

**EXTENDED ABSTRACT OF THE SOCIOECONOMIC STUDY OF
MEDPONDS PROJECT**

Interest Groups and Particular Socioeconomic conditions of the study areas

Drapano (Northeast coasts) – Coast – Georgiupoli – Lake Kourna (Code: GR430010)

Lake Kourna is located in a highly significant area in terms of tourism (Municipality of Georgiupoli) with large numbers of visitors especially during the summer, and significant number of tourist lodgings reaching 12% of the total number of buildings in this area. Moreover, the relative majority of the economically active population is engaged in the Tertiary sector (45%) while the Primary sector follows with 35% of the population.

Around Lake Kourna and close to the wetland of interest one may find a significant number of taverns / coffee shops operating at least nine months of the year and servicing a significant number of visitors. Also, in this area unlike the other study areas there has been noticed a high number of ecotourists, who come in Lake Kourna to observe the trans migratory birds. Agricultural and grazing activities near the wetland area do not seem to affect it

The pond in the area of Lake Kourna is located close to the lake's shoreline and therefore belongs to the shore zone which constitutes state's land. Private land about 50 m from the wetland does not seem to have an impact to it.

Therefore, the main group of interest for the project's objectives is the owners of the taverns / coffee shops located around the lake's shore, who maintain a cautious attitude towards environmental protection efforts, since they believe that it is possible that constraints in their operation to be enforced as a result of such measures. On the other side, the aesthetic restoration of the environment along with the development of ecotourism, which are interlinked in this particular Life project constitute positive steps for their enterprising activities and therefore with the appropriate rapprochement the programme could profit from their collaboration.

Hemeri and Agria Gramvousa – Tigani & Falasarna – Pontikonissi, Livadi Bay, Viglia (Code: GR 4340001)

At Falassarna the majority of the population is engaged with agriculture (approximately 41% of the economically active population) while a significant part is engaged in the Tertiary sector (37%). The Falassarna beach, located about 1 km north of the wetland, is one of the much-frequented destinations of W. Crete, as it is considered one of the best beaches in Crete. Nevertheless, in the coastal zone there is a limited number of touristic lodgings while the greater area is dominated by glasshouses (over 200) and cultivations (mainly olive groves). Pressures on the wetland involve the agrochemical pollution and the unrestrained disposal of man-made materials, which mainly come from the glasshouses. The owners of the glasshouses are particularly against the idea of environmental protection taking into consideration their polluting activities, while they are very suspicious in potential change of land uses, as they maintain that their interests will be offended. To date, the

municipal authorities were in favour of this notion maintained by Falassarna farmers, while they were interested in the development of tourism without at the same time affecting the vested interests of farmers. Moreover, the agricultural association of Platanos maintains that there will have to implement both environmental protection and restoration efforts and environmentally friendly agricultural practices, in order to combine development and and environmental conservation. There has been noticed a slow and gradual turn of some farmers towards tourist activities taking into account the relative decrease of their profits from cultivations, but also the obvious demand for tourism infrastructure and services. Thereby, initially hostile attitudes from local farmers towards the project could potentially turn into cooperation, provided there are possibilities of ecotourism development and socioeconomic benefits stemming from the project.

The pond at Falassarna is separated by the road along the beach and the part located near the sea belongs to the State, while the part at the other side of the road belongs (at least the greater part) to the primary school of Platanos.

Elafonissos Island and coastal zone (Code: GR 43400002)

At Elafonissi, as it appeared from the socioeconomic analysis, there has been observed a large number of farmers (69% of the economically active population), engaged with glasshouse cultivations, while another significant activity is sheep/goats grazing. The number of hotels in this area is the lowest compared to the other study areas (0.3% of the total number of buildings), although this area constitutes a very popular touristic destination during the summer (one-day visits).

