A USER-FRIENDLY METHOD FOR MONITORING ECOTOURISM TRENDS IN BULGARIAN PILOT REGIONS BASED ON THE RESULTS OF THE BIODIVERSITY CONSERVATION AND ECONOMIC GROWTH (BCEG) PROJECT

Dr. Ninel Nesheva Kiosseva

Department of Economics and Business Administration,

1618- Sofia, (Bulgaria),

Montevideo St, 21,

tel.: +359 (2) 8110620 (605,625);

fax: +359 (2) 8110365

New Bulgarian University

E mail: rubins85463@gmail.com;

Robert Hickey

Applied Research and Communications Fund

1113- Sofia, (Bulgaria)

Alexander Zhendov St. 5

tel.: +359 (2) 973 3000,

fax: +359 (2) 973 3588

E mail: rfhickey@gmail.com

(http://www.arcfund.net/?id=1279)

A USER-FRIENDLY METHOD FOR MONITORING ECOTOURISM TRENDS IN BULGARIAN PILOT REGIONS BASED ON THE RESULTS OF THE BIODIVERSITY CONSERVATION AND ECONOMIC GROWTH (BCEG) PROJECT

Abstract

Purpose: This study presents an attempt to create guidelines for user-friendly method for monitoring ecotourism trends in connection with a project of USAID, aimed at the development of ecological tourism in Bulgaria.

Motivation: Our motivation for writing this article is our desire to pay attention ecological tourism in Bulgaria. We want to put a discussion on the introduction of more adequate methods of measuring environmental impacts and economic growth at regional level (especially when it comes to small and less developed regions). Created by international organizations methodology is too complicated and makes it impractical and unusable in small and inadequate administrative capacity regions. We want to draw attention to the need to discuss more flexible and differentiated policy of the state of eco-tourism and opportunities for application of certain accounting options that would benefit its development in Bulgaria. It would be beneficial for the correct measurement of the environmental effects of economic growth in relation to eco-tourism and would allow for more adequate and efficient management of ecological tourism activities.

Designs/methodology/approach: The methods of analysis used include accounting analysis, statistics, and institutional methods. The study examines a real example of ecotourism projects. The basic data on which the present survey built consist of official documents and statistics that are publicly accessible.

Findings: For the less developed regions, the monitoring and reporting systems of the economic and environmental benefits of ecotourism should be simplified, but consistent with the general principles of accountability and monitoring. Along with this, they should reflect the contributions of the most important organizational forms in creating economic growth and conservation.

Research limitations/implications: Not all necessary survey data are publicly available or collected. This situation required the use of scientific methods of analysis to eliminate the lack of data.

Paper type Research paper

JEL: M 41, H 83, P 28, Q56, L 83

A USER-FRIENDLY METHOD FOR MONITORING ECOTOURISM TRENDS IN BULGARIAN PILOT REGIONS BASED ON THE RESULTS OF THE BIODIVERSITY CONSERVATION AND ECONOMIC GROWTH (BCEG) PROJECT

I. TOURISM IN BULGARIA

A) HISTORY OF TOURISM IN BULGARIA

Bulgaria has a long tradition in tourism development. Tourist trips date back to ancient times in the Bulgarian lands. In antiquity, religion was an initial prerequisite for the emergence of tourism, seen as travel of persons and their temporary residence outside their permanent residence, without having to work and receive income in the areas visited.

The oldest type of tourist movement in the Bulgarian lands is linked pilgrimage. Such movements, in which the elements of tourism, including travelling a great distance and seeking food and shelter, are registered in the Bulgarian lands in antiquity. They are dictated by the confession of religious cults, including parts of the Thracian population.

During the middle Ages, there is such a religious tourism to pilgrimage to holy places - the adoption of Christianity are pagan, but after the imposition of Christianity during the IX century to worship the relics of saints, religious rites and others.

During the period of the Bulgarian Renaissances tours from Bulgaria to Jerusalem were organized to worship the Holy Sepulcher and the holy places. Bulgarians, who visited Jerusalem, received the title "Hadji"[1].

During the Middle Ages regular trips were made in connection with the pilgrimage to the holy places of Christianity in Bulgaria - the major monasteries Rila and Bachkovo.

Modern Bulgarian tourism occured after the liberation of Bulgaria from Ottoman rule (1878), when the first hotels were built. "Bulgaria" Hotel was built in Sofia in 1881 and designed by Czech architect Anton Kolar. Grand Hotel Royal, was built in 1898 by Italian architect Pernigoni.

The founder of organized tourism in Bulgaria is considered the Bulgarian writer Aleko Konstantinov, who initiated the establishment of the first tour company in the country. The date of birth of organized tourism is considered the day on which group climbed the highest peak of Vitosha mountain near Sofia, the Black Peak (2290 m) on August 27, 1895.

Therefore, Aleko Konstantinov has launched the organized tourist movement in Bulgaria as precisely organized eco-tourism. Aleko's idea was, through the creation of organized tourism, to display the natural beauty and cultural heritage of Bulgaria and to educate its citizens in the most valuable moral virtues. Aleko Konstantinov died in 1897 and the movement faded, but is was restored on 23 August 1899 with the creation of the first Bulgarian tourist company "Aleko." Spring and autumn groups of Sofians made excursions to Mount Vitosha, (located close to Sofia) and since the first date and hiking trails in the mountains and the surrounding villages of Boyana and Dragalevtsi. (Kabadjov, 2007)

The expansion and development of the organized tourist movement was helped through the cooperation of state institutions such as the Ministry of Railways, Ministry of Education, and others.

---

[1] From Arabian *hadj* - pilgrimage required

Along with eco-tourism recreational tourism started to develop. At the end of the 19th century on the banks of the Iskar River traveled a large number of tourists. The number of holidaymakers the longest river in Bulgaria reached 200,000. At the beginning of the century, first restaurant near the Iskar River was opened, geared primarily to tourism.

Winter tourism in the Rila Mountains dates back to 1896 when Bulgarian Prince Ferdinand built a summer residence and hunting lodges there. This ultimately turned into a center of "political tourism", because the politicians and businesspersons built houses there. Today, Borovets is one of the biggest Bulgarian ski centers. During this period, the promotion of tourism activities increased as well as an awareness of forestation and environmental protection, marking trails, and construction of huts, mostly with volunteer labor, the beginning of mountaineering and caving and organized hiking, including winter alpine ascents also emerged during this period.

By 1944, prior to the entry of the Soviet Army in the country, Bulgaria had 370 hotels, mainly in big cities. After the socialist revolution in 1944, all the hotels were nationalized and consolidated in "Horemag" (Hotels, Restaurants, Shops) (1947) transformed in 1948 into "Balkantourist" which existed until 1953. After this, it was converted into a government-business enterprise according to the state policy for the development and maintenance of existing facilities. After 1944, massive organized tourism federations are established and provided tourist activities and sports tourism, mountaineering, caving, nature protection and guidance.

During this period, the construction major international tourist resort infrastructure began.

In 1957 the construction of the resort complex "Golden Sands Black Sea" began as an opportunity for the development for marine recreation and two years later construction of the complex "Sunny Beach" began. For several years thereafter, this area constituted a serious logistical base for the development of international tourism.

International tourism was emerging as an important source of foreign currency for Bulgaria. An increasing capacity and number of tourist complexes for foreign tourists imposed changes in the management of this sector and in 1963 the General Directorate of Tourism, was established, which was split into three divisions:

1. State enterprise "Balkantourist" designed to the service of foreign tourists;
2. State enterprise "Tourist" - the management and operation of hotels and restaurants, which were not intended solely for foreign tourists;
3. State enterprise "Rodina" - to organize travel in the country and abroad for Bulgarian citizens.

In 1977, the territorial principle are separated eight tourist complex, which

1. Four number seaside (Balkantourist Burgas, Golden Sands, Sunny Beach, Albena)
2. Two number mountain (Pamporovo and Borovets)
3. Two number city (Sofia, Plovdiv.
4. Separately itemized 11 hotel complexes to chain "Interhotel": 'Interhotel Bulgaria in Bourgas in Plovdi "Intrerhotel Leningrad"," Interhotel Trimontsium", Interhotel Novotel " in Sofia – "Interhotel Europe", "Interhotel Balkan (now"Sheraton"s), "Interhotel Moscow ", in Veliko Tarnovo, "Interhotel Tarnovo".

In 1983 the Bulgarian Association for Tourism and Recreation created a separate company, "Orbita" for development of youth tourism.

Since 1989, the financing of tourism by the state was suspended and the number of huts operated by the Bulgarian Tourist Union was reduced.

In the last years of the twentieth and early twenty-first century mass nature tourism resumed, people began to seek closeness to nature including the traditional activities such as hiking (Economics and finance, marketing, management and business and staff management, 2010).

Over the past 10 years, the creation of an entirely private tourism industry in Bulgaria has emerged and by 2007, Bulgaria offered a total of 610 thousand beds in hospitality establishments. Almost 100% of the existing facilities existing prior to 1995 have been renovated. Hotels of medium and high quality (three, four and five stars) comprise 75% of the total beds. The number of tourists increased in 2007 to 6.64% compared with the 2005. A total of 4,364,557 foreign tourists visited the country for holiday and vacation (without children entered in the passports of their parents) in 2006 (6.70% over the same period in 2005). This data ranks Bulgaria 36th place worldwide in arrivals according to data published in "World Tourism Barometer, June 2007 edition of the World Tourism Organization. (WNVTO, World Tourism barometer, 2007)

B). IMPORTANCE OF TOURIST SECTOR FOR BULGARIAN ECONOMY AND PERSPECTIVES OF ECONOMIC GROWTH. INITIAL PROJECT ASSESSMENT

1. Place, role and characteristics of tourism and ecotourism in Bulgaria's economy

Tourism is has a big economic importance for Bulgaria. Bulgarian nature has rich potential, with mountains containing over 4000 open caves. 38% of the country's territory is covered with forests and woodlands; there are 600 mineral springs, 3 national parks, 89 nature reserves, and 142 protected areas.

