

Factors determining the sustainable management of local resources of growth regarding mountainous regions; the case of Nymfaio Florinas

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Abstract

The purpose of the present essay is to identify and assess the main factors determining the attractiveness of local resources development in mountain areas. The long-term planning for the gentle development of an abandoned mountain village, and possibly the need for additional institutional measures must be taken into account in order to achieve the over time substantial improvement in the region.

The identification and assessment of factors affecting the sustainable management is achieved through a primary survey for measuring the dimensions of sustainable development in the village of Nymfaio region, such as the economic, social and environmental sustainability. According to these directions, the community of Nymfaio, situated in the Prefecture of Florina, is recommended and analyzed as an example within the framework of management of mountainous areas.

The globalization of the financial activity challenges the adaptability of regional economies and the ability to make the most of, or at least to maintain their comparative advantages. Despite the effort, as far as political selections are concerned, the gap between the regions becomes larger and the costs for the maintenance of their cohesion are rising. In the meantime, technological changes, wide markets and an increasing demand for knowledge, offer new opportunities for a local and regional development in general. However, human resources remain the main factor for the improvement and also for the promotion of the local environment.

Keywords: Nymfaio, Florina, mountain areas, Natural Resources, Regional Economic Activity, Growth, Development, Sustainable Development

JEL classification codes: P25, Q01, R11

Introduction

"Sustainability" and "viability" are two concepts newly introduced, particularly in the late 60s. (Dobson 1996, Lafferty 1999, Mitlin 1992). "Brundtland" report entitled "Our common future" (United Nations Report of the world Commission on Environment and Development 1987) introduced viability as an important ingredient of the international thought and practice, based on human prosperity, fair distribution of natural resources and also on the maintenance of the

natural ecosystem and its delivery to forthcoming generations (Sneddon et al. 2005).

Tourism is nowadays one of the most important fields of financial activity and development. The intense development of mass tourism as a dominant model of tourism development correlates with negative effects not only for the environment, but also for the local host-communities. This led to the search of more friendly, softer for the environment and also more anthropocentric forms of tourism, which in their total consist the alternative tourism (Sfakianakis 2000, p22).

Agrotourism, as one of the alternative forms of tourism, became a topic for further research and discussions during the last decades in order to define and determine its features. The results of these efforts bring conclusions, which mostly do not coincide or approach the concept with different criteria. (Sharpley & Sharpley 1997, p5).

Depending on the way through which each country conceives the concept of agrotourism, forms respectively different infrastructures (Opperman 1996). Consequently, one country offers accommodation in the farmer's house, the other one offers board and lodging in different houses within the rural settlement, the third one offers accommodation in different residences, managed by partnerships, or in natural areas, in traditional settlements, in independent residences etc. (Richard & Dennis 2005).

At the beginning of the 1960s agrotourism bloomed in Germany and Austria (Page & Getz 1997, p8-26). Agrotourism, or tourism in a farm, concerned the creation of infrastructures for the accommodation and feed of the guests in special organized places in the farms and also in newly designed places within the farm. Another parameter of living in a farm was that the guests could get involved with the jobs that usually have to be done daily in a farm. The aforementioned form of agrotourism was not brought into effect in south European countries compared to north European countries, due to the segmentation of rural ground (Opperman 1995).

In France the term "agrotourism" dates in 1952, the same time with the establishment of the Organization "Agriculture and Tourism" (Agriculture et Tourisme), which aimed to the education of the farmers about initiatives concerning tourism. Since that time, the efforts for the institutionalization of all the parameters which regulate the phenomenon of tourism, (on legislative and administrative level) became more intense and the first rural residences were constructed (Gites Ruraux). The French legislation defines the agrotourism as: all activities which refer to the control and development of a biologic circle, vegetal or zoic, and are based on the development of the ground, as an extension of the production process(including tourism) are considered to be rural activities (Mathieu 2006).

In Italy, agrotourism begins with the establishment of the "National Union of Agriculture and Tourism" (Agriturismo), of the first society about agrotourism in 1965. Passing the law of the Regulation of Agrotourism in 1985, was a significant parameter for taking actions concerning agrotourism and agriculture, by developing infrastructures, production and manpower (Agostini 2007).

