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**Analysis of regional
spatial planning and
decision making
strategies and their
impact on land use in
the urban fringe**

Koper case study

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**PLUREL - PERI-URBAN LAND USE RELATIONSHIPS – STRATEGIES AND
SUSTAINABILITY ASSESSMENT TOOLS FOR URBAN-RURAL LINKAGES**

Analysis of regional spatial planning and decision-making strategies and their impact on land use in the urban fringe – case study KOPER



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Abstract

Situated on a former rocky island, Koper has been ruled by various masters over the course of its history and is today the most important city on the Slovene coast and the sixth largest town in Slovenia. The coastal zone has rapidly developed and urbanized, with a mix of port-related industries, tourism and commercial activities, and very high quality agricultural land and a nature reserve are located there. The area is also well known for its rich biodiversity. Different interests lead to land use conflicts, which are probably most intensive in the peri-urban area. The historical development of land use, present land use and main trends in the municipality from economic, social and environmental points of view are described in the first part of the report, followed by a description of the government system and planning policies in the second part. In order to analyse the situation, trends, spatial problems and stakeholders' perceptions, as well as aims and strategies of different actors various methods have been used like: literature review, analysis of the situation based on statistical and GIS data of the area, stakeholders analysis, interviews and workshops. Strategies, as a response to spatial problems and future development needs, are presented in the third part. The aims of the strategies are more efficient land use and protection of the best agricultural land in the municipality and especially in peri-urban area, green and recreational areas that will contribute to increase quality of living and implementation of Rural Development Plan 2007-2013 for Slovenia in the territory of the Municipality of Koper.

Keywords: land use, spatial planning, peri-urban areas, urban-rural relationships, strategies, Municipality of Koper, Slovenia

Summary

The Municipality of Koper, one of the PLUREL study areas, lies between Italy and Croatia, on the Slovenian coast, in the southwest of Slovenia. Its total area is 311 square km, with 17.6 km of coastline. Its territory includes more than one hundred settlements. The population of the municipality in June 2007 was 49,303. It is characterised by a Mediterranean climate, with long and hot summers, mild winters and occasional strong winds. There is an indigenous Italian community living in Koper and the Municipality of Koper is for that reason officially bilingual (Slovenian and Italian).

The administrative centre of the municipality is the town of Koper, with approximately 24,000 inhabitants, where most of the administrative, economic and cultural activities are concentrated. Through its long and troublesome history, Koper has always played an important role as a traffic and trade centre of the Istrian peninsula. Aegida, Capris, Iustiniopolis, Caput Histriae, Capodistria and Koper have been names given to the town during different historical periods. Koper is a city engraved in Slovenia's history, as well as the history of Europe, a city that can proudly wear the title Capo d'Istria (Head of Istria).

Koper has 2,000 years and more of history behind it and during that time has hosted various peoples and masters. Their footprints can still be seen at every step. It was initially no more than a humble island settlement, within city walls, where the inhabitants of the vicinity took refuge at the time of the great migrations. In the following centuries, though, Koper flourished, mainly because of its favourable position. Its economic power lasted until the 18th century, when Reka and Trieste were granted the status of free ports. With the downfall of the Venetian Republic and the completion of the Vienna-Trieste railway, Koper finally lost its important role in the wide region. After the Second World War, Koper once more revived and flourished into being the most important economic centre of the Slovenian coast. With Slovenian independence in 1991, Koper became the only commercial port and an important industrial centre of Slovenia. Koper is today the sixth largest town in Slovenia and second in terms of per capita GDP. The basic advantages of its economy are diversity and versatility, which make it less vulnerable to market fluctuations than other parts of Slovenia. In addition to tourism, crafts, industry, entrepreneurship, transport, trade, business and financial services are the most important activities in the Municipality of Koper. The Port of Koper, founded in 1957, continues to be a very important actor, with a major economic and spatial influence on the town and its surroundings and even on the national economy. Since it was built only fifty years ago, it has up-to-date equipment and facilities, allowing the trans-shipment of more than 15 million tons of cargo per year.

The territory of the municipality can in general be divided into urban, peri-urban and rural areas. The old city centre of Koper and the remaining highly populated area surrounding it can be defined as urban. The location of the city on the coast, and the medieval city centre provide some limitations for future development. In addition, the Port of Koper occupies a lot of space. Settlement and the development of economic activities are therefore directed even more into the peri-urban area, where there is also the highest pressure for future construction and other interventions. The peri-urban area has very diversified land use: as a built-up area for settlement, as a green and recreational area, favourable conditions for agriculture enable agricultural activities, and new infrastructure and industrial zones are also being constructed there. A major part of the municipality is formed by the rural hinterland, which is sparsely settled but with a unique cultural heritage. Picturesque hamlets, small churches, sites of ancient forts and valuable architectural monuments are almost everywhere. The area is also very rich and diversified from an environmental perspective, with a well preserved cultural landscape and biodiversity. In addition to the town, the surrounding rural areas are also undergoing economic and social development. The local inhabitants still continue to farm (mostly wine, vegetable and olive production and small cattle breeding in the Karst part of the

municipality), investing in supplementary activities on farms (mostly farm tourism), craft and revitalization of ancient traditions. Culture and tradition are being strengthened by the promotion of craftsmanship, tourism, olive oil production, and the production of typical wines of the area, production of smoked ham, goat's cheese and truffles.

Analysis of the spatial situation and existing settlement in the municipality shows a characteristic distribution of the territory into three semi-circular belts in line with an urban-rural division:

- the first is the central zone – the city of Koper, its old centre and immediate surroundings including the coast (urban belt),
- the second belt is the peri-urban area with existing settlement network,
- the third belt is open space and settlements in the rural hinterland.

The new spatial development strategy for the Municipality of Koper, which is still a proposal and not yet officially accepted, foresees some main directions of spatial development for each of the defined belts. The spatial strategy is one of the necessary spatial documents which the municipality must prepare in addition to the municipal spatial plan (implementation plan).

Spatial planning in Slovenia is divided between national and local levels, while an official regional level has not yet been established. The new Spatial Planning Act (ZPNačrt), applicable since April 2007, introduced some changes and defines the purpose, aims and principles of spatial planning. The main aim of spatial planning is to enable harmonious spatial development, taking into account the various needs and interests of development and the public good in the fields of environmental protection, preserving the natural and cultural heritage, protection of natural resources, defence and protection against natural and other disasters. The new Act also introduced new compulsory spatial documents on national and local (municipal) levels. On the national level, the main document is the "national strategic spatial plan" and on the municipal level, the "municipal spatial plan", which deals comprehensively with the spatial problems of the municipality and is at the same time a strategic and implementing spatial document. The municipal spatial plan is the basis for the preparation of projects which require building permission. Local authorities, in consultation with citizens, NGOs and other land users, prepare a municipal spatial plan, which must be adopted by the municipal council. Conformity with national spatial planning documents must be confirmed by the Ministry of the Environment and Spatial Planning. The national level can thus reject a local government plan if it contains elements in conflict with the national spatial plan or strategy or other national strategic documents.

The Municipality of Koper is currently in process of preparing the new spatial documents according to the legislation amended in 2007: Strategy of Spatial Development of the Municipality and Municipal Spatial Plan. The strategic issues that dominate planning discussions in the Municipality of Koper are: the adjustment of different development needs in the municipality, assurance of spatial efficiency in the sense of rational space arrangement and protection of natural resources (best agricultural land, forests etc.), assurance of quality living conditions (green and recreational areas), efficient public transport, conditions for economic development (industrial and trade zones), maintenance of the cultural landscape and natural and cultural heritage in both urban and rural parts of the municipality. The new municipal spatial plan will be a long-term spatial document. An analysis of the present spatial situation and problems has therefore been prepared, some future trends in population and economic growth are being studied and modelled, and proposals from local people, local communities and other actors are being collected.

The main land use issues/problems in the Municipality of Koper that have been detected and agreed between stakeholders and researchers are:

- land pressure due to housing,
- agriculture under pressure and
- high value nature at risk.

Due to its strategic position, the coastal area of the Municipality of Koper is very attractive for the development of economic activities (primarily the development of the Port of Koper, which is of major national interest, as well as the development of tourism), for the construction of apartments, which achieve high prices, so land pressure there is high. Agriculture is also under pressure, because the best quality agricultural land is situated where the interests are also highest for other purposes: mostly for settlement, for the location of industrial and craft zones, for infrastructure (highways) etc. Agriculture is also under pressure because of international competition, globalisation and the common market for agricultural products in the EU. Agricultural structures in the Municipality of Koper are also not very favourable: small farms with very fragmented land, often unsolved land ownership, less favourable conditions for agriculture in the hinterland, aging farming population etc. The area also has rich biodiversity and well-preserved nature because of its advantageous natural conditions (Mediterranean climate, various types of ecosystems and landscapes resulting from different soil types and different agricultural activities). Due to the rich biodiversity, the Municipality of Koper has several ecological important areas (i.e. the Karst, Dragonja river valley, Rijana river valley, Škocjanski zatok Nature Reserve, Debeli rtič, coast line etc.). Natura 2000 areas, for example, cover 44% of the municipal territory.

In order that the proposal of a new municipality spatial plan will include sustainable land use, some strategies were selected and accepted at a workshop between stakeholders and researchers. First strategy called "Land use efficiency and protection of the best agricultural land" will try to prepare a tool which will contribute to more optimal and sustainable land use planning in the municipality and enable the development of the municipality in an appropriate way. It will first focus on the primary soil quality and qualities important for the individual sectors (forestry, water management, environmental protection etc.) and subsequently on inter-sectorial cooperation to find optimal land use solutions in the new municipal spatial document. The strategy will try to find solutions for all three main land use issues: land pressure due to housing and the maintenance of agriculture and biodiversity in the area where there is the highest pressure, in the peri-urban area. Spatial planners have expressed their interest in such an approach at workshops. It will help them to avoid using the best quality land for construction purposes on the one hand (agriculture will retain nonreflexive quality agricultural land) and, on the other hand important environmental areas, will also be preserved. Biodiversity will be maintained with the mosaic activities in space, with the consideration of environmental demands, maintenance of natural resources, as well as appropriate management of Natura 2000 and protected areas. Areas planned for future settlement, economic and other development will try to avoid areas important because of their primary soil quality, environmental importance etc. and will be redirected to less quality land. The second strategy "Green and recreational areas to increase quality of living" will help to recognize the importance of such areas and their integration in the spatial planning process. They are essential to guarantee a higher living standard of the population in the peri-urban area. The aim is also to create a policy on green area allocation. The third strategy will try to stimulate the implementation of rural development measures from Rural Development Plan for Slovenia 2007-2013. Available measures and support mechanisms from this programme can steer the development of Istrian countryside that the area will keep to be settled, that the abandoned houses will be renovated, that overgrown terraces will be cultivated again, that new infrastructure will be established in a way to enable contemporary way of life, and together with the development of tourism, and other environmental friendly activities will enable dwellers additional income.

The consensus among the various actors in the space (municipal officials and experts, spatial planners, agricultural and forestry experts, environmentalists etc.) and researchers about the approach is that some tool is necessary to confront the different interests and problems in the space and find the most optimal solution. However, the final decision is still in hands of the municipal council, where professional solutions do not always play the main role, since political and financial power and interests are also important.

Classification of results/outputs:

For the purpose of integrating the results of this deliverable into the PLUREL Explorer dissemination platform as fact sheets and associated documentation please classify the results in relation to spatial scale; DPSIR framework; land use issues; output indicators and knowledge type.

Spatial scale for results: Regional, national, European	Regional
DPSIR framework: Driver, Pressure, State, Impact, Response	Drivers, Pressures, State, Policy response, responses by other actors. Impacts to a very limited extend. In the Xplorer the strategies are described as drivers because we are obliged to choose and the research set-up aims at identifying impacts of strategies through land use modelling (see M 3.3.12 assessments and D.3.4.8 scenarios)
Land use issues covered: Housing, Traffic, Agriculture, Natural area, Water, Tourism/recreation	All, with some special focus on housing, Agriculture and natural areas (biodiversity protection)
Scenario sensitivity: Are the products/outputs sensitive to Module 1 scenarios?	Not in terms of research methodology. But the object of research is sensitive to international trends.
Output indicators: Socio-economic & environmental external constraints; Land Use structure; RUR Metabolism; ECO-system integrity; Ecosystem Services; Socio-economic assessment Criteria; Decisions	Land Use Structure, Decisions, RUR Metabolism, Socio-economic & environmental external constraints
Knowledge type: Narrative storylines; Response functions; GIS-based maps; Tables or charts; Handbooks	Narrative storylines, maps, tables, charts, GIS-based maps
How many fact sheets will be derived from this deliverable:	Split up into present situation (pressure); current policies and planning (drivers); and strategies (as policy responses)

Introduction

Objectives of PLUREL case studies

This report is one of the PLUREL case study reports on 'Governance and Spatial Planning Strategies' in six European urban regions: Warsaw, Montpellier, Manchester, Leipzig, Koper and Haaglanden. An outside comparison is also made to Hangzhou, China. Each of the research teams, in cooperation with regional authorities, has studied the unique governance and planning strategies in their region. In addition to official policies, their results and outcomes, the influence of a wider range of actors has been analyzed.

This analysis forms the basis for an assessment of the different regional strategies in terms of their physical, political, social and economic structures and dynamics. The case studies are being used by other Modules of the PLUREL project, to inform the modeling and policy analysis. Finally, the different strategies and their assessment will be disseminated through good practice guidance handbooks and workshops in 2010.

Urban fringe land use issues

In order to bring real-world experience to the Module 3 research, the regional stakeholders in each of the case studies identified four major issues related to land use:

- land pressure due to housing and business development in the urban fringe,
- agriculture in the urban fringe under pressure,
- high value nature areas in the urban fringe at risk,
- integration of leisure and tourism activity in the urban fringe.

Strategies: about actors and their means of influence

The many actors - policy makers and other stakeholders - respond to these issues not only through formal policies but through coalitions, resources, rules and discourses. The focus on 'strategies' includes this wider view of 'a deliberate course of actions that an actor has made/makes, comprising a succession of decisions and actions to achieve goals, objectives'. The strategies identified in the case study reports concern governance and spatial planning – including for instance the patrimonial structure of farming in France, the experiments in partnerships in the UK, or the re-invention of Warsaw as a global city.

Methodology and content based on a Joint Analytical Framework

The case study work follows a common 'Joint Analytical Framework' (JAF) that was developed on the basis of research proposals from the national research teams and consultations. The report first describes the urban region, following the boundaries of the administrative unit concerned. (Stadsgewest, Agglomération, etc.) It summarizes the land use history, the actual land use situation and major strategic issues for each of the case study regions. Second, the official government and spatial planning system is described. The third chapter describes a number of planning and governance strategies in more detail, uncovering the interactions between the different actors involved, what matters to them, and how they influence the urban rural interactions and the fringe. For some strategies this might be done ex-ante, for others ex-post. The effects in terms of sustainable development of the urban fringe is the subject of the second round of case study reports and developed in cooperation with the other PLUREL modules.

Definition of the urban fringe

A central notion to the concept of 'urban fringe' is the location in the periphery of the built-up urban area. The wording 'peri-urban area', of French origin (*peri-urbain*) can also be used. It can be either an area that at the outer limits (seen from the urban perspective, motivating the word 'fringe') extends into larger (open land) arable or green

areas, as in Warsaw, Koper and Hangzhou; or it can also expand into the urban fabric of a new city or agglomeration, such as in Haaglanden, Manchester or Leipzig. This definition of the urban fringe is a spatial physical definition that is workable for all case study areas. The functional definition of a 'rural-urban region' can be based on employment patterns or a one-hour journey time from urban centers. For more densely populated areas of Europe the fringe territory can then extend right across larger agglomerations.

There are several dynamics, i.e. developments resulting from the urban influence, that especially characterize the urban fringe in economic and social terms but also environmental terms:

- recreational initiatives and land uses by urban dwellers;
- increased traffic flows to and from the urban area;
- overflow of urban uses and infrastructure that are incompatible with high density residence because of air pollution, noise, safety risks, or planned outside the urban area because of lower land prices, such as water storage, car dumpsites, waste disposal, residence of urban workers or urban rich, motor cross sites.

A distinctive feature is that the urban fringe is not considered in terms of its own intrinsic values but merely as a solution to urban problems and as a cheap source of land. At times, it is seen as a location of great contrasts, housing both very wealthy and very deprived communities. PLUREL was financed by the European Commission because several FP5 research projects requested attention on the urban fringe as an area with specific qualities and issues and often divided over several administrative areas. The case studies research the attempts of 6 European regions in the sustainable development of their urban fringes and they identify a new kind of policy agenda.

Responses to the urban fringe agenda

Ideally, the urban fringe should become an area of high quality, with a more independent role than only that of a spill-over area. Past attempts to draw a juridical line between urban areas and their green surroundings - such as by the former Dutch Minister for Housing and Spatial Development, Jan Pronk - can be seen as an effort to realize this and to contain, for instance, the financial pressure of urban land markets. There are various possible approaches: to assign the fringe and green infrastructure the status of a municipality, or to assign land ownership and stewardship to a community land trust.

More sustainable development of the urban fringe into an area of high quality environment that serves the residents of urban, fringe and rural areas is a concern of all regional authorities involved in PLUREL - the governance forms and spatial planning strategies contributing to this are the focus of the following case study.

1 Land use and spatial development in the region and turning points

Koper is situated in the south-west of Slovenia, on the Slovenian coast (Istrian peninsula), bordering Italy and Croatia. Its geographic position is N 45° 32' 05" and E 13° 45' 05". The entire territory of the Municipality of Koper is a PLUREL case study area and belongs to the Obalno-kraška (Coastal-Karst) statistical region. Koper is 170 km from Venice, 400 km from Milan, 490 km from Zurich, Munich and Vienna and 550 km from Budapest.



Figure 1: Position of Slovenia and the Municipality of Koper within Slovenia

The Slovenian coastal region is covered with lush vegetation, which consists of numerous wild plants, ornamental parkland species and agricultural plants. As elsewhere in the Mediterranean region, the traditional use of the land can be described as very heterogeneous. The diversity of vegetation is made possible by large amounts of sunshine and high temperatures characteristic for the Mediterranean climate.

1.2 History of land use

The Slovenian coast has a characteristic Eocene flysch base. The relief, shaped by the geolithologic base and tectonic and erosion processes, gives the landscape a special morphologic character (Stritar, 1990). Together with the Mediterranean climate and vegetation, it provides the characteristic image to the landscape. The Bay of Koper is the largest bay on the north-western Istrian coast. The coastline was formed after extensive encroachments by the sea following the last Ice Age. The irregular nature of the coast is a result of the flooding of the lower parts of valleys whose rivers had run further to the west during the glaciation, when the sea level was some 90 metres lower (Šifrer, 1965). The shallows were ideally suited for the creation of salt pans (Orožen Adamič, 1981).

Koper, the oldest town in Slovenia, developed on a rocky island with the Roman name of Capris. Of the three Slovenian coastal towns (Koper, Izola and Piran), Koper has experienced the most numerous modifications to its layout, the reasons for which must be sought in the various changes of reigns and states, all of which marked the city with their specific traits and names. Koper was called Capris in Roman times, during the time of the Pope Gregory I (599) Insula Capraria ("goat island"), Iustinopolis under the Byzantine Empire (between the mid 6th and 8th centuries) and Caput Histriae ("head of Istria") by the Patriarchs of Aquileia. The Venetians rendered that name into the Italian form, Capodistria, which is still one of the two official names of the city¹. The Slovenian equivalent of the name is Koper.

¹ The Municipality of Koper is a territory which also has an Italian minority. The Italian minority is mentioned in the Slovenian Constitution and has various specific rights, one of which is the use of the Italian language in all spheres of life. The Italian language is the second official language in the area, in addition to Slovenian. All place names in the municipality, as well as all official documents, are therefore written in both languages.

The Roman Empire had an important influence on the development of urbanism and architecture in the area. Roman civilization is famous for its great progressive impact on construction, materials and the culture of residence. The Romans also adopted some of the knowledge and primary materials of the aboriginal population.

The Venetian Republic (1279-1797) ruled over the city for the longest period, when Koper experienced economic (trade, salt production) and cultural prosperity (painting, music). The Venetian influence is still visible in the city architecture, which, despite numerous modern interventions, has preserved its medieval character, with the city of Koper being a member of the European Association of Medieval Cities. In the middle ages, Koper was an island encircled by walls and connected with the mainland by a wooden bridge in the direction of Škocjan. It was protected by a mighty fortress, Lion Castle, and surrounded by vast saltpans. Koper's importance began to diminish in the 18th century, when Trieste was proclaimed a free port, and finally ended with the downfall of the Venetian Republic.

In the period of the 19th century, up to the First World War (i.e., from the Napoleonic Empire 1806-1813 to the Hapsburg Monarchy 1813-1918), Koper experienced numerous changes in economic and social development. This period was marked by a contraction of the saltpans, which were entirely abandoned in 1912, and a changed layout of the city, which began to lose its character. In 1825, a second road connection with the mainland was constructed (Semedela Road), followed by the coastal road in the middle of 19th century, with a maritime link between Trieste and Poreč and the railway connection Trieste-Poreč in 1902.

Under the Italian Empire, Koper entirely lost its island character because of the draining of the abandoned saltpans.

The period after the Second World War brought further changes. Until the final determination of the border with Italy with the signing of the London Memorandum in 1954, when it officially became part of former Yugoslavia, Koper was part of Zone B, administered by the Yugoslav National Army, initially belonging to the Julian March and from September 1947 to the neutral state called the Free Trieste Territory. As part of Yugoslavia, Koper experienced profound changes in its national structure. This also brought about new architectural interventions, both in the city centre and in its surroundings, especially in terms of the huge development brought about by the construction of the port.



Figure 2: Historical buildings in Koper old city centre

Historical Development of Koper Bay



Koper Bay with two islands before Roman colonisation:

- Koper Island, overgrown with bushes (Insula Capritana) on the left,
- Sermin Hill (Insula Risani) on the right.



The Romans established a town called Aegida on Koper Island.



Saltpans dominated the area from Roman times till 1911. The picture shows Koper (Semedela) saltpans (south of Koper Island).



How Koper Island was connected with the mainland.



In 1911, the production of salt was totally abandoned due to a fall in the price of salt. In the 1930s, the saltpans were drained, the area filled up with soil, and fields (bonifikas) were created.



In the 1960s, the Port of Koper began to be built in the immediate vicinity of the City of Koper, spreading towards Ankaran.

Škocjan Bay became more and more closed until it finally obtained the character of a lagoon.



Today's situation in the Koper area.

1.2 Recent land use developments

1.2.1 Urbanisation and industrialisation of the area

The Koper saltpans and those near Sermin had begun to decline economically by the end of the 19th century and by the time of the First World War this activity had almost entirely ceased. The salt flats became marshes. Thus, for economic as well as health reasons, drainage was undertaken in 1932–1939. The course of the Rijana River was diverted over a length of 5 km because of frequent flooding (Plut, 1981). Drainage ditches can be identified on aerial photographs.

In Slovenia, as elsewhere in the world in the late fifties and sixties of the 20th century, major public works such as motorways, pipelines, urbanization, agricultural development, and poorly regulated suburban industrial and infrastructural developments, transformed the cultural landscape, often without any environmental impact assessment and the cultural heritage was frequently destroyed, especially in the suburbs and in the countryside. From the very beginning it was recognised that the predominant national interest concerning the development of Slovenia was and remains the development of Koper port, urbanization, industrialization of the region and the development of the tourist industry. All this thus led in the late sixties in Koper to the construction of new buildings – a few skyscrapers next to the medieval town, an expansion of the industrial zone and shopping centres outside its fortified walls. The suburban expansion is still not concluded.



Figure 3: Panoramic view of Koper and its surroundings

Large scale construction projects began after the Second World War, after 1950. By 1977, 42 drainage ditches had been dug and some 93 assorted buildings had been constructed on the land on the outskirts of Koper (Stokin, 1997). Encroachments into agricultural areas for a limited period also included the expansion of Koper harbour and the construction of a railway station. Oil and gas terminals were built beside the hill near Koper. The economic exploitation and development of the area has not ceased. A sand extraction plant has been active on the eastern side of the hill from the early eighties. Expansion of the harbour blocked off the rest of the Bay of Koper from the open sea with large embankments. The result of these interventions is that the area has been modified to such an extent that its original topography has been virtually destroyed (Stokin, 1997). The historical, romantic landscape around Koper has been lost.

Present land use is a result of society's current needs as well as a reflection of historical land use. One of the effects of fast economic development after the Second World War and of the attractiveness of the coastal area is a high level of urbanization. In the most recent period, sub-urbanization is mainly evident on urban fringe and in settlements which are close to coastal towns (Koper, Izola and Piran). While increasing population is evident in the coastal area, almost all settlements in the rural hinterland were demographical endangered until some years ago, with a falling population. Today, the situation has stabilized in rural settlements, too.

The main land use interests today are: development of building land for housing needs, development of economic activities (Koper harbour, industrial zones, trade centres etc.), infrastructure (construction of a highway through the area, foreseen construction of second railway track from Trieste to Divača), agricultural activities, tourism needs (hotels, apartments, golf courses and other leisure facilities), as well as nature reserves and protected areas. Almost half (46.8%) of the total land in the Municipality of Koper today is covered by forests and their share is still increasing because of agricultural land overgrowing, mostly in the remote rural hinterland areas. About 7% of the total land is in process of overgrowing. Agricultural land represents 44.9% of the area of the municipality, but grassland, mostly extensive, predominates. Built-up areas represent around 7% of the total area (*Table 1, Map 1*).

