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THESIS

*Assessment and prospects
of National
Marine Park Zakynthos*



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“Assessment and prospects of National Marine Park Zakynthos”

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Abstract

This study was conducted in the Department of Planning and Regional Development, University of Thessaly, during the academic year 2009-2010. The topic of this study is the «Assessment and prospects of a case of a National Marine Park Zakynthos. This thesis does not intend to become a common study based only on environmental theories; interviews concerning the relations between the locals and the Management Board of a National Marine Park were equally studied.

The case studied in this thesis is the case of the National Marine Park of Zakynthos (NMPZ) located in the island of Zakynthos, Western Greece. It started functioning after the Presidential Decree of December 1999. The National Marine Park of Zakynthos has the first Management Agency of Protected Areas in Greece. The necessity of creating this Park resulted from the Greek obligation to the European Union concerning the protection of *Caretta-caretta*'s breeding habitat in Zakynthos.

The Operational Program "Environment" is one of the 24 programs of the 3rd Community Support Framework (2000-2006) for Greece and it is funded by the European Regional Development Fund. The Special Management Unit of the Operational Program "Environment" has the power to control the application of the Law (L.2860/2000), so as to ensure the efficiency, rationality and transparency of the Program's implementation. The project of the Operational Program "Environment" includes measures for the protection and management of the breeding habitat of the loggerhead sea turtle *Caretta-caretta* in Zakynthos.

Key words: National Marine Park of Zakynthos, Protected Areas, Marine Protected Areas, Sustainable Development, Ecotourism.

Περίληψη

Η παρούσα διατριβή πραγματοποιήθηκε στο Τμήμα Μηχανικών Χωροταξίας και Πολεοδομίας και Περιφερειακής Ανάπτυξης της Πολυτεχνικής Σχολής του Πανεπιστημίου Θεσσαλίας, κατά τη διάρκεια του ακαδημαϊκού έτους 2009-2010. Το θέμα της εργασίας είναι η «Αξιολόγηση και οι προοπτικές του Εθνικού Θαλάσσιου Πάρκου Ζακύνθου». Η διατριβή αυτή σκοπό δεν έχει να είναι μια συνηθισμένη μελέτη βασισμένη μόνο σε περιβαλλοντικές θεωρίες αλλά μελετήθηκαν εξίσου συνεντεύξεις που αφορούν στις σχέσεις μεταξύ των κατοίκων της περιοχής και του διοικητικού συμβουλίου του Εθνικού Θαλάσσιου Πάρκου.

Η περίπτωση που μελετά η διατριβή είναι αυτή του Εθνικού Θαλάσσιου Πάρκου Ζακύνθου (ΕΘΠΖ) το οποίο τοποθετείται στο νησί της Ζακύνθου στη Δυτική Ελλάδα. Η λειτουργία του άρχισε με το Προεδρικό Διάταγμα το 1999. Το Εθνικό Θαλάσσιο Πάρκο Ζακύνθου αποτελεί τον πρώτο Φορέα Διαχείρισης Προστατευόμενων Περιοχών στην Ελλάδα. Η ανάγκη δημιουργίας του Πάρκου προήλθε από την υποχρέωση της Ελλάδας προς την Ευρωπαϊκή Ένωση σχετικά με την προστασία της θαλάσσιας χελώνας *Caretta-caretta* στη Ζάκυνθο.

Το Επιχειρησιακό Πρόγραμμα "Περιβάλλον" είναι ένα από τα 24 Προγράμματα του Γ' Κοινοτικού Πλαισίου Στήριξης (2000-2006) για την Ελλάδα και συγχρηματοδοτείται από το Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης. Αρμοδιότητα της Ειδικής Υπηρεσίας Διαχείρισης του Επιχειρησιακού Προγράμματος "Περιβάλλον" είναι να ακολουθεί και να εφαρμόζει το Νόμο 2860/2000, έτσι ώστε να εξασφαλίζονται η επάρκεια, η ορθολογικότητα και η διαφάνεια στην εφαρμογή του Επιχειρησιακού Προγράμματος "Περιβάλλον". Το έργο του Επιχειρησιακού Προγράμματος "Περιβάλλον" περιλαμβάνει δράσεις για την προστασία και διαχείριση του βιότοπου αναπαραγωγής της θαλάσσιας χελώνας *Caretta-caretta* στη Ζάκυνθο.

Λέξεις Κλειδιά: Εθνικό Θαλάσσιο Πάρκο Ζακύνθου, Προστατευόμενες Περιοχές, Θαλάσσιες Προστατευόμενες Περιοχές, Βιώσιμη Ανάπτυξη, Οικοτουρισμός

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LIST OF ABBREVIATIONS

CAP:	Common Agricultural Policy
CNPPA:	Committee for the National Park and Protected Area
EE:	Environmental Education
FDOs:	Forest District Offices
IUNC:	International Union for the Conservation of Nature
MA:	Management Agency
MEPPW:	Ministry of Environment Planning and Public Works
MPA:	Marine Protected Areas
NGO:	Not Government Organisation
NMPZ:	National Marine Park Zakynthos
NSRF:	National Strategic Reference Framework
PA:	Protected Area
SACs:	Special Areas of Consecration
SPAs:	Special Protected Areas
WSSD:	World Summit for Sustainable Development

Introduction

The recent revision of the environmental legislation, induced by the EU, led to the reorientation of Greece's existing conservation policy introducing a call for broader public involvement and a framework for increased coordination capacities conceded to conservation authorities. The successful conservation of a country's biodiversity does not refer only to the protection of nature but to the policy adopted by the competent agencies. In addition, the institutionalization of integrative nature conservation policy is linked to a number of both institutional and procedural elements. The former are very much dependent upon the politico-economic context and are country specific. An example of institutional elements is the political culture, briefly defined as the national style of shaping policy and affecting the outcomes (Vogel, 1986).

1. Sustainable development

Sustainable development requires that the environmental resources must be considered as a stock of natural capital and countries should use only the return of it (Mose, 1988).

According to the action plan for the 21st century – Agenda 21 – that was created during the United Nations Conference on Environment and Development, 1992, the agency 'Science for Sustainable Development' was accorded an essential role 'in the search for feasible pathways towards sustainable development' (UN, 1992). The World Summit for Sustainable Development (WSSD) in 2002 reinforced the role of research in sustainable development.

Sustainable development involves a vision of the integration of the economic and social development and environmental protection and management. This leads to a need for integrating various research perspectives and various social activities and interests. Research policies highlight this two-fold meaning of interaction. Environmental concerns must be integrated into the economic and social development. Market incentives are regarded as a major tool for solving environmental problems.

The general view that sustainable development is globally achievable has gradually become a shared basis of policy making and research. However, national policies seem to be different from each other, because of the different ideologies, societies and cultures. In 1999, the

Swedish parliament established 15 environmental quality objectives, defining how the natural environment – farmland, forests, lakes, seas and the atmosphere – should be in 20 years time. The Swedish government, however, stated that they did not have the know-how for establishing a sustainable and good living environment; consequently, many studies concerning sustainable development were given an important role (Bill 2000/2001).

Some researchers stated that each dimension of sustainable development (social, environmental and economic) should be kept separate to facilitate its definition: these various subsystem definitions might later collectively lead to a general framework. ‘The three types of sustainability – social, environmental and economic – are clearest when kept separate... While there is some overlap among the three, and certainly linkages, the three are best desegregated and addressed separately by different disciplines’ (Goodland and Daly, 1996). This view seems to be held also by the funding agencies, which predominantly attach themselves to various forms of prefix/suffix sustainability. New concepts of sustainable development have evolved and are visible even in the research councils’ terminology: sustainable ecology, social sustainability, economic sustainability, sustainable growth, urban sustainability, sustainable forestry and sustainable urbanization. This could indicate a fragmentation of sustainable development research that is contradictory to its underlying integrated rationale (Nolin, 2000).

The renewed EU Sustainable Development Strategy (European Council, 2006) and the so-called Thematic Strategy for a Sustainable Use of Natural Resources (European Commission, 2005a) address high levels of resource use as a main obstacle for achieving environmentally sustainable development in Europe and demand decoupling of economic growth from resource use and environmental impacts.

An important initiative to increase resource productivity in developing countries has been launched by the OECD Development Assistant Council (OECD, 2005). The initiative aims at supporting the implementation of environmental fiscal reforms (EFR) in developing countries, which could contribute to the achievement of fiscal, environmental and social policy objectives at the same time. The EU and other industrialized countries should support this initiative by funding the capacity building activities, supporting public awareness campaigns, and financing technical co-operation to help industries adapt to the new framework (Giljum et Al, 2008).

1.1 Common Agricultural Policy (CAP) and the Environment

CAP reform in 1992 did not have the expected results in the environmental improvement. This happened for two reasons; on the one hand, because CAP measures were insufficient for the environmental improvement and on the other hand because the international market changes and continues to affect the reform's future. This is very important as policy-making institutions begin to realize that CAP is not the only tool for changing the rural sector (Winter and Gaskell, 1998).

The main objective of the CAP was to improve life quality in the rural and urban regions of Europe. The positive results can be observed in the benefit of supplies in the internal market (mainly for the urban population) and in the increase of revenues for rural exploitations. CAP measures, however, have been linked with various undesirable effects such as the environmental degradation and food crisis. As a result, CAP attracts more and more criticism. The first negative effects appeared in the United Kingdom: the high cost of the environmental policy did not cover citizens' needs (Ramos and Delgado, 2003). The Common Agricultural policy makers were mainly agriculture economists. It is said that most popular agriculture magazines are mainly based on articles published by the European Committee rather than on academic conclusions (Fennell, 1997).

A research showed that the environmental pressure will be reduced after CAP's reform in 2003. This goal will not be achieved after the reform of Agenda 2000 (Wier et Al., 2002). Friendly environmental practices are possible to be more attractive for farmers even if subsidies stop to the current level. Agriculture has been accused for a long time of the ecosystem destruction of and of biodiversity decline.

1.2 Environmental Communication – Environmental Education

It is generally known that mass media are not limited only to the dissemination of information but they shape the public opinion too (Nitz, 2000). Mass media are connected closely with the environmental knowledge and attitude of citizens. When mass media cover environmental topics focus on problems without spending a lot of time in discussions about their solutions (Grunig, 1977, Jaehne, 1990). The continuous publicity of environmental issues, with no report in solutions, removes the public from the real problems. The agenda of the mass media

is important and studies showed that the public relies on mass media for information concerning the environment (Ader, 1995). The local pressure for environmental cover leads to the use of cheap and easily provided source of information (Griffin and Dunwoody, 1995).

The problem of the environmental education (EE) could be connected with the national school curriculum which includes teaching of environmental facts rather than environmental issues (Adara, 1993). There is, consequently, a tendency for learning without awareness. This is the case of the educational system of Nigeria, for example, which, despite the environmental education policy dated from 1971 (FRN, 1981), still suffers from environmental degradation as a result of civic inaction (Adara, 1996).

Two different approaches lead both to the growth of environmental concern. One is to associate the natural environment with positive feelings such as happiness, pleasure and hope, as individuals become fascinated by nature and place personal value on its protection. Another approach is to focus on negative elements and experiences such as environmental disasters. The fear of environmental risks can lead to action (Mandel, 1992).

2. Protected Areas (PA) and Regional Development

A protected area is an area of land and /or sea specifically dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, managed through legal or other effective means (IUNC, 1994). In protected areas, entire tracts of lands are withdrawn from human use; in some cases, regulations limit the activity of the areas stakeholders and allow only a small number of activities. Conservation systems interfere in human activities and, as a result, the areas' stakeholders/actors become hostile to the new regulations. Conflicts regarding protected areas usually focus on different interests in the use of natural resources: some stakeholders want to preserve or enhance particular natural resources; others want to use or exploit it. An option used in regional planning is to make spatial distinctions creating special zones for residence, work, industry, traffic, forests, wetlands etc. (Mose, 1988 cited by IUNC, 1994). Furthermore, classic regional planning tends to be reactive rather than to try to direct development. It determines specifically the spatial development of settlements and infrastructure (Mose, 1988).

The definition of a “protected area” is introduced by the International Union for the Conservation of Nature (IUCN). Protected areas are land or marine regions with special natural, ecological or local characteristics, protected by the Law, specifically managed for the maintenance of their particular values, as well as their legal exploitation for ecological, social and economic needs of the present and future generation (Kasioumis, 1995).

Most states have already recognized the need for protection of important and great monuments of their natural heritage and consider it as a contribution to the global effort for the protection of vital resources and the conservation of biodiversity. The National Park has become the most common and popular form of protection. However, there are many other categories of protected areas. The Commission on National Parks and Protected Areas (CNPPA) is an IUCN Commission, responsible for promoting the creation of an international network, for the management of land and marine protected areas giving general directions.

2.1 The IUCN categories of protected areas

Ia. Strict Nature Reserve (Protected area managed mainly for science)

Ib. Wilderness Area (Protected area managed mainly for wilderness protection)

II. National Park (Protected area managed mainly for ecosystem protection and recreation)

III. Natural Monument (Protected area managed mainly for conservation of specific natural features)

IV. Habitat/ Species Management Area (Protected area managed mainly for conservation through management intervention)

V. Protected Landscape/Seascape (Protected area managed mainly for landscape/seascape conservation and recreation)

VI. Managed Resource Protected Area (Protected area managed mainly for the sustainable use of natural ecosystems).

National Parks (protected area of category II) are managed as places in which spiritual, scientific, educational and recreational needs can be satisfied, but always in an environmentally and culturally compatible manner (Mose, 1988 cited by IUNC, 1994).

2.2 Benefits and threats in Protected Areas

Protected areas are selected under ecological criteria and their main goal is to preserve the environmental treasure. In general, if the operation and the management of institutions are perfect, they can lead to important social and economic profits. The benefits of protected areas are seldom recognized and a correct balance between the profits and the expenses are not easily obvious in those responsible for the decision-making (Mcneely 1994).

Protected areas are excellent opportunities for infrastructures in recreation, education, organic agriculture, limited coastal fishery and ecotourism. These activities aim to reinforce the economic growth of the local society and to support economically these protected areas. Products related with the protection of nature are addressed in a growing market and the environmental friendly forms of growth are very profitable. Thus, the need for protection and management in

protected areas leads to the increase of employment at a local and regional level. Many of the above benefits cannot be presented in numbers and few are eventually able to understand the profits to the society. Famous PAs are very profitable as they increase tourist flow, they create new jobs and, in general, they contribute to the economic growth of the region. Furthermore, PAs are supported by many national or community financing programs. The regional programs offered by the IUCN, concerning National Parks and PAs, have set priorities that coincide with those of the area's stakeholders. These people often ask the support of institutions concerning training, information, transfer of technology and technical advice (Mcneely 1994).

Tourism is very important to a country's future because of its positive effects on the balance of payments, income, and services. In Greece, foreign exchange from tourism has experienced a continuous rise and has become an important item on the national balance sheet. Uncontrolled tourism can have adverse effects on the environment and especially on a small island ecosystem. In this respect, Zakynthos problems are similar to those of many Greek and other Mediterranean tourist islands such as Cyprus and Malta. The economy of the island of Zakynthos seems to benefit from tourism and the consequent improvement in the standard of living will most probably reduce emigration. This does not mean that the environment should be sacrificed in the name of economic prosperity and social stability (Marinos, 2002).