Mountainous areas cover 24% of Earth's surface (Kapos et al. 2000) and 12% of Earth's population lives there. (Huddleston et al, 2000)

Nowadays, mountainous areas are connected mainly with relaxation and observation of their biodiversity (Messerli & Ives 1997, p17-19). The models developed on the bulges are considered to be multifunctional. Through the years, these bulges became special spatial unities, which were intergraded with difficulty to the financial development and were regarded as areas, which tend to be aside (Sotiriadis & Varvaresos 2003).

The European bulges are significant geographical unities, which play a very important role for the countries' region. In the EU of the 25, mountainous communities occupy 40,6% of the total space and in these communities live 94,3 millions of people, which is respectively 19,1% of the total population (European Commission 2004, pIII). It should also be mentioned that 20% of the agricultural ground of the whole Union is in mountainous areas and 27% of the number of agricultural development. Additionally, forestry and many businesses related to tourism are developed within mountainous areas. The conclusion is that European mountainous sceneries with their notable cultural tradition are a basic pattern of development and infrastructure and they present the interaction between human activities and mountainous natural ecosystems (European Commission 2004, p12).

The bulges carry a decent number of undeveloped natural and cultural resources and the development of these resources is determined not only by the development of the particular mountainous area, but also of the areas on which it neighbours. Mountainous areas are exposed to the mechanisms of getting aside, to isolation. The solution of the problem is restricted to the beginning of sustainable development applying to financial activities, which conform to the expectations of the society and also with the endurance of the environment (Kyritsis & Tampakis 2004).

The new model of the development of rural space and in particular of mountainous and disadvantaged areas is based on the principle which regulates the complete and sustainable development and consequently the balance between social, financial and environmental parameters and needs (Deaton & Nelson 1992). The development of the countryside is based not only on the combination of agricultural activity (in order to come up with direct and indirect financial and environmental benefits) but also on the spatial approach of the development of rural space. Regulations, the third and fourth Community Support Framework regarding rural development after 1999, were based on the regional approach through the complete development and the improvement of natural environment. At the same time, the target for the improvement of the competitiveness was maintained (Hatzitheodoridis et al. 2007).

It is obvious that the current situation of mountainous and disadvantaged areas emerges from factors such as economy, society and environment, which are estimated after the collection of relevant elements and data. Nymfaio has managed to create a system, which protects the environment and brings out financial opportunities through the protection and rational management of the environment for social prosperity, economy and for the private sector as well (Kalfas 2008, p109).

The aim of this project is to find and estimate the main factors that determine the sustainable management of local resources concerning the development of mountainous areas. This aim is fulfilled through protogenic research about the measurement of the size of sustainable

development of one settlement, consequently the financial, social and environmental sustainability.

The area, where the research took place was Nymfaio, because it accumulates the three following basic features which allow coming to interesting conclusions: small size of the settlement, notable degree of development regarding tourism and existence of local organizations with environmental consciousness (Kalfas 2008, p109).

The method applied for the fulfillment of the aforementioned aim is the method "Financial Social and Environmental Imprint". This method that imprints the situation of an area, is based on principles of sustainable development and should not be confused with the method of "ecological imprint" (Simmons et al. 2000; Monfreda et al. 2004).

Methods and Techniques

Method of the research

This research is based on the analysis of protogenic and secondary data. There was a protogenic research through questionnaires addressing a sample of 284 guests- tourists. The size of the sample was determined after the correlation of the standard error, the accuracy and the credibility of the research, with the help of the ringing of the variable's value in the sample. Standard deviation, which is required for the calculations, was estimated with a preliminary sample, to which addressed the questionnaire as well (Siardos 2005, p81). Undoubtedly the questionnaire is the most common tool for social survey and its main functions are: description and measurement (Siardos 2005, p161).

Microcensus is the most practical method for the collection of protogenic data in researches concerning tourism (Christou, 1999 page 108). It was the basic searching method which contributed to the collection of data in order to give answers to some questions of the research. The participant observation (we deal with this settlement from the end of the last decade, because of its labor situation), the analysis of secondary data (Arktouros, Restructuring Report etc) and other searching methods and techniques were used in order to achieve the best result. Definitely there is no method, which can be the best on its own and consequently the additional acting of more than one method ratifies the results with a higher reliability (Daoutopoulos, 1994 page 3).

