STRATEGIC EVALUATION OF ECONOMIC FEASIBILITY OF MOUNTAIN TOURIST REGION DEVELOPMENT – CASE STUDY OF STARA PLANINA

Saša Milijić, Dušan Baničević, Nikola Krunić

This paper covers theoretical, methodological and practical discoveries and evaluation of the economic aspects of development and planning of the mountain tourist regions. The basic aspects of economic-spatial theories, analysis and methods are presented for research of development effects in the mountain regions. It is also pointed to the basic terms of the mountain tourist regions development in the countries of the European Union which realize respective development results. The work analyses significance of tourism in development of the mountain regions characterized by the capability for innovative activities, i.e. starting the whole range of complementary activities which reversibly influence the forming of growth and development poles. Especially are analyzed commercial and non-commercial effects of realization of the mountain tourist centers in ecologically saved, but as a rule, economically not enough developed mountain regions.

The approach in the strategic evaluation of the economic feasibility of development of the tourist region is considered in accordance with the experience of the countries with higher degree of mountain region development, on example of Stara planina. The analysis of economic feasibility of mountain region development Stara planina covered the following segments: market, consumption, number of employed, investment means and economic effects of exploitation. Considering the fact that Stara planina is region covered by the Park of Nature and Tourist region for which the Spatial plan is done, a special problem was harmonization of development and protection functions, i.e. evaluation of economic and ecological acceptability for development implementation. The Spatial plan foreseen rational model of sustainable regional development of the Stara planina region based on integration of urban and rural economies on one side and development of tourism and protection of nature, on the other.

Key words: sustainable development, tourist region, economy, protection, evaluation, Stara planina.

INTRODUCTORY REMARKS

The basic question that influences all aspects of the sustainable development of mountain regions strategy, including the fundamental decisions about its realization, presents the balance between development aims on one side and protection of resources on the other side, as a condition and a consequence of development. The protection of resources is related to natural and cultural values of the mountain regions. The natural values cover all elements of the natural environment that are a condition for realization of developmental activities. The difference between natural resources that have to be preserved is usually emphasized together with the ones that should be developed with different degrees of priorities and intensities.

In the countries with a higher degree of development of the mountain regions, tourism represents dominant economic activity since it possesses capability for innovative activities, i.e. towards the movement of the whole spectrum of complementary activities. Tourism is the generator for development which possesses capability to transfer innovations to agriculture and to other fields which supplies it with different products, semi-products and services that might be considered as the key for prosperity of the mountain regions. Besides, tourism has innovative capability turned towards markets outside the specific mountain region which will depend on its competitiveness in search of the specific tourist product, i.e. the image of the mountain region.

The mountain tourist regions in the Western European countries accomplish significant development results, primarily in incomes, with adequate ecologically adaptable protection system of the nature and environment, which is tested on the sample of
the Park of nature and tourist region of Stara planina.

CONDITIONALITY OF ECONOMIC FUNCTIONS

The existence of different interests in selection and means of realization of the social-economic development and its relation towards the protection of mountain regions influenced the creation of different approaches. For research of economic aspects of development and protection of mountain regions, different economic-spatial theories are applied, as well as analyses and methods, selected by their significance:

1. analyses of basic economic functions of the mountain region, is an integral part of the scientific approach to consideration of the development and protection which covers research about the relation between economic, human and natural systems; economic systems cover economic activities of man in the mountain regions, such as: development of tourism and complementary activities, food production, exchange and consumption of goods oriented towards sustainability and effectiveness of functioning; human systems cover sphere of biological elements, creativity, esthetics and morality, which together constitute framework for all human activities in the mountain regions and can be stated that the economic system is a sub-system of the human system; natural system represents a complex of elements of the material realities which directly influences and is in interrelation with human and economic system; considering that the expansion of human and economic systems is connected with exploitation, but limited by boundaries of the natural resources in the mountain regions, scientific researches on relation between these systems are determined towards a definition of acceptable activities and means for realization of capital investments in development of tourism, without damaging effects of the natural surrounding; usefulness of natural resources, in the form of satisfying material, esthetic, spiritual, scientific and recreational needs; absorption of harmful effects in line with the assimilative capacities of the natural environment; and elimination or compensation of side effects towards the local community and renewal and protection of natural resources.

2. analysis of influences and effects of development to the mountain regions with derived cognition that development projects might have negative consequences for the surrounding and that the decision making about its implementation must be conditioned by the planned process of identification, evaluation and comparison of development effects and fulfillment of demands related to the protection of natural values of the mountain regions; assessment of influences should identify parts of the mountain regions where development has a potential to provoke useful or harmful effects; each of these influencing elements should be described in the sense of capacity and conditions of the human environment including the shape, trend and quantity of the proposed changes; evaluation covers identification of three key types of influences of the developmental projects in the mountain regions, being (HMSO, 1995, Spasic N., 1994 and Weston J. 1997): direct and indirect effects of development and public assessment on changes of the mountain regions.

Direct development effects are expressed by its locality, influence or transfer and include consideration of: (a) nature and quantity of changes in accordance with the significance of influence towards humans, natural and created values, as well as the possibility to prevent, mitigate and remove negative tendencies; (b) the existing forms of land use and resource values; (c) spatial status in accordance with division to national, regional and local interests and the way of management; and (d) significance of influence according to the possibilities for change of the living qualities for the local communities, satisfaction of urban inhabitants needs and quality of resources depending on its specificity.

