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### **Stakeholders' perceptions over ecotourism development in natural protected areas: the case of the National Park of Kotychi-Strofylia wetlands in Western Greece**

Master Thesis

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## Table of Contents

Title Page.....	
Acknowledgments.....	iv
Table of Contents.....	v
Abstract in Greek.....	vii
Abstract in English .....	ix
List of Figures.....	xi
List of Tables.....	xii
List of Abbreviations.....	xiii
1. INTRODUCTION .....	1
1.1. Background .....	1
1.2. Problem statement.....	2
1.3. Objectives and research questions .....	4
1.4. Research study area.....	6
2. NATURAL PROTECTED AREAS .....	7
2.1. Definition and historical background.....	7
2.2. Natural protected areas in greece .....	8
2.3. Protected areas management .....	11
2.4. Management of protected areas in greece .....	13
3. ECOTOURISM .....	16
3.1. Definitions and historical background .....	16
3.2. Ecotourism and sustainable development .....	18
3.3. Ecotourism development in Greece.....	20
4. METHODOLOGY .....	22
4.1. Research design.....	22
4.2. Research case approach.....	22
4.3 The case study description .....	23
4.3.1. Introduction to the research area .....	23

4.3.2. Ownership status .....	25
4.3.3. Legal status .....	26
4.3.4. Position in an ecological unit.....	27
4.3.5. Human population.....	29
4.3.6. Accessibility of the wetland area.....	29
4.3.7. Ecological changes .....	30
4.3.8. Monitoring procedures .....	31
4.3.9. Human activities and threats .....	32
4.3.10. Tourism development .....	34
4.3.11. Management plan and effectiveness of management .....	36
4.3.12. Wardening .....	38
4.4 Surveys, reports and papers on perceptions over PAs.....	38
4.5. Data collection.....	45
4.6 Presentation of questionnaire findings.....	48
<b>5. RESULTS AND FINDINGS .....</b>	<b>57</b>
5.1. Current state of the PA as an ecotourism destination .....	57
5.2. Prospects of ecotourism development of the PA .....	58
5.3. Potential benefits and adverse consequences of ecotourism development	60
5.4. Management framework of the PA: cooperation amongst stakeholders and local community involvement .....	61
5.5. Promotion strategy planning of the PA over ecotourism development .....	64
5.6. Factors hindering the ecotourism development of the PA .....	65
<b>6. DISCUSSION AND CONCLUSIONS .....</b>	<b>67</b>
6.1. Conclusions .....	67
6.2. Limitations of the study .....	69
6.3. Future research .....	70
<b>References.....</b>	
<b>Appendix.....</b>	

## Abstract in Greek

Η βιώσιμη ανάπτυξη αποτελεί βασικό εργαλείο για την διαχείριση ευαίσθητων περιοχών με μεγάλο φυσικό πλούτο. Ο οικότουρισμός έχει προωθηθεί ως η πλέον βιώσιμη πρακτική για την ανάπτυξη του τουρισμού σε προστατευόμενες περιοχές, καθότι συμβάλει στη διατήρηση του περιβάλλοντος και την υποστήριξη των τοπικών οικονομιών. Παρόλο που ο οικότουρισμός έχει αναγνωριστεί ως ένας σημαντικός σύμμαχος για την καταπολέμηση τόσο της φτώχειας, όσο και της υποβάθμισης του περιβάλλοντος και έχει αναπτυχθεί ευρέως σε πολλές παγκόσμιες περιοχές όπως η Νότια Αφρική, η Αυστραλία και η Λατινική Αμερική, στην Ελλάδα η εξέλιξη του ήταν πολύ αργή. Το Εθνικό Πάρκο Υγροτόπων Κοτυχίου - Στροφυλιάς στη Δυτική Ελλάδα που προστατεύεται από το ευρωπαϊκό οικολογικό δίκτυο Natura 2000 και την Συνθήκη Ramsar, επιλέχθηκε για την έρευνα αυτή τόσο για τον χαρακτηρισμό του ως περιοχή υψηλής βιοποικιλότητας, όσο και για την καταλληλότητά του για την προώθηση εναλλακτικών μορφών τουρισμού. Αν και αποτελεί έναν τόπο απaráμιλλης ομορφιάς με πολύ καλή γεωγραφική θέση, δεν έχει αναπτυχθεί ως οικότουριστικός προορισμός όλα αυτά τα χρόνια. Οι αντιλήψεις των ενδιαφερομένων φορέων σε θέματα ανάπτυξης και διαχείρισης του οικότουρισμού, διερευνήθηκαν 17 χρόνια μετά την ίδρυση του Φορέα Διαχείρισης του Εθνικού Υγροτόπων Κοτυχίου – Στροφυλιάς. Σκοπός αυτής της εργασίας είναι η διερεύνηση των λόγων πίσω από την ανεπαρκή αξιοποίηση των προστατευόμενων περιοχών για οικότουρισμό στην Ελλάδα, όπως εκφράστηκαν από όλους τους εμπλεκόμενους κρατικούς και μη κρατικούς τοπικούς φορείς. Η έρευνα αποκάλυψε χαμηλό επίπεδο επικοινωνίας και συνεργασίας μεταξύ των ενδιαφερομένων φορέων σε θέματα διαχείρισης, έλλειψη συμμετοχής του κοινού και έλλειψη ολοκληρωμένου σχεδιασμού προώθησης για την οικότουριστική ανάπτυξη της περιοχής. Τα αποτελέσματα καταδεικνύουν ότι η διατήρηση του πλαισίου προστασίας αποτελεί τον κύριο σκοπό εξ ιδρύσεως του πάρκου και η ανάπτυξη του οικότουρισμού δεν έχει ακόμη συμπεριληφθεί ως προτεραιότητα στην ατζέντα διαχείρισης του. Ωστόσο, αναφέρθηκε από πλευράς των ενδιαφερομένων φορέων ένα σημαντικό επίπεδο αποδοχής του οικότουρισμού ως μία πρακτική βιώσιμης

τουριστικής ανάπτυξης κατάλληλη για την προστατευόμενη περιοχή, καθώς και η επιθυμία για την καθιέρωση στενότερης και συχνότερης συνεργασίας μεταξύ όλων των φορέων διαχείρισης και της τοπικής κοινωνίας για την αποτελεσματική προώθηση του Πάρκου ως προορισμό οικότουρισμού.

**Λέξεις κλειδιά:** Βιώσιμη Ανάπτυξη, Εθνικό Πάρκο Υγροτόπων Κοτυχίου – Στροφυλιάς, Οικότουρισμός, Φυσικές Προστατευόμενες Περιοχές.



## **Abstract in English**

Sustainable development is a key tool for the management of fragile areas of natural wealth. Ecotourism has been promoted as the most sustainable practice for tourism in protecting areas for its substantial contribution to environmental conservation and support of the local economies. Although ecotourism has been recognized as an important ally fighting both against poverty and environmental degradation and has been widely developed on many global regions like Southern Africa, Australia and Latin America, in Greece the evolution of ecotourism practices has been very slow-paced. The National Park of Kotychi-Strofylia Wetlands in Western Greece is an important site belonging to the European ecological network Natura 2000, and the Ramsar convention, which was selected for this research both for its characterization as a site of high biodiversity and its suitability for the promotion of alternative forms of tourism. Although it is a site of explicit beauty and very well-positioned geographically, it has not been developed as an ecotourism destination over the years. Stakeholders' perceptions over ecotourism development and management issues were investigated 17 years after the establishment of the Management Body of the National Park of Kotychi-Strofylia Wetlands. The purpose of this thesis is to investigate the causes behind the deficient appropriation of protected areas for ecotourism purposes in Greece as expressed by all involved state and non-state local stakeholders. The survey revealed low level of communication and collaboration amongst stakeholders on management issues, absence of public participation and lack of an integrated promotion planning for the ecotourism development of the area. Results indicate that the retention of an adequate protection and conservation status was the main purpose since the establishment of the Park and ecotourism development has not yet been included as a priority in the management agenda. However, a significant level of readiness on the side of all stakeholders to accept ecotourism as a sustainable tourist development ideal for the protected area was reported, as well as their will to establish a more coherent and regular collaboration with all managing bodies and the local population for the effective promotion of the Park as an ecotourism destination.

**Key Words:** Ecotourism, National Park of Kotychi-Strofylia wetlands, Natural Protected Areas, Sustainable Development.

## List of Figures

<b>Figure 1.</b> <i>A map of the Natura 2000 sites in Greece.....</i>	<b>9</b>
<b>Figure 2.</b> <i>The National Park of Kotychi-Strofylia wetlands.....</i>	<b>24</b>
<b>Figure 3.</b> <i>The National Park of Kotychi-Strofylia wetland featured by the dark grey line. The light and discontinuous grey lines illustrate the Sites of Community Importance (SCIs) and the Special Protection Areas (SPAs).....</i>	<b>26</b>
<b>Figure 4.</b> <i>Phoenicopiterus-roseus in lake Prokopos.....</i>	<b>28</b>
<b>Figure 5.</b> <i>Comparable imaging of the alteration on the forest extent between 1945 and 2004.....</i>	<b>33</b>
<b>Figure 6.</b> <i>Kounoupelaki beach.....</i>	<b>35</b>
<b>Figure 7.</b> <i>Sunset in lake Prokopos.....</i>	<b>36</b>

## List of Tables

**Table 1.** List of Ramsar sites in Greece.....11

**Table 2.** Research participants and number of interviews.....47

## Abbreviations

AB	Administration Board
EC	European Commission
GNTO	Greek National Tourism Organization
JMD	Joint Ministerial Decision
MA	Management Agency
MBKSW	Managing Body of Kotyhi Strofylia Wetlands
MEPPW	The Ministry for the Environment, Physical Planning and Public Works
NGO	Non-governmental organization
OIKIPA	Ecological Movement of Patras
PA	Protected Area
PNA	Natural Protected Area
SAC	Special Area of Conservation
SCI	Site of Community Importance
SES	Specific Environmental Studies
SPA	Special Protection Area
UNWTO	United Nations World Tourism Organization
WTP	Willingness to pay
WTTC	World Travel and Tourism Council
WWF	World Wide Fund for Nature

## **1. Introduction**

### **1.1. Background**

For most of the first part of the 21st century Greece had to deal with one of the most severe financial crisis in its history, which led to a large-scale unemployment, loss of income and property and consequently to a humanitarian crisis. However, during this gloomy period for the country's economy and overall prosperity and despite the continuity of the economic crisis and debt issues for almost 10 consecutive years, Greece has been experiencing a tremendous tourism boom. According to the World Travel and Tourism Council (WTTC, 2019), by 2018 the Greek travel and tourism sector had grown over three and half times the pace of its wider national economy, contributing almost at 20% of total GDP. Taking into consideration that currently almost one quarter of all employment in Greece is based in travel and tourism and the extraordinary growth in tourist arrivals over the last ten years is likely to continue in the years to come, it is commonly stated that Greece's travel and tourism sector is the main driver of its economy and a major contributor to Greek economic recovery.

However, although the growth of the tourism industry in Greece during the years of the economic recession has been undoubtedly impressive, this development is characterized by its unequal geographical and temporal distribution, leading to the concentration of tourists and investors on the already well-known mainstream destinations in relatively short periods of the whole year. This unsustainable development pattern has contributed to the touristification of many of the traditional Greek tourist destinations on the one hand and the abandonment of regions that are not included in the tourist map of the country into the whirlpool of the ongoing financial crisis on the other hand. This "two tier" economy seems to be the price Greece is paying for its uneven and uncontrolled tourism activity, where only certain geographical areas benefit from the tourism profitability, while others face a very uncertain future of extended recession and unemployment and at the same time present progress is at the expense of future generations.

While there is an urgent need of redefining the management of tourism development on terms of sustainability, both for destinations that are the most at risk of overtourism and destinations that have not yet experienced the beneficial impacts of tourism imprint, this presentation will be focused on ecotourism and in particular, tourism in parks and protected areas. Although almost one third of Greece is included in the European Network of Natura 2000 sites, ecotourism in Greece has not been widely developed as a practice for the management of protected areas. Accepting that ecotourism can contribute significantly to the sustainable tourism development in the country, there is an urgent request to be included in its economic development and conservation strategies. The emergence of new destinations on the tourist map of Greece, as well as the extension of the tourism demand throughout the year are essential for the alleviation of the local communities, which suffer from the negative impacts of mass overtourism and the economic rebound of the regions, which strive to deal with persistent unemployment and social seclusion. The reallocation of the tourism revenue amongst all geographic regions in Greece constitutes a key factor in the sustainable development of the country.

## **1.2. Problem statement**

Greece is a country with rich natural resources, which can generate various and diversified touristic activities ranging from the traditional ones to the alternative ones. The geomorphology of Greece has great diversity, including 446 sites under the Natura 2000 network, covering almost one third of the country's land area and about 20% of the marine area (EKBY, 2019). However, beliefs over the value, the utility and the management of the protected areas are usually conflicting. The academic community has acknowledged two approaches concerning the protected areas, one focused on the natural conservation and another one focused on its appropriation for tourism activities (Becken & Job, 2014). Gradually over the years and while there is a dramatic growth in the number of PAs all over the world, a multi-dimensional approach has prevailed towards the definition of the PNAs as

places to be preserved for both their long-term conservation of their biodiversity and the socio-economic benefits coming from their appropriation (Rode, Wittmer, Emerton, & Schroter-Schlaack, 2016). Although ecotourism has been recognized as an important ally fighting both against poverty and environmental degradation (United Nations World Tourism Organization, 2013) and has been widely developed on many global regions like Southern Africa, Australia and Latin America, in Greece the evolution of ecotourism practices has been very slow-paced. Despite the dazzling figures revealing that the 27,2% of the terrestrial part of Greece and the 6,12% of territorial waters belong to the Natura 2000 network (Ministry of Environment & Energy, 2019) indicating a very strong and promising potential for ecotourism development, most of these areas have been overlooked and unexploited.

The disuse of the PNAs is a major threat for the preservation of their biodiversity and a significant loss of income for the people living nearby. Taking also into consideration that ecotourism activities in PNAs could develop throughout the year, whereas mass tourism is crammed into the summer season, we can identify the importance of ecotourism on the sustainable development of the country. The absence of a national tourism strategy orientated to the evolution of alternative forms of tourism, which are focused to the cultural and natural conservation and the local communities' participation, will lead to the saturation of the mainstream destinations and the gradual decline of the tourist arrivals.

Ecotourism together with agritourism are undeniably important types of alternative tourism that could be developed in Greece, since they fit with the wide spectrum of natural beauty and the vast rural areas of the country. However, although agritourism and its derivatives such as gastro-tourism and wine tourism are a growing trend in Greece the latest years, ecotourism in PNAs has not been widely promoted as the most suitable practice for tourism in protected areas. Research studies on some of the most developed PNAs have shown that there are several constraints on the development of ecotourism (Frantzi, 2004; Jones et al., 2011; Trakolis, 2001). The absence of a coordinated national strategy for the management of the (PNAs) along with the multitude of different involved stakeholders and the lack of their collaboration have been recognized as the main sources of the



inadequate ecotourism development in Greece. The conflicting benefits and perceptions of each stakeholder towards the (PNA) and its potential appropriation (Dologlou & Katsoni, 2016) has led to a policy of inertia for many protected areas.

### **1.3. Objectives and Research questions**

The purpose of this thesis is to delve into the causes behind the deficient appropriation of PNAs for ecotourism purposes in Greece. Reaching the causes of this underfunction can be very challenging and can be pursued on various ways. The most widespread approach from researchers has been deciphering local communities' attitudes towards the ecotourism development on PNAs. Measuring environmental awareness and local community participation on management issues of the PNAs has been a useful tool for estimating probable causes for the slow-paced ecotourism development. Indeed, there is availability on many researches focusing on local community attitudes, especially for some of the most developed on terms of ecotourism areas in Greece, such as the Dadia National Park, the Kerkini Wetland and the Prespes Lakes National Park (Trakolis, 2001), (Frantzi, 2004), (Andrea, Tampakis, Tsantopoulos, & Manolas, 2014).

However, considering that Greece includes almost 446 sites under the Natura 2000 convention (EKBY, 2019) and 10 sites designated as Wetlands of International Importance (Ramsar, 2014), one can understand that there is a vast field for conducting studies on PNAs. It is also clearly stated from the existing literature, that the different geographical features of a PNA, along with the distinctive characteristics of the local communities, call for further research studies, even if the policies applied are the same (Jones, et al., 2018). Taking also into account that management policies of the PNAs) in Greece are under the authority of the different stakeholders (including state actors, local authorities and NGOs), excluding local participation (Vokou, et al., 2014), the need for addressing to the representatives of the various stakeholders for conducting research over ecotourism development on PNAs is substantial.

Acknowledging the deficit of studies concerning the stakeholders' attitudes toward ecotourism development in PNAs, this thesis will attempt to reach out to the most indicative representatives of the stakeholders responsible for the management, promotion and decision-making of a PNA. The PNA selected for this research is the National Park of Kotychi-Strofylia wetlands in Western Greece, which is an important site belonging to the European ecological network Natura 2000, and the Ramsar convention. Criteria for this selection except for its characterization as a site of high biodiversity (Georgiadis, Economidou, & Christodoulakis, 1990), are the gap on research studies on the area concerning managements strategies of the (PNA) and tourism development opportunities. Although it is a site of explicit beauty and very well-positioned geographically, it has not developed as an ecotourism destination over the years. Very few researches are available the latest years mainly concerning environmental damages estimations (Dimopoulos, Kokkoris, & Panitsa, 2017) and natural resources management (Ganatsas, Tsakalimi, & Katsaros, 2013) for the National Park of Kotychi-Strofylia wetlands.

Attempting to detect the challenges and opportunities from the potential development of ecotourism in the National Park of Kotychi-Strofylia wetlands, we have conducted a primary quantitative research by addressing the main representatives of stakeholders involved in the management of the PNA. Our research instrument was personal interviews consisting of open-ended questions to allow free responsiveness, since our aim is to furtherly understand possible connection of the deficient ecotourism development of this specific site with the perceptions of the involved stakeholders over ecotourism rather than generalize to the whole of the (PNAs) in Greece. Our research questions consisted of three main axes including the following subject areas as follows: (i) current situation of the National Park of Kotychi-Strofylia wetlands (ii) the ecotourism development challenges and opportunities (iii) collaboration between stakeholders and their participation in promotion strategies. Due to the limited sample of participants, secondary research deriving from literature review based on books, academic papers and official website articles has also been conducted for the better presentation of

the case study research area and the results on perceptions towards PAs and ecotourism from past researches.

Prior to our survey a thorough approach to definitions of ecotourism and its nexus with sustainable development on (PNAs), as well as reviews of practices of ecotourism development in other parts of Greece and throughout the world will be presented according to the existing available academic research studies and relevant bibliography to further comprehend the various approaches prevailing over the complicated management policies of protected areas.

#### **1.4. Research Study area**

The National Park of Kotychi-Strofylia wetlands is situated in the region of Western Greece and belongs administratively to Achaea and Ilia prefecture. It is an important site belonging to the European ecological network Natura 2000, and the only wetland of International Significance under the Ramsar Convention in the Peloponnese geographical district. Its huge diversity of its wetlands and terrestrial ecosystems has created a unique environment for the accommodation of many rare bird species, including priority species *Caretta caretta* (The National Park of Kotychi-Strofylia wetlands). The area was declared as National Park in 2009, with the Joint Ministerial Decision 12,365, Official Journal of the Hellenic Republic D'159/29.4.09 (Ganatsas, Tsakalimi, & Katsaros, 2013). Most of the region's population is employed in agriculture and fishing and the wide and sandy coastline of 21km constitutes a major attraction for summer tourists (Katsaros, 2008). The main threats identified from human intervention are waste disposal, vehicular traffic and illegal hunting (The National Park of Kotychi-Strofylia wetlands, "Threats"). Except for the Management Agency of the National Park, which has the authority of the management of Park, there is also a large number of stakeholders involved including public authorities, five local Forest Districts, two Regions, two Prefectures, three municipalities, one Fire brigade, two army stations, the local police station and two fishing services (Ganatsas, Tsakalimi, & Katsaros, 2013).

## **2. Natural Protected Areas**

### **2.1. Definition and Historical Background**

The need for protection of the cultural and natural heritage and the conservation of the biodiversity of the natural environment has led to the establishment of areas with status of special protection defined as Natural Protected Areas. More specifically according to the International Union for Conservation of Nature (IUCN, 2019) 'protected area is an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

Yosemite National Park in California although officially designated in 1890, it was the first land in America to be protected in 1864, when President Abraham Lincoln signed an act of Congress transferring ownership of Yosemite Valley to the state of California with the stipulation that it "be held for public use, resort, and recreation...inalienable for all time." (Kroner, Krithivasan, & Mascia, 2016). However, the first officially National park of the world was declared on 1872 in the state of Wyoming in USA. The United States Congress established Yellowstone National Park in 1872, when President Ulysses S. Grant signed the Yellowstone National Park Protection Act into law (Eagles, 2002). Ever since, there was a growth in the number on National Parks all over the world and especially in Australia, Canada, South Africa and South America. The first management body of protected areas was established in Canada with the name "Dominion Park" in 1911 (Parks Canada), followed by the National Park Service (NPS) in 1916, the first management authority of USA for protecting all national parks and monuments and those yet to be established (National Park Service, 2018). As the demands of the protected areas had grown, there was an urgent need for the founding of a world organization for the protection of nature. Indeed, the International Union for Conservation of Nature (IUCN) was established in 1948 (IUCN, 2019) as the first international organization aiming at nature conservation and sustainable use of natural resources.

