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Publication date:
1995

Citation for published version (APA):
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WORC PAPER 95.12.030/2

Paper to be presented at the Phare Workshop
Raising Public Awareness for Nature Conservation
in Hungary, Tihany, December 7-9, 1995

December 1995

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ACKNOWLEDGEMENT

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Keywords: contingent valuation method, value of nature, tourism, rural development, national parks

Abstract

National Parks have been established to protect high quality landscapes including plants and animals living in them. Agricultural and other activities can be realised in these areas to a limited degree. Tourism can have a negative influence on these national parks. This is particularly the case when mass tourism uses the park and its surroundings without sufficient restrictions.

On the other hand, touristic activities can have a positive influence on the economic conditions of the countryside around the parks. Therefore it is investigated in this paper, to what extent the development of low impact tourism can support the acceptance and support of national parks. From the use of contingent valuation methods it can be concluded that tourists give a high value to natural landscapes. A case study about sustainable tourism in Graubünden is presented too.

1 Introduction

Regarding tourism in national parks, generally speaking, two approaches are found. On the one hand, the opinion is articulated that national parks have been established aiming to protect landscapes of outstanding beauty, including the organisms living in them. On the other hand, when the level of financial funds are not sufficient as is often the case recently, tourism is seen as a good instrument to solve such problems. Both approaches have in common that national parks are seen as special entities not related to the economic problems of the countryside around
them. In this paper, it is argued that these types of approaches cannot achieve real solutions. National parks are, in this view, part of the problem of rural development. It will be demonstrated that rural problems are found in all European regions. Additionally, arguments are given why tourism, national parks and rural problems should be investigated in close cooperation.

The central question in this paper is which strategy should be evolved to guarantee a long term development of national parks. In Section 2 a sketch is given of the regional economic context of national parks. This concept is used to describe and analyse the options which can be chosen for the development of parks. In Sections 3 and 4 special attention is given to the internal and the external relationships of national parks. In Section 5 the value of nature concept, as it has been developed in environmental economics, is discussed. This can lead to a better understanding of the challenges and limitations of the marketing concepts discussed in previous sections. Finally, a case study of the Graubünden canton in Switzerland is presented.

2 Sketch of the problem

National parks are located in regions where original landscapes are still found due to scarce combinations of special geomorphological, climatic, faunistic or botanic elements. In most of them traditional agriculture is significant, as modern agriculture has destroyed most of these features elsewhere. This implies that national parks are often located at the periphery of economic activities, where modern agriculture could not penetrate for one reason or another. This means that traditional or low-impact agriculture is in many cases a precondition for the survival of the national parks. However, historic and current economic development is heading in the other direction. Modern agriculture and rural economic development, as it is often propagated, are not beneficial to national parks. It is assumed in many cases that investments have to be realised in the region resulting in an increase in economic activities, jobs and income. These ideas are based on a traditional Keynesian approach which completely overlooks the difficulties resulting from an uneven distribution of economic activities in space. These problems can only be understood when analysing recent rural developments.

In the twentieth century, agriculture and related economic activities have reacted to market forces resulting in an increase in demand due to a rise in population and purchasing power.
Additionally, it should not be overlooked that in many European countries the experience of two wars resulted in the idea that countries should be able to meet the demand for feeding their own population as much as possible. New technologies made it possible to meet this increasing demand. These new technologies aimed at the intensification of agricultural techniques, implying that agricultural production factors increased their productivity dramatically in Europe. One of these production factors is labour. An intensification in labour productivity in agriculture resulted in a surplus of labour in the countryside. Subsequently, people migrated to nearby cities, where industrialisation created new jobs.

Depopulation of the countryside was the result. When, in the course of time, the number of inhabitants of some villages fell below a certain level, normal services could no longer be provided in these villages because of a decrease in purchasing power of the people still living there. Schools and shops were closed, which again lowered the standard of living in these villages decreasing the attractiveness of the villages as residential areas and as work places. Recent developments in Europe are in two directions. On the one hand, there is still the intensification of agriculture in relatively favourable areas not far from the cities and on the other hand, extensification and abandonment of land is a common practice in the relatively peripheral areas. In many cases these processes of intensification and extensification are fairly close to each other. In the relatively fertile valleys intensification takes place and higher up on the plateaus and the mountain slopes extensification is normal. Both practices are detrimental to nature. Extensification leads to higher levels of fertilizer and pesticides with all the negative effects on the quality of water and soil, resulting in a dramatic decrease of many protected species. Extensification particularly in mountain and Mediterranean regions, leads to erosion, desertification, and to a decline of open space and the related species.

