

1 Proceedings

2 Evaluating operational projects supported by Cohesion Funds 3 for the National Forest Parks of Greece[†]

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14 **Abstract:** National Forest Parks (NFP) represent protected areas playing a critical role, in reversing
15 biodiversity loss and contributing to socio-economic development. The Cohesion Fund (CF) is a
16 European Structural and Investment Fund; implemented by the EU during the 2014-2020 periods
17 for the 'Natura 2000' regions. In Greece, the results of critical assessment of the up to date assigned
18 projects demonstrate the existence of identical financial needs for equipment and vehicles, in con-
19 trast to differences in assigned monitoring and management studies. The CF is a fundamental tool
20 that may solve the financing issues facing the 10 NFPs in Greece for the last 50 years; it can also be
21 used for other protected areas.

22 **Keywords:** regional development; Cohesion Fund; Natura 2000; National Forest Parks

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1. Introduction

'Natura 2000' is a European Union (EU) wide network of protected areas established to be compatible with the Birds and Habitats Directives, collectively known as EU 'nature legislation', regarding the 'Natura 2000' regions [1].

For planning sustainable development of protected areas, it is fundamental not only to qualitative monitor each ecosystem but also to record the past management actions and their effectiveness [2]. 'Regional development' is a legitimate way to heighten financial viewpoints aiming for the economic development of the different areas of a country through advanced and effective planning [3]. Regarding the 'Natura 2000' regions, the EU has implemented seven funds during the 2014-2020 periods and regional Policy has been delivered through two main funds: the European Regional Development Fund (ERDF) and the Cohesion Fund (CF) [4]. In fact, the Cohesion Fund (CF) has established together with the Council Regulation (EU); No 1300/2013 of 17 December 2013 (Corrigendum) for preserving the environment and promoting resource efficiency. Indeed, the goals of CFs focus on environment and sustainable development. Therefore, the actions to be financed will aim at improving the conservation status of habitats and species of Directives: 92/43/EEC and 2009/147/EC. In practice, a great variety of activities are funded including field studies and inventories; to collect the necessary knowledge about the sites, development of management plans, habitat conservation and restoration, species monitoring etc.

National Forest Parks (NFP) are part of the special regions known as protected areas in regard to their complex environments [5]. The concept behind NFPs aims at protecting

1 forest resources and simultaneously promoting forest-based tourism and economic devel-
2 opment [6], indeed NFPs provide financial opportunities through recreation [7]. Although
3 the NFPs have made great achievements in promoting 'Regional development' [6], they
4 need to be better organized. The institution of NFPs began in Greece, in 1938 [5,8], and
5 since the Law 996/1971, Greece has established 10 NFPs and the protection of native flora
6 and fauna with the coordination and control of this research, regulated by the Presidential
7 Decree of 67/1981 [5]. However, due to poor financing and understaffing [9], the fast
8 pace of NFP expansion and lack of predictable planning undermined the sustainable de-
9 velopment of the region. Additionally, NFP development has been unbalanced in regional
10 distribution. The Management Bodies (MB) of Protected Areas aim for the administration
11 and management of the areas, elements and sets of nature and the landscape according to
12 Law 4519/2018. Information-Awareness, Monitoring and Supervision of Security are the
13 main actions of its staff.

14 The purpose of this paper is to identify CFs that support the NFPs in Greece, to study
15 their progress and to propose projects, activities and cooperation with organizations that
16 may complement those of the 10 NFPs in Greece.

17 2. Materials and Methods

18 The following NFPs studied: the Ainos National Park; Parnassos National Park; Parnitha National Park; Oitis valley, Sperchios and Maliakos Gulf National Park; the Olympus National Park and the Samaria -Western Crete National Park. The research includes assessment of their organizational activities; examining the progress of using the CFs and the promoted operational projects. It is important to mention that the researching NFPs could be separated into two groups, since the first three started in 1-1-2020 while the others have been funded since 1-1-2019. Each examining CF has the 31-12-2023 as operation end date. The funding is achieved through their MBs submission of funding proposals. It is preferable to assess each NFP action separately so as to record the common projects and those payments that highlight which NFP have shortages of basic equipment, vehicles and outstanding debts to the public and private sector.

