

Development of Agrotourism through the Application of Internet Technologies: Problems and Perspectives

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Abstract. Nowadays the concepts “vacations” and “tourism” have become intertwined. Tourism, among others, has eventually become a symbol of social status. Recently, however, alternative forms of tourism including agrotourism have emerged, which have the potential of relieving the congestion of ordinary holiday resorts. Agrotourism constitutes neither a symbol of social status, nor a means of social distinction. Instead, agrotourists live a healthy life in a natural environment and consume local products and services, while protecting the environment. This paper attempts to identify new growth patterns of agrotourist businesses within the context of their contribution to local development. Web tools are most helpful in this respect. Through the construction of informative websites, agrotourist handicrafts promote their products and attract visitors in localities.

Keywords: Greece, local development, agrotourism, agrotourist handicrafts, information technologies, website.

1 Introduction

Tourism is neither a phenomenon, nor an aggregation of economic fields. Most of all, it is a human activity which involves human behavior, utilization of resources, as well as contacts and relationships among people, economies, and environments. In addition, it concerns the natural movement of people toward regions which are different from those where they normally live and work (Bull, 2002).

Agrotourism is a special form of tourism that has emerged through the need for survival of small farmers and land-owners, who have therefore decided to apply traditional methods of land cultivation, avoiding pesticides and chemical substances. Although products of these cultivations witness a growing demand, these lots are rarely profitable. Therefore, in their endeavor to supplement their income, small owners have been offering alternative forms of tourism to visitors who wish to return to nature (Higham and Luck, 2002), to contact traditional modes of land cultivation, even to participate actively in them.

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People who select this kind of holidays savor landscapes of exquisite natural beauty and are engaged in a series of refreshing activities like hiking, cycling, riding, swimming etc. Moreover, they have the opportunity to taste the local cuisine and recipes, to consume traditional local health products, but also to contact manners and customs of the countryside, which have been long forgotten by the city people (Exarhos and Karagiannis, 2004).

Agrotourism constitutes a major contributor to local development. Establishment and manning of hospices entails creation of new jobs. Development of agrotourism yields additional profits for the rural sector, and most of all, dissuades migration of rural population to cities and retains younger people in the countryside. Moreover, agrotourism entails the revival of social life in remote villages, something that is urgently needed by inhabitants of small and remote settlements.

There has been witnessed that a substantial portion of profits acquired through agrotourism is often reinvested in agriculture - the main occupation of the country people. A considerable part of the agricultural income in certain regions is due to the active participation of women in the development of agrotourism, a fact denoting that agrotourism contributes to the emergence of movements, activities, and initiatives on the part of inactive social groups so far (Karagiannis and Exarhos, 2006). Initiatives and actions for the promotion of agrotourism have been observed in several parts of Greece. Selective examples concern Langadas, Kroussia (Kilkis), Grevena (Pindos), Kalambaka – Meteora, Karpenissi, Strofylia (Achaia), Sykamia (Lesbos), Plataies (Voiotia), Lissos (Crete), the former St Panteleaiimon (Olympus), Galatista, Arnaia, Vrasna, Ouranoupolis, Delvinaki and elsewhere in settlements near the Delta of the Ebro river, in the “Forest of Dadia”, in the Pangaion Mt, in Rodopi, in Agrafa, in the mountainous Konitsa, and elsewhere.

This paper attempts to shed some light on the perspectives and benefits obtained through the application of internet technologies by Greek agrotourist business, and on the other hand to identify problems and difficulties to this end. Benefits involve, among others, the advertisement of tourist attractions of localities, the interactive representation of data, and the virtual accessibility of remote areas by prospective visitors. Application of web technologies in the field of agrotourism is a one-way process, but it might be hindered due to the mentality of people of the countryside, as well as by the ignorance of opportunities offered through the web technologies.

2 The Agrotourism Product: Agro-handicrafts & Agrotourist Cooperatives

From the previous it is derived that in order to flourish in an independent form, agrotourism has to surpass its traditional role as a provider of housing and nutrition. It has to develop a wide range of integrated tourist services in order to satisfy needs and to come up to the expectations of tourists who were attracted by advertisements in the internet and thereafter opted to pass their vacations in the countryside.

