

# RELEVANCE OF VULNERABILITY ANALYSIS AND ENVIRONMENTAL PREMISES FOR COMPREHENSIVE PLANNING

POMEN ANALIZE RANLJIVOSTI PROSTORA IN OKOLJSKIH IZHODIŠČ ZA CELOVITO PROSTORSKO NAČRTOVANJE

*Aleš Mlakar*

UDK: 504:711(497.4 Piran)

## ABSTRACT

*Consideration and coordination of all the interests that emerge in the process of spatial planning usually result in a number of conflicts. This is, among other issues, a consequence of rigid protective sectorial guidelines and the absence of comprehensive planning. It is, however, possible to avoid this by assuring proper spatial information and a coordinated process of spatial planning and strategic environmental assessment that comes with it. This article derives from the assumption that the presentation of spatial status and sectorial guidelines, both obligatory by law for the preparation and assessment of plans in spatial planning, make this possible in a limited way, and it therefore makes sense to use analytic spatial planning tools as well. The practicability of the results gained by the vulnerability analysis and the possibility of creating strategic environmental premises preparation has been verified on the environmental protection background documents for the Municipality of Piran Spatial plan. The results show that vulnerability analysis, in comparison to presentation of spatial status, gives a better idea of more or less sensitive areas as well as its individual components and thus allows more room for manoeuvring the coordination of interests and for a more objective assessment of impacts on the environment. The analysis makes it possible to upgrade the protection guidelines of the sectors by preparing conceptually clearer direction for the protection and development of individual environmental components and by preparing comprehensive environmental premises that enable us to be more effective and sustainable in comprehensive spatial planning.*

Klasifikacija prispevka po COBISS-u: 1.02

## POVZETEK

*Upoštevanje in usklajevanje interesov v procesu prostorskega načrtovanja spremlja vrsta konfliktnih položajev, ki so med drugim posledica togih varstvenih sektorskih izhodišč in odsotnosti celovitega prostorskega načrtovanja. Izogniti se jim je mogoče tudi z zagotavljanjem ustreznih informacij o prostoru ter vsebinsko usklajenim procesom prostorskega načrtovanja in spremljajoče celovite presoje vplivov na okolje. Prispevek izhaja iz predpostavke, da prikaz stanja prostora in sektorska okoljska izhodišča, ki so v skladu z veljavno zakonodajo obvezna podlaga za pripravo in presojo načrtov na področju urejanja prostora, to omogočajo le delno in je zato smiselno uporabljati tudi analitična prostorsko-načrtovalska opravila. V strokovnih podlagah s področja varstva okolja v okviru priprave prostorskega načrta občine Piran sta bili preverjeni uporabnost rezultatov analize ranljivosti prostora in možnost priprave celovitih okoljskih izhodišč. Izkazuje se, da analiza ranljivosti prostora v primerjavi s prikazom stanja prostora omogoča ustrežnejšo predstavo o bolj ali manj občutljivih delih prostora in njegovih posameznih sestavinah ter tako tudi večji manevrski prostor za usklajevanje interesov ter objektivnejšo presojo vplivov na okolje. Analiza omogoča nadgradnjo varstvenih sektorskih izhodišč s pripravo konceptualno jasnejših usmeritev za varstvo in razvoj posameznih okoljskih sestavin ter pripravo celovitih okoljskih izhodišč, ki omogočajo učinkovitejše in z okoljem skladno celovito prostorsko načrtovanje.*

## KEY WORDS

*comprehensive planning, sectorial planning, strategic environmental assessment, vulnerability analysis, environmental premises, the Municipality of Piran*

## KLJUČNE BESEDE

*celovito prostorsko načrtovanje, sektorsko načrtovanje, celovita presoja vplivov na okolje, okoljska izhodišča, analiza ranljivosti prostora, občina Piran*

## 1 INTRODUCTION

Managing all the interests that emerge when preparing the new generation of spatial planning documents and environmental reports for strategic environmental assessment that come with that, usually results in a number of conflicts. It also means complications in proceedings, delays, growing costs, inability to exercise legitimate development interests and strategically questionable spatial solutions. It is obvious that spatial planning and environmental protection are inferior to sectorial guidelines. One of the main reasons for this is a mistaken belief of some individuals and groups that spatial management is also a 'sector' or that the planner's function should be limited to the settlement zones, called 'town planning', and that the rest can be left to 'agriculturalist, foresters and environmentalists'. Most likely it was the same belief that affected the philosophy of the present Spatial Planning Act (2007) that has incomprehensibility discarded almost all established tools of comprehensive spatial planning as are vulnerability analysis, development possibilities analysis for land uses and the conception of landscape development and protection. And as the sectors have gained more autonomy, the new Spatial Planning Act (2007) has further blocked the possibility to exercise spatial planning as a way of reconciliation of different interests in an area.

Legal protection regimes and the regimes originating from certain sectorial regulations both declare the so-called reserves. Reserves are one of the earliest protection measures and can be defined as an area on the surface of the earth where human intervention or activity is limited in a way that it maintains the desired state (Marušič, 1993, page 59). It must be recognized that reserved protection is found also in spatial planning, as it can be a fundamental planning instrument. Land use can be defined as a set of reserves, areas for the implementation of certain activities. Looking from the viewpoint of individual sector, land-use planning in the form of reserves is, even with the best intentions, incomplete and unsatisfactory. What makes it unacceptable for other users of the area is sectors' restricted notion on a specific area. When physically defining a protected area of a reserve, it is crucial to set a protection regime that includes a list of prohibitions and guidelines for appropriate behavior in the protected zone or for the protected structure. This, of course, has direct, but generally negative or restrictive effects on all other users of the area (Marušič, Mlakar, Vertelj Nared, 2004). Uncritical interpretation of sectorial guidelines has in the past contributed to the generation of spatial occurrences - problems, such as dispersed construction as a consequence of awaiting construction in the best agricultural areas (Cof, 2005; Golobič et al., 2005). In the future a major hindrance will be vast nature conservation and archaeological heritage protection areas, which can greatly limit the development prospects and cause irrational land-use.