Table 1: Land use in the Municipality of Koper in 2001

Land use:	Area (ha)	Structure (%)
Arable land and gardens	2,306.78	7.4
Vineyards	1,801.168	5.8
Orchards	2,64.08	0.8
Olive plantations	6,34.74	2.0
Grassland	6,810.08	21.9
Agricultural land in process of overgrowing	2,167.84	7.0
Forests	14,576.93	46.8
Land under construction (built-up areas)	2,137.66	6.9
Reedbeds and other marshy land	43.28	0.1
Other land and water	377.41	1.2
TOTAL	31,119.97	100.0

Source: Ministry of Agriculture, Forestry and Food.

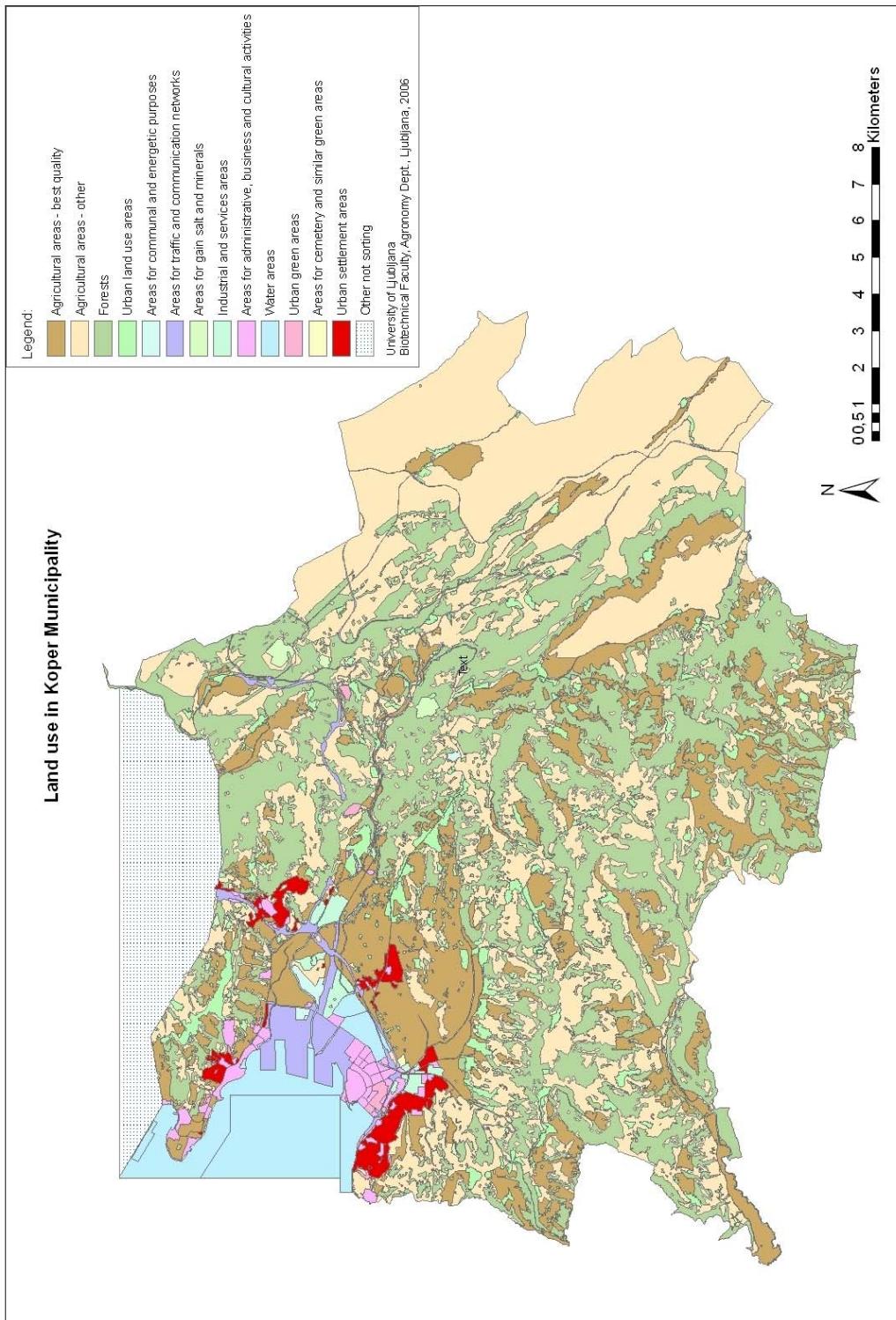
Grassland predominates in the structure of agricultural land (mostly extensive pastures and meadows) with 48% of the total agricultural land. A high percentage (16%) of agricultural land is in process of overgrowing, mostly due to difficult conditions (poor land or unsuitable conditions for use of mechanization) and abandonment of agriculture on small farms or farms without a successor. Some farmers have also stopped breeding animals on their farms and have specialized in wine, fruit or olive production, so their grassland has started to overgrow. Vineyards present 13% in the structure of agricultural land, olive plantations 5% and orchards around 2% (*Table 2, Map 2*).

Table 2: Agricultural land use in the Municipality of Koper in 2001

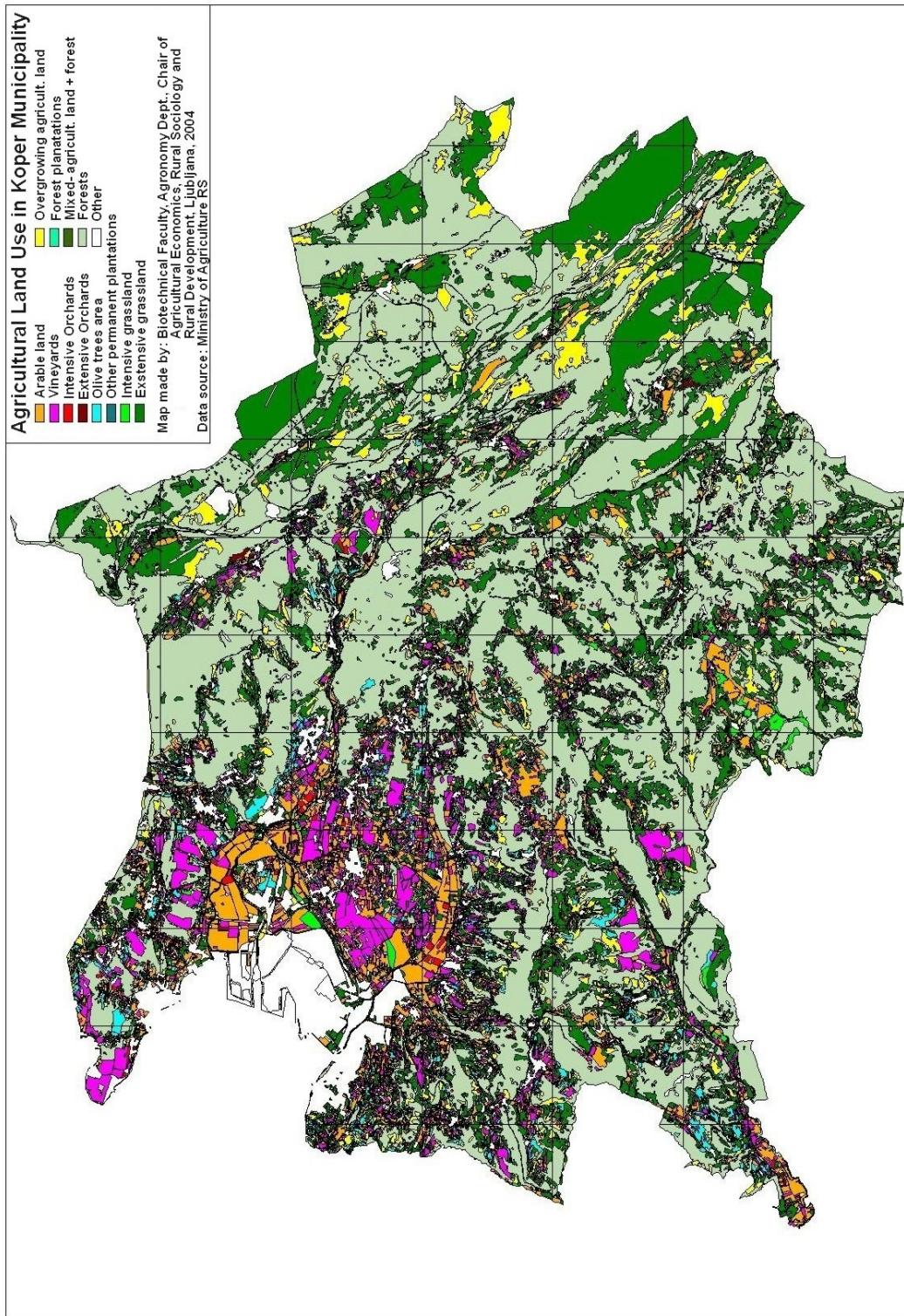
Agricultural land use:	Area (ha)	Structure (%)
Arable land and gardens	2,306.78	16.5
Vineyards	1,801.17	12.9
Orchards	264.08	1.9
Olive trees plantations	634.74	4.5
Grassland	6,810.08	48.7
Agricultural land becoming overgrown	2,167.84	15.5
TOTAL AGRICULTURAL LAND	13,984.686	100.0

Source: Ministry of Agriculture, Forestry and Food.

Map 1: Land use in the Municipality of Koper



Map 2: Agricultural land use in the Municipality of Koper



The Port of Koper is an important actor in present and future land use of the municipal area (*Fig. 4*). The port's real estate amounts to 400 hectare. The Port is Government owned and is controlled by the Koper Port Authority. The operation of the port has been privatised, with the Government holding 51%, but the voting rights of the holding is limited to 2%. The balance of 49% is held by the general public, comprising former workers, current workers and their families. Port and national authorities have a major interest in increasing the port area (construction of a third terminal and better connections - highway and modernized railways) and port capacities. This also means increased spatial needs.



Figure 4: Port of Koper (left) and view from rural hinterland towards urbanized coast with the city of Koper behind (right)

The main problem of present land use is a conflict of interest resulting from the fact that the majority of the population lives in the urban and peri-urban area, where economic activities are also mostly concentrated, as well as tourist facilities and attractions, the main infrastructure and the best quality agricultural land and environmentally important areas (e.g., Škocjanski zatok Nature Reserve) (*Fig. 5*). Good spatial planning is therefore very important for appropriate adjustment of different land use interests as well as sustainable development of the area.

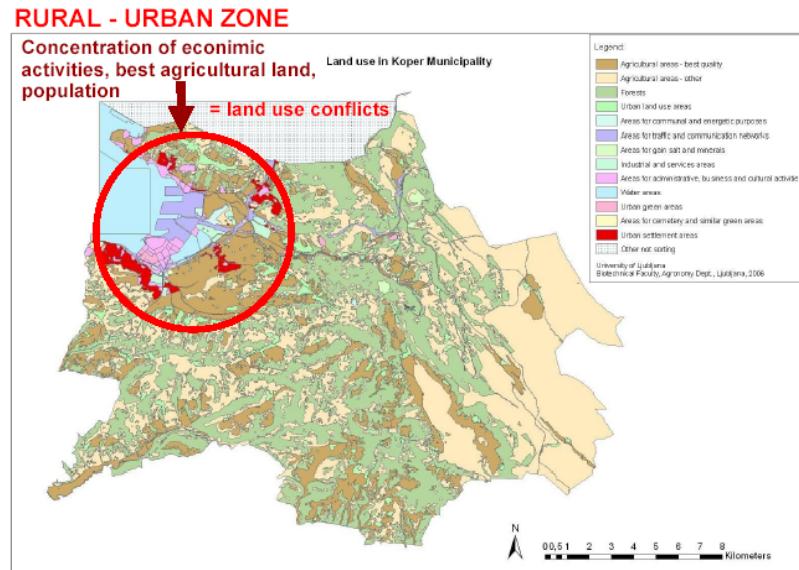


Figure 5: Conflict of interest in land use in the Municipality of Koper

The development of tourism in the area and urban sprawl outside the city is creating the need for new infrastructure. Urbanisation of the coastal belt, together with increasing employment opportunities have led to intensive migration from the hinterland to the coast; there is also migration into the municipal area from other parts of the country, as well as from abroad. The major changes in the narrow coastal belt in recent decades (abandonment of salt production, the construction of tourist facilities, including yachtmarinas, the development of the Port of Koper, infrastructure construction etc.) have resulted in a serious loss of natural coastline and degradation of coastal ecosystems. There is less than 20% of natural coastline left.

The most important policy option that has been chosen and adopted is “hold the line”, which is implemented in most urbanised or intensively used parts of the coastal zone. Only the parts of the coast that are either nature reserves or uninhabited areas are subject to natural processes, and are left to natural dynamics, with the soft policy option of “limited intervention”. In the area of the Port of Koper, the policy option is to “move seaward” in general, the approach to solving coastline erosion problems is local, using proper technical solutions and appropriate land use.

1.2.2 A nature reserve at the entrance to the city

Škocjanski zatok, a nature reserve and the largest brackish wetland in Slovenia, is also within the urban fringe. The area of the nature reserve is 122 hectares. It is located on the outskirts of Koper and consists of a brackish lagoon surrounded by reedbeds and agricultural land that is being turned into a freshwater marsh (Figure 6). An outstanding attribute of the nature reserve is its rich flora and fauna, which includes a number of rare or endangered Slovenian species. The area was severely damaged in the 1980s, when the local authorities planned to fill the brackish lagoon completely in order to develop an industrial and commercial zone. In 1993, DOPPS - BirdLife Slovenia initiated a public campaign to protect the area. After five years of dedicated and persistent work and invaluable support from BirdLife Partners, the area was officially declared a nature reserve by the Slovene government in 1998. At the end of 1999, DOPPS obtained a management licence over the reserve. Legal protection put a stop to degradation and the challenge is now to restore the wetland to conditions prior to degradation and to ensure its long-term protection. Restoration started at the beginning of 2006 and was mostly completed in 2007. The area was re-opened for the public to observe the birds and other natural life there, and to provide a “green space” for the urban population. (http://www.skocjanski-zatok.org/index_en.php)



Figure 6: Škocjanski zatok Nature Reserve, housing and economic area of Koper behind

1.3 Some trends in the Municipality of Koper

Urbanisation:

The urbanisation of the coastal belt together, with the increasing employment opportunities, led in the past to intensive migration of inhabitants from the hinterland to the coast. The direct consequences include deserted villages, the decay of urban buildings, poor maintenance of infrastructure, abandonment of farming, and decay of the typical cultural landscape. In the eighties of the last century the migration process reversed, due mainly to more private housing possibilities and improved infrastructure. The change had a positive effect on the revitalization of the hinterland. At the same time, however, due to poor planning and insufficient control over building activities, the process led to serious degradation of the cultural landscape. Today, the major problem of coastal cities and settlements is their extensive and dispersed expansion into the surrounding space in the last decades. The major changes in the narrow coastal belt in recent decades (the construction of tourist facilities, including yacht marinas, the development of the Port of Koper, infrastructure) have resulted in serious loss of the natural coastline and degradation of coastal ecosystems.

Transportation:

The Port of Koper, Slovenia's major freight port, serves several Central European countries. The port now handles more than 15 million tons of freight per year. This has resulted in important economic development, enlargement of the docklands, with consequent substantial burdens on the environment due to coastal construction, river drainage and dredging operations. In addition to the Port of Koper, located adjacent to the historic core of Koper, there are four marinas (Portoroz, Piran, Izola, and Koper) with mooring for about 2,000 yachts. There are also other important transport facilities: both road and railway. Passenger ship lines ply along the coast, as well as to ports in neighbouring Italy and Croatia. In addition to the marina, there is also a small passenger and fishing harbour in Koper. The Port of Koper has also started to build a new passenger terminal to attract still more tourists and passenger ships.

Agriculture:

The traditional terrace culture on flysch slopes is very well adapted to the environment, since it reduces erosion, increases the cultivated surface and plays an exceptionally valuable role in water retention. Today, agriculture is largely neglected as an activity. Consequently, less favoured agricultural land has become overgrown with forest. In addition, farms are small and have been fragmented down to 0.5 ha plots, with only about 10 % of farms bigger than 5.0 ha. There are also vineyards, fruit plantations and olive groves, with potential for future development linked to tourism. The best agricultural potentials are situated in areas where other non-agricultural interests are strong, too.

Industry:

Industrial activities include the petroleum industry, shipbuilding, car production, canning industry, fine mechanics, production of chemicals and food industry. The share of employment in services is constantly increasing.

Nature conservation:

Despite intensive human activities, there are extensive protected areas of natural and historical sites. Nature reserves include cliffs, lagoons, underwater habitats, salt marshes and saltpans, reserves of Mediterranean terrestrial flora and fauna, as well as freshwater lakes. They should be regarded as part of a valuable network of attractive areas that can be used for diversifying the tourism product and diverting development centres away from the congested coastal belt. Environmental awareness is rising, mostly thanks to legislation, the activities of environmental NGOs, environmental institutions in the area and rising awareness among the local population.

Tourism and recreation:

The area is visited by tourists primarily because of its natural beauties (coast, sea, bathing sites, characteristic landscape, rich natural and cultural heritage) and, naturally, because

of its attractive location relatively close to major cities of northern Italy, Austria, Hungary, and mainland Slovenia. The Slovenian coast has well developed tourist infrastructure. The tourist infrastructure includes several dozen hotels, sport facilities and public beaches, most of them artificial. Tourist development in Koper and in the other parts of the coast, sprawls outside the city, creating the need for new infrastructure. Tourist capacities are also located in sensitive coastal landscapes, causing additional pressure on natural coasts and reducing the biodiversity potential of the area.

Migrations:

Population increase is mainly due to immigration; data shows that the natural population increase in the municipality is even negative. In recent years, evidently after joining the EU in 2004, immigration from abroad has been increasing, as well as immigration from other Slovenian municipalities. There is also emigration from the municipality to abroad and to other municipalities in Slovenia but on a smaller scale than immigration.

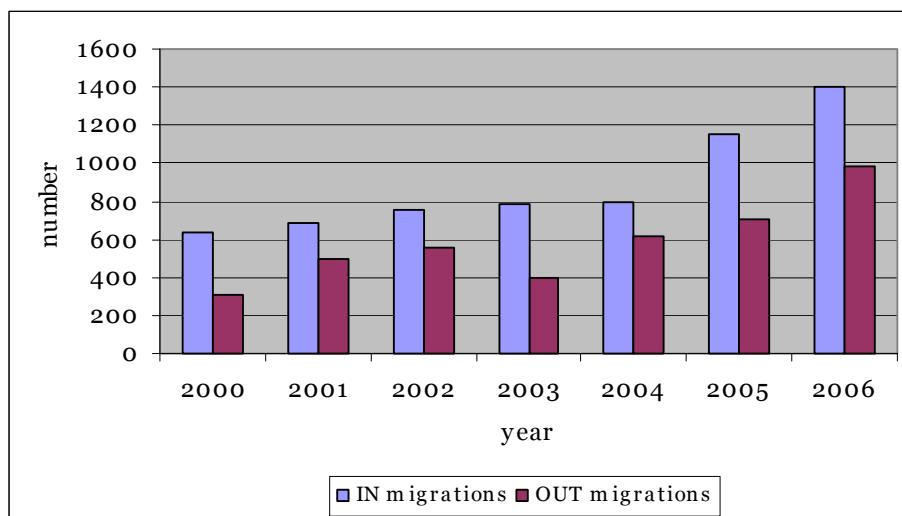


Figure 7: Migration into and out of the Municipality of Koper
(Source: Statistical Office of the Republic of Slovenia, 2008)

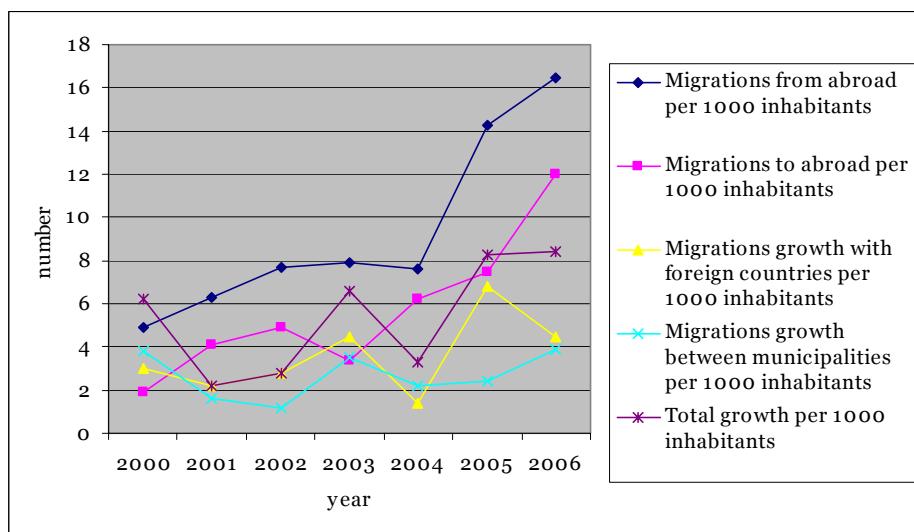


Figure 8: Migration per 1000 inhabitants in the Municipality of Koper
(Source: Statistical Office of the Republic of Slovenia, 2008)

Population projection:

A population projection for 2015 in the Municipality of Koper has been prepared by Zakrajšek (Municipality Spatial Plan-draft, 2008). The projection is based on a model taking into account: age structure of present population in individual areas of the municipality and natural movement of population during the time and planned construction of apartments in the same period. Some other parameters, such as decreasing number of family members, required reserves in the number of apartments, holiday apartments, building and location plans etc. were also used.

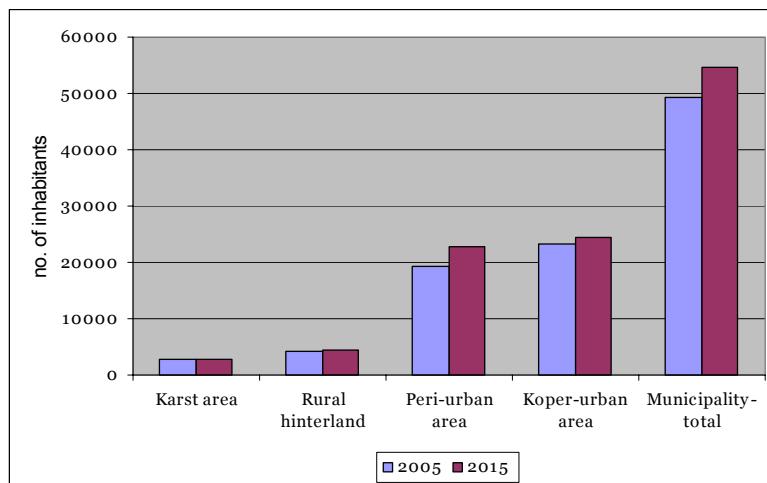


Figure 9: Population projection for the Municipality of Koper for 2015
 (Source: Spatial Plan of the Municipality of Koper – draft, 2008)

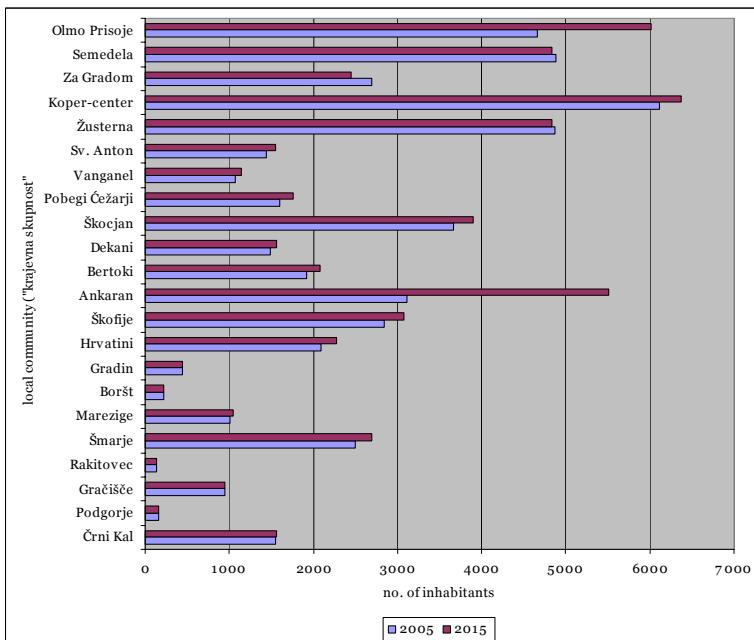


Figure 10: Population projection for local communities of MOK for 2015
 (Source: Spatial Plan of the Municipality of Koper – draft, 2008)

Data show an increasing of number of inhabitants in all parts of the municipality, including the rural hinterland, where the number of inhabitants decreased in the past. The present demographic structure is already such that stagnation or further decrease is not expected.

Possible effects of climate change:

Slovenia has a very diversified climate due to a varied relief and its location between the Alps, the Mediterranean and the Pannonian Plain.

The average yearly temperature is rising, and the same is true for the average temperature of the vegetation period and the length of the growing season. The lowest and the highest daily temperatures are also higher. There are ever fewer cold days and more hot days. The relative humidity is falling, while the duration of sun radiation is increasing. The amount of precipitation and the number of rainy days is also slightly decreasing. Precipitation is less frequent in the first part of the year and more frequent in autumn. Plants are already reacting to the higher temperatures; more of them are blossoming earlier than before and spring has started in recent years approximately 10 days earlier.

Temperatures in Slovenia in the last half century increased by 1.4° C (also on Kredarica in the Alps (2500 m a.s.l.)). Evaporation will also be higher because of higher temperatures, more energy is accumulated and, as a result, there are more violent storms. Slovenia, and the Koper region, have already had some, till now unknown destructive storms, which require some changes in building construction, flood prevention and also in spatial planning in general. One of the effects of climate change is a rise in the sea level, which can cause problems on the coast.

The effects of climatic change can/will be very heterogeneous (Kajfež Bogataj, 2008). They endanger the security of individuals, society and the state, as well as international security. Scientists warn that climate change will not just give rise to environmental problems but can cause also political, economic, energy, migration, social and health-epidemic crises.