The Municipality of Inachorio is particularly aware of environmental issues and has actively taken part in numerous wetland and species conservation programs, while is also taking actions independently in environmental restoration activities (e.g. cedar forest at Elafonissi beach). Thereby, in this particular project the municipality shows intention of cooperation and active support and as a result is expected to be an important ally for the Life project Partners.

The most significant interest group for the project is the owners of the glasshouses and generally the land owners who are potential entrepreneurs of the tourism sector, provided the present dynamics (increased demand for tourist services) and the low degree of touristic development to date, will soon result in the change of the area's economic activities and therefore to significant touristic investments. The attitude of the glasshouse owners towards the project is cautious since their view of it is one of a potential threat to their activities, which locally have a significant environmental impact. Moreover, the land owners demonstrate a suspiciousness for the project's objectives as well as the value of ponds, due to their limited duration of flooding and also because they intend on avoiding the establishment of a status quo for total protection which would potentially block their business plans.

However, the project's significant relationship with the ecotouristic development and the excellent collaboration with the Municipality of Inachorio creates favourable conditions for the increase of the local community awareness.

The areas of the ponds are mostly private or claimed while the ownership status is unclear (there are no contracts) in many cases. However, a large proportion (of about 30%) belongs to members or relatives of the Council of Inachorio Municipality, who are positive towards the project and accept to offer some of their land for the project's objectives.

Islands of Gavdos and Gavdopoula (Code: GR 4340013)

Gavdos Island is a relatively remote area south of Crete with significant infrastructure problems which concern mainly its power and water supply. Its population is particularly small (about 65-80 permanent inhabitants), while the economical activities are limited mainly in the Primary and Tertiary sector, since 56% of the economically active population is engaged with agricultural activities and 26% with touristic enterprises. The main agricultural activity is grazing while recently the touristic development becomes more and more significant with a continuous ascending trend. This is also concluded from the proportion of touristic lodgings, which reaches 4% of the total number of buildings (the 2nd largest proportion among the study areas). Moreover, during the summer the number of tourists increases dramatically resulting in serious supplies', as well as power, water and wastewater management problems. The main group of interest for the project's objectives is the stock-farmers followed by the touristic enterprises owners. The initial view for the project is positive taking into account the high demand for economic and touristic development of the island, although there is a small reservation for potential establishment of protection zones, which may possibly offend ownership rights. The Gavdos Community maintains a positive view for the project and fully collaborates with the project's team, while it is expected to actively contribute to the project's activities. A positive element for the project is that due to the high demand for touristic services from the observed increasing trend of visitors, the stock-farmers are gradually changing their activities and fall into the Tertiary sector and therefore hold a more positive attitude towards the project and the benefits that stem from it.

In Gavdos the ownership regime is also obscure and many areas fall into the use-occupation regime, due to lack of contracts. The locations of the ponds do not receive significant pressures from private interests, especially those situated away from built-up areas and beaches (accounting for approximately 80% of the total number of ponds in the island). The low density of built-up areas combined with the native population of no more than 80 inhabitants also contributes to the latter statement.

Lefka Ori – Omalos (Code: 4340008)

The area of Omalos is particularly mountainous and with limited touristic infrastructure, since 69% of the economically active population is engaged with the primary sector, and in particular with stock-breeding. In the study area there are about 10,000 sheep/goats, which rest here for about 9 months a year. The area's buildings mainly concern a few residences and taverns / coffee shops, since the plateau's local population is not more than 400 inhabitants, who move (due to the weather conditions) into nearby villages during the months December – March. The local Municipality of Eastern Selino has a positive attitude towards the project, with the

largest proportion of stock-farmers being supporters taking into account that the project will result in the solution of the stock-watering problem during the summer months. Only a few stock-farmers are cautious believing that the access of the sheep/goats to the pond may be constrained, and therefore the problem of stock-watering will be further worsened. The limited extent of cultivations in the greater pond area does not impose a threat to the project, as the owners do not have a direct affinity or interest for the pond, taking into account the fact that they do not utilise the pond's water for irrigation purposes.