Bold protection without a substantial background or vision what to do with the protected area, stock-protection and self widening the jurisdictions or testing comprehensive planning and protection by a typical sectorial institutions are in practice frequent. Topical example of such practice is the preparation of the draft Act amending the Agricultural Land Act (Ministrstvo za kmetijstvo, gozdarstvo in prehrano, 2009) that has proposed provisions, such as:

- 'agricultural land under this Act shall also mean land that is in the spatial planning documents defined as building, water or other land that is according to agricultural land and forest records in actual agricultural use and of size more than 0.3 hectares'
- 'of all possible options to choose from the one which interferes least with the best agricultural land should be chosen'

This undermines the role and the meaning of spatial planning document and is in total contrary to the principles of spatial planning while maintaining incomprehensible normative protection based on outdated categorization of agricultural land (Društvo krajinskih arhitektov Slovenije, 2009).

The reason is actually simple, we might say it is just a normal reaction of a profession infused by a protective mentality. In fear of, indeed frequent, devastating effects of today's liberal planning, mostly on the local level, or due to the fact that the absence of complex protective planning is frequent, professions dealing with the protection of sources try to take over the role of spatial planners. By that they take the strategic viewpoint and, through individual protected areas, directly control spatial development and placement of activities and land-use. The biggest problem in doing so is that they derive only from protective motives and not also from the development grounds of the individual environment and the object of protection itself. It is this coordination between protection and development that is of crucial importance.

This type of coordination requires a lot of knowledge and skills of the spatial planners. Spatial planners are very quick in criticizing the sectorial guidelines. This can be a rather frivolous doing, without the awareness of the importance and meaning of protection values, of sustainable use of resources, also without knowing the sectorial laws and how to instil individual percepts into comprehensive spatial solutions, especially when criticism arises from spatial planning self-sufficiency, authorial complacency and from denying the importance of diversity of participatory processes.

The key issue to be considered, if not resolved, is the question of relation between spatial planning and protective sectorial guidelines that are part of this process. What are the differences between the process of spatial planning, the process of environmental protection and the processes of preparing the sectorial plans? How can we assure (in content, method, procedure and time wise) complementarities of these processes or individual documents and what is the processes-instrumentation? These are some of the questions that demand formalized records. It is key, however, that the question of relation should derive, not so much from who possesses more competence or from defining definitions, but more from reflections on how to achieve the results that are in cohesion with the spatial planning objectives and also with the objectives of individual interests in the area. That is, if the basic assumption is that the protection of values

and resources is effectively realized through spatial planning and management. It is usually with proper activity placement that the impact of the activities on the individual environmental components or area is reduced (Marušič, 1993), making the environmental protection process (of cultural heritage, nature, recourses, potential) part of the spatial planning process.

Spatial Planning Act (2007) defines the presentation of spatial status as a basis for spatial planning document preparation. It includes the presentation of closed, protected, brownfield, endangered and other areas where a spatial legal regime is set on the regulation basis. Integration of protection sector guidelines is formalized with the institute of environmental premises introduced by The Environment Protection Act (2004) and is a mandatory basis for the preparation and assessment of documents, programs, plans and other acts in the spatial planning field and in other fields, such as: water management, forestry, agriculture.

The introduced environmental premises institute seems to be convincing on the theoretical level, but it is questionable as how operational it could really be (Marušič, Mlakar in Vertelj Nared, 2004). In fact, the environmental premises that the Government should have defined by the 31st of December 2004 have never been defined. This is probably the reason why the Act's provisions were changed in 2008. Now the environmental premises are not defined as a formal institute, but 'with environmental protection objectives set by the regulations'.

This article derives from the assumption that the presentation of spatial status and sectorial environmental premises that are in line with the Act and are mandatory for the preparation and assessment of documents in the spatial planning field provide limited spatial information and consequently hinder the process of coordinating the interests in the area and also hinder the impact assessment of the document. Spatial planning consists of spatial definitions that individual sectors have defined as their areas of interest. These are protected areas defined outside the processes of comprehensive planning. The main problem is that these areas tend to have the stamp of a 'final decision' ready and of what is called black and white information (protected / not protected) instead of information with a value span (more valuable ... less valuable), which would allow more room for coordination manoeuvring and the integration of protection for the entire area within the planning process.

Theses of this article are as follows:

- The vulnerability analysis enables, in comparison to presentation of spatial status, a better conception of more and less sensitive areas, and also regarding the area's separate components, thus allowing more room for coordination manoeuvring and a more objective assessment of environmental impacts.
- It is possible and sensible to upgrade the protection sector guidelines by preparing conceptually clearer directions for the protection and development of individual environmental components and by preparing comprehensive environmental premises that would enable a more effective and environmentally sound comprehensive planning.

The reader might find the text self-evident, but as practice shows (Mlakar, 2007; Zavodnik Lamovšek et al., 2008, Mlakar, 2009, Study ... SEA Directive, 2009), these contents are

persistently neglected when preparing spatial documents, somewhat because of time and financial limitations. That is why the constant reminder about the significance of these processes, when resolving conflict situations, surely will not be in vain. Methodological guidelines were tested while preparing the Environmental protection background documents for the Municipality of Piran spatial plan (Mlakar et al, 2008). They were formed as an environmental report for strategic environmental assessment. It is important to mention the preparation phase of these documents as the precept was an early-enough inclusion of the environmentally-protective mechanism into planning with the purpose of planning the interventions in a way that would harm the environment in the least possible way. Here, unlike the normal practice of environmental report preparation, environmental impact assessment was not used as a verification process (as a confirmation of environmental acceptance), but nearly as a planned activity, a way of spatial-organization optimization.