The following are some of the possible consequences of climate change:

- More expensive energy due to the situation on global energy markets (i.e., oil);
- Influence on electro-energetic systems - increased use of electric energy;
- Very pronounced influence on water sources (higher flood threat, endangered water supply and hydro-power stations, drinking water supply etc.);
- Changes in agricultural production (changes in the quality of products, selection of varieties and in the use of traditional agricultural technologies). Plants will ripen faster, they will need more water, more damage will be caused by weather (e.g., floods), and there will be more problems with pests and diseases. Prices of agricultural products will be higher. Agriculture will be increasingly at risk from the weather;
- In forests, especially coniferous trees will be endangered, particularly where they are monocultures or where forest is on poor conditions (bad soil, dry areas, sloping terrain). Fire and insects will be a higher danger. Costs of forest management will be higher;
- There will be greater frequency and intensity of storms, with higher damage caused by hail, lightning, heavy rain and strong winds. Floods and soil erosion will be more frequent, as will also be droughts and thus a higher fire risk;
- Rich biodiversity will be endangered, first in extreme high mountain habitats and habitats of cool loving species of flora and fauna. Fragmented remnants of ecosystems without genetic, spatial and ecological potential for movement to new location will be particularly endangered;
- There will be a direct impact on human health (air pollution, higher temperatures, changed ecosystems, changed water cycle, food production and disease carriers...);
- There may also be an effect on the economy: insurance and tourism sectors are already feeling the impact of weather difficulties, but also the other sectors (exchange, trade etc.).

Weather changes can even cause social risks, such as migrations and political imbalance.

Some main trends from different aspects are summarized below:

Demographic aspect:

- the population density in the municipality (158 inhab./km²) is significantly above the Slovenian average (98 inhab./km²); the highest is in the coastal belt (2/3 of the population live in 1/5 of the municipal area);
- unfavourable age structure of the population (share of those younger than 40 years is lower than the Slovenian average); there are differences between local communities within the municipality; the age structure in the old city centre is also worse than in other parts of the municipality;
- population increase is not a result of natural increase (which is even negative) in the municipality but of net migration into the municipality from elsewhere in Slovenia and from abroad; the municipality has a higher percentage of immigrants than the Slovenian average;
- projections for 2020 foresee a decrease in the number of inhabitants in the municipality by 2.4%;

Economic aspect:

- Koper is an important employment centre; the share of employed is slightly below the Slovenian average (employment rate = 55.7%); the share of entrepreneurs is also high, but the share of farmers is low; more than 70% of active employed inhabitants work in services; the share of industry, 17%, is below the Slovenian average, construction has an important share in the structure;
- salaries are above the Slovenian average and above the average for the Coastal-Karst Region;
- the profitability of the local economy is advantageous;
- bipolarity of economic development: new working places in recent decades have occurred almost exclusively in the coastal belt, while in the hinterland, of the reduction in agricultural activities has not been accompanied by an opening of new working places (the effect is an impoverished rural economic basis, demographic risk, a high percentage of employed outside living place = high daily migrations);
- below average unemployment compared to the Slovenian average (7.0% in 2006);
- deficiency of some profession profiles = employment of the foreign workforce;

Sociological aspect:

- increasing individualization and different methods of contact (ICT technology);
- sharpening of contrasts between higher spatial needs and demands on the one hand and spatial possibilities on the other (condensation in space and increase of mutually disturbing influences, on the one hand and a tendency towards higher individualization of work and residence on the other – as a result of increased pressure for dispersed settlement);
- increasing individualization of residence and mobility; increasing sensitivity of population for privacy (visual, acoustic, ICT, emissions privacy, privacy of visits etc.);
- decrease in the size and increase in the number of households;
- more possibilities of working at home, distance study etc.

Environmental aspect:

- higher developmental pressure than in other Slovenian regions;
- pollution as a result of the maritime economy (port, shipyard, marinas), waste water emission into the sea and rivers, waste and traffic; problems are still greater in the summer tourist season;
- periodic problems with air pollution: ozone and other gases (CO₂, NO_x, SO₂, CO, C₆H₆ etc.) as a result of traffic, industry, agriculture and individual heating systems;
- water pollution (sea and rivers) as a result of waste water emission from sewage system into the sea and rivers (Badaševica and Rizana), emissions of oil and waste oils from ships, local industry (chemicals, heavy metals, organic substances and micro organisms), agriculture (mostly use of mineral manures because livestock production has almost disappeared in the area);
- noise pollution can be caused by traffic, in coastal part particularly trucks leaving the Port of Koper;
- nevertheless, Koper municipality is among the less polluted Slovenian towns.

Table 3: Some data of the Municipality of Koper

Social/demographics	
Number of inhabitants	49,303 (June 2007)
Population growth (period 1991-2002)	+ 3.8%
Population density	158 inhabitants per km ²
Number of households	17,391 (March 31st 2002-Survey 2002)
Average household size	in 1991: 2.9 members ; in 2002: 2.7 members
Households growth (period 1991-2002)	+ 10.1%
No. of apartments	20,246
No. of apartments growth (1991-2002)	+ 20.5%
No. of buildings with apartments	11004
Economic	
Employment rate	57.8% (average 2002-2004)
Unemployment rate	7.0% (in 2006)
Number of enterprises	2,909 (in 2004)
Net investment per employee	13,845 EUR
Value added per employee	30,905 EUR
Value added per capita	6,210 EUR
GDP/capita	14,616 EUR (in 2005-Obalno-kraška region)
Family farms	1,359 (agricultural census 2000)
Environmental	
CO ₂ production/person	10 t (data for Slovenia in general)
Average daily temperature	13.4°C (period 1990-2007- station Portorož)
Average wind speed	3.1 m/s (period 1990-2007- station Portorož)
Energy consumption – only households	1.88 MWh/capita/year (in 2007)
Energy consumption – total (all users)	5.84 MWh/capita/year (in 2007)
Water consumption– only households	43.5 m ³ /capita/year (in 2007)
Water consumption– total (all users)	121 m ³ /capita/year (in 2007)
Household waste per capita	471.3 kg/year (in 2006)
Connection to public sewage system	64.3% (in 2002)
Spatial	
Area	311.2 km ²
Road length	288.7 km categorized + 300 km non categorized
Coast length	17.6 km
Land use in 2001 (%):	
Urban (built-up areas)	7.0 %
Agriculture	44.9 %
Forests	46.8 %
other	1.3 %
Natura 2000 area	44% of the municipality territory

Sources: Statistical Office of the Republic of Slovenia (www.stat.si), Municipality of Koper (www.koper.si), own calculations

1.4 Definition of the peri-urban area

Peri-urban areas are defined in the literature as a transition zone with a mixture of urban and rural activities and land uses (Adell, 1999). This transition zone is also defined as a spectrum of change from rural to urban that is discontinuous, “lumpy” and multidimensional and that arises from underlying social processes (Iaquinta and Drescher, 2000; cited by Tötzer, 2008).

In a previous study, Kovačič et al. (2000) made a rural-urban typology for Slovenia in general. A distinction was made between urban, suburban and rural areas (the latter was further divided into sub-types due to the main purpose of typology, which was to direct and manage rural development). The criteria used were various: from population density to population growth in the most recent period (increasing population concentration), share of agricultural employment etc. The territory of the Municipality of Koper was also split into the mentioned three types.

Using simply the indicator of population density for a delineation between urban and rural areas, and peri-urban as a transition zone between them, for the Municipality of Koper shows that individual settlements are populated with different densities (*Fig. 11*).

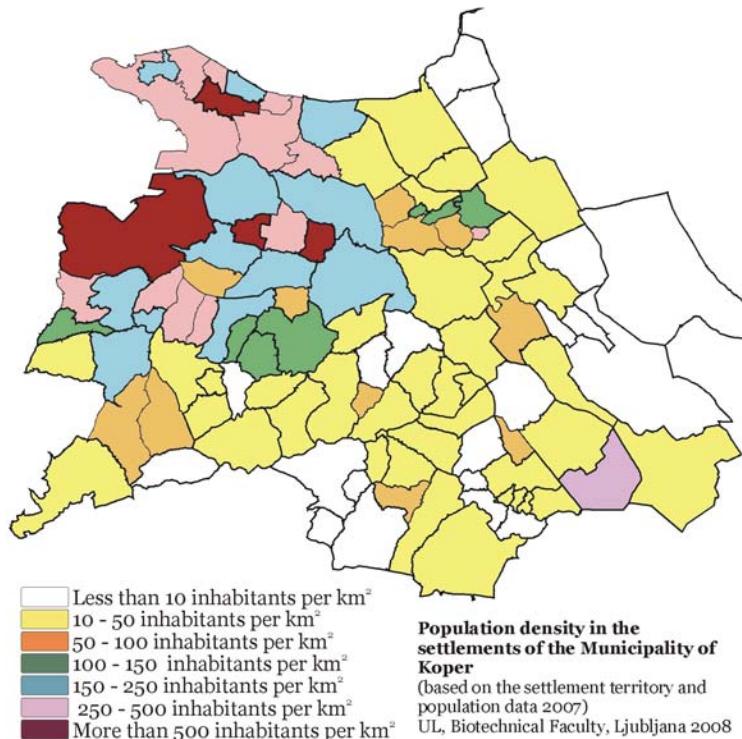


Figure 11: Population density in settlements of the Municipality of Koper

However, the territory of an individual settlement does not cover only the built-up area of the settlement but also associated uninhabited land. It is therefore more appropriate to make a delineation using a net of local communities (“krajevna skupnost”) as the smallest units of organized self-government in the municipality. In this experiment only population density has been used for the definition of types:

- Urban area: population density is more than 500 inhabitants per km²,
- Peri-urban: population density is 150 – 500 inhabitants per km²,
- Rural areas: population density is less than 150 inhabitants per km².

The final results of such a definition are more homogeneous and are presented in Figure 12.

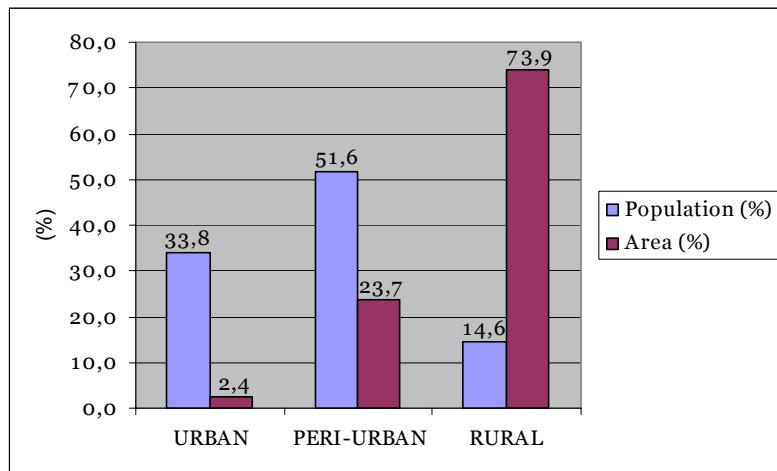
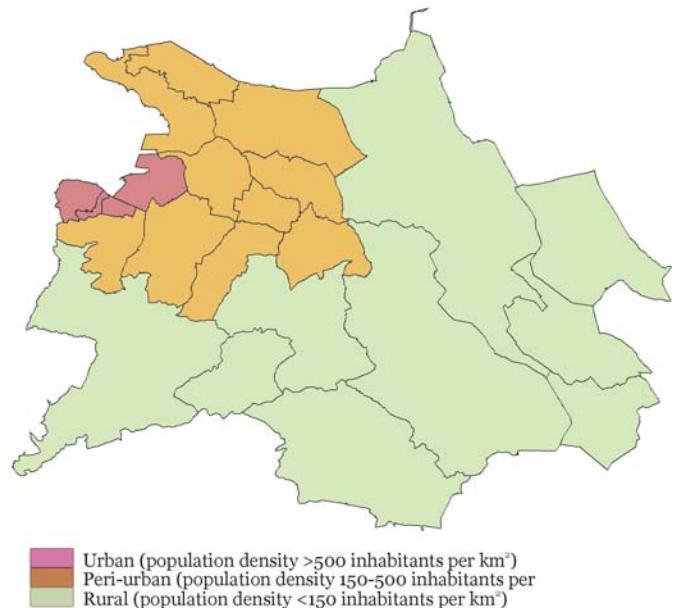


Figure 12: Share of population and area in the Municipality of Koper
(Data: Population data of the Municipality of Koper, 2007)

The results of this experiment for the purpose of the PLUREL project and the typology made by Kovačič et al. (2000) are almost identical, the difference being in only one local community (Škofije). Kovačič et al. placed this local community among rural areas and this experiment among peri-urban. It may be that the situation has changed in the last period and the local community has had stronger population growth in recent years. Kovačič et al. used data from 1991 and this experiment used population data from 2007.



Municipality of Koper by urban-rural types
(spatial unit is local community ("krajevna skupnost"))- made for the purpose of
PLUREL project
UL, Biotechnical Faculty, Ljubljana, 2008
Author: Anton Perpar

Figure 13: Territory of the Municipality of Koper by types of area

We also asked the interviewees about their definition of urban, peri-urban and rural and ask them to show such types of areas on a map of the municipality (= case study area). They mostly equated urban with the city of Koper, including in addition to the old city centre the surrounding area with urban functions (Port of Koper, residential areas of Žusterna, Semedela and Olmo and the commercial area on the old city fringe). It was very difficult for most of them clearly to delineate between urban, peri-urban and rural areas on the map; it was easier to say in which type individual settlement belong. Interviewees mostly defined as peri-urban settlements the following settlements which are physically divided from the town and where a mixture of land use can be found: Ankaran, Hrvati, Škofije, Dekani, Bertoki, Pobegi, Sv. Anton, Prade, Škocjan, Šalara. The remaining settlements in the hinterland represent rural space.

Figure 14 shows how the territory of the city of Koper is officially defined by the Geodetic and Cartographic Authority of the Republic of Slovenia.

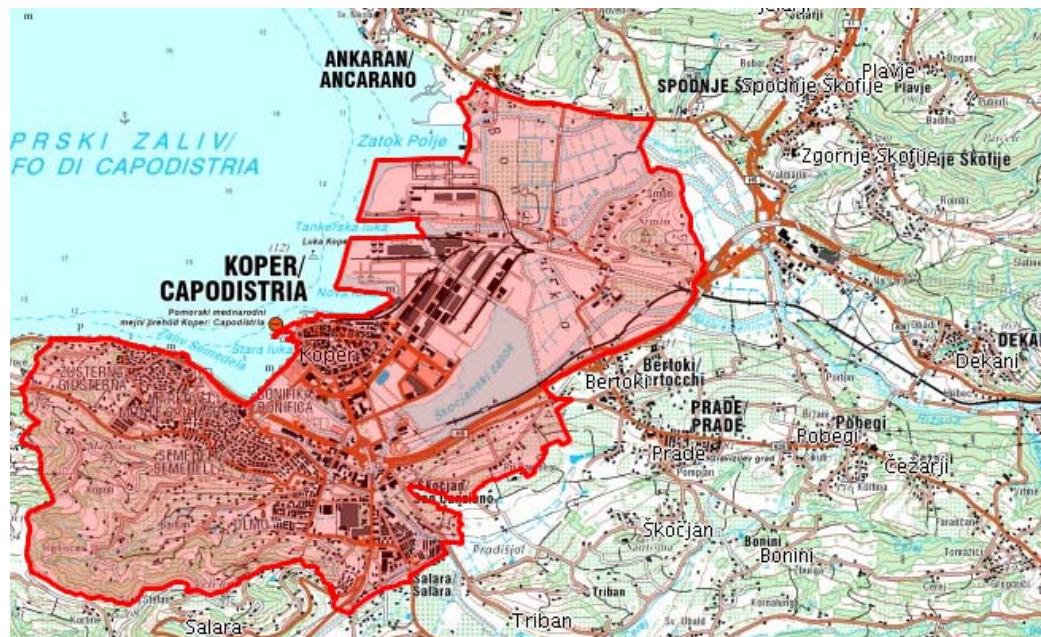


Figure 14: Territory of the city of Koper (Source: www.geopedia.si)

It can be concluded that in the case of the Municipality of Koper there is conformity between the research definition of urban-rural types and that in people's minds, because there are fairly clear boundaries and characteristics of each type of area.

2 Government institutions and policies

REPUBLIC OF SLOVENIA



General Data:

Area: 20,273 km²

North-south distance 163 km

East-west distance 248 km

Share of total area by categories of land use:

- Forests: 66%
- Agricultural areas: 27.8 %
- Bare soils: 1.6%
- Water: 0.7%
- Built-up areas: 2.8%
- Roads and railways: 1.1%

Population: 1,964,036 (census 2002)

Density: 97 inhab./km²

No. of households: 684,847



Source: Statistical Yearbook, 2007.

2.1 Relevant government institutions and policies

Slovenia is a democratic republic in which power is divided among legislative, executive, and judicial branches. Within its legislative functions, the National Assembly of the Republic of Slovenia passes constitutional amendments, laws, and other supreme instruments determining the legal basis and framework for the implementation of other state functions. The Government of the Republic of Slovenia and administrative bodies perform the executive function, particularly in implementing laws and policies. Courts perform the judicial function.

The President represents the Republic of Slovenia and is the commander-in-chief of its armed forces. The National Assembly consists of 90 deputies, elected by general and direct voting.

The Government consists of a Prime Minister and ministers. The Prime Minister is elected by the National Assembly. The National Assembly also appoints and dismisses ministers, on the Prime Minister's proposal. The Government leads and directs the work of the government through ministries. The departmental principle is applied in this respect, which means that an individual ministry is established for one or more interconnected fields of administration.

Different policies are implemented within the case study area: agricultural, environmental, economic, social, regional etc. Two ministries are responsible for land use planning and land use changes: the Ministry of the Environment and Spatial Planning and the Ministry of Agriculture, Forestry and Food.

2.1.1 Ministry of the Environment and Spatial Planning

The Ministry of the Environment and Spatial Planning is responsible for ensuring that all citizens of the Republic of Slovenia have a healthy living environment. It promotes and coordinates efforts toward sustainable development, while striving for social well-being based on a wise and efficient use of natural resources. The Ministry endeavors to increase the concern of society for maintaining natural balance and biodiversity in the country, in the belief that biodiversity is an important heritage for future generations (www.mop.gov.si). It directs the spatial development of cities, towns and villages, with the

aim of maintaining and developing the quality of the architectural and urban heritage and cultural landscape, while at the same time ensuring economic, social and cultural development. Convinced that the future of Slovenia is in the community of European nations, the Ministry ensures all necessary conditions are met for Slovenia to participate on an equal footing in European Union affairs in the fields of infrastructural integration and environmental standards and rules.

It is responsible for adequate water resources, water quality and the sustainable management of surface underground waters and seawater, since water is one of the most important natural resources in Slovenia. The Ministry ensures that development in Slovenia will direct human activities in such a way that natural disasters will affect them as little as possible. It also establishes solidarity mechanisms for natural disaster relief. It ensures that environmental costs are included in economic ones at the business level and in the national economy.

In pursuing the objectives of sustainable development, the Ministry establishes cooperation with local communities according to the principles of partnership and subsidiarity. It ensures the openness of development and enforcement of policies and sustainable development measures by encouraging the participation of individuals and groups, as well as civil society organizations. Most of all, it strives to strengthen the awareness of shared responsibility for the state of the natural and man-made environment among all people living in Slovenia.

Strategically important long-term directions and goals of the Ministry concerning environmental protection are aimed at preventing or mitigating adverse impacts presenting a threat to sustainable development. The Environmental Protection Act constitutes the regulatory framework for the environment in Slovenia. Moreover, the Resolution on the National Environmental Protection Programme stresses the following four key areas: climate change, nature and biodiversity, quality of life, and waste and industrial pollution.

The national territory is fundamental for the development of the nation and the entire population of the country, for the strengthening of national identity, for the wise exploitation of spatial potentials and for the conservation of landscape diversity and natural qualities. By encouraging and directing spatial development, the Ministry strives to develop and achieve the social well-being and freedom of every individual while conserving the environment, landscape diversity and natural resources.

General guidelines and principles of urban planning have already been included in Slovenia's strategic documents, such as the Spatial Development Strategy of Slovenia, the Spatial Order of Slovenia and the National Housing Programme. Common objectives for future spatial development are in particular:

- to provide decent housing for everyone;
- to bring settlements in line with the new social and spatial cohesion and a higher level of social interaction;
- to ensure conditions for everyday life in historical urban centres;
- to limit dispersed construction and to protect un-built areas;
- to ensure that heating, cooling and lighting of buildings does not further damage the environment;
- to protect the national, regional and local characteristics of the land, architecture and landscape; and
- to ensure the development of modern architecture.

The Spatial Planning Directorate is responsible for spatial management at the national, regional and municipal levels, as well as for construction, housing and real-estate brokerage. It coordinates work with internal organizational units of the Ministry, bodies under the Ministry and other ministries.

Its tasks are:

- to monitor, analyse and evaluate policies on spatial planning, construction and housing, and to give proposals for necessary changes or measures;
- to coordinate, guide and monitor the implementation of tasks in the field of geo-informatics;
- to direct the setting-up of the spatial information system and to manage it;
- to monitor, guide and supervise the drawing-up and implementation of all programme documents and regulations, as well as regulations of the national land survey service;
- to cooperate with EU authorities and other international institutions and to prepare and collect relevant data for international presentations and comparisons;
- to draft regulation proposals and other documents within the competence of the Directorate;
- to prepare a work programme and reports for the Minister, the Government and the National Assembly, and to make initiatives and proposals for measures within its area of work;
- to coordinate activities within the Directorate's area of work;
- to perform and monitor tasks falling within the competence of the Directorate;
- to coordinate work among organisational units of the Directorate, with organisational units and bodies under the Ministry, and with other ministries;
- to coordinate activities with other ministries with regard to the preparation of documents for the Government and the National Assembly that fall within the competence of the Directorate and concern international and European affairs and public relations;
- to direct, coordinate and supervise the preparation of financial programmes for the use of funds in the Directorate and the implementation of related public procurement procedures;
- to draft mandatory instructions, explanations, recommendations, information, answers and notes in matters within its area of work.

The Directorate comprises six departments:

- Department of National Spatial Planning Documents,
- Department of Regional Spatial Development,
- Department of Cooperation with Municipalities,
- Department of Construction,
- Department of Housing,
- Department of Systemic Legal and Information Support.

The Ministry of the Environment and Spatial Planning endeavours to ensure openness and transparency of its decision-making and legislative processes. For this purpose, draft regulations and those in force, international agreements and other important documents are made available on-line in accordance with the Access to Information of a Public Character Act.

The aim of publishing the said documents is to enhance the flow of information on the regulation-making process and to acquaint the interested public with existing and emerging legislation.

The role of the **Ministry of Agriculture, Forestry and Food** is to oversee agricultural land and take care of legislation. Its role in spatial planning is to approve any land use change from agricultural land to other land use purpose.

2.1.2 Government levels in Slovenia

Slovenia has in general three main administrative levels. By the NUTS classification, Slovenia is divided as presented in Table 4.

Table 4: NUTS classification of the Republic of Slovenia

<i>NUTS level:</i>	<i>Administrative units:</i>
NUTS 1	Republic of Slovenia
NUTS 2	Slovenia as whole till 2013, after which it will be divided into two cohesion regions (eastern less developed and western more developed)
NUTS 3	12 statistical regions
NUTS 4	58 administrative units
NUTS 5	210 municipalities on a local level

The division of Slovenia into 12 statistical regions is based on the social- geographic regionalization of Slovenia (functional medium-size regions). Statistical regions coincide with the so-called planning regions determined for the purposes of regional and spatial planning. They have no political or administrative function and are (apart from some minor exceptions) confined to the borders of existing municipalities.

As part of former Yugoslavia, Slovenia was administratively divided into 62 relatively large municipalities which - as fundamental cells of the socialist self-management system - also had considerable political power. After independence, centralization took place in Slovenia; however, there has been constant debate about the establishment of administrative-political regions (provinces) as an intermediate level between the state and the municipalities. Several governmental proposals of regionalization have been rejected in parliament in recent years. The state administration is currently organized into 58 administrative units, which are mostly based on the pattern of the former municipalities.

The former municipalities were abolished with the Establishment of Municipalities Act (1994) and new municipalities were established as bearers of local government. Slovenia is now divided into 210 municipalities (11 of these are urban municipalities), extremely diverse in terms of population and economic power: the largest in terms of population is the urban municipality of Ljubljana (265,881 of inhabitants), while the Hodoš municipality (on the Hungarian border) has only 356 inhabitants.

Municipalities are basic self-governing local communities, autonomous and independent in performing tasks under the jurisdiction of local communities (Local Government Act). National bodies only supervise only the legality of the work of local communities. The administrative organization also enables municipalities to decide independently on their integration into broader self-governing local communities, including provinces, in order to regulate and administer local matters of broader significance. A municipality consists of one or more settlements, and the official representative of a municipality is a mayor, who is elected.

Table 5 presents the different administrative decision-making levels in Slovenia and their responsibilities and main decision-making bodies.

Table 5: Administrative levels in Slovenia

Level:	Main bodies:	Responsibility:
NATIONAL	government, parliament	legislation, sectoral policy planning and implementation
REGIONAL	no official regionalization yet, 12 statistical units, in each unit at least one regional development agency and a regional council	regional development planning
LOCAL	municipalities	local spatial planning, local policy implementation, other tasks according to the Local Government Act

Our research area, the Municipality of Koper, belongs to the Obalno-kraška Region (*in English Littoral-Karst Region*) in the south-west of Slovenia (*Fig. 15*). The region compromises 7 municipalities: Divača, Hrpelje-Kozina, Izola, Komen, Koper, Piran, Sežana and has an area of 1044 km². The area has 105,029 inhabitants and the second highest GDP per capita of the Slovenian regions. The percentage of foreigners in it is the highest of all regions, at 4.2%. This region also has the highest percentage of people employed in tertiary (services) activities. The employment structure is: 70.6% services, 26.8% industry, 2.6% agriculture. Fifteen percent of the GDP is generated by transport (mostly in the Port of Koper). The area also has the highest number of tourists of all the Slovenian regions (24.5%). They come from: 41.9% Slovenia, 17% Austria, 2.2% Croatia, 34.3% Italy, 14.7% Germany, 2.8% UK, 29% other countries. The length of motorways in area is 55 km; the length of other roads 822 km. The area also has a railway connection. It has the largest and only commercial port, situated in Koper, together with marinas in Koper, Izola and Portorož. There is also a small international airport.