Random sampling depends on technical sampling which is based on possibilities, where the error possibility during the sampling is predetermined. The prerequisite size on the representative sample consists a function of the homogeneity of population as far as one or more features are concerned, which the researcher considers to be substantial, the degree of accuracy of the cost which he must do in order to collect the necessary information from the sample members (Siardos 2005, page 80).

An important role during the sampling plays the sample size, which includes the member of the unities and not the percentage of the population which corresponds. The sample size is determined by the accuracy of the estimation and also by the level of its reliability.

The following formula connects the standard error $\sigma_{\bar{x}}$, accuracy d and reliability z (Yamane 1967 pages 80-89 in Siardos 2005, pages 81)

$$d^2 = z^2 \sigma_x^2 \Rightarrow d^2 = z^2 \frac{s^2 N}{n} \frac{n}{N}$$

Equation 1: Formula which connects standard error σ_x accuracy d and reliability z

S^2 =fluctuation of the value of the variable.
From the above formula comes up the following:

$$n = \frac{N(zs)^2}{Nd^2 + (zs)^2} \text{ (Sampling without recovery)}$$

Equation 2: Determination of the sample for sampling without recovery
The values of z depend on the level of reliability (p): z=1, 96 (for p=95%), z=2,58 (for p= 99%) etc. The most common value is z=3 which coincides to p= 99,7% (this value is used for the estimations of the present research.

The accuracy is determined subjectively by the researcher and refers to the half of the confidence region of the values of μ (population average):

$$d = \left| \bar{X} - \mu \right|$$

Equation 3: Determination of accuracy

Standard deviation is estimated with a preliminary sample or it's already known from previous researches. N is the total sampling population (Siardos 2005, page 81).

Due to estimation needs of the sample a preliminary research on 50 visitors was done and the independent variable was the tourist's place of origin. The kilometric performance which connects the settlement of Nymfaio with the place of origin was determined. An effort was made to use distance as an independent variable, but then it would be necessary to answer questions such as "which road did you choose?", "from which port did you start your journey?" etc.

The following table presents the results of the first 50 questionnaires:

Table 1: Kilometric distance between Nymfaio and places of origin of the tourists

	Place of origin	Kilometric Distance (km)		Place of origin	Kilometric Distance (km)
1	ATHENS	353	26	THES/NIKI	124
2	ATHENS	353	27	THES/NIKI	124
3	ATHENS	353	28	THES/NIKI	124
4	ATHENS	353	29	THES/NIKI	124
5	ATHENS	353	30	THES/NIKI	124
6	ATHENS	353	31	THES/NIKI	124
7	ATHENS	353	32	THES/NIKI	124
8	ATHENS	353	33	THES/NIKI	124
9	ATHENS	353	34	THES/NIKI	124

	Place of origin	Kilometric Distance (km)		Place of origin	Kilometric Distance (km)
10	ATHENS	353	35	IOANNINA	122
11	ATHENS	353	36	KAVALA	248
12	ATHENS	353	37	KASTORIA	23
13	ATHENS	353	38	KASTORIA	23
14	AMYNTAIO	16	39	KOZANI	45
15	ARTA	173	40	KOZANI	45
16	VOLOS	191	41	LAMIA	208
17	DRAMA	230	42	LARISA	138
18	EDESSA	50	43	MALAKASA	333
19	ELASSONA	109	44	NAFPAKTOS	252
20	THES/NIKI	124	45	NAFPLIO	360
21	THES/NIKI	124	46	PTOLEMAIDA	20
22	THES/NIKI	124	47	FLORINA	18
23	THES/NIKI	124	48	FLORINA	18
24	THES/NIKI	124	49	CHANIA	612
25	THES/NIKI	124	50	CHIOS	472

From the above values and with the help of Microsoft Excel we can come to the following conclusions:

Standard deviation $s=140,57$

Average $\bar{X}=203,10$

$z = 3$, which coincides to a level of reliability $P=99,7\%$

The confidence region is a region which extends on either side of the average sample. If alpha (α) equals 0,003, the space underneath the typical normal curve must be estimated, which equals $(1-\alpha)$ or 99,7%. This value is ± 3 . Consequently the confidence region is:

$$(1-\alpha)\% \delta. \epsilon. = \bar{x} \pm 3 \left(\frac{\sigma}{\sqrt{n}} \right) \Rightarrow (1-\alpha)\% \delta. \epsilon. = 203,10 \pm 3 \left(\frac{140,57}{\sqrt{50}} \right) = 203,10 \pm 59,00$$