In the meantime, national parks were established in many European countries. Most of these parks were located where modern agriculture was not such a significant factor. This implies that agriculture in and around these parks were, from the point of view of agriculture, in a backward position. Now the question arises how to develop and maintain the national parks and what should be the function of the surrounding countryside? And what is, in this respect, the position of agriculture? It can be taken as a starting point that 'normal' rural development can only increase the problems in the long run. This development with high levels of investments, as propagated by the European Union by using the instruments of the Rural Fund, the Cohesion
Fund, etc. can only increase the intensification of agriculture, again leading to an increase in labour productivity which again results in the out migration of people, a rise in environmental pollution and an ongoing threat to landscapes and nature. Hence, it can be concluded that the intensification of agriculture using traditional models of economic development, do not benefit the countryside.

Recently, the disadvantages of this development are being increasingly recognised by many politicians and particularly by the European Union. In recent European documents such as the Fifth Action Programme, it is argued that the historical development of the countryside should be stopped and that a sustainable development of society should result in limitations to the 'normal' economic development of regions. However, the recognition of the problem is not the same thing as the solution. We are now at the beginning of a transition process, in which the European Union and national authorities intend to develop in a way which is more beneficial to the countryside, landscape and nature. Local and regional authorities are often not aware of the rapid change in the approaches and starting points of regional development and nature protection. In any case, national park authorities should be aware of the changing situation regarding rural development. They are now in a position to become active actors in the development of new approaches.

3 The internal approach

From the previous discussion it can be concluded that problems of national parks and the problems of the countryside are the result of the same economic development. They are, more or less, two sides of the same coin which implies that a solution can only be found when national parks and the countryside are investigated as a common problem. National parks can only survive in the long run if the intensification of agriculture in and around the national parks is stopped. On the other hand, further intensification of agriculture will have detrimental effects on nature, landscape, the national parks and the countryside. Additionally, it should not be overlooked that job creation is a relevant topic as a further depopulation of the countryside will put the national parks in an isolated position; they will become islands in which nature and landscape are the dominant factors, but they will be surrounded by empty space. This will undoubtedly put national parks in an unfavourable position with regard to the mobilisation of resources. Rural development is therefore a prerequisite for the survival of national parks.
How should this be done? From the previous discussion, one can conclude that making a separate plan for the national parks and another plan for the regions does not make sense. If the problems of national parks and the surrounding country sides are the same from the economic perspective, a comprehensive plan for a national park and the countryside should be the starting point. In most cases, the national parks have a sufficient background enabling them to make such a plan. They have the know-how and often the human resources familiar with such work. It goes without saying that communication and involvement of the local and the regional communities is the way to proceed when plans are made.

One of the most striking aims of these plans is job creation which is a precondition for every rural development. Of all the economic sectors, tourism is the only alternative for job creation in rural areas where national parks are located. The advantage of rural tourism is that there is a dramatic increase in the demand of tourism located in areas of high landscape value. The quality of this type of tourism is not identified by five-star hotels with indoor and outdoor swimming pools. The quality of the tourism infrastructure is found in the quality of nature in the region. When tourism in and around national parks is developed, the region should never have to compete with high standard tourism areas along the coast and in other well established tourist locations. In the first place it has to be stressed, that there is an abundance of these types of tourist destinations. It makes no sense, from the marketing point of view, to compete with these regions.

Sustainable tourism, which benefits from an economic point of view, the regions and people living in them, is the only way out to tackle the problems of the national parks and the surrounding regions. It needs to be reiterated, that job creation is necessary for the long term survival of the national parks as well as the countryside.

The next question is, of course, how can we maintain the quality of nature and the landscape in and around the national parks with a rise in tourism? In particular, people responsible for the quality of national parks are often afraid that tourism development will decrease the quality of nature. It is often argued that people will always disturb nature; they cannot cope with each other. It has to be said, however, that many investigations have not made clear what the disturbances would be in the case of tourism and recreational activities (see for example Cocossis and Parpairis, 1992). Of course, when vulnerable vegetation is found in a certain part
of a national park it goes without saying, that paths should not be constructed in these areas. Whenever it is known that visitors can cause damage measures have to be taken.

We should address the point that the interactions of tourists with nature and the landscape can easily be made compatible with the limitations of the national park. It is the tourism infrastructure which brings the tourist to a certain place. The development of this infrastructure is often in the hands of the national park authorities. For instance, mass tourism can only be developed after establishing a certain level of infrastructure. National parks authorities do not usually promote mass tourism. They should recognise what level of a special type of tourism is, generally speaking, compatible with the scope and limitations of the national park in question. After defining this level, they could promote the infrastructure needed for that level.

It is of great importance that they investigate how far existing infrastructures such as barns and farm houses are still available in the region. By using this infrastructure they can demonstrate that they are willing to promote the economic opportunities of the people living in the region. Many national park authorities do not have the vaguest idea what to do with sustainable tourism.