The categories of PAs recognized by all international bodies in the world were introduced by the IUCN in 1994 as follows:

- Ia - Strict Nature Reserve
- Ib - Wilderness Area
- II - National Park
- III - Natural Monument or Feature
- IV - Habitat/Species Management Area
- V - Protected Landscape/Seascape
- VI - Protected Area with Sustainable Use of Natural Resources

By 2012 the area of terrestrial PAs had reached the 14.6% of the planet's surface and marine PAs the 9.7% (Becken & Job, 2014).

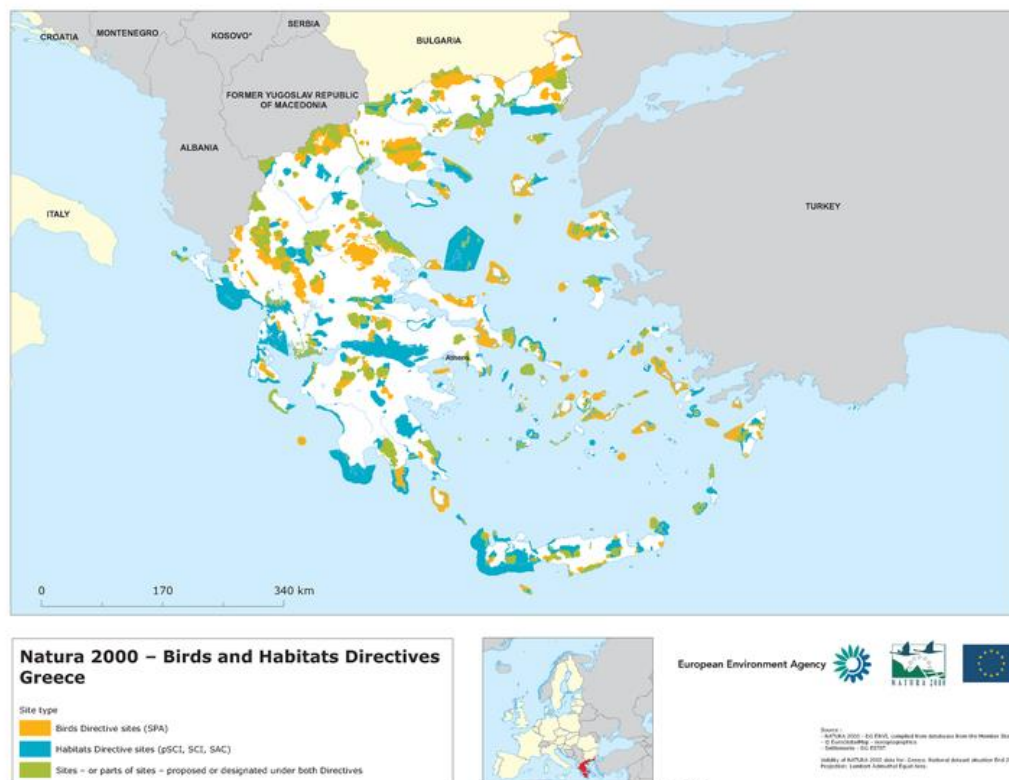
## **2.2. Natural Protected Areas in Greece**

In Greece there is a wealth of PNAs with high biodiversity value. Olympus and Parnassos National Parks were the first two national parks established in 1938 (law 856/1937), (Papageorgiou & Vogiatzakis, 2006). At the early stages of their proclamation, all human activities were prohibited. Nowadays there is great effort on achieving an integrated policy focusing not only on nature conservation but also on the sustainable use of natural resources.

The PNAs in Greece are categorized and classified according to existing national legislation, or through international conventions and international or European initiatives. The primary categories of PNAs according to national legislation were designated up to 1986 only under forest legislation, but today the categories have evolved as follows (EKBY, 2010):

- National Woodland Parks (Law No. 996/71)
- National Parks (Law No. 1650/86)
- Aesthetic Forests (Law No. 996/71)
- Natural Monuments and Landmarks (Law No. 996/71)
- Wildlife Refuges (Law No 177/75 as amended by Law No 2637/98)

- Controlled hunting Areas (Law No. 177/75, as amended by Law No. 2637/98)
- Game Breeding Stations (Law No. 177/75, as amended by Law No. 2637/98)
- Nature Reserve Areas (Law No. 1650/86)
- Absolute Nature Reserve Areas (Law No. 1650/86)
- Protected Forests
- Protected significant natural formations and landscapes (Law No. 1650/86)
- Ecodevelopment Areas (Law No. 1650/86)



**Figure 1.** A map of the Natura 2000 sites in Greece. (<https://www.eea.europa.eu/data-and-maps/figures/natura-2000-birds-and-habitat-directives-10/greece>)

The categorization of the PNAs according to international conventions has been applied as follows:

- Wetlands of international importance according to the Ramsar Convention
- World Heritage Sites (UNESCO)
- Biosphere Reserves (UNESCO, Man and Biosphere)
- Specially Protected Areas according to the Barcelona Convention
- Biogenetic Reserves (Council of Europe)
- Eurodiploma Sites (Council of Europe)

The need for the protection of the most threatened natural habitats animal and plant species led to the adoption of the Habitats Directive (Council Directive 92/43/EEC) on 21 May 1992 by the European Union (EC, 2019). The Habitats Directive together with the Birds Directive (Directive 79/409/EEC) adopted in 1979 for the protection of all bird species, constitute the main pillars of Europe's nature conservation policy.

The Natura 2000 network covering around 18.6 % of Europe's land and over 9.5 % of the surrounding seas, is the largest coordinated network of protected areas in the world founded upon the 1979 Birds Directive and the 1992 Habitats Directive (EC, 2019). Natura 2000 includes Special Areas of Conservation (SACs), and Special Protection Areas (SPAs), based on the Habitats Directive and the Birds Directive, respectively (EC, 2019).

The Natura 2000 network in Greece includes 446 areas among them 265 designated as Sites of Community Importance (SCIs) according to the EU Directive 92/43 and 207 as SPAs according to EU Directive 79/409 (EKBY, 2019). The total area of the Greek Natura 2000 network amounts to 4.294.205 ha and covers 27.2 % of the national territory and 6.1 % of its territorial waters (Ministry of Environment & Energy, 2019). This area corresponds to 4.5 % of the total area of the European Network. These areas include the National Parks, the Wetlands of International Importance under the Ramsar Convention, as well as other important areas such as Aesthetic Forests and Natural Monuments and Landmarks.

Greece also hosts ten wetland complexes covering an area of 163,501 hectares of high biological diversity protected by the Ramsar Convention (Ramsar, 1990). Some of the criteria under which these sites were designated as wetlands of international importance were their uniqueness, naturalness, representativity of number of species (Ramsar, 1996). The Ramsar convention was adopted in Iran in 1971 for the protection and the wide use of wetlands and their resources (Ramsar, 2014).

Site name	Designation date	Area
Evros Delta	21-08-1975	9,267 ha
Lakes Volvi & Koronia	21-08-1975	16,388 ha
Axios, Loudias, Aliakmon Delta	21-08-1975	11,808 ha
Nestos Delta and adjoining lagoons	21-08-1975	21,930 ha
Amvrakikos gulf	21-08-1975	23,649 ha
Messolonghi lagoons	21-08-1975	33,687 ha
Artificial lake Kerkini	21-08-1975	10,996 ha
Lake Mikri Prespa	21-08-1975	5,078 ha
Kotychi lagoons	21-08-1975	6,302 ha
Lake Vistonis, Porto Lagos, Lake Ismaris and adjoining lagoons	21-08-1975	24,396 ha

**Table 1.** List of Ramsar sites in Greece. ([https://rsis Ramsar.org/ris-search/?f\[0\]=regionCountry\\_en\\_ss%3AGreece&pagetab=1](https://rsis Ramsar.org/ris-search/?f[0]=regionCountry_en_ss%3AGreece&pagetab=1))

### 2.3. Protected Areas management

The dramatic growth of PAs all over the world along with their evolution from areas of high biodiversity to tourism destinations have changed the priorities over their management. While the main goal of their management still is the biodiversity conservation, many other have aroused from their development as major tourism sites. PAs nowadays are places serving multiple roles ranging from sites of recreation and nature conservation to guardians of ecological services and providers of living space for local people (Becken, 2014). The demands of PAs have changed calling for changes and adjustments to their management. When the PAs were serving only as places of protection of habitats and species, very little room was left for interests of other stakeholders (Fauchald & Gulbrandsen, 2012). This classical nature-protection management did not include commercial appropriation of the territory, thus regional development as well as local people participation was excluded.

It is clearly stated that the management of PAs is a complex procedure as conflicts between protection and society need to be balanced. These conflicts usually derive from the competing goals between different stakeholders and mostly



concern the distribution of resources of a PA. Local communities living close to PAs rely on natural resources for their livelihoods, thus protection status and certain restrictions affect them directly leading to negative attitudes towards the PAs. Contrariwise local people who are involved in conservation and tourism activities, benefiting from such a policy tend to obtain positive attitudes towards the PAs (Andrea, Tampakis, Tsantopoulos, & Arabatzis, 2014). There are many more internal factors affecting the management of PAs except for the local people consensus such as the financial resourcing and the competence and personal perceptions of the PA staff (Becken & Job, 2014).

However nowadays, there are also major external factors of global range which affect the PAs and call for immediate actions from all stakeholders involved in their management. The main global factors of change are the population growth, the changes in land use, the climate change and energy use (Becken & Job, 2014). According to survey concerning a World Protected Areas Database with 10 Global Climate Models and three different emission scenarios, climate change could severely threat more than half of the PAs globally (IPCC, 2019). Environmental pressures have led to the active involvement of environmental non-governmental organizations as well as representatives of the academic community into the management of the PAs.

Facing global pressures and conflicting management goals is a challenging process demanding for continual adaptations and changes in the governance of PAs. Indeed, over the last three decades there have been major changes on PAs management regarding the inclusion of stakeholders and local players (Apostolopoulou, Drakou, & Pediaditi, 2012). From 1980 several participatory approaches have been developed aiming at providing both sustainable livelihoods and better conservation including participation and involvement of many different stakeholders and local communities (Pediaditi, et al., 2011). The successful management of PAs though is not only the outcome of multiple participation but also of mutual trust and consensus on decision-making processes (Mccool, 2009). There are many forms of local participation varying from the manipulative participation where the participation is just nominal to interactive participation

where local people actively participate by formatting local institutions and self-mobilization participation where people are taking initiatives independently (Pretty, 1997). However, the measure of involvement depends on the different characteristics of the PA and the distinct demands for its management.

Concerning the Natura 2000 network there is direct report for local participation in the management of protected areas. The fact that there is no common strategy and specific directions towards this goal and each Member state is responsible for the policies implemented has led to many cases of deficient participation and unsuccessful implementation of the Natura 2000 network (Eben, 2006).

The outcome of all these social and environmental changes is a clear shift from the traditional management of PAs, where the government was the only actor entitled to decision-making to a more decentralized governance where multiple stakeholders are involved in the management of the PA (Eagles, et al., 2013). These community-based management frameworks have led to the opening of the PAs to a wider number of stakeholders, such as the private sector, local communities and NGOs for the purpose of the better biodiversity conservation and beneficial appropriation of the PAs through regional and national development (Klooster & Masera, 2000).

#### **2.4. Management of Protected Areas in Greece**

Greece has a very extensive network of PAs of high biodiversity value. The responsibility for the management of the PAs was initially assigned to the local forest services (Papageorgiou & Vogiatzakis, 2006). Although in 1986 major changes were applied to environmental policies among them the segregation of management duties for the PAs between The Ministry for the Environment, Physical Planning and Public Works (MEPPW) and the Ministry of Agriculture, still their implementation remained the responsibility of the local forest services that belonged to the Ministry of Agriculture. More specifically the main responsibilities of the MEPPW were the funding issues while for the Ministry of Agriculture the management issues (Andrea,

Tampakis, Tsantopoulos, & Arabatzis, 2014). Following this classification several independent agencies for the supervision of the PAs were introduced named as Special Administration Authorities for Forest Service. However still all responsibilities and management of the PAs were under the authority of the local forest services (Papageorgiou & Kassioumis, 2005).

The uneven and conflicting cooperation of the two Ministries together with the establishment of 371 Greek Natura sites including 163 Special Protection Areas and 239 Special Areas of Conservation (31 sites were both SPAs and SACs) with law 1650/86 in 1998 (Apostolopoulou & Pantis, 2009) had led to the designation of autonomous legal institutions accountable to the MEPPW for the management of the PAs. Since 1999 these management agencies (MAs) are responsible for the compliance to the Council Directive 92/43/EEC for the protection of natural habitats animals and plant species and the protection, management, environmental education, research and sustainable development of the PAs (Dimitrakopoulos, et al., 2010). The managing body of the MAs consisted of 7 to 11 representatives of all involved stakeholders including state and regional authorities, NGOs and experts from state universities or research institutes (Papageorgiou & Kassioumis, 2005). The presidents of the Administration Boards (ABs) of the MAs were assigned by the MEPPW, while all other members by the actors represented in the ABs (law 2742/1999). There are twenty-eight MAs of PAs in Greece responsible for the 30% of the sites constituting the Greek part of the Natura 2000 network as defined after the Birds Directive, and 241 Special Areas for Conservation (SACs), defined after the Habitats Directive. The Greek Natura network covers an area of 4,294,960 ha corresponding to 27.3 % of the national territory and 6.1 % of territorial waters (Vokou, et al., 2014).

The establishment of the MAs was a governmental measurement towards a new management framework for the PAs based on co-management principles (Apostolopoulou, 2012). Main objectives of the new management framework for the PAs was the participation on the decision-making of multiple stakeholders such as the local or regional authorities, state universities or research institutes and especially the local communities. Indeed, between 1999 and 2011 several non-state

actors became concerned and attempted to get involved with the PAs management and appropriation (Hovardas & Poirazidis, 2007). Nevertheless, the ambitious project for a more decentralized management of the PAs, focused on public participation, most of these ideas remained in theory. The protecting system of the Greek PAs is co-management in practice.

Almost twenty years after the MAs are still responsible for the administration and management of PAs, but they are not authorized to impose the law. Law enforcement is under the authority of other entities as the local forest services and the local police stations. The MAs are controlled by powerful ABs their selection is not based only on educational and professional criteria, but also social and political since the Minister of Environment affects their selection (Vokou, 2014). The emphasis on political criteria over the selection of the personnel constituting the MAs have led to diverse and conflicting management perception within the management bodies, affecting the policies effectiveness. Public participation was never in practice encouraged and the MAs continued to be responsible for all matters of conservation and administration.

Research studies over the effectiveness of the environmental and management policies of PAs over the last years in Greece have brought out many deficiencies on conditions on MAs operation (Vokou, 2014). One of the most important ones is the lack of management plans approved by the Minister of Environment for most of the PAs. Thus, the large majority of the PAs are managed based on very old legal frameworks unable to keep in touch with the current needs and priorities (Vokou, 2014). Secondly, the collaboration of all involved stakeholders with the MAs is only in theory because of the often-conflicting interests and different levels on awareness about environmental issues. Another important issue is the lack of local communities' participation on the management of the PAs leading to a low level of acceptance of the PA and to a growing negative perception over the PA and its role (Papageorgiou & Vogiatzakis, 2006). It is obvious though that without local consensus, the MAs find difficulties in implementing their policies leaving the PAs in Greece in many cases under protected and underdeveloped. For PAs to be able to achieve satisfactory conservation status as well as socio-economic development, a

strong interactive and evolving relationship between administrative authorities and local people has to be established (Andrea, Tampakis, Tsantopoulos, & Arabatzis, 2014).

### **3. Ecotourism**

#### **3.1. Definitions and Historical Background**

Ecotourism has gained great attention in recent times because of its importance as an effective tool towards biodiversity conservation and improvement of the well-being of people living near PAs (Kala & Maikhuri, 2011). The phenomenon of ecotourism has risen in the late 1970s as the outcome of the increased concern over environmental protection and the socio-economic impacts of mass tourism (Honey, 2008). One of the first definitions of ecotourism was given in 1987 by Hector Ceballos-Lascurain, a Mexican conservationist stating that *'we may define ecological tourism or ecotourism as that tourism that involves travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring and enjoying the scenery and its wild plants and animals'* (Ceballos-Lascuráin, 1996).

Since then there have been numerous attempts from experts and researchers to develop a single definition for ecotourism. Indeed, over the years there are reported more than eighty-five definitions (Fennell, 2001). Moreover, many from the different governmental agencies that were involved with ecotourism in the Americas had created their own definitions according on their interests (Edwards, McLaughlin, & Ham, 2003). The first attempts were mostly focused on the idea of nature preservation and the description of tourist activities (Donohoe & Needham, 2006). However, most of the ecotourism definitions were based on common components dealing with activities taking place in a relatively undisturbed natural area, aiming at minimizing the environmental impacts by providing environmental awareness and education and benefits to the local people (Fennell, 2001).

Over the last two decades the definitions of ecotourism have included references to local communities' participation and benefits deriving for the sustainable development of the PAs (Plummer & Fennell, 2009). In 1991, the International Ecotourism Society defined tourism as '*Responsible travel to natural areas that conserves the environment and improved the well-being of local people*' (Honey, 2008). The involvement of local people on the ecotourism development of the PAs has gained special attention as it is identified vital for the sustainability of the PAs and has led to prevailing concept of community-based ecotourism (Plummer & Fennell, 2009). The local community involvement has been acclaimed as one of the most important features of ecotourism in recent years for it encouraged people to participate in the management of the PAs, thus it contributes to improving the acceptance of the PA and its conservation measures.

The concept of ecotourism has evolved through the years into an integrated concept based on different type of principles, that support the sustainable development of the natural areas. The most important principle is based on the reduce of the environmental impact especially nowadays, where main global factors of change such as the population growth, the changes in land use and the climate change threat the natural environment. The respect of the host communities' culture and the enhancement of their wellbeing by permitting their active participation on the management of the PAs in another important feature. Promoting eco-friendly destinations also enhances responsible tourism by increasing visitor's awareness for environmental issues and by coming in contact with native communities. Ecotourism definitions of the last decade also reflect the strong relationship between sustainability and ecotourism. According to Fennell (2014), 'ecotourism is a sustainable, non-invasive form of nature-based tourism that focuses primarily on learning about nature first-hand, and which is ethically managed to be low impact, non-consumptive, and locally oriented (control, benefits and scale)'. However, while the definitions for ecotourism continue to evolve and multiply the definition of Honey (2008) is still considered the most integrated and widely quoted in literature: '*Ecotourism is travel to fragile, pristine, and usually protected areas that strive to be low impact and (usually) is small scale. It helps educate the traveler;*

*provides funds for conservation; directly benefits the economic development and political empowerment of local communities; and fosters respect for different cultures and for human rights ‘.*

However, the aforementioned ecotourism principles cannot be applied on every area with the same manner, since every region has its own distinct features and background (Dologlou & Katsoni, 2016). Accepting that ecotourism is the most appropriate practice for PAs we need to understand that planning and implementation processes need to take place being respectful to the unique characteristics of its region.

### **3.2. Ecotourism and sustainable development**

PNAs nowadays are threatened in various ways including the unsustainable use of natural resources, the climate change and the human pressure deriving from population growth and irresponsible tourism. PNAs need to be protected and preserved more than ever since they constitute the lungs of our planet. Transgressive human activities along with the careless exploitation of natural resources can lead to the degradation nature reserves, the destruction of forest parks, the drainage of wetlands and the extinction of natural habitats animal and plant species. The benefits of the sustainable management of the PNAs can be segregated to three categories including the environmental benefits from the biodiversity conservation, the social benefits deriving from the enhancement of well-being for local communities and the economic benefits coming from the development of tourism activities (Chen, Lupi, & Liu, 2017).

Issues of sustainability in tourism have prevailed from the mid-1990s as an answer to the concerns about climate change (Weaver, 2011). Climate change along with the frantic growth of mass tourism are the main pressures for PNAs. Nature-based tourism and especially tourism in parks and protected areas has been very popular lately, specifically when tourism of its kind becomes more stimulating when connected to the perverse phenomenon of “last chance tourism” evident adaptation (Dubois & Ceron, 2006). However, as destinations become more popular there is a

great difficulty on retaining a balance between natural preservation and economic development (Mandic, 2019). The need for new practices in tourism development in PNAs complying with the principles of sustainability has led to the implementation of ecotourism as the best proposition for the socio-economic evolvement of the nature reserve (Frost et al. 2014).

Ecotourism's agenda is broad and aspire to control some of the most long-standing socioeconomic and environmental problems: poverty and environmental degradation (UNWTO, 2013). The ecotourism framework consists of three axes, which comply with the main sustainable development factors which are environmental conservation, environmental education and empowerment of local community (Pipinos & Fokiali, 2007). Indeed, sustainable development is an all-important key for the protection and management of areas of high natural and cultural wealth. More specifically in PAs the sustainable use of natural resources promotes environmental awareness and contributes to the effective preservation of the biodiversity (Martinis, Mazi, & Minotou, 2015). Sustainable tourism development can also be ideal for revitalizing local communities in remote natural reserves by giving them the opportunity to participate in sustainable tourism development plans.

PAs are the most suitable areas for alternative forms of tourism. The implementation of ecotourism as a sustainable option for land-use and as a conservation strategy in PAs is widespread in many global regions such as southern Africa, Australia and Latin America. Sustainable development creates opportunities for both environmental protection and economic growth for the PAs. Eco-tourism significance almost coincides with the significance of sustainable tourism and constitutes an important key for the protection of the environment and the society against intensive tourism (Honey, 2008). However, it is important to always be taken under consideration that each region is unique and ecotourism planning should be managed depending on the place and the people involved (Buckley, 2012). Moreover, the collaboration and consensus of all involved stakeholders is also essential for the sustainable development of the PAs.