Ecotourism ('eco' as in ecological) is a type of tourism that is founded primarily on a specific interest in the natural history of a region. The concept emerged out of the eco-development and sustainable development literature of the 1970s and 1980s and has generated a significant amount of interest and controversy. Interest, because it represents an alluring alternative to the mass tourism paradigm that has been so transformative to the social and ecological conditions of destinations throughout the world; and controversy because many feel that it has yet to live up to its position as a more responsible or ethical form of travel. Issues that limit its ability to affect positive change in society include links with more consumptive forms of tourism, like fishing and hunting; being subsumed by the much larger mass tourism industry; the inability of local populations to control the scale and extent of development in their own regions; the profit motive; and new programs such as accreditation which have become politicized and institutionalized (Fennell, 2009).

There are not only economic benefits, but social as well. Some of these are the reduction of the unemployment rate -which serves as a motive to the local population not to leave the region- and the improvement of social life. The existence of a Management Agency and activities such as networking, volunteerism and conflicts resolution in PAs, may strengthen social awareness. Moreover, opportunities for recreation and environmental education, as well as the protection of cultural heritage are parts of the social value of a protected area (Karavellas et Al, 2003).

On the other hand, many of the PAs are no longer functioning or face restrictions concerning their place or size. Moreover, activities like the illegal hunting, fishing or trade of endangered species threaten the ecological balance of the PA.

Table 1: Benefits and threats in PAs

BENEFITS		THREATS
TOURISM/RECREATION	economic benefits	insufficient management
ENVIRONMENT PROTECTION	protection from erosion-reduction/control of flood	human intervention
ECOLOGY	recycling of nutritious components/recycling and cleaning of air/water	change in the system of water supply
BIODIVERSITY	protection, promotion of ecosystem diversity	Illegal hunting
RESEARCH AND EDUCATION	promotion of science	inadequate internal growth
CONSUMER BENEFITS	sources of goods	excavation
NO CONSUMER BENEFITS	aesthetic, intellectual, cultural value	conflicts for the stock farming of animals
FUTURE VALUE	future use	military activity
		forest activities
		adjacent land development

Source: Trivourea, 2001

2.3 Marine Protected Areas

The term MPA, adopted by the IUCN, is defined as “an area of intertidal or subtidal terrain, together with its overlying waters and associated flora, fauna, historical and cultural features, which has been reserved by legislation or other effective means to protect part or all of the enclosed environment” (Kelleher and Kenchington, 1992).

Marine protected areas or networks of MPAs, can be used as a management tool for mitigating the negative human impacts on coastal and marine areas. Numerous definitions exist for MPAs and networks of MPAs, and there is confusion based on inconsistent use of terminology (Agardy, 2000).

The term “MPA network” used in the present study, was first introduced by the Canadian Marine Protected Areas Strategy and is defined as “a set of complementary and ecologically linked MPAs, consisting of a broad spectrum of MPAs established and managed within a sustainable ocean management planning framework and linked to transboundary, global and terrestrial protected areas networks” (Fisheries and Oceans Canada, 2005a).

Increasing impacts on oceans worldwide because of overfishing, development, oil and gas discharge, introduction of exotic species, and climate change are having negative effects on coastal and marine ecosystems, and cause a loss of marine biodiversity (Zacharias, 2000).

3. History of Nature Conservation and National Parks

Nature conservation was first initiated in Greece in 1937 in the form of national parks. The term “national parks” was first defined by the Law 856/37 of 1937, as “mainly forested areas of special conservation interest on the flora and fauna, geomorphology, subsoil, atmosphere, waters for aesthetic, psychological and healthy recreation and for carrying out all kinds of scientific research” (OGG, 1971).

The next significant proliferation of the protected areas system came in 1971 (Law 996/1971), which modified the Law 856/37 and led to the statutory designation of five more national parks between 1962 and 1974. The principles governing the creation of parks and their basic philosophy were included in the provisions of the new law; conservation was the primary purpose of the parks with recreation only allowed where conservation values are not compromised (OGG, 1971). By 1974 there had been 10 national parks listed. The Law 996/71 has also added substantial protection for two more protected categories: aesthetic forests (AFs) and protected natural monuments (PNMs).

The next significant change to the operation of the protected area system came with an institutional law on the environment in 1986 (Law 1650/1986). The law replaced all previous legislation and its rationale was to eliminate deficiencies in previous laws (EER, 1986); it introduced certain changes in site designation procedure and five new categories of protected areas including marine parks. However, its implementation has been limited. With the exception of two marine parks founded in 1986, no other areas have been given special protection under this new law until 1992.

In recent years, the emphasis in nature conservation in Europe has been placed more on retaining the existing natural areas, connecting and protecting them with surrounding buffer zones, and restoring damaged areas. As a result, Natura 2000, a network of protected areas, was created. Combining special protection areas (SPAs) designated under the Birds Directive and Special Areas of Conservation (SACs) under the Habitat Directive, Natura 2000 is intended to be a Union-wide ecological network of sites, representing Europe’s diversity of habitats and species.

In Greece, the lowest number of designated areas is seen in the region of Attica, the largest Greek built-up area, where development pressures are higher than in any other region. The high number of protected areas and the presence of unspoiled natural and semi-natural areas in South Aegean and Crete reflect the geographical importance of these regions.

During the 1980s, the policy of nature conservation was given higher priority most notably after the Law 1650/1986. The Law gave more powers to a new state conservation actor, the Ministry of Environment, Planning and Public Works (MEPPW), to deal with policy development and planning for the protected areas. Although, the MEPPW has been the main operator in policy development and planning in the protected areas created after 1986, executive powers and the actual management of all kinds of protected areas founded before 1986, still remain within Forest District Offices (FDOs) at the local level. This law has been criticized for lack of public involvement, insufficient sanctions and administrative difficulties (IUCN, 1991; Tahos, 1992).

Table 2: Objectives of protected areas designated between 1937 and 1992

Objectives of protected areas designated between 1937 and 1992						
	Biodiversity preservation	Scientific research	Protection of special features	Tourism/recreation	Education	Heritage protection
National parks	√	√		√	√	
Aesthetic forest				√		
Protected natural monument			√			√
Ramsar site ¹	√					
Marine parks	√					

Source: Papageorgiou and Vogiatzakis, 2006

At the policy level, the biodiversity conservation cannot be sustainable simply by extending the protected area and designations alone. The major failures of conservation policy can be traced to structural causes rooted in politico-economic power structures of mainstream

¹Ramsar sites are wetlands of international importance, designated under the Ramsar Convention. The Ramsar Convention is an international agreement signed in Ramsar, Iran, in 1971, which provides for the conservation and good use of wetlands. The UK Government ratified the Convention and designated the first Ramsar sites in 1976 <http://www.naturalengland.org.uk/ourwork/conservation/designatedareas/ramsars/default.aspx>

policy. These structural causes generate three constraints: in addressing an integrative approach, in nature conservation and in designing appropriate policy instruments.

The first refers to the need of changing the political culture within the administration agencies. Having little history of working together with the local communities or developing and planning park strategies as integral component to regional development, greater realization of integrated conservation in Greece necessitates reforms in the political culture in terms of being more open and cooperative and the setting up of a process to facilitate public dialogue.

The second issue provides the means to assess the social intervention in the conservation of protected areas. Building an effective Natura 2000 network will undoubtedly cause frictions between local communities and park planners.

The third refers to greater inter-sectoral coordination and collaboration. Conservation policy in Greece has yet to achieve an inter-sectoral and holistic approach in order to pursue the targets of sustainability and to be more integrative on a broader geographical base. In policy terms, Greece needs to promote sectoral policies in agriculture and forestry through a more biodiversity sensitive planning. Specialized national forest legislation may play a significant role in achieving this goal (Papageorgiou and Vogiatzakis, 2006).

4. National experience

4.1 France

The 9 national parks in France grouped together within the “Parcs Nationaux de France”, are part of the cultural identity of the French Nation just like the most prestigious cultural facilities. In 2007 there were nine national parks: Vanoise (1963), Port-Cros (1963), Pyrénées (1967), Cévennes (1970), Ecrins (1973), Mercantour (1979), Guadeloupe (1989), Réunion Island (2007), French Guiana (2007). Every year, the national parks attract more than 7 million visitors. The Law of April 14th, 2006, concerning national parks led to the creation of the national agency called “Parcs Nationaux de France”. It is a national administrative agency that works under the auspices of the Ministry of Environmental Protection. The purpose of Parcs Nationaux de France is to create a link between the public national parks, to reinforce their common culture at a national and international level and to improve their management quality.²

National Parks in France have their own Management Board. This council is responsible for the Park’s management and consists of many representatives of the public sector –Ministries with similar competencies, the local government, the National Museum of Natural History, the National Council for the Protection of Nature and the National Centre of Scientific Research. The director is in charge of the daily management. National Parks are divided in two areas, the core and the regional area. The director and his personnel are responsible for the management of the core area; the Ministry of Environment (at a central level) and a Committee (at a local level) are equally responsible for the regional area. The personnel of a National Park consists of 24 up to 70 employees.

Regional Parks belong to local authorities. The members of the Management Board represent usually the local authorities or local organizations; the working staff of regional areas consists of 15 up to 30 individuals, specialized in environmental management, energy, education, archaeology, tourism etc.

2

[http://www.google.gr/#hl=el&q=National+Parks+in+France+Sharing+Nature&meta=&aq=f&aqi=&aql=&oq=Port+Cros+National+Park+\(France+pdf&gs_rfai=&fp=b9aa37ff16f8b858](http://www.google.gr/#hl=el&q=National+Parks+in+France+Sharing+Nature&meta=&aq=f&aqi=&aql=&oq=Port+Cros+National+Park+(France+pdf&gs_rfai=&fp=b9aa37ff16f8b858)

As far as the evaluation is concerned, Regional Parks have their own articles of association that determine the objectives, the general action or particular measures that should be taken. The articles of association are signed by all members of the Management Board and have the approval of the local society. The articles of association expire in 10 years time; a systematic evaluation is then carried out and, if needed, the objectives are redefined for another 10-year period.

Concerning the financing, National Parks belong to the State and their total cost of operation is covered by the State, the Ministry of Environment. Regional Parks in France receive less than half of their budget from the State. The rest is provided by the local authorities. It is estimated that their management costs double the cost of National Parks. More specifically: 35% of the budget is covered by regional authorities, 30% by the local government (municipalities, Prefectures) and 10% by the State. The rest 25% is covered by other ministries, the EU and finally by the Park's own resources.

Concerning the co-ordination of Regional Parks in France, there is the Federation of Regional Natural Parks that was created in 1971. It represents Parks in the local authorities, the Parliament and other institutional bodies by defending their interests and promoting their goals. Moreover, it is responsible for communicating information to the public and for cooperating with other protected areas of the country. The Federation consists of 3 teams:

- i. Representatives of all Parks
- ii. Representatives of 28 national organisms responsible for the development and protection of nature, the cultural heritage and tourism
- iii. Members of Regional Councils

The Federation has an important role in promoting the know-how and the exchange of experiences among Parks: special magazines, an updated website, interesting data bases inside the Park provide essential information to the public. Furthermore, the Federation answers the questions of the public on a daily basis.

The Federation of Regional Natural Parks is financed by its members, by European or national subsidies, by private agencies and finally by its own resources (sale of its publications etc). The Federation is not officially responsible for the action of each Park, as Parks are

independent, but it has the power to intervene in case the actions of a Park harm the Regional Parks system. (Ministry of Environment Planning and Public Works, 2003).

The marine protected areas of Port Cros, Scandola and Carry le Rouet are briefly described in the following pages.

Port Cros

The marine Park of Port Cros was founded on December 14th 1963 and covers an area of 7.000 acres of land and 12.880 acres of sea. It is one of the oldest National Parks in France and the first marine park in Europe ³

In 1991, Richez studied the numbers of divers' visits in the national park Port Cros. The Park's revenues only from the divers' visits in July and August amounted to 505.337€ and this money was spent in transports, food, equipment etc. Only a small amount of this money was invested in Port Cros. Most of the revenues were spent in the rest of the country and, as a result, the region was hardly developed and tourists did not have the opportunity to satisfy their needs (Richez, 1991).

Scandola

Scandola Nature Reserve was created in December 1975. It is located in the French island Corsica, within the Corsica Regional Park. The Park and Reserve have been recognized by the United Nations as a Natural World Heritage Site, and they were registered in the World Heritage List in 1983. In 1930, a Law prohibiting destruction or modification within Corsica Regional Park was voted. Scandola Nature Reserve is strictly protected so that the area returns to its natural state. In the marine park of Scandola diving is prohibited. In 1992, Richez carried out a research, part of which studied the legal activity of rowing in the protected region. The study focused on the way which the canoeists use the region, their motive and their reaction against a probable prohibition or restriction of their activities in the protected region. In this last question, 42% of them declared that they were against this kind of measures, 22% declared they were in

³ www.portcrosparcnational.fr

favor, 22% were in favor but under certain conditions and 11% of them did not answer at all (Richez, 19912).

Carry le Rouet

The protected area Carry le Rouet is located in southern France and was founded on September 8th 1987. The marine park covers 850 ha. In 1991, a research was carried out in order to evaluate the economic impact of the Carry le Rouet Park. The aim of the Park is to maintain the traditional economic activities, to protect the environment and to educate visitors. The study showed that many educational programs for schools, scientific meetings, activities and dive travels increased the economy of the area (Bechet, 1991).

4.2 Italy

In Italy there are 6 categories of protected areas: National Parks, Regional Parks, Marine Protected Areas, National Reserves, Regional Reserves and Wetland. Their management system is the following: The ministry of Environment and the regional authorities are responsible for the implementation of protected areas policy. 21 Management Agencies were founded for 21 different National Parks. Their president is appointed by the Ministry of Environment. The Management Board is the main body of decision-making. Its members are appointed by the Ministry of Environment as follows: 5 members from the local authorities, 2 from Non-Governmental Organizations (NGO), 2 from the scientific community and 2 from the Ministries of Environment and Forests. Management Agencies work under the supervision of Certified Public Accountants. The Management Agency is an independent public authority; it is responsible for publishing the Regulation of Park Operation and the Management Plan. The financing of protected areas in Italy is covered by the State and amounts to 45 million Euros per year. ⁴

Regarding the coordination of protected areas, a committee was founded, as in France, but over the past few years this committee has been abolished (Ministry of Environment Planning and Public Works, 2003).

⁴ <http://www.parks.it/Eindex.html>

The marine protected areas of Miramare Marine Reserve and Isola di Ustica Marine Reserve are briefly described in the following pages.

Miramare Marine Reserve

Miramare Marine Reserve lies in front of the homonymous castle. Today the Reserve represents a major test rig for the experimentation of new educational and scientific methods regarding the knowledge and conservation of the marine ecosystem. A leading cultural, educational and scientific area, the Reserve is committed to maintain and protect the marine environment of Miramare, where geomorphological, physical and chemical features create a precious biodiversity casket representing the biotic communities of the Upper Adriatic Sea.

Miramare Marine Reserve was established in 1986 with a Decree by the Department of the Environment, which entrusted its management to the WWF Italian Association. Since 1989 the educational team of Riserva marina di Miramare elaborated and carried out activities for schools at any grade, giving the opportunity to young students to discover and study a difficultly accessible and therefore not very known environment like the sea. The staff of biologists and naturalists dealing with environmental education uses "hands-on" methods linked to the philosophy of the equivalent American and English centers, which are in the forefront as far as the experimentation of environmental education techniques is concerned, constantly involving students in an active manner in environmental discovery and interpretation. Together with the environmental research classic methods of analysis (survey of environmental parameters, flora and fauna sampling, elaboration of studies along transects, etc.), and techniques based on a sensorial approach are used to successfully involve students in educational activities.⁵

Isola di Ustica

The marine reserve of the island of Ustica (Isola di Ustica), which is situated about 30 n.m. from the north-west coast of Sicily, was established by a Decree of November 12th 1986 issued by the Ministry of Environment, along with the Ministry of Merchant Marine. This was the first Italian marine reserve to be created (Scovazzi, 1999).