Equation 4: Estimation of the confidence region

The confidence region is 59,00 and the fluctuation according to the sample is:

$$s^2 = \frac{n \sum x^2 - (\sum x)^2}{n(n-1)} \Rightarrow s^2 = 19.759,11 \text{ consequently } s = 140,57$$

Equation 5: Estimation of the fluctuation of the sample

N is the total sampling population and according to the former president of the community of Nymfaio Mr. Nikolaos Mertzios "Nymfaio after 10 years of strategic development, receives visitors which annually exceed the whole population of the Prefecture of Florina. More than 60.000 visitors" (2004, Proceedings of the 1st Conference of Alternative Forms of Tourism of the Prefecture of Florina)

From the Equation 1 comes up:

$$n = \frac{N(zs)^2}{Nd^2 + (zs)^2}$$

Data:

- N=65.000 (for research security reasons 5.000 more visitors were given)
- Standard deviation s=140,57
- Z=3, which coincides to a reliability level of P=99,7

The accuracy d is subjectively determined and refers to half of the confidence region: 59,00/2=29,50. This means that the average straight kilometric distance must be estimated with accuracy ±29,50 kilometres, on either side of the average and z=3 (reliability coefficient). In order to come to accurate conclusions, a decrease at about 15% of the ±29,50 kilometres is necessary. Consequently the average kilometric distance between Nymfaio and the place of origin of the tourists can be accurately estimated ±25,00 kilometres on both sides of the average, z=3 (reliability coefficient).

- Accuracy d=25,00

$$n = \frac{N(zs)^2}{Nd^2 + (zs)^2} = \frac{65.000 * (3 * 140,57)^2}{65.000 * 25,00^2 + (3 * 140,57)^2} = 283,29 \text{ questionnaires}$$

It should be reminded that the sample includes 284 persons. The collection of the questionnaires lasted from October 2007 until February 2008 and the analyzing method used was that of descriptive statistics.

Research Area

Nymfaio's geographical area covers a section of the mountain Vernon. Its highest peak is Vitsi (total height 2,128 m) and in northeast is the plateau of Florina. To be more precise, Nymfaio extends on the slopes of this branch on either side, starting from a very high peak named Oxeia Koryfi (total height 1,781m) and ending to the contour of total height of 950m. Its orographic style is not only smooth, but also very intense, and consequently gives to the whole area a mountainous, semi mountainous style (Kalfas 2005, pp38-39).

The research area is 25,300,000 m² wide, of which 74.08% is bush fallow, 18.19% bare grassland and the rest of this area is apportioned to agricultural, dwelled and infertile areas (Nianios, Michtatidis and Kalfas 2007, p 10). The aforementioned areas include the Park of Wild Life, the camping of Y.M.C.A. of Thessaloniki and the areas which "Arktouros" uses and belong to the Forests and wooded areas. It comes up that the areas under cultivation cover a very small percentage. Within the community a small quantity of vegetables is cultivated, while arboriculture and cultures of potatoes are very limited.

Nymfaio was dwelled around 1385 by Latin speaking indigenous Greek Macedonians called "Vlachoi Odites" in Greek, who turned to the mountainous area after having fought hard battles against Ottoman invaders. Later on, they surrendered under conditions but they remained armed and they came directly under the mother of the Sultan (Community of Nymfaio 2003, p10). Around 1630 they began to work on silver and their village became a notorious centre of silver- and gold

elaboration in whole Macedonia for the three next centuries. Recipients of their creations were people, church and monasteries (Municipality of Thessaloniki 1995, p40).

These "Vlachoi Odites" played a very important role during the Macedonia Combat and Pavlos Melas in his report to the Macedonian Union determined "the rich Greek town "Neveska" as the base of the Combat" (Mela 1964, pp398-400; Tsami 2008, pp69-70). After the liberation of Nymfaio in 1912, the constant wars with a war range in Nymfaio (1913, 1940-41 National Opposition and The Civil War), the limitation of the vast Single Market within the Greek borders, the international financial crisis, the change of the Greek society and finally the migration flow between 1950-1970 caused gradually the decline and the desolation of Nymfaio (Kalfas 2008, p31).