### **3.3. Ecotourism development in Greece**

Tourism in Greece had been synonymous with the “four S’s”, sun, sea, sand and sex for many decades. Likewise, Greek travelers were also mostly opted for islands, sandy beaches and summer vacations instead of visiting sites of natural and cultural wealth out of the summer season. However, as mass tourism brought overdevelopment for certain areas and uneven development for others and proved to be detrimental for the environmental conservation, people started to review their preferences over tourism destinations. Appalled by the overcrowded mainstream destinations and the unpleasant conditions, people started to seek for serenity in places of unique and unspoiled nature. Alternative types of tourism having to do with activities which include interaction with the local environment and communities gradually took shape between the 1970s and early 1980s (Honey, 2008).

Greece being a country of countless breathtaking sites of natural and cultural beauty and ideal Mediterranean climate, could be the ideal destination for the development of all kinds of alternative tourism. However, although agritourism has been a growing trend during the last decade, ecotourism has not been yet widely promoted. According to WWF Greece (2000), even though the number of ecotourists has increased, the percentage of this rise is much lower than the one of mass tourism. Greece is still connected to the image of mass tourism and very few people choose Greece for eco-friendly tourism. According to the Greek National Tourism Organisation (GNTO, 2004), tourists in Greece spend 1-8 days for ecotourism, visiting mostly mountainous areas during winter and spring season. The visitors who choose Greece for ecotourism are mostly students, adults participating in organized tours or mountaineering-nature lovers clubs, people who travel individually and are interested in nature, as well as people who work voluntarily in nature. The general characteristics of the Greek Ecotourist community are urban origin, higher education and income and ages between 30 and 50 years old. Indeed, most of the visitors come from the two big cities of Greece, Athens and Thessaloniki and spend relatively very few days for ecotourism (Tsartas, Manoglou, & Markou, 2001). According to WWF Greece (2000), the motivations of the people coming for ecotourism do not

differ from the ones coming for mass tourism. Moreover, most of the visitors of National Parks in Greece are occasional travellers and their visit on the park is just part of a greater organized trip (Diamantis, 2000). What is more, the majority of the visitors of National Parks are not involved in any environmental organizations and have no interest in issues of environmental protection and conservation (Vokou, Makrodimos, & Tziolas, 2000). According to the above characteristics the Greek visitors of National Parks belong to ecotourists of soft ecotourism activity type (Weaver 2005).

The most important stakeholder in Greece for the promotion of ecotourism and the protection of the PNAs are their MAs. While MAs are responsible for the administration and management of PAs, they are not authorized to impose the law and they also deal with big problems of underfunding. Commission funds are often reduced and there is no comprehensive planning at national or even regional level. Furthermore, many PAS all over the country do not even still have MAs. Although ecotourism could be a great contributor for the economic recovery of the countryside there are very few PAs which have developed ecotourism activities among them the Kerkini and Prespa Lake, the National Park of Dadia – Lefkimi – Soufli, the Plastira Lake and the Nymfaio village in West Macedonia.

It is obvious that the national strategy of tourism in Greece is still mostly orientated on the “Sun and Sea model”. Greece is a country which could contribute a great deal to the global development of ecotourism because of its diversity vastness in natural and cultural resources. Greece is undeniably the country of diversities being 80% mountainous and at the same time holding 16,000km of coastline in length. The different ecosystems host approximately 50,000 species of animals, included 700 species of animals and 900 species of plants that are protected for their rarity (EEFECT, 2018). Ecotourism in Greece is still a small but under development part of tourism (Skanavis, et al., 2004), which is usually connected to the cultural tourism.

## **4. Methodology**

### **4.1. Research design**

This research focuses on presenting and analyzing the stakeholders' perceptions over ecotourism development in natural protected areas. The researcher has approached the most indicative stakeholders involved with the management and promotion of the PAs in order to obtain sufficient amount of primary data. The key methods that have been adopted for collection of primary information involve extensive open-ended questionnaires. Qualitative research allows the researcher to understand how the participants derive meaning from their surroundings, and how their meaning influences their behavior. Moreover, small samples do not allow to proceed to quantitative analyses. Furthermore, the researcher has collected secondary information with the help of books, journals, conference proceedings and official website articles.

### **4.2. Research case approach**

Case study approaches can be based in single or multiple cases (Simons, 2013). There are four types of case study design. The single case-study design which is used for a case that represents a critical test of existing theory, a unique circumstance or a representative or typical case. Multiple- case designs on the other hand usually serve the purpose of demonstrating the reproduction of a phenomenon and are mostly used to provide more powerful conclusion than single case designs (Yin, 2009). This research was presented based on a single case-study design, since it constitutes a representative case of a PA with tourism development which is assessed as a moderate to low impact despite its accessibility and proximity to one of the biggest urban centres of Greece. The single case study consisted of three phases including design, data collection and interpretation. In the first-place relevant literature was collected and reviewed followed by the data collection through open-ended questionnaires. Finally, the case analysis and interpretation were applied in order to compare the research finding with the existing literature.

### 4.3. The case study description

#### 4.3.1. Introduction to the research area

The National Park of Kotychi-Strofylia wetlands lies in the western Peloponnesos, southern Greece meandering along the coastal zone of the North-west Peloponnese from Mavra Vouna of Araxos Lagoon down to Lehaina salt-marshes and administratively belongs to Achaia and Ileia prefectures (Ganatsas, Tsakalimi, & Katsaros, 2013). The National Park occupies an area of 14,318.08 ha with a shore line of approximately 22 km, hosting a unique combination of habitats of high ecological and aesthetic value among them wetlands, forest habitats, dunes and agricultural lands (Georgiadis & Christodoulakis, 1984). The most important ones are the wetlands and the surrounding seasonally flooded areas, the Umbrella pine forest, the sand dunes and the calcareous hills (Strofylia National Park). The National Park is home of many rare and endangered plants and animals such as *Himantopus himantopus*, *Glareola pratincola* and *Sterna albifrons* and an ideal stop for migratory birds such as *Plegadis falcinellus*, *Philomachus pugnax*, *Tringa glareola* and *Tringa stagnatilis*. Within the Park area 13 mammals (all species included in the habitat directive), 7 amphibians, 23 reptiles (7 species included in the habitats directive), including the priority species *Caretta caretta* have been recorded. Moreover, the rare endemic plant species *Centaurea niederi*, a species included in Annex II of the habitat directive is also spread all over the northern part of the park (Ganatsas, Tsakalimi, & Katsaros, 2013).

The system of wetlands comprises 4 water bodies along with their adjoining floodplains. The cluster of Strofylia the Kotychi lagoon and Lake Prokopou, extends along 15 km and complements the Papa lagoon, which is a long very important natural fish farm (Ganatsas, Tsakalimi, & Katsaros, 2013). Of the permanent wetlands of the area, Kotychi is the largest lagoon of the Peloponnese (750 ha). The lagoon of Araxos lies at the northern border of the National Park and the lagoon of Prokopos at the south part at the foot of the Black Mountains hills. The major attraction of the National Park is the famous *Umbrella pine* (*Pinus pinea*) forest of Strofylia, the biggest in Greece, one of the largest in Europe and priority habitat at

European level. The total area of this coastal forest is approximately 2,200 ha with an average width of 1,250 meters. The forest, which depends directly on the presence of water, is located in the northwestern region of the area between the wetlands and the sea. The greater part of the forest is dominated by the *Allepo pine* (*Pinus halepensis*), and also includes a small residual cluster of *Vallonea oak* (*Quercus macrolepis*), a remnant of the ancient oak forests that covered the area (Strofylia National Park).



**Figure 2.** The National Park of Kotychi-Strofylia wetlands. Photo by Mahi Goula & Geroje Parchas.

(<https://strofylianationalpark.gr/photo-gallery/>)

The Managing Body of Kotyhi Strofylia Wetlands is a nonprofit private legal Entity, which is supervised by the Ministry of Environment, Energy & Climate Change, and was founded in 2002 by National Law and it is governed by a Board of 11 members that represent central Government, all levels of local Government, Environmental Organisations, local stakeholders and the scientific community. The Administrative office of the Body and the Information Centre are located in the village of Lappa, in the Prefecture of Achaia. The MBKSW is responsible for the protection of biodiversity, sustainable development within the area, management

and scientific monitoring of the habitats and species of the Protected Area, as well as raising public awareness concerning the ecological importance of the area, environmental education and reinforcement of supervision within the PA in collaboration with other relevant services such as the Forestry and Fire Departments (Strofylia National Park).

#### **4.3.2. Ownership status**

Greece currently has 10 sites designated as Wetlands of International Importance (Ramsar Sites) as from 1975. In most cases the state is the owner of the actual wetland area, while the surrounding area is both state and private/community owned. Most often the the surrounding areas are lent or allocated by the state to the local municipalities and communities for agricultural use or livestock grazing. More of the 90% if the inner part of the Wetland is usually state owned. Research over the exact ownership status of the Wetlands has not been adequate over the years, thus there are no specific and valid data concerning the percentages of private and state-owned surrounding lands as well as lack of updated and comprehensive maps of the wetlands. Specifically, for Kotychi-Strofylia Wetlands there are no are no updated maps (Maragou & Mantziou, 2000).

Theoretically, the prevailing state character of the sites seems to be a facilitating factor for their management. However, in practice their management and development planning depend mainly on agricultural policy since the surrounding communities become a key factor for the management of the wetland area. Furthermore, there are many cases when the wetland area management and administration belong to more than one ministry or authorities. More than half of the wetland sites belong also to more than one prefecture and/or municipalities each one making decisions based on its own interests. The Kotychi-Strofylia Wetlands is one of these cases since administratively belongs to Achaia and Ileia prefectures (Maragou & Mantziou, 2000).

#### 4.3.3. Legal status

All Wetland sites have been proposed as Sites of Community Importance (SCIs) under the Habitats Directive (92/43/EEC) and as Special Protection Areas (SPAs) under the Birds Directive (79/409/EEC) and almost all include wildlife reserves. The Kotychi-Strofylia Wetlands have acquired a number of protection designations due to its high biodiversity and rare aesthetic value (Maragou & Mantziou, 2000). According to Ganatsas (2013), the legal status of the area seems to be adequate. The National Park of the wetlands Kotychi-Strofylia includes two sites of Community Importance of the network Natura 2000, GR2,320,001 'Lagoon Kalogria, Strofylia Forest and Lamia marsh', and the site GR2,330,006 'Lagoon Kotychi'. Part of it has been recognized as a Wetland of International Importance in 1975. In 1998 becomes part of the Natura 2000 European network of protected areas.



**Figure 3.** The National Park of Kotychi-Strofylia wetland featured by the dark grey line. The light and discontinuous grey lines illustrate the Sites of Community Importance (SCIs) and the Special Protection Areas (SPAs). (Ganatsas, 2013).

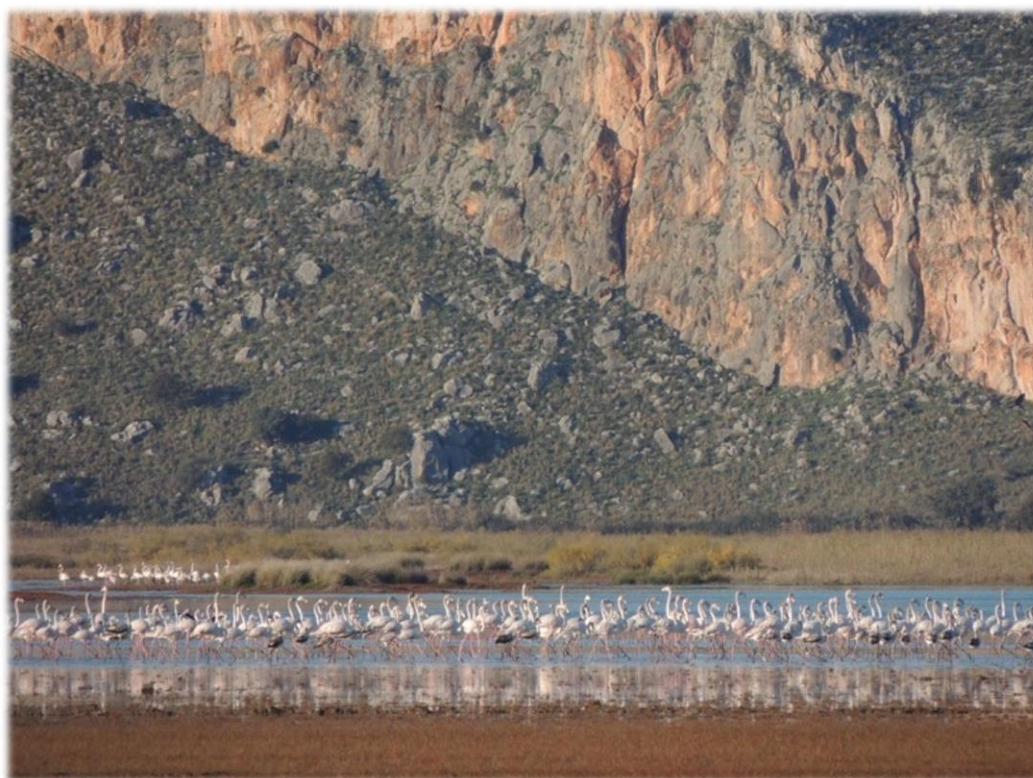
The protected area includes five Natura 2000 sites, two Special Protection Areas for Birds in accordance with the Directive 2009/147/EE and three Sites of Community Importance in accordance with bird species during migration, wintering and Breeding. In 2002 a permanent Wildlife Shelter was established in the areas of Strofyli Forest and the Prokopos-Lamia wetlands. In 2002 the Managing Body of Kotyhi-Strofyli Wetlands was founded by Law 3044/2002 for the Administration, management and sustainable development of the protected area. In 2009 the area was declared as National Park with the Joint Ministerial Decision 12,365, Official Journal of the Hellenic Republic D'159/29.4.09. However, except for the Management Agency of the National Park there are also a large number (25) of authorities/stakeholders involved in the management of the Park, such as five local Forest Districts, two Regions, two Prefectures, three municipalities, one Fire brigade, two army stations, the local police station and two fishing services.

#### **4.3.4. Position in an ecological unit**

Most of the Greek Ramsar sites constitute a complex of more than one wetland. Among them only the lake Kerkini is a man-made wetland and the Kotyhi-Strofyli Wetlands is an isolated wetland complex. The Kotyhi-Strofyli Wetlands hold a strategic position as they gather a large number of species during the spring and autumn migration (Maragou & Mantziou, 2000). Being the largest wetland system in the Peloponnese, the wetlands include the lagoons of Araxos, Prokopos and Kotyhi, the Lamia marsh and areas with brackish and fresh water that are seasonally flooded (Strofyli National Park). The wetlands cover an area of 1,500 ha and are also used as natural fisheries. Among the most important and impressive ecosystems thriving inside the Kotyhi-Strofyli Wetlands are the forest of Strofyli, the Black Mountains and the sand Dunes. The forest of Strofyli, the biggest in Greece and one of the largest in Europe consists of three main tree species: the *Aleppo pine* (*Pinus halepensis*), the *Umbrella pine* (*Pinus pinea*) and the *Vallonea oak* (*Quercus macrolepis*) and constitutes a habitat for a wide variety of animals and birds. The Black Mountains constitute an ideal habitat for mammals, such as the *jackal* (*Canis*



aureus) and for reptiles, such as the *Marginated tortoise* (*Testudo marginata*), a nesting site for birds of prey, such as the *Common kestrel* (*Falco tinnunculus*), the *Eagle owl* (*Bubo bubo*) and the *Peregrine falcon* (*Falco peregrinus*) and Habitat of the plant *Centaurea niederi*, a rare Greek endemic species. The sand Dunes which are small hills of sand formed by the wind and waves can reach a height of more than 10 meters and a width of 20-500 meters and constitute a rare and endangered coastal habitat, since they are a natural filter and flood barrier for seawater, preventing the erosion of the coastal zone. A wide range of species nest and lay their eggs and search for food on the dunes, such as the *Kentish plover* (*Charadrius alexandrinus*) and the *Loggerhead* sea turtle (*Caretta caretta*), (Strofylia National Park). The views from the Mavra Vouna Hills (Black mountains), the Prokopos Lagoon Ecotourism Centre are panoramic and offer an unhindered viewpoint of the Prokopos lagoon and the Strofylia forest.



**Figure 4.** *Phoenicopterus-roseus* in lake Prokopos. Photo by Mahi Goula & Geroqe Parchas  
(<https://strofylianationalpark.gr/photo-gallery/>)

#### **4.3.5. Human population**

The human population inside and around the Greek Ramsar wetlands is usually estimated below 100,000 people (Maragou & Mantziou, 2000). According to the National Inventory (2001), the total population of the three municipalities around and within the park borders of Kotyhi-Strofylia Wetlands amounts to 24,564 people (Ganatsas, 2013). Within the park area, there are also 14 settlements, with a population of 12,850 people dealing mostly with agriculture and fishery activities. Settlements inside the zone of higher protection of the wetland are found only in Kotyhi-Strofylia Wetlands and around Mikri Prespa. More specifically in Kotyhi-Strofylia Wetlands there are two settlements amounting almost 750 people, which according to the Joint Ministerial Decision and the Council of the State and the Prefectural Authorities are illegal and should be removed. However, they have not been implemented yet (Maragou & Mantziou, 2000).

#### **4.3.6. Accessibility of the wetland area**

The accessibility to most of the parts of the Wetland complexes has been reviewed as satisfactory by past assessments on Greek Ramsar sites, since usually there is a fully-developed road network around the wetlands, as well as a network of rural roads and trails inside them. Moreover, most of the Greek Wetlands are located close to an urban center of medium size (Maragou & Mantziou, 2000). Concerning the Kotyhi-Strofylia Wetlands, the accessibility can be characterised as being very good because of their proximity to two big urban centers, such as the city of Patras and the city of Pyrgos. However, the road network around and inside the Wetlands is so extensive that constitutes a cause of management and protection problems, since it is very difficult to monitor and control all human activities inside the protected area. The lack of proper signing deteriorates the problem and has great impact on the regeneration of the rare *Pinus pinea* forest (Maragou & Mantziou, 2000).

#### 4.3.7. Ecological changes

The Greek Ramsar wetlands constitute home for a great diversity of habitats, fauna and flora species. All Greek Ramsar wetlands host more than ten habitats of community importance, as defined by the EC Habitats Directive (92/43/EEC) and many rare and endangered species included in national and international Red Data Books (Maragou & Mantziou, 2000). Except for the Lake of Kerkini, which has experienced the least ecological changes during the last five years, the changes in ecosystems in all other Greek Ramsar wetlands seem to be similar. Infilling for land reclamation, either for expansion of agricultural land or for the development of illegal tourist resorts is a common cause of alterations in the wetland ecosystems resulting to the decrease of sensitive habitats. In Kotyhi-Strofylia Wetlands the excessive abstraction for irrigation purposes has led to salinization of the aquifers (Maragou & Mantziou, 2000). Another important issue of great concern is the quality of water in the Greek Ramsar Wetlands. Fortunately, the water quality of the lagoons of Kotychi-Strofylia wetlands has not changed. Some land use changes have been observed in the area, such as expansion of mine and agricultural land towards natural habitats (Ganatsas, 2013). However, the numbers of wintering birds in the Greek Ramsar wetlands are only rising in Mesolonghi and Amvrakikos according to the Hellenic Ornithological Society (Maragou & Mantziou, 2000). Unfortunately, as far as the Kotyhi-Strofylia Wetlands is concerned, the fall is dramatic. What is more, the Strofylia forest also belongs to the group of littoral forests that have been strongly degraded by human activities all over Europe (Maragou & Mantziou, 2000). Grazing, human pressure and salinization of the aquifer obstruct the regeneration of the Umbrella pine. Moreover, other illegal human activities, such as hunting and sand extractions taking place in Strofylia forest have also great impact on the conservation of the habitats (Maragou & Mantziou, 2000). On the positive side, the experimental reforestations of *Pinus pinea* at Strofylia forest were successful (Maragou & Mantziou, 2000) and the conservation status of the habitats of the directive 92/43/EEC and the plant and animal species of the directive 92/43/EEC remained at the same condition during the 1999–2008 period (Ganatsas, 2013).