One thing is clear, namely that sustainable tourism is consistent with the possibilities of the national park and the surrounding countryside. However, one should not forget that sustainable tourism is, from the marketing point of view, differing from other forms of tourism. This implies that marketing should concentrate on the type of sustainable tourism that national park authorities intend to promote. It does not make any sense to argue that a certain type of tourism can be accepted in the region, and then wait until that type of tourist comes. In that case, they will never come.

Marketing approaches recognise different types of tourists. Some groups are relevant for the development of sustainable tourism. When we take, for example, bird watchers, one should not overlook that they are concentrated in some European countries such as the Netherlands, Great Britain, Germany and Scandinavia. There are hardly any of them in Italy, Spain, Portugal and Greece. Promotion of birdwatching is possible by advertisement in the former countries. The questions are in that case: what type of accommodation is 'normal' for this type of tourist? Do they need guided tours? Where can watch towers be built? Which part of the national park should be closed to them due to breeding birds? This type of development is not only interesting for Fertő; in Kiskunsag National Park, for instance, there are many birds which are extremely interesting for Western European birdwatchers such as Coracias garrulus, Merops apiaster, Upupa epops, Otus scops and Otis tarda. This information has to be communicated to Western
birdwatchers. The easiest way is to contact relevant organisations in these countries such as the Royal Society for the Protection of Birds and the international organisation Bird Life. National park authorities should stress the benefits of these visits for bird protection. But it is not only birds which are relevant in this respect. In Western countries there are organisations investigating plants, reptiles, amphibians, butterflies, etc. There are many possibilities; however, the communication should always focus on the information which is relevant for the organisations.

Furthermore, in Western countries the number of people who are interested in nature and an interesting landscape who can not be defined as birdwatchers, is much higher than is often assumed. For instance, the total number of active birdwatchers in the Netherlands is approximately 100,000; but more than 800,000 people (or families) are members of Dutch Nature. Therefore the total market for nature lovers in the Netherlands exceeds 2 million.

Public awareness, nature conservation and sustainable tourism should be evaluated as one entity. Only by communicating these issues to the people around the national parks, can sufficient support be generated. It is of utmost importance to make clear to people living around the park that the park authorities are willing to support the economic opportunities of these people. Furthermore, it needs to be expressed that in a national park only certain types of tourism can be accepted. A large number of visitors to the national parks creates a high level of support in society itself. A very good example of this strategy can be found in the national parks of the USA, where willingness to provide public goods and services is very low. This is not the case with national parks, however, which are supported by the government. This is only possible because of the very large number of visitors to these national parks.

A crucial issue is the financial and administrative situation of national parks. When national parks are funded by national authorities the income from sustainable tourism realised by the national park itself, often has to be paid back to the government. In that case it makes sense to investigate to what extent it is possible to create new administrative structures or foundations, in which the tourism activities can be realised without intervention of the authorities. Even when it is not possible to benefit directly from sustainable tourism, one should not overlook the beneficial effects of sustainable tourism on the support of the population and authorities. There are two financial instruments which benefit national parks and can be used in nearly all situations: an entrance fee and a charge for guided tours. There are many arguments for asking a high price for these services. The rationale behind this statement is given in Section 5.
4 The external approach

In the previous section it was argued that appropriate marketing is a prerequisite for achieving sustainable tourism in national parks. Of course, many national park authorities are not accustomed to marketing and these types of commercial activities and in many cases they have strong antagonistic feelings when marketing comes up for discussion. This is, of course, a normal reaction as marketing is nowadays often used for bringing tourists to any place where tour operators can make money off these developments without regard for the effects of tourism on nature and the environment. Two comments have to be made. In the first place, this attitude is changing rather rapidly, as an increasing number of tourists are taking nature and the environment into consideration when having their holidays. In normal life, the effects of behaviour on nature and the environment are often given full attention in the public debate. People are becoming more aware of these issues during their holidays as well. Secondly, if it is the responsibility of national park authorities to promote sustainable tourism in and around national parks, it does not make any sense if they do not use the appropriate instruments to achieve that situation.

It should be noted that modern tourism is full of visual symbols (Goossens, 1992). Sustainable tourism is not an exception to that. This implies that leaflets with pictures, signposts in the national parks, brochures for the tour operators, etc. should fulfil these expectations. Modern tourists, including many nature lovers, are not able to recognise the value of landscape, vegetation, birds, wildlife, etc. without help. If they are informed that a certain region is a national park with rare animals and plants, they 'know' that they have made the right choice. A striking example is the Abruzzen National Park in Italy with a very large number of visitors who are absolutely convinced that this park is of outstanding quality since brown bears and wolves live there. They will never see them, but they will tell their neighbours that they have been to a place with such outstanding nature that even brown bears and wolves live there. These information has to be communicated to potential visitors.