29 Most of the researching CFs are 1.000.000 euro (€); apart from the Samaria NFP which
30 is funded up to 990.785€ and the Oitis NFP will get 983.365€. The NFP of Olympus and
31 Oitis have been funded for three and two projects respectively. The Olympus CF is di-
32 vided into the regions of Western Macedonia, Central Macedonia and Thessaly, while the
33 Oitis CF is concerned with the regions of Thessaly and Central Greece.

34 The list of operational projects through the CFs that concern NFPs in Greece is found
35 on the NSRF (National Strategic Reference Framework) website:
36 <https://www.espa.gr/en/pages/OperationsList.aspx>. All assigned projects and payments
37 funded by CFs for the examining NFPs are available online on the public website Diavgeia
38 <https://diavgeia.gov.gr/> and were examined. For entering data the operation names/code
39 of the CFs (or MIS) were used:

- 40 • 5033022 for the Ainos NFP;
- 41 • 5032966 for the Parnassos NFP;
- 42 • 5033697 for the Parnitha NFP;
- 43 • 5032589 for the Oitis NFP;
- 44 • 5033173 for the Olympus NFP;
- 45 • 5033240 for the Samaria NFP.

46 3. Results

47 The NFPs in Greece have mostly been funded through the ERDFs and the CFs, which
48 are two important European Structural and Investment Funds which collect high funding.
49 In fact, the six MBs have enrolled nine CFs, in total, 64 actions, both assigned projects and
50 payments, have been implemented. The NFPs of Olympus and Oitis have proved to be

more active in publishing competitions in comparison to the other examining NFPs. (figure 1) It is noteworthy that the NFP of Parnitha also has an active role in the conservation of its supervised area however, the four published competitions (two were the same project), did not attract public interest and so far no assignment or project has emerged.

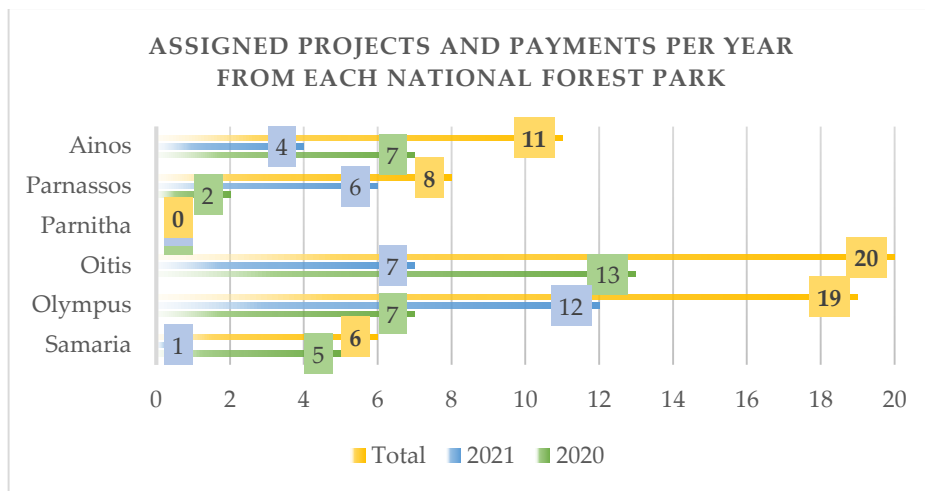


Figure 1. Assigned projects and payments per year from each NFP.

In addition, it is important that most of the NFPs' have proposed larger funds of their expenditures targets in the last years (table 1).

Table 1. Planning expenditures targets for each examining NFP per year.

NFP/Year	2021(in €)	2022 (in €)	2023(in €)
Ainos ^{1,2}	297.300,00	0	0
Parnassos	100.000,00	455.800,00	409.200,00
Parnitha ¹	342.400,00	250.000,00	360.000,00
Oitis	305.260,00	281.650,00	159.745,00
Olympus ¹	260.000,00	315.416,25	252.416,25
Samaria	306.365,00	221.183,00	357.311,90

¹Their Strategy Program was lodged in 2021.

²The Ainos NFP has not set CF funding planning for 2022 and 2023.

All projects to be funded through the CFs, relate to Act 085 - protecting and enhancing biodiversity, nature conservation and green infrastructure. The main formation of the operational programs contains four Work Packages (WP):

1. WP1. Promotion of Actions of the Operational Program 'Transport Infrastructure, Environment and Sustainable Development';
2. WP2. Networking / CFSP Expertise / Scientific Documentation;
3. WP3. Implementation of species and habitat monitoring actions and/or elaboration of studies (technical and non-technical);
4. WP4. Management actions to improve the conservation status of species and habitat types.

