A contemporary perspective of development of the mountainous economy
Case study: Fokida Prefecture-Greece

ATHANASIOS S. CHRISTODOULOU*

1. Introduction
It is known that the mountainous space, which, in the older days, was flourishing from an economic, social and cultural viewpoint, collapsed during the war and post-war period; a fact that is due to specific political choices that overturned the existing balance and translocated the center of gravity from the upland to lowland areas in respect to the geography itself, and from the rural to the urban sector, in respect to the society. However, the way of living of the mountainous population and the degree of utilizing and exploiting the natural resources was such that the "structural relation of man and the environment has produced something that we would call poetry of the landscape" (Nitsiakos, 2001). However, this traditional way of life, in the strict sense of the term, is a part of the past and efforts are made for its revival in the mountainous regions are rather a utopia in the degree that the traditional network of social relations does not exist, and the relative self-sufficiency on the basis of the traditional way of production is not enough to cover the consumption trends which characterize the modern societies (Loizos, 2001). In other words, we could not, at least up-to-date, defend the philosophical view of H.D. Thoreau that "the more people can deny things the richer they can get".

According to the recent facts "farmer is considered one who works in the agriculture, stock breeding, wildlife management, forestry, fishery, agro-tourism, agro-manufacture, traditional manufacture and protection of the natural space, as long as he affords at least half of this available time for these activities whereas the income he earns from the above activities is in excess of any income he acquires from other sources" (Min. of Agriculture, 1998). Therefore, we can see that the meaning of farmer is much broader than the standing today's one and that the existence of an income from farming is not necessary to characterize someone as farmer. This, after all, necessary co-existence of multi-activities "matches" directly with the sustainable way of production but also with the encouragement of the regional development (Race et al., 1997; Christodoulou et al., 1998).

Sustainable development shall mean the effort of man's life improvement, living within the boundaries set by the carrying capacity of the ecosystems that support the life (WWF, 1993). In fact, it is the known principle of "the sustainability of harvests", as it is applied in the forest space, at least officially, from 1713 and which, under the new social and economic facts, is expressed as "the principle of sustainability of the multiple functions of the forest", that is the forest and the forest lands are managed in such a way so that they maintain their capacity to provide perpetually and in an excellent combination, wood, protection against erosion, water, oxygen, recreation etc.; in other words, goods useful for today's man of but also for the man of tomorrow.

According to Daoutopoulos (1986, 1997), development of an area, at community level, is called the scheduled change which aims at the improvement of living standards of the local population and may be assisted by a change agent in a way that the maximum possible participation of residents is obtained in setting out the content

* Athanasios S. Christodoulou, Assistant Professor School of Forestry & Natural Environment, Aristotle University of Thessaloniki-Greece

Abstract
For several decades, the specific economic and investment policy set out by the Greek government has promoted the development of the urban and the low-land areas at the expense of the semi-mountainous and mountainous regions. This has raised several economic, social, cultural and environmental problems to the inhabitants of the mountain areas. This paper provides proposals for the development of the Prefecture of Fokida through multiple activities which may generally improve the standard of living of the prefecture's population. These proposals stem from an in-depth analysis of the conditions prevailing in this prefecture.

Résumé
Une approche contemporaine en vue du développement économique des régions montagneuses : le cas de la Préfecture de Fokida – Grèce

Pendant de longues décennies, la politique économique et d'investissement menée par le Gouvernement grec a favorisé d'une manière exagérée le développement des espaces urbains et en plaine par rapport aux espaces montagneux et semi-montagneux. Cela a induit de nombreux problèmes au niveau économique, social, culturel et environnemental pour les populations qui habitent dans les régions montagneuses. Dans cet article, on avance des hypothèses de développement pour la Préfecture de Fokida s'appuyant sur diverses activités qui sont censées pouvoir améliorer le niveau de vie de la population locale. Ces propositions sont basées sur les résultats d'une analyse très fine des conditions particulières qui prédominent dans cette Préfecture.

Case study: Fokida Prefecture-Greece

NEW MEDIT N. 1/2003

35
of the local change program but also in its implementation process.