Attraction of visitors and tourists to rural areas is not an easy task. In order to earn a complementary income and to secure an acceptable standard of living, agricultural communities have to pay particular attention to the quality of the tourist product they provide. Communal endeavors and entrepreneurial activities can be greatly enhanced

through the creation of websites (Andreopoulou *et al*, 2003). On the other hand, by browsing web pages from relevant thematic fields, users are capable of locating useful information.

The European and the national regulatory framework (Mytoula, 2006), particularly the provisions 797/1985 and 2088/1985 concerning the Mediterranean Integrated Programs (MOP), the Law 2169/1993 concerning rural cooperatives and the Law 1667/1986 concerning urban cooperatives, provided the framework for the creation of women agrotourist cooperatives. Thereby, women were offered an opportunity to contribute to community development, and in particular to the development of lagging and degraded agricultural areas. These initiatives aim at retaining rural populations to their land, at creating new jobs, at supplementing agricultural income, at reviving traditional production modes and cultural events, at utilizing local business resources, and at developing entrepreneurship at the countryside.

In due course, new legal interventions, such as the Regulation 2328/1991, have enhanced the initiatives for the establishment of rural enterprises (agro-handicrafts) which aim at improving agricultural income, at retaining rural populations to their land, even at motivating rural people who have migrated to return to their mountainous homelands. Moreover, the Law 2810/2000 concerning agricultural cooperatives provided for new forms and processes of organization of cooperatives, while the Law 3208/2003 imposed additional terms and restrictions concerning the protection of forests and forestal ecosystems. Under the legal framework mentioned above, more than 45 women agro-handicraft / agrotourist cooperatives have been established. According to their statutes, women agro-handicraft and agrotourist cooperatives function under the principle of equitable participation and mutual aid of members. They aim at the economic, social, and cultural development of their members, among others, through the following activities:

- Establishment and operation of agrotourist units and accommodations, development of ecotourism, social tourism and social works.
- Procurement of any kind of technical equipment or means of transportation that may be helpful to the fulfillment of the cooperative goals.
- Concentration, packaging, standardization, storage, conservation, transportation, and selling of products of the cooperative.
- Establishment of kiosks, stalls, and exhibition points.
- Procurement or renting rural or urban real estate for the creation of tourist infrastructure.
- Establishment and operation of restaurants, taverns, and bars.
- Utilization and promotion of products manufactured by members (dishes, handiwork, embroidery etc), or products of agrotourism.
- Establishment of units for manufacturing traditional products (jams, desserts, pasta, frumenty etc).
- Distribution of products to local, domestic, and international markets.
- Publicity and promotion of products and services of the cooperative.

3 Web Domains for Business

Development and promotion of new technologies is amply supported by the EC policies. As reiterated in the previous, the web, as well as the digital and network services, are utilized in order to enhance development of agrotourism. By now internet providers offer their subscribers free software for web browsing, also free hosting in web pages.

The internet is a most powerful and innovative business tool. It constitutes by far the largest information channel in contemporary society. In Greece an intense interest is witnessed recently regarding digital products and services through the web, while major improvements of broadband platforms have been carried out. Nowadays internet access is facilitated through various appliances at acceptable prices (PC, netbooks, tablet PC, cell phones etc) (Zacharopoulos, 2008).

