and also economic and cultural, specifically because the cedar trees are symbols of “Mediterraneanism”. The cedar trees are endangered by human machine and they are facing a hazardous destruction as the case in Lebanon. From this standpoint, the objective of the creation of Ifrane National Park is the protection of the mountain area of the Middle Atlas and the enforcement of the socio-economic benefits for the local population and its development. The National Park constitutes a natural space, with an ecological value in its contents of fauna and flora (plants, birds, animals, fish, insects and other different living creature). It also has an aesthetic value and a scientific and cultural contribution that can be exploited in the tourism business.

The creation of parks is a powerful means to protect the

natural environment, the biodiversity and to preserve cultural heritage as it is stated by the Dahir of 11th November 1934, which is the legal framework of creating the Parks and managing them one of the most important goals of creating parks as stipulated by the Dahir in its first chapter is to highlight the tourism value of the region or the natural area intended to be protected in its current condition. In this context, among the main objectives that the project of developing the forest areas of the province of Ifrane tries to fulfill is Ifrane Natural Park. It is essentially based on the protection of the ecological equilibrium of the area and the contribution to the ecological tourism development. This Park’s surface is estimated to be 53.768 hectares distributed over 8 communities (Table 1).

**Table 1:** The surface distribution of Ifrane National Park over the communities

Community	Hectares approximate surface	Percentage %
Dayat Aoua	12220	23%
Tizguit	3259	6%
Ifrane	989	2%
Ben Smim	10882	20%
Tikrikra	8845	16%
Timahdite	2153	4%
Sidi El Makhfi	5819	11%
Ain Leuh	9601	18%
Total	53768 hectares	100%

*Source:* Data provided by the province of Ifrane, 2018.

There are many objectives for which Ifrane National Park was created, and this was established by the provincial park management plan, which was prepared by the Department of Water and Forests. The launching of its creation was issued in the official press and the research note on June 2002 and published on October 11th, 2004. It covers eight rural communities with global sought objectives that encompass all the economic and environmental aspects of the project, including:

- The protection of the biodiversity and the sustainable management of the ecosystems within the Park.
- The sustainable management of the natural resources.
- The environmental education and sensitization through means of communication and information (Figure 2 and 3).
- The enhancement of the cultural and ecological heritage through ecotourism.



*Source:* Administration of Ifrane National Park in Azrou, 2018.

**Fig 2:** The role of environmental education in preserving the local heritage



Source: Authors, 2018.

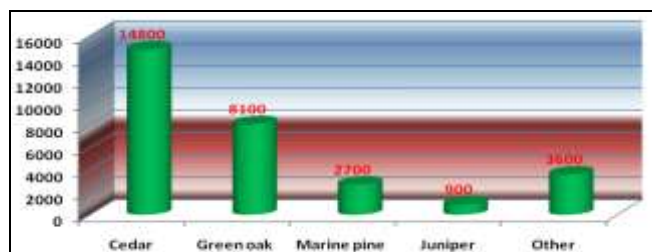
Fig 3: The role of sensitization of different generations of the need to protect the environment and the local legacy

**4. Results and Discussion**

The province of Ifrane reigns in a cold and humid climate (Troin *et al.*, 2006) [6], and the space scene is characterized by its penetration of the karst manifestations resulting from the disintegration of carbonate environments due to the movement of water caused by the melting of snow. These manifestations, which are embodied in small and large forms such as caves, have also given space to the emergence of some seasonal lakes known locally as Aguelmam (Lake) (Chahou, 2011) [1]. The project of Ifrane National Park is a protected natural milieu which contributes to attract a great number of Moroccan and foreign tourists and nature lovers. It has a positive impact socially, economically and culturally. In addition to these three dimensions, there is another aspect that has recently become important by officials in preserving the resources and its role in achieving an environmental balance. The park is composed of forested formations that mainly include cedar trees, which represent 14800 hectares. It should be noted that the forest constitutes 56% of the total surface of the park (30000 hectares). This surface involves Azrou Sidi Mgueild forest, Jebel Aoua forest as well as Lala Mimouna forest and Jaaba forest. The park is characterized by natural, cultural and tourist potentials to affront these challenges and achieve its intended, due to its specific geographical location, as well as its availability of important natural and cultural potentialities as it embraces plants and forest formations that have a great importance such as cedar trees, green oak trees, beech, pine, etc (Figure 4). The park also contains the largest forest length on the national level, and the oldest existing cedar tree which is called "Gouraud cedar," which is one of the oldest cedar trees in the world. Thus, this park is considered as an important touristic location.