5 Environmental economics as an intermezzo

From the previous discussion one can conclude that nature, landscape and the environment are given, very often implicitly, a high value in society. The European Union policy aims at a
sustainable development of the economy which implies that it will not come about in a normal market situation. Hence, a public policy is needed. Additionally, tourists are willing to spend a lot of money to visit unspoiled landscapes and to observe rare animals and plants. From an economic point of view, one could argue that tourists are willing to spend scarce economic resources to get satisfaction from the observation of unspoiled nature. Presumably, nature and unspoiled landscape have a high economic value.

One cannot overlook the problem, however, that this economic scarcity is only reflected to a limited degree on a market. It is often suggested that many other economic goods and services provide a better reflection of economic scarcity, as they are sold and bought on a market. In this case, the market price can be seen as a reflection of economic scarcity. However, this is only partly true. An automobile, for instance, has, indeed, a certain market price which can be seen as the economic value which is given to that product by the car owner. Cars, however, do have negative effects on the environment; these negative effects are, in fact, costs for the society and should therefore be subtracted from the market price to calculate 'true' economic value. This example may demonstrate that even market prices do not reflect 'true' economic value. It is the market price of the car which gives the impression of an economic value. So, market prices cannot be seen, in many cases, as a true reflection of economic scarcity.

However, this may not marginalise the problem of the unknown value of nature and landscape due to the absence of market prices. In environmental economics, this problem attracted the attention of researchers. They try to construct other options to get an idea of the economic value of nature, landscape and the environment. Three methods of evaluation have been developed:

a) the contingent valuation method where a pseudo market is created by asking people what they are willing to pay for a certain environmental issue;

b) the hedonic pricing method where the differences between the market values of the same types of houses but located in different environmental situations, are taken as a proxy for the value of the environmental issue;

c) the travel cost method where the travel costs people are willing to incur for visiting a certain nature area are taken as a proxy of the value of the particular nature area.

The contingent valuation method in particular has been given special attention recently. It is seen by many environmental economists as a relatively good method to get relevant information with regard to the value of environmental and natural assets. We will concentrate, therefore,
on this method. This paper cannot cover all the pitfalls and barriers of this method (A good overview includes the contributions of Navrud, 1991; Hanley and Spash, 1994, and Hoevenagel, 1994). One of the most striking problems of the method concerns the information which is available to consumers. In situations where the environmental situation is rather complicated as is the case with the greenhouse effect, nuclear waste, acid rain and tropical rain forests, people are, generally speaking, insufficiently informed about these issues and hence, are not able to give defensible answers about their willingness to pay for the protection of these environmental goods and services.

In the case of touristic and recreational questions this problem is not so evident. In this situation environmental complications are, of course, relevant, but they are not as significant as in the case of the greenhouse effect. Therefore, there is a general opinion among environmental economists that this method can give relevant information when touristic issues are discussed.

We can demonstrate the relevance of the method by discussing some examples found in economic literature.

The travel cost method has been used by these authors by estimating the recreational value of the canals in the English Midlands. These canals were constructed during the Industrial Revolution as part of an infrastructure for industries in the region. Recently, these canals are no longer used by boats, as industries are using other modes of transport. The maintenance of these canals amounts to approximately £50.000 million. However, the travel costs realised by tourist to visit these canals is more than £60.000 million. This means that the recreational value, estimated by using a travel cost method, is higher than the total level of the maintenance costs. So, one may conclude that the recreational value of these canals is much higher than is often assumed.

* The recreational value of Dutch forests and heath (Van der Linden and Oosterhuis, 1987).
These authors did a survey using the contingent valuation method in the Netherlands and investigated the willingness to pay for the protection of Dutch forests and heath against the influences of acid rain. It turned out that the Dutch population is willing to pay Dfl. 1.5 billion every year for this purpose. This has nothing to do with the value of timber as this value is only related to the recreational use of these nature areas.
Of course, one cannot argue that in these cases 'the' economic value of nature has actually be
determined as too many uncertainties can be recognised when using these methods. However,
one cannot overlook the point that these investigations give an indication of the high economic
value people are presumably willing to pay for the protection of these environmental assets. One
can conclude that most tourists are willing to pay for visiting high quality nature areas and
landscapes. This is recognised by the national parks in Costa Rica where the authorities decided
recently to charge visitors an entrance fee of $15. In the beginning, there were many arguments
against the fee, as people were afraid of a sharp decline in visitors to the national parks. It
turned out, however, that tourists did not object to paying the fee. They have already spent a
lot of money on the flight to Costa Rica and on lodging, and do not feel that an entrance fee
of $15 makes any real difference. In many cases, tourists see the fee as an effective instrument
for the protection of the rain forests. It is much more difficult to use the rain forest for timber
purposes when a lot of money can be earned from the entrance fee.