## 2 METHODOLOGICAL APPROACH

Presentation of spatial status and environmental premises disregard the planning analysis as the bases of spatial planner's work. The practice of preparing environmental report for strategic environmental assessment indicates a broad collection of environmental information, yet often without a clear vision on how and to what extent this information will actually be useful. Planning is not just about collecting analysis or dissecting information. Planning analysis is searching for possibilities (alternatives) on how to solve the problem. It can be defined as a set of responses to uncertainty that are related to realizing a spatial plan or resolving a spatial problem. Analysis deals with addressing the relationship between the findings on the present and the past and reflection about the future. General characteristic of such an analysis is the focus on the problem. The groundwork is to identify the specific problem in a given area, to gather information about the area, about the processes (natural and social) in the area, and also about its values, history, social particularities of the area and about the possible ways of solving the problem at issue. Such an analysis must include developmental as well as the protective criteria, and create, assess and compare alternative spatial solutions.

The process of spatial planning, with the purpose of harmonization of spatial implementation conditions, is to separate formal spatial definition of protection (as it is defined in a plan) from a value definition that is part of planning analysis or background documents. The latter can or should be the basis for the former (Mlakar and Marušič, 2000). Coordination of the areas of conflict between interest of different sectors and with other development interests requires repetition of a value definition in accordance with the individual interest for protecting a natural resource or the values that this sector represents. Such an analysis reveals which locations are truly the most important to protect and which can be included in the coordination with other sectors or interests in the area.

The distinction between value- and plan-defined boundaries is particularly important in determining the impact and, in consequence, the acceptability of an individual intervention. Makers of environmental reports generally define the impact level on the basis of physical

intervention in a protected area and not on the basis of the actual impact of the concrete intervention in dependence on the expected extent of the change and the change in quality of each individual environmental component due to intervention (Marušič and Mlakar, 2004). Each type of intervention has various impacts on the individual value, which means that it is impossible to form a unified area of an impact's non-acceptability. Protected or influence area should be viewed as an area with defined spatial implementation conditions, as an area where the potential impacts are expected and planned with suitable spatial planning or management measures, if the intervention will definitely be realized. This analytical process is presented in a simplified form in Figure 1.

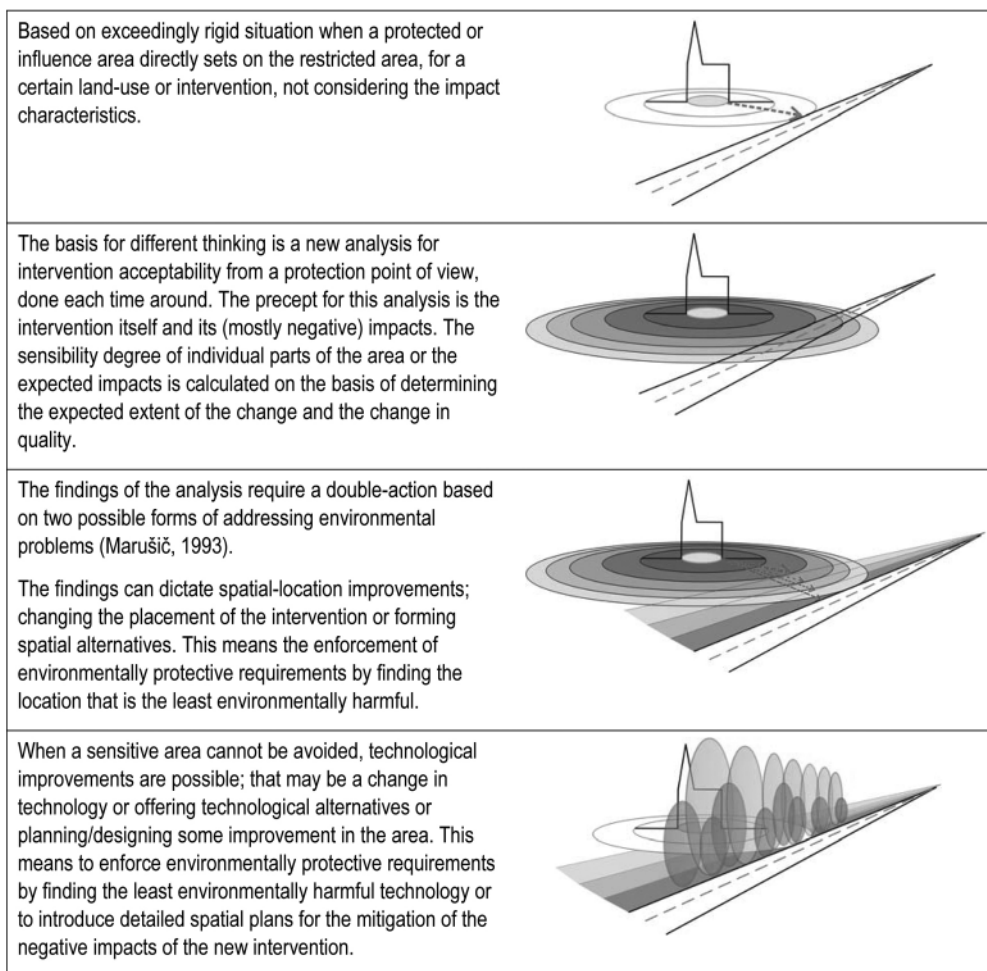


Figure 1: Principle of impact adjustment in the protected area (adapted from Marušič, Mlakar in Vertelj Nared, 2004)

Given the initial thesis that data from the presentation of spatial status or from legally defined environmental premises do not enable this analytical procedure, and that it is possible and reasonable to build on these premises, verification has been carried out, as follows:

- Is it possible to ensure a more adequate definition of the values in the area with the help of vulnerability analysis?
- Can the protective sector guidelines be upgraded by conceptually clearer guidelines for the protection and development of individual environmental components and for the preparation of comprehensive environmental premises?