surface of the park with 8100 hectares. As for the marine pine, it represents 9 % of a surface that covers 2700 hectares. Finally, we find juniper with only 3% and a surface of 900 hectares, while the other types represent 12% with a surface that covers 3600 hectares. Clearly, the cedar tree is considered as an important and rare species, and it is considered one of the most attractive and tree species compared to the rest of the forest species that spread in Morocco, due to many considerations related to its aesthetic and the quality of its wood, which provides multiple uses in terms of economic and social aspects, as well as its great importance for the environment. All of this led to the consideration of cedar forests as a natural heritage and has been classified as a national heritage since 1947<sup>2</sup>.

Further, the Green oak is considered one of the important varieties in the area as it is characterized by an average tall ranging between 15 and 20 meters, and it is available on a smooth bark in its youth, but it cracks at adulthood, its leaves are permanently green, lasting between two to three years, and the flowering begins when the tree reaches 12 years, occurring during the months of April and May. Clearly, the Green oak is considered one of the perennial trees that may live for nearly 300 years (Chahou, *Op.cit.*,) [1]. Besides this huge forest wealth, the National Park of Ifrane embraces an important biological diversity as it contains different species more than 127 species of birds are concentrated in its forest, 5 types of them have an international importance such as the "Royal kitten" and the marbled duck (Figure 5). In addition to this, there are different insects, which most of them are rare namely the butterflies (Figure 6).



Source: Provincial Directorate for Water and Forests in Azrou, 2018.

Fig 4: Varieties of forest species in the National Park of Ifrane

This graph shows that the forest types in Ifrane National Park are various. The pure and mixed cedar constitutes the highest percentage with 49% that is to say 14800 hectares while the green oak represents 27% of the total forested



Source: Administration of Ifrane National Park in Azrou, 2018.

Fig 5: Birds living in the reserves of the area



Source: Administration of the National Park of Ifrane in Azrou, 2018

Fig 6: Different rare insects.

<sup>2</sup> Data provided by the Administration of the National Park of Ifrane, Azrou, 2019.



Most important of that, the National park of Ifrane offers a variety of habitats rich in animal species, some of them will likely to become extinct in the near future because of the various reasons (Figure 7).



Source: Administration of Ifrane National Park in Azrou, 2018

Fig 7: Some endangered species.

Likewise, the presence of humid areas which are considered as a refuge for many specific birds, such as “the Shelduck and the fulica cristata. As for the reptiles and the amphibians, there are 33 kinds (Figure 8) in addition to 37 types of mammals mainly the Barbary macaque (also known as Barbary ape or magot). These species are globally rare and are endangered.