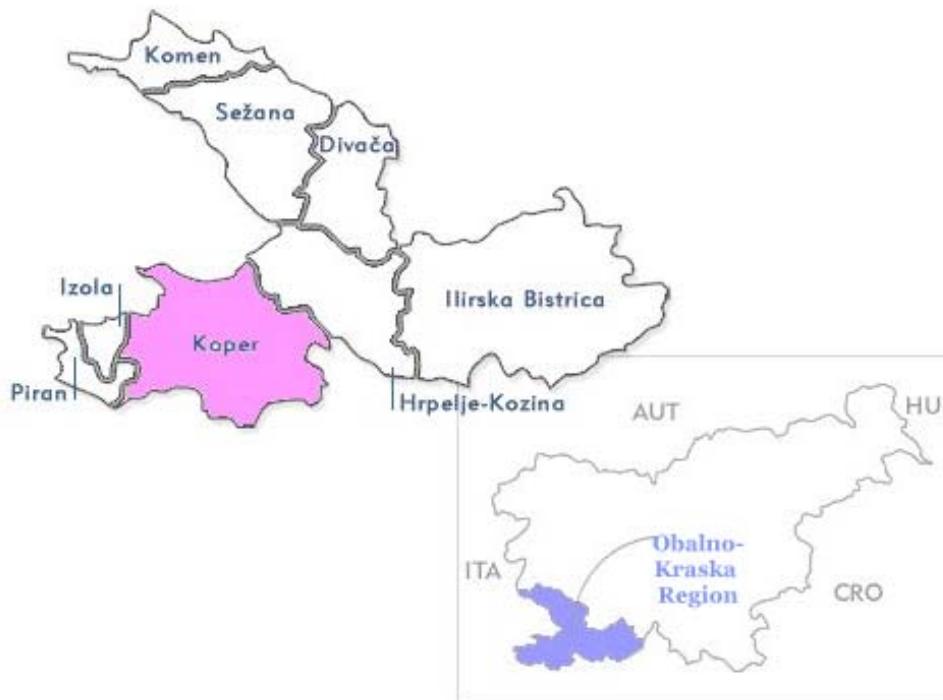


Figure 15: Municipality of Koper in the Obalno-Kraška Statistical Region

2.1.3 Planning System in Slovenia

2.1.3.1 Division of tasks in the planning administration

State

In the field of spatial planning and management, the state prepares laws, policies, and other instruments, which are adopted by the National Assembly or the Government of the Republic of Slovenia. They define the spatial planning system and provide strategic spatial development objectives and guidelines. In addition to spatial development laws and strategic documents, the state also has the authority to take measures concerning spatial development activities and construction of national significance.

The state uses laws and other strategic documents to provide frameworks for spatial planning at the regional and local levels. The state has the authority to monitor the legality of spatial planning at lower levels. If the local community fails to perform its tasks in the area of spatial management and planning, the state has the right - in special cases - to take alternative action.

The state has also the responsibility to:

- conduct and implement land policy,
- maintain the spatial data system,
- develop and encourage professional work in spatial planning, and
- participate in matters of spatial planning and management at the international level.

Regions

Slovenia has not yet formally established the regional administrative level. Spatial planning documents at the regional level are optional under new spatial planning legislation, so not obligatory.

Municipalities - Local Administration

Local communities have the original right to spatial management and planning of their territories, with the exception of spatial development activities that are under the direct jurisdiction of the state. Local communities are obliged to perform activities in the field of spatial planning and management, as well as planning pursuant to adopted laws, standards and criteria. Their principal task in connection with spatial management and planning is concern for rational, mixed, and sustainable land use, as well as economic use of land plots in accordance with the principles of high quality living, working and recreation, and a healthy environment. In decision-making procedures, they are responsible for the direct participation of all involved and interested parties. They also care for and maintain the identity of the community by considering and protecting the natural and built characteristic features.

2.1.3.2 Current spatial planning legislation

Before establishing an independent state, Slovenia had a comprehensive social planning system, which contained, in addition to the economic and social aspects, also a spatial aspect. When Slovenia gained independence in 1991, a special law revoked social planning. Only spatial components of national and local social plans were in force until the adoption of new spatial planning and management regulations.

On January 1st 2003, following a transition period of a few years, Slovenia adopted a new Spatial Planning Act. This act was amended in April 2007 with a new Spatial Planning Act but the general principles from 2003 were not changed. The new Spatial Planning Act was

published in the Official Journal of the Republic of Slovenia No. 33/07 and has been officially valid since April 27th 2007.

The new Spatial Planning Act (ZPNačrt) also introduced some changes and defines the purpose, aims and principles of spatial planning. The main aim of spatial planning is to enable harmonious spatial development, balancing the different needs and interests of development with public benefits on the field of environmental protection, maintaining the natural and cultural heritage, protecting natural sources, defence and protection against natural and other catastrophes (ZPNačrt, 2007). The basic principles to be taken into account in the process of spatial planning are the following:

- Principle of sustainable spatial development: can be assured by the adjustment of development needs with protection demands in space in such a way as to achieve rational land use for individual activities.
- Principle of public involvement: expression of the interests, opinions and initiatives of all who interested parties must be enabled, information about the preparation of spatial documents must be provided and those interested must have the chance to participate in the process of preparation.
- Principle of directing spatial development of settlements: spatial development is directing and planning on free, degraded and not efficiently used areas within existing settlements; renovation has priority over new construction; the quality of the living environment should not be reduced by settlement development; green areas within settlements must be maintained as far as possible; expansion of a settlement is only allowed if further development within the existing settlement is no longer possible; extension of settlement should be first directed to less important land from the viewpoint of sustainable use of natural resources, maintaining the best agricultural land, and protection of nature and the cultural heritage; such less important land should be functionally connected with the existing settlement.
- Principle of prevailing public interest: public and private interests should be taken into consideration and weighed according with the aims of spatial planning; private interest should not harm the public interest.
- Principle of maintaining the recognized characteristics of the space: all structures that contribute to the identity of a space and define its characteristics should be taken into consideration.
- Principle of maintaining and protecting the cultural heritage
- Principle of expertise (expert knowledge): a spatial document should be based on expert knowledge about the characteristics and capacities of the space and be prepared in accordance with the methods of spatial planning and quality urban, architectural and landscape planning.

Planning of spatial arrangements and interventions in space outside an area of settlement is defined in Article 44 of the Act and allows such arrangements and interventions for: direct agricultural, forestry or tourist activity, for implementation of local economic public services, for implementation of measures for environmental protection, maintaining the natural and cultural heritage, for maintaining visible landscape characteristics, for sport and recreation purposes, for use of natural resources etc. The article strictly specifies that some spatial arrangement planning and individual space interventions on best agricultural land are allowed only if it is not possible to use land less appropriate for agricultural production. Criteria for such interventions on best agricultural land must be prescribed by the minister responsible for the environment and spatial planning in agreement with the minister responsible for agriculture.

The new Spatial Planning Act introduced new spatial documents on state and municipal levels. On the state level, the main document will be the National Strategic Spatial Plan, which replaces the Spatial Development Strategy and Spatial Order of Slovenia. On the municipal level, only one document is obligatory, the Municipal Spatial Plan (MSP), which will fully deal with the spatial problems of the municipality and will be simultaneously the strategic and implementing spatial document and basis for the

preparation of projects for acquiring building permission. The Act also makes it possible for a municipality (if necessary) to adopt the strategic part of the spatial plan as an independent document, the Municipal Strategic Spatial Plan (MSSP). In addition to the Municipal Spatial Plan (MSP), municipalities can additionally prepare a Detailed Municipal Spatial Plan (DMSP), for certain individual spatial arrangements, but it is not obligatory.

It follows from the transitional provisions of the new Act that MSSP will replace the existing Strategy of Spatial Development of a Municipality, and MSP will replace the Spatial Order of a Municipality. DMSP, if a municipality prepares it, will replace the existing Municipal Location Plan.

The new Act also defines an inter-municipality spatial document, the Regional Spatial Plan. For the implementation of the regional development plan, which requires spatial arrangement planning of regional importance, municipalities will prepare a regional spatial plan. The regional spatial plan is the basis for preparing projects for acquiring building permits under regulations concerning building construction.

The strategic document, the Spatial Development Strategy of Slovenia, represents the basic content-related premises for the preparation of all spatial planning documents at national, regional, and local levels.

2.1.3.3 Local planning

At the level of a municipality and within the confines of its territory, the Municipality Spatial Development Strategy determines long-term goals of spatial development in the territory, and particularly the guidelines for sustainable spatial development and guidelines for the location of activities, development of settlement, infrastructure, and landscape. The Municipal Spatial Development Strategy determines:

- basic premises and goals of municipal spatial development,
- priorities and guidelines for achieving spatial development objectives,
- the conception of settlement, urban land use, renewal of existing settlements, and restoration of degraded urban areas,
- the concept of transport, energy, municipal utilities and other infrastructure,
- the concept of the landscape, showing farming land and forests, water resources management
- systems, areas of mineral, natural and cultural values, as well as natural and threatened areas,
- development, planning and management of settlements based on the concept of urban development, and planning of landscapes based on the concept of landscape development and protection, and
- implementing measures.

2.1.3.4 Planning obligation

In the spatial planning system, spatial planning documents are organized hierarchically at national, regional, and local levels, whereby documents at lower levels may not be in conflict with documents at higher levels. National spatial planning documents are prepared by the Ministry of the Environment and Spatial Planning, while municipal documents are prepared by municipalities.

In principle, all spatial planning documents are financed from public funds except in the case of detailed plans, which can also be financed by the initiators or investors of the intended spatial development activity. For the purpose of enforcing the public benefit, private investors and the municipality may also conclude an urban planning contract determining the obligations of the investor and of the municipality in the preparation of spatial planning documents and implementation of a spatial development activity.

National Spatial Planning

The Ministry of the Environment and Spatial Planning is responsible for the preparation and adoption of national spatial planning documents. The preparation of national spatial planning documents can be initiated by another ministry if there are sound reasons for doing so. The state is also responsible for leading the preparation of national detailed plans for spatial arrangements of national importance. Based on agreement, this responsibility can be transferred to a municipality.

The Ministry of the Environment is also responsible for the preparation of implementing acts provided by the Spatial Planning Act. It also prepares manuals and instructions in connection with spatial planning and management when the need for that arises.

Local Level

Municipalities are responsible for the preparation and adoption of Municipal Spatial Planning Documents. Their basic task is to represent the public interest, and act in accordance with the law and superior spatial planning documents. An initiative for changing municipal spatial planning documents can be given by anyone, provided that such an initiative is well grounded. The municipality is obliged to consider such an initiative at least every four years.

2.1.3.5 Environmental impact assessment

The Spatial Planning Act lays down the obligation to observe methods and procedures regulated by the Spatial Planning Act. The Act provides for the mandatory preparation of environmental vulnerability studies and an environmental impact assessment to be used for the assessment of spatial development documents.

In the procedure of issuing a building permit, in the case of complex structures with an environmental impact, a special assessment of such a structure's environmental impact and the preparation of an appropriate report is required. The spatial planning system reform also envisages revision of the system of environmental impact assessment for planned spatial development activities. This should ensure consistent provision of environmental protection, and even closer procedural and contents-related integration of the two normative systems.

In addition to the environmental protection system, specific systems for the protection and conservation of natural values, cultural heritage, waters, farming land, and forests are also important, each of which has a specific normative regulation set up, which affects the preparation of spatial planning documents. In the spatial planning document preparation and adoption procedure, they must be mutually harmonized.

2.1.3.6 Main rules of cooperation and public participation

The Spatial Planning Act provides for public participation in all phases of spatial planning document preparation and adoption at all levels. The following ways of informing the public and their participation are foreseen and must be observed in the preparation procedures of all spatial planning documents:

- mandatory public announcement of the preparation of spatial planning documents and programmes of their revision,
- public debate on spatial planning issues during which planned spatial development activities are fundamentally harmonized,
- public exhibition of a spatial planning document, which must last at least 30 days. Public debate on the exhibited spatial planning document must also be organized during this time,

- the obligation of the producer of a spatial planning document (state or municipality) to adopt an opinion on all remarks and proposals received during the public hearing,
- mandatory provision of public access to spatial planning documents and materials, which have been the basis for spatial planning document preparation and adoption, during the entire period of its validity.

In any of the aforementioned phases of the spatial planning document preparation and adoption process, all participants have the right to put forward recommendations, remarks and proposals.

2.1.3.7 Approval and supervision of plans

The Spatial Development Strategy of Slovenia is adopted by the National Assembly, while Detailed Plans of National Importance are adopted by the Government RS.

Municipal spatial planning documents are adopted by municipalities (municipal council), but their conformity with national spatial planning documents must be confirmed by the Minister of the Environment and Spatial Planning.

The Ministry of the Environment exercises supervision over municipal spatial planning documents. The purpose of supervision is to check the activities of municipalities, which are obliged to observe goals and guidelines from national planning documents in their planning documents.

In principle, the supervision procedure is the same for all spatial planning documents, irrespective of the level of preparation and adoption within the spatial planning system. Supervision over spatial development activities is also performed through building permits issued by administrative units.

The instruments of supervision are the Spatial Data System, collections of legal regimes, and data banks of administrative documents. Their purpose is to harmonize spatial indicators for spatial monitoring.

2.1.3.8 Enforcement and validity of plans

All spatial planning documents enter into force on their adoption at each respective level and following their publication in the Official Gazette of the Republic of Slovenia. Municipal spatial planning documents may be published in the Official Gazette of RS or official gazettes of municipalities. All spatial planning documents are publicly accessible documents.

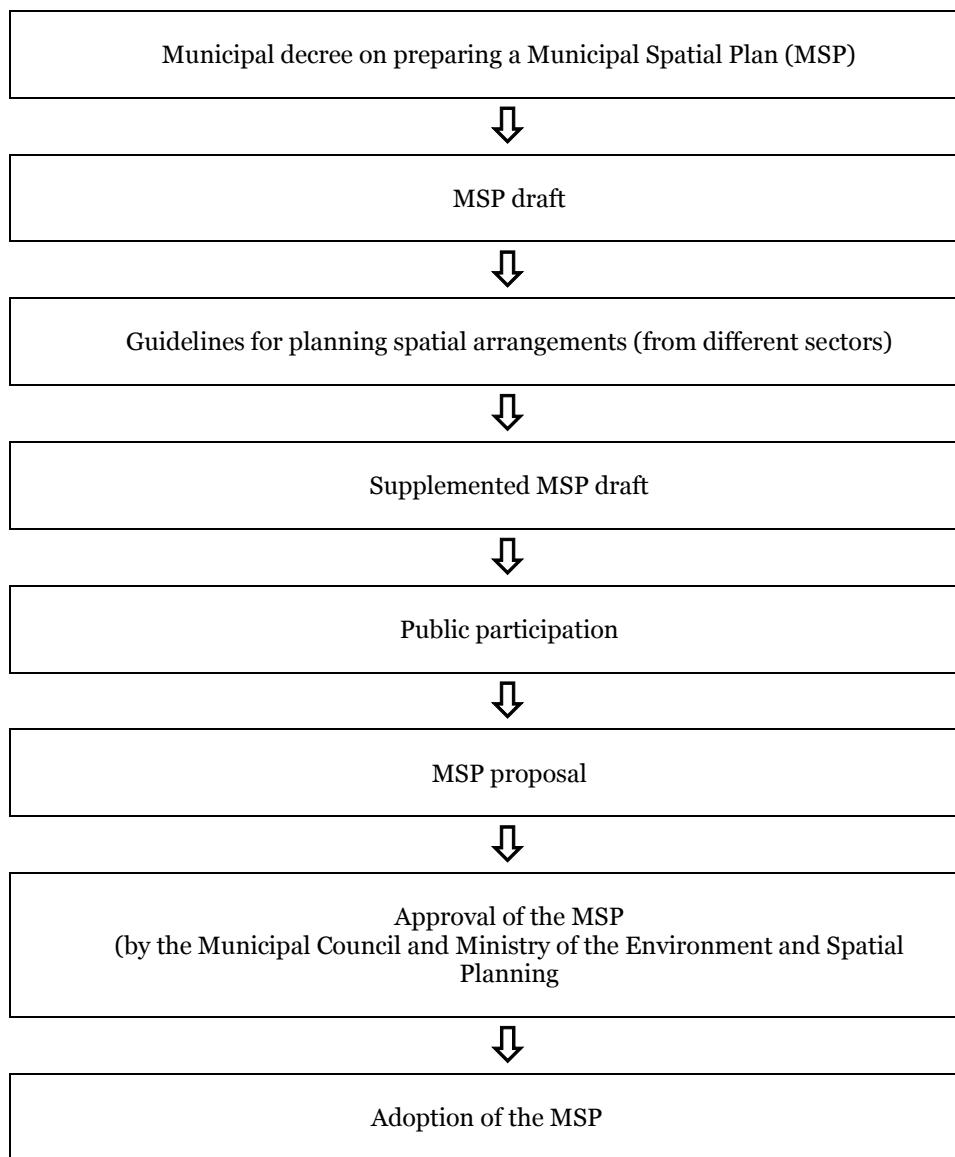
Their validity is not time limited, but revision can begin on an initiative for a procedure for the preparation of a spatial planning document.

2.1.3.9 Legal Impact of Different Plans

National spatial planning documents have legal impact, in particular on spatial planning documents at lower levels, and on spatial development activities and the construction of buildings and engineering works of national importance. At the same time, they also have legal impact on ministerial plans and regulations, insofra as they refer to the field of spatial planning and management.

Adopted spatial planning documents may not be in mutual conflict, irrespective of the level and degree of specificity. Municipal spatial planning documents may not conflict with national and regional spatial planning documents.

Procedure for the preparation of a Municipal Spatial Plan (under ZPNačrt, 2007):



In the best case, the procedure can be finished in one year after commencement.

2.1.4 Current situation and main problems in planning

It was essential to update the former statutory regulations in the field of spatial planning and management, in terms of both the contents and process, since in the transitional period when social planning was abolished, the Spatial Planning Act could not resolve numerous open questions in this field. The existing statutory (systemic) solutions set out excessively defined and rigid spatial planning documents. Particularly at the local level, these documents were frequently planned in too much detail. Such inflexibility resulted in frequent changing of spatial planning documents through a number of lengthy and, in terms of contents and finance, demanding procedures. In practice, this meant that many spatial development activities were not performed at all.

The procedures for obtaining building permits were similarly complex, time consuming, and expensive. In the past, spatial development permits were granted at two levels: firstly, it was necessary to obtain a planning permit, and then a building permit for the same spatial development. The consequences were reflected in the form of illicit construction, i.e., construction without building permits².

The absence of instruments for supervising the location of activities, and for monitoring the implementation of adopted spatial planning documents, caused inefficient implementation of otherwise well-considered goals of spatial development, planning, and management. All this also began to be reflected in space. Particularly outstanding in the wide range of identified issues are big differences in the spatial development of regions, uneven urban development associated with a lack of land policy and housing policy instruments, suburbanization pressures along motorways, uncontrolled dispersed building construction, a large share of illicitly-built structures, degraded urban and other areas, the decline of old industrial towns, unplanned and deficient renovation of old city cores, inadequate infrastructure in settlements, unsolved waste management issues, restructuring of rural areas due to a changed role of agriculture, extensive forestation of farmland, inadequate transport links despite a well dispersed road network, insufficient emphasis on rail transport and an inadequate network of public means of transport, inadequate systemic solution to the protection of farming land also within settlements, no respect for and observance of regulations on spatial planning and management, the absence of a regional level as an intermediate link between state administration and local government, a shortage of suitable personnel, and disconnected work by different sectors.

² Illicit construction means that the builders unlawfully took spatial planning rights (and sometimes also land), so that to a large extent they avoided paying the prescribed taxes, thus laying them on legal builders, and that they obtained significant unlawful property benefits in the most attractive areas (e.g. on the coast or in protected natural areas) and avoided administrative control and inspection of technical correctness and safety of construction.

2.2 Main strategic issues

Certain European policies (or at least their influence) and national policies have an impact on land use in the case study region. Such national policies include the following:

- agricultural policy, especially that relating to agricultural land use policy; the aims and requirements of the CAP (common agricultural policy) also have an important influence; second pillar-rural development has an important role in strengthening rural areas;
- environmental policy has special requirements regarding the use of natural resources (soil, water etc.), biodiversity and nature protection;
- spatial policy, with spatial planning processes that make change of land use possible;
- traffic policy, especially the construction of highways in the Koper region, planned construction of a second rail track from Trieste to Divača, other road construction etc.
- regional policy, which strives for “balanced” development among Slovenian regions and also for “balanced” development between urban and rural areas with a region.

In general, policies are made on the national level and responsible bodies such as individual ministries, government and parliament must approve them.

In order to avoid high liberalization in spatial development on a national level, the state must prepare adequate normative regulations and, on such a basis, a hierarchy of planning documents. In general, there are three levels of planning: national, regional and local. EU member states mostly also have a fourth level, because most sectoral policies also have some spatial elements. With democratic development, local people (from villages and other settlements) must also have the possibility of expressing their wishes regarding the spatial arrangement, and their living and working environment (subsidiary principle). Such five level planning is necessary to achieve sustainable spatial development of the rural and urban space (Prosen, 2008).

In addition to national planning, regional spatial planning is also very important. In planning the development of a region, there is a close connection between natural and created resources and social and economic development possibilities. Regional planning represents a kind of “bridge” between national legislation (regulations) and the needs of municipalities that form a region. The results of such planning should be the starting point for municipal planning, so that individual mayors and municipal councils (as decision-making bodies) know what they can do and what they cannot do within their territory. Space, natural conditions and created amenities define the creation of priority areas in the region and an adequate settlement network. Such planning can be criticised as being too centralistic but, on the other hand, there is otherwise no proper order in space. The excessive authority that mayors and municipalities have today in Slovenia means that land is not used sustainably and that the only decision-making factor is economic (but in a very short-term sense). Today in Slovenia, if there were no regional spatial planning, a municipality could do what it wanted within its own territory and mayors and municipal councils in the recent period in Slovenia have mostly seen their development only in the construction of new craft, industry and housing zones in urban or sub-urban areas.

Inter-sectoral planning is also very important for sustainable spatial development and the balanced development of rural and urban space. This is especially true for sectors which depend very much on space and land. They must develop their own sectoral planning, the results of which (expert studies) provide the professional basis for integrated planning, in which all sectors present their needs, limitations, relation to resources etc. Adjustment of interests is needed at the end. Some sectors, such as agriculture, are very dependent on natural conditions, particularly the quality and extent of land. Slovenia already has a very limited amount of good quality land (85% of land is in less favoured areas) and with today's tempo and trend of construction on the best land, such land will be soon limited to a minimum. Unfortunately, the Ministry of Agriculture, Forestry and Food has not developed the spatial component of planning and has not responded appropriately to

changed spatial planning legislation. The reason is probably that legislation about protection of best agricultural land from the 1970s was very strict and the ministry had to approve every change. However, there were so many exceptions that even strict legislation was not and even now is not successful in practice. The responsible ministry does not somehow contribute to improving the situation. New spatial development legislation makes land use much more liberal. The government must be aware that it is responsible for the development of all areas of the country and must not leave important decisions to the municipalities, and especially not to the market. There must be some control mechanisms, because mayors and municipal councils are not sufficiently qualified to make decisions alone without supervision about such important things as spatial planning.

Table 6: Policies with an impact on land use and their objectives and legislation

Policy:	Policy objectives:	Legislation impacting on land use:
Agricultural policy	<ul style="list-style-type: none"> - food production and security, - maintaining production capacities of agricultural land for agricultural production, - maintaining populated rural areas, - maintaining the cultural landscape, - protection of agricultural land and water against pollution and aimless use, - enabling suitable income for agricultural producers. 	<ul style="list-style-type: none"> • Agriculture Act • Agricultural Land Act • EU legislation
Environmental policy	<ul style="list-style-type: none"> - healthy living environment, - maintaining natural balance and biodiversity, - directing sustainable spatial development that will enable economic, cultural and social development in space, - care of water sources, other natural resources, - increasing awareness of the environment, climate change among the population. 	<ul style="list-style-type: none"> • Environmental Protection Act • Water Act • Various conventions • Spatial Planning Act
Regional policy	<ul style="list-style-type: none"> - stimulation of sustainable development that activates the potentials of Slovenian regions and in this process does not reduce resources and developmental possibilities for the next generation. 	<ul style="list-style-type: none"> • Spatial Planning Act • Local Government Act
Spatial policy	<p>The policy aim is harmonious spatial development that takes into account and balances different needs and interests with public benefits in the spheres of nature protection, preserving the natural and cultural heritage, maintaining natural resources. Interventions in space should be directed in such a way as to enable:</p> <ul style="list-style-type: none"> - sustainable development in space and efficient and economic land use, - a quality living environment, - harmonized location of different activities in space, - renovation of old has priority over new construction, - maintaining the characteristics of the space, - protection of nature, the environment and natural resources, - health of the population etc. 	<ul style="list-style-type: none"> • Act on Spatial Planning • European Spatial Development Policy
Traffic policy	<ul style="list-style-type: none"> - harmonized, reliable and cost efficient working of the traffic system, - construction of traffic infrastructure. 	

Some other policies can also have an indirect impact on land use.

3 Research methodology

3.1 The object of the research

The object of the research of Module 3 is getting the insight into to the governance and spatial planning of land use developments in the urban region. Special attention is given to the developments in the urban fringe and the interrelations among the urban area, the urban fringe and the wider rural surroundings.