⁵ <http://www.parks.it/riserva.marina.miramare/Eedu.php>

The foundation of a marine park in the island of Ustica generated a lot of new activities and the existing ones were also improved. Some of these activities are: a centre of visitors in which tourists can get information about the environment and some environmental activities, an aquarium, boats with glass bottom so that tourists can observe the marine fauna and flora, the restoration of the medieval tower and its utilization as a centre of International Conferences, collaboration with the University of Palermo for courses concerning the marine biology and the submarine archaeology, a festival of submarine photograph and many diving centers. These activities are very likely to have positive effects in tourism. (Badalamenti et Al, 2000).

4.3 Spain

In Spain, the Committee of Common Management is responsible for the general Management of National Parks. Members of the Committee are equal in number representatives of the central administration and the Autonomous Regions e.g. Andalucía. The presidency of the committee rotates between the state and the autonomous region. The Committee is in charge of elaborating a Management Plan for each park, of approving the investments plan and the implementation of operating systems for services and infrastructures, and of supervising the management, administration and efficiency of each park.

The Director and the Management Board of the Park are in charge of the Park's Management. The director is also the secretary of the Committee of Common Management. The members of the Management Board represent the central administration, the region, the local committees and the institutions related to the Park. The role of the Management Board is to comment on the Management Plan, to approve sectoral plans, to approve annual reports, to propose corrective measures, if needed, and to comment in the annual plans of action and investments. The presidents of Management Board are appointed by the government after proposal of Ministry of Environment with the conform opinion of Committee of Common Management.

At a central level, the Service of National Parks –under the auspices of the Ministry of Environment- is responsible for economic issues and the general operation.

Furthermore, the Committee of Network of National Parks is a national agency that has advisory role in the Parks' management. In this Committee, the Central Administration, the Autonomous Regions, Local Authorities including National Parks, the Presidents of the Management Boards and environmental NGO are represented.

PAs in Spain are financed by the State and the Autonomous Regions according to common financing agreements signed since the very beginning of their cooperation.

The operation of PAs is coordinated by the Committee of Common Management of National Parks, which represents the central and regional administration, and the Service of National Parks which is controlled by the Ministry of Environment. The aforementioned Committee of Network of National Parks is also involved in the coordination. In this country great importance is given to the management/coordinative bodies of National Parks and to the attendance of the environmental NGO in them (Ministry of Environment, Planning and Public Works, 2003).

Columbretes Islands

The Columbretes Islands are a group of small uninhabited islets of volcanic origin, in the Mediterranean Sea, 30 nautical miles (60 km) off Oropesa del Mar in the Valencian Community in Spain. Since 1988 the archipelago has been declared a wildlife reserve.⁶

A research carried out in the region showed an increase of recreation ships in comparison with the years before the creation of PAs. The main activity of these ships is amateur fishery (72% of ships in 1996). Before the creation of PAs., recreational fishery, also called as sport fishery, it was at a very low level compared to professional fishery. Since 1990s, professional fishery has been prohibited and recreational fishery has increased, as it was prohibited only in the high protection area that covers 12% of the marine park. Diving activities were also increased, from 114 divers in 1990 up to 1547 in 1994 (Badalamenti F, et al., 2000).

⁶ <http://reddeparquesnacionales.mma.es/parques/cabrera/index.htm>

Cabrera

The island Cabrera is one of the Balearic islands in Spain and it is located in southern Majorca, in the Mediterranean Sea. The whole archipelago is a Spanish national park (Parque Nacional del Archipiélago de Cabrera). Cabrera is a cruising destination, and boats may anchor in the island's natural harbor. Boats may not anchor anywhere else due to the fragile marine life around the island. Many species survive on Cabrera that are rarely found around the Balearics, such as dolphins and sea snails. Diving is strictly forbidden and a license must be provided, in advance, by the government, for a one day pass only. Thus, excursions to the island are rarely organised only by the diving community. Hiking is available, and there is a tourist information office, a museum, and a 14th-century castle as well as a gift shop and café. The park covers 100 km² (13 km² land) but attracts few visitors due to its remoteness.⁷

In 1998, a study was carried out concerning the human activities in the park of Cabrera based on the annual reports of the park in the years 1993 up to 1996. During this time period, the number of navigation licenses increased from 173 to 1706, the ship moorings from 3400 to 6495 and the number of divers from 166 to 408. Visitors reached the number of 39.066 in 1996. According to Pozo, this increase was a result of good marketing of the island (Badalamenti et Al, 2000).

4.4 Conclusions

To sum up, the management of Protected Areas at a National Level and the Management Agency of a National Park need to be separated. The management at a national level should refer to the general management of Protected Areas, whereas a Management Agency should have the competency to deal with specific management issues in its Area. The existing management system in Greece cannot guarantee successful coordination of management both at a national and local level. However, Italy and France seem to have overcome these difficulties.

On the other hand, Spain has a different management system based on decentralization. According to this Spanish model, managing nature at a regional level seems to be easier than at a

⁷ http://reddeparquesnacionales.mma.es/en/parques/cabrera/home_parque_cabrera.htm
http://en.wikipedia.org/wiki/Cabrera,_Balearic_Islands

central level. Spain's government is in charge only of the National Parks management and the National Shelters of Preys. Finally, decentralization reinforces the collaboration of various competent institutions of the central administration with agencies of the local authorities.

At this point, it is worth underlining the necessity of a coordinative body which is very important for an effective management. It is obvious that the more decentralized a management system is the more necessary becomes the existence of this body. A typical example of that is France with the Federation of Regional Natural Parks.

As to the Parks' financing in the aforementioned countries, Parks are very much dependent upon the State's budget. However, Management Agencies of Protected Areas in France make many efforts towards their self-financing, that is through their own resources. To conclude, a profitable activity for National Parks is the "diving tourism", as it attracts environmental sensitive tourists. It is an activity with many profitable effects that may boost the level of tourism in a region.

5. National Marine Park of Zakynthos (NMPZ)

5.1 Zakynthos

The island of Zakynthos belongs to Ionian Islands, in western Greece. It is one of the largest Ionian islands, after Corfu and Kefalonia and covers a surface of 410 km² (158 sq mi) with 123 km (76 mi) coastline. Zakynthos population amounts to 39.015 (National Statistical Service of Greece, 2001). Zakynthos is one of the regions with the highest population growth in Greece. It is 9,5 n.m. off Peloponnese and 8,5 n.m. off Kefalonia.⁸

Laganas Municipality covers 74.104 km², including two islands, Marathonisi and Peloyzo. Laganas Bay, at the southern part of the Island of Zakynthos, hosts the largest nesting area of the Loggerhead sea turtle *Caretta-caretta* in the Mediterranean Sea. The average number of nests in Laganas Bay represents almost 26% of the total documented nesting effort of Loggerhead turtles in the Mediterranean. The nesting habitat of Laganas Bay consists of the terrestrial part including six different beaches: Marathonissi, East Laganas, Kalamaki, Sekania, Daphni, Gerakas.

Over the last few years, tourism in Zakynthos island has threatened the existence of *Caretta-caretta* turtles, because most of the famous tourist beaches in Zakynthos serve as turtles' nesting areas too. Many different studies in Zakynthos, based on interviews with tourists and permanent residents, showed that the legislation established for the protection of wildlife is not always effective and many members of the local community react strongly against any restrictions imposed by the Greek government on the tourism development. A research showed that the existence of *Caretta-caretta* turtles did not act as a prime motivator in the decision to plan a holiday in Zakynthos. Various strategies are taken into consideration in order to deal with the aspirations of local people and tourist development with regard to the habitat of an endangered species (Prunier et Al, 2002).

The economy of Zakynthos was traditionally based on agriculture, but in 1960s the island became famous for the deep blue sea, the caves and the sandy beaches. The largest bay - Laganas - is the most important nesting area in the Mediterranean for the turtle *Caretta-caretta*, a species which feeds and lives primarily in shallow coastal waters rather than in the open sea. The threat

⁸ <http://hellas.teipir.gr/prefectures/english/Zakinthos/GenikaStoixeia.htm>

from humans takes many forms, such as sewage, water pollution, lighting (the turtle's disorientated when light is directed upon a beach) and noise (Prunier et Al, 2002).

Is it safe to link the environment with the tourism? Tourism may have adverse effects on the environment. However, nature serves a double purpose: it provides both natural and tourism resources. So, sound environmental management can promote continuing prosperity in the touristic industry. 'Green' tourism and the control of tourist flow to avoid saturation in peak seasons could help (Romeril, 2002).

5.2 NMPZ

The first national park in the Mediterranean to protect sea turtles was established in 1999 on the island of Zakynthos, Western Greece. This was the result of longstanding efforts made by NGOs, the Greek Government, the European Union, the Council of Europe (Bern Convention) and other concerned parties. The primary aim of the Park is to provide the appropriate nesting conditions for the most important known loggerhead (*Caretta-caretta*) nesting population in the Mediterranean.

The Management Agency stopped functioning in April 2004 because of lack of funds, traditionally provided by the State. The NMPZ opened its gates again in August 2005, after the appointment of a new President and a new Board by the Ministry of Environment. During 2006, the Management Agency worked towards a new conservation scheme, based mainly on wardening (supervision), control of visitors and involving local people especially in the problematic area of Daphni. This work, continued in 2007 and 2008, included studies made by research assistants who investigated the status of the nesting beaches and the maritime area. The creation of the National Marine Park of Zakynthos (NMPZ) and the associated Management Agency were major steps in protecting the most important nesting habitat of *Caretta-caretta* in the Mediterranean. In 2009, the NMPZ expanded the warden program, fulfilling its responsibilities in most of the cases. Three drivers and 74 local wardens were hired by the NMPZ to implement a 24-hour guarding of the nesting beaches and the marine area. Thirteen of them are permanent employees and the rest are seasonal (6-month contract) to cover needs during the high tourist season. Furthermore a car equipped with NMPZ personnel to prevent or

extinguish fires was present this year. All this lead to an effective 24-hour safeguarding of the nesting beaches (Touliatou et Al, 2009).

Three initial job positions (secretary, resource manager and administration officer) have been filled. An annual Business Plan defining priorities and actions to be taken until the end of 2001 was adopted. The Business Plan includes among others: elaboration of internal regulations for the Management Agency and drafting of a Management Plan for the National Marine Park, as required by law, elaboration of a study for ecotourism and compensation measures for affected landowners, formation of a committee to propose necessary amendments to the enabling Presidential Decree of December 1999. The committee consists of local and government consultants. Its task is to harmonize the Presidential Decree with the Law 2742/1999 which describes the role of Management Agencies in Greece and propose modifications of the existing legislation. As the NMPZ is actually the first national park with a Management Agency established in Greece, there is a definite lack of experience in dealing with such issues. The formation and operation of the Management Agency will be a real challenge. It will not only become a turning point for Zakynthos nesting area, but a good example of management for the the management bodies that will soon be established in several other protected areas in Greece (Dimopoulos, 2001).

The NMPZ includes: The main Area: with 7 terrestrial core zones (Zone A1, A2, A3, P 1, P 2, P 3, Y and Y) and 4 buffer zones (Zone Φ 1, Φ 1', Φ 2 and Φ 3) with a total area of 1,471 ha and 2 maritime zones (Ia and Ib), with a total area of 8,918 ha. Ia is subdivided in three zones inside the Bay controlling boat traffic and fishing activities between May 1st and October 31st every year. Ib circumscribes at a radius of 500m the islands of Strofadia and regulates fishing activities. Building activities are not allowed in the core zones and are strictly controlled in the buffer zones. The Peripheral Area: with 7 terrestrial zones (O1, O2, O3, O4, T1, T2 and T3), acting as a transition stage to the main area of the park, with a total area of 3,071 ha. Land use is defined and building is regulated (Dimopoulos, 2001).

Figure 1: A sketch map of the boundaries of the National Marine Park of Zakynthos

Source: Dimopoulos, 2001

5.3 Legal Framework

The Presidential Decree on the establishment of the National Marine Park of Zakynthos was signed on the 1st of December 1999 by the President of the Hellenic Republic (Gov. Gazzette 906D, 1999).

The Management Agency of the Marine Park was created after the National Government Ministerial Decision of the 20th of July 2000. The Management Board consists of twenty one members, representing the local society of Zakynthos, the Region of Ionian Islands, environmental organizations and the Hellenic Ministry of Environment, Planning and Public Works. The Management Agency is a non-profit entity, governed by private law, and operates under the supervision of the Ministry of Environment, Physical Planning and Public Works.

The Management Agency is responsible for achieving the integrated management of protected areas within the National Marine Park. It is also responsible for the protection of all

flora, fauna and natural resources of the Marine Park, ensuring the sustainable development of the region and providing an effective education and public awareness program for both children and adults.

According to Article 9 of the Presidential Decree on the establishment of the National Marine Park of Zakynthos, the Management Agency aims at elaborating and controlling the application of regulations concerning the management and operation of the NMPZ according to the existing national and Community legislation on environmental protection in the area and to principles and policies for the sustainable development of the region. The Agency also promotes the cooperation of all stakeholders (National Government, Local Authorities, Private Sector), the awareness of residents and stakeholders so as to ensure their participation in the development program of the region including campaigns, commercial promotion inside and outside Greece as well as action plans to attract and develop sustainable tourism (Gov. Gazzette 906D, 1999).

In addition, the Management Agency is responsible for monitoring the conditions and limits set by the P.D. More specifically, it is responsible for:

1. The marking of the designated areas as defined in the P.D.
2. Organizing and implementing wardening action plan in the area.
3. The information of the public and the area's stakeholders; the organization and coordination of public awareness programs.
4. The construction of infrastructure required for the wardening and permitted activities within the boundaries of the marine park.
5. The cooperation of the country's competent bodies with similar international bodies and organizations in the field of information, knowledge and information sharing, or preparation of joint parallel programs.
6. Reporting to the competent authorities of the acts or omissions concerning the provisions of the Presidential Decree in order to enforce legal sanctions.
7. Training programs for the conservation of historical, folklore, cultural and natural monuments.

8. A study evaluating the protected objects and suggestions for the modification of the protection limits.
9. and licensing activities (boatmen, schools, diving).⁹

5.4 The financing of the NMPZ

The Marine Park is mainly financed by the Operational Programs “Environment” (3rd Community Support Framework 2000-2006) and “Environment and sustainable development” (NSRF 2010-2015) which control the application of management measures, as well as the general operation of Management Agency.

The Operational Program "Environment" is one of the 24 programs of the 3rd Community Support Framework (2000-2006) for Greece and it is funded by the European Regional Development Fund. The Special Management Unit of the Operational Program "Environment" has the power to control the correct application of the Law 2860/2000, in order to ensure the efficiency, rationality and transparency in the implementation of the Operational Program "Environment". The project includes measures for the protection and management of the breeding habitat of the loggerhead sea turtle *Caretta-caretta* in Zakynthos, an area which has been designated as a National Marine Park by Presidential Decree (Official Gazette 906/D, 22.12.1999). The projects are selected by the Special Management Service under the criteria described in the Planning Supplement and authorized by the Monitoring Committee.