These examples lead us to conclude that modern tourists are, generally speaking, fully aware
of the high value of national parks. They see the label of a national park as a guarantee for high
quality nature and landscapes. Therefore it makes no sense to concentrate on low prices for
tourists in the marketing process. Particular attention has to be given to the outstanding quality
of nature and landscape which is guaranteed, in the opinion of modern tourists, by the label of
a national park.

6 A Case Study of the Graubünden Canton in Switzerland

6.1. Introduction
In this section the case study of Graubünden is discussed, as it can give us information
regarding tourism in an area where nature and the landscape are of outstanding quality,
featuring a National Park with a high level of tourism. Indeed, the area is apart of the Alps
which are generally seen as an area suffering from high levels of tourist activities. Hence, the
region can be considered as a counterpart to many national parks elsewhere in Europe where
authorities are thinking about the application of sustainable tourism, while in Graubünden
authorities are taking measures to bring tourism into a sustainable position.

1This case study is based on research done by Jeanette van 't Zelfde of the Department of Leisure Studies of Tilburg University,
the Netherlands.
6.2 A case study of Graubünden

At least 110 million people are annually visit the Alps for recreational purposes (Daneshku, 1995). They spend approximately $50 billion every year. The total population of the Alps is 12 million. This has posed a significant threat to the nature and environment of the region causing the International Union for the Conservation of Nature to express the opinion that the Alps are the most threatened mountain region in the world. This threat is the result of a combination of many factors such as air pollution and acid rain, road traffic, water pollution, the construction of water reservoirs and the growing pressure of tourism (Ski '93, 1993). Better road access and tourism infrastructures have produced a tourist stream which is growing by four per cent per year (Molenberg, De Graaf and Viëtor, 1993).

The Alpine region is located within seven different countries: France, Germany, Austria, Switzerland, Slovenia, Liechtenstein and Italy. There is, however, no general accepted policy with regard to nature and the environment in these countries. In France and Italy, for instance, the construction of ski villages includes cutting down trees on a mass scale and dynamiting rocks when they 'obstruct' the use of ski slopes. Such a practice would hardly be accepted in Switzerland and Austria.

These differences in policies are the result of differences in political experience and population density. Many of the farmers in the French and Italian mountain regions migrated to the plains resulting in low population densities. As a consequence, the construction of these ski villages does not provoke resistance. In the Alpine regions of other Alpine countries, population densities are still higher which means a higher level of resistance against the destruction of the surrounding slopes. Furthermore, major differences in the administrative situation can be recognised. France, for instance, is a centrally governed country where all policies are determined in Paris. The opposite situation is found in Switzerland, where the influence of local decision-making is very strong. It is very difficult to implement policies without the support of the community. Additionally, Germany, France, Italy and Austria are members of the European Union; so they have to follow the directives of Brussels in the field of nature and the environment.

6.3 Sustainable tourism development in Graubünden

These environmental problems have been recognised by most of the Alpine countries resulting
in attempts at international cooperation. In particular the Alpine Convention initiated by the Commission International de la Protection des Alpes (COPRA) is playing a significant role in this respect. However, not only on an international level, but also on a national or a regional level measures can be taken to protect the Alps. The Swiss canton Graubünden serves as an example to demonstrate what ecological measures can be taken on a regional level. This canton is very dependent on national and international tourism. The well-known Swiss National Park is located there. The authorities intend to maintain the ecological condition of the park and to shift tourism activities in an environmentally friendly direction. They claim that they will secure sustainable development for tourism. Of course, the high level of income from the tourism sector makes it necessary to guarantee the future use of nature, including the national park, for recreational purposes.

Marco Hartman is the director of the Verkehrsverein Graubünden (the Graubünden Tourist Office) and plays a significant role in protecting nature and the environment in this region. Hartman considers the role of sustainable tourism in this canton to be very important for the following reasons:

* Nature and the environment are major sources for tourism. 90 per cent of the tourists in the region consider this the major components of the regional tourism product. The conservation and protection of nature and the environment safeguards the most important resources of tourism.

* Regions have to compete with other regions with regard to the image of their tourism product. Ecology will be a decisive factor in this competition. An increasing number of tourists prefer environmentally friendly holiday destinations. This is the reason why adjacent tourist regions such as Bayern, Hessen, Tirol, Vorarlberg, Salzburgerland and Alto Adige devote so much attention to the development of ecological tourism. Furthermore, elements such as an acceptable price/quality relationship and environmental friendliness are becoming more important for tourists.

* Hotels are dependent on the quality of their employees and staff. The environmental friendliness of an enterprise will be an important factor in attracting highly qualified personnel as an increasing percentage of the employees prefer to work in an eco-oriented enterprise.
In the long run, inhabitants of tourism regions will only accept environmentally friendly tourism. It has been demonstrated in Graubünden that intolerance for tourists and anti-tourism actions by local residents could be attributed to environmental concerns (Hartman, 1994).