Agro-tourism is the tourist activity which is developed in a non-urban space by people who are mainly engaged in the primary and secondary sector and particularly in family and cooperative-based small-sized tourist units of goods and services in order to reinforce the rural income and the local economy as much as from the exploitation of tourist lodges as well as from the supply of tourist units with locally produced goods (Theocharopoulos et al., 1996). In contrast with the traditional tourism, agro-tourism is "anything but small and beautiful with a human face" (Iakovidou, 2000).

Bearing in mind all the above statements, aiming at the improvement of the economic-social-cultural living conditions of the mountainous, but not only, population, the production of competitive, certified, brand-named generally agricultural products, of high quality, manufactured by renovating procedures, in accordance with the principles of sustainable development and by the support of the Local Government Authorities, is required. The above authorities should be in a daily alertness making use at the same time of the advantages of the EU. Besides, the change in the direction of the CAP requires the turning of the Greek production in relation to the standardization and the availability of products. Concurrently, the support of CAP in the future will be applied more and more selectively and in dependence of the quality and protection of the environment criteria (Maravegias et al., 2001).

The current increased activity in the trade of forest products may be partly attributed to the following two factors: the globalization of the market and the international marketing (Christodoulou et al., 1997). Finally, the certification of the forest products is a sign of our times and which, here, includes the following stages:

- Recording, analysis, and evaluation of the characteristics of Fokida Prefecture
- Recording and evaluation of National and European Community instructions, restrictions etc.
- Shaping of proposals.

For a start, the material available from the already existing research papers, from the authorities of Fokida Prefecture, the Statistical Service and the instructions of EU is utilized in order to carry out a recording of the prefecture's forest resources in size and in forestry species as well as a representative reference of the expenditures in the forestry field of the prefecture. Furthermore, attention is also paid to the international experience and practice, the relative instructions of the EU as well as the peculiarities of the prefecture so that specific proposals of economic-social-environmental recovery of the prefecture are made. More specifically, in regard to these proposals, the utilization of the comparative advantages of the studied area is taken into account along with the production of "products of origin", the current trend of organic animal products, the application of EU instructions which mainly lead to a forest development, the utilization of applying the so-called "special protected areas" and finally the better utilization of the tourist stream.

3. Results - Discussion

3.1 The forest resources of Fokida Prefecture

Table 1 provides the allocation of various forms of land use, entirely for Greece, for the region of Sterea Greece and for the Fokida Prefecture as well. Fokida Prefecture occupies 189,674 Ha of forest of which 112,168 Ha (59.1%) belong to the category of industrial forest (industrial forests are those areas characterized by high trees - high forests and coppice forests - producing merchantable wood products. Industrial forests are those areas capable of producing at least 1 m3 of wood/Ha/year as well as trees with a wood stem of at least 1.2 m) and the remaining 77,506 a (40.9%) to the category of the non-industrial forest (non-industrial forests are areas characterized from multi-branched dwarf trees and shrubs - usually evergreen broadleaves - which do not produce merchantable wood products for the time being and they mainly have value for grazing, fuel wood and protection of hydrological watersheds).

The forest area of 189,674 Ha accounts for 2.91% of the total forests of the country and 13.11 of the forests of Sterea Greece.

According to the above reported areas of industrial forest, the forestation percentage of Fokida Prefecture is equal to (112,168 : 266,629) X100 = 42.1% that is fairly higher than the forestation percentage of the country.

2. Methods - Materials

The methodology which is applied in the present paperwork is the one which is followed in the social sciences: research and observation of facts (Duverger, 1990) and which, here, includes the following stages:

- Recording, analysis, and evaluation of the characteristics of Fokida Prefecture
- Recording and evaluation of National and European Community instructions, restrictions etc.
- Shaping of proposals.

Table 1 provides the allocation of various forms of land use, entirely for Greece, for the region of Sterea Greece and for the Fokida Prefecture as well. Fokida Prefecture occupies 189,674 Ha of forest of which 112,168 Ha (59.1%) belong to the category of industrial forest (industrial forests are those areas characterized by high trees - high forests and coppice forests - producing merchantable wood products. Industrial forests are those areas capable of producing at least 1 m3 of wood/Ha/year as well as trees with a wood stem of at least 1.2 m) and the remaining 77,506 a (40.9%) to the category of the non-industrial forest (non-industrial forests are areas characterized from multi-branched dwarf trees and shrubs - usually evergreen broadleaves - which do not produce merchantable wood products for the time being and they mainly have value for grazing, fuel wood and protection of hydrological watersheds).