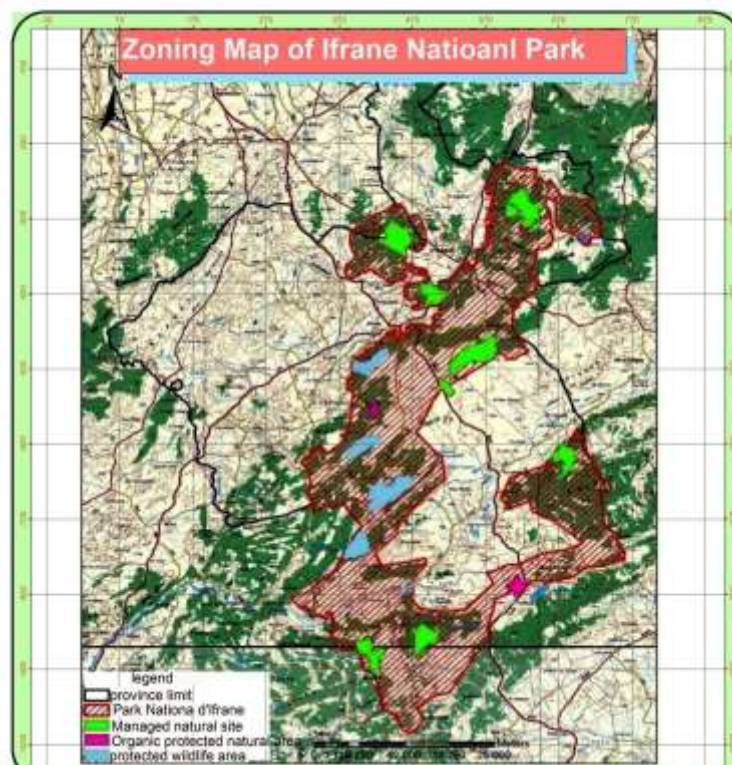


Source: Administration of Ifrane National Park in Azrou, 2018

Fig 8: Some reptiles and amphibians spread in the region.

In order to achieve the purposes of the creation of Ifrane National Park, the latter was divided into 3 areas under different systems, they are:

- The first region (Natural biological protected areas).
- The second region (Natural area reserved for the beasts).
- The third region (Management protected sites) as the following map (Figure 9), display them:



Source: Administration of the National Park of Ifrane in Azrou, modified and completed by A. Laghmam, 2019.

Fig 9: Zoning Map of Ifrane National Park

In addition to its natural potentials and its various cultural riches, the National Park of Ifrane is provides an appropriate framework for practicing the following activities:

- Expeditions – trips and hiking a footer animals or bikes.
- Skiing in Hibri, Habri and Michlifen stations.
- Activities to explore the cultural and artistic heritage of

the region.

- Organized hunting and fishing.
- Activities to discover animal species occurring in the Park especially the Barbary macaque.

The tourism constitutes the ideal sector of these spaces,

especially the space of Ifrane which offers the potentialities that allow the development of different tourism activities (Chetou, 2006 and 2007, *Op.cit.*) [2]. This great variety of tourist potentials of Ifrane National Park, allows to attract huge numbers of tourists as the park has an important tourist activity, but it is still low compared to other parks such as Toubkal park in the High Atlas, the demand is mostly national particularly from nearby cities like Fes, Meknès or even Rabat and Casablanca as for foreign tourists, their number is very low. Ifrane National Park plays an important role as a huge reservoir providing rivers (Sebou river, Oum Errabiâ river, Melouya river) with water it also shelters several famous sources, valleys and waterfalls... In addition to several lakes such as Ifrane lake, Afnourir lake, Aoua lake, they are sites of great importance that attract thousands of tourists and contribute to the ecological, tourism development in the park. Water bodies existing in the park contribute to the creation of fish breeding stations such as Rass El Maa, Amghass, Ain Aghbal source, Oum Errabia sources. This constitutes one of the best ways to enhance the activities of fishing as a hobby practised by a lot of tourists. The park is also characterized by the presence of a very rich and varied cultural and historical heritage as there are a lot of Amazigh tribes living in and around the park. They are semi-nomadic, who put up tents as a residence for their stability, characterized by various customs and traditions, which mainly contribute to enrich the tourism product of the park (Table 2).

**Table 2:** Distribution of the main cultural tourist sites in the National Park of Ifrane

Name of site	Its nature	Community
Ifri Waska	Cave	Timahdite
Ifri Ouabrid	Cave	Ain Leuh
Aoua lake	Lake	Dayat Aoua
Hachlaf lake	Lake	Dayat Aoua
Ifrane lake	Lake	Outside the Park
Taoujdat valley	Valley	Tizguit
Valley of Tizguit	Valley	Tizguit
Tidrin Afkfak	Terrain site	Tizguit
Valley of Hachlaf	Natural reserve	Dayat Aoua
Ras El Maa valley	Reserve	Azrou district
Sidi Mimoun valley	Reserve	Dayat Aoua
Zerrouk valley	Reserve	Tizguit

Source: Administration of Ifrane National Park in Azrou, 2018.