In Graubünden 50 per cent of the jobs are directly or indirectly related to tourism. In many regions and valleys this figure is even between as high as 70 to 95 per cent. So, one can conclude that the tourism sector is of great importance to this canton. To strengthen the chances of this sector, a quality development strategy has been applied in recent years. The quality development concept is fairly similar to sustainable tourism development; it can be defined as: 'tourism that satisfies the needs and wants of guests, that is enumerative for touristic entrepreneurs and that warrants a growth of the regional economy. Quality development also implies the protection of nature and environment and a kind of tourism that respects cultural peculiarities and that is accepted by the inhabitants (Hartman, 1994)'.

Graubünden is not the only region where sustainable development has become an important issue. In these regions, authorities have also developed tourism strategies including sustainable development elements. Therefore, regions are pressed to realise these plans as much as possible as most tourist are able to recognise the differences between plans and actions. Graubünden published a programme for ecological modernisation in 1990. The programme was initiated by the Graubünden Tourist Office and was supported by the Swiss Ministry of Environmental Affairs. The Graubündner Kantonalbank (GKB) and Eurocard S.A. gave financial support to the project.

6.4 The Ecological Modernisation Plan

The programme can be divided into six steps

* Institutionalisation - the making of an eco-engine

The first point was to develop a theoretical programme which could be put into practice. For that reason, in 1991 the VVGR Arbeitsgruppe (a working group of the Graubünden Tourist Office) was established, comprising 11 members selected from the tourism sector and the region of Graubünden. This group functions as a discussion forum with regard to all questions related to the environment. Furthermore, they have developed an ecological action programme for the region and they are responsible for its implementation.
An ecological position paper

In 1991, a position paper was written about tourism and the environment in Graubünden. Information given by many tourist entrepreneurs and organisations, reviews of previous research and interviews with authorities which are responsible for the protection of the environment, have been used as a basis for the paper. The position paper gives an overview of the pressure on the environment and the efforts to neutralise these impacts. The document has been used as a basis for the development of concrete environmental measures and as a tool for the subsequent evaluation of these measures.

It can be concluded that environmental awareness is increasing, in particular at tourist offices and hotels. Suppliers of cable cars, lifts and other tourist accommodations are, generally speaking, less conscious of the environment; the lowest level of environmental awareness can be found among the restaurant owners. It can be concluded that sufficient legal instruments are available to achieve a sustainable tourism situation. However, few ecological measures have been put into practice. The level of investment aiming to reduce environmental threats proved to be relatively low.

The main environmental problems in Graubünden are the pressure of traffic and the building of second homes. Additionally, the demand of space could be seen as a serious problem, in particular in relation to new trend sports such as rafting, mountain-biking and trekking. There is a need for action in the fields of waste disposal, ecology in the work place and energy saving. It turns out that tourists are becoming increasingly aware of environmental problems. However, when tourists are on holiday their ecological behaviour is sometimes not in line with their general ideas at home. The position paper made clear that sustainable tourism development measures have only been taken to a certain degree, but that many regulations have to be implemented. Finally, it can be argued that there is a growing environmental consciousness in the tourism sector.

* Environmental awareness and motivation of the tourism sector

To disseminate the idea of environmental consciousness, the VVGR-Arbeitsgruppe organised an Environment and Tourism conference for the tourism industry in Graubünden in June 1992. Special attention was given to the demonstration of ecological measures which have been implemented by entrepreneurs in the tourism sector. The conference attracted over 400 visitors.
and generated a lot of publicity. Additionally, it illustrated to the tourism sector and the authorities that tourism in Graubünden is environmentally engaged.

The success of the conference made it possible to organise it as an annual event. In 1993, the main question was whether there is a future for the sustainable tourism development concept with regard to the difficult economic situation of tourism in Switzerland in this period. Attention was given to the possibility of exchanging experiences in sustainable tourism development. In 1994, the 'eco-hotel of the year' competition was started. The Ecological Modernisation Programme was awarded the Environmental Prize by the Swiss Commission of the Environment.

* Develop engagement
The tourism sector should address itself explicitly to environmentally friendly behaviour. For this reason, 'The Declaration of Environmentally Friendly Tourism in Graubünden' was put forward. This declaration is a legal obligation and was first undersigned by the eight main tourism organisation. Ultimately, 120 local Tourist Offices, tourism enterprises and individuals also signed the declaration.

* From theory to practice
The VVGR-Arbeitsgruppe selected different demonstration projects of new and successful ecological practices. These projects relate to traffic, energy, ecology in the work place, waste disposal and local purchasing practices. All these projects have been collected in a databank which could be used as pilot projects by those who want to implement these types of measures. By the end of 1993, a collection of 227 projects located in 61 different villages and towns and realised by 300 enterprises could be identified. Most projects dealt with topics such as traffic, energy and local purchasing practices.