Actors in the planning and management of land use follow different strategies, pursuing different actor-specific targets. The interaction between the actors and the regional specific physical and social context influences the effect of their strategies. M3 studies the strategies from the point of view of different actors, interactions and process.

3.2 Research area

Koper is one among the seven PLUREL's case studies.

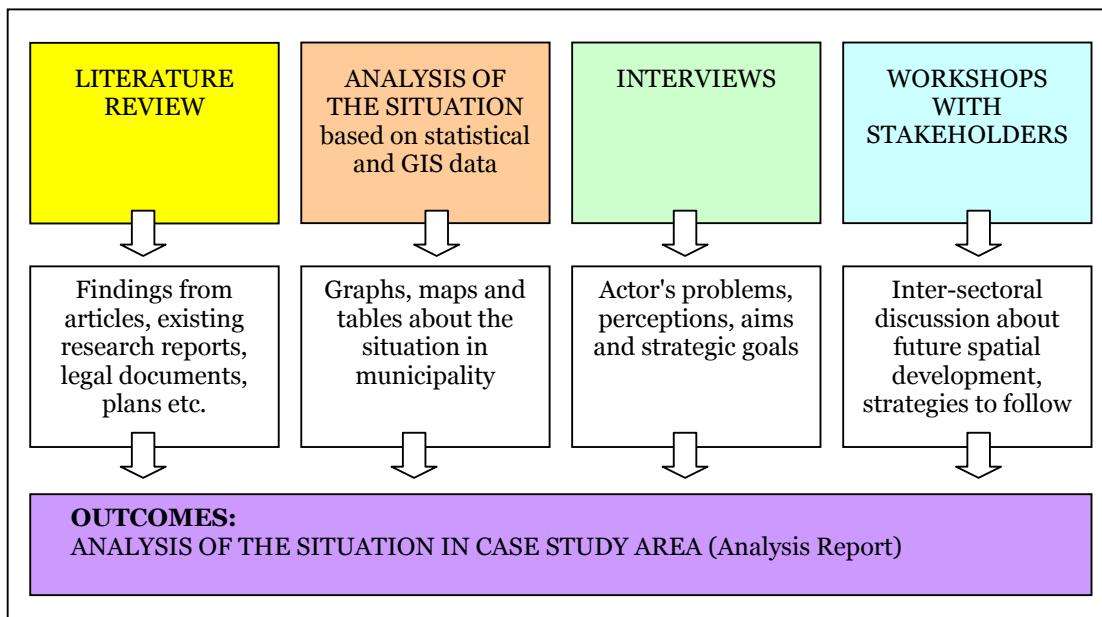
Case study is an explorative research method by which we can gain an extensive insight in a phenomenon in its natural setting, with special attention being paid to the interrelatedness of relevant factors (JAF Remix: Analysis Framework, 2007). Case study approach is a particular method of qualitative research.

Research area is the Municipality of Koper in its administrative borders. It does not comprise the entire RUR from the RUR typology. One reason for such decision is that the Municipality of Koper is relatively large, comprises also urban, peri-urban and rural areas and can be seen as region as well. Another reason is that Slovenia has no administrative regions yet, except for statistical purposes only, also statistical data are available mostly on municipality level.

3.3 Research methods

In order to analyse the situation, trends, spatial problems and stakeholders' perceptions, as well as aims and strategies of different actors various methods have been used like:

- Literature review: available research reports, articles, development plans etc. in conjunction with the area;
- Analysis of the situation based on statistical and GIS data of the area;
- Stakeholders analysis;
- Interviews;
- Workshops.



Literature review

Desk research was mainly used in the first stage of the research and was primarily devoted to legal documents, various reports, articles and publications about the case study area and spatial/land use problems.

Analysis of the situation based on statistical and GIS data of the case study area

Because some analysis doesn't exist and some existing analyses of the situation in the Municipality of Koper used already old data, it was necessary to make some new analysis based on new available data, statistical or also some GIS data prepared for some digital maps. For that purpose we used data of Statistical Office of the Republic of Slovenia available online (www.stat.si) and data of Municipality of Koper also available online (www.koper.si). In order to present some spatial situation in the area we prepared maps using ARC MAP software using available land use data of Ministry of Agriculture, Forestry and Food of the Republic of Slovenia and Office of Environment and Spatial Planning of the Municipality of Koper.

Stakeholder analysis

Different people have different priorities. For policy making the knowledge about the stakeholders' priorities is of particular importance. For this reason, stakeholder analysis is needed.

Stakeholders are those who affect and/or are affected by development policies, programmes and activities. They can be women or men, communities, socio-economic groups or institutions of any size and from any level of society. Each of these groups has particular needs and resources – therefore each must be represented in the process of deciding upon development activities. Among other things, this ensures that decision-making is not effectively taken over by one particular economic or political group. (SEAGA, 2001).

But stakeholders also include people or groups outside the community, including policy-makers, planners and other government and non-governmental staff, and those who may have commercial or ideological interests in the success or failure of certain development activities.

Disagreement among different stakeholders is not unusual. Conflicts of interest often arise from competition for access to resources. They may also arise due to competing development goals.

Stakeholders include both those who stand to gain and those who stand to lose, given a particular development activity. The easiest way to identify who they are is to focus on their resources needed to implement the activity and their decision-making power.

Identifying stakeholders helps us to make sure that development action plans are realistic. Proposed activities that depend on resources that are not available or on goals that are deeply contentious are bound to fail. On the other hand, identifying existing partnerships and networks, or creating new partnerships between stakeholders who share common interests, is a good starting point for the development planning.

Interviews

Interviews based on semi-standardised questions were prepared for all case studies of the project. Questions were translated in Slovene language and were used as support tool for the interviews. To discuss with interviewed stakeholder also about regional specific situation and spatial problems some regional specific questions were added as well (see Appendix 1).

Interviews were carried out during the summer 2008 on the basis of pre-prepared list of interviewees. In total 12 interviews were performed.

Workshops with stakeholders

Workshops represent a direct way of communication with multiple players at once and allow direct face to face views among them. Two workshops were conducted in 2008, one in August and second one in September. At those events the general idea of the project and the work that has already been done was presented, and spatial problems in the municipality were discussed. On one of the workshop some general idea of possible future spatial development of the Municipality of Koper was presented by spatial planner. In simultaneous discussion the focus was also on searching appropriate strategies to support spatial development in the municipality. We found out that workshops were very useful since they get together experts and other people from different sectors that otherwise do not have many opportunities to meet and discuss about their common problems.

4 Regional spatial planning and decision-making strategies and their impact on the urban fringe

4.1 Introduction

In line with the key problems, the group of researchers and stakeholders working on the Koper case study decided to focus on three main substantive issues (*Table 7*):

1. Land pressure due to housing,
2. Agriculture under pressure,
3. High value nature at risk.

Table 7: Description of main substantive issues for Koper case study

<i>Main substantive issues:</i>	<i>Description and link with PLUREL:</i>
Land pressure due to housing	The coastal area is very attractive as place to live or just to have holiday house, not only for people from the region but also for people from all over Slovenia and, since EU accession, also for foreigners. There is therefore major interest in building parcels along the coast and in the urban fringe. The population in the urban and peri-urban area and the concentration of economic activities increasing, while the situation in the rural hinterland is just the opposite.
Agriculture under the pressure	Agricultural structures in the Koper area, and in Slovenia in general, are very specific. Compared to the EU average farm, farms here are very small and their land is very fragmented. Ownership of the land is also often not solved (several owners of a single parcel, some of them even live abroad etc.). People therefore mostly do agricultural activity in addition to permanent work and agriculture is mostly a secondary income source. Most farms do not have the conditions for professional farming. Such a situation leads in the long-term to the abandonment of agricultural land, because of less favourable conditions for agriculture (not possible to use mechanisation), because livestock production in the area has almost stopped (grassland is still predominant) and because farmers are aging and there is no great interest in farming among the young etc. Abandonment is directly connected with loss of biodiversity. If farming stops we lose a major part of biodiversity, as well as the natural and cultural identity of the area. Agriculture is also under pressure because of international competition and the common market in agricultural products, globalisation etc. Another pressure on agriculture is caused by various other actors in space, which need agricultural land for the location of their activities or constructions, especially in the urban fringe, where the best quality land is located.
High value nature at risk	The area has rich biodiversity because of advantageous natural conditions (Mediterranean climate, various types of ecosystems and landscapes resulting from different soil types etc. In the urban fringe there is Škocjanski zatok Nature Reserve and Dragonja valley is another case of a well preserved natural environment with rich flora and fauna. Pressure on land directed from the centre to the fringe provides some risk, also including, for example, on NATURA 2000 areas and the Dragonja valley as a possible protected area. Some kind of designated areas are a possibility (for example, the Dragonja valley) but the state is not interested in financing new designated areas and they are too expensive for the municipality alone.

KEY RURAL-URBAN ACTORS IN THE KOPER REGION

Table 8: Identified key rural-urban actors in the Municipality of Koper

Land Use Issues	Private Companies	Non-profit	Governments	Civil initiatives
Land pressure due to housing	<ul style="list-style-type: none"> • Luka Koper d.d. • Istrabenz Turizem d.d. - LifeClass • Trade centres (Mercator, Spar, Lidl, Hofer..) • Private Construction companies 	<ul style="list-style-type: none"> • UP ZRS Koper • ZRSVN OE Piran 	<ul style="list-style-type: none"> • Ministry of Environment and Spatial Planning - MESP (MOP) • Ministry of Agriculture, Forestry and Food of RS - MAFF (MKGP) • MOK - Office for environment and spatial planning • Administrative Unit of Koper (UE) • ARSO - Office Koper • Institute for Nature Protection of RS (ZRSVN OE Piran) 	<ul style="list-style-type: none"> • Farmers' associations • Local communities • Landowners
High value nature at risk	<ul style="list-style-type: none"> • Luka Koper d.d. • Komunalna Koper d.o.o. • Industrial zone Koper - Local companies 	<ul style="list-style-type: none"> • UP ZRS Koper • ZRSVN OE Piran • NIB MBP - Marine Biology Station Piran 	<ul style="list-style-type: none"> • MAFF (MKGP) • MESP (MOP) • MOK - Office for environment and spatial planning • ARSO - Office Koper • ZRSVN - OE Piran • Inspectorate • Slovenia Forest Service (ZGS) • Institute for the Protection of Cultural Heritage of Slovenia (ZVKDS) • University of Ljubljana and University of Primorska 	<ul style="list-style-type: none"> • Tourist Associations • Hunters' Associat. • Firemens' Associat. • Fishermens Assoc. • Local communities (KS, VO) • DOPPS Birdlife SLO • Organic farmers Association (ZEEKS) • Other envir. NGOs
Agriculture under pressure	<ul style="list-style-type: none"> • Vina Koper • Agraria 	<ul style="list-style-type: none"> • UP ZRS Koper • ZRSVN OE Piran 	<ul style="list-style-type: none"> • University of Ljubljana and University of Primorska • MAFF (MKGP) • MESP (MOP) • MOK-Office for environment and spatial planning • Agricultural and Forestry Chamber • ZRSVN - OE Piran • Inspectorate • Farmland and Forest Fund of RS 	<ul style="list-style-type: none"> • DOPPS BirdLife SLO • Local communities • Local farmers • Other environmental NGOs • Landowners • Farmers associations

Abbreviations: VGP-water management company; ARSO- Environmental Agency of RS, MOK-Koper Municipality; ZRSVN-Institute for Nature Protection

4.2 Land pressure due to housing

4.2.1 Settlement trends in the Municipality of Koper

The Municipality of Koper covers over 311 km² and includes 104 settlements of different size:

- Koper with 23,726 inhabitants (cca. 50% of the municipal population),
 - Ankaran with 3,000 inhabitants,
 - 5 settlements with more than 1,000 inhabitants: Dekani (1,409), Sveti Anton (1,343), Spodnje Škofije (1,221), Hrvatini (1,126) and Pobegi (1,011),
 - Bertki (892) and Pobegi (946) are already connected settlements and have a combined total of 1,838 inhabitants.

The aforementioned peri-urban settlements (Dekani, Sveti Anton, Spodnje Škofije, Hrvatini, Pobegi, Bertoki) are development centres of gravity, as also are some smaller settlements in the Vanganel valley which together have 1,803 inhabitants: Bošamarin (395), Kampel (565), Manžan 407 and Vanganel (436).

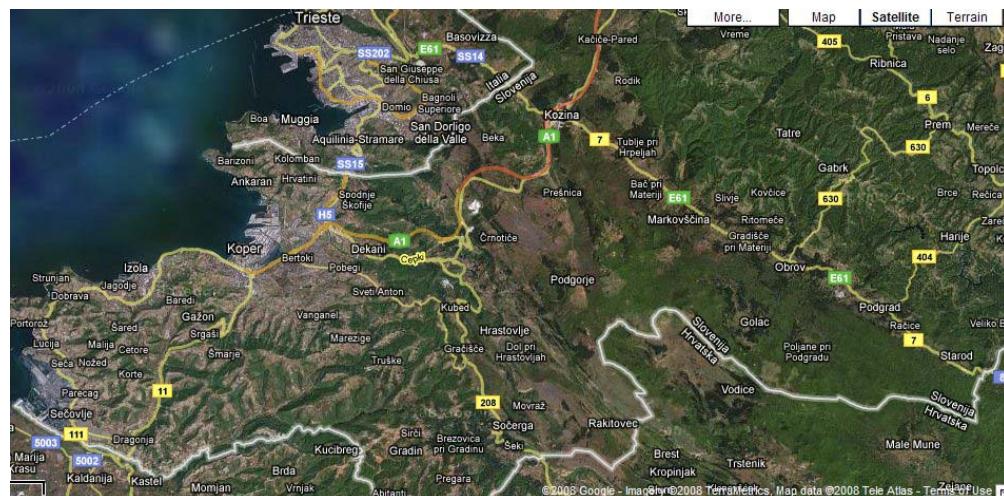


Figure 16: Settlements in the Municipality of Koper and main transport network

All the above mentioned settlements, together with Koper, are situated in the coastal belt, where 32 settlements covering 27.4% of the municipal area contain 89% of the municipal population.

Table 9: Settlements in the Municipality of Koper by number of inhabitants

No. of inhabitants	No. of settlements	Inhabitants in 2002	Share of inhabitants (%)	No. of housing units	Share of housing units (%)
Up to 50	36	803	1.7	533	2.6
51-200	41	4,398	9.2	2,159	10.6
201-500	15	5,728	12.0	2,347	11.6
501-1000	5	3,799	8.0	1,464	7.2
1000-2000	5	6,110	12.9	2,439	12.0
2000-5000	1	2,984	6.3	1,547	7.6
> 5000	1	23,726	49.9	9,760	48.2
TOTAL	104	47,548	100.0	20,249	100.0

Source: Municipal Spatial Plan – draft, 2008.

Table 10: Housing density and share of already build up foreseen construction areas

	Construction areas-settlements and urban use				Inhab. 2002	Density	
	Total (m ²)	Free (m ²)	Occupied (m ²)	% occupied		Inh./ha of occupied	Inh./h a of total
Koper	2,138,812	297,130	1,841,682	86.1	17,526	95.2	81.9
Ankaran	577,807	235,376	342,431	59.1	2,984	87.1	51.6
Other settlements - coastal belt	7,427,643	2,233,357	5,194,285	69.9	15,041	29.0	20.3
Settlements - hinterland	3,704,297	1,605,045	2,099,252	56.7	3,868	18.4	10.4
Karst settlements	1,942,434	889,825	1,052,609	54.2	1,929	18.3	9.9
Municipality	15,790,993	5,260,733	10,530,259	66.7	41,348	39.3	26.2

Source: Spatial components of spatial documents of the Municipality of Koper - purpose use, digital ortofoto and Population census 2002

Only areas defined as settlement areas (for housing and mixed urban use) are shown in the table (without areas designated for tertiary activities), so the number for Koper does not include inhabitants in the centre. Data show foreseen settlement areas already designated as such in spatial components of plan are still sufficient and that there is no need for them to spread. However, data should not be taken at face value. It will be necessary to evaluate every settlement and the situation there individually. In addition to Koper, there are 22 settlements in which more than 75% of the defined settlement area is already built up.

Settlement size changes can also be observed also through a changing number of inhabitants and number of housing units. The table shows changes from 1981 till 2002.

Table 11: Population in settlements of the Municipality of Koper from 1981-2002

	POPULATION								
	1981		1991		2002		Index of population growth		
	No.	%	No.	%	No.	%	91/81	02/91	02/81
Karst settlements	2,234	5	2,053	4	1,929	4	91.9	94.0	86.3
Settlements - hinterland	37,45	9	3,615	8	3,868	8	96.5	107.0	103.3
Other settlements - coastal belt	11,020	26	12,774	28	15,041	32	115.9	117.7	136.5
Ankaran	1,735	4	2,659	6	2,984	6	153.3	112.2	172.0
Koper	23,581	56	24,704	54	23,726	50	104.8.	96.0	100.6
Municipality	42,315	100	45,805	100	47,548	100	108.2	103.8	112.4

Source: Municipal Spatial Plan – draft, 2008.

Table 12: Increase in number of housing units in the Municipality of Koper

	APARTMENTS					
	Number			Index of apartments growth		
	1981	1991	2002	91/81	02/91	02/81
Karst settlements	807	875	1,068	108.4	122.1	132.3
Settlements in hinterland	1,263	1,410	1,888	111.6	133.9	149.5
Other settlements in coastal belt	3,480	4,495	5,986	129.2	133.2	172.0
Ankaran	597	1,100	1,547	184.3	140.6	259.1
Koper	7,927	8,915	9,760	112.5	109.5	123.1
Municipality in total	14,074	16,795	20,249	119.3	120.6	143.9

Source: Municipal Spatial Plan – draft, 2008.

Comparison between population and increase in the number of housing units shows the number of housing units increasing faster than the number of inhabitants. The number of housing units increased on »Miljski hrib« and in Ankaran (index 256), mainly due to the construction of »weekend« residences. In the other settlements in the coastal belt, the increase in the number of housing units is more proportional to the population increase. The situation is also interesting in the rural hinterland, where, despite the stagnation or even fall in the number of inhabitants, the number of housing units is significantly increasing. Differences between the number of inhabitants and number of housing units indicate that more housing units are empty or they are in use as secondary residences. At the same time, the fact that the number of housing units is increasing almost everywhere means that, despite the smaller number of inhabitants, the space and environment are increasingly burdened and settled.

Comparison between population and increase in the number of housing units also shows that there is a noticeable difference between Koper and Ankaran on the one hand and other settlements in the coastal belt on the other. In the decade 1981-1991, in absolute terms, there is still a higher increase in population in Koper and Ankaran than in other settlements. Later, from 1991-2002, ratios changed: the number of inhabitants decreased in Koper, and in Ankaran the increase was no longer so evident, but in some other peri-urban settlements (such as Prade, Sv. Anton, Kampel) the increase was more evident.

Data about new housing units show that there are still more new residences in Koper and in Ankaran than in other peri-urban settlements. As was already clear for the ratio between population and housing units in the rural hinterland, in the urban space, too, the number of inhabitants does not entirely correspond or does not show the situation in the space correctly. A housing unit is no longer just a permanent living space but also somewhere to spend holidays or even a capital investment by individuals and companies. Apartments in Koper are also used for renting to the students of Primorska University in Koper and other tenants (since the opening of borders and accession to the EU, more workers have also come to work in the area from abroad).

The Science and Research Centre of Koper of the University of Primorska carried out a survey in 2005 among the municipal population. Some of their preferences about their desired place of residence (kind of apartment or house and location) are shown in the graphs below.

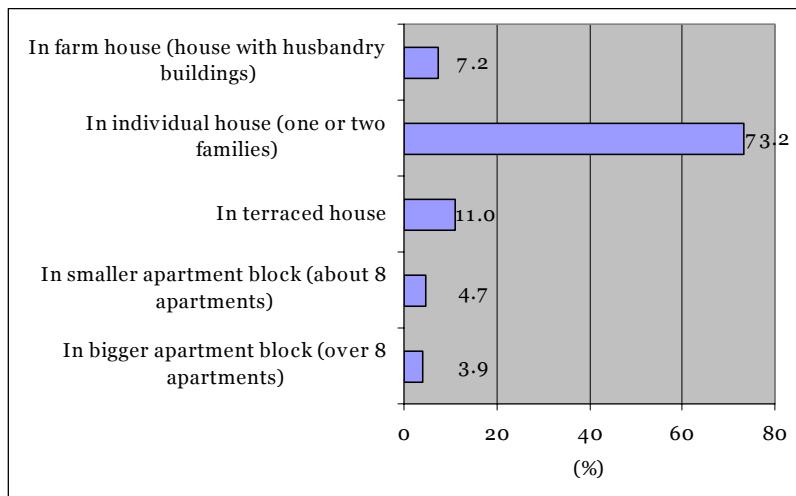


Figure 17: Preferences of people concerning the kind of apartment
 in which they would like to live

(Data source: University of Primorska - Science and Research Centre of Koper, 2005)

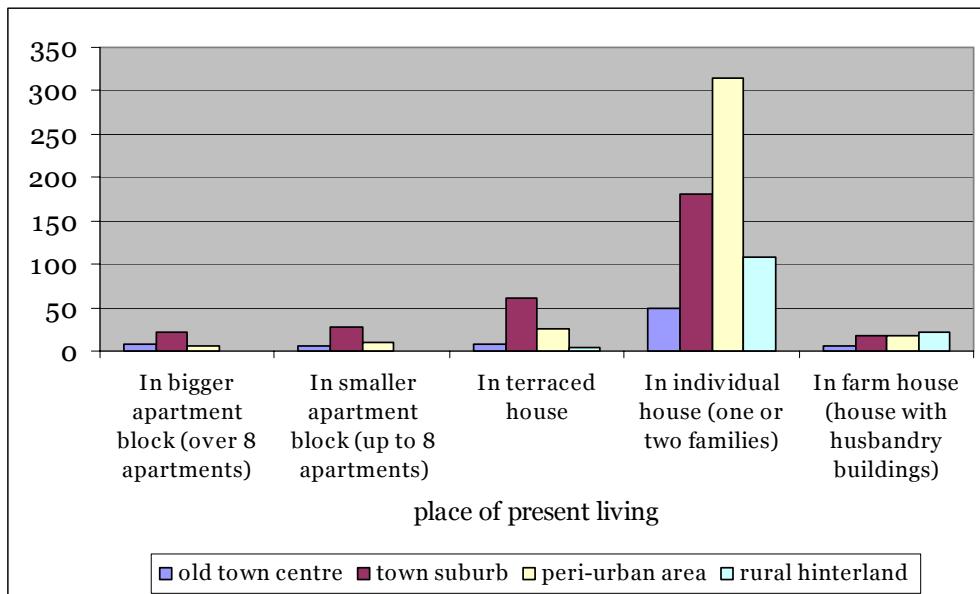


Figure 18: Preferences of people of where they would like to live
 (Data source: University of Primorska - Science and Research Centre of Koper, 2005)

Figure 17 shows that most inhabitants of the municipality want to live in an individual house containing one or a maximum of two families live. The next most frequent wishes are to live in a terraced house or in a farm house. Preferences are thus to live in an individual house in the Koper hinterland or in the peri-urban area, as shown in Figure 18. It is clear that people want to live outside the town but not too far from it.

4.2.2 Preparation of new spatial documents

The Municipality of Koper is in process of preparing new spatial documents: the Strategy of Spatial Development of the Municipality and the Municipal Spatial Plan. The strategic issues that dominate planning discussions in the Municipality of Koper are the following:

- Aims and spatial solutions in the new spatial documents;
- Adjustment of different development needs in the municipality, assurance of spatial efficiency in the sense of rational space arrangement and protection of natural resources (best agricultural land, forests, protected areas etc.);
- Assurance of quality living conditions with an adequate amount of green and recreational areas (parks, walking paths, cycling paths, forests, playgrounds etc.), efficient public transport, possibilities of economic development (industrial and trade zones), maintenance of the cultural landscape and natural and cultural heritage in urban, peri-urban and rural parts of the municipality.

The new Spatial Planning Act adopted in Slovenia in April 2007 requires municipalities to prepare two documents (or they can be integrated into one document if the municipality so decides): the Strategy of Spatial Development of the Municipality and the Municipal Spatial Plan. The Municipality of Koper accepted two documents in 1986 which are still valid: the Long-term Plan of the Municipality of Koper for the period 1986-2000 and Mid-term Social Plan of the Municipality of Koper for the period 1986-1990. The basic characteristic of the spatial plan from 1986 is its explicit orientation towards spatial zoning, which was suited to the planning principles of the socialistic economic and social system. The most pronounced priorities of municipal spatial development were ensuring conditions for the development and spatial regulation of individual sectors, with intensive urbanization of the urban fringe, development of the Port of Koper and other industrial locations and carefully planned installation of central supply services in flat land around

the old city. The old city centre and the rural hinterland were relatively pushed into the background in this process but today they both represent specific development potential.

The Slovenian coast, on which Koper is located, is heavily populated. The coastal region has a much higher population density than the national average. Most of the population lives within a 1.5 kilometer wide strip along the coast. This concentration of population and activities, which include transport, industry, commerce, tourism and fishery, represents a major concern in the coastal area.

The most important pressures and problems of the coastal zone are:

- socio-economic problems,
- urban development (littoralisation, urban sprawl, transport),
- pressures on the water body (communal waste water, solid waste),
- tourism development,
- ecosystem and habitat degradation,
- degradation of coastal landscape and cultural heritage,
- nautical sports (marinas),
- marine transport.

With Slovenia's independence, the new state arrangement and accession to various international associations (NATO, EU), some new development processes also started. On all levels of society, a new democratic and very liberally oriented market approach emerged. New spatial needs are also a result of this development (entrepreneurship, tourism, changed agricultural policy, real estate demands, housing construction etc.).