In 2003, the NMPZ had serious problems. Greece was about to host the “Olympic Games 2004”, and all the economic resources of the State were spent on the construction of the Olympic works in Athens. As a consequence, the financing of the marine park had to stop and the Park’s employees remained unpaid for a long time. The Park’s employees, including the security guards, came on strike and in 2004 anarchy was spread in Zakynthos beaches. Umbrellas and deck chair, canoes and sea bicycles, even vehicles were used under no control in the beach, harming the sand and destroying the most important nesting area of *Caretta-caretta*.¹⁰

⁹ http://www.carettaodyssey.gr/nmp-zak/index.php?l=GR&t=content&pn=park_law&r=home_menu

¹⁰ http://www.natureworldtravel.com/marine_park_gr.htm

The main objectives of the Operational Program "Environment and sustainable development" are the protection, upgrading and sustainable management of the environment, that lead to the protection of the public health, to a greater standard of living for the locals and to a more competitive local economy. Some of the most important projects that will take place in Zakynthos during the Operational Program are the integrated management of solid and hazardous waste and the protection of the soil, urban waste management, the application of action plans for reducing air pollution, the pollution of the marine environment and of the coasts. This program also includes integrated protection and management of the wetlands, new infrastructure for large scale anti-flood protection and effective mitigation or prevention of natural disasters.

The total budget of the Operational Program amounts to 2,250,000,000 euros; 1,800,000,000 euros of this budget comes from European Funds and 450,000,000 euros from National Resources. In addition to this amount, it is estimated that National Resources amounting to 519,000,000 euros will be earmarked to cover the cost of projects that are not co-funded by the EU, such as expropriations, etc. The total sum of the Program's budget is estimated to reach 2,769,000,000 euros.¹¹

According to annual budget of the NMPZ for years 2004, 2005, 2006, 2007 and 2008 the estimated amount is 6,914,898 euros.

5.4.1 Financial Resources

The financial resources of the N.M.P.Z are¹²:

1. Subsidies provided by the Ministry of Environment, Planning and Public Works or other legal persons that are connected with the financing of the environmental protection, as well as the local authorities.
2. National Resources for programs, studies and research concerning the activities of the Agency.

¹¹ <http://www.espa.gr/en/Pages/staticOPEnvironment.aspx>

¹² Gov. Gazette 65, 21 January 2005

3. Revenues from property management, subsidies, donations etc by natural and legal persons.
4. Income from publications or any other intellectual property (copyright) that the Agency produces or exploits. Moreover, income from the exploitation and promotion of the protected area such as tickets, guided tour.
5. Revenues from research projects.
6. Income from entrance tickets issued in the National Park, after the decision of the competent Ministry.
7. Income from other legal activities.

All the revenues of the Agency are deposited in a specific bank account. The withdrawal, distribution or any other action concerning this bank account is done with special written order of the President of the NMPZ Management Board.

5.4.2 Budget

The financial management of the Agency is based on its income and expenditure budget that consists of the following categories¹³:

1. Income budget
2. Operational expenses budget (stable expenses)
3. Activities expenses budget (variable expenses)
4. Investment budget

The budget is prepared by the financial services of the country two months before the new fiscal year according to expectations based on the annual activity program; Any economic or other evidence that the financial services (or the Management Agency) possesses are submitted for approval to the Management Board.

¹³ <http://www.espa.gr/en/Pages/staticOPEnvironment.aspx>

6. Methodology

6.1 Science theory

This research was aimed at exploring and finding out if the NMPZ follows its initial purpose to protect the environment, particularly the loggerhead sea turtle *Caretta-caretta* and the sea area of the Park and general to develop activities aiming at the protection of nature and the landscape in the wider area of Zakynthos. A well-structured research method that was based on the purpose of the research was essential in order to accomplish this goal. Due to the complexity of this research, it was necessary to get a deeper understanding of the research questions in order to obtain valuable knowledge.

The complexity of this research was to evaluate the progress of marine Park that is based on a number of the employers and employees' teamwork. This factor left a non-positivistic research approach to measure and understand the impact of working environment. However, one of the main advantages with the positivistic philosophy is high reliability achieved which makes it possible to repeat the study with the same result (Lundahl & Skärvad, 1999). This could not be possible in this research due to situational dependence aspects such as changes of employees as well as the time factor involved.

Qualitative research interview was used in this study to describe the role that NMPZ plays in the growth of the island and how the local people react in restrictions about the protected area. The main task in these interviews was to understand the meaning of what the interviewees said (Kvale, 1996).

Disadvantages and criticisms of qualitative approach based research are that interviews are time consuming and they are resource intensive. The interviewer is considered a part of the measurement instrument and interviewer has to be well trained in how to respond to any contingency. This study required a pre-understanding of the terms Protected Area and Management Agency.

6.2 Research approach

This study was more issue-oriented and focused more on the case study for finding the effects and consequences rather than hypothesis testing based on existing theories. This is one of the reasons a qualitative research method science was used. This research was not testing already established theories versus practice. The aim is to reach a deeper understanding of how the NMPZ manages its activities and the reaction of the local people.

6.3 The method choice

This study used the qualitative research method for studying the assessment of the NMPZ. This included finding out the effects of the landowners, the church, the politics and environmental services and the way of the financing. A lower level of structure that a qualitative method represents should follow higher complexity (Wigblad, 1997). An example of this that corresponded with this study was a dialog with more open answers that be followed up by complementary questions compared to a more standardised (high-structured) research approach.

6.4 Techniques of gathering information

Information gathering can be divided into two categories, primary and secondary information (Lundahl & Skärvad, 1999). The primary data are collected by the researcher while secondary data or information already exists and is only extracted from the source. Primary data is usually collected using observations, questionnaires and in the case of this study, through face-to-face oral interviews. Secondary data is collected through literature that constitutes the theoretical foundation of the study (Kumar, 1999). In this study secondary data was collected through literature and scientific journals.

6.5 Literature study

As mentioned earlier, the goal of this study was to explore and obtain information for a deeper understanding of how the NMPZ manages its activities and the reaction of the local people. Therefore, a lot literature was used to obtain and get a pre-understanding and knowledge on Protected Area, Marine Protected Area and sustainable growth. Literature study will enable the reader to obtain a complete understanding of the researched topic without a pre-knowledge of the entire Assessment of NMPZ topic. It is hard to identify every reader's pre-knowledge therefore; some required theories and definitions knowledge might not be described in detail. So, a fundamental search of literature was contacted using database and various literatures. Structure and content of the theoretical framework was summarized at the end and additional sources added.

6.6 Interviews

It is used interviews in this study as an empirical study in order to get a deeper knowledge of how the NMPZ manages its activities and how the local people react with the restrictions. A simple definition of an interview is, 'Any person-to-person interaction between two or more individuals with a specific purpose in mind is an interview' (Kumar, 1999). The respondents are people who have direct or indirect relation with the NMPZ.

Concretely, was used the personal interview with specifically shaped questionnaire, where the questions and the way that was submitted had been predetermined, as well as the individuals that were asked.

There were a number of basic questions that after was increased because were added other questions as additional, depending on the speciality, the knowledge and the job of the respondent in the environmental management of the park, in order to understand deeper and to promote as much as possible a more complete picture of the interesting region. The questions were "open" or free answer. In this case the answer that is required, from the interviewer side, is narrating, short or extensive, where the respondent can answer free with the way that he prefers (Siardos, 1997).

6.6.1 Interview styles (Bryman, 2001)

Qualitative

Semi-structured or in-depth: The researcher has an interview schedule with a list of themes and potential questions to ask the interviewee. This interview style is flexible, allowing for an open dialogue that can extend beyond the parameters set by the interview schedule.

Unstructured: An interview style where the researcher has a brief topic guide, allowing considerable freedom within the interview. The interview takes the form of a conversation rather than a more structured question-answer session.

Quantitative

Structured: Sometimes called a standardised interview, a structured interview involves the researcher asking each interviewee the exact same questions. Questions will generally offer the interviewee a fixed range of answers (typical of survey research), followed by a statistical analysis of the results.

6.7 Selection of respondents

It is important to choose a perspective and the use of several perspectives increases the level of objectivity in relation to diversification and completeness (Lundahl & Skärvad, 1999). This study based on information gathered from different perspectives that were divergent and a complete objective picture was gained by including all these perspectives. These perspectives could be compared to reach a more accurate view of the NMPZ it is important to make sure the respondent has relevant, useful and important information about the researched topic and its problems before conducting interviews using the qualitative method (Repstad 1999). In other words, it is the purpose and problem definition that decides the selection of respondents.

The selection of the respondents divides into two types, probability and non-probability selection (Merriam, 1994). The most common type in qualitative case studies is the non-probability selection. There are two strategies of non-probability selection, either targeted strategy or criteria related strategy (Merriam, 1994). Targeted strategy is based on the wish to explore, understand and obtain knowledge. The researcher selects the respondents where he/she could get most knowledge. On the other hand criteria-related strategy is based upon a selection where the respondents need to fulfill some defined criteria chosen by the researcher and there after a selection is made of those that fulfill these criteria. In this study were selected in a non-probability approach using targeted strategy.

6.8 Questions

Q1: Could the NMPZ have an important role to play in the island's development?

Q2: There is a trend in ecotourism mobility worldwide. How could the NMPZ help in attracting these high standard tourists?

Q3: What countervailing measures can be taken against the losses of particular groups of population? How many and which of them are already taken in the NMPZ and what are the results?

Q4: Will these countervailing measures be finally provided to those really in danger?

Q5: Which must be the form of the countervailing measures? Should the State indemnify the residents for their seized properties or should they create new activities to their own profit?

Q6: What should the NMPZ do to have its own resources? Is the State's funding adequate?

Q7: Zakynthos is famous for its cultural heritage. How this heritage could be linked to the NMPZ and what might be the results?

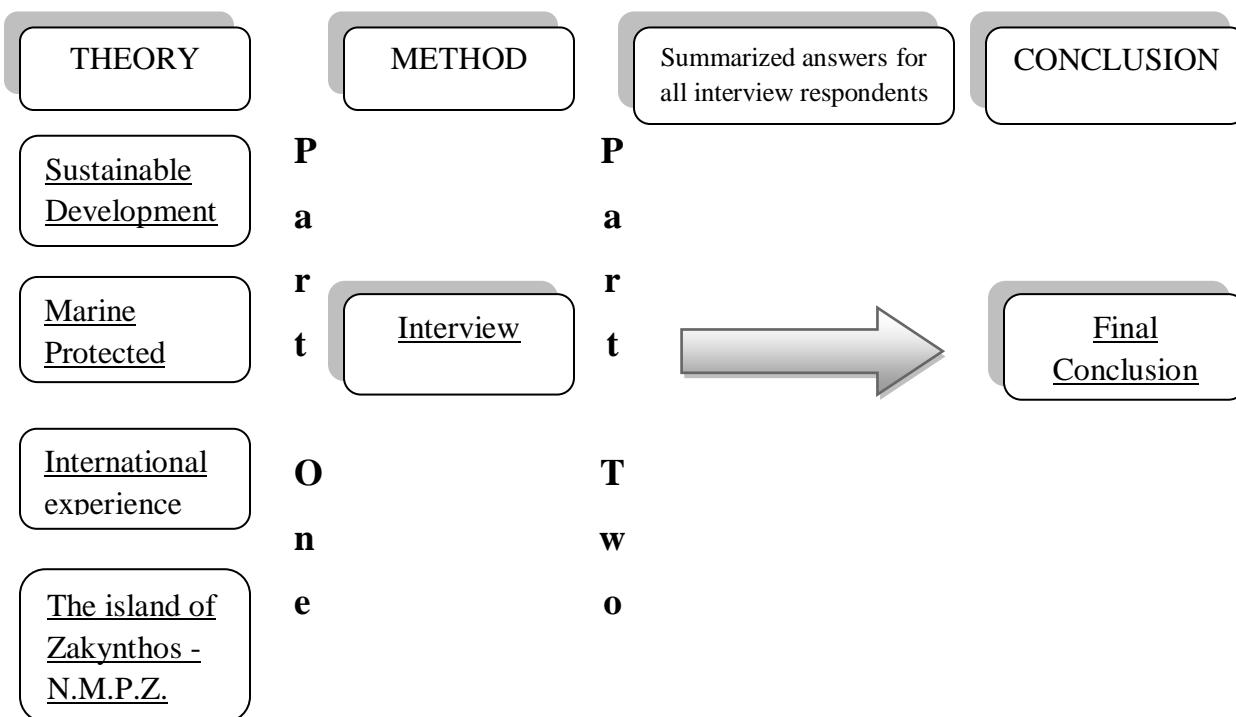
Q8: What are the relations between the local church and the NMPZ and how these could be improved?

Q9: Could the west and north-east coasts of the island, already named "Protected Areas", be integrated to the NMPZ?

6.9 Research Framework

Below it is presented in graphic way the sequentially steps of the current project.

Figure 2: Steps of the project



- Step 1: Collect and provided in each chapter necessary theories and available data four factors in order to draw at end of them, helpful conclusions for the next step.
- Step 2: Use the method of interviews to analyze data and information found in part one. At the end of this analysis, draw a conclusion based on the result.
- Step 3: Based on summarized answers for all interview respondents.
- Step 4: Draw a conclusion which presents the most important and relevant findings.

7. Summarized answers of all interview respondents

7.1 The Development of Zakynthos

According to our research and to the answers given to the question concerning the role of the NMPZ in the island's development, everyone agreed that the tourism based on the NMPZ could enhance the development of Zakynthos. This tourism, though, is different than the conventional form of tourism that Zakynthos experienced in the past.

All the interview respondents supported that the tourist activity in the island is seen only under quantitative -and no qualitative- criteria. This attitude needs to change and other forms of tourism supporting environmental friendly methods should be found. The NMPZ could be a pole of attraction for people that will respect the environment and will not create problems like those resulting from mass tourism.

As the President of NMPZ, Mrs Karagouni, has already mentioned in her interview, the aim of the Management Agency is to indicate to the permanent residents of the region how to behave in the park area and to show to them how this change will bring the desirable results to the sustainable development of the island.

Ecotourism seems to grow rapidly worldwide. In Zakynthos, everyone agrees that the tourist activity of the island should turn to ecotourism. According to the Member of the Greek Parliament for Zakynthos Prefecture, Mr Barbarigos, the protection of the environment through the NMPZ is an essential choice for the island's development.

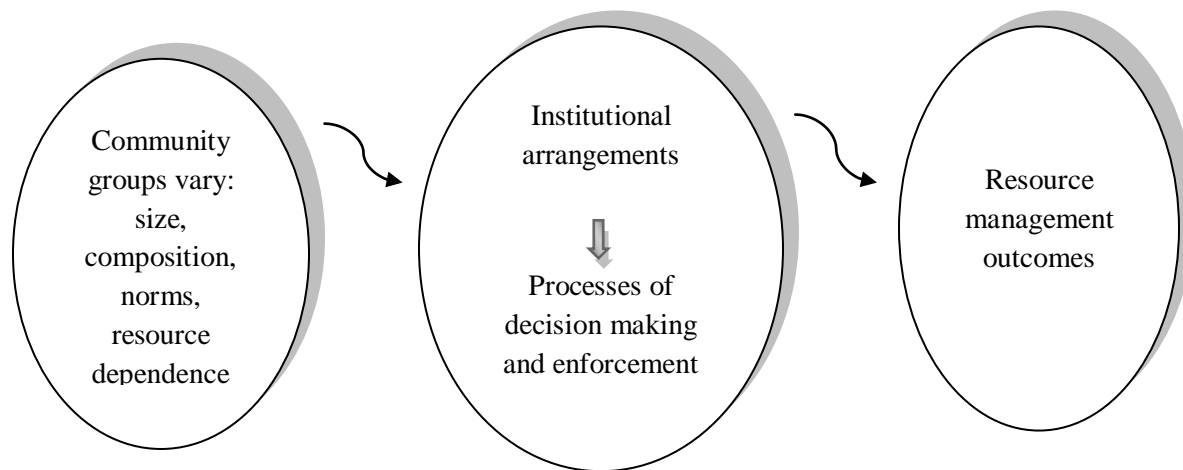
However, changing the traditional tourism activities is not easy to achieve, especially in Zakynthos. As mentioned by the former President of the NMPZ, Mr. Pantis I., the turn to the qualitative form of tourism is very difficult, because over the last three decades the island has been based on the very profitable mass tourism. However, in regions like Dadia or Alonnisos, it became much easier to turn to ecotourism, as no tourism activity existed in the past and the locals were very positive to the new change. In general, the people of Zakynthos should change their way of thinking. They must not be victims of the mass tourist industry; they should simply follow the example of Italy, where cultural monuments are successfully protected, attracting in this way high standard tourists.