#### **4.3.8. Monitoring procedures**

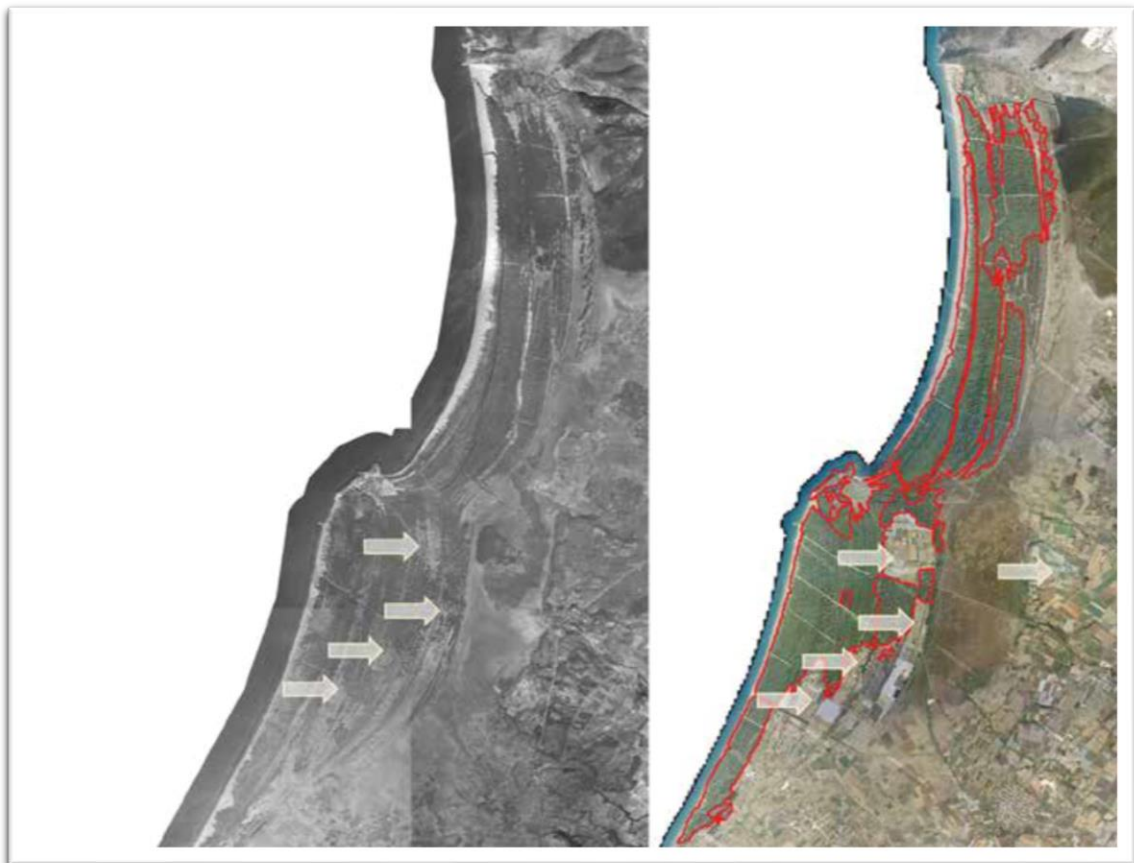
Most of the monitoring practices on Greek Ramsar Wetlands concern financial activities and some of them ecological changes. There is no common pattern for all Wetlands in Greece and central and local authorities are involved to a different degree. The only common project that started to be implemented since 1996 was a national monitoring programme for the water quality by the Ministry of the Environment. However no regular reports are yet available. NGOs and research institutes are mostly involved in a number of research and short-term projects that monitor biological parameters. In Kotyhi-Strofylia Wetlands the University of Patras monitors projects concerning water quality, vegetation and plant communities. These projects may not provide long-term data, but they are useful in certain cases. The lack of assessment procedures for these monitoring programmes, the limited sample, the different methods used and the problematic exchange of information between central and local authorities, educational institutes and NGOs constitute them unreliable to rely on and the results cannot be comparable for further research (Maragou & Mantziou, 2000). Monitoring on human activities is also deficient. The LIFE-Nature projects implemented from the European Commission in cooperation with Non-governmental organizations (NGOs), scientific institutions, representatives of local societies and public services, as well as consulting agencies have included monitoring procedures for illegal activities and impacts from human concerning the land uses and water resources. Among various LIFE-Nature projects that were implemented in protected areas of Greece from 1999 to 2007, five of them were dedicated to the Ramsar wetlands of Strofylia-Kotychi, Amvrakikos, Lake Mikri Prespa, River Nestos Delta and Evros Delta – Drana Lagoon (Kazoglou & Vrahnakis, 2008). For Kotyhi-Strofylia Wetlands five monitoring programmes were carried out within the frame of the LIFE project and a wide monitoring programme of environmental data was carried out a few years ago and finished in 2009. Regarding biodiversity conservation nine management actions were carried out during the 1999–2008 period, which had positive effects on the habitats of the directive 92/43/EEC, eight of them positively affecting priority habitats and four actions had positive influence on plant and animal species of Annex II of the habitat's directive

92/43/EEC. The level of the research and monitoring programmes in the area, aiming at covering the management needs, is considered high (Ganatsas, 2013). Moreover, The Operational Programme “Environment” 2000-2006 empowered by the Greek Ministry of Environment and Energy had implemented many monitoring procedures in Kotyhi-Strofylia Wetlands regarding the environmental data of the area and their conservation status. The same programme was also the first funding source for the operation of the MA of the protected area and the acts of promotion of the area through thematic exhibitions, advertisement spots on television and radio stations, information sheets of the area, educational seminars and tours and voluntary activities in cooperation with national and local environmental organizations (Strofylia National Park). According to the MA of Kotychi-Strofylia Wetlands, during the 2000-2009 period 2.250 people, most of them students, had visited the protected area for scientific purposes. Moreover, during the 2003-2066 period the Information Center of Strofylia forest had been visited by 10.000 people mostly as part of their organized trips (Kotychi-Strofylia Wetlands).

#### **4.3.9. Human activities and Threats**

The main activity taking place outside and inside the Greek Ramsar wetlands is agriculture. Large changes in land areas have occurred in many cases due to the extensive drainage for the expansion of agricultural land. Another important activity taking place in Greek wetlands is fishing. Overfishing and illegal fishing have led to the decline of fish catches in the Greek wetlands. Cattle raising and animal breeding are also practiced by the local communities in the wetlands. The lack of control and monitoring over the carrying capacity of the grazing animals often lead to overgrazing. The prohibitions of grazing animals inside the protected areas in many cases are not respected. (Maragou & Mantziou, 2000). In Kotyhi-Strofylia Wetlands there are still about fifteen families, who practice animal breeding and grazing inside the protected area, besides the decisions pending since 1993 for the removal of livestock from the Ramsar area. The grazing rights of local people and the land ownership issues in the *Samareika* area are a continuous problem for the

management of the park (Ganatsas, 2013). Overgrazing has a great impact on the riparian zones by reducing the vegetation, since animals prefer these areas because of the shade and water available during summer. Illegal hunting is also an activity that increases pressure on the protected area. The Forestry Services have not adequate personnel to guard successfully the large wetland sites (Maragou & Mantziou, 2000).



**Figure 5.** Comparable imaging of the alteration on the forest extent between 1945 (left image) and 2004 (right image). The positions which record decrease on forest surface are depicted by arrows. (Dimopoulos, Kokkoris, & Panitsa, 2017).

The most important human activities causing problems of degradation to the Kotyhi-Strofylia Wetlands are waste disposal, vehicular traffic and illegal hunting. The extensive sandy coastline of Strofylia forest is a major attraction for visitors during summer period. The uncontrolled mass visiting of vacationers and the increased vehicular traffic have resulted in the intrusion of species, destruction to certain sand dune positions, pollution and continuous fire risk. The unregulated

growth in tourist activities along the seaside is also a major threat for the *Caretta caretta* sea turtle, which nests in entire length of the protected region (approximately 20 km) (Strofylia National Park). The lack of a fire protection plan is a very serious problem, since the risk from wildfires is high during summer season because of the favourable climatic conditions and the type of vegetation (Mediterranean flammable pine forests,) (Ganatsas, 2013).

Illegal hunting is also a major threat affecting mostly the Prokopos and Kotychi lagoons, which according to the protected region's definition constitute a Zone A (Nature Protection Region) in the National Park, a section of which has furthermore been defined as a Wildlife Refuge. Thus, hunting of all species is prohibited throughout the year in this region (Strofylia National Park)

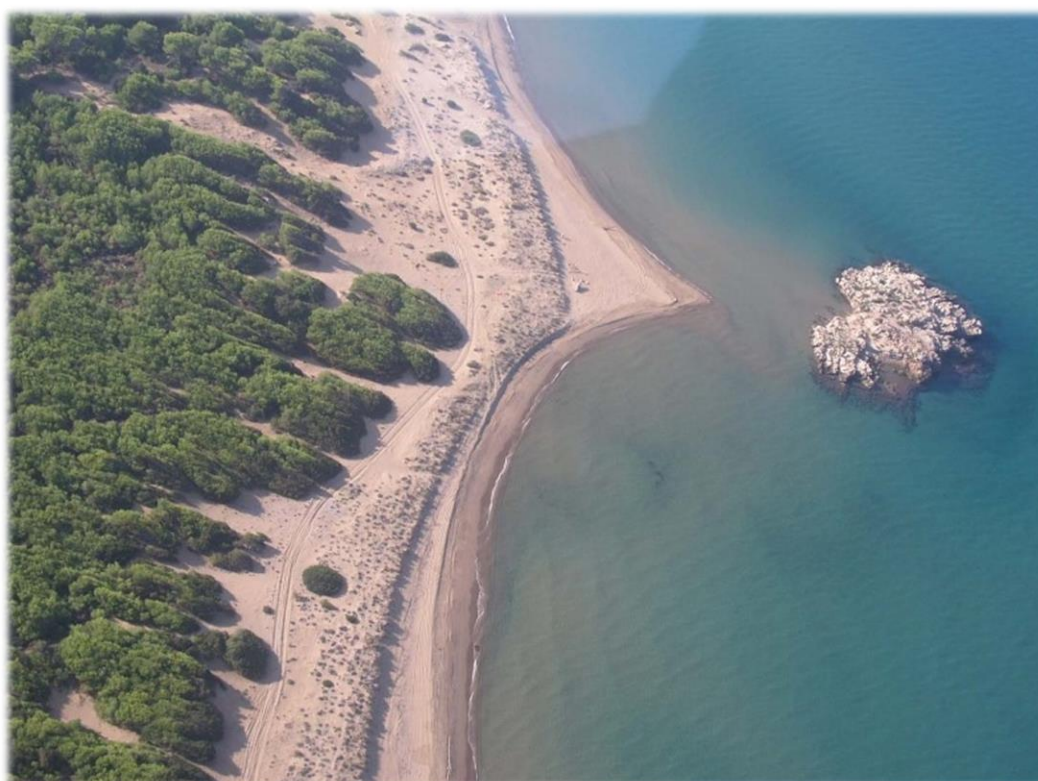
#### **4.3.10. Tourism development**

Tourism within and around wetlands is assessed as a developing moderate to low impact activity, which is expected to grow significantly in the years to come. Eco-tourism is also considered to grow because of the infrastructure regarding Information Centres and the development of projects regarding environmentally friendly tourism. Currently tourism is developing randomly, without an integrated specific plan being a potential threat for PAs and ecosystems. Also, a lot of illegal settlements have been reported from many Greek Ramsar wetlands (Maragou & Mantziou, 2000). Nowadays in Greece there are very few examples of organised and controlled ecotourism development in PAs such as the Dadia National Park, the Kerkini Wetland and the Prespes Lakes National Park.

The major attraction point for visitors in the Kotyhi-Strofylia Wetlands is the extensive sandy seashore of 21km. The Kotyhi-Strofylia Wetlands seems to be one of the most visited Greek wetlands during summer due to the long and sandy beaches of the area and the easily accessible near-by *Pinus pinea* forest. The vast sandy beach can be accessed by three main points in Kalogria, Kounoupeli and Falari. Hotel settlements close to the beach area operate approximately 9 months during the year. The environmental educational centre in Lappa operates throughout the year



receiving a few thousand visitors per year for environmental and educational purposes. The northern part of the park area (Mavravouna) constitutes the most important recreation area of the PA (Katsaros, 2008). The carrying capacity for recreation activities in the PA is estimated around 2.520 persons per day. Moreover, income deriving from compatible with the environment activities is estimated around 25 euros per person (63.000 euro/per day) during periods of high visitation (Katsaros, 2008).



**Figure 6.** Kounoupelaki beach. Photo by Mahi Goula & Geroge Parchas  
(<https://strofylianationalpark.gr/photo-gallery/>)

Available activities for visitors in Strofylia National Park are hiking, cycling, birdwatching, swimming and photography. Birdwatching is an activity of high interest, since the National Park of Kotychi0Strofylia is home of 260 species of birds and an internationally important site because of its location on the flyway along the west coast of Greece. What is more the Strofylia forest is the only Ramsar site in Peloponnese. Numerous hiking and cycling trails are also available for every type of traveler. There are eight hiking trails (H1-H8) of graded difficulty and four cycling tails (C1-C4) spread throughout the National Park. All activities can be combined with



birdwatching and swimming and panoramic views of the Wetlands, Strofyli Forest and the beaches of the National Park can be reached from various points (Strofyli National Park).

Some of the most important attractions of the Kotyhi-Strofyli Wetlands except for the vast sandy beach are the Dymaion Wall, the cape Kounoupele and the Byzantine church PalaioPanagia Manolados. The archaeological site of Dymaion Wall is situated to the north of Lake Prokopos, constructed around 1250 BC in the Black Mountains. Mythology mentions that it was built by Herakles in his struggle against Aigeias, the King of Ileia. The ruins of the small castle on the north eastern section of the rock at Cape Kounoupele are dated to the period of the Frankish occupation. Finally, the Byzantine church of PalaioPanagia Manolados is dated back to the 12th century (Strofyli National Park).



**Figure 7.** Sunset in lake Prokopos. Photo by Mahi Goula & Geroge Parchas.

(<https://strofylianationalpark.gr/photo-gallery/>)

#### **4.3.11. Management plan and effectiveness of management**

A management plan is substantial for the description, the assessment of values and the implementation of appropriate management measures and periodical reviews of a Ramsar Site. In the “Guidelines on Management Planning for Ramsar

sites and other wetlands” (1993), it is highly noticed that “...management planning is a way of thinking which involves recording, evaluating and planning. It is a procedure subjected to continuous review and revision. A management plan is divided into five major sections including description, recognition, evaluation, objectives and action plan. The management specifications for the Greek Ramsar wetlands, as well as for protected areas are included in two types of documents, the *Specific Environmental Studies* (SES) and the *Joint Ministerial Decisions* (JMD), (Maragou & Mantziou, 2000).

The Joint Ministerial Decisions (JMD) are issued in order to define zones, management objectives, land uses and permitted human activities in each zone. Their validity runs for 2-3 years and then must be replaced by Presidential Decrees, which have a permanent status. Joint Ministerial Decisions have been issued for 8 Ramsar sites, but except for the deltas of Evros, and Axios-Loudias-Aliakmon all other JMDs have expired. Theoretically the regulations and boundaries defined by the JMDs are still valid after their expiration and until their replacement by the Presidential Decrees. The Specific Environmental Studies (SES) have been completed after the issuance of the JMDs for the purpose of managing issues for each site, regarding specific needs for land uses, protection zones and regulations. These SES are still under preparation and have not been submitted for approval for all Greek Ramsar sites. The establishment of the management bodies for the MAs were created for the better administration of the PAs, but the deficiency in funding sources and the obscurity over their responsibilities have not been able to overweight the absence of management plans for most of the Greek Ramsar Sites (Maragou & Mantziou, 2000). Likewise, the management plan for Kotyhi-Strofylia Wetlands is still under preparation (WWF, ELLET, & Hellenic Ornithological Society, 2009).

It is commonly accepted that because of the lack of management plans, the management of the Greek Ramsar wetlands is insufficient and ineffective. The management specifications described in the JMDs and the SES are old and very general and cannot replace the need for an integrated extensive updated plan which will respond to the different characteristics and dynamic of each Ramsar site. The need for raising public awareness over the PAs and the participation of local NGOs in

the management issues are also essential. In the case of Kotyhi-Strofylia Wetlands a big percentage of indifference and detachment from local people over the issues of management of the PA as well as the lack of a continuous and long-term of participation from the NGOs (Maragou & Mantziou, 2000).

#### **4.3.12. Wardening**

The wardening of the protected areas is characterized as insufficient in all the Greek Ramsar wetlands. The Forestry services are the main responsible authorities for the guarding of the PAs. However, the lack of funding sources, personnel and appropriate equipment are the cause for the deficient wardening of the PA. Moreover, the personnel of the forestry services often have other responsibilities and cannot be completely focused on protecting the PA. The involvement of other authorities and services except for the forestry services, such as the police services leads to confusion over the responsibilities over the protection of the PA. The impotence on preventing the wildfires occurring almost every year on Kotyhi-Strofylia Wetlands is a typical paradigm of the ineffectiveness of the wardening system (Maragou & Mantziou, 2000).

#### **4.4. Surveys, reports and papers on perceptions over PAs**

Environmental policies and management issues aiming at the conservation of the PAs and their appropriation are strongly influenced by social factors, such as the perceptions and attitudes of the local communities and all the involved stakeholders over their development. The available studies and reports have revealed that there are great differences on the perceptions of individuals on many issues as environmental awareness and preferences of management schemes depending. Moreover, each PA in Greece constitutes a different case, thus the results of the reports may be different on several research points.

The survey for pilot actions for the development of ecotourism conducted by the GNTO and WWF Greece on 2000 concerning the Dadia National Park has shown that ecotourism in the Dadia area has contributed in various ways to the conservation of the environment and the social cohesion. However, the ecotourism in Dadia National Park had many similarities with mass tourism on the period of the survey. The need for a management body authorized for promoting ecotourism, the measuring of the carrying capacity of the area, the formulation of a marketing plan and the active participation of the local communities on the management of the PA were emphasized as the most important measures in order for the ecotourism to be developed (WWF, 2000).

The majority of the studies conducted on PAs are focused on the local's perceptions on National Parks. A thorough and indicative study had been conducted on Prespes National Park 24 years after its designation regarding the perceptions of the local people on planning and management issues. Around 200 responses had been collected for analysis after the procedure of systematic sampling. Responses had shown poor knowledge of people regarding environmental issues. However, results had also shown a positive attitude of locals on tourism development plans including improvement of accessibility and infrastructure around the Park (Trakolis, 2001).

Another important survey had been conducted on 2004 in 32 communities neighboring four Ramsar wetlands in northern Greece. Around 1600 questionnaires were distributed on local people to investigate their attitudes regarding the ways of management and appropriation of the wetlands. The purpose of this research was the evaluation of the results for the better management and conservation of the wetlands. The outcome of the investigation had shown awareness of local residents of the value of wetlands as well as their positive attitude towards further protection of the wetlands and their tourism development (Christopoulou & Tsachalidis, 2004). The survey on the National Marine Park of Zakynthos on 2006 had examined the influence of visitors' profile, information sources, environmental dispositions, and visit evaluation on visitors' willingness to pay (WTP). The impressive finding was that the estimated annual revenue that could be gained would cover all operating costs

of the Protected Area Management Body. Parameters of visit evaluations were the most important factors that were appointed as indicators on visitors WTP (Togridou, Hovardas, & Pantis, 2006).

The establishment of 371 Greek Natura sites with law 1650/86 in 1998 (Apostolopoulou & Pantis, 2009) has initiated changes on the design and conservation policy of the PAs. Objective of another survey conducted on 2006 was the evaluation of the public involvement on an integrative vision of nature conservation. Results had shown that overall picture of protected areas in the country appears complex, confusing and fragmented since the efforts for better conservation policies had been led to bureaucracy and unnecessary legislation. It was concluded that public participation is essential for the effective realization of an integrated policy of sustainable management of the PAs (Papageorgiou & Vogiatzakis, 2006).

The attitudes of the residents of Northern Karpathos island towards ecotourism development in environmentally sensitive areas were investigated on a survey of 2007. The findings of the study had shown a high level of environmental awareness, the recognition of the need for environmental education concerning ecotourism activities and a positive attitude towards the implementation of initiatives in the ecotourism field. The level of education and the permanent place of residence of the participants has reported to influence significantly their perceptions (Pipinos & Fokiali, 2007).

The importance of stakeholder beliefs regarding environmental policy has been noticed by a survey taken place on 2007. The purpose of the survey was to address the gap on surveys concerning the stakeholders' perceptions on issues of protected area management. Questionnaires containing 73 fivepoint Likert scale items were administered to eight different stakeholder groups involved in the management of Greek protected areas. Findings had shown that participants believed that local communities should engage in decision-making processes in the frame of PA management. However, the entire sample acknowledged management goals are first determined by a confined number of stakeholders, and then local people are asked to simply comply with decisions already taken. Results also referred to core

beliefs on environmental policy, namely, the value framework and sustainable development, and secondary beliefs, that is, beliefs on social consensus and ecotourism development. Moreover, both value frame elements and beliefs on social consensus were found to most significantly differ among stakeholder groups. These findings point to a mixed-motive perspective in environmental policymaking (Hovardas & Poirazidis, 2007).

The effectiveness of the Greek state's policy in PAs had been investigated in 2009 after the distribution of 91 semi-structured interviews to state and non-state actors involved in the Greek conservation policy towards PAs. Results had shown that the lack of common and clear goals, the ineffectual promotion and the differential between stated and actual goals had led to bureaucratic interpretations of conservation objectives processes in favor of satisfying economic and development interests. The need of a new conservation strategy as an official part of an integrated Greek conservation policy and the establishment of independent institutions were emphasized by all scientists (Apostolopoulou & Pantis, 2009).

Another research in the National Park of Eastern Macedonia and Thrace, the Wetland of Kalloni, and the Lake Tavropou was conducted on 2010 investigating the perceptions and awareness of Greek citizens for PAs over matters of environmental issues and alternative management scenarios, funding sources, and management schemes for the conservation of biodiversity. The differences of results between the three research areas had also been researched. In general, a positive attitude on supporting the PAs and high levels of knowledge of environmental issues had been reported whereas active participation was limited (Dimitrakopoulos, et al., 2010).

Greece's importance on the European map of PAs was emphasized on a review in 2010. The wide diversity of the Greek landscape including mountains, Mediterranean scrub, oak woodlands, and freshwater and saltwater wetlands along its geographical position indicate Greece's importance on the global map of PAs (Williams, 2010).

The knowledge and perceptions of citizens concerning environmental issues, awareness and restrictions imposed my management framework and wiliness to pay as visitors were investigated on an empirical survey in 2010 National Parks of Greece

in Eastern Macedonia and Thrace. Results had revealed a low level of awareness as well as that the level of knowledge and perceptions of individuals about the national parks varies according to the social groups examined. The need for further efforts both by the state and non-governmental organizations, to inform the local community and visitors about the existence of the PA and also the social and economic benefits resulting from its creation was appointed by the researchers (Jones, Iosifides, Evangelinos, Florokapi, & Dimitrakopoulos, 2011).