In this context, spatial planning is somehow caught between a sustainable spatial development vision and the contrary practice of partial working, which is a result of slow enforcement of regulative instruments and a lack of strategic aims. There are also many local commercial actors in space, which do not follow the directions of long-term spatial strategies. New spatial documents should assure an adequate level of regulations governing spatial processes, and direct certain trends and tendencies towards defined development aims, while simultaneously maintaining the existing qualities of local and national territory.

The strategy for ensuring sustainable development and the most reasonable land use in the Municipality of Koper has not yet been officially accepted, although there is a draft proposal for the new Strategic Municipal Plan. The general idea is to divide the territory of the municipality into three semi-circular belts in line with the existing situation (settlements, traffic connection, coast, importance of the Port of Koper), natural conditions (agricultural land, forests etc.) and to organize activities in each belt reasonably taking into account the needs, situation and limits that each of them have.

Studies and analysis of the settled space show a very explicit concentric (semi-circular) hierarchical division of existing settlement in the Municipality of Koper. Three of them are very characteristic:

- the first represents the central zone - city of Koper, its old centre and immediate surrounding, including the coast (= urban belt),
- the second belt represents the peri-urban area, with some network settlement,
- the third belt represents settlement in the rural hinterland.

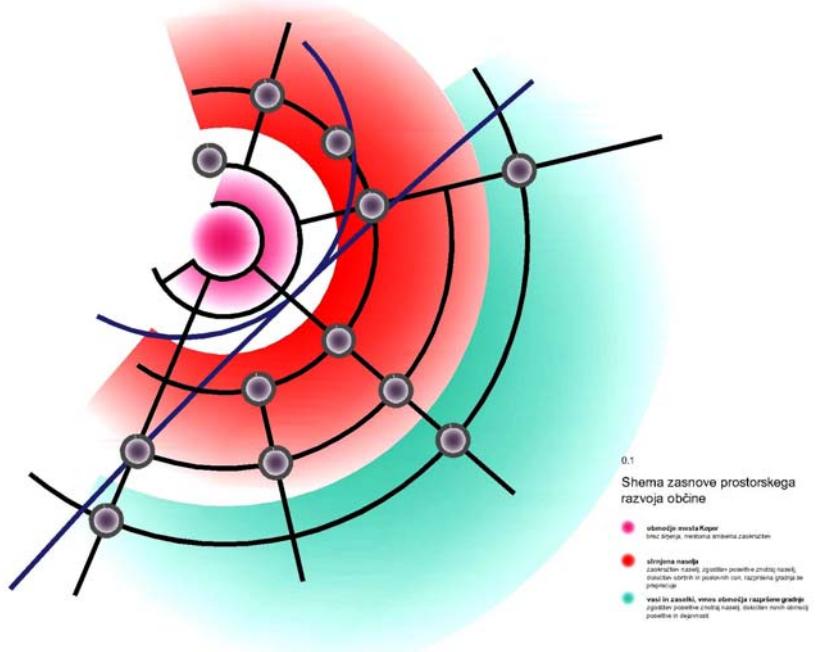


Figure 19: Scheme of spatial development of the Municipality of Koper

The general idea of how to achieve the most reasonable and efficient (= optimal) sustainable land use in the municipality is to re-arrange the existing spatial situation and to direct development (settlement, economic activities, traffic, agriculture etc.) into three semi-circular belts. The suggested directions are the following:

- to keep and develop only city-forming activities and activities (economic, recreational etc.) connected or depending on the sea in the coastal belt (central urban zone),
- to move and concentrate other economic activities and settlement into the second belt; the problem here is that the highest quality agricultural land is also located there and it is strongly protected by legislation; some green and recreational areas are also foreseen in the second belt and agriculture will remain there where possible,
- the third belt, which is the rural hinterland, is the main place for agricultural activities, forests and also the development of service activities and the development of existing settlements, adjusted to rural characteristics and specifics.

The proposed Strategy of Spatial Development (which is not yet officially adopted) foresees some main directions of spatial development for each belt:

- The first, very urban (central) belt represents the central zone of Koper with coast and the spread of settlement is only possible here by minor reasonable rounding off. Interventions are more or less limited, mostly oriented to renovating and reconstructing existing buildings.
- The second (middle) belt represents an area of linked settlement developed along radial traffic connections from the centre to the hinterland. These are mostly peri-urban settlements which in all their functions strongly gravitate towards the municipal centre - Koper. Settlement rounding off is foreseen here, condensation of settlement within settlement areas, definition and development of areas for business, industrial and craft activities. Dispersed construction should be prevented in this belt.

- The third (outer) belt represents the rural hinterland with numerous villages and hamlets, often with old historical village centres with areas of dispersed settlement in between. Main foreseen directions here are renovation or replacement of the existing building fund, settlement rounding off and condensation of settlement within existing settlement areas.

In terms of design of the settlement network, individual development areas have been broken down with regard to the functions that settlements have: urban, more important local centres, local and less important local centres.

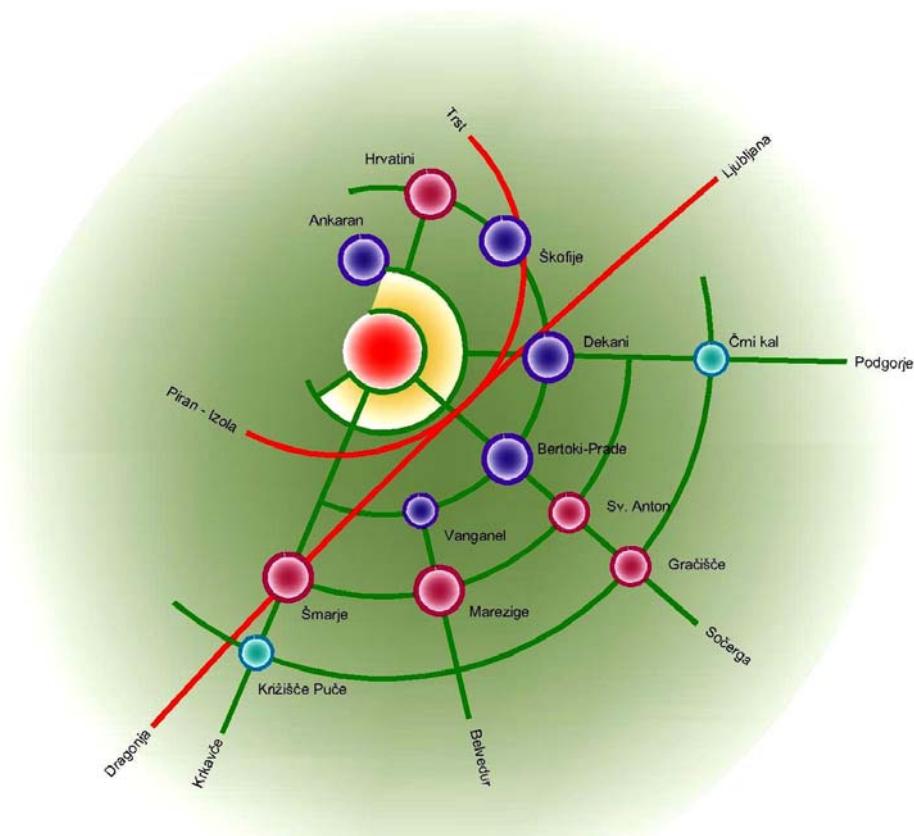


Figure 20: Settlement network in the Municipality of Koper

In the centre is the city of Koper, surrounded by an area of interwoven activities. The important local centre of Ankaran is also connected to this belt. The middle belt (peri-urban area) contains some important local centres: Vanganel, Bertoki, Dekani, Škofije and the local centre, Hrvatini. In the third belt, some local centres are represented by the following settlements: Šmarje, Marezige, Sv. Anton, and in the outer hinterland belt less important local centres are Križišče, Puče, Črni Kal and Gračišče.

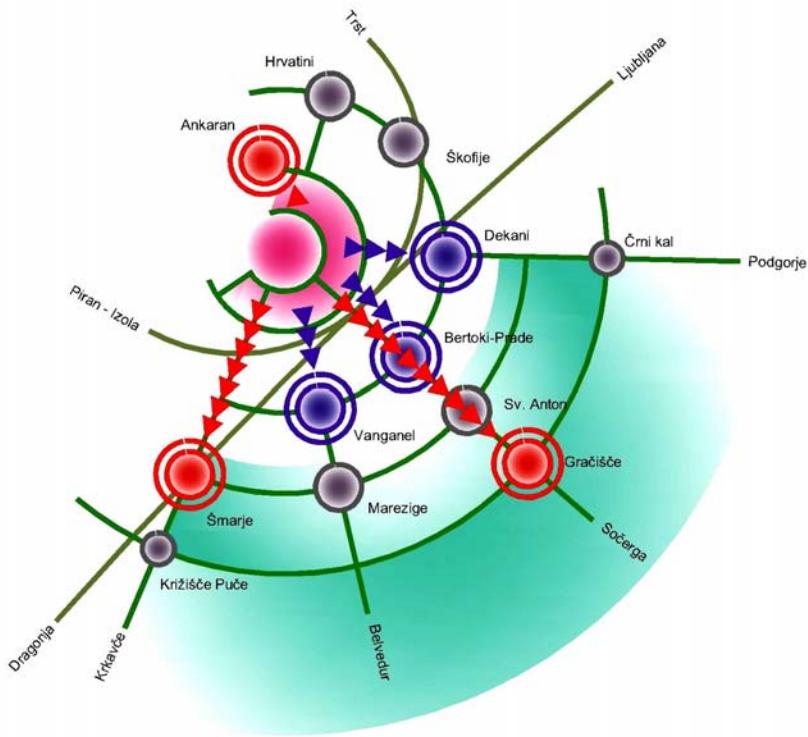


Figure 21: Scheme of priority areas for the development of activities

The stimulation of tourism and activities connected with the coast and sea are mostly foreseen in the urban centre and belt immediately around it. Craft, industrial and business activities are expected to move into peri-urban settlements (Vanganel, Bertoki-Prade, Dekani) in the future or to be supplemented there and to ensure a more complete provision of activities and services there in the future, which will also mean better municipal decentralization. Some individual activities and services can also be moved to, developed and supplemented in some more distant rural sub-centres, such as Šmarje or Gračišče. Such settlements can thus have more functions, and hinterland settlements can also be ensured more independence from Koper, thus stimulating better living and other conditions in the rural hinterland. In the middle and outer belts, the development of rural tourism connected with the landscape and agriculture is also foreseen.

Taking into the account the present spatial situation and anticipated future development a new proposal of the spatial arrangement in the Municipality of Koper has been prepared. Anticipated future land use is presented in the first proposal for a spatial plan (*Fig. 22*) of the Municipality of Koper, which is still the subject of discussion. Red fields on the map (*Fig. 22*) are areas of existing settlement, red lines show foreseen increase of existing individual settlements.

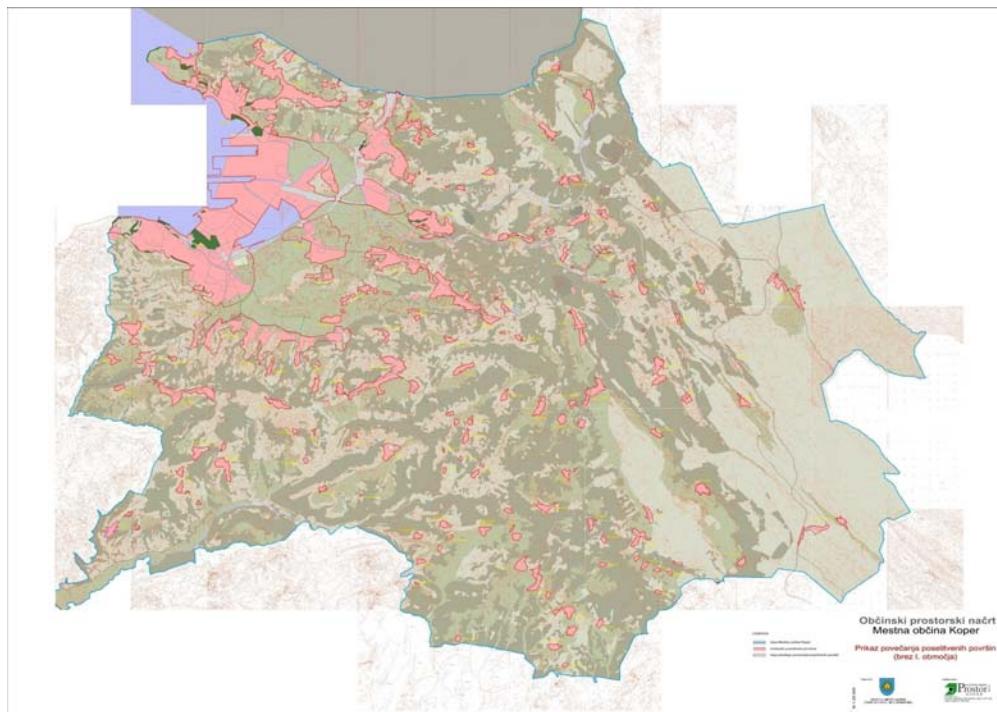


Figure 22: Foreseen land use in the Municipality of Koper (proposed spatial plan)

4.2.3 Actors, their strategies and resources

Various actors were identified influencing the issue »land pressure due to housing«:

- Municipality of Koper, Office for the Environment and Spatial Planning
- Spatial planners
- Local communities (»krajevna skupnost«) in the municipality
- Administrative Unit of Koper (»upravna enota«)
- Port of Koper
- The Farmland and Forest Fund of the Republic of Slovenia
- Environmental associations and groups
- Private land owners
- Private construction companies
- Ministry of the Environment and Spatial Planning
- Ministry of Agriculture, Forestry and Food
- Institute for Nature Protection of the Republic of Slovenia
- Institute for the Protection of the Cultural Heritage of the Republic of Slovenia
- University of Ljubljana and University of Primorska

Municipality of Koper, Office for the Environment and Spatial Planning

The office is responsible for the preparation of the municipal spatial plan based on spatial planning legislation. It must follow the prescribed procedure; collect different initiatives from the economic sector, local communities, individual land owners, environmentalists etc. for future development spatial needs or protection needs. The task of the office is also to ask suitable institutions to prepare various studies of the present and future situation (demographic, economic, environmental studies), to encourage different sectors for inter-sectoral cooperation (every sector must prepare their own professional basis for spatial planning), to decide whether different initiatives are legitimate and, finally, to prepare a proposal of the spatial strategy and spatial plan (documents can also be prepared by a

spatial planning company or institution). When proposals for municipal spatial documents are prepared, they must be confirmed by the municipal council and, later, also approved on the Ministry of the Environment and Spatial Planning. The Municipality of Koper is thus the main actor responsible for the spatial situation, development and planning in the municipality, except for interventions which are a national responsibility.

Some problems were also raised in the interviews, such as: insufficient funds for the implementation of aims, problem of unclear land ownership, laxity of some regulations etc. One of the difficulties in the planning process is the present system of agricultural land protection, whereby agricultural land is classified into two categories: 1st quality agricultural land areas (best agricultural land) and 2nd quality agricultural land. Any change of land use of 1st quality agricultural land requires the approval of the Ministry of Agriculture. The main problem in the existing system of agricultural land protection is that the definition is not based on precise criteria, so 1st quality agricultural land includes land that does not belong there. When criteria are not precise, it is also difficult to argue why one person can build on such land and another not.

Strategy of the municipality:

One of the strategic aims of the Office of the Environment and Spatial Planning is to maintain a balance among residential, economic development, socio-demographic development and environmental protection in order to ensure sustainable use of natural resources. Some kind of tool or methodology is therefore needed to prepare good proposals for sustainable land use and to support decision-making about it.

Resources:

The Municipality of Koper has various resources available: experts in spatial planning and funds from the municipal budget for their field of work, experience and knowledge, database of spatial data necessary for planning, decision-making power (together with the municipal council), tools and necessary equipment, offices etc.

Spatial planners

Spatial planners are experts from whom proposals of spatial strategies and spatial plans are expected. In the Municipality of Koper, spatial documents are prepared in one of the spatial planning offices in Koper. Good cooperation with the Office of the Environment and Spatial Planning is of course of great importance. The solution that such documents are prepared in an outside planning office is good because an »outside« office can be more independent in its proposals than the municipal office.

During the interviews, we also discovered some problems that spatial planners face: they have to prepare spatial documents following the new spatial legislation from 2007, but general guidelines are still lacking in this respect. Another problem mentioned was that Slovenia had parliamentary elections in autumn 2008. As a result, no suggestions or guidelines to planners came from the political sphere, and all procedures were slowed down or even halted. Planners could accept such a situation as good, since it would mean that professional decisions were of main importance, but some planners feared that it could also mean that a new political establishment could also overturn professional decisions, as many times before. Every new government in Slovenia in recent years has changed spatial planning legislation and procedures. The problem of the present agricultural land classification was also expressed because very often the optimal place for some future development of housing, green and recreational areas etc. is 1st quality agricultural land. Although they agree to respect arguments, the quality of natural resources and want to avoid destroying valuable agricultural land whenever possible, they need a better basis to do so. Planners also expressed doubts during interviews about public participation because, on the one hand, the public can be very easily manipulated by specific lobbies and, on the other, some individuals are only interested in a solution that affects him/her individually. People who genuinely have something to say do not normally come forward and express their opinion. Another problem raised is that investors do not take into account planning decisions about necessary green areas or

parking areas, for example, but try to extend built-up areas to the maximum and make as high a profit as possible. Because of insufficient control and sanctions, there are already frequent problems because new residents have no children's playgrounds, insufficient parking, almost no green areas and have to use such facilities somewhere else, but residents there, are not at all happy about this. It can lead to conflict between them and such cases have already occurred in the Municipality of Koper. It is also a significant problem that political decisions often have priority over professional ones, and that lobbying has a dual influence: higher prices of land and housing on the one hand and consequently, which is good aspect, because prices are high, pressure for construction land is not still higher.

An idea that was put forward at workshops and in interviews is re-arrangement of the existing spatial situation by directing development (settlements, economic activities, traffic, agriculture etc.) into three semi-circular belts, as was already described above.

Resources:

The main resources of spatial planners are their knowledge and experience. They need for their work funds, the necessary data and equipment.

Local communities (»krajevna skupnost«)

A local community (LC) (in Slovene »krajevna skupnost«) is the smallest administrative unit in Slovenia, but it is not obligatory. Most larger municipalities are further divided into local communities. The Municipality of Koper is divided into 23 local communities. The competences and functions of local communities are defined in the Local Government Act and the Statute of the Municipality of Koper. Local communities have such competences as: ensuring the development of the LC area, preparing a programme for the development of LC, ensuring the maintenance and construction of public roads in LC territory, recreational and other public areas, constructing or cooperating in the construction of communal equipment, making proposals to the municipal authorities regarding future development and spatial and investment needs etc. The municipality must provide funds for the functioning of an LC. The main problems of LCs, as mentioned during interviews, are limited finances and competences. Some LCs do not even have adequate administrative facilities to operate normally.

Their strategies are mostly to lobby for the municipality investments in their territory in order to increase the quality of life in their communities or just to solve the main problems and needs.

Resources:

Local communities have the following resources: their territory, population and elected authority, funds for their functioning, they can also own some buildings, experience and knowledge about their territory and needs, the trust of local people, and they can also have some political power.

Administrative Unit of Koper (»upravna enota«)

The Administrative Unit of Koper according to legislation is responsible for the implementation of tasks of state competence for the area of the Municipality of Koper. It also has the task of issuing building permits, approving trade in agricultural land etc.

The Administrative Unit operates on the basis of national legislation and the directions of ministries, so some special strategies have not been recognized.

Resources: they have decision-making powers, funds from the national budget for their functioning, administrative staff, knowledge and experience, the necessary equipment and databases.

Port of Koper

Luka Koper is a public limited company, whose activity has an impact on the development of the Obalno-Kraška region, giving it a positive and dynamic economic pulse. Luka Koper provides port and logistics services in the Port of Koper. The company's basic activity covers cargo handling and warehousing services for all types of goods, complemented by a range of additional services for cargo intended to provide comprehensive logistics support to customers. The company manages the commercial zone and ensures the development and maintenance of port infrastructure. The port has ambitious goals and is striving to become the leading port and logistics system servicing the countries of Central Europe. Luka Koper has a number of strategic goals, such as:

- to become a recognized logistics service provider,
- to organize an efficient port system and distribution centre,
- to achieve a long-term successful business system,
- to ensure sustainable development.

Some strategies are necessary for the achievement of the strategic goals, so the Port of Koper plans:

- to build a new entrance for cargo traffic together with a new truck terminal and a building devoted to customs and other state services;
- to erect multi-storage buildings to store cars; they will thus make the best use of limited space in the port area and obtain covered warehouses for more than 100,000 cars. One of the buildings will be connected to the quayside with a viaduct;
- pier 1 will be dedicated to containers. With the enlargement of pier 1 and the erection of two post panamax ship-to-shore cranes, the capacity of the terminal will increase from 400,000 to 600,000 TEUs;
- to construct a new third pier for containers, which will be equipped with three post panamax and three panamax ship-to-shore cranes to be able to handle 1 million TEUs per year;
- pier 2 will have modern warehouses for dry bulk and liquid bulk cargoes. New shore tanks for oil derivatives are planned;
- the European energy terminal will be covered to eliminate dust originating from coal and iron ore;
- there will be a new berth and warehouse on pier 2 devoted to handling steel products;
- new municipal berths and a new sports and recreation centre will be built on Santa Catharina;
- good use will be made of the competitive advantages of the inland terminal in Sežana, which lies on the fifth European corridor, and a modern logistics centre of 900,000 m² will be built there. There will be a container and a car terminal as well as multipurpose and racking system warehouses.

The development of the Port of Koper is of national importance, so the interests of the Port of Koper and the interests of the Municipality of Koper are not necessarily complementary, and in the case of Koper, local interests are often not in accordance with national interests or the interests of the port. The municipality has no competences for spatial planning of the development of port; planning is done at the national level. The local community of Ankaran, which borders on port, for example, is against the construction of the new third pier. On the other hand, the Port of Koper is aware that it also represents a kind of spatial barrier and tries to make some activities in the port more environmentally friendly: they have a plantation of olive trees inside, and they try to use alternative energy sources (solar and biomass energy etc.). The Port of Koper also supported the restoration of Škocjanski zatok Nature Reserve.

The *resources* of the Port of Koper are company property (physical and financial), the knowledge and experience of its employees, power and influence as an important economic subject, strategic position.

The Farmland and Forest Fund of the Republic of Slovenia

The Farmland and Forest Fund of the Republic of Slovenia is responsible for managing the farmland, farms and forests owned by the state. Its role, tasks, strategies and resources will be described in more detailed in the next chapter describing “agriculture under the pressure” on page 68.

Environmental associations and groups

Several environmental organizations are active in the Municipality of Koper, including in the sphere of spatial planning. For example, the Pangea Association initiated a pilot project in the village of Šmarje, where they started a process of village revitalisation and received financial support for the preparation of an urban plan for the village. Other environmental groups are also active and express environmental concern as well as cooperating in the preparation of spatial documents.

Their *strategic aims* are related to their fields of work:

- to protect the natural environment and to draw attention to environmental and spatial problems,
- to make people aware of the need for environmental protection,
- to assure development in accordance with nature protection and maintenance of the cultural heritage,
- to lobby for »more natural« and sustainable development,
- to ensure adequate flood safety when extending settlement areas.

Resources: experts, funds for their activities (from different sources: membership fees, support from the municipality and other institutions, funds for research and other projects etc.). As part of civil society they have quite a good influence on planning, implementation of different interventions etc. Their position in the political network is also not so weak.

Private landowners

Private landowners include farmers, non-farmers and companies. Because the area is attractive, interest in land is also high, particularly building land. The high demand for land and housing also leads to high prices of land and housing, which are among the highest in Slovenia (for example: the price of apartments in the Koper region can be from 2750 to 3500 EUR/m²). During interviews it was also mentioned that some companies from other parts of Slovenia are buying agricultural land on good locations with a nice view of the sea. This is a matter of speculation, because such companies will later try to change the land use from agricultural to building land; the price of land will increase and they plan to build new housing for sale, on which they will make a large profit. With some good connections and political support, such initiatives can even be successful. Speculation by landowners, particularly when the municipality collects new initiatives for change of land use are not rare and mostly have an economic background.

Resources of private land owners: land, finance, good information, they can have some good political connections etc.

Private construction companies

Coastal area is very interesting for construction companies due to the high price of apartments and because the area is attractive for residence as well as for holiday apartments and houses. Although data shows that there are already available apartments in the area, interest in the construction of new ones has not disappeared. Various problems were expressed in interviews which also indicate some of the strategies of such companies: construction companies are very aggressive on the land market, they are also buying land in advance in the areas where is still cheap agricultural land but on good locations; they speculate that it will be possible to build there in the future, too. Companies want to maximize their profit and thus do not respect standards for green

areas, parking etc. but enlarge buildings as much as possible. New tenants then have problems, the quality of life is worse, and conflicts in the community can occur. The present recession will perhaps have some effect and will also sober investors. Some effects on housing prices are already visible.

Resources: financial power, property, good political connections and lobbying experience, knowledge and experience.

Ministry of the Environment and Spatial Planning (MESP)

The Ministry of the Environment and Spatial Planning has the task of ensuring that all citizens of the Republic of Slovenia have a healthy living environment. It promotes and coordinates efforts toward sustainable development, while striving for social well-being based on the wise and efficient use of natural resources.

MESP endeavours to increase the concern of society for maintaining natural balance and biodiversity in the country, in the belief that biodiversity is an important heritage for future generations. It directs the spatial development of cities, towns and villages, in order to maintain and develop the quality of the architectural and urban heritage and cultural landscape, while at the same time ensuring economic, social and cultural development. The Spatial Planning Directorate within MESP is responsible for spatial management at national, regional and municipal levels, as well as for construction, housing and real-estate brokerage. It coordinates work with internal organisational units of the ministry, bodies under the ministry and other ministries. It is also responsible for spatial planning legislation and planning principles. The problem here is that almost every change of government leads to change in the spatial legislation.