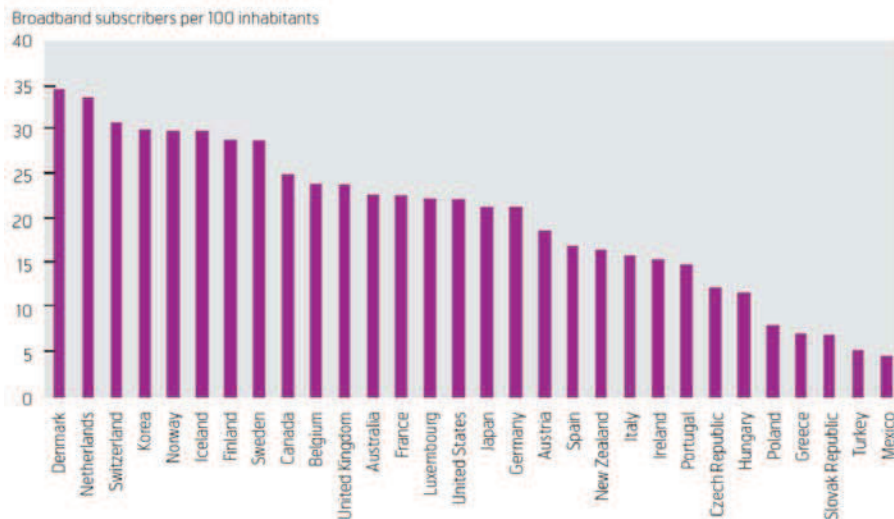


Fig.1. Broadband Subscribers per 100 inhabitants in 2007 (Source: OECD Broadband Portal).

By now Greece attempts to enter the broadband era, an era of particular importance, since broadband in the 21th century can be likened to the channels, railways, and highways of the 20th century. Broadband accessibility of selected countries is shown in Fig. 1. Even though Greece occupied the lowest positions in 2007, evidence from the OECD broadband portal shows that its Penetration Increase Rate has been continuously rising (Kopanas, 2008).

4 Agrotourism and the Internet

Cooperation between agricultural policy and tourist policy can yield benefits for both economic sectors. For the development of agrotourism, a close co-operation between *tourist business* and *agricultural business* is indicated. This constructive and creative synergy will be most beneficial when the appropriate internet technology, which has proved successful so far, is adopted (e.g. Worldwide web, E-mail, File Transfer Protocol, Teleconference) (Arapoglou *et al*, 2006). Through this synergy, as well as through the application of internet technologies, agrotourism has been emerging as an important contributor to the tertiary sector of the Greek economy. According to a recent research in enterprises of semi-mountainous and mountainous regions in Greece (Gaitanis and Karavangelis, 2008), about 50% possess PC and retain files containing useful information in written or electronic form, while the rest do not keep a file system. Most companies (71%) agree that nowadays it is a necessity to establish and retain an electronic filing system, but also to process electronic information. Moreover, the diffusion and exchange of information through the cooperation between institutions and enterprises in Greece and abroad has been suggested by them.

Consequently, close cooperation between agrotourism and the internet normally begins with selective information. A platform has to be determined, upon which relevant data disclosing information on agrotourism and on provision of services will be based. Under these circumstances, agrotourism completes its activities and amply compensates producers against a probable reduction of their income that might stem from slacking off their ordinary agricultural works. Compensation for lost incomes will be achieved by cooperation through the network and through the novel activities of agricultural production.

Nevertheless we consider that even though agrotourism constitutes a “small-scale phenomenon”, it resides in large areas and contributes substantially to the reduction of environmental damages, mostly owed to the excessive concentration of population per surface unit. Therefore, it is apparent that agrotourism plays an important role in environmental protection and in upgrading physical resources and soil.

Finally, although agrotourism is a form of “native tourism”, it is combined with local entrepreneurial initiatives, thereafter subjected to developments and interdependent activities which yield an immediate benefit to the socio-economic progress of the affected zones/localities.

The Regulation for Tourism 92/421/EU (17.7.1992) states that “*Tourism in EC has to respect local populations, as well as the physical and the cultural environment, so that quality of supply will be promoted.*” The same Regulation stresses the development of agrotourism, because “*aim of the EC action in this sector is the development of tourist activities in the countryside, in particular of Agrotourism, of small family hotels, or of activities of associations, municipalities, or local institutions.*”

In the endeavor for the creation of a business plan in agrotourism, the investment in electronic service is justified by means of being more economical than the conventional means of knowledge transfer. Within business, administration of knowledge actually does not represent a cost factor, but rather constitutes a form of

important capital, since the web constitutes the fundamental tool for electronic communication (Talanti and Polymenakou, 2008).