The forest area of 189,674 Ha accounts for 2.91% of the total forests of the country and 13.11 of the forests of Sterea Greece.

According to the above reported areas of industrial forest, the forestation percentage of Fokida Prefecture is equal to (112,168 : 266,629) X100 = 42.1% that is fairly higher than the forestation percentage of the country.
(3,359,186 : 13,195,740) X 100 = 25.5% and the respective percentage of Sterea Greece (725,505 : 2,235,073) X 100 = 32.5%.

If we co-calculate the areas of the non-industrial forest, then the forestation percentage of the Prefecture amounts to (189,674 : 266,629) X 100 = 71.1% against (6,513,068 : 13,195,740) X 100 = 49.4% of the country and (1,446,628 : 2,235,073) X 100 = 64.7% of Sterea Greece.

The rangelands of Fokida Prefecture, with a total of 29,998 a represent 2.1% of the total of the Country’s rangelands and respectively 14.1% of the rangelands of Sterea Greece.

Finally, the agricultural areas of the Prefecture occupy only 1.2% (35,593 Ha) of the farming lands of the Country and 7.4% of Sterea Greece.

Out of 189,674 Ha of forest the major forestry species are distributed as follows (Tab. 2): 77,802 Ha (41.0%) are fir forests, 4,180 ha (2.2%) are Black pine forests, 26,946 Ha (14.2%) oak forests, 77,506 Ha (40.9%) evergreen broadleaves.

The Prefecture’s fir forests occupy a significant percentage (14.1%) of the total fir forests of the Country and a significant percentage (26.6%) of the respective fir forests of Sterea Greece.

Assuming that today, the property regime in force is still the same as in the older days (Makris, 1973), then 94.3% of Fokida’s forests belong to the category of public forests while the remaining 5.7% to the non-public forests. The respective percentages for the partially forest lands (which actually coincide with the non-industrial forests) are equal to 97.0% and 3.0% (Tab. 3).

3.2 The allocation of expenditures in forestry

Table 4 and for the year 1995 (which may be considered as representative for the prevailing situation in the issue of the allocation of expenditures in Forestry) shows the allocation of expenditures in the field of Forestry.

The total expenditure spent during this year in the Prefecture of Fokida amounted to about 2,128,000 ECUs, covering just 1.3% of the total expenditure for the entire forest space of Greece. However, as indicated in Table 1, the forest areas in this Prefecture along with the rangelands occupy 2.8% of the respective Country areas. In other words, the funding for the Prefecture of Fokida is not proportional to the size of its forest areas while this index, along with others more or less important, should have been considered as the criterion for the allocation of expenditures in the forest space.

31.4% of 2,128,000 ECUs are covered by Public Investments, 29.4% by the Agriculture, Livestock and Forests Fund and 39.2% by the Regular Budget.

3.3 The animal organic products

Organic Agriculture rejects the use of Genetic Engi-
neering while the natural diversity and the fertility of soil are the best guarantee for the health and the safety of foods. The harmful effects of Genetic Engineering for the production of foods are related not only to the health of people but also to the general degradation of the environment.

On the other side, it has been proved that the nutritional reserves of the earth have not been exhausted yet (Paula Myer, according to Baskozos, 2001a). However, what has been done is a waste, an unequal distribution of foods and a great extent of desertification of the cultivated land due to intensive farming and to the adverse effects resulting from the change in the earth’s climate.

It has been claimed that organic animal breeding but also more generally organic agriculture is a great opportunity in the long run, especially for Greece (Fantesmichen, 1998). Consequently, this fact has a particular importance and value for the Prefecture of Fokida which is more or less a mountainous region and it is up to the decision makers to promote and provide motives for the local stock breeders so that this sector of animal production can offer the maximum towards the economic upgrading of the highland regions.