Created during the socialist period, the structure of tourism has not changed. It continues to be dominated by maritime tourism, in which major investments were made during the socialist period. After this, the infrastructural base was privatized and developed, while much less has been done to develop other types of tourism by private industry. Therefore, eco-tourism continues to lag behind and takes a relatively small share in the tourist system in Bulgaria. The following table illustrates this:

Insert Table 1 about here

This shows that infrastructure development and environmental tourism lag compared to other types of tourism." (State Agency of Tourism, 2009)

Insert Table 2 about here

The importance and opportunities for tourism development are indicated by the sectors balance of payments. The balance of payments in Bulgaria and the establishment of a balance of tourism has the following features. flows recorded on the credit side, represent that part of gross domestic product, provided the rest of the world (exports of goods and services) and provision of factors of production expressed by received (or to be received) income - compensation of employees and investment income (interest, dividends, etc.). Includes also offsets received free and real resources (transfers). Tourism is reported in the article "trips". Tourism (travel) covers goods and services, including those related to health and educational services provided to travelers for business or personal. (Methodological notes on the compilation of balance of Bulgaria, 2011)

Insert Table 3 about here

Evidence suggests that the summer tourism season, forms the bulk of the net proceeds of Bulgaria's current account. This is due to particularly high development of marine tourism.

The drop in tourist revenue outside the summer season shows a negative current account due to the insufficient development of other types of tourism and the overall productive structure of the Bulgarian economy.

Estimating from the statistics, we can confidently conclude that the tourism industry is crucial to the economy of Bulgaria. On the other hand, it continues to be developed in an unbalanced way by the inherited from the socialist structure of the industry. Bulgaria has the resources for development and other types of tourism, including environmental and ecotourism. However, the excessive construction at the seaside has led to environmental destruction in this region.

For these reasons, support for the diversification of the product structure of tourism in Bulgaria justifies the implementation of the project Biodiversity Conservation and Economic Growth (BCEG), which focuses on ecotourism, in order to exploit the touristic resources of Bulgaria. To do this, there is a need for the development of an ecological culture of the people and in particular the mobilization of entrepreneurs in the tourism sector for the creation of conditions for the revival of local production in the regions. It is the most sensitive sector in terms of deepening climate change and global warming, environmental protection and compliance with the principles of sustainable tourism development. However, ecological tourism in Bulgaria has some specific advantages and disadvantages such as:

- Untapped yet significant potential of natural resources
- No specified with measured parameters national strategy for ecotourism development
- Information is insufficient and training of local communities about the values of natural resources;
- Lack of information in a systematic way of resources for ecotourism;
- Training in ecotourism and human resource development are not yet effectively integrated into the Bulgarian educational system;
- There are no accepted standards for information management for ecotourism, and there are no mechanisms for effective, inexpensive and rapid exchange of information between suppliers, manufacturers and markets;
- Insufficient products and services in the field of ecotourism
- Underdeveloped infrastructure inside the country (airports, roads, public transport);
- Lack of tourism offices of major target markets for Bulgaria;
- Lack of experienced and trained staff;
- Lack of activity of NGOs and the lack of clarity regarding the functions and powers to raise awareness in the sector and the formation of decisions by the institutions;
- Lack of effective national system for collecting, storing and distribution of reliable statistical and marketing information of Bulgarian tourism;

2. Ecotourism

Ecotourism has been variously defined in a number of ways by its leading proponents. In 1991, The Ecotourism Society said, "Ecotourism is responsible travel to natural areas that conserves the environment and sustains the well-being of local people. The World Conservation Union defined ecotourism as "environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features - both past a present) that promotes conservation, has low negative visitor impact, and provides for beneficiary active socio-economic involvement in local populations." (Wood, M., 2002, p.9).The UN report on Ecotourism also characterizes a number of components of ecotourism which appear common to much of the literature on what characteristics represent ecotourism. These include the contribution to the conservation of biodiversity, sustaining the well-being of local people, including an interpretation and learning experience, responsible action on the part of tourists and the tourism industry,

tourism that is delivered to small groups by small-scale businesses, requires a low-level of consumption of non-renewable resources and tourism which emphasizes local participation and business ownership in particular for rural people. (Wood, M., 2002, p.10).

At the same time as achieving these objectives, ecotourism is also a business opportunity that is designed to raise the incomes and living standards of those who take advantage of its potential. Given its dual economic and environmental objectives, its proper management is very important to the achievement of its economic objectives, without paradoxically compromising the environmental sustainability upon which its economic strength depends. Achieving these dual objectives begins to require differentiating between tourism in general and ecotourism as a niche segment within the umbrella of tourism in general. A cursory examination investigation into ecotourism will show that there are a number of guidelines, programs; criteria and accreditation systems which indicate that the measures by which ecotourism are measured differ from place to place. This occurs not only between countries but also within countries as well as between individual tourism companies.

Ecotourism is a more recent phenomenon that tourism itself. With its origins in the 1970's and 1980's, ecotourism was demonstrated to be potentially significant source of revenue for conservation efforts through academic research as well as organically driven by a public interest as a result of raised awareness by increasing environmental concerns which began to permeate the culture through increased media attention as well as companies catering to the outdoor equipment market. The effect appeared to be self-reinforcing, with public interest supporting a burgeoning ecotourism businesses that was able to invest in the destinations that they promoted by hiring local people and supporting the local economy. Given that the industry was seemed to emerge from the grassroots level resulted in the situation that we see today; namely that the principles and approaches to ecotourism are very individualized and are largely dependent on the views of individual business owners with only a mild influence from regional or national government as well as essentially nothing from the international level. Of particular important in the context of this study is that the United Nations Environmental Report notes "that standards in the field of ecotourism are quite difficult to measure, has allowed businesses and governments to promote ecotourism without any oversight." (Wood, 2002, p. 12) This lack of consistency and oversight has clear ramifications for the use of the term ecotourism as a marketing tool to attract tourists, rather than as an instrument supporting its multi-pronged approach of supporting local economies and biodiversity as well. Often referred to as "greenwashing" (which applies to a situation where a façade of environmental considerations conceal the fact that nothing substantive has been proposed or achieved in environmental protection) this issue undermines both the environmental aspects of "real" ecotourism and, if persisting over enough time, can confuse and frustrate potential ecotourism travelers.

In order reduce this uncertainty and maximize the potential for ecotourism to deliver on its ostensible objectives, a number of principles were developed by The International Ecotourism Society and form the cornerstones of the sector and should be considered when the promotion of ecotourism is promoted regardless of geographic location. These include:

1. Minimizing the negative impacts on nature and culture that can damage a destination
2. Educate the traveler on the importance of conservation
3. Stress the importance of responsible business, which delivers goods to meet local challenges and delivers conservation benefits
4. Direct some of the revenues to conservation and management of natural areas
5. The need for regional tourism zoning and visitor management plans designed for potential ecotourism destinations

6. Use environmental and social studies as well as long-term monitoring programs to assess and minimize negative impacts
7. Attempt to maximize economic gains for the local community (i.e. people living in close proximity to the natural attraction in question)
8. Ensure that tourism development and the built environment does not negatively impact the limits of acceptable change as determined through cooperation between local residents and researchers
9. Utilize infrastructure that in environmentally sustainable with the surrounding environment, minimizes fossil fuel use and conserves local biodiversity.
10. At the heart of the present work is to work towards improving the sixth and seventh principle above in Bulgaria as both environmental policies as well as those focusing on rural development.

In order to promote the above principles in the development of an international ecotourism certification scheme, or at least the ways that such a certification scheme can contribute to the achievement of the above mentioned principles, is needed. The problem here is that while certification is essential to deliver the stated objectives and increase consumer confidence in their travel choices, certification relies on environmental and economic criteria and independently verifying this data, the problem remains that such data can be extremely hard to capture and analyze in a standardized way. Ecotourism destinations are dispersed and may not contribute enough to a country's GDP in order to justify the development and implementation of new methods of monitoring, including the collection of data where communication channels and the potential for electronic reporting may be weak. As such, the development of criteria and an evaluation system specifically tailored to this type of enterprise are of particular importance. While such criteria will surely differ due to the uniqueness of each country, region or destination, a possible architecture for such a certification system had been proposed in 2001 for The International Ecotourism Society as a potential starting point. These included:

1. Indicators for sustainability arrived at by research of appropriate indicators based on best-practices
2. Indicators for sustainability should be approved through a stakeholder process
3. Indicators for sustainability should be arrived at for each part of the ecotourism industry (hotels, tour operators, transportation)
4. Indicators for sustainability will vary according to region and should be arrived at according to local participation
5. Certification programs require independent verification procedures that do not result in a conflict of interests with the agency required to certify
6. Certification programs will probably not pay for themselves through fees and will need national, regional or international subsidization
7. Certification programs should specify the products or locations the fulfill relevant criteria as certified
8. Certifications should be ground tested before full implementation in order to ensure the functionality of the system, in order to ensure that collected data can be independently verified.

The idea behind certification and monitoring systems is to increase the potential of this type of tourism to deliver its stated objectives; rather reduce the number of potential ecotourism operators, the idea is to improve the business environment so that others could grow. This also applies to the positive economic spill-over effects that members of the local community experience when they supply support services and goods to ecotourists or indirectly at some link in the ecotourism supply chain. Maximizing the positive effects from these spill-overs is contingent upon both the existence of small and medium sized enterprises as well as the

degree to which ecotourism establishments source their products and services locally. While general policies designed to improve the business climate may have some impact on ecotourism and specific policies tailored towards improving the environment for ecotourism (such as certification) may have an even more appreciable effect, these primarily focus on the supply-side of the market. It is also important to look at the demand-side in order to see what types of activities that potential tourists are looking for. These may consist of wildlife tours to remote areas where professional researchers are conducting their work and to listen to expert talks by them or the ability to stay in state-of-the-art structures which have low impacts on the surrounding environment in rustic, biologically diverse settings. In Europe, for example, where rural areas are often agriculturally oriented, ecotourists can travel to pristine areas where the agricultural economy is dwindling in the face of international competition. (Wood, 2002, p. 18). The key to promoting the demand side of ecotourism is to link an increasing rise in the public awareness of environmental concerns with the purchasing power of tourists. This is why it is critical to not only market what an ecotourism trip is, but also to communicate how their expenditure will allow them to vacation while simultaneously promoting their environmental values.