5 Promotion of Agrotourism Services through the Web

Agrotourism, as an alternative form of tourism, can be limited neither to the enterprises providing accommodations (rooms, hospices etc), nor to food services (restaurants, taverns etc) which undoubtedly comprise the basic infrastructure required for its development. In this sector are incorporated, among others, centers of healthy living conditions, home handicrafts & handicrafts of traditional hand-woven needlework and fabrics, home handicrafts & handicrafts for processing and packaging agricultural products, home handicrafts & handicrafts for processing and packaging dairy products, units for collection and processing aromatic herbs etc. Moreover, wherever history has been impinged through monuments and memorials in the periphery, an endeavor is made in order to elevate the historical identity of the particular area, so that it becomes a desirable destination for tourists (Oikonomou & Mytoula, 2010).

The agrotourist product has to be accessible and attractive to visitors, and to communicate them directly with the physical environment, with the architectural features and inheritance of the community, with the local people and residents of the countryside. This means that it has to be connected to the network and to the information technologies which have been gradually utilized within the Greek context in the recent years. The agrotourist product has to be based on an interactive presentation of data, so that the prospective visitor will be capable of finding relevant information about the region and its infrastructures (Papastavrou *et al*, 2005). In this context, people of the countryside are the protagonists of the endeavor for the formation and development of agrotourism. Their task is to motivate tired city people so that they spend their holidays in a meaningful and healthy way of life. By establishing creative websites, local people are capable of showing-up the natural and cultural elements of their community, thus attracting visitors for time intervals longer than 24 hours, and leading them to extend their vacation time in the area (Andreopoulou *et al*, 2006). They may offer high-quality tourist products to people who wish to pass-by even for one day, or for the weekend, in order to win their gratitude and make them come again for longer.

The network provides a flexible platform for information exchange. Nowadays the internet and information technologies constitute indispensable tools for the developmental strategy of agrotourist business. Agrotourists are best served through interactive presentation of data, so that they become capable of locating information about the locality and its infrastructure (Papastavrou *et al*, 2005).

The network offers new perspectives through the provision of high-quality agrotourist services within their developing domain. Agrotourist companies of today have to create web pages since promotion of their services and activities contribute to the promotion of the overall agrotourist product, thus serving their ultimate objective, which is the attraction of visitors. Realization of this project is both simple and cheap, since it requires only the existence of elementary telecommunications infrastructure, telephone lines, and internet connection. Thereafter, unbarred communication with potential agrotourists will be established irrespective of the

location of their residence, under the condition that the web pages contain all necessary information and relevant data (Lallas and Papastavrou, 2008).

Following this trend, through the inclusion of the website into thematic indices, users are capable of locating helpful information by moving from general topics to special ones. Therefore, an important precondition for the success of a commercial website is, on the one hand to provide users with accurate, detailed and updated information, and on the other hand, to identify its target groups through market segmentation (Capron, 1998). Purpose of the website is to offer a wide range of information, to develop an interactive data base about the locality and to promote local agrotourist activities (Andreopoulou *et al*, 2006).

The website ensures presence of the agrotourist business in the network, and ought to be accessible to all interested users. Promotion of the agrotourist business entails a detailed presentation of the various activities and services in multiple languages, as well as sufficient communication data, including property details, address, telephone, fax, email etc.

Beyond a mere presence in the global network, the contemporary agrotourist website has to contain rich informative material about the locality and its scenic beauties, e.g. videos, photo collections etc. Additional features that would be helpful to agrotourists include a search engine, useful links, temperature and weather forecasting, distances from nearby urban centers, interesting sights and refreshment grounds of the region (archaeological sites, ski resorts etc), and indicated itinerary and transport information on how to reach the locality. Interactive browsing constitutes a “must” for the agrotourist website of today. Interactive elements concern, among others, the capability to browse among detailed maps and the use a web camera. Social networking and the Facebook have opened new pathways of digital connection through forums, chat groups, and online visitors’ books where tourists may exchange their experiences and impressions.