The verification procedure was carried out for individual environmental components, which are usually subject to an environmental report for the strategic environmental assessment. The verification was carried out in the Municipality of Piran. This article presents the environmental premises for agricultural land and agriculture, and the joint environmental premises. The procedure was conducted in the following steps:

1. Preparation of the presentation of spatial status in accordance with the Spatial Planning Act (2007) or a range of closed, protected, brownfield, endangered and other areas on which a special legal regime had been established on the basis of regulations.
2. Preparation of the vulnerability analysis in line with the Spatial Order of Slovenia (2004), which is still statutory, but lately, unfortunately, less used planning tool. By using the vulnerability analysis we can evaluate the potential impacts of the activities or interventions on individual spatial elements, detect more vulnerable and sensitive parts of the area, and identify parts, where the new intervention should not be placed. Vulnerability analysis derives from the assumption that physical space is not vulnerable by itself but always to an intervention or activity. Vulnerability modeling comes from the following reflection: In what situations will the spatial effects of a potential intervention or activities be more pronounced (Marušič in Mlakar, 2004)? Modeling was done by software ProVal 2000.
3. Comparison of the presentation data of spatial status and the results of a vulnerability analysis based on the relevance and usefulness of both types of information in the process of spatial planning and strategic environmental assessment.
4. Preparation of guidelines for the protection and development of individual environmental components and verification of their functionality.
5. Preparation of comprehensive environmental premises and verification of their compliance with the sectorial guidelines.

Preparation of comprehensive premises derives from the assumption that spatial planning is much more than just a set of areas and the identification of specific sectors. Preparation refers to somewhat forgotten Article 55 of the Spatial Order of Slovenia (2004), which defines the area of the complex functions, uses and other landscape qualities as areas of a particular importance for landscape development. With the 'conception of landscape development and protection' being cancelled, where these areas were supposed to be shown, in practice their presentation was unfortunately never realized. These were supposed to be presentations of important multi-layered areas, which the government or the local community should strategically protect against urbanization and the change of land-use, function and appearance. These zones should have been subject to restrictions or special regimes in land-use and organization of activities in the area, dictated by the type of content of a particular area.

These areas signify an essential upgrade from the system of closed, protected, brownfield and endangered areas. The reason is that in directing spatial development sectorial legislation derives from the protective motivation and not also from development precept of the area. To coordinate both is of crucial importance in an area. Because we have here layering heterogeneous, in regimes contrasting areas, it is possible to achieve coordination only through comprehensive spatial planning process, which can be effectively defined as a way of coordination of interests. Strategic environmental premises try to define a common framework for preventive protection of operations by local communities. They are based on guidelines relating to individual environmental components and their integration into a coherent and complex entirety, mostly taking into account:

- multi-layering - overlapping areas of greater vulnerability of the various spatial components,
- displacing - condensing the areas of greatest vulnerability,
- possibility of establishing networks - spatial systems,
- possibility of establishing spatially homogeneous functional entities - spatial planning units with attributes, criteria and conditions of spatial planning, and,
- social context - recognizing the attitude of society to the content of protection.

### 3 RESULTS

#### 3.1 Comparison of the presentation of spatial status and the vulnerability analysis results

Data on best agricultural land seem to be one of the obvious examples of the limited land-use shown in the spatial planning procedure or coordination of the development needs and protection requirements in this process. Data on best agricultural land are inadequate in spatial accuracy and the definition of the actual quality of agricultural land. Comparison with the vulnerability analysis of production potential, shown in Figure 2, demonstrates the location of the agricultural land that should be strategically protected against settlement expansion, as it reflects the realistic picture of agricultural land quality. Above all, such an analysis allows much more room for manoeuvring when coordinating the guidelines of comprehensive planning with the guidelines of agricultural development, knowing the actual land-quality in an area, compared to other areas of potential settlement expansion.

There is probably no spatial planner, who would not cover all the closed, protected, brownfield, and endangered areas with the area he/she is working on. In the Municipality of Piran we can conclude that at least one of the regimes covers as much as 92% of the Municipality. If the data are combined on the principle of maximum value, then it is easy to conclude that there is no manoeuvring area for spatial planning. As almost everywhere outside of the existing settlement areas we run into a sector restriction that strictly disallows settlement expansion. The comparison in Figure 3 demonstrates that by a proper spatial analysis and a joint vulnerability analysis because of settlement expansion the overall more or less vulnerable parts of the Municipalities area can be shown more adequately.



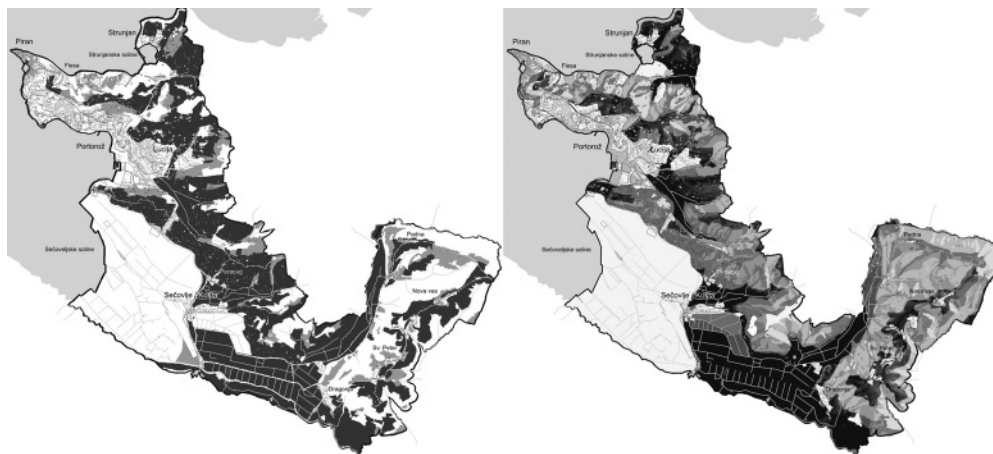


Figure 2: Comparison of the best areas of agricultural land as black / white information (left, dark) with the vulnerability analysis of agricultural production potential for settlement expansion and as a structured information with the range of values (right, darker - more vulnerable) - the Municipality of Piran area (Mlakar et al., 2008)