The Fachshule für Tourismus in Samedan offered special courses in sustainable tourism management for owners of hotels and restaurants, lifts and tourist offices. The Graubünden Tourist Office offers practical brochures on the themes 'Open Breakfast in Hotels' and 'Ecotips for Rental of Holiday Houses'. In 1994, the Tourist Office offered individual eco-advice to tourism enterprises and to organisations about energy saving and recycling. The Tourist Office itself demonstrated its environmentally friendly behaviour by using recycled paper,
implementing energy-saving measures, using eco-proved office material and offering a free Season rail pass to all their employees.

Every year, core issues of the environmental policy are described in an action programme. In 1994, the main topics were energy saving methods in 18 hotels and ecology in the work place. Therefore the brochures 'How to save energy without making costs' and 'Improve the world; start at your own desk' have been published. The strategy of the Tourist Office is to inform not only the suppliers of the tourism product, but also the tourists themselves. In 1993, for instance, tourists were asked to contribute to the environment and the protection of nature and landscape in their favourite holiday destination. The state of ecological affairs is reported every two months in the magazine 'Saison'. The aim of the magazine is to inform tourists and suppliers of tourism products about new developments in sustainable tourism and about ecological measures which have been taken.

* Communication
The Graubünden Tourist Office gives ecological issues the central stage in its communication policy unto others. The Tourist Office intends to create an environmentally friendly image of Graubünden in the media and towards tourists. The Tourism Platform Graubünden decided that the canton will portray itself as an environmentally friendly holiday destination, so its brochures are printed on recycled paper thus enhancing its environmental image internationally (Hartmann, 1994).

6.5 Some solutions to the main ecological problems of Graubünden

5.1 Traffic
As expressed in the position paper, traffic is a significant problem. It is clear that action has to be taken, in particular with respect to the use of private cars. Some measures have been taken to minimise the traffic problem:

*Rail Check Graubünden
The Graubünden Tourist Office and the Hotel Association planned to introduce the pilot project 'Rail Check Graubünden' in cooperation with Swiss Rail (SBB) in the summer of 1995. Tourists
travelling to hotels in Graubünden will receive an attractive discount if they travel by public transport.

* Train+ and ski+: combined tickets for trains and lifts
In a number of railway stations in and outside Graubünden tourists can buy a combined ticket which enables them to travel by train and public bus to an attractive ski resort where they can use the cable cars with the same ticket.

* Ski villages and regional buses in Graubünden
For a long time the main ski resorts in Graubünden have offered free buses in the village and the region. This service will be improved and expanded. In summer, special bus services will be introduced to transport hikers and walkers to special destinations in the valley. At the end of the day buses pick up these tourists again and bring them back to the village.

* Traffic Management in Sils
Authorities constructed a central parking place in Sils-Maria where 400 cars can be parked. The aim is to prevent people from driving in the village itself. Therefore the main street became a pedestrian area; furthermore, all other parking places located elsewhere in the village have been closed.

* Coordination of projects
Aiming to coordinate all projects, the police of Graubünden developed a traffic coordination point. Twice a year, project leaders meet each other, to exchange experiences and to develop synergetic effects between individual projects.

* Periodical closure of access roads
In St. Moritz plans have been developed to reduce the inner-centre traffic during the winter season. For instance, the main street between Celerina and St. Moritz has been closed to private cars; it can only be accessed by public transport. These measures have proved very successful.

Although there are already some successful examples of road traffic management, there is still a need for additional action. Tourists should be stimulated to use public transport when they come to Graubünden and in the region itself, instead of always using their own cars. It is
important that tourist operators offer packages including public transport. The current bus system should be expanded and introduced in other villages. However, capacity of public transport is another topic; bus companies and Swiss Rail should expand their capacity to meet growing demands. A good connection with the intercity network in Germany and a frequent connection with the Zürich airport will improve the competitive position of Graubünden on the markets of the main originating countries Germany, Italy and Switzerland. To complete the management approach, a local and regional integrative traffic concept should be developed. Villages centres should be closed to private cars; pedestrian zones and peripheral roads help achieve that goal.

5.2 Energy-saving projects

* Reconstruction of hotels and lifts
Lifts and cable cars are energy-consuming as is the case with many provisions in hotels. Energy can be saved by adoption of special measures in these installations. Furthermore, the use of a bicycle for small deliveries and shopping can save energy too. It should not be overlooked that energy saving will lead to lower electricity bills.

* Solar energy
Many solar energy projects are supported by a special organisation. When hotels use solar energy, they shift from the use of fossil fuels to renewable resources. The number of hours of sunshine in Graubünden is relatively high. Solar energy cells have been placed on the noise barriers along the road between Domat and Ems.