3.4. The potentials of forest development via the EU regulations

Today, the EU shows its interest through a range of efforts but also the significance that attributes to the three basic functions of the forests:

- economic
- ecological, and
- recreational

as well as to the role that the forest can play for smoothing out or solving problems such as:

- the utilization of idle farming lands,
- the replacement of agricultural products that are produced in excess and finally are led to dumping sites, 
- the improvement of employment and income of the forest-adjacent populations,
- the regional development, and
- the improvement of self-sufficient degree of the EU in wood and wood products.

Park (1988) reports that, today, the policy is more focused on the protection of the natural fauna and the traditional characteristics of the landscape rather than on agricultural crops. Therefore, thinking that the development in the mountainous space can be only promoted via
a range of multi-activities (as more or less set out by the above-mentioned definition of the farmer) it is necessary that the EU regulations are applied at best and new directions towards the forest development ruled out. Particular significance is given to the ex regulation 2080/92 which anticipates the utilization of agricultural lands (idle, marginal and cultivated).

However, since each region has its own particularities (climatic, soil etc.), it is expedient and incumbent, at Fokida’s Prefecture level, to conduct research so that each time the forestry species and the soil types upon which it can grow, is checked up (Buffin, 1988). At the same time, the “comparative advantages” of each region will be utilized in conjunction with the production of “origin products”. The utilization of the comparative advantage has a special importance and value because by this way a) the possibilities of getting an approval of the proposed programmes on behalf of the EU authorities are becoming bigger and b) these programmes will be carried on in time and yield the expected results.

3.5. The special protected areas

On 21/5/1992 the directive 92/43/EEC was issued (known as ecotopes directive) for the conservation of natural ecotopes and the wild fauna and flora. The purpose of this directive is to contribute to the protection of the biological diversity and make provision for the establishment of a European ecological network, connecting the places where the specific types of ecotopes, flora, and fauna species are met. This network is called NATURA 2000. The above directive along with the directive 79/409/EEC for the birdlife, is the community’s contribution to the Contract for the conservation of the planet biodiversity (Rio, 1992).

The member countries were committed to make a list of the candidate regions to be incorporated into NATURA 2000 network. The national list of the proposed areas of our country finally includes 265 such areas (Special Protected Areas). In the Pref. of Fokida there are five such SPA (GBWC, 2000):
1. Vardousia Mountains. Area: 19,483Ha. Importance: A significant number of endemic and rare plants.
3. Mornos River and Artificial Lake of Mornos. Area: 2,953Ha. Importance: The relief in conjunction with the forest character of the area and the artificial lake of Mornos provide the area with a particular aesthetic value with an ecotourist and educational character. The formations of Quercus ilex in southern Greece are limited and their rational management and protection are considered necessary.
4. Coastal zone from Naupaktos to Itea. Area: 10,927Ha. Importance: The forests with Juniperus phoenicea are extensive in the area with a particular aesthetic and ecological value.

The member countries take over the obligation to take all necessary measures so that the SPA are not degraded. However, by taking these measures the populations do not leave these areas but on the contrary, they continue to live and work within them. Any proposals or measure are taken in collaboration with and through meetings of State representatives with the parties concerned.

However, the need for ensuring the prerequisites of the unobstructed performance of these areas requires, for Fokida Prefecture, the analysis of the prerequisites of the tourist current has developed during the recent years in this prefecture.

During the 1986-95 decade, 213,290 people visited the Pref. of Fokida on average per year, with a minimum of 162,169 people in 1995 and maximum 250,407 people in 1987 (Tab. 5). Of this number 27% were Greek citizens and the remaining 73% foreigners. The average number of overnight stays per visitor was just 1.42, with a minimum rate of 1.31 overnight stays per individual in 1987 and a maximum rate of 1.48 in 1995. In other words, during the last years of the studied decade in which we have a decrease in the number of visitors, it is observed a small increase in the average time of stay in the area. On the other side, the most disappointing fact is that the average number of overnight stays per individual (1.42) seems to
be much smaller than the respective average number concerning the entire Greece (4.4). Consequently, it is confirmed that in the Fokida Prefecture the one-day and two-day excursions, mainly in Delphi, is the most characteristic feature while the tourist activity in the mountainous tourist lodges which has significantly changed in the period 1988-98, presenting its maximum peak in 1990 (43.9%) and its minimum in 1996 (30%). So, a declining course followed, a fact which reflects the general fall of the tourist movement (Theocharopoulos, 2001), presenting its maximum peak in the period 1988-95,