As the definitions of nature tourism, sustainable tourism, ecotourism (and other tourism typologies) overlap and it is hard to distinguish between the intent and specific objectives of individual tourists, only rough approximations of the ecotourism market can be discerned. Such a rough estimate of *international* tourism was approximated as about seven percent of the tourism market, equating to about 45 million arrivals in 1998 and a projected number of 70 million in 2010 (this prediction was made in 1997 and does not include domestic ecotourism). (Wood, 2002, p. 20). However, recent developments may likely have bucked this tradition, with visiting to natural sites rising in the 1980's and 1990's. The problem remains that sufficient statistics do not exist for the nature tourism market in Europe and as a result it is difficult to adequately determine the valuation and size of the ecotourism market or the appropriate target market. Some research shows that Europeans have an above average interest in nature tourism than tourists from other parts of the world although this information is specific enough to allow for the optimal targeting of ecotourism programs to improve the profile and the positive results from this form of tourism.

3. Ecotourism in Bulgaria

As indicated above, the global tourism market is growing and the nature tourism market is growing even faster. (National Ecotourism Strategy and Action Plan for Bulgaria, 2004.p. 9). As of 2004, the Bulgarian tourism market was in a period of growth and with the accession to the European Union in 2007, growth in this sector may be accelerating even faster. Between 2001 and 2002, international tourist arrivals increased by 8.6% and between 2002 and 2003 the number of tourists visiting Bulgaria increased again by 18% most of which came from Germany. Bulgaria was one of the initial countries to adopt the *Guidelines for Activities Related to Sustainable Tourism and Biological Diversity* which were used in developing the countries National Ecotourism Strategy. (National Ecotourism Strategy and Action Plan for Bulgaria, 2004.p. 10.).

There is great potential for the tourism, and ecotourism specifically is to overcome some of main problems facing Bulgaria during the transition period to a market economy. This transition has been marked by inflation, joblessness, and high impoverishment, especially in rural areas where many potential ecotouristic sites are located and able to provide significant high returns on small upfront investments. As the National Ecotourism Strategy and Action Plan points out, such development in rural areas can significantly increase strength of regional economies and create more even development across Bulgaria's regions. It also describes efforts at promoting ecotourism and exploiting natural regional assets as

inconsistent and uneven. A methodological and consistent approach to supporting ecotourism in Bulgaria would help crystallize the natural potential of the country into economic competitiveness.

The National Ecotourism Strategy and Action Plan also serve as a basis for understanding the potentials for ecotourism in Bulgaria. The strategy summarizes as number of areas where research was conducted to understand a number of interlocking factors, which affect ecotourism. These include resource diversity, the policy framework, relevant stakeholders, infrastructure and market trends. The results of this were summed up in a SWOT (strengths, weaknesses, opportunities and threats) analysis that shed light on the future direction for the development of the sector.

Resource Diversity – Bulgaria has a system of protected areas which cover about 5% of the territory of the country designed to protect areas of high biodiversity. Many areas in Bulgaria are part of the Nature 2000 ecological network and the National Ecological Network which will promote sustainable development in the country. The country has over 40,000 sites of national or international significance and which are protected under law and many events of cultural importance.

Policy Framework – As of 2004, there were eight national strategies and plans in a number of areas including biodiversity conservation, forestry, water management, agricultural development, regional development business development, as well as 10 national laws and the signatory to 26 international conventions.

Stakeholders **-** The main stakeholders in any national ecotourism strategy include governmental institutions, NGO's, private tourism operators, investors and international donor projects and programs.

Infrastructure – The infrastructure for ecotourism relies for the most part on general infrastructure and specifically rural infrastructure. Such infrastructure includes transportation, power and heating supply, water supply, sewage and waste treatment and communications networks. While the infrastructure is fairly well-developed, supporting infrastructures and the most well-developed on the Black Sea and ski resorts. Ecotourism infrastructure varies widely throughout the country; particular improvements are needed for mountain chalets used for guests, energy production and conservation and waste disposal.

Market Trends – There is a growing domestic tourism market and indications that it is increasingly focused on ecotourism. The National Strategy indicates that the potential domestic ecotourism market ranges between 140,000 and 180,000 people based on a total of 1 million people in 2001 that traveled for leisure. Additionally, international ecotourism is constantly growing and stimulated by rapidly growing cultural heritage tourism. Despite that fact that data on international cultural visitors to Bulgaria is lacking, the strategy indicates that of the 3.53 million visitors to Bulgaria in 2003, it is estimated that less than 5% visited for ecotourism purposes.

A SWOT analysis of these studies indicated relevant points related to this present document. Year-on-year analysis of the growth of ecotourism appears to be lacking with limited available statistics as to the international and domestic tourist expectations, practices, needs and expenditures and the impossibility of determining what percentage of the tourists are interested in ecotourism products. Additionally, the institutions which use ecotourism as a tool for rural development, conservation and economic growth do not seem effective at supporting ecotourism consistently over time. This, combined with the fact that ecotourism information is not adequately gathered and subsequently analyzed, results in a situation where the economic and/or environmental impacts of policy on the sector prevents adequate course correction changes through policy. The strategy also indicates that there a key weakness in Bulgarian ecotourism in Bulgaria is the lack of technical assistance and business support programs for ecotourism and any programs which do exist come inconsistently.

There are few incentives for small business support programs. When programs do exist would be better tailored if there was data on the responsiveness of the sector to such programs over time. The trend towards decentralization of such governance and such programs to the regional level would help to better respond to local conditions.

In order to address these challenges, the National Strategy details a vision, mission, ways of achieving the mission through interagency cooperation and competitive clusters, and a policy framework for ecotourism. Part of the policy framework consisted of monitoring the costs and benefits of ecotourism including biodiversity conservation advantages, economic growth advantages to the local economy, the performance and growth of local government, the contribution of ecotourism to the country's economy. In doing this, the National Strategy suggests a number of questions, which should be addressed in a monitoring system in order to address the success of the strategy at the local and regional level. Some of these include:

1. To what degree does ecotourism contribute to value of natural and cultural areas?
2. What are the impacts of ecotourism on natural and cultural areas?
3. Are there incentives for managing ecotourism impacts?
4. What is the capacity of local authorities to implement these initiatives?
5. What is the impact of tourism on biodiversity?
6. What is the impact of ecotourism on the government's development of policies to support sustainable development of tourism?
7. Is ecotourism benefitting the environment and supporting an improved social situation in the tourist destination?
8. Is ecotourism benefitting the local economy?
9. Does ecotourism expand job opportunities to local residents?
10. Are there benefits to the community?

It was decided in the national ecotourism strategy to include suggestions for improved information management systems and resources on ecotourism. This would include a specific action (referred to as "Action 3" which would include ecotourism data collection into existing tourism data collection systems to help analyze the specifics attributes of this subsector. Such indicators would include: volume, country/region of origin, demographics, duration of stay, location, gross and average expenditure, season, special interests, satisfaction levels, training programs, and investment opportunities. Taken from the national ecotourism strategy, the following was determined as necessary to monitor the sector. (National Ecotourism Strategy and Action Plan for Bulgaria, 2004. p. 64):

This information will be collected in order to achieve a number of objectives including:
- *Monitor the impact of the National Strategy;*
- *Identify the relative impacts of product development, marketing campaigns and cluster development and national and regional policies designed to stimulate ecotourism;*
- *Identify Bulgaria's performance in relation to global and regional trends in ecotourism;*
- *Justify the prominence given to the ecotourism segment within the overall national marketing profile and its share of national resources.*

And will result in improved methods for stimulating the sector, including:
- *Better knowledge of ecotourism market segments and of the needs and expectations of the potential consumers of ecotourism products and services;*
- *Efficient monitoring and direction of development priorities*
- *Continuing review of market penetration; and*
- *Identification of new product development opportunities*

> ***It will be done by the following actions:***
> - *Identify existing surveys conducted regionally and nationally.*
> - *Develop new data collections tools at appropriate levels.*
> - *Formulate questions relevant to the ecotourism sector.*
> - *Specify format of required analyses.*
> - *Integrate these within survey methodologies and analytical systems.*
> - *Disseminate analyses within government websites and annual ecotourism statistical report.*
>
> ***Illustrative Indicators***
> - *Survey of users on relevance of statistics and analyses.*
>
> ***Lead Agency and Partners***
> - *Ministry of Economy; national, regional and local tourism associations; Ministry of Environment and Waters; Ministry of Agriculture and Forests; Ministry of Culture; and Bulgarian Tourism Union.*
>
> ***Duration:***
> - *Specify requirements in Year 1; integrate into collection process in Year 2; and publish analyses in Year 3 and every year thereafter.*
>
> ***Funding Sources:***
> - *GoB; as well as all sources funding ecotourism projects*

4. The economic crisis and tourism in Bulgaria

The current economic crisis had sharply influenced Bulgaria, and in particular on tourism. This can be seen from the following data:

Insert Table 4 about here

General data showing the comparison between European country groups 25, 27 and Bulgaria of the quantity of jobs shows that the crisis seen through the prism of this indicator in Bulgaria is considerably more acute. Instead of a creation of jobs in recent years, tourism in Bulgaria lost permanent jobs. This is accentuated since tourism is such an important matter for the Bulgarian economy.

Bulgarian citizens recently significantly expenditures for travel, as seen from the table below.

Insert Table 5 about here

National Institute of Statistics of Bulgaria data show that travel by Bulgarians in the country overall have decreased by over 40% annually.

5. The problem with absorption of foreign funds and projects for tourism in Bulgaria and in pilot regions of the Biodiversity Conservation and Economic Growth (BCEG) Project

Creating an approach to the assessment of tourism development and economic growth associated with them is essential in helping end the negative effects of the recent financial crisis in tourism especially since it is of great importance for the Bulgarian economy. However, the Bulgarian economy as a whole during the transition to market economy in the last 20 years shows a constant state of inertia in that it had a very weak ability to absorb external funds (in EU programs and other donor funds). It ranks last in EU funds absorption

of EU. The causes of this are complex and difficult to isolate. However, some reasons may be as follows:

1. Inability due to the lack of experience and skills to productively absorb the material and intangible resources from outside.

2. A high degree of corruption that cannot be overcome. It leads to political parties to allocate external funds only among their own companies. Given that firms of parties in power now cannot cope with the absorption of funds, contracts are not awarded to companies outside the party circles.

3. Expanding informal sector and a significant proportion of the black economy.

Here we will cite the example of the allocation of EU funds directed to the pilot regions of the U.S. BCEG project.