In the 80s, 2/3 of the settlement disappeared, the rest of the houses were split and the last 45 people were trying to find a way to escape to nearby urban centers. At that time many people who came from Nymfaio, but lived in Thessaloniki, intervened in order to save their village. They used to come back at the weekends, they found their friends, who lived in other cities and they refreshed the social life and in some way, they rebuilt their mansion-houses. They invested money and their soul to a dream: the "resurrection" of Neveska and finally their dream came true (Kalfas 2005, p14).

The development of the population of the Community of Nymfaio during 1951-1991 was followed by fluctuations, which presented a total reduction during these 40 years by 30%. The biggest reduction (around 50%) of the population of Nymfaio's Community occurred during the decade of 1961-1971. The population shift during the last decades is a very important element of the settlement's social and financial life. This population shift is presented on the following table, according to the census of the 2001 of the General Secretariat of the National Statistical Service of Greece (G.S.N.S.S.G. 2009).

Table 2: Resident and Present population of Nymfaio between 1991 and 2001

Resident Population		Present Population	
2001	1991	2001	1991
211	112	413	244

This statistical data presents an increase of the population by 55% between 1971 and 1981, but this increase is notional because it includes many people, who were born in Nymfaio and live elsewhere, but they visited it during the census of 1981, in order to be documented as residents. On the other hand, the census of the year 2001 presents the reality in a better way, because at that time, many labor places and small businesses for tourism were created. Consequently, according to the data of G.S.N.S.S.G. the resident and the present population of Nymfaio were doubled between 1991 and 2001: In 2001 the resident population was 211 people and the present 413 people and in 1991 the resident population was 112 people and the present was 244 people.

Research results-Discussion

The age of the guests-tourists presents an increased participation of the most active part of the tourists; 88.1% of the tourists are between 15 and 45 years old. On the other hand, tourists more than 45

years (11.9%) do not participate in the tourism in the region of Nymfaio in the same degree as younger people.

Through an observation of the Nymfaio tourists' educational level can be concluded that two out of three (66.6%) tourists have graduated from higher educational institutions. This result confirms Partalidou's and Iakovidou's (2008) recent project, which concerns seven more rural tourism destinations of our country.

Furthermore, the annual income of each tourist's household is presented very high, because the income tax statement of 64.44% of total tourists includes an annual income of €20000. This means that the annual income of this group is more than 110% of the gross annual per capita income of the total of the country (around €18000), (Operational Programme 2007-2013 Region of West Macedonia 2007, page 18). Additionally, if €20000 annually would be considered as low income base, only four out of ten tourists would have a low annual income and most of them are not married. The following table presents the centers of attraction for tourists of Nymfaio:

Table 3: Centers of attraction in Nymfaio

Centers of attraction	Frequency	Percentage (%)
Traditional built environment (architecture museum etc)	33	9,9
Natural environment (flora, fauna, centre of the bears etc)	30	9,0
Artistic traditional accommodation/hotels	12	3,6
Tranquility of the traditional village	220	66,1
Winter, snow and close by ski centers	38	11,4
TOTAL	333	100,0

To be more precise, the answers to this question were selected from a multiple choice list and as a result, the total of the frequencies is more than 284, which corresponds the number of the respondents.

From the above table can be concluded that Nymfaio's main centre of attraction is the tranquility of the traditional village (66.1%) and then follows the nature and built environment. This percentage is high because tourists depart from traditional big urban centers (around 40% depart from Thessaloniki and 30% from Athens).

Visitors who choose to travel to Nymfaio seem to be very active as far as sightseeing is concerned. Consequently, 78.5% want to visit Arktouros, to be informed about the activities of this center and to see the bears. Additionally, 55.3% of the tourists claim that will visit the exhibits in Nymfaio's museums, when the 40% want to visit skiing centers of the region.

A comparative assessment of the tourists' intentions of their travel in Nymfaio, could present the significance of "Arktouros" concerning their choice of Nymfaio as a destination. It is a substantial center of attraction and a parameter, which can serve its dual purpose: on the one hand to sensitize people for the wild fauna (particularly for the brown bear), for the environment in general, and on the other hand to contribute to the rise of the incomings through the increase of the visits.