Greece needs a network of environmental protected areas that will attract tourists with advanced level and quality. In this purpose a National Strategy must be created that will be applied by all 27 Management Agencies in Greece. According to Mr Pantis, Greece has the know-how, the experience and many qualified professionals but lacks of political will.

Furthermore, the Prefect of Zakynthos believes that the cultural heritage of the island is very important. He says that if the locals want Zakynthos to be competitive in the tourism sector, they should promote the environment and their culture as well. This can be achieved through a number of events inside the NMPZ that will inform and entertain not only tourists but also the permanent residents of Zakynthos.

7.2 Landowners and NMPZ

A study showed that community-based conservation should include all the interested parties of the island local groups, public services, even NGOs and aid agencies. Local groups are usually the least powerful among the different parties interested in conservation. Community-based conservation requires, therefore, that its representatives make stronger efforts to give greater power to local groups. These groups must also find the way to negotiate on equal terms with government officials and aid agencies today. In addition, networked structures, bringing together the resources of several communities, are also important for other reasons. They may be proved far more effective in resolving intercommunity conflicts in comparison to distant, time-consuming legal mechanisms that exclude local groups from any procedure. Effective institutionalization of community-based conservation requires that local groups have access to adequate funds for implementing the rules they create. The sources for these funds should also be local, from the community-users rather than from central governments. Over time, this would mean that government agencies will not only cede their authority to make rules about conservation, but that community groups also demand control over the resources themselves (Agrawal and Gibson, 1999).

Figure 3: View of community and conservation (Agrawal and Gibson, 1999).

In many Protected Areas the residents refused to accept the administrative measures taken by the local society (Agrawal and Gibson, 1999). The main reason of this refusal is the process of the decision-making, for each administrative measure, which follows top-down approach (Bonaiuto et Al., 2004). The same situation is observed in Greece (Trakolis, 2001). What has led to conflicts between the local society and each Management Agency of PA is the absence of local society from the process of decision-making. Moreover, the conflicts are caused because the protection measures that were taken in PAs gave the sense that the role of Parks is the prohibition of human activities and not the protection of the local flora and the fauna (Papageorgiou, 2001).

In 1999 and 2002, the Greek Parliament voted the creation of Management Agencies (Laws 2742/99 and 3044/2002) giving the opportunity to the local society to participate in the management of the PAs. The new era of administration in PAs gave the possibility to the local society to participate in the decision-making and reap the economic benefits of the region (Lundquvist, 2000). The supporters of the new administration in PAs believed that good management practices may have positive effects both on the local society and the protection of the environment (Hoffman et Al., 1999).

The residents of the island have not realized the necessity of the NMPZ nor the necessity of the environmental protection measures yet. Consequently, there are conflicts between the residents of the region and the Management Agency of the NMPZ As His Most Reverence,

Metropolitan of Zakynthos said, the consensus is needed so as achieve the economic growth that will begin with the Park and will end to the society. The aforementioned conflicts derive from the seized land and the restrictive measures that do not allow to landowners to develop their economic activities in the Protected Area. Every interview respondent believes, though, that the measures taken by the government to solve these problems with the locals are still insufficient, 9 years after the creation of the Management Agency.

According to Mr Pantis, many problems resulted from the Law 1650/86 which was drafted by people who did not know the needs of the environment, of a PA or an environmental particularity. The state should indemnify all landowners against their seized property. However, nowadays this seems to be very difficult. The Law 1650/86 is impossible to be implemented because over 19% of the Greek territory has been characterized as PA and it is therefore difficult for the State to satisfy all the landowners.

As Mrs Karagkouni said, this problem does not derive from the Agency but from all governments that did not succeed in implementing the provisions of the Presidential Decree concerning the seized properties. Furthermore, the Metropolitan of Zakynthos believes that the human approach must be the first to take into consideration: the state should firstly indemnify all the residents of the PA for their seized property and then proceed to measures for the protection of the environment.

7.3 The Church and the NMPZ

Over the last few years, the Greek Church has developed a particular relation with the natural environment due to the activities of the Ecumenical Patriarch Bartholomew. These activities consist of various conferences which promote the dialogue between the Orthodox Church, the scientific community and some political institutions. However, these actions were successful only at a theoretical level and did not end in coordinated strategies. It is also worth mentioning that many monasteries in Greece have taken lately important initiatives concerning the environmental management. However, these initiatives are uncoordinated, random and of limited range (Gekas et Al, 2006).

In Zakynthos, the local church has a very good and close cooperation with the NMPZ. The Marine Park is totally supported by His Most Reverence, Metropolitan of Zakynthos and even the Ecumenical Patriarch Bartholomew expressed the necessity of the environmental protection during his visit to the island. The church of Zakynthos was also one of the few local institutions that contributed to the creation and the operation of the Postgraduate Program concerning the Protected Areas.

Finally, Mrs Karagkouni said that a great example of the Church's good relation with the NMPZ is the concession of a building of the "Kallitero" monastery to the Park -that has now became the local cultural centre. It is also worth mentioning that the Metropolitan of Zakynthos had a major contribution to the successful integration of "Strofades" islands into the NMPZ.

7.4 Greek Public Services and NMPZ

Every interview respondent agrees that the cooperation of the local institutions with the NMPZ must be as good as possible in order to achieve the proper operation of the Park and the eventual general economic growth of the island. However, this does not always happen. As the former member of Zakynthos Municipality Council, Mr Xenos, said, the relation of the two municipalities included in the NMPZ- the municipalities of Zakynthos and Laganas- with the Management Agency is rather competitive. According to Mr Plessas, head of the Environmental Department of Zakynthos Prefecture, the relations of the Environmental services with the NMPZ, are not good enough too.

7.5 The financing of the NMPZ

One of the most important factors for the successful operation of a Marine Park is the adequate financing. In this case, the financing of the NMPZ is provided by the state and the European Union. Since the very first steps of the Park, though, this sector has been problematic. As Mr Pantis said, all the institutions of this type should have all the money needed for their activities.

It is worth mentioning that, according to Mrs Karagkouni, the money provided by the European Union is enough for the Park's operation but the Greek bureaucracy creates many problems. The NMPZ is based on government subsidies, on European programs and on its own resources, which may cover a great part of the Agency's needs. A good economic strategy should be designed in order to increase the Park's own resources, as it is already predicted in the Park's Business Plan.

8. Conclusions

Main results and findings of the study

The purpose of the Natura Network is to maintain the natural resources of a country by protecting the regions with endangered, rare species of the local flora and fauna. For this reason, the Gov. Gazette 906D of 1999, created the NMPZ. The Marine Park's objectives are to protect the loggerhead sea turtle *Caretta-caretta* and to preserve the great natural heritage through the conservation of the ecological balance of the marine and coastal area, including the islets of Laganas Bay and Strophadia. Furthermore, the Management Agency of the Park aims to develop activities that comply with the protection of the natural landscape in the wider/broader area of Zakynthos.

Nowadays, the operation of the NMPZ and the Management Agency is not the best possible. There are a lot of economic and functional problems that do not allow the Park to boost the economic growth of the island, as it was expected since the very beginning. This situation can change and should change into the sustainable development that will not harm the environment. The behavior of the islands' residents should change and the locals must understand that the NMPZ can lead to a different type of development. This new type will respect the environment and will eventually reap the benefits of tourism, which is the most important economic activity of the island at this moment.

In order to achieve the aforementioned goal many measures should be taken. Firstly, the residents of the island and more specifically the residents who live in the area near the NMPZ should understand the necessity of this Park. The state should take measures in order to indemnify the locals for their seized land not only in terms of money but through the creation of economic activities. Part of these profits will eventually end to the locals and the Management Agency.

The financing of the NMPZ is based on two Operational Programs: the Operational Program "Environment" (3rd Community Support Framework 2000-2006) and "Environment and sustainable development" (NSRF 2010-2015). The financing provided to the NMPZ should cover all its needs. Unfortunately, the money offered to the Park today is insufficient because of

the Greek bureaucracy or the inadequate EU funding. It would be better to develop economic activities, as described above, so that the N.M.P.Z obtains its own resources.

The international experience shows that the management of Protected Areas needs to be distinguished between: a. the management at a national level and b. the Management Agency, which is responsible for the National Parks. The management at a national level should include a general management strategy of Protected Areas. On the other hand, Management Agencies should have the competency to solve daily problems occurring in every Protected Area. A great difficulty, of this system, though, is to find the balance between the National and the regional management services. However, Italy and France seem to have overcome these difficulties.

The good relations of the Local Authorities with the N.M.P.Z are a major factor of the environmental and economic development of the island. The existing conflicts seem to become an obstacle. A constructive dialogue between the interested parties may be the key for the economic growth of Zakynthos, so that the next generations may reap the benefits of an environmental sustainable development.

Appendix 1: Interview questions

Appendix 2: Research Interview questions and answers

Appendix 1: Interview questions

General information about respondent:

- Name
- Sex
- Position
- E- mail

Questions

Q1: Could the NMPZ have an important role to play in the island's development?

Q2: There is a trend in ecotourism mobility worldwide. How could the NMPZ help in attracting these high standard tourists?

Q3: What countervailing measures can be taken against the losses of particular groups of population? How many and which of them are already taken in the NMPZ and what are the results?

Q4: Will these countervailing measures be finally provided to those really in danger?

Q5: Which must be the form of the countervailing measures? Should the State indemnify the residents for their seized properties or should they create new activities to their own profit?

Q6: What should the NMPZ do to have its own resources? Is the State's funding adequate?

Q7: Zakynthos is famous for its cultural heritage. How this heritage could be linked to the NMPZ and what might be the results?

Q8: What are the relations between the local church and the NMPZ and how these could be improved?

Q9: Could the west and north-east coasts of the island, already named "Protected Areas", be integrated to the NMPZ?

Appendix 2: Research Interview questions and answers

Interview with Mrs Karagkouni Amalia, President of the NMPZ Management Board

Name: Amalia Karagkouni- Kirtsou

Sex: Female

Education: PhD Biology of University Warwick of England (1979)

Position: Chairman of the Management Board of the National Marine Park of Zakynthos and Professor of Microbiology in the Department of Biology, National and Kapodistrian University of Athens

E-mail: akar@biol.uoa.gr

Q1. Could the NMPZ have an important role to play in the island's development?

Yes, and it could help in many ways. Mainly, the NMPZ could become the example of managing these areas. When we talk about management, all we try to do is to encourage people to see their lives differently through these areas. Then, we indicate through management measures the way they should behave. This is what we mean by "managerial practices and indicating the way of behavior."

Q2. There is a trend in ecotourism mobility worldwide. How could the NMPZ help in attracting these high standard tourists?

In too many ways. Maybe if we showed them activities, others than drinking, smoking and ravaging our beaches. We can indicate to them sea and land activities. We could create diving parks, which is a very nice activity; we could create paths following the turtle tracks. However, there are many obstacles in making these ideas come true, such as the indifference of this island's residents, who never tried to see and learn something new. We have already created a thematic exposition centre, which is a way of awakening the public. When the tourist comes to Zakynthos, he cannot see the turtle because the nesting beaches are closed at night. However, he can visit the thematic centre and get an idea of the nesting and why we protect it. There is

something else we could do, certainly; that is to indicate to tourist units entrepreneurs to provide high quality facilities and services to their hosts.

Q3. What countervailing measures can be taken against the losses of particular groups of population? How many and which of them are already taken in the NMPZ and what are the results?

First of all, it is not the responsibility of the NMPZ to take these measures. The NMPZ is the executive part of a legal framework. The legal framework is defined by the State, so it is the State's responsibility and the YPEXODE's (Ministry of Environment, Planning and Public Works) responsibility to take measures in order to provide countervailing profits to those in danger. The umbrella salesmen in the nesting beaches have no losses; and these beaches are not their property. However, all properties seized by the State should have already be indemnified.

Q4. Will these countervailing measures be finally provided to those really in danger?

Yes, they will. There is a provision in the Presidential Decree concerning this matter. However, the real challenge is which Government will take now the responsibility to perform this duty and behave with dignity. The countervailing measures are not the NMPZ's responsibility; they are the Government's responsibility. The Government must perform its duty with dignity and provide the appropriate countervailing measures. One might ask, though, "why they don't do it now?". Well, the general problem today is the incapacity of politicians to govern. In my opinion, we should indemnify the locals or we could create activities to their own profit.

Q5. Which must be the form of the countervailing measures? Should the State indemnify the residents for their seized properties or should they create new activities to their own profit?

Both of them. The first option is advantageous but the second one is useful. A diving park, for example, would attract high standard tourists. Divers are high standard tourists. So, they would look for better hotels, better services etc. Divers spend in general more money than the average tourist; they buy, for example, expensive diving suits. This would motivate the residents to work in this field. Another advantage would be the preservation of the fish stocks.

Q6. What should the NMPZ do to have its own resources? Is the State's funding adequate?

Sometimes it is. However, bureaucracy is so complicated that we cannot move on. In addition, EU programs have special admission preconditions and we cannot enter these programs, because our activities are not included in the preconditions. The Management Agency of the NMPZ should have some resources that could be used in new projects in the NMPZ or in special occasions, for example in case of a rainfall that destroys a road and must be fixed. These expenses are not predicted in the program; therefore no resources are available for these or many other similar situations. Another reason is that the Agency is responsible for many other activities that must be also funded.

Q7. Zakynthos is famous for its cultural heritage. How this heritage could be linked to the NMPZ and what might be the results?

The results would be numerous if Zakynthos could really preserve this cultural heritage. I believe that through the Park's activities, the new approach and new management of the environment we actually protect this cultural heritage. If there is a real estate, a monument in the protected area, then, this monument is protected from many threats, like fire etc. A protected environment guarantees, obviously, better safety for the cultural heritage too.

Q8. What are the relations between the local church and the NMPZ and how these could be improved?

I believe that we have the best relations with his Most Reverence, Metropolitan of Zakynthos. He is very helpful. He was the one who helped integrating the Strofadia islands to the NMPZ and I think our relations could not be better. He has also conceded to us the Kallistero Monastery, which we try to renovate under YPEXODE's funding in order to create a cultural centre.

Q9. Could the west and north-east coasts of the island, already named "Protected Areas", be integrated to the NMPZ?

We have already launched the procedures. We do not only care for the NMPZ but for the whole area. We have launched the cooperation with other municipalities too, that is Alykes and Artemisio. I have already visited these Municipalities and we discussed our existing relations. Moreover, a one-day conference was held in Alykes Municipality concerning the oil production

waste management. The NMPZ is not a closed society. It is open to the whole island. And not only to the island. I would dare to say that all nesting beaches of Caretta-Caretta in Peloponnese must be linked to the NMPZ.

Comments

Mrs Karagkouni underlined the fact that the NMPZ could become an important tool for Zakynthos's sustainable development. However, all island's stakeholders, the residents and especially those living in the surrounding areas of the NMPZ must be willing to participate in this effort.

Interview with Mr Pantis Ioannis, former NMPZ's President.