Insert Table 6 about here

Insert Table 7 about here

The data show the disastrous situation of slow progress of the absorption of funds within the projects. Of course, to the reasons for the weak execution of the external economic development projects in Bulgaria should be added the probable lack of economic incentives for the population. This line of analysis can lead us to the tax system, the allocation of public resources through the budget of the state and municipal budgets (a problem that is also associated with corruption), the negative position of general basic growth factors such as population decline and others. For these reasons, moving to the issue of the proper evaluation of the project, the execution and results of such projects in improving economic growth is crucial for overcoming this situation.

II. BIODIVERSITY CONSERVATION AND ECONOMIC GROWTH (BCEG) PROJECT

A) GOALS, TOOLS, RESOURCES AND VALUE.

The Biodiversity Conservation and Economic Growth (BCEG) project utilized a competitive cluster approach for the promotion of ecotourism in Bulgaria. The competitive cluster approach revolves around the idea that a closely linked and geographically bound set of services and producers can efficiency constitute a supply chain which positive spill-over effects along the chain. The project was funded by USAID and previous assessment, assistance and financial help in protection biodiversity and geographical areas of natural importance. The BCEG project worked on the development of national park management plans and undertook research in the development of financial tools to help ensure continued revenues and functionality of national parks and an informational campaign aimed at stakeholders and the public. The aim of these activities was to increase the economic viability of ecotourism in two pilot regions while keeping in mind the key tenets of ecotourism.

The project utilized a previous set of best practices and indicators to as a reference point for the development of ecotourism. Then, using these benchmarks, a number of recommendations were made for stimulating clusters near the two largest national parks in the country; Rila National Park and Central Balkan National Park. These areas were selected due to the needs and opportunities afforded by their further development. The ecotourism area near Rila National Park included Samakov, Govedartsi, Beli Iskar and Mala Tzarkva. The area is known for its rich cultural heritage and proximity to major population centers. For

the Central Balkan National Park, the pilot region is located in Kalofer, which also has historical and cultural importance for Bulgaria.

In order to implement and facilitate the flow of information and authority and foster local engagement between the project and the pilot areas, partnerships between businesses and local government were supported. This was done through the development of the National Ecotourism Working Group, which brought together representatives of national institutions and parks that shape the policy environment for ecotourism in the country. Representatives came from the Ministry of Environment and Water, Ministry of Economy, BCEG staff, national parks and associations for tourism as well as environmental education centers. To complement the authority at the national level, "Local Ecotourism Initiative Groups" were set within the pilot regions and were ultimately responsible for the development and implementation of the project. It included local government representatives, local business owners, NGO's and local associations. There groups worked with the project partners to assess the situation in the region, develop a vision for the future, develop public awareness activities and marketing materials and develop new products. The BCEG project also used a benchmark developed by the Canadian Tourism Commission in order to help stimulate cooperative business initiatives between companies to help stimulate cluster development and jump-start the critical mass needed for a cluster to be self-sustaining. In Bulgaria this was done through a competition where business could submit a proposal which included collaboration between ecotourism related business in order to help improve the attractiveness and quality of tourism packages. The proposals that were selected were invited to draft a further summary of their project idea that were again evaluated. From these evaluations, 12 projects were awarded a small sum of money to aid their efforts in locating more substantial funding from larger sources.

In order to understand the business potential for tourism in the pilot regions, market research surveys were conducted to help define concrete recommendations are ways for overcoming the challenges. These also helped illuminate the market niches where further development could deliver significant economic and social value. These surveys showed that many travel agents did not promote and were not familiar with ecotourism, that only a small fraction of the tourism market were interested in ecotourism although if fully exploited, this segment could provide significantly more value that it previously was as knowledge of the two pilot areas was very high.

During the one-year period during the project between the Fall of 2001 and the Fall of 2002, a number of significant changes occurred in the pilot regions. In Samakov, these included increased credit for hotels, increased tourist establishments registered, increased sales and jobs created, development of new tourist packages, the registration of an ecotourism association in Rila as well as the establishment of branding concepts and marketing symbols. In Kalofer, impressive results were also recorded, including: more hotel rooms rented, the registration of more mountain guides, development of three new tour packages, an increased number of tourism establishments, a 50% increase in tourism visits, the opening of an information center, the formation of an ecotourism association as well as the establishment of branding concepts and marketing symbols.

A number of recommendations based on the analysis of the pilot regions and the examination of best practices from around the world were recommended. (Hawkins, 2004) These included:

1. The Development of an inclusive stakeholder group
2. Supporting education and awareness within the community
3. Strengthening the legal and regulatory framework
4. Expanding SME business development and entrepreneurship opportunities
5. Expanding destination management capacity at the community level

6. Establishing a product enhancement strategy linking high profile sites with less visited protected areas
7. Implementing an environmental management and certification programme at the local level
8. Expanding Financing
9. Using the internet for marketing

The need still exists for further measures to support small businesses in general and in tourism in particular. Such businesses may include direct or supporting services for transport and food services and craftspeople. Financial instruments are also needed for the expansion of ecotourism related businesses which require the improvement of strategic planning and business plan development skills amount those in the industry. The point of departure for the present paper however, comes from the need for the development of an accurate and functional indicator monitoring system that must use available data sources. This is extremely important for policy-makers at all levels in order to monitor the impacts (or lack thereof) over time. Using existing data will allow this to be done on an annual basis and in a uniform manner to compare data year-on-year. Since ecotourism has natural, social and environmental implications many national authorities have a stake in its growth and its adherence to its environmental principles. The BCEG project has started this task and we aim to build on it to deliver a streamlines yet accurate monitoring approach.

B) EVALUATION OF THE CONCEPT OF ECOTOURISM CLUSTER APPROACH IN THE PILOT REGIONS

1. Theoretical advantages

The USAID ecotourism project targeting the regions Kalofer (Central Balkans) and Samokov (Rila) have the idea of clustering ecotourism products and services in these regions. For the purposes of this project, clusters consist of small and medium-sized enterprises, which are located in close geographical proximity to each other.
The theoretical benefits of clusters are that they can facilitate access to:

- Suppliers
- Specialized information through personal relationships
- A Skilled workforce
- Clients
- Finance
- Technology
- R & D
- Support from institutions and access to public goods

Therefore, as a result of organizing itself into clustered groups, SMEs could receive the following potential benefits:

- Increased productivity
- Increased competence (through specialization)
- Reduced transaction costs
- Improving quality
- New value added
- New business information
- Increasing capacity for innovation
- Returns to scale

However, there may be some drawbacks to this cluster approach, which may occur in practice. This is a possibility of one of the "institutional trap".

As a body bringing together many participants, the cluster members may decide that protecting the environment, which is the basis of ecological tourism, can take environmentally protective measures at acceptable costs. However, if one of the participants in the cluster decided that others can do it without their contribution in the protection of the environment, they would not pay anything. This situation will slowly lead to stakeholders not paying anything. This situation arises whenever it comes to funding public goods, as is the case with environmental protection and biodiversity. Private interests would not do anything (as there are few incentives) about the environment and the development of ecological tourism, and ultimately all would be losers.

The situation can be described by John Nash's model equilibrium objective function with the participants of the type an f (xn + x) ixn, 0 <xn <1, where an individual is empowered utility environment;, f (xn + x) is the probability of environmental protection; xn - cost to the participant, and X are the costs of other participants in the cluster for ecological tourism. Not every Nash - equilibrium is efficient in reality. The only way this game can be solved with an efficient outcome is to change conditions. From non-cooperative to become coalition. I.e. players must to cooperate. Put in more simple language to help. In Nash – equilibrium position deviation of one of the participants chosen strategy for environmental protection is impossible.

Directly or indirectly, ecotourism has also influenced the development of many other sectors of the economy. For this reason, the idea of ecotourism development in both regions is very appropriate. There are differences in the design of the theoretical cluster shape in both regions.

Clusters and characteristics of ecotourism in the two project regions in Biodiversity Conservation and Economic Growth Project (BCEG)

While Karlovo is very small closed community with a small population, located in a region untouched by industrialization, Samokov is a highly organized center of winter tourism. While there is little competition in Kalofer for ecological tourism, in the region of Samokov competition of winter tourism in terms of ecological tourism is very big. There is a tradition of winter sport in Samakov and some of the most visited ski resorts in Bulgaria are there.

Therefore, the situation in the two pilot regions is radically different in terms of biodiversity and the competitive environment. This creates different conditions for the existence of cluster structures in the field of eco-tourism in both regions. Transportation services, food manufacturers and raw materials accompanying tourism services in the Samokov region have already specialized to serve winter tourism there, while in Kalofer no such specialization exists. Kalofer is located in one of the most important European regions of biodiversity, while Samokov is located in a region with mostly forest, and fewer high-profile biodiversity concerns.

The cluster approach in the two regions of the project Biodiversity Conservation and Economic Growth (BCEG) allows for increased economic efficiency of investment, because it allows for investment that is close to the consumption of final products. As the effectiveness of capital investments is a ratio between the growth of the finished product and the amount of investment in the creation of this gain, saving capital costs to create the final product gain from ecotourism can be done through minimizing the losses in the initial stages of development (there is no need to create additional transport structure, provide fuel, etc.).

Orientation to SMEs

In the tourism industry "Hotels and Restaurant" microenterprises have the highest share of value added, perhaps due to the relative advantages of the small businesses it is in this sector.

The lowest labor costs per one employee in the sector include the areas of "Hotels and Restaurants", "Manufacturing", "Trade, Repair of Motor Vehicles" and "Personal and Household goods". (Small and Medium Enterprises in Bulgaria, 2004)

Insert Table 8 about here
----

2. Evaluation of projects available statistics

There are a number of restrictions on the possibilities for optimal integrated solutions to the evaluation of projects and if they led to increased efficiency of eco-tourism. It is essential for these projects to set the foundations for sustainable economic growth in the sector.

The challenges and limitations are as follows:

1. A lack of basic econometric data that we need for a thorough evaluation
2. Missing implementation of social and environmental accounting
3. Lack of basic conventional data
4. According to the Bulgarian Statistics Act, data with financial information are confidential and not available to users without the consent of the parties concerned.

Therefore it is only possible to use some indirect indicators of the state of the economy in these regions.

Dynamics and structure of the population.

Regarding the two regions of Kalofer and Samokov the following data has been obtained.

Insert Table 9 about here

The data shows that over the past 12-years the population has steadily decreased. The numbers show that there is a decrease in the population of about 4.5%. However, economic growth is almost always linked with population growth combined with the growth of real income per capita.