At a glance, such approach looks simple: the effects of development should be scientifically evaluated, and the intention of space planned. In this case there are few problems. Primarily, lack of necessary scientific information, such research process is long; it demands knowledge of the cause and effect links and selectivity. A conflict in the planning process might be created questioning the acceptance of the results about effects of development on changes in space. The expert's opinion is not the only one that is important, public opinion is also important. The conflict between the expert judgment and public opinion is a clash of different understanding of change values which cannot be quantitatively expressed and technically sufficiently treated, but can marginally change the evaluation. Public does not consider statistical, financial and political terms of developmental influence, but increment or decrement of quality of the environment. Public observes the effects of development, caused as consequence of running different activities in space, acceptable only in case that they can compensate imposed risks to the surrounding. Also, significant analytical difficulties of such complex task and need for valuable judgment, demands collection and consideration of a great number of information and inevitably include significant degree of subjectivity, meaning that the evaluation of influence might be used with an aim to skip problems and manipulate with results, satisfying the investors' and influential stakeholders' interests (Cullington B. 1997 and Rees J. 1994).

According to HMSO (1995), one of the approaches that treats the evaluation of influence of the development in relation to strategic planning of the mountain regions is determination of the significance of its geographic level, where we distinguish influences of a) international significance, which produce effects that are tangible to international subjects interests, such as the regions protected by the Alpe Convention and other mountain regions which are in the developmental and protection sense under the influence of many countries; b) state significance which includes the effects that influence the interests of the mountain region development determined by the politics of a
country; c) regional significance which mainly relates to the part of the mountain region situated within a certain municipality.

The indirect effects of development emerge by the influence of more development factors, outside the market mechanisms, are manifested at the wider mountain surrounding and include positive effects which are materialized through consumption and negative effects manifested as a consequence of the lack of adequate policies for development and protection.

Perceiving the consequences of developmental effects not valued at the market, demands operationalization of the concept of external effects in management of the mountain regions based on theoretical considerations: a) optimization – consistency with effectiveness; b) compensation – financial transactions between producers and recipients of effects; c) internalization – considering the characteristics based on potential “market” effect; and d) distribution – social and spatial, symmetry and asymmetry in use of the resources and services (Perman P. 1996). These considerations do not aim towards improvement of the quality of the natural environment, but only to include the question of natural environment into the traditional system of prices and markets.

Public evaluation on changes of the mountain regions covers opinions and proposals of the local inhabitants and visitors about locations suitable for development and identification of negative and positive consequences of development, or changes in quality and offers in the region. The evaluation process of the influence of economic development to the mountain region, based on a kind of valuable ranking, enables research of the significance of all influences in order to offer information to decision makers about the power and size, short-term or long-term, return or non-return; quality standards of the human environment; sensibility of receptors; coordination with the human environment policy, etc. In methodological sense, determination of importance of any single developmental effect is complex and demands skilled attitude determined by developmental priorities, ecological criteria for protection and rebuilding of scenery and the expenses derived.

Comparison of effects of developmental alternatives aims to selection of the best or the most balanced solution, based on the researched values of their characteristics, where the question is who should undertake it – an expert, politician or public. In case the selection is undertaken only in accordance with the expert principles of scientific overview and results of technical evaluation of fundamentally political questions, there is a possibility that the solution does not obtain adequate support. On the other side, if the selection is undertaken only in the process of political guesses and public consultations, than it is foreseeable that “balanced” solutions suffer partiality – in favor of the most influential stakeholders.

3. analyses of optimal economic activities in use of the mountain resources, represent research of economic, social and ecological effects to rural and urban locations and their inhabitants, which derive from different forms of development and modification of the basic purpose of land; illustration of the application of multidimensional methods for determination of optimal purpose of the land, represents the study on spatial planning from the concession perspective on the local municipalities for the use of mountain resources; after collecting data about relevant marks of the mountain regions, first step towards analytical evaluation of the land purpose is identification of variations in purposes, such as: application of concessions for exploitation of natural forests resources, waters, ores, etc., which is positive in case of employment improvement and development of the region, but negative in case of limits in agriculture, tourism and the condition of the natural environment; new ways of concession for exploitation of natural resources of the mountain regions with right to realize tourist-recreational activities which represents less attractive solution from the economic aspect due to the higher starting investments, but also a long term solution which is in balance with principles of the sustainable development; application of alternative mountain region for exploitation of natural resources which is positive from the ecological aspect, but less attractive from economic aspect; and halting all economic activities in mountain regions which is “positive” solution from ecological, but unacceptable from the economic aspect.

The presented variations can be valued according to the three basic groups of criteria, economic, social and ecological, which can be further divided into more components. The precision improvement of the planned information demands creation of the matrix of multi-criteria evaluation of the development effects to the existing spatial needs, where the opinion is given by different interested groups.

4. analysis of the economic values of resources of the mountain region capable to be determined on basis of the market transaction, but independently from it; in case that the resources are subject of market transaction they have certain monetary value which can be used when defining its social value; however market and market prices will rarely exist and will not give correct indications about the social value of the resource and quantitatively natural flows, if they are in form of the public goods or when the change of natural environment happens (in that case, any

Table 1: Basic criteria for evaluation of the variations in land use

<table>
<thead>
<tr>
<th>ECONOMIC CRITERIA</th>
<th>SOCIAL CRITERIA</th>
<th>ECOLOGICAL CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment in the primary sector</td>
<td>Attractiveness of destination</td>
<td>Psychological and esthetic qualities of scenery</td>
</tr>
<tr>
<td>Employment in the secondary sector</td>
<td>Recreational attractiveness</td>
<td>Rareness of eco. and bio. components</td>
</tr>
<tr>
<td>Agricultural production</td>
<td>Tourist possibilities</td>
<td>Consistence with the existing landscape</td>
</tr>
<tr>
<td>National reserves of resources</td>
<td>Traffic and infrastructure</td>
<td>Consistence with the existing historical-cultural contents</td>
</tr>
<tr>
<td>Profit on basis of concession</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
achievement to evaluate social value of the resource will demand a big number of information about exploitation of the resource and will demand alternative approach of evaluation in physical units, for example, tons, hectares, etc, and the selection will depend on shape of the observed natural good. Individual and social preferences (needs, wishes, demands) in relation to the natural goods reflex expected benefits from their use (or existence). Ethic arguments might suggest that the use of resource is a true natural right, but that the existence of this right enforces limits in a way that these resources might be used by people. The question is raised how these rights and limits might be included into the economic maximum of usefulness. Defining the rights and limits in the use of resources has to be considered in the process of decision making which have potential influence on the living environment, but for which, other relevant information is needed besides economic.