Name: Pantis Ioannis

Sex: Male

Education: Professor, Department of Ecology, School of Biology, Faculty of Science,
Aristotle University of Thessaloniki

Position: Former President of the National Marine Park in Zakynthos

E-mail: pantis@bio.auth.gr

Q₁. Could the NMPZ have an important role to play in the island's development?

I believe that all Protected Areas (PA) that have administration, i.e. a Management Agency (M.A.), need to become an essential tool of alternative development in their surrounding areas. In Greece, there are 27 Protected Areas and Zakynthos is one of them. To succeed in that, they must link the environmental protection with the economic growth based on this environmental particularity, as well as with the social cohesion and well-being of the surrounding area. They need to convert the profit of the private sector economy to a social profit. They need to create an economic activity to the society's profit. Some of them will also be used in its self-preservation. These social benefits could lead to innovations -which is the most important result- either to the agricultural sector through the organic farming, or to the tourism sector through ecotourism, agrotourism etc, or even more to the field of certification. I mean that all Marine Parks and in general all Parks in Greece must be authorized to act as certification organizations for the ecotourism activities as well as for the organic farming under a form of cooperation, for example with ΔΗΩ. Because Management Boards often change. The same happens with the Ministry too. There is no continuation, no National Strategy, nothing. The only thing all Management Agencies could do is to create a coordination tool independent of any Ministry. This coordination tool could promote changes that won't depend on specific persons and will therefore be stable. If the NMPZ was authorized to certify environmental friendly tourism activities, a permanent procedure would then be launched. But this would be better if launched in a national level, forming a central strategy for the Protected Areas which would include all

horizontal-parallel economic strategies that would support the NMPZ and its social role. So, why should the local society be positive to the creation of Marine Park, when no socio-economic gains are included?

Q₂. Do you believe that this happens because of the constant change both of Management Boards and the Ministers?

We never had strategy; nor in the beginning of the Park creation nor today. We do not even understand these Areas' utility. The NMPZ was the first Protected Area established in Greece. It was created only under the pressure of the European Union. It was not our decision. The same happened with other Protected Areas in 2003. We created them because we did not want to return the money received for the Special Environmental Studies. There is no National Strategy. YPEXODE, the Ministry of Agriculture and the Ministry of Merchant Marine interfere in the NMPZ management with no results. All these competencies should be appointed to a Ministry of Environment which could be proved very effective. I mean that there is a lack of capability of people involved and of the environmental services, which lead to no coordination at all.

There are 3 different reasons for the State's weakness : a) the State's structure is not functional b) human resources of the ministries are incapable of responding to the environmental evolution and c) the economic resources are insufficient The money of the Special Fund for Regulatory and Urban-planning Projects Implementation (ETEPIIΣ) was spent under no supervision. There are also 3 reasons why no policies are produced: a) the State's weakness resulting from the 3 aforementioned reasons b) the lack of research needed in the fields of conservation policy and conservation biology in order to support scientifically all measures that should be taken by the competent services. The lack of social search is also very important and Universities are largely responsible for that. The third part of this problem is the absence of locals' participation in these decisions. This system is a top-down procedures system, as it imposes the Law and the Convictions of the European Union (top) to the citizens of the member-states. We need to reinforce the bottom-up procedure, that is to include in the laws the local environmental knowledge and particularity, which are of high importance. In this way, we will make a bottom-up effort to create a National Strategy that will be implemented along with the European Strategy. So, when no bottom-up procedures are followed, when there is a lack of

scientific research and the State itself cannot function for the 3 reasons I mentioned before, there is no future. The only thing we do now is to simply follow the provisions of the EU and try to avoid the European directives and regulations as much as possible. Consequently, our efforts to protect the environment and its particularity do not derive from a National Strategy; we are forced to do it by the EU directives. This approach is really negative.

Q3. There is a trend to ecotourism worldwide. How could the NMPZ help in attracting ecotourists and how should Zakynthos be prepared in hosting this type of tourists?

In areas with low tourism mobility, like Dadia or Alonissos, we have a "virgin" touristic view whose development could be promoted with environmental friendly trends. This is an advantage. In areas of mass tourism, like Zakynthos, Rhodes or Crete, it is rather difficult to promote new activities, as in Dadia; In Dadia, these new activities were very profitable and consequently satisfied the local society. In Zakynthos, we have a touristic model which is actually opposite to the desired one; it has been proved profitable though, but this money derive from the quantitative dimension of tourism. Competition reduces prices and this leads to the degradation of the environment. The price of a room, for example, is very low, and the profit too small; therefore, the room's cost must be reduced by shifting it somewhere else. Unfortunately, it is shifted to the environment. Thus, the existing form of tourism threatens the environment. This is the exact opposite of Italy, where the authorities preserve nature and the architectural characteristics – for example of their cities etc. The tourist then is willing to visit the country and pay twice as much money, or more, to see this particularity. Consequently, unless the Greek tourism –and not only the NMPZ– changes its quantity perspective to quality, we are condemned to fail. Because Turkey always be cheaper and, later on, Egypt as well. There will always be a cheaper country. If the quality perspective is established in tourism, tourism agents will not press for changing anything. In this case, of the quality perspective, in tourism or the agricultural sector, local communities will redefine their development model and will not depend on the tourism industry. In Zakynthos, this perspective does not exist. Everybody here tries to cheat or they are puppets of the tourism industry. They want to destroy their island by helping the tourism industry and make some money for themselves too.

So, what should the Park do now? Firstly, it must help to the self-definition in a local level, it must become a development tool with innovating ideas; it will then become part of the island

and in this way it will help in forming the structures needed in the area. Ultimately, the Park will reinforce the self-forming of attitudes that will lead to a decision-making system based upon quality, not quantity. The park should revive the lack of continuity of local memories that has been lost under this destroying type of tourism development. It should revive past values. Not through a conservative support, but through an angle of values that will incorporate the maintenance of the environmental and cultural heritage at economic and tourism level. Why must the only reason for the tourist to come be the cheap services? This is an entirely wrong way of thinking. That's why the Park must be certified with EMAS. These are the permanent procedures that will change gradually the situation in Greece. We must have a National Strategy for that; actually for the 27 areas, or at least for those still running.

Q4. The NMPZ is one of the few Management Agencies that still exists.

That is because it has three more years of additional experience compared to the others; it runs also under the protection of the European Court of Justice.

Q5. Is it possible that a series of actions, like launching forms of alternative tourism and search programs would reinforce the tourism mobility of the NMPZ?

As soon as we undertook the Management of the Park in 2000, we sent requests to all Universities related to sciences like Biology, Environment, Economics, Law, asking them to send to the Park people with visions. I must also add that at that time the NMPZ was the first Park in Greece managed by a Management Agency. We also hosted the joint MSc Program "Sustainable Management of the Protected Areas". I feel that now it is the right time to say that this Park has been the object of many research programs and I am happy for that, as I contributed a lot. 4 PhDs have been completed over the past three years, 3 PhDs are in progress, 15 Postgraduate Programs have also taken place here in Zakynthos and a large number of Theses are still pending. All these must be stored in the Park's Library. So, there is a primary research, which is unique and was launched under the decision of our 1st Management Board, three months after we undertook the Park's Management. We decided to proceed in these co operations, because we could not move forward without it. We can use this scientific research by proposing management measures with scientific traits. Apart from the Greek scientists that have conducted their research in Zakynthos and those who are still working on it, we paid the accommodation for scientists coming from other areas or countries to do their research here. I believe that at this

moment Zakynthos and the NMPZ have the best scientific database. We had also launched the Life Programs, but they ended in failure, as the State was proved insufficient. I think that a Council that links all 27 Protected Areas must be created; this Council will operate as a coordinator and will reinforce the implementation of an ecotourism policy for all the P.As.

The Council should also promote the cooperation with 2 big tourist agencies that will lead tourists to Vikos forest, then to the Marine Park of Zakynthos and finally to the Delta of Axios-Loudias-Aliakmonas rivers to see the wetland. We should promote tourism offers with a national sense. We know what we have to do, we have the experience to do it, we have the human resources but we miss one thing: the "dream", the political will, which, I am afraid, will always be missing.. Chatzidakis used to say: "I am tired of training Ministers of Culture that are completely unaware of what they are doing". And I am saying that I am tired of training public officers that work in Ministries related to environmental issues and do not have a clue of what they are doing". I have already talked to them about these and they always answer with " Yes, yes and yes". But in the end they do nothing...

Q₆. What kind of countervailing measures should the State take in the future in order to limit the reactions of citizens that have been suffered from their land seizure?

There is a huge legal problem there. The L.1650/86 must be drafted again. This law was first created in 1986, when we did not know what constitutes the environment, what is an environmental particularity and what is a Protected Area. At that time, we only knew the notion of Public Works. So, whatever we do as countervailing measures in the field of Public Works, we should apply the same in the Protected Areas. When to Public Works, we pay the residents to leave, we rent their land or we provide another land as a compensation. When we want to construct a road, for example, we must compensate the residents whose land is located in the under construction area. When to Protected Areas, however, we cannot do the same. But we have no options because every Law has been drafted under the same approach, the Public Works' approach. This is 100% wrong. This is an anti-ecological attitude. The ideal solution is to incorporate these people to the project of the Protected Areas through managerial proposals and interventions that would counterbalance their losses. That means that their problem will be transformed to a profitable solution. Unfortunately, this solution is not included in the Law. We need to change our attitude to an attitude of participation, of co- management, and of co-

creation of policies and things. In our case, so, we should not give people money to leave, but we should find all these activities allowed in the Park's borders that will act as a counterbalance to their losses. A company could be created, for example, together with Dafni's residents, which will place boats in the sea area of the Park and give the opportunity to tourists to see the turtles. This company could have the exclusive rights for the sea area's exploitation and the revenues could reach even a stable monthly income for the locals. These rights could also be inherited to the locals' descendants. This idea could come true, but we need a totally different legal framework. The existing legal framework is prohibitive for these initiatives. We had the will, but not the power. This is YPEXODE's responsibility, despite the fact that we were the Management Agency. The Law must change and on the other hand Management Agencies must be competent to promote this kind of projects under the name for example "Local society Participation" or "Local Entrepreneurship Participation", which will decide on the aforementioned issues.

That's the whole story; but firstly we must change the Law and afterwards the attitude. It's not Public Works, it's not an airport that must be constructed in a residential area that will uproot the residents. The point is how will these residents stay in their land and participate in these managerial initiatives. The idea of uprooting the inhabitants is both wrong and anti-ecological. What for? To make the protected areas a "Nature's Museums"? They are not museums. These areas must be functional; there will certainly be areas where no entry is allowed. but, in general, Protected Areas will be functional and economic activities. This is the right attitude for me. Not the seizure of locals' properties that historically do not belong to the State.

Q7. The State's funding provided to the NMPZ is adequate? If not, what should the NMPZ do to have its own resources?

At my time, this funding was inadequate. Today, I have been informed that the NMPZ's resources are almost 6 million Euros. This amount is too big. We are now on the other side of the coin. I believe that Management Agencies must be neither rich nor poor. Our aim must not be to save up money, neither to have no money at all. Our goal must be an adequate amount of money to finance our activities. Hence, a good planning at a national level where all activities and potentials of the Protected Areas will be predicted as a whole, but as a unit as well, might be very effective. In addition, this national project will include the activities costs and the

appropriate business plan for the areas' incomes from the Special Fund for Regulatory and Urban-planning Projects Implementation (ETEPIIS), from the Operational Program "Environment" (EIIIEP) and the EU, from the Area's resources and from different special programs that must be launched. All I want to say is that the Area's survival depends on what we have planned to do and how we respond to its needs. There is no common approach; the program launched in Zakynthos is different from the one launched in other areas. We must also assess the programs and find the way to support them economically. Unfortunately, there are no such National Strategy Plans. We were the only Management Agency in Greece who had a business plan.

Q8. The Park's resources you mentioned before, where were they deriving from?

From boats, T-shirts etc. Parks with no entry tickets, like the NMPZ, have no income from the visitors' mobility, as all visitors enter anywhere they want. So, what can we do to obtain our own resources? We must create activities, provide services, which will be respectively paid. There are no Parks in Greece with entry or exit tickets, except from the one in Samaria. These parks must function under the following approach: Services must be provided along with the local society and activities must give the opportunity to tourists to participate. Then, the Park can charge tourists for these services with the equivalent fee. We could charge, for example, 1€ for guiding tour, 1€ for chemical toilets use etc. This is the way we could collect our own resources, not with an entry ticket. These were all included in our business plan but nobody cares for their application.

Q9. Zakynthos is famous for its cultural heritage. Is it possible to link this heritage to the NMPZ through some activities and what would the results be?

The results would be simple up to complicated as well. Back then, we had organized a lecture concerning the park. This was for example something simple. My suggestion for the social economy was something more complicated. By the term "social economy" I mean that we could promote cultural activities under the auspices of the NMPZ which would be beneficial for the local society. The island's cultural particularity must be integrated in the Park, e.g. through monuments already located in the Park. The Park's book includes all cultural monuments as well as great poets' references for Zakynthos, such as Edgar Alan Poe's. In general, this means that all these things must be incorporated in the protected object and this object must be linked with

all cultural agencies of Zakynthos, Platiforos or rest, with the best possible way. Linking the Park to the cultural heritage of the island is an easy way to link it to the local society as well.

Q₁₀. What are the relations of the Church with the NMPZ and how they could be improved?

I think that at the time when the Patriarch came in Zakynthos we had reached our best phase in our relations. The Metropolitan of Zakynthos is a very clever man and never misses opportunities. He participates in many things and we helped each other several times as well. In general, we had very good relations with the Church. Back then, we had the idea of making the Kallistero Monastery, which the Church had ceded to us, an offices building; and this was a great idea. The project was approved but the disbursement was pending. The new Management Board changed the funding plan and this money was invested in other activities. In my opinion, that was a terrible mistake. Our idea was realistic and it could change the entire image of the Monastery's land. It could become a unique place. Like the ones abroad.

Q₁₁. Is it necessary to take measures to ensure the Park's adequate funding and to improve its economic status so that it will be sustainable?

Of course it is. Back then, we managed to survive as an Agency for 5 years without being paid at all. Today, the money needed is available. So, if all these plans are included in a national system of ecotourism, organic farming and development measures, the Parks' future will be bright. The number of Protected Areas should be 10, not 27 as it is today. 10 big Parks, with 5 Natura Areas each. I mean that making the gulf of Lagana a Protected Area and leaving the back part of the island not protected is not a successful approach. This part must be protected as Natura Areas. We must follow the Kapodistrias program approach. In my opinion, it would be better, much more reasonable and scientifically correct to create a South Ionian Park, including Zakynthos, Kefalonia areas, where Caretta-Caretta turtles give birth, Ainos and in general 10 Natura areas, which will be governed by the same management system. In this way, we would create 10 National Parks, including their Natura Areas, that already exist in Greece; the choice of these areas would be based on research. According to a research we carried out in the past, there are 50 areas in Greece that contain 99,9% of the Greek biodiversity. These are the areas that must be protected. We need not to protect areas as Natura Areas when they have no particular ecological identity. This is a whole different strategy.

Q12. Are you in favor of reducing the NMPZ area, as they suggest some local officials?

This is past idea and it must not survive. I would say that not only Zakynthos is the Park, but all areas of South Ionian Sea as well. And this must be done to the rest of Greece too; we could create for example 3 wetlands, 2 marine parks and 3 forest parks. These areas would be part of the National Network, which would part of the European Network and would run under specific managerial practices and specific policies.