"Arktouros" is a Greek non-profitable environmental organization which aims to protect wild life and mountainous ecosystems. Its activities concern environmental education, expertise supply about the intervention on the natural environment, information and sensitization of students, citizens, government entities in order to participate in the protection of the environment. Many volunteers, mainly from Greece but also from other countries help "Arktouros" to this direction through volunteer host programs with the cooperation of the General Secretariat of New Generation and the European Voluntary Service (EVS) (Arktouros 2009).

It should be mentioned that, 1/3 (8,524,000 m²) of the aforementioned geographical area of Nymfaio (its west part) belongs to the area NATURA 2000 (NATURE 2000) with the Area Name: MOUNTAIN VERNON-PEAK VITSI and with the Area Code: GR1340006. Additionally, this area has been documented to the Greek biotopes of the European program CORINE with the codes AG0060008 Peaks of Mountain Vitsi (Vernon) and AG0060006 Mountain Vitsi (Vernon). Furthermore, the area of Nymfaio is also documented to the Landscapes with Special Natural Beauty according to the program "Demarcation and Determination of Protection Measures of Landscapes with Special Beauty" of the Department of the Environment, Planning and Public Works (1996-1999), with the Area Name: "Nymfaio" and Area Code: AT4011024 (Bank "Filotis" 2009; Natura 2000 network and protected areas 2009).

The following table presents the impression of tourists as far as Nymfaio's sights, architecture and nature are concerned:

Table 4: Impression of Nymfaio's sights, architecture and nature

Impression of Nymfaio's sights, architecture and nature	Frequency	Percentage (%)
Very satisfied	208	73,2
Satisfied	68	23,9
Neutral	4	1,4
Non satisfied	1	0,4
Totally unsatisfied	3	1,1
TOTAL	284	100,0

The timeless charms of the natural landscape as well as the conscientious human intervention are featured through the answers of the respondents on what was their best impression. As a result, 69% of them support the successful architecture of the settlement and the substructures, when the natural environment gains the 16.5% of the best impressions.

The Nymfaio settlement has been declared preservable and traditional according to 1910/18.11.1978 of Presidential Decree (Greek Government Gazette 594 D'), because of the remarkable characteristics of its residential mast and buildings. It has also been declared preservable historical place. For this settlement there are specific building terms, and building out of plan is determined by the P.D. of 24/31-5-85/GGG 270 D' entitled "building out of plan". In this region there are not Urban Control Zones. On the other hand special terms are being added as far as the construction techniques are concerned (use of stone and steel sheet on roofs etc). Moreover, the projects on buildings constructions and their execution are controlled by the 4th Inspectorate of Monuments.

In order to examine further if there is a relationship between the variables of the questionnaire, is necessary the use of Pearson's χ^2 parametric test (Chi-Square Test), which examines the independency between nominal variables.

To be more precise, the relationship between the visitors' educational level and their intention to visit "Arktouros" was examined.