Tab. 5. Average annual number of visitors, overnight stays and overnight stays per visitor for the period 1986-95

<table>
<thead>
<tr>
<th>Prefecture</th>
<th>Annual number of visitors</th>
<th>Annual number of overnight stays</th>
<th>Annual number of overnight stays per visitor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>min</td>
<td>max</td>
</tr>
<tr>
<td>E. Macedonia</td>
<td>451355</td>
<td>410366</td>
<td>510813</td>
</tr>
<tr>
<td>Central</td>
<td>1091650</td>
<td>931671</td>
<td>1197441</td>
</tr>
<tr>
<td>Macedonia</td>
<td>(91)</td>
<td>(87)</td>
<td>(87)</td>
</tr>
<tr>
<td>Western</td>
<td>170593</td>
<td>150539</td>
<td>240891</td>
</tr>
<tr>
<td>Macedonia</td>
<td>(95)</td>
<td>(88)</td>
<td>(88)</td>
</tr>
<tr>
<td>Epirus</td>
<td>355169</td>
<td>337146</td>
<td>375714</td>
</tr>
<tr>
<td>Thessaly</td>
<td>533397</td>
<td>463827</td>
<td>602988</td>
</tr>
<tr>
<td>Ionian Islands</td>
<td>587716</td>
<td>533394</td>
<td>645262</td>
</tr>
<tr>
<td>Western</td>
<td>628710</td>
<td>553949</td>
<td>674696</td>
</tr>
<tr>
<td>Greece</td>
<td>(91)</td>
<td>(90)</td>
<td>(90)</td>
</tr>
<tr>
<td>Sterea</td>
<td>550517</td>
<td>514553</td>
<td>578311</td>
</tr>
<tr>
<td>Greece</td>
<td>(91)</td>
<td>(87)</td>
<td>(87)</td>
</tr>
<tr>
<td>Attiki</td>
<td>287346</td>
<td>2450415</td>
<td>3095350</td>
</tr>
<tr>
<td>Peloponnisian</td>
<td>812650</td>
<td>699278</td>
<td>866935</td>
</tr>
<tr>
<td>Northern</td>
<td>172821</td>
<td>122037</td>
<td>244824</td>
</tr>
<tr>
<td>Aegean Sea</td>
<td>(91)</td>
<td>(91)</td>
<td>(91)</td>
</tr>
<tr>
<td>Southern</td>
<td>1462355</td>
<td>1251695</td>
<td>1843590</td>
</tr>
<tr>
<td>Aegean Sea</td>
<td>(86)</td>
<td>(86)</td>
<td>(86)</td>
</tr>
<tr>
<td>Crete</td>
<td>1264480</td>
<td>1113120</td>
<td>1423987</td>
</tr>
<tr>
<td>Greece</td>
<td>10954883</td>
<td>9700693</td>
<td>1165171</td>
</tr>
<tr>
<td>Pref. of FOKIDA</td>
<td>213290</td>
<td>162169</td>
<td>250407</td>
</tr>
</tbody>
</table>

Source: NSSG. Statistics of Tourism

However, beyond this action at prefecture level, local actions are also needed to push the so-called Local Tourism which covers five levels: it begins from the local initiative, it is managed by the local bodies, it has impacts on the local scale, it is marked by a natural landscape and the intense seasonality affects negatively the cost and the quality of the services provided with negative consequences on competitiveness.

As a result of the above, there will be the support of the income, the creation of job opportunities and the confrontation of unemployment of the economically active population of the area with of course all the involved useful consequences of the “multiplier” (Samuelson, 1975). The principle that each daily wage that is generally paid out inside the forest area causes the creation of 2-5 addi-
tional daily wages (Nautiyal, 1988, Katenidis, 1998) is significant together with the general position that the contribution of the forest towards the safeguarding of labor and the redistribution of the income in favor of the close-to-forest living mountainous population (Efthymiou, 2001, Stamou, 2001).