Comments

The former President of the NMPZ believes in the importance of this Park and in its contribution to the island's sustainable development. According to Mr Pantis, the Marine Park, as well as the Management Agency of the Park, must have the support mainly from the locals and secondly from the State; the locals must understand through environmental education that the Marine Park will help them survive from the mass tourism that has caused -and still causes many problems to the island.

Interview with Mr Barbarigos Dimitrios, Member of the Greek Parliament for Zakynthos Prefecture

Name: Barbarigos Dimitrios
Sex: Male
Education: Biology Degree, University of Patras
Position: Member of Greek Parliament for Zakynthos Prefecture
E-mail: ppab@otenet.gr

Q1. Could the NMPZ have an important role to play in the island's development?

Certainly. Nowadays, in a world with severe environmental threats, the only solution in the fields of development is the so-called "sustainable development", which can be both sustainable and lasting. The choice of institutionalising the Management Agency and the NMPZ relies exactly on this principle: the protection of the environment under a sustainable perspective. In this way, we can preserve the natural resources we inherited in order to give the next generations a chance to live. This Park is therefore a significant choice, a contribution to the quality of the island's development and its maintenance.

Q2. The State's funding to the NMPZ is adequate?

The funding is full of problems. This is rather obvious, occasionally, when the security guards and the Park's Management staff remain unpaid. These problems have not been solved yet. The Presidential Decree predicts the possibility for the Park to have its own resources too through tickets in the turtle observation land. The Park has already an income from beaches exploitation and from boat tours in the Laganas Bay that lead tourists to the turtles.

Q3. Are these boats under the NMPZ's management?

Part of tickets money paid to the boat owners is given to the NMPZ. It does not cover all financial needs though. YPEXODE controls the NMPZ and is also responsible for the funding. The Park is also financed by the Special Fund for Regulatory and Urban-planning Projects Implementation (ETEPIIS) and by some extraordinary funding. Basically, at this moment, the

Park's funding relies on the political will of the Ministry of Environment. The Park's funding is not adequately institutionalised; therefore, the Park lacks of stable resources and eventually of correct planning. If planning is not based in clear and stable resources, it will then be problematic.

Q4. Did you make any efforts to obtain extra resources by integrating the NMPZ to the NSRF (National Strategic Reference Framework)?

We are not fully aware of the NSRF potentials as its content has not been officially published yet. We know that there is an environmental aspect in this Framework and activities as the NMPZ could be included in it. However, the NSRF does not cover functional costs, only future projects.

Q5. There is an ecotourism mobility worldwide. How could the NMPZ help in attracting ecotourists?

We have already done that in Zakynthos. The Caretta-caretta turtle is the best ambassador of our island. It is an advertisement for Zakynthos at an international level. Allow me to say that, today, the Caretta-caretta turtle is the most famous feature of Zakynthos! So, supporting Zakynthos development through tourism, the Park and the turtle's protection begins to show results. And these results could become much more important if we are better organised.

Q6. Did you notice any signs of improvement in the tourism quality after the NMPZ creation?

I cannot say that. The NMPZ visitors are certainly tourists of high quality and we must always attract this kind of tourists. The whole tourism development of the island must be based on this goal, because the existing mass tourism has already shown its negative results to our island: irregular development, rubbish, water problems etc. We must define development with terms of sustainability, as I mentioned before. Unless we target quality tourism, we will never promote sustainable development. Before attracting these high class clients, though, we must change our infrastructures. We need to meet these clients' requirements as they need to meet ours.

Q7. Zakynthos is very famous for its cultural heritage. How this heritage can be linked to the NMPZ and what may be the results?

Our civilization, whether it is the human civilization or the civilization that accompanies the human being along with the environment, constitutes a single unit. The cultural heritage of Zakynthos is mainly intangible as our monuments have been destroyed by the earthquake of 1953. The only thing left is the aura of the Eptanese Civilization, which is also eventually in danger because of the mass tourism; mass tourism has gradually ravaged Zakynthos and destroyed everything.

Q8. Is there any hope for change?

There is always hope as long as competent people appear. We, the local authorities, have huge responsibilities. We are authorized to manage these matters and our success depends greatly on our activities, our goals and our criteria for choosing the correct activities.

Q9. As a Member of Parliament for Zakynthos, how could you support the NMPZ actions?

The NMPZ has many problems with the locals. The Presidential Decree No 906/Δ of 1999 which founded the NMPZ has created many problems that are still unsolved. The protection conditions described in the Decree imposed restrictive measures in the urban planning of the area. There are now 19 zones in the Park where the rules are much stricter than in the rest of Zakynthos. Especially in the zones of high and total protection there is total prohibition of building construction. This caused the legitimate reaction of the locals who saw their property losing its value. Development had affected every area but theirs.

Q10. This development was irregular though.

That did not really matter at that time. Even if it was regular, we would still observe inequities within the same island. The State promised to provide to the locals countervailing measures against their losses through a new Presidential Decree. These countervailing measures are still pending though, and the locals are still hostile. This lack of measures must be covered by the State. I've said that thousand times: the State has huge responsibility: It was in 1984, when the restrictive measures were initially imposed in the area, but only in 1992 was the residency control zone created and only in 1999 was the Presidential Decree signed. In fact, the locals are seeing their properties seized for a long time without receiving any indemnifications.

Nobody denies the necessity of protection and of taking measures; on the other hand the State's Constitution is responsible for protecting citizen properties too. This case is pending; I've tried too many times and, still, Governments do not take measures to indemnify these people, because the cost is too big.

Q₁₁. The Joint Postgraduate Program of Protected Areas Management was not finally launched in Zakynthos. Why did that happen?

I was personally engaged in this Program when it was first decided. Unfortunately, when people in charge came to the island, the infrastructures here in Zakynthos were not adequate. There were many problems. The Local Authorities were asked to support this initiative. But their support was not enough. The Local Church and His Reverence, Metropolitan of Zakynthos, as well as Laganas Municipality were the ones who offered significant help. But this help was lost as the Local Authorities did not support it properly. Consequently, those in charge of the Joint Program left the island as they had better offers from areas with better infrastructures and support. This means that we, the local society, are responsible for this failure, as we did not fully support it. It was an initiative that could be included in the island's development.

Comments

According to Mr Barbarigos, Member of Parliament for Zakynthos, as well as to all people interviewed, Zakynthos development can be boosted by the NMPZ and its ecotourists. The funding is of great importance for the Park and it must be regulated in a way that will not cause additional problems to the Agency.

Interview with Mr Dionysios Gasparos, Prefect of Zakynthos Prefecture

Name: Gasparos Dionysios
Sex: Male
Education: Urological Surgeon
Position: Prefect of Zakynthos
E-mail: nomarxis@naz.gr

Q1. Could the NMPZ have an important role to play in the island's development?

The NMPZ's contribution to quality tourism could be of high importance, especially in a time where tourists search for alternative forms of tourism. But our case here in Zakynthos is rather different; the locals and the local agencies disagree with the Presidential Decree, as it remains an obstacle to the island's development. They ask for its modification, because, according to this Decree, 1/4 of the Prefecture area is appointed to the NMPZ; this is not realistic. We all look in the same direction; even the Park's Management Agency agrees with us. Therefore, we will see some changes in the future.

Q2. That means that you are in favour of some reduction of the Park's area?

Definitely. The area of the Park must be reduced. In this way, we will avoid inequities during Zakynthos Development, we will respect the environment and in general the tourists in Zakynthos.

Q3. Is the State's funding adequate?

The State's funding is not adequate; however the Park's President today and the Management Board make their own efforts to this direction. We hope that the 4th CSF (Community Support Framework) will provide more resources to the NMPZ, so that the Park will be viable and have the possibility to extend its activities.

Q4. Did you make any efforts to gain extra resources from the NSRF?

Yes. The NSRF is highly committed to the environment.

Q5. There is an ecotourism mobility worldwide. Could the NMPZ help in attracting ecotourists in Zakynthos?

Certainly. Unless we respect the environment we will end up destroying our own land. The NMPZ could have -and already has- a major role in this field. The Park is still "young", some cases are still pending and the locals react..However I believe that in time all these problems will be solved.

Q6. Did you notice any signs of improvement in the tourism quality after the NMPZ creation?

No, we did not see the improvement we wanted to see. However, the Park is famous in Europe and it participates in tourism expositions. Europeans have already shown their interest in the Park and I believe that we will soon have tangible results.

Q7. Zakynthos is famous for its cultural heritage. Is it possible to link this heritage to the NMPZ through some activities and what would the results be?

I think that the Local Authorities must aim in protecting both the environment and the island's culture. In this way, Zakynthos will survive in our globalized world and in the competitive market of tourism. I think that environment and culture have common future, as well as culture and tourism. Finally, when we talk about the NMPZ, which is related to the environment, we all know that tourism is included, because the Park is a tourism product itself.

Q8. As the Prefect of Zakynthos, how could you support the NMPZ actions?

We always helped the NMPZ, when asked. We need each other: we need the NMPZ in many projects within the Park and the Park needs the Local Authorities too. We have a very successful cooperation.

Comments

The point of view expressed by the Prefect in this interview is rather different from the previous ones. According to Mr Gasparos, the area of the NMPZ is much bigger than needed; he also said that the Prefecture of Zakynthos has asked the modification of the Presidential Decree and the reduction of the Park's boundaries. He agrees though that the NMPZ could become a centre for higher quality tourism.

Interview with Mr Dionysios Komiotis, Mayor of Laganas.

Name: Komiotis Dionysios

Sex: Male

Education: Dental Technician

Position: Mayor of Laganas

E-mail: dlagana@otenet.gr

Q1. Is the role of the NMPZ important to the island's development?

Certainly. The NMPZ's role in the island's development is important and it could be more important under the right conditions. What should I say? First of all, people must know that the residents of Zakynthos have lived together with the Caretta-caretta turtle since ages! They have already protected -and still protect- this species. That's why it is not extinct yet, despite the irregular tourism development, especially in Laganas Bay. The NMPZ runs according to the provisions of a Presidential Decree, or actually of an Environmental Study which led to the Presidential Decree. This Decree, though, has created a lot of problems; in my opinion, it does not fully protect the Caretta-caretta turtle nor creates the proper conditions to the island's development. It needs to be modified. I'll give you an example: in the current NMPZ, formed according to the aforementioned Presidential Decree of 1999, there are regional zones that seem to violate Greece's Constitution. Secondly, these zones are not predicted in any EU's directive. In fact, there is no marine park worldwide that has such zones. This Park was created through direct assignment by the Government, and especially by some officials of YPEXODE. The public auction that was held previously was annulled so as the environmental study of 1993, which was about to become a Presidential Decree. You can see that the past is complicated, with anti constitutional actions that have already caused great tensions in the local society. In my opinion, as Mayor of Laganas, and with 16 years of experience in the Local Authorities, this effort will fail, unless it has the social consensus. Unfortunately, today, the whole NMPZ initiative has not the locals' support. All these aforementioned actions have made the NMPZ a residential issue, or a land planning issue. The aim of protecting the sea turtle has been actually lost... The land use planning must be regulated by another Presidential Decree, which will include the whole island.

In my opinion, and according to some scientists I met in the past -because you must know that 5 years ago we invited here the Greek members of the European Parliament, like Mrs Kratsa and Mr Marinos-, this initiative here in Zakynthos has lost its initial goal, which was the protection of the sea turtle. I strongly believe that the NMPZ must continue its activities, but it is necessary to launch a new environmental study, as proved by the unanimous decision of the Local Union of Municipalities and Communities (TEΔK). This study will serve as basis for a new Presidential Decree leading to a new Marine Park, a new Management Agency who will be authorised to protect the species in its habitats and reproduction areas.

Q2. You mean a totally new Park or the renovation of the existing one, as in the past?

*I am afraid that if we proceed with the renovation, it will only be partial. I believe that we need a whole new environmental study. It's been five years now and it's high time we made a new one that will lead to a new Presidential Decree. That's why we asked the Management Agency to forward the new proposal of TEΔK to the Ministry. After our unanimous vote, in presence of Mrs Karagkouni, President of the NMPZ Management Board, the Management Board of the Management Agency voted in simple majority the proposal of the new Environmental Study too. As you can see, we really care for the Marine Park, for the turtle's protection. We are deeply interested in the turtle's protection and we also believe that through a correct Presidential Decree and a competent Management Agency which will protect *Caretta-caretta* properly, our island's development will be boosted again. *Caretta-caretta* could become our messenger across Europe, it will serve as an advertisement for Zakynthos. As the Mayor of this area allows me to say that we were the first local Council that used the turtle in the flag of Laganas Municipality ship. Our symbols are the ship (the trireme) and the *Caretta-caretta* turtle. You can see that we are greatly attached to presence of the turtle, as a species to be protected, but as a symbol for Laganas and the whole Zakynthos as well. To conclude, I believe that under the aforementioned circumstances the protection of the turtle will become a development tool for the island. I should also mention at this point the following: Local Authorities share a small participation in the Park's Management. I believe that part of money deriving from the Marine Park must be invested to the island's development. It is not right for the residents to see their properties seized while the Europeans are indifferent to providing any indemnifications, any motivation and any countervailing measures against their losses. When the State seizes a citizen's property that is constitutionally protected by the Greek Constitution, it must take some measures to its own profit*

and not show indifference for about 20 years, as it happened in our case. That's the first Law violation and the first inequity in the area. All these show that we need the creation of a correct Marine Park that will protect the turtle properly and enhance the island's development. We cannot speak of sustainable development while Kalamaki, Laganas, Mouzaki, Pantokratoras and Lithakia lack of sewage system.

Q3. There is an ecotourism mobility worldwide. How could the NMPZ help in attracting these ecotourists?

In Zakynthos we have the greatest Cretta-caretta habitat. It is a tool not properly used yet. So, yes, I think that the NMPZ could attract tourists with environmental concerns. We have not achieved our purpose yet though. We, the Laganas Municipality, have asked and still ask the cooperation of the NMPZ. We have also participated without the NMPZ in more than 25 expositions around the world and we always used our flag with Caretta-caretta. I would also like to mention that we have launched the procedure so that Laganas Municipality is qualified as an Eco-Municipality. In addition, we have planned to take some initiatives in the future, which I don't want to share with you right now. We will present our plans concerning the turtle and the new study to the EU and the Greek Government, and, then, we hope to be qualified as Eco-Municipality.

Q4. Did you notice any signs of improvement in the tourism quality after the NMPZ creation?

I must say -and please forgive my bitterness- that we haven't noticed any sign of improvement at all! On the contrary, Laganas lost its quality tourism and we make an effort at an EU level to regain this tourism, which has now been replaced by tourists that only seek fun beyond limits. I mean that we haven't notice any differentiation in tourism at all. This is rather obvious in Laganas, in the quality and life of tourists. Most of them are unfortunately young. I am not saying that we don't want the youth, but most of them come to Zakynthos to have fun in a particular way, they don't care about Caretta-caretta. If we want to draw the attention of Europeans or other populations, that are environmentally sensitive, we must work hard in an organised and systematic way. We must also spend money. I am saying that because it's the truth: If you don't spend money you can't make money. We live in an open market world. Whether we like it or not, that's the truth. So, unless we invest money abroad to advertise our

island, we won't have a chance. On the other hand, we must also make some investments here in Zakynthos to change our infrastructures, as competition is hard in Europe and the rest of the world. To conclude, unless we launch a more aggressive policy abroad in order to be heard and promoted and unless we renovate our infrastructures, we will succeed in nothing. No Marine Park and no Management Agency will ever attract tourists on their own.

Q5. Local Authorities cooperate with the NMPZ. What can you do to help the NMPZ?