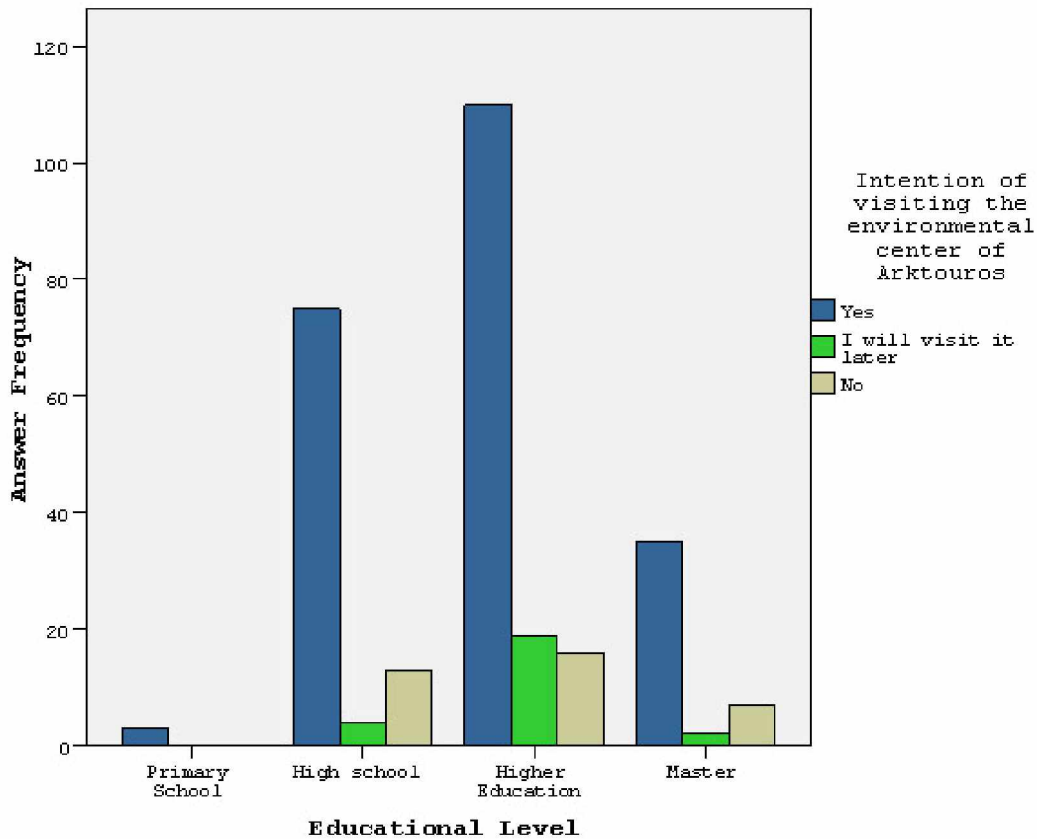
Furthermore, it was interesting to examine the possible relationship between the educational level of Nymfaio's visitors and their general impression of the settlement, consequently how tourists conceive the industry of tourism in Nymfaio.

At the same time was examined the possibility of the existence of a significant relationship between visitors' educational level and their impression of how clean and well organized the settlement is.

The following table presents the examination of the relationship between tourists' educational level and their intention to visit the environmental center of "Arktouros". These results are also presented on the graphic display that follows.

Table 5: Intention to visit the environmental center of "Arktouros" with educational level

		Intention to visit the environmental center of "Arktouros"			Total
		Yes	I will visit it later	No	
Educational level	Primary school	3	0	0	3
	High School	75	4	13	92
	Higher Education	110	19	16	145
	Master	35	2	7	44
Total		223	25	36	284



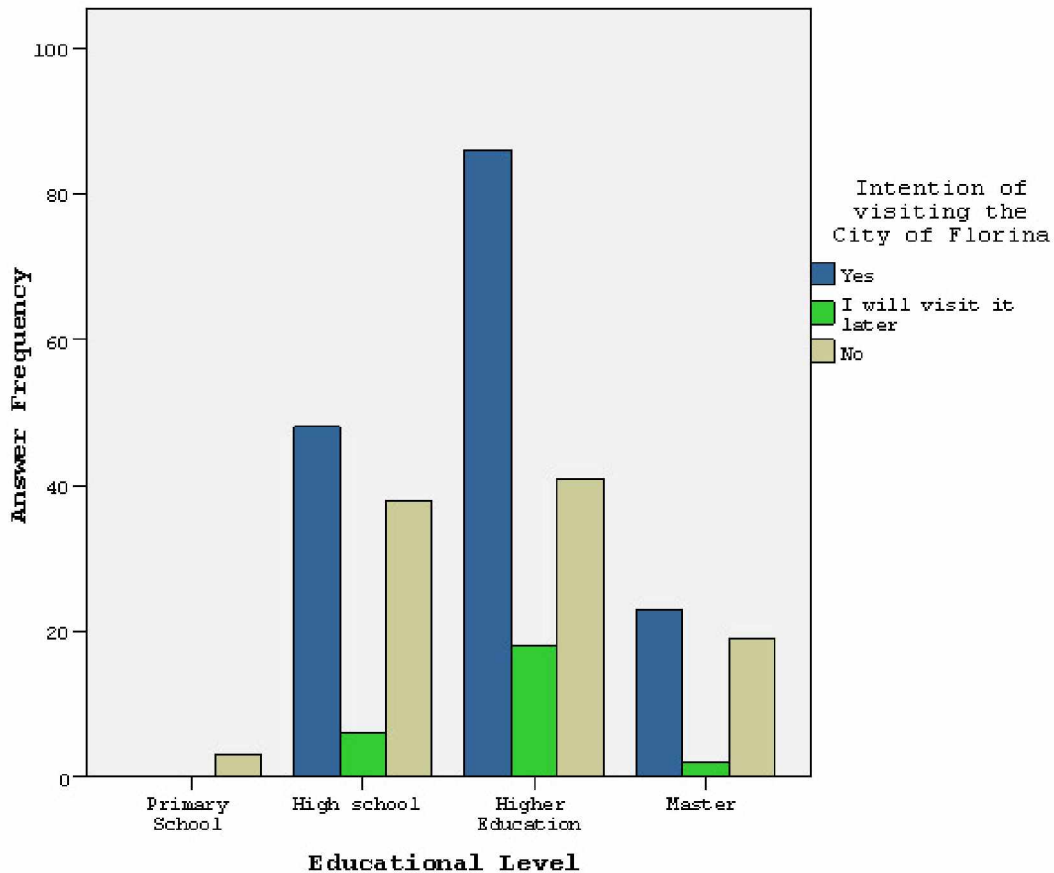
Graphic display 1: Intention to visit the environmental center of "Arktouros" with educational level