The concept of economic valuation of the mountain region resources demands discussion on dimensions of the resource values and techniques for their determination, with critical review about their application. The values that are analyzed have more dimensions and might be presented as: existing, current, optional, quasi-optional and total value. Following the practical experiences of the economic analyses, values can be considered as individual or social profits derived from the way of present or future use of the mountain region values. The existing value of the mountain region resources derives from ecological preferences for their maintenance in the present form and it is only connected to particular ways of use. The current value of use of the mountain region resources derives from their potentials and the economic and social profit derived from that. The optional value of the use of the mountain region resources can be defined through the monetary amount, payable at present by which the right of the open purpose options is realized for the resource, and difference that can derive between it and the expected marked surplus in the future. Quasi-optional value of the resource relates to the benefit that can be achieved by holding the existing and including alternative purpose options in the future. The total economic value covers the sum of all value classes that have a base in human preferences and can be represented as a quantity function of natural goods in the mountain regions that are used in a certain period of time.

Techniques for evaluation of the natural resources have an aim to define effects that derive from the use and damage caused by lowering the quality of natural resources. Many ways for approach of the problem exist. First way would include attempts of direct evaluation of the benefits and damages derived from the use of natural resources and it comprises three approaches: hedonistic valuation, valuation of travel expenses and contingent valuation. The second way uses indirect approach to valuation represented in the method of dosed answer. The third way represents the method of economic-ecological multi-criteria evaluation where the approach combines qualitative and quantitative information.

The method of hedonistic valuation is based on the rating of the natural resources which as public goods do not have market price, but presume that their value can be defined through services or distinctive features that contribute to pleasure. Under what circumstances is this way of evaluation possible and adequate: the examples can be variable ownerships, neighborhoods, approaches or qualities of the elements of the natural environment, for example air (or vice versa atmospheric pollution). While on one side, the clear air is not a market product; on the other it can influence the price of residential locations. The research of this impact shows that tendency exists in rental growth people are ready to pay, depending on the higher standard of the air quality. In these circumstances statistical techniques (for example regression analyses) can be a good tool for identification of the location suitability, while the other determinants of the residential rent are observed as constant.

The method of valuation of the travel expenses is defined by destination and its developing possibilities based on tourist, recreational or cultural potentials. The basic principle of this method, based on theory of consumers demand, follows the relation between expenses (in the sense of time and money) and frequency of visitors who travel and stream to such destinations. A conclusion is derived from the researches that the function of travel expenses and frequency of visits grows with the growth of variable quality which represents destination quality and can be interpreted via the demand line.

According to Giusspe M. (1995) the method of contingency valuation is used in two cases: for evaluation of readiness to pay for improvement of the quality or quantity of some good in the surrounding and for evaluation of readiness to accept compensation for possible damages in the surrounding. Method operates by data obtained from the survey of representative samples of population (time determined contingent), and on the basis of its content, their interest for changes in the surrounding is presented in relation to nature, implementation, expenses, etc. The questionnaire as a methodological procedure for data collection, facts and opinions of the particular number of examinees, depending on the type of questions, can be: closed - where answers are limited in advance and data presentation easier and open - where a possibility of free expression exists, but data presentation is harder. The way in which the survey is conducted might have significant effects on results of evaluation. The confident answers can be received easier by carefully defined questionnaire (closed model of survey) with prior suggestions about the specific problems, solutions and consequences of the planned project. Improvement of quality of the natural environment by selection of evaluation that this has to be paid or compensation to be made, leads us to the question of competency in aggregation of individual or social interests, time moments of this decision and the referential point for comparison of losses and gains.

According to Perman P. (1996) dosage as an evaluation method consists identification of effects (dose) of the human environment load, i.e. change of values of goods and services. As an indicator of value, the prices for the related media are used in units. In the second phase their evaluation is done in form of monetary values for each unit of negative and positive effects of the protection and development.
The method of multi-criteria evaluation, according to Guisspe M. (1995) takes into consideration integration of different information which will enable decision making with the minor degree of conflicts (or the major level of consensus). Integration of different information about the values of the mountain regions contains some methodological problems, such as: differences in time scale (comparing to ecology, economy mainly analyses short term and mid-term effects); differences in spatial scale (spatial scales of ecological variables are often very small, while the scales of economic variables are big) and differences at the measuring level of variables (need for information of the combined type). The method has an aim to secure wider frame for evaluation of gains and losses of the mountain alternatives, by constituting detailed social, economic and ecological effects and taking into consideration interests of different social groups which are under the influence of the mountain solutions, from which the compromising solution is identified, one that satisfies all three conflict values of economy: efficiency, equivalence and sustainability.

The samples of development integration and protection of the mountain regions, which are of significance for application of the previous approaches are: developing needs of the local community in the protected mountain regions, inclusion of the local communities in planning and application of the protection projects and enabling the local population to realize benefits through employment, additional incomes and compensations, stimulation of traditional forms of land use and eco-tourism as the most important economic activity compatible with sustainability of the bio-diversity (Walther P., Kohler T., 2002).