Most of the assigned projects assist studies, habitat monitoring and management actions of protected species and habitats, in order to improve habitat knowledge and preserve flora and fauna also birds, amphibians, reptiles, lepidoptera and mammals. Other projects and payments relate to the NFPs' underfunding over the last years. Indeed, some

NFPs made indirect payment to their accounts, a large amount of used funds show substantial shortages of electronic equipment and teleconferencing systems, desktop computers, laser printers, Global navigation and positioning systems (GPS). In addition, footwear and work clothes for the staff, vehicles, bank expenses and past unpaid subscriptions to organizations, whose collaborations are considered crucial for international knowledge exchange and progress of environmental actions within the limits of their responsibility.

Through the assessment, the most important operational programs and payments for each NFP are:

- **Ainos:** supply of an aerial and a submarine drone, Strategic Study and Action Plan for the protection from light pollution, supply of an inflatable boat Oceanic RIB 640 and a trailer;
- **Parnassos:** creation of a scientific library, electronic equipment and teleconferencing system, management actions for improving habitat knowledge and protection of amphibians, reptiles, lepidoptera and wolves;
- **Parnitha:** (although they were not assigned) reassessment of attendance and reserving status of bird fauna, genetic analysis - identification and Management of the Red Deer Population and supply of footwear and work clothes for the staff;
- **Oitis:** supply of photographic equipment, services for the implementation of a Geographic Information System for the new area of responsibility, management action for protection of wolves, supply of power fences, supply of bird fauna' ringing equipment and services of collection of seeds;
- **Olympus:** supply of binoculars, and of a 4X4 type agricultural vehicle with a closed and detachable trailer, cooperation with scientists specializing in entomology, in forestry, botany, biology and supply of Ground Temperature Sensors for the continuation and completion of the international Gloria Program (services for the establishment of a climate change monitoring system in the alpine and ecological types area);
- **Samaria:** supply of a 4X4 type agricultural vehicle, annual subscription for Mediterranean Marine Protected Areas (MedPAN) and 'Eurosite', establishment of permanent sites for monitoring of pine diseases.

By today, the average CF absorption rate of the examining NFPs is 10.3%; the NFP of Olympus, Ainos and Parnassos have organised more projects and payments, indeed their CF absorption is 16.32%, 14.29% and 1.42%. The Samaria PNP has significantly low fund absorption, although its CF started in 2019, plus in table 1 its programming, it predicts higher funding in 2023. Furthermore, as shown in the study, none of the PNPs has funded an action before 2020. (table 2)

Table 2. Amount of assigned projects and payments for each examining NFP per year and CF absorption rate.

NFP	2020 (in €)	2021 (in €)	Total (in €)	CF absorption rate (%)
Ainos	75.168,40	67720,99	142.889,39	14,29%
Parnassos	15.378,14	118.788,34	134.166,48	13,42%
Parnitha ¹	0	0	0	0%
Oitis	53.356,05	66.882,54	120.238,59	12,23%
Olympos	88.619,80	74.608,71	163.228,51	16,32%
Samaria	53.560,84	540,00	54.100,84	5,46%
Average				10,3%

¹ Four published competitions, in total for 92.842 € but no assignments were made.

4. Discussion

There are many operational projects attempting to support conservation of biodiversity and at the same time sustainability. Although the average CF absorption (10.3%) is in general low, we have to consider that few competitions did not lead to assignments, for instance from the Parnitha NFP and in several announced projects the assignment and payment credit are pending. Therefore we could not include their proposed costs. We will have more accurate results about the fund absorption at the end of 2021, since it is the middle period of the funding program.

Regarding supplies, most of the payments were for fundamental equipment like teleconferencing equipment, desktop computers and vehicles.

Main monitoring and management actions related to the protection of bird fauna, and wolves; services for the establishment of a monitoring system in the alpine and ecological types area, monitoring pine diseases and services of collection of seeds.

5. Conclusions

Awareness of nature education, holistic planning, research and green marketing has the potential to improve the regional development in Greece. The findings can provide valuable ideas in order to effectively governance the six NFPs that still have available funds through the CFs. Lastly, the CFs can provide important guidance and financial assistance to regional management and sustainability both to the NFPs and to other bio-unique regions in Greece such as Protected Landscapes, Aesthetic Forests and Protected Forests.

Conflicts of Interest: “The authors declare no conflict of interest.”

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