The pond area at Omalos belongs to the Municipality, but it is utilised by the stock-farmers as a water reservoir for stock-watering. Also, around the pond there are small cultivation parcels, which do not seem to affect its operation, while the largest part of land in the greater area is composed of grasslands with natural vegetation, receiving, however, pressure from over-grazing.

Additionally, it has to be noted that among all study areas with the exceptions of Kourna and Omalos there is anxiety among the land owners in relation to the occurrence of ponds in the areas close to or within their properties, as in many cases the ownership status quo is unclear since a great extent of land is claimed due to lack of titles. This obscurity creates a feeling of threat to the owners / claimants for the future of land which possess / claim. This problem is amplified by the lack of cadastre and by the lack of operation of a certain regime for zones of protection, which would resolve many issues and would significantly facilitate the application of environmental conservation and restoration actions.

Conclusions – Recommendations

As this was made apparent the wetlands of the Mediterranean Temporary Ponds constitutes a comparative advantage of the study areas and their conservation may be directly and effectively combined with the existing economical activities (agriculture / stock-breeding, tourism, services) as well as to promote the future development of the areas under consideration. Specifically, the following are highlighted for each sector of activity:

- AGRICULTURE

The present requirements and approaches for the agricultural activities necessitate the alteration of mentality and practices in production by utilising environmental friendly cultivation methods and rational management of the physical resources. In addition, the existing status quo for subsidization and financing of the farmers will change in form and procedure in the context of the recently agreed Common Agricultural Policy (CAP) of the EU and will impose a combination of increasing the products' quality level and of reducing the environmental impact from agricultural activity. Therefore, innovative and environmental friendly agricultural practices, such as solar remediation of the soils, biological cultivations, reuse of irrigation water, etc. will be promoted and preferentially applied in areas of particular environmental beauty and value (e.g. Natura areas). Moreover, the production from these protected areas will constitute an advertising advantage and will have a particular value for the

international market, considering the proper agricultural practices which will be applied and certified on the product's label.

Therefore, the occurrence of Mediterranean Temporary Ponds in these particular areas of Chania Prefecture represents a significant advantage for the farmers and may return substantial socioeconomic benefits, provided that the proposed changes, which are consistent with the European legislation be applied. In this context, there is particular interest for the existing possibilities of financing from the CAP framework, regarding the thematic axes: a) integrated interventions in areas under environmental constraints (axis 2), b) agricultural/environmental measures (axis 3) and c) afforestation of agricultural lands (axis 4). All the aforementioned axes are directly linked with the occurrence of the Mediterranean Temporary Ponds and of the Natura protected areas in the study areas and therefore it is possible to directly finance local farmers/growers and to harmonize their activities with the contemporary market and science requirements. Additional information regarding the financing possibilities, mentioned above, are available from:

1. The relevant Departments of Agricultural Development of the Prefectures
2. The web address of the Ministry of Agricultural Development and Foods (www.minagric.gr), in the Paper for Planning of Agricultural Development.

- **TOURISM**

Tourism in Greece and particularly in Crete is one of the more rapidly developed economic activities, which is expected to constitute the main boost for country's development in the forthcoming years. In the last few years, about 14 million tourists visit Greece annually. From this figure about 1.8 million visit Crete and 20% the Chania Prefecture. In Greece, 16.5% of the economically active population is occupied with Tourism, contributing about 14.3% of the GDP, while the figures for agriculture are 16% and 6%, respectively. There is an evident dynamics for development of tourism with emphasis on alternative forms (ecotourism, agrotourism, etc). About 35 millions of European tourists are nowadays interested in alternative forms of tourism and the annual rate increases with more than 20%. Also, alternative tourism is diversified from mass tourism, which until recently was dominant, from the quality criterion introduced in the services provided, as opposed to the economical criterion, on which the mass tourism was based. Therefore, the group of alternative tourists is composed of people from high educational and economical level who are in favour of mild human interventions on the physical environment and are ready to pay the cost for the required development while this particular type of tourism lengthens the touristic period, since visiting important ecosystems is not constrained in the summer period. Therefore, it is evident that in the study areas, which belong to the European network of NATURA protected areas and involve the priority habitat of Mediterranean Temporary Ponds, a unique chance of quick but also sustainable development of alternative forms of tourism is apparent and is expected to be assisted by the present LIFE project.