Methods of project evaluation in the mountain regions can be divided into the general and special ones: general methods of evaluation are: expenses and profit analyses, analyze of the spatial suitability, analyze of the values of the human environment system, evaluation of the countryside suitability, planned case balance, matrix of realized aims, valuation of the spatial attractiveness, etc. Special methods of valuation are valuations of the border capacity, first stage realization, etc.

**Optimal use of the mountain region resources**

The analyses of the relevant economic factors represents precondition for defining the rational model for use of renewable and non renewable resources of the mountain regions. A special attention in the analyses would be dedicated to the use of resources under the existing and changed circumstances, acceptance of changes in relation to other factors of the surrounding and the ecological significance and possibilities for quantification of the social benefits from the way resource is used, in other words direction and intensity of changes as appendix to planned alternatives (Smyth, A.J. 1993).

In practice, it is very difficult to precisely execute quantification of the social benefit on basis of the usage ways in the mountain region and conventional economic model which enables us to understand this in a simple way, might be presented as highly aggregated function where the resources are observed through variables in the usage or production processes:

\[ Q = (C, L, R) \]

**Analyses of the economic factors**

Analyses of the economic factors is a complex one, due to its multi-criteria function where economic, physical and social aspects overlap and each in its own way decide the way the mountain region resources are used.

There are two basic questions connected to the presented economic factors of use of the mountain regions natural resources (Peran P. 1996): a) question of the positive economy: is it, in the economy of usage of the resources, possible to achieve the condition where trends

<table>
<thead>
<tr>
<th>GROUP OF FACTORS</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESOURCES</strong></td>
<td></td>
</tr>
<tr>
<td>Renewable and non renewable</td>
<td>Quality and quantity</td>
</tr>
<tr>
<td>Labor</td>
<td>Disposability, engagement and seasonal components of work profiles</td>
</tr>
<tr>
<td>Capital</td>
<td>Rationality of use of the basic tools</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Literacy rate and level of education</td>
</tr>
<tr>
<td>Capacity</td>
<td>Kind of capacities and ways of spatial usage</td>
</tr>
<tr>
<td>Exploitation efficiency</td>
<td>Refund of the invested means</td>
</tr>
<tr>
<td><strong>ECONOMIC SURROUNDING</strong></td>
<td></td>
</tr>
<tr>
<td>Exploitation expenses</td>
<td>Level, seasonal and annual variations, risks</td>
</tr>
<tr>
<td>Income of the use</td>
<td>Level, seasonal and annual variations, risks</td>
</tr>
<tr>
<td>Investments</td>
<td>Availability, scope and realization, interest rates</td>
</tr>
<tr>
<td>Market</td>
<td>Approach, interests, location's image, prices</td>
</tr>
<tr>
<td>Inhabitants</td>
<td>Rate of changes, migrations directions</td>
</tr>
<tr>
<td><strong>SOCIAL INTERESTS</strong></td>
<td></td>
</tr>
<tr>
<td>Aims</td>
<td>Maximising the usefulness, minimising conflicts, satisfaction of needs</td>
</tr>
<tr>
<td>Risk escape</td>
<td>Coefficient of the absolute, relative and partial risk escape</td>
</tr>
<tr>
<td>Realization</td>
<td>Development priorities, inclusion of local communities in tourst offer, concessions for the use of the natural resources of the mountain regions</td>
</tr>
</tbody>
</table>
of their exploitation will both renew and have the same values in an unlimited time period, with respect to capacities of the resources and limitation of their use and b) normative question: which scope of use of the mountain region resources should have a priority as an optimal in realization of the long term concept of development.

The concept of the optimal use of the mountain region resources have several meanings, as well as different understandings about the limits and consequences that can appear by application of the certain activity in space.

In order to direct discussion to understanding of the optimal way of use of the mountain region resources, according to Perman P. (1996), it is necessary to analyze a few definitions:

• optimal way of use of the natural resources understands leaving the present conditions to future generations;

• optimal way of use presents realization of non-declining usefulness for a representative part of society;

• optimal use is the level of economic activity which leaves the quality of surroundings unchanged, with development policy directed towards maximizing net use from development; services and quality of natural resources;

• optimal use of natural resources enables such development which would satisfy the needs of present generations without compromise with possibilities for future generations to satisfy their needs; and

• alternative approach to optimal use is focused on realization of the planned documents and development policy under the condition to satisfy standards of the optimal protection of resources; the mentioned condition is based on presumption that the limits exist above which the exchange of natural capital by human action is not possible; this approach is focused on the relation between economic and ecological and opens the question of defining the optimal protection as justified, or unjustified limitation for development.

Within the new knowledge about the concept for optimal use of resources some similarities exist on attitudes in moral, ecological and economic arguments. The moral arguments for use of natural resources are based on the obligation for a long term preservation of their quality which not only considers the optimal use, but the optimal protection of the mountain region resources. The ecological arguments for use of the natural resources are based on the overview of possibilities for protection of the ecological diversity on basis of the correct selection of space purpose. The economic arguments for use of the natural resources are based on consideration of the justification and efficiency in realization more options for use and protection of resources as a condition for development.

According to Perman R. (1996) dispute and explanation of the economic activities in connection to relations towards the use of the mountain regions resources have the following aims: to define and explain concept of economic efficiency and optimality through the usage activity of the mountain region resource; economic efficiency is directed to such activities that will enable instant efficiency, i.e. maximum usefulness (static usage of resources), while the economic efficiency is directed to accumulation of resources and division of rights to present, but also to the future optimal usefulness (dynamic use of resources); and to analyze and explain instruments under which are market and public policy competitive to influence the usage of resources and how qualitative, quantitative and substitution effects of the resources usage influence the change on market and public policy. According to Common M. (1995) a few categories and instruments exist for control of resources usage, such as: direct control (legal specification of the permissive exploitation, processes and equipment); indirect control (price stimulation and taxation for certain scopes of the resources usage); social influence (pressure by Interested groups, education about the problems of the existing and possible scopes of use) and moral conviction (possibility for compensation by introduction of new technologies for tax reduction).