Unfavorable is and the structure of the population. For the period from 1999 to 2010

For the same period in both regions are born until 3028 children. In Kalofer [2] of them only199. In the village of Mala Tzarkva has even a year with zero births – 2003.

The hospitality industry

---

[2] Kalofer was bustling urban center in the past. He emerged in 1533. Kalofer is burned to the ground three times by the Turks, the last of many population killing by the Turks was in1877, after great Bulgarian insurrection in 1876 for liberation from Ottoman rule when all men were killed and city was destroyed by Turkish troops. Over time, Kalofer have developed mechanisms for survival and have developed the tenacity with which features are characteristic to this day. In any burning people with joint efforts co-construct it a new, is the birthplace of one of the leaders of the biggest Bulgarian uprising of 1876 - the poet Hristo Botev (1848-1976 g), killed by Turkish troops in combat as leader of the rebel unit in West Balkan Mountains, far from his birthplace. For his poetic genius speak verses:
"*Now falls the twilight and the moon clambers*
Into that arch where the happy stars dance,
Now the wood rustles, now the wind hisses,
Now chants the Balkan a robber's romance. "
Botev's poetry translated into almost all existing languages.

Statistical observations from the National Statistical Institute illustrates the number of beds in hotels and Samokov and Kalofer (for Govedartsi, Mala Tzarkva and Beli Iskar no official statistical surveys) for the period.

Insert Table 10 about here

After a change in statistical monitoring after 2006 the capacity in Samokov looks favorable, but because of the heterogeneity of statistics here it is hard to draw conclusions. Particularly worrying is the situation of decline in the number of beds (2761) in Samokov between 2010 and 2008. Based on this indicator, we cannot say that growth in both regions has been particularly strong, although recent downward trends are potentially linked to the global financial crisis.

An important factor of economic growth is ability to create and absorb new technologies, equipment and methods of organization and production. This science and technology component of the growth has not been studied though in depth statistics. Indirectly however, we can make inferences about the details of expenditure incurred for R & D in the target areas. They are shown below. Kalofer falls within South Central region, and its expenditures are given. Samokov (along with Iskar and Mala Tzarkva) falls within the South West region. This indirect data are encouraging, except for the most recent decline in the Southwest region. The explanation may be sought in an attempt to offset declining population with the introduction of machinery that is more productive, technology and organization.

Insert Table 11 about here

Indirectly, we can see the development of pilot areas and common data for major non-economic indicators such as number of firms, wage costs and number of employees.

Insert Table 12 about here

The analysis of aggregate data in this case, shows an increase in employment (seasonally adjusted). Most likely, the growth that is observed here has an impact situation (the crisis in Bulgaria started with a lag compared to the rest of the world) as well as growth in the largest centers of tourism - Sofia, Plovdiv and winter resorts of "Borovets". For these reasons, data on economic fundamentals cannot confirm the creation of a self-sustaining economic growth in the pilot project areas.

3. State policy on tourism and economic development

The state should support economic development by creating conditions for better functioning of the market or through direct subsidies to priority activities. As an EU Action Plan for State Aid stipulated, "Under some conditions, state aid can correct market failures, thereby improving the functioning of markets and increase competitiveness. They may also help to promote sustainable development, despite the correction of market failures". (Action plan, 2008)

The Treaty on European Union defines sustainable development as one of the objectives of the European Union. This development must be based on economic prosperity, social cohesion and high level of environmental protection. Sustainable development can not in our opinion, be achieved without the state. Neither managers nor private owners or teams of clusters have a sufficiently long planning horizon. They are not able to take long-term

decisions. Economic actors tend to pursue short-term tasks, to seek personal enrichment, and this limits the possibilities for preventing the creation of socially useful goods even in the short term. In the Bulgarian case, the state is missing entirely in the attempt to create conditions for ecological tourism in the pilot regions.

In times of crisis, the market fails to allocate resources effectively, since the (negative) external effects of production are not taken into account by the manufacturer and are borne by society as a whole. This applies very well to Bulgaria because of the overall difficult economic situation - especially Kalofer and villages in the region of Samokov.

The costs of environmental protection are higher for small and medium enterprises, in relative terms compared to the size of their business, as they cannot take advantage of economies of scale. Additionally the ability of SMEs to absorb such costs is often limited by capital market imperfections, which in the beginning of this crisis was particularly relevant in Bulgaria.

In cases where eco-tourism is not a highly profitable enterprise at the local level, some states often stimulate its development through grants, tax and other benefits, as indirect benefits to the regional and national level make it a prudent public policy.

Below is a list of allowable state aid in EU countries, which can be utilized in Bulgaria for the support of small and medium enterprises.

Insert Table 13 about here

The Bulgarian government does not apply any preferences for small and medium enterprises in the tax system. The Bulgarian tax system designed to provide for easy collection of taxes for state coffers, but not to stimulate the development of SMEs and thus the creation and development of the middle class. Therefore, in Bulgaria there is no tax relief for small and medium businesses. The main taxes are taxes on labor, income, and corporate tax (income tax), which are 10% and VAT of 20% without a tiered-rate system. Tourism VAT is 9% (increased in 2010 from 7% to 9%). In 2001, instead of a pre-existing tourist tax (quazy- tax) there was the introduction of a tourism tax, with the amount varying between 3 BGN to 0.20 BGN (10 euro cents) per night. Based on information from the Bulgarian Industrial Association, it is envisaged that income from it can be distributed as follows "10 percent of the tourist tax, we anticipate will go to finance the Bulgarian Tourism Organization, 20 percent - for organizations to manage tourist areas and 70 percent will remain in the municipalities for activities included in the program for tourism development". (Bulgarian Industrial Association, 2011).

Significant differences were found between Member States regarding the sectors to which aid was directed. In 2009, aid directed at manufacturing and services, other non manufacturing sectors, and coal represented 75% or more of total aid inter alia in Denmark, Germany, Luxembourg, Poland, Portugal and Sweden. In a few Member States, aid to agriculture, fisheries and transport still accounts for more than 50% of the total, namely in Bulgaria, Estonia, Ireland, Cyprus, Latvia, Lithuania, Romania and Finland. Due to the particularities associated with aid to agriculture, fisheries and transport, it is worth looking at total aid without these sectors (i.e. total aid to industry and services). (Facts and figures on State aid in the Member States, 2010, p. 12) At the same time, Bulgaria is in 25th place regarding the nominal value of the state aid budget for R & D, followed only by Slovakia and Cyprus.(Facts and figures on State aid in the Member States, 2010, p. 29) This greatly reduces the absolute and relative capabilities of the country to create their own environmentally friendly methods and technologies in the economy.

Insert Table 14 about here

Based on this information, we can say that the Bulgarian state does not conduct recommended EC policies for creating financial incentives for tourism, research and development.

There have been some small, concessions, such as recognition of eligible costs for the environment, which come bundled requirements of some European programs. For example, under regulations 312 and 311 of the Operative Programme "Rural Development", there are funds allocated for support in capacity building for environmental energy production including photovoltaic power plants, biogas yield, and wind. The program also funded the construction of 20 rural hotel rooms in the priority municipalities. The programme includes the purchase of equipment, including computer software and specialized equipment. Examples of eligible expenditure include the purchase of hotel software to purchase horses for non-agricultural activities. Additionally, reimbursable expenses under the program include the costs of a consultant who will prepare a project for the funding of a solar audit, which is necessary to build a "Photovoltaic" plant, such as ISO and GMP certificates.

In conclusion we can say that the Bulgarian state has a low ability to absorb projects for tourism development and does not conduct public funding of ecotourism and tourism in general. It has also not introduced a policy of special tax treatment for SMEs. Direct and indirect data do not show a noticeable improvement in the aforementioned pilot areas.

C) OPPORTUNITIES FOR ASSESSING ECOTOURISM PROJECTS AND THEIR IMPACT ON ECONOMIC GROWTH

With this in mind, we find it useful to offer several options for assessing eco-tourism projects and recommend some measures that would support economic growth. The proposed methods are consistent with the challenges and options of the pilot project areas of USAID, which were discussed above.

1.Evaluation the projects: Correlation between Economic Efficiency, Economic impact and Economic growth

Defining Economic Growth

In economic terms, economic growth can be "traditional" and "modern." According to research and definitions of Simon Kuznetz, (Kuznetz, 1959) traditional economic growth is expressed only in production growth in absolute terms and is measured using the aggregated gross domestic product (GDP). GDP may increase at the same time as gross domestic product per capita falls. This means that traditional growth an increase in social welfare. In the more modern definition, economic growth occurs when GDP per capita grows faster than population growth. In this case, produced surplus production occurs above population growth, which represents growth of GDP per capita.

In addition to the concept provided by Kuznetz, we can add the concept of Walt Whitman Rostow of modern economic growth. (Rostow, W. W., Stages of Economic Growth, 1960) In this instance, economic growth occurs when it is "self-sustaining". This means that:
1. There is another move towards growth sectors of the economic system
2. Increase savings and investment benefit over 5-10% of net capital formation
3. Performed diffusion of growth from the initial sector where growth has occurred to others
4. There is growth in real income per capita
5. There is continuous growth in investments and savings.

This happens as a result of more sophisticated production methods and organization that enable it to produce more. In the context of the present case, however, economic growth

should be looked at through the lens of environment sustainable economic growth as "economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development".(Triple Bottom Line measuring and reporting in Australia, 2011) The definition of sustainable development adopted by the "Bruntland Commission" is: "Development seeking to meet the needs of the present generation without compromising the ability of future generations to meet their own needs." (The World Commission on Environment and Development, Our Common Future, 1987)

To the measurement of economic growth should be added a metric of social development and environmental protection, which are mutually reinforcing components of development. There must be growth that meets the requirements and needs of modern growth now that does not consume resources for growth in the future. It includes three fields, which are measured differently which are very complicated to aggregate. Therefore, there are many models for measuring sustainable economic growth - mathematical, statistical, descriptive, and theoretical. They give different results as each has its own assumptions and methods used. (See per example: Andreoni, J. and A. Levinson, (2001); Antweiler, A., B. Copeland and M. S. Taylor, (2001); Barnett, H.J. and C. Morse, (1963); Berndt, E.R., (1990); Brock, W.A. and M.S. Taylor, (2004); Dasgupta, P, and G. Heal, (1979); Solow, R., (1993), and others)

Our goal is to present a simple model for measuring modern sustainable growth that can be used for purposes of preliminary assessment and reporting of projects that apply to small businesses and areas. However, we must include economic, environmental and social indicators of growth. Furthermore, we have to get a reasonable rate of growth that does not result in negative environmental externalities. There should be a balanced, self-limited growth and limits to growth. The idea is to have a positive growth per capita, provided that environmental quality improves. There are also different views on this limitation. For example, Stiglitz argues that the return on capital must equal the return on the resource. It can also be a requirement for the marginal rate of substitution between consumption and destruction of the ecosystem to be equal to the marginal product. (Stiglitz, J. 1974)

Here we must bear in mind the following principles:

- Identifying how economic activity depends on the environment. We must determine the use of natural resources in production and how it changes in the environment quality or how a reduction of natural resources affect economic production.