Thus provided an agreement is reached between the involved utilities (local administration, the owners of touristic lodgings and stores, agricultural corporations) ecotourism/agrotourism development actions may be promoted which will have immediate and significant benefits for these particular areas. In the context of the Life

project wooden educational kiosks, footpaths, ecological fences will be constructed, while significant quantities of printed informational material will be distributed and an intensive educational campaign will be carried out for all the study areas. Therefore, the essential basis for ecotouristic development will be created, which is easily accomplished after the aforementioned project activities, provided that the only requirement is the cooperation and acquiescence of the involved utilities, as well as the continuation of some of the LIFE project's actions (e.g. application of the habitat's management plan, conservation and development of the project's infrastructures).

The development of alternative forms of tourism constitutes a priority according to the contemporary European and international policies and is financed by a series of projects.

The project "THISSEAS" concerns the local administration organisations of the whole country and includes four sub-projects, the second of which has as its goal the "local development and protection of the environment". Also, the financing conveyor (Hellenic Ministry of the Interior, Public Administration and Decentralisation) enforces the role of environmental infrastructures, setting this as a criterion for the allocation of funds at the Local Administration Organisations (OTA). Thus the occurrence of Mediterranean Temporary Ponds will constitute a comparative advantage for the effort of Municipalities financial resources abstractions from "THISSEAS" project but also from the 4th EC Support Framework Program, provided that environmental protection and sustainable development are viewed as priorities when assessing the strategic options.

Also, for ecotouristic / agrotouristic activities in the context of the 3rd EC Support Framework Program there is a series of projects, which reinforce:

- a) the success of ecotouristic destinations such as the Environmental Operational Programme (EPPER, Measure 8-1),
- b) the relevant infrastructures (Leader and EPAN projects), and
- c) the ecological signals for the acquisition of ISO and EMAS.

It is therefore evident from the above that the occurrence of the Mediterranean Temporary Ponds in the study areas and the implementation of the relevant LIFE project may contribute to, besides the aesthetic and environmental restoration, to the future economic development of the areas and the normal adaptation to the contemporary principles of agricultural and touristic development, combining the improvement in products quality and the conservation of environmental values. For the realisation of these objectives, however, there will have to be an integrated education of the involved utilities and acquiescence regarding the development strategies and goals. The LIFE project will offer significant infrastructures and publicity to the study areas as well as an indicative development plan according to the aforementioned standards, which is expected to be utilised and implemented by the local community, in order to obtain the aforementioned socioeconomic benefits. In this context, the ownership issues of these specific areas have to get clear with the implementation of the relevant cadastre for each Municipality and the land planning studies, while it is essential that it should be agreed between the area's inhabitants and entrepreneurs that environmental protection is not opposed to the economical development but many times in favour. In this respect, the LIFE project's partners

will have to come in contact with the OTA representatives, but also with the inhabitants of the study areas, in order to present the direct and indirect benefits which will stem from the project's actions, but also the added value to the study areas after the end of the LIFE project.

The contribution of the project's environmental education action will be significant, provided that in Chania Prefecture, as it was evident from this study there is a great number of students and educators who demonstrate special interest on environmental issues and as such the proper and complete education for the habitat of Mediterranean Temporary Ponds, but also their active participation in some of the project's activities will contribute to the project's objectives and to the long term habitat's conservation.