Conducting the public policy on usage of natural resources is reflected in the policy of spatial planning which part includes rating of influences and alternating locations of developmental activities and process of its integration into the sector’s policies and the process of the surrounding monitoring. Considering the qualitative and quantitative effects, series of possible options of economic activities, the planned solutions are directed to selection of the best or the least bad solution, achieving a kind of an optimal difference between potentially clashed economic goals and protection of the natural environment. In the countries with market economy, a document which overviews the total quality effect of development, is a pre-investment study where the best possibilities for investment (with the best relation between expenses and profit) are researched alternatively; regional basis and regional connections are studied; competitive alternatives are compared; possible reactions of local and regional inhabitants and authorities are explored. The provisions of the planned solutions and elements of pre-investment study are framed by the regulations of a long term plan, i.e. by provisions of the legal and management regulations, like instances where the protection of the welfare interests are secured, together with the interests of the local society, human environment, etc. On basis of the achieved plan document and positive results of the pre-investment study, the bearer of investments orders the investment documents and their value is tested by detailed investment studies (Dabić D. 1998).

The process of development, protection and structure of the mountain regions contains specific areas where potentials and limits of the natural and created resources are considered, possibilities for the most appropriate trade activities, inter-relation of tourism and complementary activities, tourist image and demand for a tourist product at the market, means for inclusion of the local population into the development and protection processes, ways of financing and managing the development, possibilities for social-economic influence (from the national, regional and local level, private investors), harmonization with the natural surroundings, etc.
Social-economic aspects for the mountain region development integrate different analyses and evaluation of plans and projects for developments and cover:

1. investment analyses for development, i.e. profitability of the project, by application of commercial criteria of expenses and benefits; evaluation of the project consists of review of the mutual and external expenses and individual studies of cost-effectiveness (financial, location, etc), definition of investment priorities, etc.;

2. analyses of social-economic effects on regional and national level on the basis of: data between tourist and other services; investments which can be conditionally divided on investments in capital infrastructural systems and objects and investments in tourist objects: influence of the tourist development to national income and social-economic structure (foreign trade balance and expenses by the unit of investment, capital expenses by an employee, etc); multiplier effect of tourist development which creates new profits and expenditures for other economic sectors; employment in category of direct employment in sector of tourist services and indirect employment which relates to sectors which are under the indirect influence of tourism; regional benefits of revenues on the basis of direct taxes (from employees in tourism, tourist and other enterprises) indirect taxes (on consumers goods for tourists, etc), state financing (through subventions for regional development, investment in infrastructure, improvement of the natural environment, municipal project for development of tourism, elaboration of planned documents, etc); economic aspects in view to the length of tourist season, trade and provision of the land for construction of tourist objects, etc; and non-quantitative effects of development such as standard of the local inhabitants, services to local inhabitants from use of public and sport-recreational objects, degradation of natural and social environment, education about the land resources and the region, etc;

3. analyses of the other facts of development, such as: sensitivity of tourist market to external influences (changes in political, economic and social structures, etc); competition of other mountain tourist centers; the length for development of a tourist centre (average is 10 or more years), for which it is necessary to have the flexibility of developing program in accordance to new scopes of request that might occur at the market (alternative subjects of the centers, improvement of sky transfer system, new ski-paths and summer programs in space, etc.) and

4. survey on social-economic interests and developing subjects policies according to the development of mountain region and its priorities.

The effects of development of the mountain regions from the tourism aspect might be summarized as advantages and limitations. Advantages are economic (increased revenues, gross domestic product, foreign trade, redistribution of revenues towards mountain regions, etc.), development of infrastructure and services, opening of new working places, protection of the natural environment, education of the inhabitants, diversification of trade (industries complementary to tourism), regionalization of the economic development with an aim to integrate offers, increment in revenues (taxes, rents, tariffs, etc), creation of the country's attractive image abroad and raising the living standard in mountain regions, holding the inhabitants, etc. Numerous confinesments which the organization, construction and outfitting of space make more difficult and more expensive emerge due to more factors: distance from the emissive and other centers in the valleys, underdevelopment and non-arrangement of the local environment, difficult traffic accessibility and permeability, danger of the natural disasters, regime for the protection of nature, big winter energetic needs and needs for thermo and hydro isolation, very short building seasons, increased expenses for maintenance, great investments (especially in infrastructural construction, necessary participation of state funds, etc), social problems, destruction of spatial and cultural surroundings (in case of non adequate application of plan and tourist influence), sensibility to external factors, growth of land values, influence to the natural environment, etc.

Creating systematic conditions for protection and development of the mountain regions, by priorities cover: identification, reservation and protection of resources until putting it in a planned function, i.e. regulation of the regime of space use and sanctions for negligence; and management of resources of the mountain regions with establishment of responsibilities and obligations for developing subjects and competent institutions in charge of plan application. In any case it is necessary to determine the limit up to which the development should be forced, regulated or limited, i.e. in case that the tourism is the framework for development of the mountain region (accelerated economic, social and spatial changes) effective control and measures for protection of the natural environment should be defined; when development is not successful, despite availability of resources, alternative directions of tourist development have to be determined, together with the analyses of cost-effectiveness of competitive and existing economic sectors; and when the tourist development effects degradation and erosion of unique locations and resources, but has significant social economic benefits for the local population, decision has more to be based on political factors.