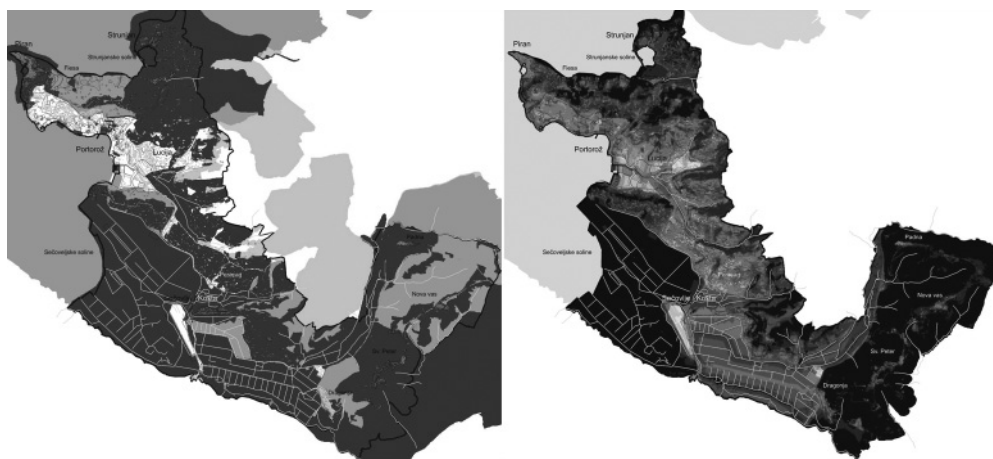


Figure 3: Comparison of the joint extent of closed, protected and endangered areas (left) with joint vulnerability due to the settlement expansion (right) - the Municipality of Piran area (Mlakar et al., 2008)

### 3.2 Planning Guidelines

A superficial overview of the Municipality shows that land within the definition of the best and other agricultural land is very diverse and in places illogical. That is why further articulation of these areas was done, demonstrated in Figure 4. The agricultural land was basically divided into:

- agricultural land that fits the criteria, and,
- agricultural land that needs to be reclassified from the best agricultural land into other agricultural areas or vice versa.

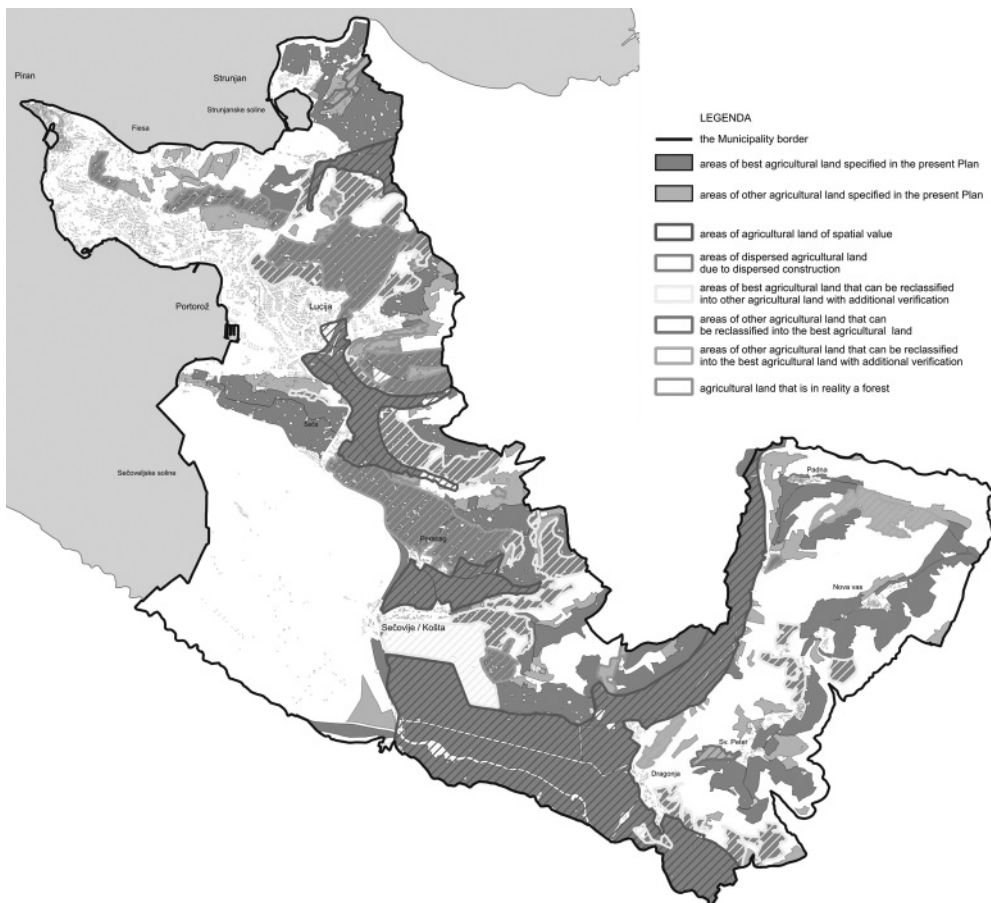


Figure 4: Environmental premises for agriculture and agricultural land / possible reclassification of the best and other agricultural land - the area of the Municipality of Piran (Mlakar et al., 2008)

Agricultural area of the Municipality proved to be quite diverse, according to the characteristics of agricultural land and the potential for development of agriculture. With the purpose of a more explicit illustration of the (possible) agriculture development, areas with common characteristics and directions were formed - demonstrated in Figure 5. These were:

- areas of agricultural land of special value on alluvial plain that should, due to suitable textures, terrain, groundwater and soil chemistry, be classified as especially protected areas for agriculture,
- areas of agricultural development that should be especially protected and where agriculture development should be encouraged due to emphasized conservation of cultural landscape,
- areas of dispersed agricultural land due to dispersed construction. Also because of conflicts between agricultural activity and the living environment, and regardless of separate parts of good soil, there arises the dilemma of the reasonableness of further conservation of agriculture. For this reason, here the elimination of agricultural land from the Plan is possible.