However, there are still a lot of hindrances that hamper the ecological tourism development in the park while ecotourism development in the middle High Atlas has made gigantic steps and goes through important dynamism, the development of eco-tourism in Ifrane National Park needs important projects that also take into consideration the development of the area and make the practice of eco-tourism activities an achievable objective. It has become urgent for the responsables of the tourism sector including local authorities, government, elected citizens, individuals and local population to pave the way in order to realize the outlined objectives and to discard all the obstacles that hinder the sustainable development of the area. It remains that the challenge is to establish communication among all the actors so as to organize awareness raising campaigns about the importance of the protection and promotion of the national park as a national patrimony. It is imperative to

hold educational trips through the park for local inhabitants and visitors to sensitize them of the important role that the park plays in the protection of the fauna and the flora and to get informed about the animals living in the park such as the berber camel, the jackal, the mongoose, the hedgehog, the sheep...); the park also contains shelters to provide protection and security for the visitors.

It should be noted that the project of establishing and preserving the forest areas of the park is a pioneering project that can be realized in other forest surfaces this project was financed with 214 million dirham's with the contributions of several sectors: French Agency for development, high delegate for water and forests, local communities, however, the exploit of the park in the tourism sector requires taking several measures of protection and action to avoid any negative impact on the natural environment, some of these measures can be:

- Limit the number of the visitors to the park.
- Make roads and itineraries to be respected by the visitors.
- Allow visitors to enter the park under the conditions of respecting the natural milieu; they should not harm the fauna as well as the flora of the protected areas.

Additionally, the authorities of the park took a long time to establish the borders of the park and to set up the objectives in a geographical space that should be coherent and functional. This operation requires the protection of certain biological and natural balances existing within the park such as flexibility in the management of the park due to the huge number of the space exploiters and users. Also, the obligation to prepare a forest space that plays the social entertainment role and creates natural sites that can be worldwide famous. Besides, the fair of the National Park of Ifrane exhibits several local products and artcrafts. These are various and natural. Most of them are made by brilliant professional artcraftsmen. Here are some pictures of products exposed for sale in the fair (Figure 10), in addition to the exploited space as well as the forest resources so as to avoid separation from pastoral areas and to create tourism activities, and not to separate the unexploited areas by the inhabitants to bypass severe disputes over the borders that are exploited collectively, and to preserve the prominent biological elements.

Thus, if the starting point of the natural park is based primarily on the ecological dimension, then the tourist reception space is intended to enhance the human and the natural potentials and highlight them as a product that favours the development of the rural tourism offered in the area in specific and the province in general, and the improvement of the rural inhabitants living conditions by benefiting from the revenues of the tourism sector which has become an effective tool for planning the local spaces, due to its economic, social, cultural and environmental dimensions (Imran, 2004) [5]. Then, ecotourism is one of the tourism products that are strengthening and developing within the framework of the two integrated plans: the program of the Tourist Host Country of Ifrane (PATI) aimed at developing the rural tourism and the program of the National Park of Ifrane (NPI) (Hamdouni *et al.*, 2014, *Op.cit.*) [3].



Source: Authors, 2018

Fig 10: The Ifrane National Park exhibition.

## 5. Conclusion

The National Park of Ifrane encompasses a whole ecosystem and huge potentials that can contribute to the development of eco-tourism and the region in general. It can also help to make of the area an important economic and social pole. The biodiversity is very important for both the fauna and the flora in addition to the humid areas that makes the area breathtaking and relaxing in a way that should encourage the authorities to exploit this aspect in ecotourism if they compound it with compatible infrastructures. The positive natural elements such as weather conditions (snow) as well as the geographical diversity (mountains, valley, rivers) can be exploited in creating mountain itineraries and routes in addition to the current pastoral culture based on nomadic life with the associated customs and traditions that enrich the eco-tourism landscape. Further, the ecotourism has become an investable alternative to the government policy whether social or economical aiming at reducing disparities in the development between the traditional spaces of development literature, namely the rich urban environment and the poor rural environment. Thus, ecotourism is a reliable development locomotive in the rural areas, with rich and varied cultural and natural resources.

## 6. Acknowledgments

The authors are very grateful to all local actors who accepted to participate in this study. Their willingness to give their time so generously has been very much appreciated.

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