* Regaining heat
When hotels use air conditioning, they produce heat which is normally blown away in the air. This heat can be used for making hot water.

* Laundry
It has been a normal practice in hotels to give guests new towels every day. Most tourists are not accustomed to changing their towels that often at home. So, given the choice, guests prefer to have their towels replaced less frequently. This reduces the total amount of laundry which benefits the environment. Many hotels in Graubünden now give their guests a choice regarding
the frequency of renewal.

5.3 Recycling

* Ski-boot recycling
Ski-boots are made from valuable synthetic material and can then be recycled into synthetic parcels and can then be assembled into other products such as ink pads. Ski-shops promote the recycling of ski-boots and therefore are willing to collect the old ones. However, the recycling process is fairly costly. The shops ask Sfr 4 per pair which they have to pay to the boot industry for recycling.

* Rusty cans
The owner of a hotel in St. Moritz had the idea to ask his guests to collect discarded cans. Those who collected the highest number of cans were offered a free holiday. As a result of this action more than one ton of cans was collected in one summer season. It has to be stressed that this particular hotel owner has been very inventive in promoting environmental plans such as the plan to give to his guests a sack of jute marked with the text: 'Ein Wanderer fröhlich und fit, nimmt seinen Abfall wieder mit.' ('A happy and fit walker, takes his rubbish home'). This initiative has been taken over by the catering organisation and then been offered to all enterprises in Graubünden.

* Return of ski-passes
Expired ski-passes can be returned to the ticket offices in Oberengadin which then reuses these cards. In the Klosters-Davos region tourists pay a deposit which is refunded when they return their used ski-pass.

5.4 Local purchasing practices

* Breakfast in Davos
'Beginnen Sie Ihren Tag mit Schwung - mit Produkten aus der Davoser Landschaft' ('Start your day with a swing - with products from the Davos region'). This slogan is used in 35 hotels in Davos to promote regional products in the daily breakfast. The advantages of this strategy are twofold: the use of these products reduces the use of environmentally unfriendly energy and additionally, the income of the local farmers can be increased.
Bio-farms

There are many organic farmers in the region. They established a cooperative entitled ‘Vereinigte Bündner Bioproduzentinnen’ (‘Graubünden’s Organic Farmers Cooperative’). A list of the names and addresses of these farmers has been published.

5.5 Other sustainable tourism development projects

* Ecological guidelines for the organisation of events

Outdoor sports and the organisation of sporting events in the countryside are always accompanied by controversial discussions and conflicts. The ecological pressure of these events have to be reduced. Therefore sports authorities have developed guidelines for organising sporting events.

5.6 Small steps forward on the quality development trail

Since 1991, Graubünden promoted environmental actions at a local and regional level, increasing organisational quality; special attention has been given to actions in which tourists themselves develop environmentally friendly behaviour. The next phase is to develop an environmental framework and implement economic incentives to embed sustainable tourism. The intention is not to transform the whole region into a paradise for eco-lovers; the aim is to develop tourism in Graubünden on an ecological basis. It can be concluded from the experience of the last years that sustainable tourism is firstly a task for the suppliers of tourism. Tourists expect them to lead the way. However, sustainable tourism development need the time and commitment of all those involved (Hartman, 1994).

The situation in Graubünden is, of course, different from that in the regions in which the national parks in Hungary are located. On the other hand, we can learn from this example that it makes sense, even or particularly when a national park is located in the region, to accept shared responsibility and opportunity to promote sustainable tourism and to use all available means of communication to satisfy tourists, to guarantee the quality of nature, landscape and the environment, and to build strong support from the people living in the region itself.
7 Conclusions

From the previous sections the following conclusions can be drawn:

* The decrease of economic activities and the decline of agriculture bring the countryside in an unfavourable position. Intensification as well as extensification of agriculture are common phenomena recently. Both have detrimental effects on nature, the environment and landscapes. Economic revival and rural development are important issues in rural areas.

* National parks cannot exist and survive as islands surrounded by depopulated and depressed rural areas.

* The development of low impact tourism can be evaluated as a good instrument for an economic revival of the countryside. National parks and the surrounding areas often have high nature and landscape qualities making them appropriate for eco-tourism.

* Modern agriculture and extensification of agriculture activities are both much more detrimental to nature and the environment than all forms of tourism. The influence of low-impact tourism on nature is often exaggerated by national parks authorities.

* National park authorities can regulate the impact of tourism only if they are active in influencing and promoting low-impact tourism to the region.

* The value of nature to visitors is much more higher than mainly expected by national park authorities. This implies that high entrance fees and high priced guided tours are seen by many tourists as a guarantee for high quality.

* National parks need to communicate these issues with the region, regional and state authorities, potential visitors and their own employees.
Literature