It is therefore evident that the upgrading of the information on best agricultural land is possible and sensible. It is sensible firstly because the existing data on agricultural land do not reflect the actual state. The analysis shows (1) areas where agriculture should strategically be maintained for food security, (2) areas where agriculture is an inseparable characteristic of the countryside, and (3) areas where it is possible to expand settlements in a way that the agricultural land in the total area of the municipality is affected in the least possible way. Thus, it is possible to expand the debate on the potential comprehensive expansion of settlements and prevent further fragmentation of agricultural land throughout the municipality.

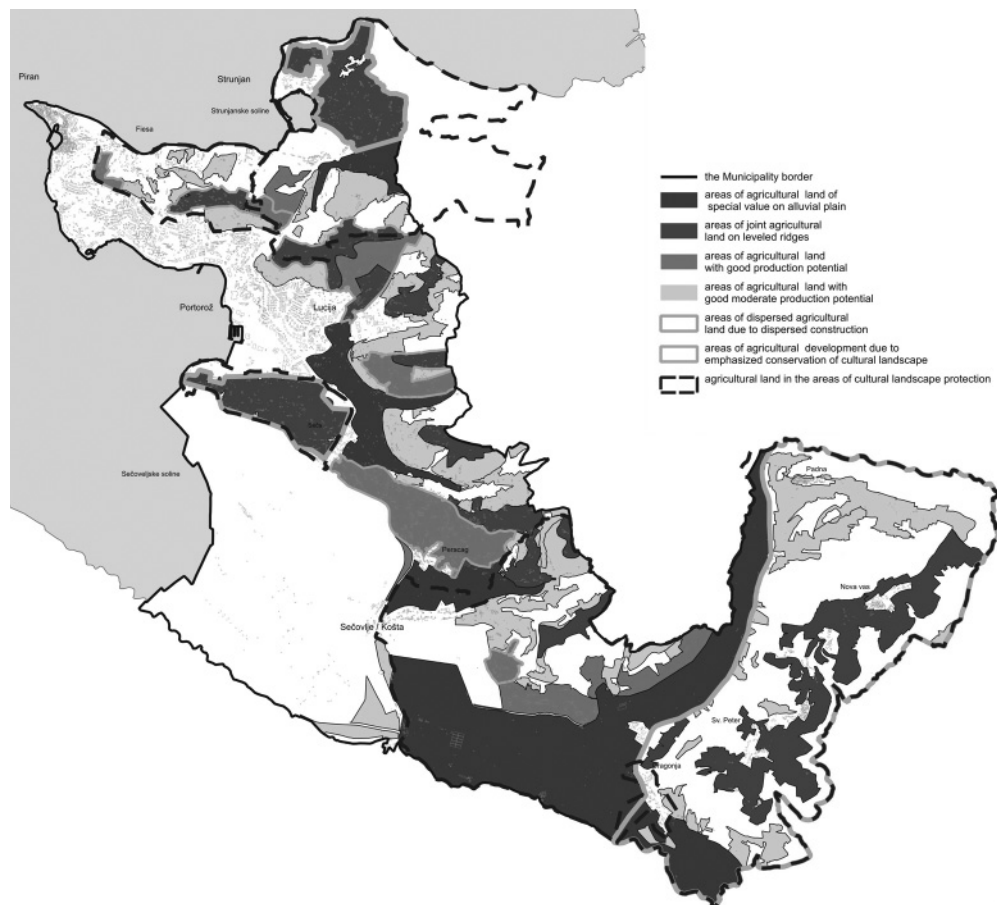


Figure 5: Environmental premises for agriculture and agricultural land / classification of a typical agricultural land - area of the Municipality of Piran (Mlakar et al., 2008)

### 3.3 Comprehensive environmental premises

The overview of premises on specific environmental components shows that the system of closed, protected, brownfield and endangered areas includes a diverse range of areas or spatial phenomena, but only those where protection is legally required under various sectorial laws or regulations. In this way we are losing spatial entities that are not formally protected but still very