Resources: decision-making power, available funds, experts and administrative staff, databases, legislation.

Ministry of Agriculture, Forestry and Food

The Ministry of Agriculture, Forestry and Food directs the development of Slovenian agriculture and the food-processing industry, in order to boost the competitiveness of the sector, taking into account the diversity and distinctive features of rural areas and the multi-purpose role of agriculture. It is therefore responsible for the implementation of the government's agricultural policy and the Common Agricultural Policy (CAP). The role of the Ministry of Agriculture, Forestry and Food is to oversee use of agricultural land and relevant legislation. The ministry must approve any change of land use from agricultural land to another purpose, such as construction. The strategic goal of the ministry is to preserve agricultural production resources in order to maintain the agricultural landscape, biodiversity, food security and keep rural areas settled. A problem that has already been mentioned is that the existing principle of protection of agricultural land use is not very acceptable for spatial planners and in practice not very successful. Despite legislative agricultural land protection, between 1950 and 2000 Slovenia lost half of its agricultural land and in 2000 had just 865 m² of arable land per inhabitant.

Resources: decision-making power, available funds, experts and administrative staff, databases, legislation.

Institute of the Republic of Slovenia for Nature Protection

The Institute of the Republic of Slovenia for Nature Conservation (IRSNC) is a professional national institution. In compliance with the competences allotted to it by Slovene legislation or, to be more precise, by the Conservation of Nature Act (Official Gazette of the Republic of Slovenia, no. 96/2004), it cares for the conservation of Slovene nature, with special attention being devoted to the conservation of the most valuable natural areas in the country. The Institute for Nature Protection also has a role in spatial planning; it has to provide guidelines, comments and concrete directions on draft proposals of spatial plans and to check whether the environmental impact assessment has been correctly done. Interviews revealed that experts from the Institute have the impression that professional arguments do not predominate in many cases and political

decisions and the power of capital are more important. Competences of the experts from the Institute are also weak; they can only provide guidelines and advice. Their influence is restricted to environmentally important areas defined by legislation. Badly prepared legislative amendments provide good opportunities for speculators and lobbies to take advantage of the confusion caused by the changes and to seek "holes" in the legislation.

Resources: limited funds from the national budget, projects, experts with a lot of knowledge and experience, regionally organized network of offices.

Institute for the Protection of the Cultural Heritage of the Republic of Slovenia

The role of the Institute for the Protection of the Cultural Heritage is to ensure the protection of the cultural heritage in the country. National legislation enables the implementation of various elements of protection activity and the proper integration of protection in development, spatial and implementation plans and the promotion of public access to the heritage. The institute's tasks are to develop policies and strategies of heritage protection, to ensure quality care and control, to analyze the effects of protection, to establish the requirements for the implementation of protection, to prepare and implement management projects etc.

Resources: limited funds from the national budget, projects, experts with a lot of knowledge and experience, regionally organized network of offices.

University of Ljubljana and University of Primorska

Both universities implement various research and development projects in the area in order to answer specific research questions and to support the local environment with expert reports, analyses of the situation, professional bases, survey results etc. They have an important role in the spatial planning process in Koper because they contribute to spatial planning procedures and can even contribute to better inter-sectoral cooperation and the development of tools to assist in planning.

Resources: experts, knowledge and experience, databases, research findings etc.

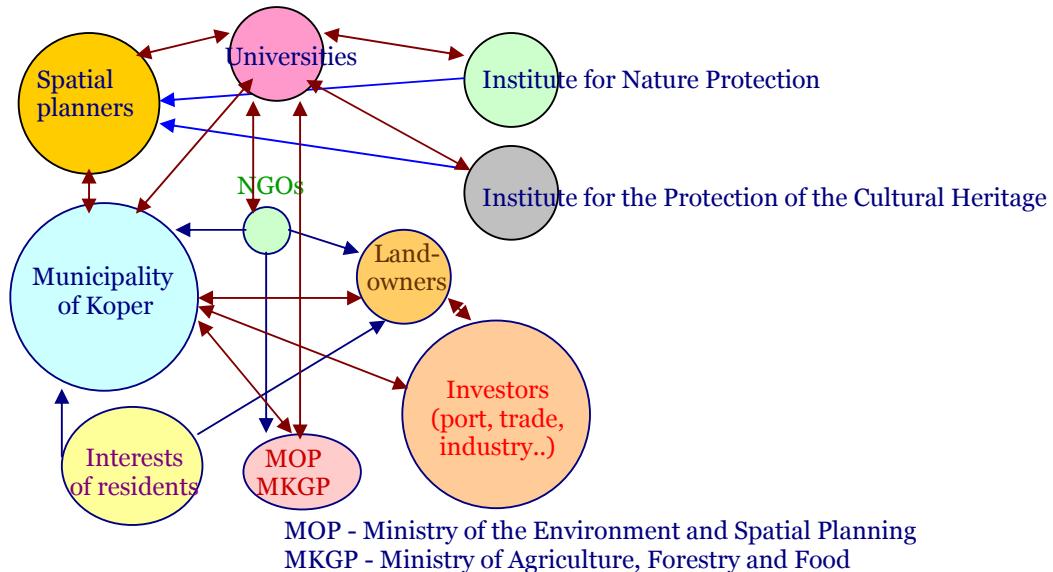


Figure 23: Various actors in the process and possible interactions (Venn diagram).
(Actors with bigger circles are more important and have more power).

4.3 Agriculture under pressure

4.3.1 Trends in agriculture in Slovenia and in the Municipality of Koper

General about agriculture in Slovenia

According to data from the 2005 sample census, just over 77,000 agricultural holdings in Slovenia are engaged in agriculture (the same as two years earlier). Data shows that intensive structural changes have slowed down the decrease in the number of farms that characterized the second half of the 1990s. This period did not record any substantial abandonment of agricultural land and so the average size of farms remained unchanged and totals 6.3 hectares of utilized agricultural area (UAA). At the same time, the number of farms with more than 20 hectares of agricultural land has increased.

Slovenia, with 648,113 hectares of utilised agricultural area (UAA), contributes 0.31 % to the total area of agricultural land of EU-25 members (excluding Romania and Bulgaria).

The share of agriculture in the **gross domestic product** (GDP) is slightly lower than the European average and totals just less than 2%. Despite the small share in GDP, agriculture's importance is higher than seems at first sight. The multi-purpose role of agriculture in Slovenian rural areas has become publicly recognised and is making progress in terms of specific results. Similarly, agriculture's importance relative to other primary economic branches is not insignificant (particularly for some rural areas) and the same is true of its relationship with the secondary and tertiary sectors.

A specific problem faced by Slovenian agriculture is the **age structure of farmers** on family farms. The share of those younger than 45 years is only 18.8 %, a slightly higher share of farmers is seen in the 45 to 55 years age group (24.3%), but most farmers are over 55 years old (56.9%). Slovenia is fully aware of this problem, which also contributes to the slower transfer of knowledge to farms, so a number of measures have been taken in recent years to encourage ageing farmers to retire and transfer their farms to their descendants, and to encourage the young to take over. It is also true that the ratio between the age groups is more favourable on farms larger than 10 hectares, since 60 % of farmers on such farms are younger than 55.

Meadows and pastures represent us much as 60 % of agricultural land, while more than 20% of arable land is used for the production of feed (maize, root crops, green feed...). This highlights the great importance of animal breeding in Slovenia. Ruminants are primarily bred, with the breeding of sheep and goats very much on the increase although, on average, the number of livestock units (LU) per farm is falling (6.3 LU).

As much as 440,349 hectares in Slovenia are defined as less favoured areas (LFA). These are hilly and mountainous areas, areas with karst features or other limiting factors for agriculture. Only 10% of Slovenian municipalities have no LFA within their boundaries. In these areas, farms are entitled to subsidies which totalled €40.6 million or 35.5% of the budget expenditures of the Rural Development Policy in 2005.

Slovenia has freshwater as well as sea fisheries and aquacultures. In 2005, sea fishermen caught 1,022 tonnes of marine animals, one-quarter more than the year before. At the same time, the breeding of marine animals decreased substantially and achieved only slightly over 23 % of the 2004 production level. The total weight of all animals bred in 2005 was 227 tonnes or 18 % less than in 2004. In 2005, marine fisheries and aquaculture employed 159 regular workers. In 2005, freshwater aquacultures bred 1,120 tonnes of fish, representing a fall from the year before. The number of regular workers employed in freshwater fisheries is 308.

Forestry

Forests cover 59.8% of Slovenia's area and the trend of increasing area covered by forests is continuing. Thus, in terms of forest cover, Slovenia is in third place in Europe, after Sweden and Finland. They are predominantly beech, fir-beech and beech-oak forests, with a relatively high production capacity, and 72 % of forest is privately-owned, with the remaining 28% being owned by the state and municipalities. The privately-owned forest holdings are very fragmented; the average area per owner is less than 3 hectares. In Slovenia, there are 314,000 forest holders or, together with co-owners, as many as 489,000. Such fragmentation makes professional work and optimal wood utilisation difficult. The contribution of forestry to Slovenia's gross national product has been around 0.2 % for quite a while now and, in terms of its economic performance, the industry lags behind the average of the country's processing industries.

Even in the future, forests will play an important role in Slovenia in acquiring green energy, because the potential of the forest biomass is large and not fully utilised. Forests in Slovenia are open to the public, so they also have an important recreational role.

Agricultural concern for the environment

In the middle of last century, agriculture was under the pressure of intensive production. The technologies that were developed were not always environmentally friendly. Even in the 1980s, however, experts started to point out the consequences of intensive agriculture which in Europe, in spite of everything, never reached the dimensions characteristic of other continents. In the majority of Slovenia, farmers never introduced intensive technologies, mostly due to the natural conditions. Slovenian agricultural policy was therefore oriented towards supporting environmentally friendly agriculture even before the country joined the EU. The trend towards extensive production that started at the end of the previous century has had an impact on most of Slovenia's agriculture, with the exception of lowland farms which tended towards intensive production or breeding in the same period.

In 2001, within the framework of its agricultural policy reform, Slovenia introduced subsidies or environmental payments for environmentally friendly agriculture. These are agricultural environmental payments (AEP, originally KOP) which currently include 21 measures classified into three groups:

- reducing the negative impact of agriculture on the environment;
- conserving natural assets, biodiversity, soil fertility and the traditional cultural landscape;
- safeguarding protected areas.

This scheme also has an important impact on education and promotion. The first Slovenian Agricultural Environmental Programme (SAEP, orig. SKOP), a forerunner of the current agricultural environmental payments, was developed following the model of similar programmes already implemented in European Union member countries, which enabled a gradual transition to comparable EU subsidies. Since 2007, a new scheme within the framework of the 2nd axis of the Rural Development Programme 2007-2013 has been implemented.

In Slovenia, controlled farming systems are on the increase, including both integrated and organic farming. They both still hold great development potential, while intensive education programmes are aimed at facilitating decisions in favour of more efficient farming. The products of such farming systems can acquire special quality labels, while their production is subject to consistent and precise control, which is exercised in Slovenia by five independent institutions. In 2006, 1,379 farms in Slovenia acquired an organic farming certificate and 460 farms acquired a positive control report, while 5,530 farms acquired an integrated farming certificate.

Agriculture in the Municipality of Koper

Agriculture was one of the most important economic activities in the region in the past but today it has lost its economic importance in most parts of the region. Although some land reclamation was carried out in the region in the second half of the 20th century, a small parcel structure still prevails and, in combination with some characteristic production (vineyards, orchards, olive plantations) creates a very high quality cultural landscape. Quality agricultural areas in large united plots are rare. Market oriented agriculture has often changed the cultural landscape because of particular measures for increasing production that were implemented (increase in parcel size) or because of the abandonment of agriculture and, consequently, agricultural land overgrowing. Lost functions of agriculture, as one of the most important factors in rural areas, and deteriorated agricultural land also cause living conditions, the morphology of settlement and image of cultural landscape to change. Ever more sustainable farming methods have been introduced in the region (ecological or integrated production), conforming to the characteristics of the natural conditions (soil, climate, and relief). The natural and climatic conditions also provide different conditions for agricultural activities in different parts of the municipality: on a flysch base exposed to the sun, there are good conditions for vineyards, orchards or olive plantations, on flatland in the coastal belt there are good conditions for vegetable production (but there is a problem of building greenhouses) and in the Karst part of the municipality (where grassland predominates) the most natural form of agriculture is livestock production (mostly sheep and goats), as one of the instruments for preventing the overgrowing of agricultural land as is currently in process. Analysis of the development possibilities shows that there are good opportunities for further development of agriculture in the region, mostly in connection with tourism and recreation, indirectly also with protection of the natural and cultural heritage (farm tourism, thematic walking trails, village centre renewal etc. In areas of nature protection, agriculture also has new development possibilities connected with substituting for income lost because of limitations (ecological production, implementation of agri-environmental measures, possibilities of managing such areas etc.)

In 2000 (Agricultural Census Data) the Municipality of Koper had 1,357 family farms with a total of 3011.2 ha of utilized agricultural area (UAA) or an average of 4.2 ha per agricultural holding. The average is still smaller than the already small average agricultural holding size in Slovenia (6.3 ha UAA). Grassland predominates in the structure (33%) following by arable land (29%) and vineyards (22%).

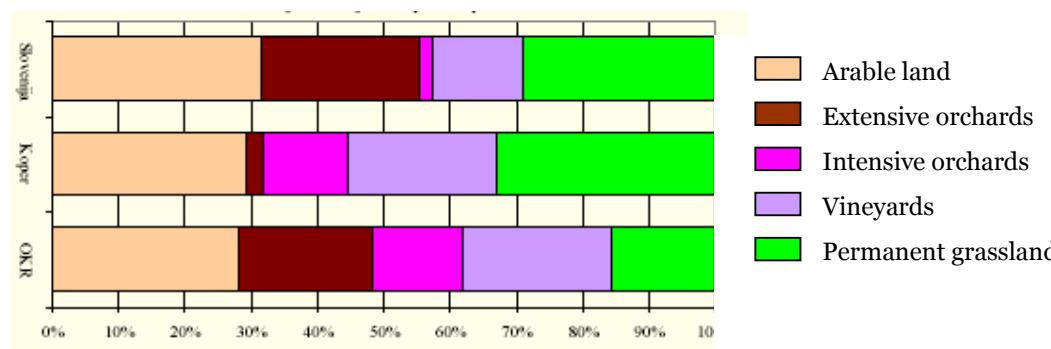


Figure 24: Use of UAA in Slovenia, Municipality of Koper and Obalno-Kraška Region
 (Source: www.koper.si)

Table 13: Utilized agricultural area in Slovenia, Municipality of Koper and Obalno-Kraška Region (OKR)

	Total UAA	
	ha	Average per agricultural holding
Slovenia	456,215	5.3
Koper	3,011	2.2
OKR	11,697	3.2

Source: Agricultural Survey 2000, www.koper.si

The following is the structure of UAA in the Municipality of Koper:

- arable land: 877 ha or 0.8 ha per agricultural holding,
- extensive orchards: 81 ha or 0.1 ha per agricultural holding,
- intensive orchards: 388 ha or 0.5 ha per agricultural holding,
- vineyards: 670 ha or 0.6 ha per agricultural holding,
- permanent grassland: 995 ha or 2.6 ha per agricultural holding.

Arable land represents 29% in the structure of UAA and according to the agricultural census 2000 data, 1,120 farms have such production. The main problem here is small and deteriorated parcels. Farms produce mostly wheat, maize, potatoes and barley, while 807 family farms have intensive orchards on their farms (total 388 ha), where they produce mostly olives (56%) and peaches (22%), the remainder being all other fruits. Vineyards are owned by 1,148 family farms to a total amount of 670 ha (4.9% of Slovenian vineyard area) or an average of 0.6 ha per agricultural holding. Around 60% are red wine varieties and 40% white wine varieties.

In contrast to the Slovenian average, there is not much livestock production in the Municipality of Koper. About 50% of family farms still have some animals. According to the agricultural census data 2000, family farms contained 666 livestock units (LU) or only 0.9 per agricultural holding (the Slovenian average was 5.7 LU). As a result, more agricultural land in the area is overgrowing, particularly in the Karst part of the municipality and in the Dragonja valley (see Fig. 26 on page 65).

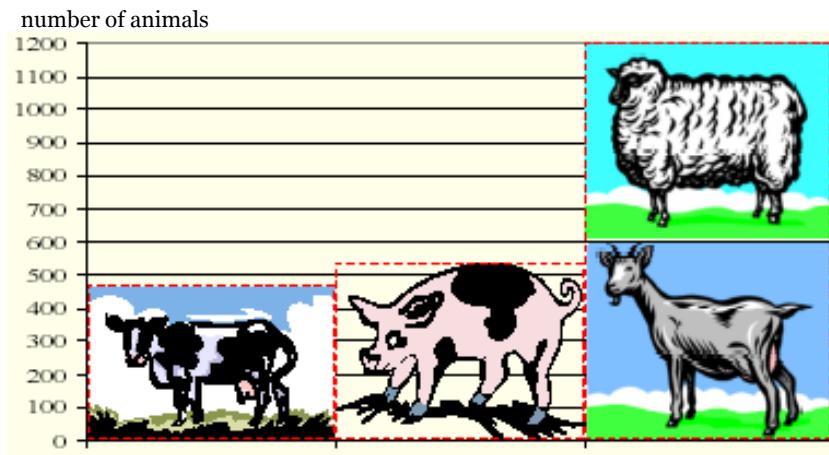


Figure 25: Number of animals on family farms in the Municipality of Koper

Farming is the main activity for only 16% of farm holders, for the remaining 84% farming is just part-time or even a kind of »hobby« activity. One third of the 1,358 farm holders are older than 64 years and half of them are between 45 and 64. As in Slovenia in general, the level of education of farmers is low, even their farming is based mainly on practical experience.



Historical view on land-use changes in the Dragonja river valley

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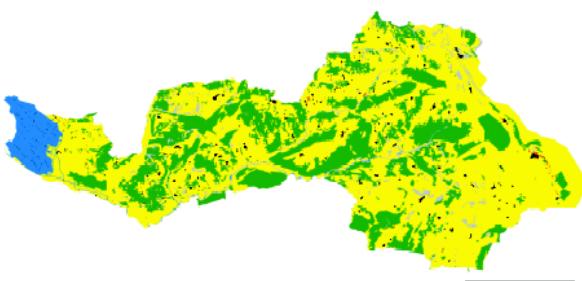
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The Dragonja river valley is situated at the most south-western part of Slovenia and it consists of roughly 17.000 ha, the catchment itself is of course much bigger. The Dragonja valley area is geologically composed of Eocene flysch with some parts of limestone (SW part) and conglomerates. Soil is carbonate rendzina, some ridges consist of brown eutric soil. The Dragonja valley bottom is covered with alluvium.

The Dragonja river catchment consists of long flat ridges hardly higher than 400 m a. s. l. The area is rather steep and usually covered with forests on northern expositions, meanwhile on southern expositions, vineyards and olive trees prevail nowadays. The settlements are situated above the deep valleys of the Dragonja river and its tributaries, on the bottom part of the hill slopes.

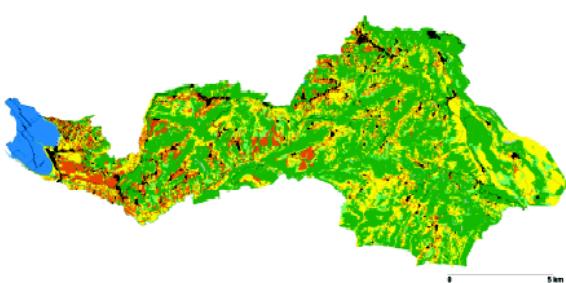


An assessment of landscape changes has been carried out in the Dragonja river valley using national land-use maps for data on present land use, followed by a comparison with land-use data from the 19th century Franciscan land register of the same region.



- Built areas
- Water and salt pans
- Forests and trees
- Orchards, olive groves, vineyards
- Fields, meadows, pastures
- Other open areas
- Abandoned agriculture areas

Figure 1: Dragonja river valley - year 1830 (top) and year 2000 (bottom)



The results show striking difference between major groups of land-use and major shift from agricultural matrix in the early 19th century to forest matrix in the beginning of the 20th century. Urban pressure and nature conservation (i.e. Natura 2000 site) are recognised as the most influential driving forces of the near future.

Figure 26: Historical view of land-use changes in the Dragonja river valley (poster)



Figure 2 : Location of Dragonja river valley



Figure 3: Dragonja river rural background



Figure 4: Koper

Land use year 2000	Land use 1 year 1830	Land use 2 year 1830	Land use 3 year 1830	Other use year 1830
Forest	Forest 44%	Pasture 32%	Field 11%	13%
Meadow	Field 34%	Pasture 31%	Meadow 18%	17%
Field	Field 60%	Meadow 23%	Pasture 17%	11%
Abandoned	Pasture 40%	Field 24%	Forest 19%	17%
Vineyard	Field 54%	Pasture 20%	Forest 13%	13%
Water	Water 92%	-	-	8%
Built	Field 43%	Pasture 22%	Built 11%	24%
Olives	Field 61%	Forest 19%	Pasture 15%	5%
Orchard	Field 63%	Pasture 17%	Meadow 10%	10%
Open area	Pasture 51%	Forest 27%	Open a. 8%	14%

Table 1: Major land use shift from land uses in year 1830 composing areas of land use in year 2000

Land use (ha)	Year 1830	Year 2000
Vineyard	16.39	866.36
Olive trees	-	447.58
Orchard	-	240.00
Meadow	1894.92	3585.33
Field	4190.34	1182.37
Pasture	4890.49	-
Abandoned agriculture	-	974.26
Forest	4780.23	8432.96
Open areas	492.55	103.11
Built	129.72	580.39
Water and salt pans	679.17	653.06

Table 2: Comparison of land use changes in Dragonja river valley

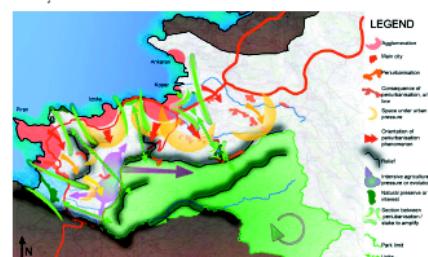


Figure 5 : Driving forces around Dragonja

4.3.2 Actors, their strategies and resources

Various actors with an impact on agriculture were identified:

- Farmers
- Agricultural Extension Service (Agricultural and Forestry Chamber of Slovenia)
- Agricultural Enterprises (e.g., Vina Koper)
- Ministry of Agriculture, Forestry and Food
- Farmland and Forest Fund of the Republic of Slovenia
- Agricultural professional organizations and associations
- Environmental associations and groups
- Private landowners
- Forestry Institute of the Republic of Slovenia

Farmers

The number of registered farmers (professional farmers) in the Municipality of Koper is 251 (May 2005). The total number of farms in the area is 1,358. Farms are mostly small, with part-time farmers. On the other hand, there is also a small group of bigger farms which are mostly oriented into some kind of more intensive production (wine, fruits or vegetable production). Farming in the area is still important, not only for economic reasons but ever more because of its secondary functions: maintenance of the cultural landscape, biodiversity and production of regional characteristic products (olive oil, wine, fruits...), the cultural landscape also provides the possibility of developing farm tourism and recreation.

Farmers have different kinds of *resources*:

- their production resources (owned or rented land, agricultural machinery, animals),
- their knowledge and experience,
- their professional organizations/associations (e.g., Wine Producers of Slovenian Istria),
- public services (e.g., Agricultural Extension Service, which advises them about production, plant protection, economics, supplementary activities on farms etc. They also make/or at least help to make applications for subsidies and other applications for funds for measures of agricultural policy (investment in agricultural holdings, farm tourism, agri-environmental measures etc.),

Farmers' intentions:

- to sell the land or at least turn it into »building land« and thus to increase the price of their land (or at least to ensure that someone from their family can build on the land),
- to intensify agricultural production (intensive wine, fruit or vegetable production),
- turn towards ecological farming (natural conditions very often do not allow intensive agriculture, although it can also be a personal decision or belief of an individual farmer in such farming),
- part-time farming on small farms (small farms are not economically sufficient to work full-time on them. Farmers continue agricultural activity in addition to a job because of the traditional Slovenian connection of farmers with their land (and the land of their forebears), farming is also a way of life and kind of hobby or »recreation« after the job),
- to diversify activities on farms (small farms are not economically sufficient so it is necessary to seek additional activity and source of income (e.g., farm tourism, direct marketing of agricultural products (wine, olive oil...) or processing of them).

Agricultural Extension Service (Agricultural and Forestry Chamber of Slovenia)

The Agricultural Extension Service became a part of the Agricultural and Forestry Chamber of Slovenia after the later's establishment in 2000. Agricultural advice is adjusted to the basic aims of agricultural policy defined in the Strategy of the Development of Slovenian Agriculture and other development documents for agriculture and rural development in Slovenia and offers advice and professional help in the following fields:

- technological, economic and environmental aspects of farming,
- preparing business plans for agricultural holdings (for investments, development plans of rural areas etc., as part of applications for money from EU funds etc.),
- for the implementation of agricultural policy measures,
- for the operation of agricultural (and rural) professional associations, producers' organizations and other farmers' production organizations,
- for the satisfaction of various farming related regulations etc.

The Agricultural Extension Service also has various *resources*:

- knowledge and experience of agricultural advisers,
- advisory network all over Slovenian territory (regionally organized),
- funds for their work (funds for their work come partly from the Ministry of Agriculture, Forestry and Food, partly from membership fees that every farmer must pay to the Chamber and partly from their activities on the free market (e.g., farmers must pay for business plans, preparing applications for subsidies or applications for money from structural funds etc.)
- their traditional presence in the rural space and respect for them.