POSITION AND BASIC CHARACTERISTICS OF STARA PLANINA TOURIST REGION

A special problem of regionalization of the mountain tourist regions derives from situations where tourism overlaps with the protection of the natural and other functions of the general social interests. In such cases a semi-functional region is established comprising the protected area (national part or park of nature) with tourism as one of the special functions and its development is coordinated with another special function which consists protection of nature; this is in practice confirmed through organization of national and regional parks in the greater part of the Alps mountain regions. Only some mountain regions are protected and arranged exclusively for cultural use today (example is the park Engadin in Switzerland), while the majority is treated according to the French type model for protected regions, with triple level of protection, as in the case of Stara planina.
The region of Stara planina represents the area of natural goods and main natural tourist protection in the strategic frame of the sustainable development of Republic of Serbia, with the completed Spatial plan and includes Park of Nature and the tourist region Stara planina of 1540 km².

Stara planina is the best quality high - mountainous region in the Republic of Serbia (excluding Prokletije and Šarplanina in the Province of Kosovo and Metohija ruled by UNMIK) suitable for contemporary year-round tourist activities and recreation, as well as the cultural presentations, for ecological, exclusive agricultural production of healthy food and other activities that are complementary to the Park of Nature and tourism (forestry, waterpower engineering, production of clean energy, clean industrial and craft manufacturing, etc.). The natural conditions and resources are among the most important natural conveniences for development of winter and summer tourism and recreation, integral with other means of tourism and complementary activities. The spatial capacity enables realization of tourist centers and settlements, as well as sport-recreational offers in space. Stara planina relief by morphometric shapes and landscape characteristics with hydrological resources represents extreme tourist and recreational potential. High mountain massif with direct middle mountain surrounding occupies about 110 km², in high-altitude belt above 1500 m.a.s. and around 340 km² in high altitude belt between 1000 and 1500 m.a.s. The main potentials of tourist development are ski-paths at Stara planina, water accumulation “Zavoj” and watercourses with suitable locations for realization of highly commercial tourist centers in the municipalities of Knjaževac, Pirot and Dimitrovgrad with inclusion of under-mountain villages into the tourist offer. Special tourist potentials on a wide high-mountainous area of Stara planina (in municipalities Knjaževac, Pirot and Dimitrovgrad) are terrains suitable for high-quality downhill and cross-country skiing (with cold expositions, height differences of paths to 1000 m and snow lasting for 5 months, together with the suitable grass terrains of continual slopes and little forests) international and domestic significance, not only for the recreational skiing, but also for sport competitions of international and national ranks, by standards of the World Ski Federation (FIS). A significant potential represents rich cultural heritage (especially ethno-values of traditional villages and tourist manifestations) with more intensive and organized presentation and use, renewal of neglected traditional handcrafts, etc. Special potentials for development of tourism are preserved nature and natural values of the Park of Nature Stara planina, under the condition to intensify and organize protection, presentation and control of use. The convenience represents the expressed interest of foreign and domestic capital for construction and exploitation of tourist-recreational complexes and infrastructure.

Since the rational economy of the mountain tourism understands year-round use of the offered capacities and since there are enough potential, numerous ways of tourism in winter and summer periods are anticipated. The tourist contents, recreation and sport in the Park of Nature and tourist region Stara planina will be zoned and organized in two basic high zones: mountain and sub-mountain, with about 60 000 stationed users. Mountain zone will represent higher mountain belt with dominant mountain offer in space and new tourist accommodation for about 40 000 based users, in direct contact with that offer (at the entrances of Alpine and Nordic ski paths with ski lifts starting points, starting points of mountaineering, mountain resort paths and other mountain offers in space). Sub-mountain zone would include lower foot of mountain and its wider surrounding within the Plan area, with hills and valleys and offers in space and accommodation in the existing villages and mixed settlements and town centers for about 20 000 stationed users. The total minimum capacity of the downhill ski paths of the mountain tourist zone will be about 41 000 simultaneous skiers (9 500 at the territory of Knjaževac municipality, 25 700 at the territory of Pirot municipality and 6 000 at the territory of Dimitrovgrad municipality). Approximately, the maximum number of skiers who can ski at the same time is estimated to around 68 500 as the border capacity of the ski resort of Stara planina, but the approximate maximum capacities of ski resort in some sectors might be bigger from the ones stated by the Plan, if by detailed explanation the economic justification and ecological acceptability for bigger burden of space can be proved. A minimum of 49 main ski lifts (3 with cabins and 46 others) with the minimum of 143 km downhill ski paths are planned in all six sectors.

DEVELOPMENT OF STARA PLANINA TOURIST REGION

According to potentials of the Stara planina tourist region, realization of the planned activities and objects in function of tourism will represent the key developmental project in the region. Developing option that would include development of Stara planina tourist region would depend only on small and medium enterprises (in further text SMEs) and the existing industrial branches, with extremely difficulties in solving the question of non privatized enterprises and starting the economy, redundant employees and pre-qualification of workers, sale of goods and creation of convenient business conditions, with long term backwardness in development and solving the key problems of the local economy.

For evaluation of the economic feasibility of developing projects in accordance to the EU criteria, the most important are: 1) competitiveness at the market; 2) influence to living quality; 3) improvement of the living environment; and 4) reduction of the unemployment rate. Regarding the project case for Stara planina tourist region, all four conditions for positive evaluation of the project are completely fulfilled.

1. The project can be very competitive in terms of tourist services prices and attractiveness, i.e. occupancy of the tourist capacities, specially having in mind enormous potentials and facilities for development of the year-round tourism;
2. successful development of tourism would multiply influence the improvement of living standard of the local inhabitants - employment, additional incomes, security and long term employment and increase of the attractiveness of the region for life, etc;
3. tourism is a sector with relatively small pollution in the surrounding, under the condition that the infrastructural objects
are placed and controlled in adequate way, primarily traffic, water supply, system for refinement of waste water, etc; eventual pollution from development of tourism can be solved by assignment of ecological taxes (payable at the entrance of the Park of Nature/ tourist resort), or from the part of incomes received by tourist activities; and

4. one of the key developing effects of the project is employment for local inhabitants through various kinds of business and guarantee for the long term demand for tourist products of the region, placement of the local community product and local working power.