A similar empirical survey was conducted in 2011 in two National Parks including river delta ecosystems designated as Ramsar wetlands in northern Greece, the Evros Delta National Park and National Park of Axios–Loudias–Aliakmonas Delta. Local residents' perceptions of three hypothesized policy options (regulatory, market-based and participatory) for Park management were examined. The regulatory option was reported as the least restrictive while the market-based option as the most restrictive. However, greater benefits were identified by residents from the market-based option even though this was regarded as the most restrictive, while the fewest benefits were considered to arise from the proposed regulatory option. The differences in perceived benefits can be explained largely by the management actor involved in each policy option. Residents were more positively inclined towards the involvement of local authorities in Park management under the market-based option, compared to state management in the regulatory policy option (Jones, Clark, Panteli, Proikaki, & Dimitrakopoulos, 2012).

In 2012 a large-scale survey was conducted for Greek Natura 2000 sites investigating the nature and role of participation in Greek biodiversity governance through 3 case studies of Natura sites in the prefecture of Crete island. The results of 96 interviews of national, regional and local level stakeholders and 734 questionnaires of local people had been analyzed revealing that stakeholders' participation exists mainly in theory and on paper whereas community participation is practically absent. The findings of the survey indicated a preference towards improving stakeholders' participation and the community's engagement in the management of Natura 2000 sites. The urgent need for integrated policies adopting fair and collaborative two-way forms of participation for the better and more

effective management and appropriation of the PAs was appointed by researchers Apostolopoulou, Drakou, & Pediaditi, 2012).

The stakeholders' views over administration and management effectiveness of PAs were investigated on a survey taken place on Dadia National Park in 2014. The stakeholders involved in the administration and management of the NP, namely the park management, the municipality of Soufli and the regional authorities of Evros Prefecture, as well as locals and visitors, were asked their opinion about the effectiveness of administration and management of the park. The results of the study indicated that there are weaknesses affecting the collaboration of the administrative bodies, the locals are not satisfied with the local authorities' operations and the visitors are not being adequately informed about the relevant bodies and type of administration and management of the National Park. The locals' dissatisfaction with their quality of life, but their lack of awareness of matters related to Dadia NP and their lack of participation in its decision-making processes were reported (Andrea, Tampakis, Tsantopoulos, & Arabatzis, 2014)

A study evaluating the first co-management framework and performance that has been adopted and implemented in Greece over the last 10 years for the management of 28 protected areas was presented in 2014. a questionnaire dealing with issues of financing and administration, environmental management and guarding, and connection with the local community was distributed revealing that local community participation has been achieved only to a limited degree. Moreover, the support and commitment to conservation of state actors were often missing. Delays in responding to needs associated with biodiversity monitoring, limited funding, inefficient guarding were some of the most important problem detected. However. Despite its weaknesses, the co-management framework has been reported to had contributed significantly to the conservation of environmental values of Greece (Vokou, et al., 2014).

Alternative tourism as a proposal for ecological restoration, protection, conservation, and sustainable development at Natura 2000 areas was presented on a survey of 2015 for the case of Zakynthos and Strofades in Ionian Islands. The forest degradation of both areas because of the recent wildfires has raised the need for



their restoration. Alternative tourism has been appointed as the best practice for the economic improvement of degraded areas. Low educational level, and a general lack of knowledge on environmental and sustainable development issues were also reported. The studies were carried out under the Interreg Greece-Italy European program 2007-2013, "Strategic plans for restoration protection & ecotourism promotion in Natura 2000 sites which were devastated by natural disasters", (Martinis, Minotou, & Poirazidis, 2015).

The perceptions on participatory management of NATURA 2000 forest sites in Greece have been explored through a study of 2015 in the Tzoumerka–Peristeri–Arachthos Gorge National Park and the Vikos–Aoos National Park. The social factors influencing the level of acceptability for participatory management frameworks have been investigated by distributing questionnaires in the Tzoumerka site in the Vikos–Aoos area. According to the results of the study the highest level of acceptance was presented for the collaborative scenario, which promoted the cooperation of local and state actors with the local community. The least accepted management framework was the community-based scenario, where most of the responsibilities would fall on local communities and they would be minimum interference from the state. According to our study the most important factor determining this ranking of the scenarios is the restriction that individuals perceive from each management option (Jones, Filos, Fates, & Dimitrakopoulos, 2015).

Sustainable development as a key tool for the management of areas with natural and cultural wealth was appointed at the survey taken place on the mountain of Pantokratoras in Corfu in 2015. The perceptions and attitudes of the local community of the region of Pantokratoras, in north Corfu, Greece towards ecotourism development and environmental education were investigated. More specifically the findings of the survey had shown that the local community is interested in the protection and conservation of the environment and believes that sustainable tourism development is the ideal model for economic revitalizing and retaining local population. The local community seems to believe in the coexistence of economic growth and environmental protection. It was also concluded that the lack of environmental knowledge and awareness is one of the most important

parameters that could potentially be improved and contribute to the sustainable development of Pantokratoras (Martinis, Mazi, & Minotou, 2015).

Local stakeholder participation in Gyaros Marine Protected Area was the objective of the survey conducted on 2017 under the Thirteenth International MEDCOAST Congress on Coastal and Marine Science, Engineering, Management and Conservation. The overexploitation of the natural resources of Coastal fisheries because of the economic recession and the lack of development and employment opportunities in Greece has raised the conversation over a co-management plan for specifically designated Marine Protected Areas (MPAs) aiming at their conservation and sustainable development. The need for the participation of local stakeholders in the management of the MPAs is emphasized (Papadopoulos, et al.).

According to a survey of 2018 from three NATURA 2000 sites in Greece, the Prespes National Park, the Samaria National Park and the Chortarolimni-Limni Alyki & Thalassia Periochi (Limnos), the most important indicators influencing perceptions of social impacts are the individuals' perceived quality of life, trust in institutions, social trust and place attachment. However, results of the survey has shown that measuring social impacts is not sufficient for the planning and designation of a PA. The purpose of the study was to explore people's perceptions of the PAs and the reasons and factors influencing these perceptions. Once more low levels of institutional trust and local participation on management issues were reported (Jones, et al., 2018).

#### **4.5. Data collection**

The primary quantitative research was conducted for the purpose of detecting the challenges and opportunities from the potential development of ecotourism in the National Park of Kotychi-Strofylia wetlands. Personal interviews consisting of open-ended questions were distributed to the main representatives of stakeholders involved in the management of the PA. Open-ended questions were chosen because they can be answered in depth and allow for original, unique responses, without

being limited by multiple choice predetermined answers. Moreover, this research instrument allows for free responsiveness since our aim is to furtherly understand possible connection of the deficient ecotourism development of this specific site with the perceptions of the involved stakeholders over ecotourism rather than generalize to the whole of the PAs in Greece.

Our first intention was the interviews to be conducted in person, but after many unsuccessful repetitive attempts of setting predefined appointments with the representatives of the stakeholders and because of the limited time-frame for the completion of the research study, questionnaires were emailed to all the participants. Questionnaires were mailed to five different stakeholder groups involved in PA management of the research area, namely: State agencies at the level of Greek Prefectures, local authorities, the MA of the PA, environmental organizations and forest managers. The questionnaires were introduced by an invitation letter as a survey on ecotourism development beliefs. Respondents were asked to state their opinions according to their knowledge and experience. The research utilized a three-contact procedure (initial mailing, telephone reminder, and follow-up full mailing). In total, eleven extensive questionnaires consisting of fourteen principle questions followed by sub questions were mailed and seven questionnaires were returned during October of 2019. Three of the ten participants were the supervisors of three state departments of the Region of Western Greece namely: the department of development planning, the department of tourism strategy planning and the department of environmental and spatial planning. One questionnaire was addressed to the Project Coordinator, Responsible of Financial Services and Head of System Administrative Sufficiency of the MA of the National Park of Kotychi-Strofylia wetlands. Two questionnaires were mailed to the Municipality of Andravida-Killini and the Municipality of West Achaia respectively of which only the latter was responded by the Mayor of the municipality. Three questionnaires were also emailed at representatives of local and national such as the Ecological Movement of Patras (OIKIPA), the WWF Greece and the Hellenic Ornithological Society (HOS). Answers were returned by the OIKIPA and the WWF. Finally, two questionnaires were also sent to the managers of the Forest Service of

Ilia prefecture and the Forest Services of Achaia prefecture respectively, but they were never returned.

Stakeholder group	Participant	Number of interviews
<b>Local administration</b>		
Region of Western Greece	Supervisor of the Department of Development Planning	1
Region of Western Greece	Supervisor of the Department of Tourism Strategy Planning	1
Region of Western Greece	Supervisor of the Department of Environmental and Spatial Planning	1
Municipality of West Achaia	Mayor	1
Municipality of Andravida-Killini	-	-
Forest Service of Achaia prefecture	Manager	-
Forest Service of Ilia prefecture	Manager	-
<b>Management agencies of Kotychi-Strofylia wetlands</b>		
Management Agency of the National Park of Kotychi-Strofylia wetlands	Project Coordinator	1
<b>NGOs</b>		
World Wide Fund for Nature (WWF)	Member	1
Hellenic Ornithological Society (HOS)	-	-
Ecological Movement of Patras (OIKIPA)	Member	1
<b>Total</b>		<b>7</b>

**Table 2.** Research participants and number of interviews

#### **4.6. Presentation of Questionnaire findings**

The questionnaires of the stakeholders were undertaken to give insight into their attitudes, values and practices of developing ecotourism in the National Park of Kotychi-Strofylia wetlands and to highlight variations between them. The research questions consisted of three main axes including the current situation of the National Park of Kotychi-Strofylia wetlands, the ecotourism development challenges and opportunities and the collaboration between stakeholders and their participation in promotion strategies.

The perceptions of the participants over the concept of ecotourism and its principles were used as an introductory statement prior to the further analysis of the requested topics. The role of ecotourism as a key factor for the sustainable development of the PA and the wide area is common in all responses. The opportunity for attracting scientist and students to conduct researches derived by ecotourism practices is special mentioned by the department of Department of Tourism Strategy Planning of the Region of Western Greece.

The thematic issue concerning the current situation of the National Park of Kotychi-Strofylia wetlands included three questions about the main purpose of the establishment of the National Park, the positioning of the area in Greece's tourism and the pressure and threats the protected region encounters. The protection and conservation of the huge diversity of its wetlands and terrestrial ecosystems as prescribed by the International Natura 2000 and Ramsar Conventions is recognised by all stakeholders as the principal purpose for its establishment. Except for the protection regime, the further promotion of the National Park and the wider area of Western Greece should be a prerequisite for its establishment and development according to all departments of the Region of Western Greece.

Opinions regarding the positioning of the area in Greece's tourism differentiate a lot among the participants. According to the project coordinator of the MA, the National Park of Kotychi-Strofylia wetlands does not constitute an autonomous tourism destination, but there is great potential in its development as such. The supervisors of all departments of the the Region of Western Greece agree on the

recognition of the National Park as an autonomous tourism destination for specific tourism markets such as scientists, researchers, students and volunteers on environmental projects. On the other hand, WWF Greece and the OIKIPA emphasize on the recreational character of the destination. To their opinion unfortunately the area is unknown for its international importance as a Special Protection Areas and a Site of Community Importance even to the residents of the city of Patras, which is in very close proximity to the Park. However, most local people are aware of the area as a daily seaside destination. Hotel accommodation is limited, medium sized and mostly all-inclusive, addressing to travelers, who usually spend just one night on their pass-through to another destination or to senior tourists seeking for affordable summer holidays. Both agree that ecotourism activities occur randomly, and the scarce visitors only spend a few hours inside the National Park. Thus, the National Park Kotychi-Strofylia wetlands does not constitute an autonomous tourism destination nor for ecotourism nor for mass tourism.

All participants identify a large number of pressures and threats the National Park encounters. Forest fires are recognized as the major current threat of the Park, since every summer wide areas of the pine forests are burnt. The favorable climatic conditions and the type of vegetation (Mediterranean flammable pine forests favor the wide spread of fires in the Park. The forest degradation by the uncontrolled vehicle access during summer season and excess waste disposal from vacationers are also identified as major pressures by all participants. Illegal hunting, illegal road openings and overgrazing are also mentioned by all respondents as human activities which are carried out uncontrollably and contribute to the reduction of the ecological and aesthetical value of the PA. The MA of the National park together with WWF and the Municipality of West Achaia underline the problem of illegal wood-cutting. The Mayor of the the Municipality of West Achaia points out the inefficient patrols of the Forest Services and the imprudent behaviour of the local people of the nearby communities. Finally land ownership issues in the *Samareika* area inside the protected area are a continuous problem for the management of the park according to the Supervisor of the Department of Environmental and Spatial Planning and the OIKIPA. According to OIKIPA the community of *Samareika* practices illegal breeding

and grazing inside the protected area and all decisions for the removal of livestock from the Ramsar area are pending.

The next thematic issue concerning the ecotourism development challenges and opportunities included various questions about the ecotourism activities offered in the National Park, the conditions under which ecotourism could be developed, the impacts and opportunities of such a development and the main problems blocking it. According to the participants there are many available activities in the National Park such as Hiking, Cycling, Swimming, Bird watching as, various hiking and cycling trails for all every type of traveler. As mentioned before the ecotourism activity is low impact, despite the fact that the Park offers numerous attractions for ecotourists. More specifically, according to the Department of Tourism Strategy Planning the only ecotourism activities that take place in the Park are educational tours organized by universities, schools and NGOs in collaboration with the Information Center of the Park. The number of individual travelers interested in ecotourism activities inside the Park is very limited. However, the ecotourism development of the Park is feasible on the supposition that new strategies are applied. All participants identify the need for renovation of the existing hotel units and apartments and the construction of new ones for the proper accommodation of the visitors. The cooperation of the MA with all the involved state and non-state stakeholders for the better promotion of the National Park is pointed out by both the Region of Western Greece and Municipality of West Achaea. What is more, according to the MA, the Region of Western Greece and the Municipality of West Achaea the combination of ecotourism with cultural, religious and educational tourism as well as agritourism would generate a strong nexus of multiple and diverse activities attracting many tourism markets in the National Park of Kotychi-Strofylia wetlands. The OIKIPA also underlines the importance of the involvement of the private sector in the conservation and wide use of the site, engaging new ecotourism activities including cultural and sightseeing tours with private guide, active participation of the visitors in agricultural activities in the external part of the Park and the development of sport tourism. Finally, the MA point outs that the existing infrastructure should be enhanced with appropriate infrastructure of alternative tourism which would be able to receive visitors

throughout the whole year and the role of the International airport of Araxos, which is only 8km away should be upgraded.

All participants agree that there are no impacts from ecotourism activities in the National Park, since ecotourism is not developed in practice. However, they do not concern about forthcoming impacts in the case of an ecotourism boom in the area, since ecotourism is by definition a low impact and small-scale activity aiming at minimizing the environmental impacts by providing environmental awareness and education and benefits to the local people. Nevertheless, all responses emphasize on the environmental footprint of the summer vacationers which traverse the park in order to enjoy the vast sandy beaches. These visitors are considered irresponsible travelers with low environmental awareness who tend to litter the beach with plastic bottles, bags and cigarette butts and trespass on the sand dunes with their vehicles.

It is common belief for all stakeholders that various opportunities can arise from the development of ecotourism of the National Park of Kotychi-Strofylia wetlands. Taking into consideration that the prefectures of Achaia and Ilia, which share spatially and administratively the National Park suffer a ceaseless socio-economic crisis, it is obvious that the tourism development can greatly contribute to the economic recovery of the regions. The economic benefits from such a development are underlined from all the participants. The MA of the National Park together with the Departments of the Region of Western Greece point out the importance of focusing on the markets of alternative tourism in order to safeguard the biodiversity of the PA and to insure the sustainable use of the natural resources of the area. However, all the participants agree that the tourism development should not be one-dimensional. According to their opinion the development of ecotourism would contribute significantly to the development of all kinds of alternative tourism as well as recreational tourism maximizing the economic benefits for the Region of Western Greece. The OIKIPA representative points out that tourism development would give access to work opportunities for the young population of the city of Patras which suffer from long-lasting unemployment since the deindustrialization period in the late 1980s. Employment opportunities is a very strong initiative for the retention of the local population in both urban centres and rural areas. According to the MA the



social inclusion and the retention of the local people on the rural areas is a major issue, since a big part of the countryside of Achaea prefecture has been abandoned for the sake of urbanization and most of the agriculture production has been permanently paused. The few communities feel secluded and helpless on the sake of the economic recession. Thus, it is clearly stated by all stakeholders that the opportunities deriving from the ecotourism development of the PA are multidimensional and contribute to the socio-economic upgrade of the profile of the greater area. The Municipality of West Achaea and the OIKIPA though remark that challenges from such a prospect derive from the necessity of the conduction of an official spatial planning, which will attribute specific land fields for certain uses excluding the zones of high protection status by ensuring the purposes of the PA and not undermine them.

Accepting that the ecotourism development of the National Park of Kotychi-Strofyliia wetlands is almost very low to null, the factors of hindering the development potentials were also requested. The MA identifies the perceptions over the definition of ecotourism and its attributes from the various involved stakeholders as the main problem. More specifically, the knowledge of stakeholders can be strongly related to their professional background, resulting in partial knowledge systems and to a unique perspective for the PA deriving from different benefits and incentives for ecotourism. The MA underlines the importance of a consensus view between all involved stakeholders towards the ecotourism principles in order to proceed in practice to development planning. All the departments of the Region of Western Greece do not identify deficiencies from their part, whereas they all agree that according to the state policy, the MA is responsible for encountering and solving all possible problems. Nevertheless, they do not express their clear opinion about the effectiveness of the management of the PA from the MA, while the representative of the Department of Development Planning of the region of Western Greece drops a hint about the failures in complying with the environmental legislation and the unacceptable illegal human activities taking place on the PA. The OIKIPA on the other hand focuses on the deficiency on specialized personnel on the managing bodies involved with the Park administration as well as the complete

absence of private initiative. Finally, the WWF Greece remarks that local communities have not been educated or informed about the opportunities that ecotourism could offer, thus they are only interested in agriculture activities, while recreational tourism on the seaside part of the PA is the only tourism segment being promoted by the local authorities.

The third research axis of the questionnaire deals with issues of collaboration between stakeholders and their participation in promotion strategies. The role of each stakeholder on the management of the National Park of Kotychi-Strofylia wetlands was one of the primary questions of this thematic section. The MA of the National Park stated that its managing body is public utility Legal Person authorised by the Ministry of Environment and Energy for the protection of habitats in the protected region and specifically the wetlands, dunes and pine forest (*Pinus pinea*) at Strofylia and the provision of information and awareness about the area's ecological significance amongst the citizens, the implementation of environmental training, touring and ecotourism programs and the recording and monitoring of the types of habitat, species of flora and fauna and water quality in the protected area. The Department of Development Planning of the Region of Western Greece stated that among its responsibilities are the conduction of scientific research on the area, the provision of consultation before the final approvals of spatial planning, activities and environmental projects in the PA, the proclamation, assignation and monitoring of such projects as well as various activities of promoting the PA through congresses and seminars. Moreover, the Department of Development Planning of the Region of Western Greece is responsible for providing all enterprises within and around the PA with quality labels. The Department of Tourism Strategy Planning of the Region of Western Greece made reference to its collaboration with the MA on projects and acts aiming at the promotion of the PA. Finally, the Department of Environmental and Spatial Planning stated that carries out controls and inspections after the denouncements coming from either Judicial authority, Police services or ecological organizations and civilians about human delinquency in the area. The municipality of West Achaia pointed out that it has no authority on matters of management and administration of the Park and identified

the MA as the only administrator of the National Park. The OIKIPA underlined its efforts over sensitisation and mobilization of the citizens in environmental matters concerning the National Park of Kotychi-Strofylia wetlands and its fights against state agencies for pending issues of illegal breeding and grazing in *Samareika* area inside the protected area as well as the afforestation of lands destroyed by human intervention and wildfires and the retention of land uses on the Black Mountains hills. OIKIPA also mentions that all members of the local NGO work hard for the promotion of the National Park through internet and media Marketing. WWF Greece identifies its general role on the protection of the environment on national level and comments that does not participate on actions related to the specific site.

Regarding their contribution and participation on activities of promoting the ecotourism development on the PA, the Department of Tourism Strategy Planning of the Region of Western Greece refers to active participation on exhibitions and congresses coordinated by the MA of the National Park, while the Department of Development Planning states that provides consultation for every project taking place at the Park and also participates in European conferences and exhibitions focusing on PAs and their sustainable development. Both the Department of Environmental and Spatial Planning and the Municipality of West Achaia have nothing to report about their active contribution to ecotourism management in the PA. Among the NGOs only the local movement OIKIPA refers mostly to the planning of one to three annual daily visits for birdwatch and hiking in the National Park. WWF Greece has nothing to report as well. Finally, the MA presents a number of actions including the upgrade and transformation of the Information Centre to a modern and interactive museum of natural history, the completion of construction of four ecotourism settlements in lake Prokopos serving the accommodation of scientists and volunteers, the signalling of the cycling and hiking trails according to European standards, the appropriate signalling of the road network in order to meet the needs of the forest services, the conduction of monitoring studies concerning the carrying capacity of the Strofylia beaches (Kalogria, Bouka, Falari, Gianiskari, Koynoupelaki, Giannitsochori and Piniou), the improvement of the processes of branding of the National Park, the certification of the local products produced in the

PA and the networking with other National Parks in Greece for sharing expertise and knowledge.