Honestly, I believe that our cooperation with the Park is not quite good. As I said before, we have not managed to create a Park that is not hostile to the local society. We have not managed to have faith to each other. We cooperate, we are moving to the right direction, but we have not reached the end, which is the equal participation of the Local Authorities and the Marine Park in the broader area management. On the contrary, the Park has often made moves that offended the Local Authorities. We have still many common problems to solve: the water, the sewage system, the urban planning...However, the Park remains indifferent. I am not referring to a specific person. In general, I believe that the Park, as a local institution, must be authorised to participate in these matters. We must, therefore, have faith to each other; we must build the foundation for the consensus. We need those moves that will build the foundation for the study to change, for the Decree to change.. In this way we will have a better cooperation with the park that will bring better results. Personally, I have made the first move, I have already asked the Park's cooperation and I hope for the best; because, allow me to say, this animal, this turtle that comes and gives birth here in Zakynthos and especially in Laganas Bay is a gift of God. We must protect it, we must take advantage of it, in a legitimate way; only then, will quality tourists come to the island. And Zakynthos deserves that; it has amazing beauties, it can attract an ecotourist.

Comments

In this interview, with the Mayor of Laganas, we discussed about everything related to the National Marine Park of Zakynthos. Mr Komiotis underlined the fact that it is extremely necessary to change the 1999 Presidential Decree, and the initial environmental study, so that the Park makes some progress. According to Laganas Mayor, the existing Presidential Decree has caused the legitimate reaction of the locals and, as a result, the Park does not function in an effective way.

Interview with Mr Palladinos Dionysios, Vice -Prefect of Zakynthos and member of the Management Board of the NMPZ Management Agency.

Name: Palladinos Dionysios

Sex: Male

Position: Vice -Prefect of Zakynthos and member of the Management Board of the NMPZ Management Agency

Q1. Could the NMPZ have an important role to play in the island's development?

Of course it could; the NMPZ has the possibility of controlling and taking advantage of the Caretta-caretta turtle in a legitimate way in the wider area of the Marine Park, to the south of Zakynthos. This is really important to the touristic promotion of the island. A great number of tourists that come to Zakynthos, whether they are Greeks or not, want to keep a close watch on Caretta-caretta. Caretta-caretta has become popular worldwide, in Europe and in Greece; it has also become a symbol for Zakynthos. That is why we think that the role of the National Marine Park is very important, as it protects this species.

Q2. There is an ecotourism mobility worldwide. Could the NMPZ help in attracting this kind of tourists?

I believe that the National Marine Park of Zakynthos could attract these tourists because Zakynthos is famous at a european level. After the EU's decision and especially the European Commission's decision, the Management Agency controls the south part of Zakynthos and therefore protects the turtle. I strongly believe that there are many tourists with environmental concerns that come to Zakynthos only for Caretta-caretta. This is obvious in the nesting beaches where entrance is allowed to tourists; these beaches attract a large number of visitors.

Q3. The State's funding provided to the NMPZ is adequate?

The funding provided to the National Marine Park does not only derive from the Greek State but from European programs as well (the Operational Program "Environment" etc...), which are the main resources of the Park. However, I want to believe that, in time, the NMPZ will be self-sufficient. This depends on the European Commission too. The Park must eventually

have its own resources in order to cover its financial needs. It needs to be self-financed. Mostly because we all know that, someday, the funding provided by the EU, our most important resource, will come to an end.

Q4. Is there any hope for the NMPZ to find its own resources so as to be self-financed?

Yes, it is. However, this matter has many aspects; not only economic ones, but political and social as well, because these resources must be based on income; and this income must be based on tourists that visit the whole area. We have already made an effort as a Management Board: we gain money from the umbrella salesmen that work in beaches of Gerakas, Kalamaki and Daphne. We also gain money from a really cheap ticket; this ticket though must eventually have the price it deserves to have.

Q5. Did you notice any signs of improvement in tourism quality after the NMPZ creation?

I must say that the whole situation in the area has improved. We have also made some progress concerning the residents and the social problems resulting from the existing Presidential Decree. I think that there is an improvement in the whole situation of the area. Concerning the tourism quality, I believe that through the Park's activities, like diving, we could succeed in upgrading the existing low tourism standards.

Q6. Is there any cooperation between the Local Authorities and the NMPZ and in what field?

First of all, the local authorities, Municipalities or Prefectures, participate in the NMPZ Management Board. The Prefecture's Council as well as the Councils of Laganas Municipality and Zakynthos Municipality have appointed their representatives to our Board. This is the first cooperation of the Local Authorities with the National Marine Park. When problems occur, though, we, the elected members of the Board or the Management Board as a whole, along with the President and the Prefect, cooperate with each other to find the solution. We are all parts of an Agency that has been created and improved over the last few years. This improvement is also a result of hard work of the Management Board and especially of its President; then of the Park's staff and finally of the successful cooperation between the Management Agency and the Local Authorities.

Comments

In our discussion, Mr Paladinos, member of the NMPZ Management Board and Vice-Prefect of Zakynthos, said that the island of Zakynthos could become famous worldwide and therefore a development tool due to the Caretta-caretta turtle. He also said quite clearly that someday the Park must find the way to obtain its own resources, because the EU funding will eventually expire.

Interview with Mr Xenos Spiros, former member of Zakynthos Municipality Council.

Name: Xenos Spiros

Sex: Male

Position: Former member of Zakynthos Municipality Council

Q1. Could the NMPZ have an important role to play in the island's development?

In my opinion, the NMPZ could promote the whole development and economy of the island which is based on tourism, whether we like it or not.

Q2. There is an ecotourism mobility worldwide. How could the NMPZ help in attracting these ecotourists?

The amazing beauty of Zakynthos and the existence of an organized Agency as the NMPZ can certainly help in attracting this kind of tourism that seems to blossom rapidly in all over the world.

Q3. The State's funding provided to the NMPZ is adequate?

It is generally known that the development, preservation and promotion of wetlands and protected areas require a generous amount of money. The State has been indifferent till now and we are therefore given only the necessary financing that cannot cover the Park's real needs.

Q4. Did you notice any signs of improvement in the tourism quality after the NMPZ creation?

I'd rather say no...But this has nothing to do with the NMPZ. Over the last few years, Zakynthos Prefecture has promoted tourism in one single way, destroying quality in favour of quantity: Thousands examples of poor accommodation, mass tourism arriving with cheap tour packages, slums and a profit driven attitude of the locals have led us and our environment to the self-destruction. The people of Zakynthos, loyal to the principles of "le nouveau riche", behave as if they were the last inhabitants of this place. In this way, the Park confines itself to stopping

the obsession of the indigenous population for trespassing the Park's land and fails in upgrading our touristic product.

Q5. Zakynthos is famous for its cultural heritage. How this heritage can be linked to the NMPZ and what might be the results?

First of all, respecting the environment is a sign of civilization itself. Even the desire to preserve and link the natural environment with the history and civilization of Zakynthos could become a basis for dialogue that will promote the sustainable development and the quality of the touristic product offered. The NMPZ's duty is to make known this quality, through a calendar of events that will inform and entertain tourists and locals by showing them the real power of this island.

Q6. Is there any cooperation between the Local Authorities and the NMPZ and in what field?

Actually, there isn't. That's because their parallel existence is rather competitive. The Municipalities of Laganas and Zakynthos, that both participate in the Management Board of the Agency cover the needs of their voters more than the needs of the Park itself. In addition, the money provided by the Ministries to the NMPZ have been occasionally snatched by the Municipalities.

Q7. How could you support the NMPZ actions?

In many and different ways. First of all, we must immediately seize the properties of Vassilikos and Daphne's residents and close this case forever. Secondly, the NMPZ must cooperate with the schools here in Zakynthos and, thirdly, I am willing to participate in and support a first group of volunteers here in Zakynthos that will know, want and love their job in the NMPZ. Fourthly, there is an immediate need for infrastructures in the whole area of the NMPZ, concerning the cleaning services, the water provision, the security and the accessibility of the Park. Fifthly, we must give a definitive answer to the illegal constructions inside the Marine Park.

Q8. Why did not the Joint Postgraduate Program of Protected Areas Management stay in Zakynthos?

Except from the Metropolis of Zakynthos (i.e. the local church), no other Local Agency cared to support it; this shows the poverty and illness of our local society.

Comments

In our discussion, Mr Xenos explained to us that the NMPZ could enhance the development of the island only if the locals decide to help. The attitude of the locals, as well as the tourist model promoted by the local tourism industry must change. Only then will Zakynthos see quality results.

Interview with his Most Reverence, Metropolitan of Zakynthos

Name: His Most Reverence, Mr Chrysostomos

Sex: Male

Position: Metropolitan of Zakynthos

Q1. Could the NMPZ have an important role to play in the island's development?

I think that the general environmental concern is a sign of progress everywhere. For us, the people here in Zakynthos, hosting the National Marine Park is a great honor and at the same time a great responsibility. In addition, it is beyond doubt that this Park draws the attention of the European people that are more interested in these environmental issues. However, we need to find a solution that will satisfy both sides. The people here in Zakynthos have not realised the necessity of some measures yet. We do not need conflicts, we need consensus.

You are referring to the land owners...

To the land owners and in general to those directly affected by the Park. They need to realize that, eventually, they will have more to win than to lose by this environmental aspect.

Q2. Do you believe that all measures taken for these people so far are enough?

No, I don't. I think that more things need to be done. The State, whose mission is to prevent the environmental disasters, must also keep in mind that the man is above all; consequently, it cannot take measures against men. Maybe it could take measures against men as a group; this group then would take more measures in order to cover the losses, by providing for example indemnifications to those affected.

Q3. What is the relation of the Church with the NMPZ and how could this be improved?

Since the beginning of this initiative, I played the role of the negotiator, as a Head of the Local Church and as a Zakynthian too. I always tried to respect the principles I mentioned before. I think that the environmental awareness is necessary, but not more important than the preservation of people's interests. We must respect the principle of taking a measure as long as it does not harm the rest of the people. If you harm somebody, he will then automatically become

your enemy. We had a close cooperation with the Marine Park and the former Management Board. We still cooperate closely with the present Management Board, and its President, the Ministry etc. I was always in the middle of some disagreements, trying to make a compromise.

Q4. Could the Ecumenical Patriarch help Zakynthos through some initiatives? Could the NMPZ, for example, be linked to the Theological School of Chalki?

I know the Ecumenical Patriarch many years now and I admire him for these initiatives and for several other things too. I would also like to say that father Panayiotis Kapodistrias and me have often referred to the Patriarch's initiatives in our speeches. We believe that our Patriarch understands the importance of the preservation of the universe; in this way, the universe will remain the same as in the day that it was first built by God.

Q5. Zakynthos is famous for its cultural heritage. How could this heritage be linked to the NMPZ and what might be the results?

This fame was thought to be enough for some people here in Zakynthos. However, the man must never take something for granted especially in our days; the man must care for the future. Everything related to the evolution of our land, our people or our civilization must be embraced and special cared. In this way it could be integrated in our cultural beauty.

Comments

During this discussion, his Most Reverence Metropolitan of Zakynthos Mr Chrysostomos, said that it is a great honor and responsibility for the people of Zakynthos to host the first Marine Park in Greece. He also mentioned that "the man must be above all". This means that all measures must be taken in order to promote the Park, but these measures must not harm the residents of the areas that host it.

Interview with Mr Spiros Plessas, Head of the Environment Department of Zakynthos Prefecture.

Name: Plessas Spiros

Sex: Male

Position: Head of the Environmental Department of Zakynthos Prefecture.

E-mail: nomarxis@naz.gr

Q1. Could the NMPZ have an important role to play in the island's development?

Definitely. It could promote a different kind of development for Zakynthos. We must admit that the development seen here over the last few years was rapid. However, it was not well prepared, no programmed at all. On the other hand, the development through the NMPZ seems to be sustainable. In my opinion, the NMPZ could support a different kind of development, which will respect more the environment and will be more profitable eventually. Under these conditions, the presence of an Agency which will protect Nature is extremely important, no matter what this Agency has (or has not) achieved so far. I believe that this Agency could be - and it need to be- very successful. It's not my responsibility though to assess the Agency's past or future actions.

Q2. There is an ecotourism mobility worldwide. Could the NMPZ help in attracting these ecotourists?

Of course it could. There is a huge distance between a tourism with no respect to the environment and the ecotourism. There are a lot of intermediary forms of tourism there. I mean that our goal must be in general a tourism with respect to the environment. And it's not just that. I don't want to talk only about the tourism sector. There are many other economic sectors in Zakynthos with equal importance. Agriculture, for example, is an important sector that must be boosted. An integrated or organic agriculture can be combined with a new form of tourism that will be very different to today's tourism. This new form will respect the environment; it will be a step towards ecotourism. The meaning of the word "ecotourism" is not quite clear though. I

believe that the Management Agency has the possibility to build the foundation and create a new Development Strategy Plan that will respect the environment and be profitable in time.

Q3. Did you notice any signs of improvement in tourism quality after the NMPZ creation?

I feel that we have not seen any significant results yet, maybe because there are still many problems pending. In addition, the NMPZ promotes the development only to the south of Zakynthos. The rest of the island lacks in many things. There is no urban planning, no land exploitation, nothing. A unilateral form of development cannot survive in an island where everything is interconnected. The NMPZ cannot survive on its own. It is extremely important to make plans for the rest of the island too. Otherwise, it will be very difficult for the park to function properly and, therefore, to affect in a positive way the rest of Zakynthos. There has been some progress certainly; this progress though is not enough, nor convenient.

Q4. Is there any cooperation between the Environment Department of Zakynthos Prefecture and the NMPZ? Did you take common actions?

I would not say that we took common actions. Each part has its own responsibility. The Prefecture's Environment Department is in charge of environmental issues at a prefectural level. They assess Environmental Impact Studies of many Projects and Activities as well as their Environmental Permits. This is very important. The Department is also in charge of Environment Legislation issues. We definitely need a good cooperation with the NMPZ. I must say that the existing relations are not the best possible. I believe though that the NMPZ as well as the environment services must cooperate the best possible way, despite the fact that they do not have the same responsibilities. Unfortunately, as I said before, this cooperation is not the best it could be. I could give you an example by saying that public services must accept the presence of the Management Agency, which is responsible for the protection of a specific area. On the other hand, the Management Agency must respect these services and try not to interfere in their businesses. A Management Agency cannot replace the police nor the services that impose fines. There have been cases where security guards of the Management Agency prohibited some public servants from making the regular controls. Later on, we discovered unpleasant situations. It was too late then. Unfortunately, this is true. However, I believe that things will get better in the future and we will cooperate well. Only then will joint programs be launched. We do not have the possibility though to launch a program but we can assist in its elaboration or monitoring.

Comments

In this interview with Mr Plessas, head of the Environment Department of Zakynthos Prefecture, as well as in all interviews, it became quite clear that the NMPZ can promote the development of Zakynthos. According to Mr Plessas, the Management Agency of the Park must cooperate in harmony with the rest of the local agencies. Unfortunately, according again to Mr Plessas, this kind of cooperation does not exist.

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Interviews:

Mrs Karagkouni Amalia, President of the NMPZ Management Board

Mr Pantis Ioannis, former NMPZ's President.

Mr Barbarigos Dimitrios, Member of the Greek Parliament for Zakynthos Prefecture

Mr Dionysios Gasparos, Prefect of Zakynthos Prefecture

Mr Dionysios Komiotis, Mayor of Laganas.

Mr Palladinos Dionysios, Vice-Prefect of Zakynthos Prefecture and member of the Management Board of the NMPZ Management Agency.

Mr Xenos Spiros, former member of Zakynthos Municipality Council.

His Most Reverence Metropolitan of Zakynthos Mr Chrysostomos

Mr Spiros Plessas, Head of the Environment Department of Zakynthos Prefecture.