3.6. The 3rd Community Support Frame and the regional development of the Prefecture of Fokida

The 3rd Community Support Frame (CSF) aims at the further enforcement of the economic and social cohesion of the less developed areas. The size of the structural financial subsidies that are covered by the European Structural Funds for the 1st and 2nd CSF amounted to 2% of the GNP on average for the total of the four known countries of the “Cohesion” that is Greece, Portugal, Ireland and Spain. Concurrently, the subsidies that are fully covered by the priorities of the “Target 1” (it is about the most important “Target” of the CSF concerning the promotion of the development and the structural adaptation of the “developmentally underdeveloped regions”) amount to 3% of the GNP (Lolos, 2001).

More specifically, and particularly via the 3rd CSF, the promotion of productive potentials of the economy will result via the improvement of the basic infrastructure and the networks (road axes, railway network, telecommunications, energy and transport networks), the upgrading of the human resources by the assistance of education and vocational programmes, as well as via the establishment of research and technological institutions. Yet, this results in the support of agriculture, tourism, industry and private investments.

Thus, one of these projects that will have a special importance and value for the Prefecture of Fokida will be the linking of Rio-Antirrio. During its construction 4,000 jobs are expected to be created but after its completion, that is during the main operation, it will originate new economic facts via the tourist, housing and commercial development of the broader area. In the middle of 2004, the bridge is expected to serve 6 million passengers and 2 million vehicles per year. So, an opportunity will be given for a full and essential utilization of the developmental advantages of the prefecture.

Moreover, it is known that the “external economies” that will result from the technological innovations have a great positive effect on the rest of the productive processes. Externalities are all those results of a specific investment plan that are extended beyond the narrow limits of the plan itself (Christodoulou, 1995). These indirect effects are distinguished into three big categories:

1. Effects that are ought to the function of the “multiplier principle” (multiplier effects) and are created due to the consumption of incomes acquired by the operation of the considered investment plan.
2. Linkage effects and scale economies (Price, 1989) that are created due to the effect the plan has upon other enterprises and activities.
3. Hidden inputs and outputs (e.g. factory wastes, erosion due to the mine operation, gain of experience and training etc).

However, taking advantage of the resources of the 3rd CSF is not simple and easy. It is known that the 3rd CSF which is approved by the European Committee based on the Plans of the Regional Development (PRD) submitted by the member countries, is an object of negotiation between Europe and the Governments. The PRDs are drawn up by the central government of each country in cooperation with regional authorities. However, as a government executive has declared, no one will take over projects of the 3rd CSF if all the projects of the 2nd CSF are not finalized. In other words this is a strict warning which is essentially addressed to the Local Government Authorities which, especially after the project “Kapodistrias”, has to play a substantial and primary role so that each Euro is invested effectively and contributes to the development of the region. All the proposals which will be submitted by the authorities of each prefecture, and subsequently of the Pref. of Fokida, should include one of the basic elements of the programming, namely the "ex ante evaluation" of the proposals so that (if the proposals are approved and listed into the implementation programme) by the "ongoing evaluation" and by the "ex post evaluation" they become the basis of structural interferences in similar proposals. This very important role that Local Government Authorities are called to play may be evidenced from the decision (7/9/2001) of a government committee to approve, within the frames of the Cohesion Fund, only 30 relative proposals from the 275 totally submitted. The justification of the rejection was, of course, that the proposals have not complied with the specifications set out by the EU. Naturally, the entire responsibility for this fact has been transferred to the Local Government.

4. Conclusions

The economic policy of our country, the targets and the measures of its promotion are rather less guided by Brussels as they were in the past. The various plannings are more Greece-centered and less dictated by some convergence programme (Pepelasis, 2001). Therefore, for a Fokida-centered planning aiming at forwarding projects of the building sector and at improving the economic-social-cultural level of residents the coordination of the various public services is required, the participation of scientists of various expertise and from various work places but also the intense activity of Local Governments of the 12 Municipalities of the Prefecture so as to make the best and most effective use of its comparative advantages. However, the participation, at the same time, of new scientists must be considered "sine qua non" since, as O. Elytis (1998) says "in the ruins pass by often bees and old ideas as well".


Min. of Agriculture. 1992. Results of the First Forest Inventory. In Greek.


References


Maraveias, N.G., G. Mermigas. 2001. The Great Dilemma of the