More specifically concerning the strategy planning for the ecotourism development in the National Park of Kotychi-Strofylia wetlands and its implementation, most of the participants referred to actions carried out by the MA of the National Park. According to all the Departments of the Region of Western Greece measures and actions for the development of ecotourism are solely carried out by the Management Bodies of the National Park and include protection and conservation of the Park, provision of information and awareness about the area's ecological significance, the implementation of environmental training, touring and ecotourism programs and the recording and monitoring of the types of habitat, species of flora and fauna and water quality in the protected area. According to OIKIPA there is no strategy planning for ecotourism development, while WWF Greece states that there was one that was never implemented. The MA of the National Park among the regular responsibilities for the protection of the Park states that during the last decade the MA has accomplished the completion the conduction of Management Plan by law 3937/2011, the allocation of proper signs on the road network, the production of informative leaflets about the activities offered in the Park available in four languages (English, French, German, Italy and Russian), the restoration and conservation of the educational trails, the lookouts and of two settlements inside the PA, the waste collection of the protection zone A, the upgrade of the official website of the National Park ([www.strofylanationalpark.gr](http://www.strofylanationalpark.gr)), the planning of tour guides by specialized scientific personnel, the completion and electronical upload of a Geodatabase application for smartphone and tablets which gives the opportunity to people to have access to a digital imaging of the National Park as well as various seminars and exhibitions for raising public awareness on environmental issues.

However, the responses regarding the cooperation of all involved stakeholders for the promotion of the National Park of Kotychi-Strofylia wetlands as an ecotourism destination were less extensive by all participants. The MA mentioned the only collaboration through meetings and educational and informative seminars.

The Department of Development Planning of the Region of Western Greece refers to regular meetings with representatives of the local authorities, the Chamber of Commerce, entrepreneurs of the wider area and the NGOs, while the Department of Tourism Strategy Planning states that participates in various tourism exhibitions within and out of Greece promoting the National Park as a site of impeccable beauty and unique biodiversity. WWF and the Department of Environmental and Spatial Planning had nothing to report, whereas the OIKIPA mentioned that a member of their ecological movement participates as a member on the Administration Council of the MA but other than that there is no stable collaboration in practice for the specific issue of ecotourism development. Controversy between stakeholders over the planning and development of ecotourism in the National Park were not reported by most of the participants, since according to OIKIPA prerequisite for any kind of conflict is the collaboration among stakeholders. OIKIPA highlights the absence of any conflict as the outcome of zero conversation and cooperation between stakeholders. The Municipality of West Achaia also underlines the null cooperation and WWF has nothing to report. All three Departments of the region of Western Greece state that they are not aware of any controversies, while the Department of Development Planning admits that profit can always be an issue of controversy. On the other hand, the MA of the National Park points out that the MA is the principal body authorised by the State for the protection, administration and management of the Park, thus the planning and development of ecotourism is under its authority. Moreover, the different definitions and evaluations of every local state and non-state stakeholder according to its personal interests is a problem and all perceptions should be aligned to the principles and practices applied by the MA.

According to all participants there is no active participation on the management of the PA by local communities. OIKIPA and WWF mention that the only involvement reported is through the participation of some people coming from NGOs or the local authorities in the Administration Council of the MA. The Municipality of West Achaia refers to null participation, while the Departments of the Region of Western Greece state that they are not aware of locals be involved to the PA management. Finally, the MA point out the percentage of participation is low; however, the MA

will continue to promote meetings and programmes that will enhance stakeholders' participation in decision-making procedures.

## **5. Results and findings**

### **5.1. Current state of the PA as an ecotourism destination**

The purpose of the establishment of the National Park of Kotychi-Strofylia wetlands as stated by all stakeholders was the protection and conservation of its biodiversity and the promotion of environmental awareness amongst the citizens. It is clear by all responses that the development of ecotourism has never been a priority on the management planning of the PA, thus since its foundation in 2002 by National Law, the number of people visiting the Park for ecotourism has not increased significantly. According to past researches and the stakeholders' responses the extensive sandy beach of 21km lying along the National Park still constitutes the only major attraction for visitors. Despite the abundance of attractions, lookouts and activities offered inside the National Park, these are not well-known to the public. The statement of OIKIPA about the lack of awareness even from the citizens of the city of Patras, which is only 37km away, about the importance of the National Park as a site of international significance augments the unpopularity of the Park.

The only tourism activities taking place in the National Park concern specific tours for scientists, students, researches and volunteers as stated by the representatives of the Region of Western Greece. Moreover, the National Park is known for its impressive beaches mostly among the people living in the wider area around the Park. Hotel accommodation and relative infrastructure is limited and outdated, and tourists usually spend on average one night or two on their pass-through to another destination. International visitors usually concern senior tourists residing in the few all-inclusive hotels nearby.

It is obvious that the development of ecotourism in the National Park of Kotychi-Strofylia wetlands is very low-paced and not integrated in the general planning and management of the PA. The ecotourism activities taking place are random and the

visitors traversing the National Park on their way to the beach are not aware or interested in its unique natural beauty and significance on the map of PAs in the world. However, this is a common state for the majority of the PAs in Greece, since only a few National Parks such as Kerkini and Prespa Lake, the National Park of Dadia – Lefkimi – Soufli, the Plastira Lake and the Nymfaio village in West Macedonia, have been developed as ecotourism destinations in the last decades as stated by the literature review.

## **5.2. Prospects of ecotourism development of the PA**

Even though the National Park of Kotychi-Strofylia wetlands is not recognised as an ecotourism destination, there is great potentiality to become one according to the MA of the Park. Indeed, as derived from the extensive case study description, the National Park holds many credentials for being a unique ecotourism destination.

The most important qualification of the National Park of Kotychi-Strofylia wetlands is its biodiversity significance as one of the ten sites designated as Wetlands of International Importance (Ramsar Sites) in Greece. The legal status of the site has acquired a number of international and national protection designations due to its unique aesthetic value and high biodiversity. The PA includes five Natura 2000 sites, two SPAs and three SCIs and a permanent Wildlife center. Its wetland system is the largest in the Peloponnese and the forest of Strofylia is the biggest in Greece and one of the largest in Europe. It is obvious that the magnitude of its qualifications could transform the PA into a destination of international range.

The available activities for ecotourists are various and diverse ranged from hiking, cycling, birdwatching and swimming. Numerous hiking and cycling trails traversing the whole extensity of the National Park are available and stunning views can be enjoyed for many easy access points. The managing and planning of ecotourism development can be carried out by the Managing Body of Kotychi-Strofylia Wetlands in cooperation with the large number of authorities/ stakeholders involved including Regions, Prefectures, Municipalities, NGOs, local Forest Districts

and police stations. The completion of the Management Plan as stated by the MA of the National Park is one more positive step to this direction.

The accessibility of the National Park is one more strong advantage to its development, since the road network inside and outside of the Park is extensive and its proximity to two big urban centres is close. International tourists could arrive either by ferry from Italy from the New Port of Patras around 37km away or by flights in Araxos International airport just 8km away.

Ecotourism development in the area could also be combined with other types of tourism as underlined by the representatives of the Region of Western Greece and the Municipality of West Achaia. Indeed, the placement of the Park in Western Greece is a great attribute, since Western Greece is a region with rich cultural and natural resources, which can generate various and diversified touristic activities ranging from the traditional to the more alternative ones. There are many important natural attractions in Western Greece, some of them protected by International conventions (NATURA 2000, RAMSAR) ideal for tourism activities throughout the whole year. Indicatively we can refer to the Kalavryta Ski Resort, which is the second largest ski resort in Greece, the Helmos Observatory located on mountain Helmos, the Spileo Limnon (Cave of the Lakes) inscribed to Natura 2000 network, the National Park of Chelmos- Vouraikos Gorge, which is part of the " UNESCO Global Geoparks" and inscribed to Natura 2000 network, the Lake Tsivlou an alpine lake at an altitude of 800 meters, the Ladonas river, the Lagoon of Messologi, the Amvrakikos Gulf and the Achaia Clauss winery. Very important archaeological sites, museums and historical sites are also situated on Western Greece among them two UNESCO World Heritage Sites, the Archaeological Site of Olympia and the Temple of Apollo Epicurius at Bassae. Moreover, important pilgrimage Christian sites as the Cathedral Church of Saint Andrew in the city of Patras and the Monasteries of Mega Spilaio and Agia Lavra in Kalavryta are also situated in the region of Western Greece. The combination of ecotourism in the National Park with cultural, religious, educational and agriculture tourism could generate a very strong and diversified tourism product active during all four seasons of the year contributing to the sustainable development of the whole region of Western Greece.



Concluding the ecotourism development of the National Park of Kotychi-Strofylia wetlands is feasible in comparison with other PAs in Greece, since the specific PA holds an MA and Information Center, a completed Management Plan, various stakeholders involved and interested for its management, numerous activities and unique attractions for its visitors, easy accessibility and various opportunities for generating a tourism product of great diversity against seasonality and mass tourism.

### **5.3. Potential benefits and adverse consequences of ecotourism development**

The opportunities deriving from the development of ecotourism are both social and economic. According to literature review the few cases of PAs with low to moderate ecotourism activity such as the Kerkini Lake and the National Park of Dadia, have experienced some positive effects on the economic development of the wider area around the PA, despite the fact that locals believe that in most cases tourism is not still well organised. In other cases, the ecotourism development has contributed in retaining especially young people in the Greek province, averting them from abandoning their villages in order to move to urban centres. The Dadia village is an excellent example of such a positive outcome of the ecotourism development of the National Park of Dadia, since it is one of the very few villages in Greece with growing population.

However, the benefits from the ecotourism development seem to be potential on the perceptions of the local communities and not yet present. Almost in all surveys in Greek PAs people talk about their positive attitude over ecotourism development and their belief that tourism will support their income and give opportunities for new jobs, especially for young people and women. Likewise, all stakeholders involved to the management of the National Park of Kotychi-Strofylia wetlands express their confidence that the ecotourism development of the park would contribute to the alleviation of the unemployment, maximising the economic benefits for the Region of Western Greece and especially the city of Patras, which suffers a socio-economic crisis since the late 1980s.

Moreover, the viability of an ecotourism development model plays a key role in the protection and preservation of the environment. Uncontrolled human activities and reckless exploitation can cause irreversible damage on ecosystems and biodiversity. Promoting awareness of the environment and the sustainable uses of natural resources generates responsible tourists, who respect the PAs as well as local communities sensitized about the environmental ethics and practices carried out in the PAs. The establishment of National Park of Kotychi-Strofylia wetlands as an ecotourism destination would contribute to its protection, since at the moment irresponsible human activity threatens its uniqueness. As stated by all stakeholders except the economic benefits, an ecotourism management plan would help local people gain knowledge and respect about the PA, would boost their self-confidence and would contribute against social inclusion and abandonment of the rural areas.

No certain impacts from ecotourism development have been reported on PAs in Greece, probably because development is still at its infancy in most cases. The ecological changes reported in some wetland sites are mostly occurred because of illegal human intervention on land uses by locals for agriculture and grazing rather than ecotourism practices. Thus, ecotourism could be an opportunity for the aversion of such practices and the better patrol of the PAs for the prevention of illegal hunting and the expansion of wildfires. However, NGOs and the other local authorities point out that in order to eliminate any possible adverse consequences of ecotourism development in the future, the conduction of an official spatial planning, which will attribute specific land fields for tourism appropriation is necessary.

#### **5.4. Management framework of the PA: cooperation amongst stakeholders and local community involvement**

The governance of the PAs in Greece has been an issue of controversy and research over the last decades. A shift towards a more participatory approach has been attempted. The inclusion of stakeholders and local communities in the management and decision-making processes has been adopted mostly in theory though, while the only authority responsible for the management and administration

of the PAs is the MA in practice. In the case of the Natura 2000 sites, the need for the local participation is referred on the Habitats Directive (92/43/EEC). However, each Member state is responsible for establishing its own management framework.

Past researches on PAs over the results of the first co-management framework adopted over the last ten years in Greece, have clearly shown that although theoretically participatory approaches are favoured both by stakeholders and locals, they have not been successfully implemented. The wardening of the PAs is co-management in practice, since the MAs are not authorised to impose the law. Guarding though is carried out by other services, such as the Forest Agencies and Police Stations. This collaboration among them is not as immediate as needed, leading to neglect and lateness in responding to emergencies threatening the PAs. The legal framework of most PAs has been reported to be old or absent and management planning is not the outcome of a common and integrated plan evaluated and approved by all involved stakeholders. What is more local community involvement in planning and decision-making is practically absent.

The local's perceptions and acceptability for three types of managements frameworks including state-based, collaborative management and community management have been investigated through various studies and researches. Findings show that even though each case is different and opinions many vary, in general there is a favorable attitude of citizens over the collaborative scenario, which promotes the collaboration of local and state actors with the local community. The exclusion of locals from the management processes though has led to low level of awareness of the importance of environmental issues and ignorance of abiding by the restrictions imposed on the core zones of the PAs.

Likewise, collaboration between management bodies of the PAs with state and regional authorities, academic institutes and NGOs has also been reported deficient and incompatible with the administration structure dictated by the State. The legislate of a large number of laws, provisions, presidential decrees and ministerial decisions for the PAs needed to be implemented by different and various administrative bodies such as the MA, the Forest and Polices Services creates problems in their application. Responsibilities get mix and even the locals and

visitors are not aware well informed about the authority responsible for the protection status. The cooperation among stakeholders is weak and hindered by the lack of coordination, undefined responsibilities and bureaucracy. In many cases stakeholders' perceptions and views over the appropriation of the PAs differentiate, but there is no regular communication for generating common planning and consensus.

Regarding the case of the National Park of Kotychi-Strofylia wetlands all above are certified by the responses of the participant stakeholders. As recognized by all participants the MA of the National Park is the only authorized stakeholder responsible for the management of the Park. The Region of Western Greece responsibilities are only restricted to conducting scientific researches, providing consultation on several matters and promoting awareness of the environmental significance of the Park on exhibitions and conferences. Similarly, the Municipality of West Achaia stated its null involvement on decisions-making processes and the local NGO underlined that its contribution is mainly the outcome of private initiative rather than collaboration practices.

It is obvious from the primary research that the management framework of the National Park of Kotychi-Strofylia wetlands remains state-based in practice and there is no practical shift to a more participatory scheme. The collaboration among stakeholders is achieved through meetings and educational and informative seminars, but there is no regular communication. Consequently, no controversies or conflicts were reported as the outcome of zero substantial conversation and cooperation. Local communities' involvement is also defined as null, since most of the stakeholders commented that they are not even aware of such an event. The dominance of the MA on the management framework of the PA was underlined by its representative, which clearly stated that the MA is the only responsible body authorized by the State for all administrative and management issues and all relevant stakeholders should comply with the principles dictated by its managing body. It is evident that like in most cases in Greece, the co-management framework is being applied only by the presence and participation of representatives of all stakeholders in the Administrative Council of the MA and there has been no progress

towards a collaborative management scheme. However, we should emphasize on the favorable attitude of the Region of Western Greece, the Municipality of West Achaia and the local NGO for wider participation and the inclusion of the local communities on the governance of the PAs. We are not aware of the citizens' perception over this matter, since the research was conducted only from the stakeholders' point of view.

### **5.5. Promotion strategy planning of the PA over ecotourism development**

The management frame for the ecotourism development of the PAs is not well organized and in many cases is absent for most of the PAs in Greece. The governance of the PAs is focused mostly on the protection and conservation of its natural resources and strategies for the development of ecotourism usually are not on the agenda.

However, there are some exceptions, where special attention has been given to ecotourism planning, such as the case of the Kerkini Lake, the Zagori area within the borders of the National Park of Vikos-Aoos and the Dadia National Park. The MA of the Kerkini lake except for its central role in nature conservations, it has established the *Information Center of Kerkini Wetland*, which is an association for the Protection and the Promotion of Lake Kerkini. One of the main goals of this association is the promotion of the area and cooperation with all involved stakeholders for the implementation of a strong marketing plan. Zagori is also an example of rural area, which has been developed as a strong tourism destination through the active and prosperous collaboration of numerous stakeholders. The establishment of Dadia Eco-tourism Center in the Dadia National Park is another successful initiative for the further development of ecotourism in the area. This foundation was established by the WWF in 1980 for the purposes of protecting and developing the area. The completion of the accommodation infrastructure in the 1990s was the cause for an impressive growth of tourist arrivals between 1995 and 2003.

Unfortunately, in the case of the National Park of Kotychi-Strofylia wetlands such practices and initiatives have not been reported. The Region of Western Greece through the Department of Development Planning and the Department of Tourism Strategy reported their contribution to the promotion of the area by participating in exhibitions and congresses coordinated by the MA of the National Park, but they remarked that there is not integrated and agreed marketing plan on tourism promotion between all stakeholders. Moreover, the presence of big national NGOs is limited, and the only local NGO reports promotion activities organized on their part and not in cooperation with other stakeholders. Consequently, the promotion strategy planning of the PA is under the sole authority of the MA, which presented a limited agenda on activities primarily focused on restorations of the existing infrastructure as well as the intention to improve the processes of branding of the National Park in the future and to contract networking relationship with other National Parks for sharing expertise.

However, it is obvious that the priority of the MA since its establishment remains the protection and conservation matter as derived by the response of the project coordinator of the MA on the question about the main purpose of the National Park. Ecotourism development though can only be achieved if the PA is offering sufficient and quality accommodation and by having regular and good promotion at a national and to some extent at international level. The information channels for the development of ecotourism in the National Park of Kotychi-Strofylia wetlands are not enough and marketing is almost not existent.

#### **5.6. Factors hindering the ecotourism development of the PA**

Various factors have been recognized as constraints on the development of ecotourism in the Greek PAs according to literature review. Starting from the very basics referring to absence of managing bodies and management plan to more specific ones like the lack of coordination between involved stakeholders.

Even for the PAs where there is an authorized managing body from the state and various authorities/stakeholders, the evolution of the PA in an autonomous ecotourism destination cannot be guaranteed. Protecting, preserving and monitoring the natural resources of the PA does not constitute a promotion strategy and a special and focused marketing plan and practices are essential for promoting its awareness. The absence of a coherent and integrated promotion planning is the major constraint on the ecotourism development. The co-management framework of the PAs is working only in theory and the participation of local authorities and local communities on strategy promotion planning is deficient. The responsibilities of the MA are usually concentrated over issues of environmental conservation and local people are not well informed about the importance of the PA and the benefits that could derive from its touristic appropriation.

Likewise, in the case of the National Park of Kotychi-Strofylia wetlands participants of the primary research reported that they are not aware of the effectiveness of the management of the Park and their contribution to promotion strategies is random and rare. Moreover, the local NGO underlined the deficiency of specialized personnel on the managing bodies and the absolute absence of private initiative. Although many people visit the National Park on their way to the beach during summer seasons, the outdated and limited accommodation together with the absence of information over ecotourism activities and attractions inside the Park discourage their staying. The MA of the National Park reported that different perspectives of stakeholders regarding the definition of ecotourism and its principles constitutes an obstacle towards the generating of a common planning over its development. Indeed except for the lack of a national promotion plan and the deficiency in appropriate infrastructure and convenient accessibility of the PAs, it is a common belief that the enormous lack of communication and cooperation among the professionals involved directly and indirectly in tourism is the major factor hindering the ecotourism development of the National Park of Kotychi-Strofylia wetlands.

## **6. Discussion and conclusions**

### **6.1. Conclusions**

Ecotourism development has been adopted as a sustainable land-use practice on PAs all over the world, since it constitutes not only an effective instrument for biodiversity protection and conservation, but also a factor enhancing the economic welfare and well-being of the people living near PAs.

Despite its abundance in unique protected forest areas of great biodiversity and aesthetic value, Greece's position on the ecotourism map of the world is very low. Various constraints have been reported the last two decades through surveys and studies about the slow-paced ecotourism development of Greek PAs. The lack of an integrated national plan for the management and administration of the PAs has been recognised as the main problem. The establishment of managing bodies consisting of people representing all local stakeholders was a first encouraging step towards more participatory practices on the management of the PAs. However, according to most of the available research reviews, the management framework of the PAs in Greece is collaborative in theory. The absence of a national conservation strategy is evident through the insufficient collaboration of central and local authorities and the deficit of public participation. As a result, many of the PAs in Greece have been either abandoned or substantially degraded.

However, there are some National Parks that not only have achieved a great protection and conservation status, but also an ecotourism development. Literature review has shown that the mild ecotourism development of PAs such as the Kerkin Lake and the Dadia National Park is the outcome of common promotion strategies and integrated efforts from all involved state and non-state stakeholders. The changes in livelihoods as a result of tourist development in these cases are obvious, since positive attitudes have been reported in general from local people towards the further appropriation of the PAs. People believe that tourism has supported their income, giving job opportunities especially for young people and unemployed women and share great hopes for further development in the future.



Regrettably the cases of PAs that have been developed as ecotourism destinations in Greece are very few. The National Park of Kotychi-Strofylia wetlands has been chosen as an indicative paradigm of a National Park, which whilst meeting most of the prerequisites for ecotourism development, there has been null tourism development since its establishment. Indeed, the National Park shares an important biodiversity position on the map of Greece and Europe, has a completed legal status protected by various national and international conventions and holds an established managing body governed by a Board of 11 members that represent central Government, all levels of local Government, Environmental Organizations, local stakeholders and the scientific community. Moreover, the huge diversity of habitats, the aplenty in attractions and lookouts, the extensive road network inside and around the park, the proximity to two urban centres and the easy accessibility of the area hosting even an international airport just 8 km away, constitute the PA ideal for ecotourism development.

Nevertheless, ecotourism activities take place randomly and are not part of an organised planning. Primary research has revealed that ecotourism has not ever been in the agenda of the managing bodies of the PA. Retaining an adequate protection and conservation status was the main purpose since the establishment of the Park and has not been enriched with new practices over the years. The MA of the park had very little to report over actions and purposeful planning regarding the ecotourism development of the PA. The co-management framework of the PAs is working only in theory and the participation of local authorities and local communities on strategy promotion planning is being applied only by the presence and participation of representatives of all stakeholders in the Administrative Council. Deficiencies of specialized personnel on the managing bodies and absolute absence of private initiative have also been reported. The role of all involved actors and the terms of their operation is not clear, causing problems to the efficient guarding of the PA, since although the MA is the main responsible body for the protection of the Park, it has not the authority to enforce the law. Consequently, uncontrolled human activity related to seaside tourism and illegal and harmful practices from local people and visitors have been reported as major threats for the viability of the Park.