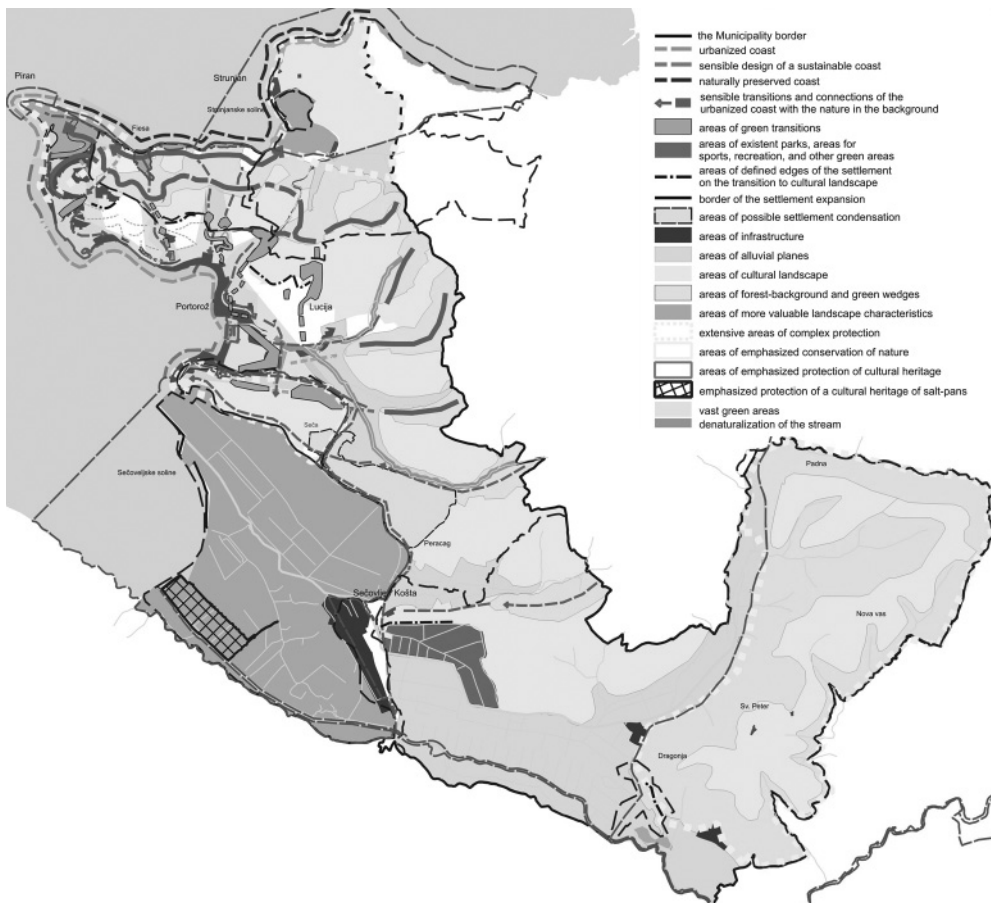


Figure 6: Joint environmental premises as a basis for Municipal spatial planning document - area of the Municipality of Piran (Mlakar et al., 2008)

important for character of the area. Besides that, we do not consider spatial categories resulting from the spatial planning and management itself, however mostly by the overlapping of these formalized areas we do not yet get a unique answer on how to regulate the area as a whole.

Comprehensive environmental premises are trying to overcome this situation by developing unified premises for individual areas and individual environmental components. Comprehensive environmental premises define:

- general guidelines for the environmentally acceptable spatial development,
- environmentally significant areas of the municipality with the guidelines for their protection and development,
- areas of emphasized conservation of individual or complex characteristics,
- areas of rehabilitation,
- spatial solutions aimed at maintaining or improving the state of environmental quality.

As it turns out, the preparation is closely linked to the strategic level of planning - i.e. the level of forming the objectives and spatial concepts. Argumentative interdisciplinary discussion can lead to coordinated articulation of the municipality areas, to the identification of the areas that the local community could strategically maintain and the areas to develop - to actively change. Conceptually clear environmental premises contribute to active solving of current spatial problems while critically considering development trends and actively suspending the uncertainty on the future vision and function of the individual sites.

#### 4 DISCUSSION

The results confirm the previously defined thesis that the vulnerability analysis in comparison to the presentation of spatial status allows considerably more structured illustration of the more or less sensitive parts of a specific system of the environment, as well as its individual components. The problem of vast units, which are typically the result of sectorial definitions and of prior spatial articulation, such as ecosystem or landscape type articulation, is that it is impossible to optimize the spatial route of e.g. infrastructure corridor. And because the units are of such size, it almost does not matter where such a route runs. Information about the area should therefore be collected within the units, which would correlate to the size and the form of intervention and should therefore be called intervention units, in contrast to spatial units. Because we use the raster system in the vulnerability analysis, we should then define a 'cell', representing the basic information unit, as a specific type of a spatial unit. Larger units can be joined by combining cells into especially suitable formed clusters of cells. The cell can thus be a sort of denominator, which is common to both spatial units and to intervention units. In fact, each cell becomes a possible alternative location for the intervention (Mlakar and Marušič, 2000).

Vulnerability analysis may serve as an appropriate optimization tool for placing interventions and activities. At the same time the environmental assessment phase enables more objective decision on the acceptability of the plan in a specific area, as the impact on the 'affected' area can be compared to the impacts of other potential areas for the placement of intervention. Therefore, intervention must be assessed in the context of a strategic conservation of an environmental component or the environment as a whole.

Regardless of the advantages of this type of analysis, when preparing the Spatial Planning Act (2007), the expressed concerns on abandoning the background documents proved to be justified, as spatial planning tasks are rationed to the extent that planning is already losing its credibility. Makers of spatial planning documents, working in limited financial and time frames, do not produce in-depth analysis. They use the areas located in the presentation of spatial status as the only precept in planning the spatial arrangements, e.g. defining the settlement expansion area, defining infrastructure corridors, etc. This information is normally also used in the preparation of the strategic environmental assessment. To continue with this practice, to consider only the protected areas defined by individual sectors, means to get the least relevant database, which could be used in the preparation of different spatial documents or environmental assessment. Sensible interpretation of the individual layers does indeed offer an answer to many environmental

problems, but the assessment, derived only from this information, may be very limited. Since the information is not considered with the range of values, the problem is the lack of argumentative decision-making of different solutions or the coordination in the spatial planning process. Vulnerability analysis has proven to be a method that provides relevant information with the range of values, which enables the possibility of argumentative coordination of individual interests in the area. It should be pointed out that this coordination does not necessarily mean reduction of the extent of protective elements in the area, but perhaps even their increase, since the analysis exposes those spatial entities that are not formally protected, but still important for the protection of the area.