The result of χ^2 analysis presents that there is not a significant relationship between educational level and tourists' intention to visit the environmental centre of "Arktouros", by showing that the increased environmental consciousness does not depend on the educational level ($\chi^2=7,914$ and $P=0,244 > 0,05$).

There were many interrelations between the variables of the questionnaire but there was not a significant statistical dependence between them apart from the educational level and the intention to visit the City of Florina. The following table presents the examination results of this relationship and is also graphically presented.

Table 6: Intention to visit the City of Florina with educational level

		Intention to visit the City of Florina			Total
		Yes	I will visit it later	No	
Educational level	Primary school	0	0	3	3
	High school	48	6	38	92
	Higher Education	86	18	41	145
	Master	23	2	19	44
Total		157	26	101	284



Graphic display 2: Intention to visit City of Florina with educational level

During the examination of the relationship between educational level and the intention to visit the City of Florina, some interesting statistical relationships come up ($\chi^2=13,230$, $P=0,04 < 0,05$). There are signs which present that people, who have graduated from higher educational institutions have the intention to visit the City of Florina. After a further examination of this relationship can be concluded that, these persons have already visited Florina. This tendency can be explained by the existence of many artists, of the university and of the intense cultural action in Florina. Other destinations (City of Kastoria, ski centers, Prespes) were examined too, but there was no statistically significant relationship.

The aforementioned elements are signs only and they need further examination.

Conclusions

Based on the above, it is a fact that reaching conclusions that come from statistic elements and lead to analysis of complicated phenomenon and tendencies is not among the basic purposes of this research. On the contrary, it is on the extensive control on the systematic development that has been achieved in Nymfaio settlement that this research focuses on.

This community is successful because it managed to envisage, ahead of time, the form of the development's model that comes along with the protection of the environment; a political imperative and also a primary requirement from the modern societies in order to achieve sustainability, viability, health, culture and generally quality of life. The former, though predominant around the world, economic ideology of development for development was unsuccessful for the Nymfaio settlement. Summarily, the settlement's economy gained identity and an environmental harmony where the development is combined with both the environmental and the cultural specifications. This kind of development is characterized by the connections between the place, the identity and the quality of the environment with the final product offered.

That is the reason why it has been considered to be necessary a safety approach based on a spatial analysis of comparative advantage on infrastructures and policies that have formed an upturn economy and positive external influences on the same time. The environment tends to keep distances from the economic development that is already taking place in it.

The development of the region lies primarily on the configuration of a subsequence of its avant-garde as a cultural heritage. New opportunities come up all the time, due to the rapid improvement of the field of conference tourism, its high yields and the same time, the realization that there are many presuppositions for a multiple complicity of different types of tourism.

According to the analysis of this research conclusions, as presented in the previous chapter, many general conclusions come up considering the development of the tourism in Nymfaio settlement. This kind of tourism is fully characterized by the relationship between Nature and Culture, having many dimensions.

The settlement's visitors require very high standards of relaxation and are already in position to express them. The tourism's model, according to them, is divided to three different models; the settlement model (urban and natural environment, Nature and Culture), the tourist business model (stay the night- food- comforts) and the model of the tourist product of any form.

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