All aforementioned problems and constraints on the ecotourism development of The National Park of Kotychi-Strofylia wetlands can be generalised up to some extent for most of the cases of PAs in Greece. However, positive conclusions have also been deducted as the significant level of readiness and willingness on the side of all stakeholders to accept ecotourism as a sustainable tourist development ideal for the PA. The overall attitude of all involved stakeholders towards ecotourism is positive, as well as their will to a more coherent and regular collaboration in order to establish a common marketing planning for the better promotion of the area. The need for proliferating environmental knowledge and possible socio-economic benefits from the appropriation of the PA for ecotourism purposes amongst citizens through systematic educational programmes is also essential for providing local actors with the means and incentives to participate in the management of the PAs. Indeed, whereas the protection and conservation is the main priority of establishing the PAs, ecotourism development can furtherly boost preservation and safeguarding of the local communities' heritage and generation of economic welfare from nature-based activities.

## **6.2. Limitations of the study**

There were several restrictions over conducting a more extensive and comprehensive primary research on stakeholders' perception towards ecotourism development of the National Park of Kotychi-Strofylia wetlands. The major constraint on the conduction of the research was the time limitation. Upon the approval of the designated subject of the research from the university institution, the research process was appointed to be carried out during the summer season. However, the Municipal Elections of May 2019 followed by the unscheduled National Elections of July 2019 aborted the schedule planning, since it was very difficult to come in contact with the new representatives of the new state agencies in the Region of Western Greece and the Municipalities bordering the National Park.

Consequently, the research had been postponed until October 2019, when all new representatives of state stakeholders had been appointed in their new

positions. The original idea of primary research consisted on personal interviews with each of them, however after multiple and fruitless effort to assign appointments with the most important supervisors of each agency, the research was conducted upon open-ended questionnaires sent by mail. In order to substitute the lack of the personal interview as a research instrument and its advantages on deriving generous knowledge and information, the questionnaire was adapted to a more extensive format consisting of various questions and sub questions.

Nevertheless, many of the chosen stakeholders involved did not have the appropriate time to respond, since the time-frame of conducting the research was very limited. Thus, some of the important stakeholders involved in the protection and management of the Park such as the Municipality of the Andravida-Killini and the Forest Services of Achaea and Ilia are not included in primary research. Likewise, since the summer season had been concluded during October 2019, it was not possible to reach private professionals from the hospitality sector, beside the fact that questionnaires had been sent to all the hotel compounds within and around the PA. The responsiveness of national NGOs was also constricted, since only WWF Greece and the local NGO OIKIPA responded immediately.

The main purpose of our primary research though was achieved, since the major key stakeholders influencing the management of the National Park reported their responses extensively. However, a more flexible time frame would attribute to collect more research material from the big number of authorities involved in the decision-making processes for the National Park of Kotychi-Strofylia wetlands, which are numbered around twenty-five.

### **6.3. Future research**

Taking into consideration that most of the available past researches on PAs the last two decades are focused on the local's perceptions over the management framework of the PAs in general, it is concluded that more research has to be conducted regarding the ecotourism development of the PAs and the challenges and

opportunities deriving from such an appropriation. Moreover, very few researches have reported the beliefs of the stakeholders' point of view in comparison with the ones concentrating on the local communities' attitudes.

Specifically, for the case of the National Park of Kotychi-Strofylia wetlands available research history is very limited looking mostly at issues of natural resource management and environmental threats. The international importance of the National Park and its uniqueness in the whole Peloponnese requires further academic research on various matters ranging from reporting the perceptions over participatory schemes on management of the PAs to attitudes of local people towards the appropriation of the Park.

First and foremost, the current research presented in this thesis could be enhanced by the inclusion of all state and non-state stakeholders in combination with both the local inhabitants and the visitor's point of view on matters concerning the evaluation of the management and administration of the Park. Comparison with other National Parks sharing same characteristics would also attribute to more effective results and conclusions. Finally, the parallel research of both the National Park Kotychi-Strofylia wetlands and the Kyparissia bay, which is also under the management of the MA of the Strofylia National Park would contribute to investigate if there are similar problems on administration and promotion with regard to these two areas and if these problems could be solved through a network of PAs.

## References

- Andrea, V., Tampakis, S., Tsantopoulos, G., & Arabatzis, G. (2014). Administration and management effectiveness of protected areas: stakeholders' views of Dadia National Park, Greece. *Eco.mont (Journal on Protected Mountain Areas Research)*, 5(2), 23–34. doi: 10.1553/ecomont-5-2s23
- Apostolopoulou, E., Drakou, E. G., & Pediaditi, K. (2012). Participation in the management of Greek Natura 2000 sites: Evidence from a cross-level analysis. *Journal of Environmental Management*, 113, 308–318. doi: 10.1016/j.jenvman.2012.09.006
- Apostolopoulou, E., & Pantis, J. D. (2009). Conceptual gaps in the national strategy for the implementation of the European Natura 2000 conservation policy in Greece. *Biological Conservation*, 142(1), 221–237. doi: 10.1016/j.biocon.2008.10.021
- Becken, S., & Job, H. (2014). Protected Areas in an era of global–local change. *Journal of Sustainable Tourism*, 22(4), 507–527. doi: 10.1080/09669582.2013.877913
- Buckley, R. (2012). Sustainable tourism: Research and reality. *Annals of Tourism Research*, 39(2), 528–546. doi: 10.1016/j.annals.2012.02.003
- Ceballos-Lascuráin, H. (1996). Tourism, ecotourism, and protected areas. doi: 10.2305/iucn.ch.1996.7.en
- Chen, X., Lupi, F., & Liu, J. (2017). Accounting for ecosystem services in compensating for the costs of effective conservation in protected areas. *Biological Conservation*, 215, 233–240. doi.org/10.1016/j.biocon.2017.09.013
- Christopoulou, O. G., & Tsachalidis, E. (2004). Conservation Policies for Protected Areas (Wetlands) in Greece: A Survey of Local Residents Attitude. *Water, Air, & Soil Pollution: Focus*, 4(4/5), 445–457. doi: 10.1023/b:wafo.0000044817.88422.64
- Diamantis, D. (2000). Ecotourism and sustainability in Mediterranean islands. *Thunderbird International Business Review*, 42(4), 427–443. doi: 10.1002/1520-6874(200007/08)42:4<427::aid-tie5>3.0.co;2-g
- Dimitrakopoulos, P. G., Jones, N., Iosifides, T., Florokapi, I., Lasda, O., Paliouras, F., & Evangelinos, K. I. (2010). Local attitudes on protected areas: Evidence from three Natura 2000 wetland sites in Greece. *Journal of Environmental Management*, 91(9), 1847–1854. doi: 10.1016/j.jenvman.2010.04.010

Dimopoulos, P., Kokkoris, I., & Panitsa, M. (2017). Assessment of the environmental damage and replacement costs in the protected area of the Kotychi-Strofylia National Park. In: *Environmental Responsibility, Prevention and Remedy: Challenges and Opportunities for the Biodiversity Protection in Greece*. 75–83.

Dologlou, N., & Katsoni, V. (2016). Ecotourism in Protected Areas, A Literature Review. *ECOCLUB.com Ecotourism Paper Series*, 1–20. Retrieved from <https://ecoclub.com/education/papers>

Donohoe, H. M., & Needham, R. D. (2006). Ecotourism: The Evolving Contemporary Definition. *Journal of Ecotourism*, 5(3), 192–210. doi: 10.2167/joe152.0

Dubois, G., & Ceron, J.-P. (2006). Tourism and Climate Change: Proposals for a Research Agenda. *Journal of Sustainable Tourism*, 14(4), 399–415. doi: 10.2167/jost539.0

Eagles, P. F. J. (2002). Trends in park tourism: economics, finance and management. *Journal of Sustainable Tourism*, 10(2), 132–153. doi: 10.1080/09669580208667158

Eagles, P. F., Romagosa, F., Buteau-Duitschaeffer, W. C., Havitz, M., Glover, T. D., & Mccutcheon, B. (2013). Good governance in protected areas: an evaluation of stakeholders' perceptions in British Columbia and Ontario Provincial Parks. *Journal of Sustainable Tourism*, 21(1), 60–79. doi: 10.1080/09669582.2012.671331

Eben, M. (n.d.). Public Participation during Site Selections for Natura 2000 in Germany: The Bavarian Case. *Stakeholder Dialogues in Natural Resources Management Environmental Science and Engineering*, 261–278. doi: 10.1007/978-3-540-36917-2\_10

Edwards, S. N., Mclaughlin, W. J., & Ham, S. H. (2003). A regional look at ecotourism policy in the Americas. *Ecotourism Policy and Planning*, 293–307. doi: 10.1079/9780851996097.0293

EEFECT. (2018). Study on ecotourism development. Retrieved from [https://eefect.eu/wp-content/uploads/2019/01/Study-on-ecotourism\\_final-pub.pdf](https://eefect.eu/wp-content/uploads/2019/01/Study-on-ecotourism_final-pub.pdf)

EKBY. (2010). Greek wetlands. Retrieved from [http://www.ekby.gr/ekby/en/EKBY\\_Greek\\_Wetlands\\_en.html](http://www.ekby.gr/ekby/en/EKBY_Greek_Wetlands_en.html)

EKBY. (2019). Natura 2000 network. Retrieved from [http://www.ekby.gr/ekby/el/Natura2000\\_main\\_el.html#NAT](http://www.ekby.gr/ekby/el/Natura2000_main_el.html#NAT)

EKBY. (2010). Protected areas of Greece. Retrieved from [www.ekby.gr/ekby/en/PA\\_main\\_en.html](http://www.ekby.gr/ekby/en/PA_main_en.html)

European Commission. (2019). Natura 2000. Retrieved from [https://ec.europa.eu/environment/nature/natura2000/index\\_en.htm](https://ec.europa.eu/environment/nature/natura2000/index_en.htm)

European Commission. (2019). Natura 2000 sites designation. Retrieved from [https://ec.europa.eu/environment/nature/natura2000/sites/index\\_en.htm](https://ec.europa.eu/environment/nature/natura2000/sites/index_en.htm)

European Commission. (2019). The Habitats Directive. Retrieved from [https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm)

Fauchald, O. K., & Gulbrandsen, L. H. (2012). The Norwegian reform of protected area management: a grand experiment with delegation of authority? *Local Environment*, 17(2), 203–222. doi: 10.1080/13549839.2012.660910

Fennell, D. A. (2001). A Content Analysis of Ecotourism Definitions. *Current Issues in Tourism*, 4(5), 403–421. doi: 10.1080/13683500108667896

Fennell, D. A. (2014). *Ecotourism: an introduction* (3rd ed.). London: Routledge.

Frantzi, S. (2004). Report on Conflict Assessment. *Tourism development in the broader area of Kerkini Wetland*. Thermi: Greek Biotope/Wetland Centre.

Frost, W., Laing, J. and Beeton, S. (2014). The Future of Nature-Based Tourism in the Asia-Pacific Region. *Journal of Travel Research*, 53(6), pp.721-732

Ganatsas, P., Tsakalimi, M., & Katsaros, D. (2013). Natural resource management in national parks: a management assessment of a Natura 2000 wetlands site in Kotychi-Strofylia, southern Greece. *International Journal of Sustainable Development & World Ecology*, 20(2), 152–165. doi: 10.1080/13504509.2012.761657

Georgiadis, T., & Christodoulakis, D. (1984). The Strofyli forest. *Geotechnica*, 3, 26–34.

Georgiadis, T., Economidou, E., & Christodoulakis, D. (1990). Flora and vegetation of the Strofyli coastal area (N.W. Peloponnesos-Greece). *Phyton (Austria)*, 30, 15–36.

Golden Kroner, R.E., Krithivasan, R., & Mascia, M.B. 2016. Effects of protected area downsizing on habitat fragmentation in Yosemite National Park (USA), 1864 – 2014. *Ecology and Society* 21(3):22. doi:10.5751/ES-08679-210322

Honey, M. (2008). *Ecotourism and Sustainable Development: Who Owns Paradise?* Island Press.

Hovardas, T., & Poirazidis, K. (2007). Environmental Policy Beliefs of Stakeholders in Protected Area Management. *Environmental Management*, 39(4), 515–525. doi: 10.1007/s00267-006-0053-9

IPCC. (2019). IPCC Special Report on Climate Change, Desertification, Land, Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems. Retrieved from [https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM\\_Approved\\_Microsite\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM_Approved_Microsite_FINAL.pdf)

IUCN. (2019, August 15). Protected Area Categories. Retrieved from <https://www.iucn.org/theme/protected-areas/about/protected-area-categories>

IUCN. (2019). A brief history. Retrieved from <https://www.iucn.org/about/iucn-a-brief-history>

Jones, N., Clark, J., Panteli, M., Proikaki, M., & Dimitrakopoulos, P. (2012). Local social capital and the acceptance of Protected Area policies: An empirical study of two Ramsar river delta ecosystems in northern Greece. *Journal of Environmental Management*, 96(1), 55–63. doi: 10.1016/j.jenvman.2011.10.012

Jones, N., Filos, E., Fates, E., & Dimitrakopoulos, P. G. (2015). Exploring perceptions on participatory management of NATURA 2000 forest sites in Greece. *Forest Policy and Economics*, 56, 1–8. doi: 10.1016/j.forpol.2015.03.010

Jones, N., Iosifides, T., Evangelinos, K. I., Florokapi, I., & Dimitrakopoulos, P. G. (2011). Investigating knowledge and perceptions of citizens of the National Park of Eastern Macedonia and Thrace, Greece. *International Journal of Sustainable Development & World Ecology*, 19(1), 25–33. doi: 10.1080/13504509.2011.584579

Jones, N., Malesios, C., Ioannidou, E., Kanakarak, R., Kazoli, F., & Dimitrakopoulos, P. G. (2018). Understanding perceptions of the social impacts of protected areas: Evidence from three NATURA 2000 sites in Greece. *Environmental Impact Assessment Review*, 73, 80–89. doi: 10.1016/j.eiar.2018.07.006

Kala, C. P., & Maikhuri, R. K. (2011). Mitigating people-park conflicts on resource use through ecotourism: A case of the Nanda Devi Biosphere Reserve, Indian Himalaya. *Journal of Mountain Science*, 8(1), 87–95. doi: 10.1007/s11629-011-1010-5



Katsaros, D. (2008). Creation of an ecotourism management model for the protected area of Strofylia and Kotychi lagoon (NW Peloponnese) and assesment of associated impacts with the incorporation of current forest policies. [PhD thesis]. Aristotle University of Thessaloniki. Retrieved from <http://hdl.handle.net/10442/hedi/19061>

Kazoglou, Y., & Vrahnakis, M. (2008). Networking of five LIFE-Nature projects in Greek Ramsar wetlands: Lessons learnt from vegetation management and monitoring activities.

Klooster, D., & Masera, O. (2000). Community forest management in Mexico: carbon mitigation and biodiversity conservation through rural development. *Global Environmental Change*, 10(4), 259–272. doi: 10.1016/s0959-3780(00)00033-9

Mandić, A. (2019). Nature-based solutions for sustainable tourism development in protected natural areas: a review. *Environment Systems and Decisions*, 39(3), 249–268. doi: 10.1007/s10669-019-09718-2.

Maragou, P., & Mantziou, D. (2000). Assessment of the Greek Ramsar wetlands. *WWF Greece*, 59–118.

Martinis, A., Mazi, S., & Minotou, C. (2015). Sustainable development and environmental education in natura 2000 areas. A vision of the mountain of pantokratoras for Corfu and the local community. 2015 6th International Conference on Information, Intelligence, Systems and Applications (IISA). doi: 10.1109/iisa.2015.7387972

Martinis, A., Minotou, C., & Poirazidis, K. (2015). Alternative tourism at Natura 2000 areas, as a proposal for ecological restoration, protection, conservation, and sustainable development. The case study of Zakynthos and Strofades. 2015 6th International Conference on Information, Intelligence, Systems and Applications (IISA). doi: 10.1109/iisa.2015.7387974

Mccool, S. F. (2009). Constructing partnerships for protected area tourism planning in an era of change and messiness. *Journal of Sustainable Tourism*, 17(2), 133–148. doi: 10.1080/09669580802495733

Ministry of Environment & Energy. (2019). NATURAL ENVIRONMENT. Retrieved from <http://www.ypeka.gr/Default.aspx?tabid=235&language=en-US>

National Park Service. (2018). Quick History of the National Park Service. Retrieved from <https://www.nps.gov/articles/quick-nps-history.htm>

Papadopoulos, A., Chalkias, C., Detsis, V., Fratsea, L., Karymbalis, E., & Mavrommatis, G. (2017). Thirteenth International MEDCOAST Congress on Coastal and Marine Science, Engineering, Management and Conservation. In *Thirteenth International MEDCOAST Congress on Coastal and Marine Science, Engineering, Management and Conservation*.

Papageorgiou, K., & Kassioumis, K. (2005). The national park policy context in Greece: Park users' perspectives of issues in park administration. *Journal for Nature Conservation*, 13(4), 231–246. doi: 10.1016/j.jnc.2004.11.001

Papageorgiou, K., & Vogiatzakis, I. N. (2006). Nature protection in Greece: an appraisal of the factors shaping integrative conservation and policy effectiveness. *Environmental Science & Policy*, 9(5), 476–486. doi: 10.1016/j.envsci.2006.03.003

Parks Canada. (n.d.). Creation of the Dominion Parks Branch National Historic Event. Retrieved from [https://www.pc.gc.ca/apps/dfhd/page\\_nhs\\_eng.aspx?id=12876](https://www.pc.gc.ca/apps/dfhd/page_nhs_eng.aspx?id=12876)

Pediaditi, K., Buono, F., Pompigna, F., Bogliotti, C., Nurlu, E., Ladisa, G., & Petropoulos, G. P. (2011). A decision support system-based procedure for evaluation and monitoring of protected areas sustainability for the Mediterranean region. *Journal of Earth System Science*, 120(5), 949–961. doi: 10.1007/s12040-011-0120-3

Pipinos, G., & Fokiali, P. (2007). An assessment of the attitudes of the inhabitants of Northern Karpathos, Greece: towards a framework for ecotourism development in environmentally sensitive areas. *Environment, Development and Sustainability*, 11(3), 655–675. doi: 10.1007/s10668-007-9135-y

Plummer, R., & Fennell, D. A. (2009). Managing protected areas for sustainable tourism: prospects for adaptive co-management. *Journal of Sustainable Tourism*, 17(2), 149–168. doi: 10.1080/09669580802359301

Pretty, J. N. (1997). Sustainable Agriculture, People and the Resource Base: Impacts on Food Production. *Forum for Development Studies*, 24(1), 7–32. doi: 10.1080/08039410.1997.9666047

Ramsar. (2014). About the Ramsar Convention. Retrieved from <https://www.ramsar.org/about-the-ramsar-convention>

Ramsar. (2014). Ramsar Sites. Retrieved from <https://www.ramsar.org/wetland/greece>.

Rode, J., Wittmer, H., Emerton, L., & Schröter-Schlaack, C. (2016). ‘Ecosystem service opportunities’: A practice-oriented framework for identifying economic instruments to enhance biodiversity and human livelihoods. *Journal for Nature Conservation*, 33, 35–47. doi:10.1016/j.jnc.2016.07.001.

Simons, H. (2013). Case study research in practice. London: Sage Publications.

Skanavis, C., Matsinos, Y. G., & Petreniti, V. (2004). Environmental education potential for Greek ecotourism. *International Journal of Environmental Studies*, 61(6), 735–745. doi: 10.1080/0020723042000271668

The List of Wetlands of International Importance (the Ramsar List). (1990). Retrieved from <https://www.ramsar.org/document/the-list-of-wetlands-of-international-importance-the-ramsar-list>

The National Park of Kotychi-Strofylia wetlands. (n.d.). Activities & Trails. Retrieved from <https://strofylianationalpark.gr/visitor/activities-trails/>

The National Park of Kotychi-Strofylia wetlands. (n.d.). Attractions. Retrieved from <https://strofylianationalpark.gr/visitor/attractions/>

The National Park of Kotychi-Strofylia wetlands. (n.d.). Avifauna. Retrieved from <https://strofylianationalpark.gr/national-park-of-kotychi-strofylia-wetlands/avifauna/>

The National Park of Kotychi-Strofylia wetlands. (n.d.). Ecosystem. Retrieved from <https://strofylianationalpark.gr/wetlands/> (Strofylia National Park)

The National Park of Kotychi-Strofylia wetlands. (n.d.). General Information of the Region. Retrieved from <https://strofylianationalpark.gr/national-park-of-kotychi-strofylia-wetlands/general-information-of-the-region/>

The National Park of Kotychi-Strofylia wetlands. (n.d.). Operational Programme “Environment” 2000-2006. Retrieved from <https://strofylianationalpark.gr/επτεπ-2000-2006-γ-κπσ/>

The National Park of Kotychi-Strofylia wetlands. (n.d.). Threats. Retrieved from <https://strofylianationalpark.gr/national-park-of-kotychi-strofylia-wetlands/threats/>

The Ramsar Sites Criteria. (1996). Retrieved from <https://www.ramsar.org/document/the-ramsar-sites-criteria>

Togridou, A., Hovardas, T., & Pantis, J. D. (2006). Determinants of visitors’ willingness to pay for the National Marine Park of Zakynthos, Greece. *Ecological Economics*, 60(1), 308–319. doi: 10.1016/j.ecolecon.2005.12.006

Tourism and Poverty Alleviation. (2013). Retrieved from <http://step.unwto.org/en/content/tourism-and-poverty-alleviation-1>

Trakolis, D. (2001). Local people’s perceptions of planning and management issues in Prespes Lakes National Park, Greece. *Journal of Environmental Management*, 61(3), 227–241. doi: 10.1006/jema.2000.0410

Tsartas, P., Manologlou, E., & Markou, A. (2001). Domestic Tourism in Greece and Special Interest Destinations: *The Role of Alternative Forms of Tourism*. *Anatolia*, 12(1), 35–42. doi: 10.1080/13032917.2001.9686997

UNWTO. (2013). Tourism and Poverty Alleviation. Retrieved from <http://step.unwto.org/en/content/tourism-and-poverty-alleviation-1>

Vokou, D., Dimitrakopoulos, P. G., Jones, N., Damialis, A., Monokrousos, N., Pantis, J. D., & Mazaris, A. D. (2014). Ten years of co-management in Greek protected areas: an evaluation. *Biodiversity and Conservation*, 23(11), 2833–2855. doi: 10.1007/s10531-014-0751-1

Vokou, D., Makrodimos, N., & Tziolas, M. (2000). Visitors in the National Park of Olympos: characteristics, behaviors and views. *Oikotopia* 18, 36–39.