In the evaluation of the project's economic feasibility for development of Stara planina tourist region the following is also perceived:

- **region's macro aims relating to start of development:** this criteria is fulfilled because the project is compatible with the natural and economic resources, under the presumption for further development of the food industry (and agriculture) and the accompanying obliging services (primarily through development of SMEs);

- **availability of human resources and financial means:** this criteria is fulfilled, because the project can solve: a) employment problem and attractiveness of the region, attractiveness for habitation and work (in relation to the demographic structure of the region); and b) problem of the dynamic economic development start of region based on lobbying and means for financing the priorities of the tourism development from public and private funds, such as: national investment fund for realization of public ski resorts, concession for engagement of foreign and domestic capitals for construction of the major infrastructural objects and accommodation capacities; credit support to investors and rural households for construction and decoration of the objects in tourist services (accommodation and alternative rural economy), etc.;

- **cost effectiveness of the project for public and private investors:** this criteria is fulfilled, since a positive net economic effect is expected for the municipality and inhabitants’ revenue by realization of the project and the whole development of the region; also positive effects are expected for private investors and the analysis of the economic feasibility, i.e. effects of tourism development in a long term period would be useful (in the course of segments elaboration a more detailed assessment of economic effects will be conducted for particular investors).

Contemporary approach to development of the Stara planina tourist region contains more reasons for elaboration by stages and carrying out a long term planned concept (Dabić D., 1998). The elaboration and selection of the most convenient alternatives of planned stages contain three basic flows: physical, financial and social. Physical study, on the basis of the detailed overview of the existing natural and created conditions and resources of the mountain regions and their surroundings determines spatial, functional, technical and technological sub-regions, supra-structures and infrastructures, together with stages for realization of the tourist offer. Financial study is based on the physical study data and interests and possibilities of the main planning actors. It is done for all real alternative stages of realization. In cases of smaller mountain’s centers, financial study is, by the rule, accomplished for a known investor, and in cases of the bigger centers this study explicitly presents parameters for the potential investor (as the bearer of the commercial investments). Study of the social verification flow of alternatives of the planned stages actively treats participation of the main actors during the work, decision making and realization of the plan. In realization of the new developing projects, as it is the case with Stara planina, the acceptable stage can be realized as a real investing program only if two important conditions are fulfilled: (a) securing investments for the basic infrastructure and necessary non-commercial public objects (with the desired subventions of the commercial entities) and (b) attraction and animation of the investors with state guarantees for safety of the capital, acceptable deadlines for refund of the capital, free disposal of profit, etc.

Analysis of the economic acceptability of development

Acceptability of the sustainable development concept of the Stara planina tourist region can be observed from the two aspects: ecological and economic.

Considering the equal demands for protection and sustainable development and in accordance with the state legacy, good practice and respect of IUCN recommendations relating to managements of Category B (protected landscapes/protected sceneries) protected areas, the spatial zone of the triple protection is determined and the condition for the environmental protection is fulfilled, thus the construction of tourist-recreational infrastructure at Stara planina is enabled. Definition of this category of protection, aims and principles/methods, besides sustainability of biological and spatial diversity and preventing the abuse of the resource and soil, insists on demand for the local community support with securing support for its socio-economic recovery and improvement, as well as preserving the tradition.

The analysis of economic acceptability for development of the tourist region Stara planina covers the following segments: market, consumption, number of employed, investment means and economic effects of exploitation.

The analysis of the market is done by main segments of the tourist offer and covers the season's length and minimum degree of use (number of visitors/users by season). In order to make the project acceptable it is necessary for the tourist season to last up to 9 months and the minimum degree of use of the stationary capacities is 60%.
The global analysis of consumption-turnover is presented on the basis of the total average consumption by a visitor, i.e. by the economic effects of segmental tourist offers during the exploitation. Economic effects incurred by realization of the Stara planina tourist region project is about 60 000 stationed users (beds), secures employment for about 16 000 workers. In addition to this number of stationed guests there are about 40 000 hikers. Gross turnover from the work of the tourist resort, mountain centers, settlements and spots, as well as the sub-mountain capacities is possible to envisage according to the real duration of the tourist season which should be about 120 days in winter with possible 70 hikers' days, and 120 days in summer with 80 possible hikers' days. Under the use of 70% of all capacities in a year it is possible, in perspective, to realize a gross revenue of about 420 000 000 Euros per year, i.e. net revenue of about 27 600 000 Euros.

According to the previous indicators the economic effects comprised by realization of the smaller mountain tourist center with about 3000 stationed users (such as Golema reka in Knjaževac municipality) would secure employment for 600 workers and realize gross revenue of about 21 000 000 Euros, i.e. net revenue of about 1 380 000 Euros per year.

The evaluation of all necessary investments depends on the level of the project documentation details and is determined on the basis of the total area capacity of all objects. Economic effects of exploitation are analyzed in theory and approximately, but with application of foreign provisions for calculation of return period for invested means which justify adequacy of investment. On the basis of framed indications of the economic effects of exploitation, it can be concluded that approximate period for return of the investments in development of the mountain tourist center is 8.5 years for ski resorts, summer offer in space about 4 and accommodation capacities from 2.5 to 11 years depending on the kind. The quickest return of the means have investments in development of summer offers in space, ski resorts and accommodation capacities in households and apartments, while the slowest return have means invested in development of hotels. Although the return period of means is acceptable considering the size of investment, in this particular situation it can be corrected depending on conditions for securing investments and efficiency of plan realization.