From the above it is derived that the contemporary agrotourist website constitutes an integrated information system which is capable of administering fully the whole tourist transaction. In this respect, commercial exploitation of the web page as a distinct product is feasible by hosting advertisements, as well as by establishing personal contact with users through passwords. This way, user-members have access to customized data and receive information according to their case-history and individual preferences.

6 Concluding Remarks

Agrotourism has emerged as a necessity due to the unfavorable developments in the agricultural sector and the depopulation of the Greek countryside. Nevertheless, nowadays it constitutes a capital dimension of the new regional development strategy of Greece in view of the year 2020 (Andreopoulou, 2010). Agrotourist activities offer new perspectives to the development of the mountainous countryside. They are offered at a low price, they do not require high investment costs, and they are free from influences by foreign patterns of consumption. Nevertheless, they require the sensitization of the rural population toward the direction of a decentralized and balanced socio-economic development. This mode of development can be achieved through the mild exploitation of the physical and natural environment, as well as

through the organization of an integrated promotion campaign in order to set-off the beauty and the power of the countryside.

Agro-handicrafts that are involved in agrotourism receive a favorable treatment by the national and EC authorities through beneficial legal provisions and subsidies. This is apparent in the case of the 45 “Women Cooperatives of Agricultural Handicraft and Cottage Industry”, who have established the “Union of Agro-Handicraft and Agrotourist Cooperatives” since 1999 in order to facilitate promotion and coordination of activities of members.

As reiterated in the previous, a necessary precondition for the development of agrotourist areas, as well as for the successful function of agrotourist business, is the evolvement of a new mentality, oriented toward traditional patterns of land exploitation and overall lifestyle. Revival of tradition, however, does not entail prevalence of “technophobia”, or disregard of technical developments and innovations. Instead, information and communication technologies must be readily applied as an integral part of and a most powerful tool for marketing and promotion of agrotourist activities. Creation and continuous improvement of competitive websites for municipalities and agrotourist associations is most helpful for the development of interaction among local population, as well as for the elevation of the locality (Lefakis *et al*, 2007).

This paper ends up with the suggestion for the promotion, integration, and application of all means of electronic communication, so that participation of local societies and agrotourist business in digital social networks will be feasible. Within the context of the promotion of agrotourism, an authentic dialogue can be initiated through exchange of viewpoints and experiences between agrotourists and inhabitants of the locality. Social dialogue today is largely facilitated through web applications such as blogs, collective web authors’ endeavors (wiki’s), social networking domains (MySpace, Facebook, Twitter), video collections (utube), photograph collections (Flickr, PicasaWeb), and audio web transmissions (Podcasts).

Novel web applications constitute an integral part of the contemporary strategies for the promotion of agrotourism. Technically, the potential for promotion has been boosted due to the fast broadband connections. Functionally, the potential for promotion has been upgraded through the new mentality designating the use of the web, named “Participative Web”, or “International Web 2.0”. Broadband technology, which is necessary for the transition to the Web 2.0, constitutes the driving force for the economic development of regions of agrotourist interest.

The Report of the Special Secretariat for Digital Design titled “Digital Strategy for Greece 2007-2013” states that the target of the strategy is “the creation of equal opportunities and new perspectives through the information and communication technologies, so that qualifications of citizens will come in the limelight ... it does not impose binding restrictions to citizens to adopt new means.” Therefore, application of modern technology by businessmen and institutions in the field of agrotourism is not an end itself, but a means for development (Lytra and Apostolopoulos, 2007).