This verification also confirms the theses that sectorial guidelines for protection can be upgraded by preparing conceptually clearer guidelines for the protection and development of individual environmental components and by preparing comprehensive environmental premises. In this way we can contribute to constructive resolution of topical problems, forming clear spatial concepts and, consequently, complete spatial solutions. The necessity of creating such solutions derives directly from the assumption that spatial planning is an activity which creates order and certainty (Klosterman, 1985). Incompleteness of concepts, often under the pretext of leaving open opportunities for potential investments, is one of the key reasons for the uncertainty of the results in spatial planning procedures. If the concepts are clear, then further decisions based on these concepts can be more objective or accepted with a higher degree of certainty. Unfortunately, practice shows that the incompleteness of concepts is often suitable for individual participants in the spatial planning process, as it allows the realization of partial interests. Openly defined spatial planning documents are therefore not necessarily the reflection of democracy or maintaining room for further planning, but also lawlessness of the spatial planning system. The spatial concept should apply to all aspects of reflection about the future of the area, as well as to all levels of spatial planning, from strategic to the organization of the hierarchically lower spatial planning documents. It must surpass (1) the situation of spatial planning, which often takes place without a clear vision of development, based only on rigid protective guidelines and disregarding local interests, or (2) the situation of frequent conception of spatial development, regardless these protective guidelines or regardless of the possibility that such guidelines can offer specific development possibilities.

The key to successful integration of protection guidelines into the content of spatial planning is to consider the context of physical space, time and society. It should surpass autonomous or even arrogant or ignorant definition of both the content of protection and the content of spatial planning, not considering integrity of the problems. When preparing spatial planning documents one should avoid the normative principles of protection and each time adapt to the new spatial situation. After accepting these documents one should surpass the coordinated normative protection principles and consistently follow the possible coincidence in development.

As it is true that spatial planning is more than just a set of sector-specific areas, it is also true that spatial planning is more than a set of development appetite. In relation to investors, the key should therefore be to respect the guidelines of strategic documents. It is of course impossible

to foresee all the initiatives in the future, but it is possible to foresee what we want to develop in the municipality and to clearly demonstrate that on the strategic level of the document and to channel the investments into suitable areas. It is also important to allow enough leeway for adaptation to specifics of the future spatial arrangements in the operational part of the spatial plan. Further on, the clarity of strategic guidelines also means greater economic efficiency of investment, since it is possible to promptly dismiss the uncertainty of the feasible (allowed) realization of an individual investment into a specific area.

The basis of an effective compliance with security interests in spatial planning is an appropriate way of including both areas into a system of comprehensive planning. This is primarily because of (1) the content integration, so the content of protection is mostly demonstrated in the plan of land-use arrangement and in the plan of individual spatial systems, as well as other contents of spatial planning. Also important is (2) formalized involvement in individual documents of spatial planning as a way of including autonomous contents of protection into the document itself, to ensure the realization of the protection of interests also in the processes of building that follow the planning process.

At the same time we have to ensure that the implementation of the planned measures is simultaneous, and to promote the project approach as a tool of direct, comprehensive spatial development of certain areas that reduces the coincidence of development, allows the arrangement of land and property ownership relations, and is crucial in cases of development, rehabilitation, renovation, increasing the quality of living or commercial spatial competitiveness, where the normal regulation does not enable the realization of the spatial development objectives.

## 5 CONCLUSION

Spatial planning should keep its position above individual sectors. It has a role of the democratic process that should be recognized. In the spatial planning processes the obligation for integration must be recognized and the commitment for integrating the individual sectorial interests must be ensured. It is an obligation and right of all the representatives of legitimate interests in the area that these interests are coordinated in spatial documents and reflected in clear spatial concepts at different levels, as well as in such criteria and conditions for the regulation and protection of physical space that do not allow equivocal interpretations of spatial documents in the process of detailed planning and building. In the process of creating spatial planning documents it is inadmissible to allow uncertainty and to leave the inconsistencies in the documents to be solved later by individuals, as this can be to their disadvantage and to the disadvantage of protection interests and the whole society.

Spatial planning stands for intervention, which aims at changing the existing course of events in the area. That is why it is essential to surpass the logic of passive planning: on the one hand urbanism based on initiatives only and on the other hand rigid protective guidelines. Spatial management is a way of harmonizing the interests of the area and coordinating the individual interests of protection that can be best achieved with the methods of spatial planning. The present planning practice, based on investor initiatives and complaint changing spatial planning

documents, should be surpassed by active spatial planning. At the same time one should realize that each era has the right to leave its mark in the physical space. Each generation, including the present, should make a statement through physical space, should manage it in a way that reflects its time, problems and the capacity to solve them. However, it is important to preserve the vital concepts and to be respectful towards nature as a fundamental heritage in itself, to the physical space as a set of human relations, to the context of space and local distinctiveness in relation to the past, the past generations and their contributions in creating physical space. The development direction must therefore result from development guidelines, as well as the environmental protection motivation and the subject of protection itself. In terms of reducing the conflicts of different interests and based on clear development objectives, the following should always be defined afresh:

- the relevant interests of spatial planning, protection (of environment, nature, cultural heritage) and other groups in the area, and not just the interests of spatial planning stakeholders from the program preparation; thus, uncertainty about the equity in considering the individual interests is reduced,
- information that is relevant and has a range of values, equipped with information on the values, resources and potentials, thus enabling the possibility of argumentative coordination of individual interests in the area,
- spatial concept that reflects coordination of interests in the area, and
- accompanying development program, which enables a realization of these interests - a set of activities, land-uses and development projects that can reduce the uncertainty of the realization of individual interests.

Physical space is a limited resource, therefore, the room for manoeuvring of spatial planners' activity decreases continuously. Simultaneous development of society which demands continuous intervention in the area and increases the protective efforts that are the result of growing problems in the environment, also implies the increase of individual conflicts of interest in the physical space. That is why spatial planning must maintain its mission of coordinating the interests in physical space. It is essential to answer when the relevant ministry will finally take over the role that other sectors are increasingly depriving it of.

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Received to publication: 20 July 2009

Accepted: 1 September 2009

Aleš Mlakar, PhD

Biotechnical Faculty - Department of Landscape Architecture, Jamnikarjeva 101, SI-1000 Ljubljana

E-mail: ales\_mlakar@siol.net