- To identify activities of ecotourism which damage the environment in the regions.
- Detect and measure the extent of depletion or environmental degradation, which reduce the capacity for ecotourism.

In general, we can identify the following about the positive economic benefits and at the same time, the social functions of ecotourism:

1. Creation of new jobs for local people;
2. Promotion of traditional forms of natural resources, production of organic food;
3. Increase investment in both infrastructure and services, as well as on the environment;
4. The welfare of local people and development of special education, aiming at the acquisition of tourism and environmental professions;
5. Crafts;
6. Development of local self-government;
7. Formation of development plans "from within", taking into account the interests of local residents.

2. Issue of the effectiveness of projects through financial methods

Evaluation of the effectiveness and impact of the project

While the effect of the project can be estimated as the increase in profit from it, the gain or benefit may be at the expense of higher environmental costs. The general rule for a normal economic decision is to increase the potential benefits over costs. Benefits – Costs > 0. (*B-C > 0)* As the greater difference, the greater is the economic benefit.

Along with this should consider the effectiveness of the project in time. In this case should be discounted future value to present value. In economics, this is a widely used method for measuring the effectiveness of projects or programs and is known as net present value (NPV). Net present value must be greater than zero to be considered effective and feasible project. NPV is the sum of all incoming and outgoing cash flows of the project over time and is compared with the annual interest rate that could reasonably be expected if the money were invested. Here we must have in mind all streams that support ecotourism project, which is state aid, municipal subsidies, subsidies for European programs, private expenditure of population and businesses and NGOs.

The flow of payments CF (cash flow), where CFt is the payment after years (time t) (T = 1,...,n) and IC - initial investment (capital invested) in the amount of IC = - CF0 - calculate net present value NPV of the famous formula.

Equation 1

$$NVP = \sum_{t=0}^{n} \frac{Bt - Ct}{(1 + r)^2}$$

(1)

Considering the time factor, total benefits should exceed total costs. The difference between benefits and costs determined by the monetary benefits of the program. The effectiveness of the project is positive if there are positive financial benefits.

Pricing of natural resources in eco-tourism projects should also be included in the system of evaluation. Environmental resources for ecotourism should include environmental costs and benefits.

In this case we ad illustrates the process as follows:

Equation 2

$$NVP = \sum_{t=0}^{n} \frac{(Bt - Ct) \pm (ERBt - ERCt)}{(1 + r)^2}$$

(2)

If the Net Present Value is greater than zero, the project should be undertaken. It is also possible to measure the ratio of discounted values of benefits and costs, which can also give guidance on the effectiveness of the project. If this ratio is greater than one - the project will be profitable.

For the purposes of this evaluation, it is necessary to explore and establish a statutory discount rate. The smaller is the discount rate, which legally can be adapted to the needs of these assessments, the better it will meet the needs of sustainable development because a smaller discount rate emphasizes the importance of future benefits over a long period. A big discount rate will allow the exploitation of natural resources and rapid rate of return on investment. It should be borne in mind that various environmental projects require a different deadline for return on investment. While the project situated in the Samokov area is

especially rich in forest resources and natural landmark as lakes and rivers, the project Kalofer situated in an area with a wide variety of animal and bird species. Since the two regions have different environmental situations and needs over time, it is necessary for them to apply different discount rates.

Additional evaluation of environmental impact and damage

Here we can identify two groups of expenditure - expenditure on prevention and disposal costs. There are several different approaches and guidelines in the assessment of environmental impacts and damage from tourism. However, they should reflect the ecological and economic processes of nature. A possible method of evaluation is based on actual costs, which is discussed in connection with the financial method for determining cost effectiveness.

Ecological costs are divided into two main groups:

I. Expenditure on prevention and protection
- Costs of Soil
- Expenditure on protection of animals and birds
- Costs for Plant Conservation
- Expenses for water protection
- Cost of air protection

II Cost of disposal

It is necessary to accept calculating full cost - an approach that is not used in Bulgaria yet. We must also choose the method by which this can be done. Since the very tourist activity in connection with environmental objects implies depreciation of environmental values, it is appropriate to the needs uses the method of management of Activity Based Cost, although there may be another method like Flow cost.

Measures to reduce risk in project management

Insurance

Insurance directly related to the question now comes to risk management. Bulgaria does not apply to mandatory environmental insurance.

Its introduction will greatly decide the issue of risk in the projects and make their performance better.

Provisioning

With regard to risk, reduction is the creation of reserves for conservation activities

It must be accepted practice firms to create their reserves for environmental activities of the two. From an accounting perspective, they should be divided into current and capital. If they can use IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", as these losses are in themselves a special kind of obligation - reserve.

Due shown to reduce the growth of spending on research and development, companies can be encouraged to establish reserves for decommissioning of obsolete facilities, which with its operation create harm to the environment based on IAS 16 "Fixed Assets" "Property, Plant and Equipment", because the original value of fixed assets should be included these costs in present value;

Also, in addition to these documents require the application of IAS 36 "Impairment of Assets", IAS 23 "Borrowing Costs" and IAS 8 "Accounting policies, changes in accounting estimates and errors".

Evaluation of the growth in ecotourism

Key measures of economic growth in tourism, which are used, are standard:

- Tourism value added
- Tourism Gross domestic product
- Employment and wages
- Tourism Gross Fixed Capital Formation

Demand bases estimation

Gross fixed capital formation and government expenditures for the support of tourism include general government expenditure on tourism in the region. These include expenditures in the care for land and air, coordinating research for development, information services, development, improvement and maintenance of reserves, parks, tourism services, regional offices and legal services.

Insert Table 15 about here

The following include some suggestions for better monitoring of ecotourism in Bulgaria:

1. The first need to use the methodology of satellite accounts for tourism, applied in the regions. The TSA provides a framework that is adapted to the integration of dispersed."Satellite accounts provide a framework linked to the central accounts and which enables attention to be focused on a certain field or aspect of economic and social life in the context of national accounts; common examples are satellite accounts for the environment, or tourism, or unpaid household work. (SNA 2.246 [21.4])

2. Creating system for statistical data necessary to take account of supply and demand in tourism.

3. Integration of statistics in national accounts.

Bulgarian statistics do not provide data on the separate regions, which are the subject of projects for development of ecotourism. Therefore, the need and challenge is to create a simple satellite account of tourism in the region. In terms of demand - this includes all expenditures of tourists before, during and after the trip was taken. These could be broken down into the following categories:

Insert Table 16 about here

Insert Table 17 about here

Insert Table 18 about here

Insert Table 19 about here

These observations should be made to cluster groups of businesses and their activities. This can directly trace the impact the project on the cluster groups allow for the monitoring of the effect of government incentives or subsidies.

3. Evaluation of the growth of ecotourism based on macroeconomic indicators

Environment-adjusted income
Since ecological tourism depends on environmental and natural attractions, the assessment of growth should include the correct ecotourism income created. To assess the impact of the loss of natural resources on GDP of the region the following formula could be used.

Equation 4

$$GDP - CFC\ (or\ depreciations) = NDP \qquad (4)$$

Equation 5

$$\begin{aligned}
ea\ Net\ domestic\ product\ of\ region\ &(or\ depletion - e.\ adjusted\ national\ incom) \\
&= NDP \\
&- (Depletion\ of\ natural\ resources \\
&+ Decreased\ value\ of\ assets\ as\ a\ result\ of\ degradation)
\end{aligned}$$

$$(5)$$

We exclude the first stage in the net balance of international tourism. The reason for this is that it is difficult to trace and requires information on the central government level. Although the first phase may not paint a comprehensive picture of the situation and trends of ecotourism , we will still have enough data for the management projects and their actual status for project managers to make more appropriate management decisions.

In a later stage of collection, we can proceed to include more components to create a more complete and reliable picture of the status and development of this industry such as the one below.

Insert Table 20 about here

Use of Natural Assets
Depletion activities consist of the depletion of natural assets by industries and by households. They comprise the exploitation of natural resources because of tourism - aquifers and biological assets (e.g. timber from forests or fish stocks of inland waters, by agriculture, forestry and fishing). The assumption is that scarcities in the availability of renewable (forest, fish, wildlife etc.) and cyclical (water) resources have been observed. Depletion costs are only estimated in these cases as far as the economic use of natural assets leads to imbalances in nature, i.e. if the depletion of biota exceeds the natural growth or the use of water exceeds replenishment of aquifers. (Bartelmus, P., J. Van Tongeren, 1991) The net value of degradation is assumed to be equal to potential abatement (restoration) costs, required either to achieve the level of environmental quality at the beginning of the accounting period or at least a level specified by "official" environmental standards. (Hueting, R, 1980).

In the table below, the value of the economic use (depletion as well as degradation) of domestic natural assets and the corresponding impacts on the asset values are shown in a simplified balance sheet. Here we do not take account of the degradation caused by sources outside the region and/or country.

Insert Table 21 about here

Here, the impact on tourism can be evaluated on the basis of monitoring, carried out by the the state in the two pilot reserves areas. This should include types of biodiversity monitoring in the Rila and Central Balkan reserves such as the one in the table below.

Insert Table 22 about here

CONCLUSIONS

The monitoring of projects and economic growth in the field of ecological tourism, which are often situated in small and relatively underdeveloped regions, must be simple to complete. This is due to the fact that the administrative capacity of these areas is weak; no particular policy in Bulgaria exists for the specific support from the state of small and medium enterprises. The monitoring should take into account the trends in biodiversity preservation as well as sustainable the economic growth.