References

1. Bull, A. (2002) *Economics of Travel & Tourism*. N. York: Wiley.
2. Higham, A. and Luek M. (2002) Urban Ecotourism. A Contradiction of Terms? *Journal of Ecotourism*, 1, p. 36-51.
3. Exarhos G. and Karagiannis St. (2004) *Agrotourism*. The Centre for Technological Research of Crete, CTR-Crete Publications.
4. Karagiannis St. and Exarhos G. (2006). *Tourism*. The Centre for Technological Research of Crete, CTR-Crete Publications.
5. Arapoglou A., Vavoglou H. Oikonomakos E. Fytros, K. (2006). *Informatics*. Ministry of National Education and Religion, Pedagogic Institute (in Greek).
6. Gaitanis D. and Karavangelis E. (2008) Data Analysis and Findings in Research on Quality in Tourism, Handicraft, Agro-Manufacturing, and Culture, in enterprises of mountainous and semi-mountainous areas in Greece and Spain, *Proceedings, 1st Scientific Conference: "Education, Development & Production"*, Amfissa, p. 83-96 (in Greek).
7. Talanti. E and Polymenakou A. (2008) Electronic Learning in Work Environments. *Proceedings, 1st Scientific Conference: "Education, Development & Production"*, Amfissa, p. 144-153 (in Greek).
8. Oikonomou A. and Mytoula R. (2010) *Ecological Administration of Buildings, Settlements, and Cities, in the European Union*. Athens: Stamoulis (in Greek).
9. Papastavrou A., Lefakis P., Andreopoulou Z., Vasiliadou S., Ioannou K. and Lazaridou A (2005). *Web Application for Regional Presentation and Development*. *Proceedings, Joint conference of the 5th Conference of the European Federation for Information Technology in Agriculture, Food and Environment & The 3rd World Congress in Agriculture and Nature Resources*. 25-28 July, Vila Real, Portugal p. 551-558.
10. Andreopoulou Z., Theoharopoulos D. and Papastavrou A. (2006) Contribution of the Internet in the Touristic Promotion of Mountainous Communities. *Touristic Issues*, 1, p. 8-18 (in Greek).
11. Andreopoulou Z., Athanasiadis D, Papastavrou A. and Papastavrou K. (2003) Identifying Drama's Prefecture as a Tourism Destination through the Presentation of its Natural Environment in the Internet. *Proceedings, International Conference on Telecommunications & Multimedia TEMU*, 5-7 July, Heraklion, Crete.
12. Mytoula R. (2006) *Sustainable Regional Development in the European Union and Restructure of the Greek Urban Environment*. Athens: Stamoulis (in Greek).
13. Lallas E. and Papastavrou K. (2008) Telematic Methods and Proposals for Searching and Managing Personnel for the Local Small and Medium Enterprises as a Factor for Enhancing Development and Production in Localities. *Proceedings, 1st Scientific Conference: "Education, Development & Production"*, Amfissa, p. 136-143 (in Greek).
14. Capron. H. (1998) *Computers. Tools for an Information Age*. Addison Wesley & Longman Publishing Company (5th Edition).

15. Zacharopoulos V. (2008) Computer Networks. Case Notes, Technical Educational Institute of Crete (in Greek).
16. Kopanas G. (2008) Telecommunications Services for All, Solutions for Everybody. The Position of Greece within Europe. Proceedings, 1st Scientific Conference: “Education, Development & Production”, Amfissa, p. 206-212 (in Greek).
17. Andreopoulou Z. (2010) Utilization of the Internet for the Promotion of Ecotourism Units in Greece within the Context of the New Strategic Regional Development in View of the Year 2020. Proceedings of the Conference: “The Regional Dimension of the New Strategy – Europe 2020” (16th Conference of the Greek Regional Scientists in cooperation with the Post-Graduate Studies Program “Sustainable Development” of the Harokopion University, 15.10.2010, p. 194-200 (in Greek).
18. Lefakis P., Skarpaliori K., Andreopoulou Z. and Papastavrou K., (2007) Development of an Internet Environment for Localities Emphasizing on Physical Environment. *Touristic Issues*, 2, p. 23-31 (in Greek).
19. Lytra A. and Apostolopoulos G. (2008) Utilization of Broadband Content which is Produced by Users within the Context of the International Participative Web in Campaigns for Oral Communication for the Promotion of Alternative Forms of Tourism in Fokis. Proceedings, 1st Scientific Conference: “Education, Development & Production”, Amfissa, p. 336-349 (in Greek).