Weaver, D. B. (2005). Comprehensive and minimalist dimensions of ecotourism. *Annals of Tourism Research*, 32(2), 439–455. doi: 10.1016/j.annals.2004.08.003

Williams, N. (2010). Greece boosts protected areas. *Current Biology*, 20(16). doi: 10.1016/j.cub.2010.08.006

World's Protected Areas Threatened by Climate Change, New Study Shows. (2007, December 11). Retrieved from <https://www.sciencedaily.com/releases/2007/12/071210094234.htm>

WTTC. (2019). Greek tourism sector growing over three times faster than wider economy says new WTTC research. Retrieved from <https://www.wttc.org/about/media-centre/press-releases/press-releases/2019/greek-tourism-sector-growing-over-three-times-faster-than-wider-economy-says-new-wttc-research/>

WWF, ELLET, & Hellenic Ornithological Society. (2009). Greek Ramsar Wetlands: Protection and Management evaluation. Retrieved from [http://politics.wwf.gr/images/stories/docs/2009\\_ngo\\_ramsar\\_report\\_gr.pdf](http://politics.wwf.gr/images/stories/docs/2009_ngo_ramsar_report_gr.pdf)

WWF. (2000). Planning of pilot actions for the development of ecotourism. Part A. Retrieved from [http://www.gnto.gov.gr/sites/default/files/files\\_basic\\_pages/ecoeota.pdf](http://www.gnto.gov.gr/sites/default/files/files_basic_pages/ecoeota.pdf)

Yin, R. K. (2009). Case study research: design and methods. Thousand Oaks: Sage.

## Appendix 1: Open questionnaire in English



International Master Program (MSc) entitled “Sustainable Tourism Development: Cultural Heritage, Environment, Society”.

### MASTER THESIS

**Stakeholders’ perceptions over ecotourism development in natural protected areas: the case of the National Park Kotychi-Strofylia wetlands in Western Greece**

### Qualitative research on open questionnaire

#### Introduction

The role of ecotourism is recognized as important in recent years, as it contributes to the protection of the nature of protected areas and to the improvement of the quality of life of local populations.

The following questionnaire concerns the considerations of the entities related to the development of ecotourism in the protected area of the National Park Kotychi-Strofylia Wetlands in Western Greece and its implications.

- How do you perceive the concept of ecotourism and what its characteristics?

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- What is the main purpose of creating the National Park Kotychi-Strofylia wetlands?  
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- What do you think is the general state of tourism today in the National Park area? Do you consider it to be an autonomous tourist destination? If not, why in your opinion?  
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- How and under what conditions ecotourism can develop in the National Park area. Do you know what ecotourism activities are offered?  
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- What are the implications of the development of ecotourism in the National Park Kotychi-Strofylia wetlands and in the wider region?  
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- Have you evaluated the threats and pressures facing the area of the protected area of the National Park Kotychi-Strofylia wetlands? Can you report the most important threats?  
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- What are the challenges and opportunities of the development of Ecotourism in the National Park Kotychi-Strofylia wetlands for the wider region?  
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- Do you know if there is a strategy for the development and management of ecotourism for the protected area of the National Park Kotychi-Strofylia wetlands? Can you mention the most important actions of the last decade concerning the promotion of ecotourism in the National Park Kotychi-Strofylia wetlands?  
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- Is there involvement of the local community in the management of the protected area?  
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- What is the role of your institution in the protected area of the National Park Kotychi-Strofylia wetlands?  
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- Does your institution collaborate with the other actors involved in the promotion of the the National Park Kotychi-Strofylia as an ecotourism destination and if so, how is this cooperation achieved?  
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- Is there any controversy between the stakeholders regarding the design and development of ecotourism in the protected area of the National Park Kotychi-Strofylia wetlands? Is there trust between actors?  
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- What measures have been taken by your organization for the management of ecotourism in the National Park Kotychi-Strofylia wetlands?  
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- Main problems that hinder the development of ecotourism and how to resolve them in the case of the National Park of Kotychi-Strofylia.  
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Thank you in advance for your participation.

Sincerely,

Maria Nikolidaki

Athens, 7 October 2019

## Appendix 2: Open questionnaire in Greek



International Master Program (MSc) entitled “Sustainable Tourism Development: Cultural Heritage, Environment, Society”.

### ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ

**Θεωρήσεις των φορέων σε σχέση με την ανάπτυξη του Οικοτουρισμού σε προστατευόμενες περιοχές: η περίπτωση του Εθνικού Πάρκου των υγροτόπων Κοτυχίου-Στροφυλιάς**

### Ποιοτική έρευνα ανοικτού ερωτηματολογίου

#### ΕΙΣΑΓΩΓΗ

Ο ρόλος του οικοτουρισμού αναγνωρίζεται ως σημαντικός τα τελευταία χρόνια, καθώς συμβάλλει στη προστασία της φύσης των προστατευόμενων περιοχών και στην βελτίωσης της ποιότητας ζωής των τοπικών πληθυσμών.

Το κάτωθι ερωτηματολόγιο αφορά στις θεωρήσεις των φορέων που σχετίζονται με την ανάπτυξη του οικοτουρισμού στην προστατευόμενη περιοχή του Εθνικού Πάρκου των υγροτόπων Κοτυχίου-Στροφυλιάς στην Δυτική Ελλάδα και τις επιπτώσεις του.

- Πώς αντιλαμβάνεστε την έννοια του οικοτουρισμού και ποια τα χαρακτηριστικά του;  
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- Ποιός είναι ο κύριος σκοπός δημιουργίας του Εθνικού Πάρκου των υγροτόπων Κοτυχίου-Στροφυλιάς;  
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- Ποια πιστεύετε ότι είναι η γενική κατάσταση του τουρισμού σήμερα στην περιοχή του Εθνικού Πάρκου; Θεωρείτε πως αποτελεί αυτόνομο τουριστικό προορισμό; Αν όχι, γιατί κατά την γνώμη σας;  
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- Πως και υπό ποιες προϋποθέσεις μπορεί να αναπτυχθεί ο οικοτουρισμός στην Περιοχή του Εθνικού Πάρκου. Γνωρίζετε ποιες δραστηριότητες οικοτουρισμού προσφέρονται;  
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- Ποιες είναι οι επιπτώσεις από την ανάπτυξη του οικοτουρισμού στο Εθνικό Πάρκο υγροτόπων Κοτυχίου-Στροφυλιάς και στην ευρύτερη περιοχή;  
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- Έχετε αξιολογήσει τις απειλές και τις πιέσεις που αντιμετωπίζει η περιοχή της προστατευόμενης περιοχής του Εθνικού Πάρκου υγροτόπων Κοτυχίου-Στροφυλιάς. Μπορείτε να αναφέρετε τις σημαντικότερες απειλές;  
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.....
- Ποιες οι προκλήσεις και οι ευκαιρίες από την ανάπτυξη του οικοτουρισμού στο Εθνικό Πάρκο των υγροτόπων Κοτυχίου-Στροφυλιάς για την ευρύτερη περιοχή;  
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- Γνωρίζετε εάν υπάρχει στρατηγική για την ανάπτυξη και διαχείριση του οικοτουρισμού για την προστατευόμενη περιοχή του Εθνικού Πάρκου υγροτόπων Κοτυχίου-Στροφυλιάς; Μπορείτε να αναφέρετε τις πιο σημαντικές δράσεις της τελευταίας δεκαετίας που αφορούν στην ανάδειξη του οικοτουρισμού στο Εθνικό Πάρκο υγροτόπων Κοτυχίου-Στροφυλιάς;  
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- Υπάρχει συμμετοχή της τοπικής κοινωνίας στην διαχείριση της προστατευόμενης περιοχής;  
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- Ποιος είναι ο ρόλος του φορέα σας στην προστατευόμενη περιοχή του Εθνικού Πάρκου υγροτόπων Κοτυχίου-Στροφυλιάς;  
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- Συνεργάζεται ο φορέας σας με τους υπόλοιπους εμπλεκόμενους φορείς για την ανάδειξη του Εθνικού Πάρκου Κοτυχίου-Στροφυλιάς ως προορισμός οικότουρισμού και αν ναι με ποιο τρόπο επιτυγχάνεται η συνεργασία αυτή;  
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- Υπάρχουν αντιπαραθέσεις μεταξύ των εμπλεκόμενων φορέων αναφορικά με την σχεδίαση και ανάπτυξη του οικότουρισμού στην προστατευόμενη περιοχή του Εθνικού Πάρκου υγροτόπων Κοτυχίου-Στροφυλιάς; Υπάρχει εμπιστοσύνη μεταξύ των φορέων;  
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- Ποια μέτρα έχουν ληφθεί από τον φορέα σας για την διαχείριση του οικότουρισμού στο Εθνικό Πάρκο υγροτόπων Κοτυχίου-Στροφυλιάς;  
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- Βασικά προβλήματα που εμποδίζουν την ανάπτυξη του οικότουρισμού και τρόποι επίλυσής τους στην περίπτωση του Εθνικού Πάρκου Κοτυχίου-Στροφυλιάς.  
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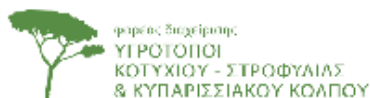
Σας ευχαριστώ εκ των προτέρων για την συμμετοχή σας.

Με εκτίμηση,

Μαρία Νικολιδάκη

Αθήνα, 7 Οκτωβρίου 2019

## Appendix 3: Formal notice regarding the decisions for the “Management Bodies of Protected areas” by law 4519/2018



Παλαιά Εθνική Οδός Πατρών – Πύργου, 27052 Λάπη Αχαΐας  
Τηλ.: 26930 31939 Φαξ: 26930 31959  
E-mail: [fdks@otenet.gr](mailto:fdks@otenet.gr)  
Ιστοσελίδα: [www.strofvlionationalpark.gr](http://www.strofvlionationalpark.gr)  
Πληροφορίες: Αρετή Ζαχαροπούλου

Λάπη, 03/07/2018  
Αρ. Πρωτ.: 592

**ΘΕΜΑ:** Ενημέρωση σχετικά με Ν. 4519/2018 «Φορείς Διαχείρισης Προστατευόμενων Περιοχών και άλλες διατάξεις».

Θα θέλαμε να σας ενημερώσουμε ότι σύμφωνα με τον υπ' αριθ. ν. 4519/2018 ΦΕΚ 25/Α/20.02.2018, ο Φορέας Διαχείρισης Υγροτόπων Κοτυχίου - Στροφυλιάς μετονομάστηκε σε Φορέας Διαχείρισης Υγροτόπων Κοτυχίου – Στροφυλιάς και Κυπαρισσιακού Κόλπου, με έδρα τον Λάπη της Π. Ε. Αχαΐας (Άρθρο 2, παρ. 3, περ. ιβ). Η χωρική αρμοδιότητα του Φορέα Διαχείρισης περιλαμβάνει την υφιστάμενη περιοχή ευθύνης του και ειδικότερα το σύνολο των Ζωνών του Εθνικού Πάρκου Υγροτόπων Κοτυχίου – Στροφυλιάς και της Ζώνης Β (όπως οριζόταν στην υπ' αριθ. 12365/2009 ΚΥΑ ΦΕΚ 159/Δ/29.04.2009) και επεκτείνεται στις ακόλουθες περιοχές του δικτύου Natura 2000 με κωδικούς GR2330002 «Οροπέδιο Φολόης», GR2330003 «Εκβολές (Δέλτα) Πηνειού», GR2330004 «Ολυμπία», GR2330005 «Θίνες και Παραλιακό Δάσος Ζαχάρως, Λίμνη Καϊάφα, Στροφυλιά, Κακόβατος», GR2330008 «Θαλάσσια Περιοχή Κόλπου Κυπαρισσίας: Ακρ. Κατάκολο – Κυπαρισσία», GR2550005 «Θίνες Κυπαρισσίας (Νεαχώρι - Κυπαρισσία)» (Άρθρο 2, παρ. 2), όπως φαίνεται στο χάρτη του Παραρτήματος.

Επιπρόσθετα σας αναφέρουμε ότι οι αρμοδιότητες του Φορέα Διαχείρισης περιγράφονται στο Άρθρο 4, παρ. 1 και είναι οι ακόλουθες:

α) η παροχή στοιχείων και αιτιολογημένης γνωμοδότησης κατά τη διαδικασία κατάρτισης των σχεδίων διαχείρισης και στη συνέχεια η εφαρμογή, παρακολούθηση, αξιολόγηση και επικαιροποίηση των σχεδίων διαχείρισης για την αειφορική διαχείριση και προστασία του φυσικού κεφαλαίου του δικτύου Natura 2000, σύμφωνα με τις κοινές υπουργικές αποφάσεις 3318/3028/11.12.1998 (Β' 1289), 14849/853/Ε103/4.4.2008 (Β' 645), 37338/1807/Ε103/ 1.9.2010 (Β' 1495) και 8353/276/Ε103/17.2.2012 (Β' 415), που ενσωμάτωσαν αντίστοιχα τις Οδηγίες 92/43/ΕΟΚ για τους οικοτόπους και 2009/147/ΕΚ για τα άγρια πτηνά,

β) η κατάρτιση ετήσιας έκθεσης για την προστατευόμενη περιοχή, με προτεραιότητα στην κατάσταση διατήρησης των προστατευτέων αντικειμένων και στα αποτελέσματα από την εφαρμογή των δράσεων που προβλέπονται στα σχέδια διαχείρισης,

γ) η σύνταξη ανά τριετία έκθεσης αξιολόγησης των ρυθμίσεων της προστατευόμενης περιοχής, το περιεχόμενο της οποίας καθορίζεται με απόφαση του Υπουργού Περιβάλλοντος και Ενέργειας,

δ) η ανεύρεση, διασφάλιση και αξιοποίηση χρηματοδοτικών εργαλείων για την προώθηση νέων τοπικών αναπτυξιακών προτύπων και δράσεων,

ε) η αποτελεσματική, χρηστή και με κανόνες διαφάνειας διάθεση και διαχείριση των πηγών εσόδων των ΦΔΠΠ για τη βελτίωση του βαθμού διατήρησης των προστατευτέων αντικειμένων, την ολοκληρωμένη διαχείριση των περιοχών ευθύνης τους και την ενίσχυση της τοπικής ανάπτυξης,

Σελίδα 1 από 7



## Appendix 4: Letter of the Ecological Movement of Patras (ΟΙΚΙΠΑ) with subject "The problems of the National Park of Kotychi-Strofylia wetlands"



### ΕΝ ΔΙΘΡΙΑ - ΟΙΚΟΛΟΓΙΚΗ ΚΙΝΗΣΗ ΠΑΤΡΑΣ

Σαχτούρη 64, 26222 ΠΑΤΡΑ  
Τηλ - fax: 2610 321010  
email: [oikipa@otenet.gr](mailto:oikipa@otenet.gr)  
url: [www.oikipa.gr](http://www.oikipa.gr)

Πάτρα 15 Ιουλίου 2019

Αρ. Πρωτ.: 159

ΠΡΟΣ: 1. Συντονιστή Έργου **ENVECO A.E.**, [info@enveco.gr](mailto:info@enveco.gr)  
2. Μελετητική Εταιρεία "**ΕΨΙΛΟΝ Α.Ε.**", [enviro@epsilon.gr](mailto:enviro@epsilon.gr)  
3. Μελετητική Εταιρεία **NERCO – Ν. ΧΛΥΚΑΣ ΚΑΙ ΣΥΝΕΡΓΑΤΕΣ Α.Ε.Μ.**, [info@nerco.gr](mailto:info@nerco.gr)

Θέμα: Προβλήματα του Εθνικού Πάρκου Κοτυχίου, Στροφυλιάς, Κυπαρισσιακού

Η **Οικολογική Κίνηση Πάτρας**, περιβαλλοντική οργάνωση με συνεχή δράση 33 ετών, περιέλαβε από την πρώτη στιγμή της ίδρυσής και συνεχίζει να περιλαμβάνει ως πρώτη προτεραιότητά της την υπεράσπιση του προστατευόμενου οικοσυστήματος της βορειοδυτικής Πελοποννήσου, σήμερα Εθνικού Πάρκου Κοτυχίου, Στροφυλιάς, Κυπαρισσιακού Κάλλπου.

Με βάση αυτήν την προτεραιότητά μας θεωρούμε αναγκαίο να απευθυνθούμε στη μελετητική σας ομάδα προκειμένου να θέσουμε υπόψη σας τα στοιχεία που έχουμε και τις απόψεις μας σχετικά με τις πλέον δυσχερείς πλευρές και προβλήματα της διαχείρισης του εν λόγω Εθνικού πάρκου. Πρόκειται για προβλήματα που κοινό χαρακτηριστικό τους είναι η απειλή κατά της ακεραιότητας του Εθνικού Πάρκου.

#### Α. Καταπατημένη περιοχή "Σαμαρέικα" ή "Ισώματα"

Πρόκειται για μια περιοχή συνολικής έκτασης 803 στρεμμάτων, σταδιακά εκχερσωμένης και καταπατημένης από το 1937 ήδη, με έξαρση της εκχέρωσης κατά τη διάρκεια της κατοχής. Σήμερα η έκταση αυτή έχει γεωργική χρήση (ποτιστικά χωράφια). Εντός αυτής υπάρχουν 10 κτίσματα (οικίες, ένα κατάστημα) τα οποία έχουν τελεσίδικα κηρυχθεί αυθαίρετα από τη διοικητική δικαιοσύνη. Από νομική άποψη ισχύουν οι αποφάσεις Γ.Γ. Περιφέρειας Δυτ. Ελλάδας αρ. 2058/2005 – Φ.Ε.Κ. 812Δ/2004 (αφορά 561 στρέμματα) και 10521/52666/2012 (αφορά τα υπόλοιπα 242 στρ.), οι οποίες τις χαρακτηρίζουν αμετάκλητα δασικές και αναδασωτέες. Οι αποφάσεις αυτές αποτέλεσαν, εν πολλοίς, καρπό σκληρών δικαστικών, διοικητικών και άλλων μαρμών αγώνων της οργάνωσής μας. Παρά την ύπαρξη και τον αμετάκλητο χαρακτήρα όμως των αποφάσεων αυτών όχι μόνο δεν υλοποιούνται αλλά τα όργανα του κράτους, τόσο σε τοπικό όσο και σε κεντρικό επίπεδο, ενεργούν έτσι ώστε να γίνει τελικά αναγνώριση των τελεσμένων και οι αποφάσεις να ακυρωθούν στην πράξη. Ουδενμία αναδασωτική ενέργεια έχει γίνει παρότι από την πρώτη απόφαση έχουν παρέλθει 15 χρόνια και από τη δεύτερη 7. Οι κρατικές ενέργειες στο μεν τοπικό επίπεδο ελαβαν διάφορες μορφές μεταξύ των οποίων την αναγνώριση μη νόμιμου οικισμού από τον Νομάρχη Ηλείας, απόφαση την οποία κατόπιν αναφορών μας υποχρεώθηκε να ανακαλέσει.

Στο κεντρικό επίπεδο έχουν λάβει τη μορφή περιπλοκών και διυσνήτων τροπολογιών ώστε να δοθούν ευκαιρίες μονιμοποίησης της αλλαγής χρήσης από δάσος σε αγροτική γη.

Θα επικεντρώσουμε στην τελευταία τέτοια νομοθετική απόπειρα αποδοχής των τελεσμένων καταπατήσεων εις βάρος του εθνικού πάρκου.

Αντιγράφουμε από κείμενο που δημοσιεύσαμε στην μηνιαία μας εφημερίδα "εν αθήρ" μετά το Αναπτυξιακό συνέδριο που οργανώθηκε από την κυβέρνηση Τσίπρα στην Πάτρα τον Φεβρ. 2018. Εκεί παρεμβήκαμε και πετύχαμε νέα νομοτεχνική διατύπωση (αλλαγή στην ουσία) τροπολογίας που επέτρεπε την νομιμοποίηση της παράνομα (καταπατήσεως) επιβληθείσας αλλαγής χρήσης της έκτασης των "Σαμαρέικων". Η νέα διατύπωση ορίζει ότι η τελική χρήση της εν λόγω έκτασης θα οριστεί στα πλαίσια του προεδρικού διατάγματος που θα καθορίσει το οριστικό διαχειριστικό καθεστώς του Εθνικού Πάρκου.

"Η συζήτηση και ψήφιση στη Βουλή του νομοσχεδίου (νόμου πλέον) για τους Φορείς Διαχείρισης, επανέφερε στην επικαιρότητα τη μεγαλύτερη από τις ανοιχτές πληγές του Εθνικού Πάρκου Κοτυχίου – Στροφυλιάς: την καταπατημένη περιοχή των Σαμαρέικων, έκτασης 803 στρεμμάτων, μια «τρύπα» στην Α'



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