However, it must be compatible with principles, methods and indicators of tourism accounting. It should also be compatible with the accepted methods of accounting for economic growth and development and the requirements of environmental accounting. As a first step, we propose to introduce a simple, user-friendly statistical and accounting system that provides clear information about economic growth and environmental changes resulting from tourism at the regional level.

REFERENCES

Bulgarian language

1. Bulgarska Stopanska Kamara (Bulgarian Industrial Association), (2011), http://www.bia-bg.com/% d0% 9d% d0% b0% d1%87% d0% b0% d0% bb% d0% be/1/mlw-grwli5snmnkdi1khchsrcnkncjafi9ojireputkr

2. Darjavna agencia za turizam (v likvidacia) (State Agency of Tourism (in liquidation) National Strategy for sustainable tourism development in Bulgaria from 2008 to 2013,p. 7, (2009)

3. Ikonomika i finansi, marketing i upravlenie na stopanskata deinost i na personala (Economics and finance, marketing, and business and staff management), (2010), 24. 04; Available on http://www.ikonomikabg.com/%d1%80%d0%b0%d0%b7%d0%b2%d0%b8%d1%82%d0%b8%d0%b5-%d0%bd%d0%b0-%d1%82%d1%83%d1%80%d0%b8%d0%b7%d0%bc%d0%b0-%d0%b2-%d0%b1%d1%8a%d0%bb%d0%b3%d0%b0%d1%80%d0%b8%d1%8f.html.

4. Kabadjov, H., (2007) Ocherk po istoria na turizma v Bulgaria (Essay of History of Tourism in Bulgaria), Btourism – online magazine, http://btourism.com/read.php?id=71, 26 September.

5. Malkite i sredni predpriatia v Bulgaria. Doklad na Agenciata za malki i sredni predpriatia, (Small and Medium Enterprises in Bulgaria) 2002-2003. Report of the Agency for SMEs, Sofia, p. 24

6. Methodological notes on the compilation of balance of Bulgaria, (2011), http://www.bnb.bg/bnbweb/groups/public/documents/bnb_download/st_m_instr_bop_bg.pdf

7. Nacionalna strategia i plan za deistvie za ekoturizma v Bulgaria (National Ecotourism Strategy and Action Plan for Bulgaria), (2004).

8. Rosrou, U,U.,(1979) Stadii na ikonomicheskia rastej (Nekomunisticheski manifest), Delfin pres (Rostow, W.W., Stages on economic growth (A Non—communist manifesto), Cambridge University Press, 1960).

9. State Gazette of Bulgaria, 2010,17, XII

English Language

10. Action plan for state aid, (2008) paragraph 10, EU Official Journal, N 1, April.

11. Andreoni, J. and A. Levinson (2001), The Simple Analytics of the Environmental Kuznets Curve, Journal of Public Economics, May, 80(2): 269-286

12. Antweiler, A., B. Copeland and M. S. Taylor (2001), Is Free Trade Good for the Environment, "American Economic Review 94, 1, September, 877 - 908

13. Bartelmus, P., J. Van Tongeren, (1991) Integrated environmental a n d economic accounting: framework for a SNA satellite system, Review of Income and Wealth Series 37, No. 2, June

14. Barnett, H.J. and C. Morse (1963), Scarcity and Growth: The Economics of Natural Resource Avail-ability, John Hopkins Press, Baltimore.

15. Berndt, E.R., (1990), .Energy Use, Technical Progress and Productivity Growth: A Survey of Economic Issues., The Journal of Productivity Analysis, 2: 67-83.

16. Brock, W.A. and M.S. Taylor (2004), The Green Solow model, NBER Working Paper No. w10557, June.

17. Brock, W.A. and M.S. Taylor (2003), The Kindergarten Rule for Sustainable Growth. NBER Working Paper N. w 9597. April.

18. Copeland, B.R., and Taylor M.S. (2003), Trade and the Environment: Theory and Evidence, Princeton University Press, Princeton,
19. EU Official Journal, p. 82/33, 1.04.2008
20. Eurostat
21. EU Information system for management and monitoring of EU Structural Instruments in Bulgaria
22. Facts and figures on State aid in the Member States, Brussels, 1.12.2010, http://www.bia-bg.com/% d0% 9d% d0% b0% d1%87% d0% b0% d0% bb% d0% be/1/mlw-grwli5snmnkdi1khchsrcnkncjafi9ojireputkrsec(2010) 1462 final, p. 12.
23. Facts and figures on State aid in the Member States, Brussels, 1.12.2010, SEC(2010) 1462 final, http://www.bia-bg.com/% d0% 9d% d0% b0% d1%87% d0% b0% d0% bb% d0% be/1/mlw-grwli5snmnkdi1khchsrcnkncjafi9ojireputkr p. 29
24. Hawkins, Donald E., A Protected Areas Ecotourism Competitive Cluster Approach to Biodiversity Conservation and Economic Growth in Bulgaria, Journal of Sustainable Tourism, v. 12, N 3, 2004, p. 219
25. Hueting, R., New Scarcity and Economic Growth: More Welfare Through Less Production, `1980, p. 198
26. Kuznetz, S., Six Lectures on Economic Growth, 1959
27. Dasgupta, P, and G. Heal (1979), Economic Theory and Exhaustible Resources, Cambridge Economic Handbooks, Cambridge University Press
28. Nordhaus, W. (1992), Lethal Model 2: The Limits to Growth Revisited. Brookings Papers on Economic Activity, Vol. No. 2: 1-59
29. Solow, R.M., (1993), An almost practical step toward sustainability, Resources Policy 19(3); 162-172.
30. Stiglitz, J. (1974), Growth with Exhaustible Natural Resources: Effcient and Optimal Growth Paths, The Review of Economic Studies, Vol. 41, Symposium on the Economics of Exhaustible Resources:123-137
31. SNA 2.246 [21.4]
32. Triple Bottom Line measuring and reporting in Australia, available http://www.environment.gov.au/sustainability/industry/publications/triple-bottom/pubs/parta.pdf
33. WNVTO World Tourism barometer, Vol. 5,N 2, 2007
34. Wood, M. (2002), Ecotourism: Principles, Practices and Policies for Sustainability, , p. 9.
35. World Commission on Environment and Development, Our Common Future, (1987)

APENDIX

TABLE 1. DISTRIBUTION OF BEDS IN BULGARIA, 2009

Beds in:	Share (%)
Black See resorts	56.8
Mountains Resorts	9.8
Spa Resorts and Villages	4.6
City hotels inside the country	28.8
Total	*100*

Source: National Institute of Statistics of Bulgaria

TABLE 2 TYPES OF TOURISM PRODUCTS AND THEIR SHARE IN TOTAL, 2009

Tourist product	Share %
Sea	52,4
Ski	16,2
Cultural and historical	11,1
Spa	6,6
Ecotourism	**4,2**
Hunting	4,1
Golf tourism	3,6
Other	1,6
Health services	0,1
Congressional	0,1

Source: National Institute of Statistics of Bulgaria

TABLE 3 BALANCE OF PAYMENTS OF BULGARIA: SERVICES (MILLION BGN),
IRREGULARITIES DATA ON SEASONALITY AND NUMBER OF WORKING DAYS
MONTHLY DATA

Year/Mount	2010-05	2010-06	2010-07	2010-08	2010-09	2010-10	2010-11	2010-12	2011-01	2011-02	2011-03	2011-04
Current account of Tourism (Net)	100,9	238,5	486,5	499,8	235,1	71,0	-43,3	32,4	37,6	28,9	26,1	42,5
Current account of services (Net)	61,3	259,9	584,2	582,8	280,0	68,1	-8,8	8,8	27,1	53,7	60,4	88,7

Source: Bulgarian National Bank, Statistics

TABLE 4 EMPLOYED PERSONS BY FULL-TIME / PART-TIME ACTIVITY IN TOURISM

Geo/Time	2008 Q3	2008 Q4	2009	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010	2010 Q1	2010 Q2	2010 Q3	2010 Q4
European Union (27 countries)	223 497	221 655	217 813	217 498	218 243	218 351	217 159	216 450	214 202	216 762	217 903	216 934
European Union (25 countries)	210 453	209 054	205 316	205 197	205 561	205 544	204 960	204 158	202 256	204 202	205 316	204 857
Bulgaria	3 417	3 364	3 254	3 263	3 300	3 280	3 172	3 053	3 011	3 072	3 104	3 024

Source: Eurostat

TABLE 5 EXPENDITURES FOR TRAVEL OF PERSONS AGED 15 AND OLDER IN
2008, 2009 AND 2010 YEAR

Year	2008	2009	2010
Total sum of expenditures for private tourist travels in the country	2743200	2391511	1797269
Total sum of expenditures for private tourist travels aboard	1054771	867886	658688

Source: National Institute of Statistics of Bulgaria

TABLE 6. LIST OF PROJECTS FUNDS, WHICH IS A BENEFICIARY OF A PILOT
PROJECT REGION KALOFER - CENTRAL BALKAN NATIONAL PARK, BGN

Name of Beneficent	Number of Projects	Total value	Actually paid
Directorate of National Park "Central Balkan" (National Park "Central Balkan")	3	5 299 381.49	1 064 556.30

Source: Information system for management and monitoring of EU Structural Instruments in Bulgaria

TABLE 7 LIST OF PROJECTS UNDER THE EU FUNDS, IN WHICH A BENEFICIARY OF THE PROJECT REGION "SAMOKOV"- RILA NATIONAL PARK (BGN)

Name of the Project	Data of Beginning	Total Value	Grant	Financing of the beneficiary	Paid	Duration (mounts)	Status
Inventory of forest in reserve "Rila Monastery Forest"	15.07.2009	0,00	0,00	0,00	0,00	36.00	Suspended
Updating of the Plan for Management of National Park "Rila"	01.04.2010 г.	5 628 467,56	5 628 467,56	0,00	1 125 693,51	30.00	Registered

Source: Information system for management and monitoring of EU Structural Instruments in Bulgaria

TABLE 8 GROSS INVESTMENT IN FIXED ASSETS OF AN ENTERPRISE OF PRIVATE BUSINESS SECTORS (THOUSAND BGN, CURRENT PRICES)