Financial aspects of Stara planina tourist region development might be overviewed in accordance with evaluation of investment in protection, but also by revenues from visits/use of the Park of Nature. On basis of the average assignment for the protected mountain regions in EU which is about 2 000 Euros/km², it can be evaluated that the assignment for protection of the Park of Nature Stara planina can be around 2 300 000 Euros per year. The greatest part of the financial resources might be from the budget, i.e. revenues/residence taxes or the use of Park of Nature resources. Further additional finances can be secured by concessions for water usage, usage of grasslands, ski-resorts, business licences, donations, etc.
CONCLUSION

Development of tourism in the mountain tourist regions in Serbia that has started far later from the city and spa, today has more and more dominant part not only in investments but also in tourist turnover (Dabić D., Milijić S. 1998).

Sustainable regional development of Stara Planina region will be based on integration of urban and rural economies on one side and development of tourism and protection of nature on the other. In accordance with recommendations of the planned practices of the EU countries with the higher degree of development of the areas, tourism represents for certain years now one of the most dynamic fields of complex, commercial and non-commercial development especially ecologically preserved and economically not sufficiently developed mountain regions. Tourism as an industry within the frames of prioritized aims, insists on preservation and improvement of natural and cultural heritage, i.e. on defining mutual interests for rational use

Table 6: Global economic effects of exploitation of the mountain tourist center

<table>
<thead>
<tr>
<th>Investments</th>
<th>Extent of investment in %</th>
<th>% Capacity per object</th>
<th>% means</th>
<th>Time of investment return in years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reproduction according to investment</td>
</tr>
<tr>
<td>Ski resort - total</td>
<td>31</td>
<td>28</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer program</td>
<td>4</td>
<td>1.5</td>
<td>2.5</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accommodation - total</td>
<td>51</td>
<td>14</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal traffic</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Spatial Plan for Park of nature and tourist region Stara Planina (tourist resort, mountain centers, settlements and spots, protection of nature, ski area)
and wise management of the space, which is a pre-condition for sustainable development. Intensifying the development of tourist region Stara planina, in other words tourism with complementary activities, as the bearer of the whole economic and spatial-functional organization would contribute to: start of dynamic economic development, working engagement of inhabitants, attractiveness of the region for residence, deceleration of negative demographic processes, increase of living standards for local inhabitants with simultaneous provision of conditions for solution of other developing problems.

Regional aspect of development is based on the potential of Stara planina for realization of the year-round tourist activities, where this space will become the pillar of tourism in Eastern Serbia, which will in time become the pillar of total development. Conditionally, the tourist region of Stara planina will gravitate inhabitants of macro-regional centre Nis, and the centres of functional regions of Pirot and Zaječar, together with the municipalities of the Eastern Serbia. Also, the region will attract clients from Belgrade and Vojvodina, as well as Bulgaria and through them wider emissive regions.

Sustainable socio-economic and spatial-ecological development of the Serbia's region will be based on:

- compatibility of tourist potentials with natural and economic resources, with presumption for development of the organic, i.e. traditional food production and accompanying obliging services (primarily through development of SMEs) in line with the needs of the tourist region;
- high standards of tourist services;
- valorisation of relatively convenient geographical site of Stara planina, increase of living standard of inhabitants of Serbia, as future users of services of the tourist region at a higher degree of organization of the tourist offer;
- valorisation of two European multi-modal corridors (VII and X) where Stara planina is sited, as well as better connection with secondary traffic at these corridors;
- more intensive use of the airports in Nis and Sofia with an aim to improve access to Stara planina;
- qualitative transformation of traffic at the approach corridors of Stara planina, creating the conditions for network (complementarities) of tourist offer of the surrounding with tourist offer of Stara planina would influence the whole transformation of Timok developing base, i.e. increase of its significance in spatial-functional organisation of Serbia;
- Activation and qualitative transformation of development centres economy in nearby and macro-regional surroundings, creating material base for development the leisure function and recreation of the inhabitants that could be realized in Stara planina region.

Economic effects of realization of the tourist region Stara planina project, according to the long-term vision, would secure employment for more thousands workers and realization of significant financial revenues, where a part would be set aside for the protection of the Park of Nature.

Due to the significant and non-exploited potentials of the mountain regions, Serbia has not become a space where the concept of sustainable development is successfully applied, but a training ground for testing of extreme economic interests characteristic for the countries in transition, where besides the spatial plans as a regulatory development documents, master plans are also exposed.

Although carrying out of Master plans regarding touristic development in Serbia is nowadays favored, their partial approach should be avoided. Spatial planning, based on integral approach with balancing resources and economical potential, has been given new tasks and goals. Therefore, it is necessary to introduce new segment in process and practice of spatial planning, as an instrument of protection of public interest and investment realization, segment which would be related to assessment of economical feasibility of development priorities.

Literature
European Parliament, web site
http://www.europarl.eu.int/stoa/public/168439/cap1_en.htm
Spatial Plan for Park of nature and tourist region Stara Planina, Institute of Architecture and Urban & Spatial Planning of Serbia, Official Gazette of Republic of Serbia, no. 116/08.


Deric B., (2001): Reconsideration of theory polarization applicability, Space, Newspaper of spatial planners and students of spatial planning, Faculty of Geography, Belgrade University, no. 7, pgs. 26-34.


---

i European Parliament, web site http://www.europarl.eu.int/stoa/publi/168439/chap1_en.htm

ii Besides directly employed workers (permanent and seasonal) came to increase of number of employees in complementary services (agriculture, communal services, traffic, etc) where the scope of business will significantly be increased by development implementation in the mountain region

iii Derived according to the structure of investments for development of the mountain tourist centre Brezovica at Šar planina. For details see IAUS (1991:54-64).