Gross investment in fixed assets of an enterprise of private business sectors (thousand BGN, current prices)								
Number of employed	1-9		10-49		50-99		100-249-	
Year	2001	2002	2001	2002	2001	2002	2001	2002
Total	3,9	5,2	67,3	85,7	224,7	226,7	533,0	477,0
hotels and Restaurants	1,9	4,7	88,3	111,7	907,1	832,5	2198,0	545,5
Fixed assets of an enterprise								
Total	11,7	14,4	231,8	255,9	817,0	980,2	2020,6	2164,2
hotels and Restaurants	5,8	10,6	288,7	380,7	2490,4	3358,4	10535,6	6914,3

Source: Small and Medium Enterprises in Bulgaria 2002-2003. Report of the Agency for SMEs, S. 2004, p 91, 92

TABLE 9 POPULATION IN THE TWO PILOT REGIONS 1999-2010

Region/ Year	Samokov	Govedartzi	Beli Iskar	Mala Tzarkva	Total Samokov Projekt	Kalofer	Total	Index 1999=100
1999	26253	1633	833	564	29283	3876	33159	98,9
2000	26026	1595	806	546	28973	3836	32809	104,0
2001	27506	1594	760	539	30399	3711	34110	99,1
2002	27242	1559	745	529	30075	3713	33788	98,3
2003	26836	1513	721	518	29588	3621	33209	98,8
2004	26576	1479	700	503	29258	3548	32806	99,2
2005	26413	1434	685	498	29030	3524	32554	99,7
2006	26419	1403	677	481	28980	3470	32450	99,3
2007	26274	1383	686	482	28825	3397	32222	99,5
2008	26245	1356	679	471	28751	3325	32076	99,5
2009	26196	1329	669	462	28656	3259	31915	99,2
2010	26061	1301	659	450	28471	3191	31662	
Index 1999 =100	99	80	79	80	97	82	95	

Source: National Institute of Statistics of Bulgaria

TABLE 10 CATEGORIZED HOTELS (1999-2010) IN THE TWO PILOT REGIONS

Year	Samokov- hotels (number)	Samokov - Beds - number	Kalofer - hotels (number)	Kalofer - Beds - number
1999				
2000				
2001	16	4025		
2002	17	3406		
2003	17	3295		
2004	17	3534		
2005	18	3799		
2006	*21*	*4190*		
2007	26	4434		
2008	21	7102	3	26
2009	30	4493	3	31
2010	25	4341	3	31

Note: to 2006-more than 30 beds since 2006, with over 10 beds.

Source: National Institute of Statistics of Bulgaria

TABLE 11.EXPENDITURES FOR R&D (THOUSAND BGN) CATEGORIZED HOTELS 1999-2010)

Statistical Region	Sector "Enterprises" – tourist business								
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
South-central region	1830	2308	confidential data	3086	1952	4151	4861	10746	24774
South-West region	21246	20012	18653	22091	34829	34447	40928	61582	59354

Source: National Institute of Statistics of Bulgaria

TABLE 12 KEY ECONOMIC INDICATORS FOR THE SECTOR HOTELS AND
RESTAURANTS IN STATISTICAL AREAS (2007-2009)

Statistical Region/Year	2007	2008	2009
South-West Region Total			
Number of firms	5976	6148	7890
Expenditures for wages - thousand BGN	125826	158375	196017
Number of employers	41212	42464	49641
South-Central Region Total			
Number of firms	4290	4234	5059
Expenditures for wages - thousand BGN	43592	60487	71706
Number of employers	20093	21076	23772

Source: National Institute of Statistics of Bulgaria

TABLE 13 AID INTENSITY OF INVESTMENT AID AS PART OF ELIGIBLE COSTS

	Intensity of aid to enterprises beyond Community standards or increasing the level of environmental protection in the absence of Community standards with the exception of environmental innovations	Intensity of aid to enterprises beyond Community standards or increasing the level of environmental protection in the absence of Community standards in the field of environmental innovations	Support for studies in environmental	Aid for early adaptation to future Community standards	Aid for waste management	Aid for renewable energy	Aid for energy saving. Aid facilities for cogeneration	Aid for rehabilitation of contaminated sites	Aid for relocation of enterprises
Small enterprise	70 % 100% in auction procedure	80 % 100 in auction procedure	70	25-20	70	80 % 100 % in auction procedure	80 % 100 % in auction procedure	100	70
Middle enterprises	60 %	70 % 100% in auction procedure	60	20-15	60	80 % 100 % in auction procedure	70 % 100 in auction procedure	100	60
Big enterprises	50 % 100% in auction procedure	60 % 100% in auction procedure	50	15-10	50	80 % 100 % in auction procedure	60 % 100 % in auction procedure	100	50

Source: EU Official Journal, p. 82/33, 1.04.2008

TABLE 14 EXPENDITURES FROM STATE BUDGET BY SECTORS

Options	Thousand BGN	%
Expenditures	25 666 912.9	100.0
General state administration	1 951 847.6	7.6
including Science	223 671.2	0.9
Defense and Security	3 000 791.5	11.7
Education	2 837 808.2	11.0
Health	2 634 367.2	10.3
Social insurance, social care	9 104 697.8	35.5
Housing, public works, utilities and environmental	*1 687 299.7*	*6.6*
Recreation, cultural activities	**537 621.1**	**2.1**
including Culture	440 526.8	1.7
Economic activities and services	2 645 549.9	10.3
Other costs	1 266 929.9	4.9

Source: State Gazette, 17, 12, 2010

TABLE 15 TOURISM EXPENDITURE BY TYPE OF PRODUCT AND TYPE OF TOURIST

Product	Domestic demand			International demand	Total demand
	Business demand	Government demand	Household demand		
	BGN				

Source: National Institute of Statistics of Bulgaria

Table 16 Tourism expenditure by products

Accommodation services	Tourism consumption	Percent of contribution	Percent of contribution from cluster's firms
Food & Beverages			
Transport and support services			
Travel Agencies and Tour Operators services			
Cultural, Sport, Recreational Services			
Others			
Total			

Source: National Institute of Statistics of Bulgaria

TABLE 17 PRODUCTION ACCOUNTS OF TOURISM INDUSTRIES AND OTHER INDUSTRIES

Details	Tourism consumption	Percent of contribution	Percent of contribution of cluster's firms
Hotels and places for accommodation			
Restaurants and places for eat			
Air Passenger transport			
Land passenger transport			
Transport equipment rental			
Travel Agencies			
Handicrafts			
Tourism Retail trade services			
Other tourist service activities			
Taxes + fees, grants and subsidies from state budget			
GDP of Regions			
% of contribution of Pilot Regions			
Growth Rate			

TABLE 18 GROSS FIXED CAPITAL FORMATION

Tourism Industries	Building, structures and Land improvements	Furniture, fixtures , Equipment Machineries et cetera	Total	Gross fixed capital formation from clusters
Hotels and Similar				
Restaurants and similar				
Transport				
Travel Agencies				
Cultural services				
Miscellaneous				
Total Share of tourist regions in total tourism sector				

Note: *Gross fixed capital formation* is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets (such as subsoil assets or major improvements in the quantity, quality or productivity of land) realized by the productive activity of institutional units. SNA 10.33 & 10.51 [10.26]

TABLE 19 VALUE ADDED OF ECOTOURISM

Industries	Output 1	Intermediate consumption 2	Value added of tourism 1-2	Value added from Clusters
Hotels and Similar				
Restaurants and similar				
Transport				
Cultural services				
Miscellaneous				
Share of Value Added in Ecotourism in GDP %				

Gross value added is the value of output less the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry or sector; gross value added is the source from which the primary incomes of the SNA are generated and is therefore carried forward into the primary distribution of income account. SNA 1.6 [2.172, 6.4, 6.222]

TABLE 20 FULL TOURISM SATELLITE ACCOUNT FOR REGION

	YEAR			Growth Rate (%)	
	A	B	C	A-B	B-C
Monetary indicators					
Eco-Tourism Expenditure	X	Y	Z		
- Direct Tourism Value Added	x	y	z		
- Indirect Tourism Value Added	x	y	z		
- Imports (sold/used in production sold to tourists)	x	y	z		
Taxes Paid on Purchases by Tourists	x	y	z		
International Tourism Expenditure					
Domestic Tourism Expenditure					
Nonmonetary indicators					
Persons Engaged in Tourism (full-time equivalent, 000)					
Directly Engaged in Tourism					
Indirectly Engaged in Tourism					
Eco-Tourism Contributions to in Regional Economy (Percent)					
Tourism Direct Value Added Expenditure (% of GDP)					
Tourism Direct Employment (% of Total FTE Employment)					
Tourism taxesT (% of Total)					
Tourism Export Earning /Loses(% of Total Export)					

TABLE 21 ECONOMIC USE AND IMPACTS ON NATURAL ASSETS

Use of Natural Assets (environmental costs)		Impacts on Natural Assets (decrease of asset values)	
Domestic use		Domestic environment	
Depletion	X	Depletion	X
- -industries and households	x	- Product and non-product natural assets	x
- -tourism	x	- -tourism	x
Degradation	X	Degradation	X
- -industries, households, government and prod. assets	x	- non-product natural assets	x
- -Tourism	x	- -Tourism	x

TABLE 22 BIODIVERSITY MONITORING: TARGET VALUES FOR PERFORMANCE INDICATORS IN NATIONAL PARK "RILA", "PIRIN" AND "CENTRAL BALKAN

Target values for performance indicators

Program 7 National System for Environmental Monitoring and Information security

Product / Service: Environmental monitoring

Target Value

Performance indicators	Unit	2007	2008	2009	2010
Biodiversity Monitoring National Parks Rila", "Pirin" and "Central Balkan"					
Number of points and objects of observation in the National Park "Rila", "Pirin" and "Central Balkan"	number	53 water (abiotic) 47 object (biotic)	70/52 water and 18 soil / (abiotic) 51 objects (47 biological and 4 additional)	52 water (abiotic) 51 objects (47 biological and 4 additional)	52 water (abiotic) 51 sites (47 biological and 4 additional)
Number of tests for analysis	number	90 water (abiotic))	121 89 water and 32 soil / (abiotic)	89 water(abiotic)	89 water(abiotic)
Test Parameters	number	14 water (abiotic)and 3biotoc objects)	34 /14 water and 20 soil / (abiotic) 3 object (biotic)	14 water (abiotic) 3 objects (biotic)	14 water (abiotic) 3 objects (biotic)

Source: Ministry of Environment and Water, 2007