Their *strategic goals* can be summarized as follows:

- to maintain agriculture and consequently to maintain the cultural landscape as one of the very important spatial qualities,
- to protect agricultural land from other uses and also from becoming overgrown,
- to assure agricultural production in the area and production of food (particularly regional speciality products),
- to help farmers to survive on the market.

Agricultural Enterprises (e.g., Vina Koper)

Two major agricultural enterprises are important in the Municipality of Koper: Agraria and Vina Koper. The latter is a wine producing company with approximately 450 ha of vineyards in the area, 50% of them are located in the coastal belt and peri-urban areas and the remaining 50% more in the hinterland. The company has also a large wine cellar in the urban fringe. The position of the cellar is very suitable and enables the company to sell around 20% of their production there. The company is not directly involved in spatial planning and for now they have no problem in the development of wine production but in interview it was mentioned that there may be some pressure in the future to change agricultural land, where are now vineyards, into building land. The vineyards are on attractive locations, on parcels exposed to the sun with fine views of the coast. These are the best positions for vineyards and they give the area an additional attraction. One of the mentioned problems is that is very difficult to change forest land use into agricultural use. Protection of forests in Slovenia is very high and sometimes unreasonable in view of the increase in forest area, which already occupies more than 60% of the country. In the interviewee's opinion it is more difficult to make that change than to change agricultural land to building land. An additional argument is that much of the present forest area was agricultural land in the past. Vina Koper company is aware of the possible climate changes, so they are experimenting with some varieties characteristic of warmer places. Some autochthonous species ("refošk, malvazija, rumeni muškat") are also very well adapted to warmer conditions as well. The strategic goal of the company is not just to expand their production areas, but also to further improve the quality of wines and to better develop their marketing: for example, to develop a "wine shop" in a tower from World War Two, with underground pits, on Debeli rtič, to promote products of local farmers (cheese, olive oil, ham, fruits etc.) together with wine, there should also be a wine

shop offering local wines in the old city centre of Koper and incorporated in the tourist offer of the city and area.

Resources: property in land, buildings and capital, employees with a lot of professional knowledge and experience, wine store, wine production tradition, many quality awards, customer network etc.

Ministry of Agriculture, Forestry and Food

The Ministry of Agriculture, Forestry and Food directs the development of the Slovenian agriculture and food-processing industry in order to boost the competitiveness of the sector, bearing in mind the diversity and distinctive features of rural areas and the multi-purpose role of agriculture. It is therefore responsible for the implementation of the government agricultural policy and the Common Agricultural Policy (CAP). The role of the Ministry of Agriculture, Forestry and Food is to oversee agricultural land use, also in terms of legislation. The Ministry must approve any land use change from agricultural land to other land use, such as building land. The strategic goal of the ministry is to preserve agricultural production resources in order to maintain the agricultural landscape, biodiversity, food security and keep rural areas settled, as well as to support the domestic food processing industry.

Resources: decision-making power, available funds, experts and administrative staff, databases, legislation.

Farmland and Forest Fund of the Republic of Slovenia

The Farmland and Forest Fund of the Republic of Slovenia is an organisation that was founded by the Republic of Slovenia in 1993. It is responsible for managing the farmland, farms and forests owned by the state.

The Farmland and Forest Fund of the Republic of Slovenia carries out the following main activities:

- it improves the property and parcel structure through purchases of farmland and forests, which it then offers for long-term lease or sale to improve the unity of farms;
- it awards concessions for the state-owned forests;
- it carries out the inter-regional exchange of farmland and forests;
- it protects the national interest regarding land ownership;
- it buys forests with a special purpose and protective forests on behalf of the state;
- it ensures the rational use and environmental value of farmland and forests, and suitable cultivation;
- it exerts an influence on the settlement structure of Slovenian rural areas in accordance with the development policy adopted by the Republic of Slovenia and in collaboration with ministries;
- it regulates ownership and other property rights regarding immovable assets (farmland and forests) owned by the Republic of Slovenia in both court and out-of-court proceedings;
- it keeps records of state-owned farmland, farms and forests;
- it participates in providing substitute land to farmers who will lose their cultivable land after a planned encroachment in a physical space, in accordance with the law that regulates issues regarding construction of the Motorway Network in the Republic of Slovenia;
- in the process of denationalisation, the Fund is responsible for returning farmland, farms and forests to former owners in accordance with the Denationalisation Act and it is also responsible for providing substitute farmland to former owners of nationalised property where a return in kind is impossible; and
- the Farmland and Forest Fund of the Republic of Slovenia manages funds received, including funds it acquires on its own and some minimal funding allocated from the budget, which it only uses for specific expenses in the field of forestry.

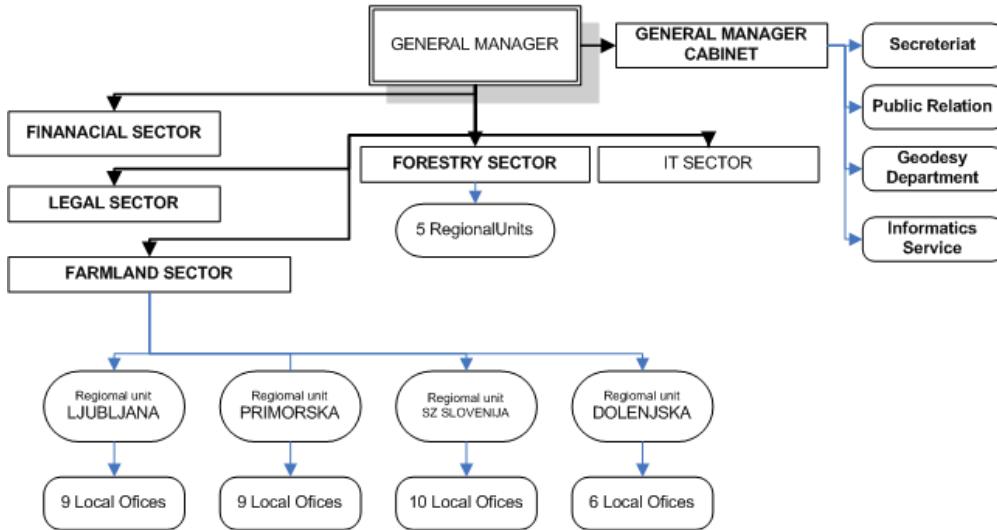


Figure 27: Organization structure of the Farmland and Forestry Fund
(Source: www.s-kzg.gov.si)

Main tasks of the Agricultural Sector of the Farmland and Forest Fund:

- management and free use of farmlands owned by the Republic of Slovenia
- making contracts for lease based on public tenders for leasing farmlands
- active policy implementation in the field of trade in land; buying, selling and exchanging lands
- transfers of farmland under the management of the Farmland and Forest Fund of the Republic of Slovenia based on Farmland and Forest Fund of the Republic of Slovenia Act
- transfers of land from the Farmland and Forest Fund of the Republic of Slovenia to communities, based on the law on public funds
- harmonization of the land register with the actual state of land in nature (especially leased lands)

The Farmland and Forest Fund of the Republic of Slovenia works on the basis of the Farmland and Forest Fund of the Republic of Slovenia Act, its statute, rule book and other documents (e.g., working and financial plans for an individual year, development strategy of fund etc.).

The *strategic aims* of the fund are efficient management of state owned agricultural land and its rent for the purpose of agricultural activities.

Agricultural professional organizations and associations

Associations are a kind of professional civil society and are normally established among a single kind of agricultural producer (wine or fruit producers, cattle, sheep, goat or horse breeders, association of organic farmers, rural women, rural youth etc.).

Their aims are mostly to stimulate the activities of their members, to improve quality, to exchange knowledge and experience, to solve particular problems or just an opportunity for social contact among people etc.

Their *strategic aims* are:

- to improve the knowledge of members,
- to strengthen their influence and to lobby for their interests,
- to join people with the same interest and to stimulate the development of their field of work.

The most important resources of professional associations in agriculture are wide membership among farmers (they pay a membership fee, other funds can come as financial support from a municipality or the Ministry of Agriculture or other sources), knowledge and experience. Associations can have various positive effects: they can enable transfer of knowledge and experience between members, they can also organize education and training for their members, solve common problems because they can have power to influence change in relation to »political problems«, e.g., problems with legislation etc. Associations very often also have technical support from agricultural advisers, so they can also express their interests, wishes and problems to the Agricultural and Forestry Chamber.

Environmental associations and groups

Environmental concern is ever more present and has an impact on farming, too. There are some active local groups organized as civil society associations in the Municipality of Koper. One of them is DOPPS – Life Bird which is organized on a national level but also has an office in Koper. The association is active in various fields: protection of nature and birds, introduction of more bird-friendly farming techniques (late grass mowing), creating and improving relevant legislation and development documents (they were active, for example, in preparing the Rural Development Plan for Slovenia in the period 2007-2013 and also succeeded in adding some additional agri-environmental measures for implementation in the mentioned period etc.). Another such association in the rural area of the Koper Municipality is Pangea, with its seat in the village of Šmarje in Koper's rural area but active over the whole municipality area. Their main aims are environmental protection and rural development.

The resources that such associations have are educated experts, funds for their activities (from various sources: membership fees, support from the municipality and other institutions, research and other projects etc.). As elements of civil society, they have quite a good influence on planning, execution of various interventions etc. Their position in the political network is also not insignificant.

Their intentions are related to their field of work:

- to protect the natural environment and to draw attention to problems,
- to make people aware of the need for environmental protection,
- to ensure development in accordance with nature protection and maintenance of the cultural heritage,
- to lobby for »more nature«.

Private landowners

Owning land in the Koper area is today very popular among Slovenian and also foreign citizens (Italians, Germans, English). There are very varied reasons: some buy a house or a farm to live there (in some cases also to farm and obtain subsidies), some speculate (they buy still cheap agricultural land and speculate that for some reason the price of land will increase = capital investment or that they will succeed in changing the land use - from agricultural to building land), others buy a house or land for their holidays since the area is near the coast and attractive to tourists. They may even rent their house or apartment to tourists (mostly grey economy).

Such people are mostly well-situated, often also with good political connections and information.

4.4 High value nature at risk

The Koper area still has rich biodiversity and preserved natural characteristics, particularly in the rural hinterland, as a result of the diversified natural conditions, the Mediterranean climate and mostly »nature friendly« methods of farming or even abandoned agriculture. The rich biodiversity is a result of very diversified and mixed land use: agriculture, forestry, protected areas etc. The maintenance of biodiversity and nature protection is therefore an important aim of the municipality and the state.

Agriculture has an important impact on biodiversity. A specific form of land use within the same activity can support the conservation and sustainable use of the components of biodiversity, or seriously threaten them (Biodiversity Conservation Strategy of Slovenia, 2002). Agriculture is an activity that generates both benefits and adverse effects on biodiversity, depending on the farming practices and grazing and mowing periods. Due to their natural features, particular habitats are extremely sensitive to the effects of agriculture.

Governmental interventions assist selected measures and thus significantly affect farming practices. They often lead to sufficient food production and the introduction of new agricultural practices. However, they are often not in compliance with the sustainable use of components of biodiversity. Production increases can often be at the expense of the degradation of natural capital (fertile soil, clean water and semi-natural ecosystems). On the other hand, support to sustainable agricultural practices often leads to the maintenance and conservation of important habitats.

People who live in areas where agriculture is the primary source of income must be interested in sustainable land use practices. They can thus contribute to the conservation and sustainable use of components of biodiversity in the area. Certain habitats are conserved only if traditional agricultural activities continue to be carried out. Where farmland is the key sustainable element of an ecosystem, its abandonment leads to the irreversible degradation of various habitats. Even though the awareness of farmers has improved, the practice of »green technologies« does not achieve the desired level if agricultural and environmental policies do not offer farmers complementary directions, and if they do not act jointly.

Agriculture has always played an important role in the diversity of ecosystems. The maintenance and further development of farming activities is a prerequisite for the conservation and sustainable use of agricultural ecosystems. Taking into account the positive impact of low intensity agriculture on wild species, farmers must be given support in the setting-up and maintenance of suitable »created« habitats. The positive effect of agricultural practices and production on the conservation and sustainable use of components of biodiversity and landscape diversity must be guaranteed. Specific sustainable farming methods, in particular, should be preserved and maintained.

Slovenia implemented agro-environmental measures in 2001 when it introduced subsidies or environmental payments for environmentally friendly agriculture, following the European approach. The Slovenian agro-environmental programme, called KOP, currently includes 21 measures classified into three groups:

- reduction of the negative impact of agriculture on the environment;
- conservation of natural assets, biodiversity, soil fertility and the traditional cultural landscape;
- safeguarding protected areas.

Some analyses show that agro-environmental measures are implemented mostly among small and medium size farms, as an additional source of income (Perpar & Udovč, 2006).

In addition to agriculture, forestry is the principal land use activity which affects biodiversity. Forests cover 59.8 % of Slovenia and the area covered by forests continues to expand. Thus, in terms of forest cover, Slovenia is in third place in Europe, after Sweden and Finland. In the Municipality of Koper, too, forests cover 47% of the municipal area. They have various recognized functions, such as economic (timber and other forest products), environmental-protection (contribute to a reduction of CO₂ and production of oxygen, important habitats), social (recreation, leisure activities). Management of forests in Slovenia is on a high professional level and sustainably oriented. The Forestry Institute of Slovenia is the main professional institution on this field. Boundaries between forests and other land use are precisely defined.

Various kinds of environmentally important areas are also of great importance, such as NATURA 2000 areas, nature reserves, protected areas etc. The Municipality of Koper has all kinds of the mentioned areas.

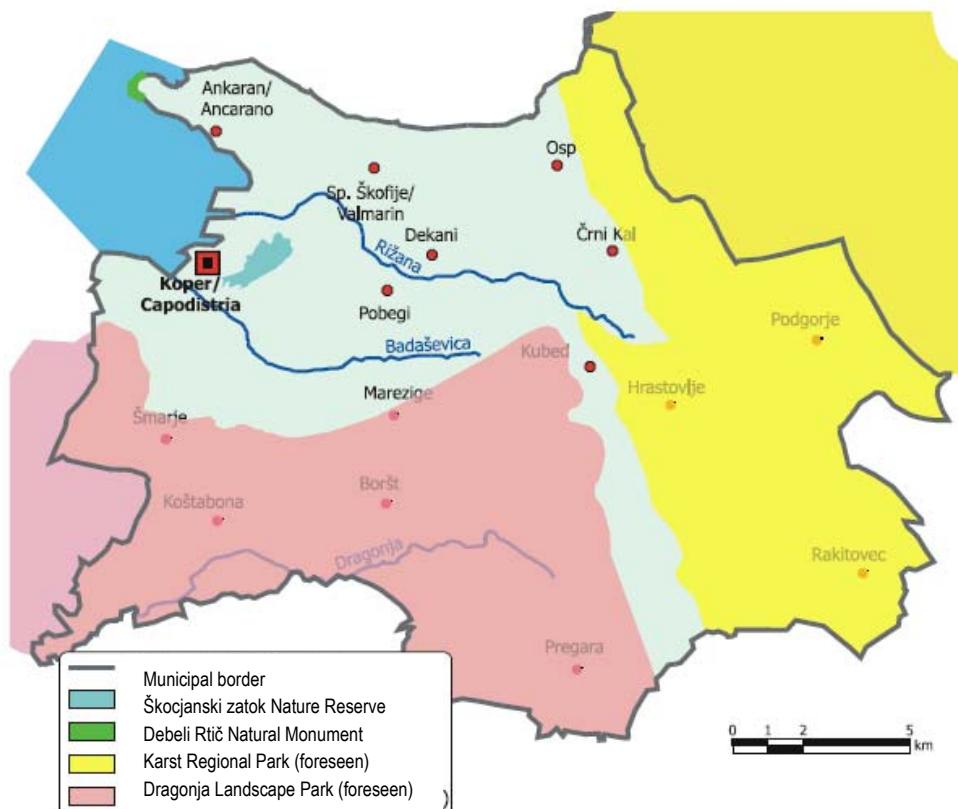


Figure 28: Protected areas in the Municipality of Koper
(Source: ARSO, 2006; Map: Mladen Novak).

NATURA 2000 areas are defined according to the Habitats Directive (pSCI) and according to the Wild Birds Directive (SPA). Such sites in total in Slovenia encompass 36% of the country, which is the highest (terrestrial) rate in the EU. In the Municipality of Koper, Natura 2000 areas exceed the national average and cover as much as 44% of the municipality territory, so a high percentage of the area is restricted in terms of development and needs special management plans. On the other hand, this means higher pressure on the rest of the municipal territory.

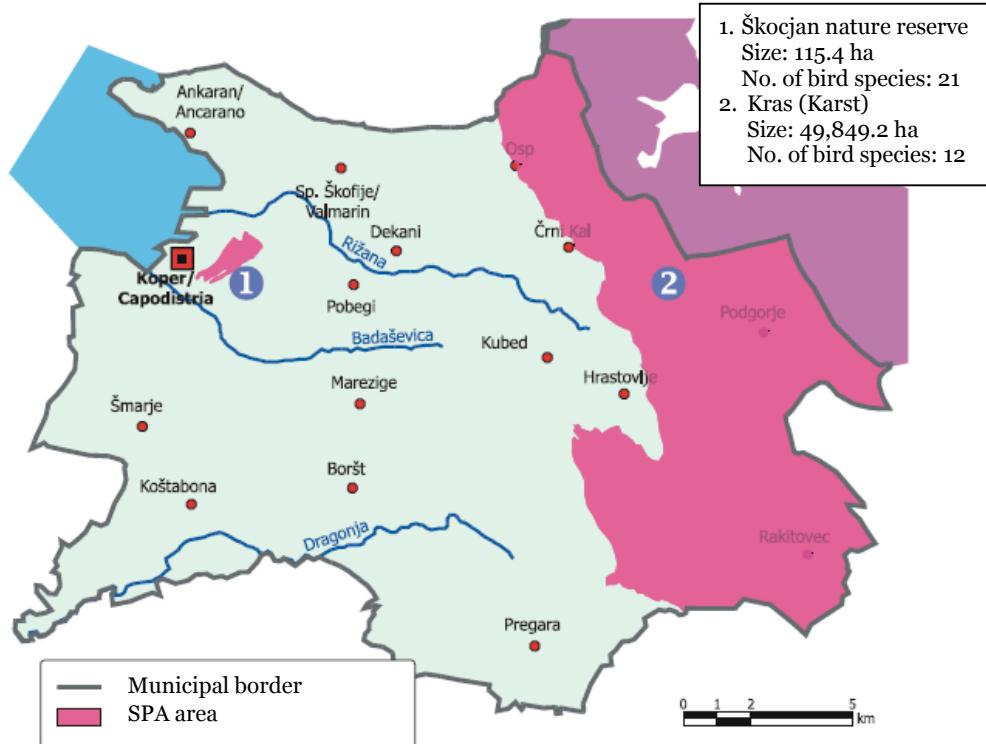


Figure 29: Areas according to the Wild Birds Directive - SPA
(Source: ARSO, 2006; Map: Mladen Novak).

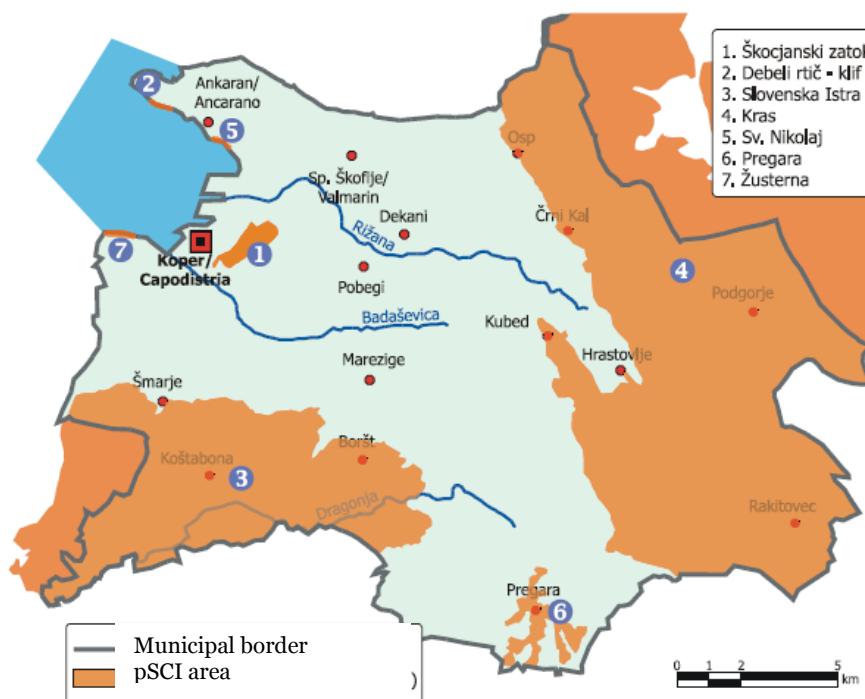


Figure 30: Areas according to the Habitat Directive - pSCI
(Source: ARSO, 2006; Map: Mladen Novak).

Other areas in the municipality are very important from an environmental aspect, such as Škocjan Bay Nature Reserve, the Karst edge area, Rizana and Dragonja river valleys, coast etc.

Škocjan Bay Nature Reserve is the largest brackish marsh in Slovenia, of great ecological significance and with extraordinary botanical, zoological and landscape value. It is protected by the Škocjan Bay Nature Reserve Act (published in the Official Gazette of the Republic of Slovenia, no. 20/98). A programme of protection and development is being carried out in the area of the reserve. Its basic aim is the restoration and protection of the bay's natural value by providing a suitable habitat for all of the endangered species of flora and fauna.



Figure 31: In November 2008, Škocjanski zatok Nature Reserve gained new residents, two Camargue mares

The entire Rizana River is a real wonder of nature. It can be divided into two basic units, which differ in their geological, hydrographical, relief and other geographical characteristics. Along its course, where in the past there was a series of mills, there are numerous monuments of archaeological, artistic and ethnological heritage, which are among the most important cultural sites in Slovenia.

Dragonja river valley is very attractive and a habitat of an indigenous grass snake. Its numerous waterfalls and constantly eroding meanders make the river a natural attraction. This is the only river in Slovenia that springs from flysch and reaches the sea across flysch deposits. Once an agricultural area, it is today overgrowing. Historical land use changes have been studied by Pirnat et al. (2008) and some summary results are presented on page 65 of this report. The Municipality of Koper, environmental groups and associations have put forward initiatives to protect the valley as a landscape park but these initiatives have so far been rejected because the state is not interested in financing new designated areas, and it is too expensive for the municipality alone.

The Karst edge is a picturesque and distinct geomorphological, climatic and vegetational border between the karst plateau and the flysch littoral of Slovenian Istria. It extends from Socerb, located on the Slovenia-Italy border, down through Mlini, located on the Slovenia-Croatia border. Its scaly geological structure, unique in Slovenia, hosts an extraordinarily rich flora and fauna, including many endemic species whose existence is threatened and/or which are protected. These species have either reached the limit of their ranges or have their origins here. All this natural wealth and rich cultural heritage is reason for this region to be included in the emerging Karst Regional Park.

4.4.1 Actors, their strategies and resources

Various actors with an impact on »high value nature at risk« were identified:

- Municipality of Koper
- Environmental associations and groups
- Ministry of the Environment and Spatial Planning
- Ministry of Agriculture, Forestry and Food
- Institute for Nature Protection of the Republic of Slovenia
- Farmers
- Forestry Institute of the Republic of Slovenia
- University of Ljubljana and University of Primorska

Municipality of Koper

The Municipality of Koper is responsible for nature and biodiversity protection of its territory. The municipality is aware of the importance and richness of its area and therefore supports environmental protection and initiates it itself or supports the initiatives of environmentalists. It supports the restoration of Škocjanski zatok Nature Reserve as well as the initiative for the establishment of a landscape park in the Dragonja valley.

Resources: experts, funds from the municipal budget for its field of work, experience and knowledge, databases, decision-making power (through the municipal council), tools and necessary equipment, offices etc.

Environmental associations and groups

Some environmental groups in the area are very active, as already mentioned. Škocjanski zatok Nature Reserve was restored on their initiative and DOPPS, as one of them, also manages the restored reserve. Environmental groups in the municipality also organize cleaning actions, inform the local population about environmental problems and take various other actions to make people aware of the importance of nature and the preservation of biodiversity.

Resources: experts, funds for their activities, political connections etc.

Ministry of the Environment and Spatial Planning (MESP)

MESP is the responsible ministry for nature and the preservation of biodiversity, as well as for spatial planning. Its role was already described on page 59.

Resources: decision-making power, available funds, experts and administrative staff, databases, legislation.

Ministry of Agriculture, Forestry and Food (MAFF)

MAFF prepares and implements agricultural policy measures, of which agri-environmental measures are the most connected with nature and the preservation of biodiversity.

Resources: decision-making power, available funds, experts and administrative staff, databases, legislation.

Institute for Nature Protection of the Republic of Slovenia

The main task of the institute is to conserve Slovene nature, with special care devoted to its most valuable and most threatened parts. The institute's key tasks in compliance with the Nature Protection Act are the following:

- collection of data on plant and animal species, their habitats and ecosystems (in cooperation with the implementers of public works in the sphere of guiding natural resource management);
- registration and evaluation of separate parts of nature;

- managing databases concerning natural assets and components of biodiversity;
- monitoring the state of nature preservation, biodiversity and natural assets;
- preparation of professional models:
 - for identifying the status of natural assets and their classification as natural assets of national and local concern,
 - for measures to protect the components of biodiversity,
 - for measures to protect natural assets of local and national concern,
 - for protection, and
 - for the preparation of Red Lists;
- preparation of nature conservation guidelines;
- presentation of professional opinions in the sphere of nature conservation;
- cooperation in the preparation of plans for the management of protected areas;
- management of protected areas established by the state (if so stipulated in the protection act);
- cooperation in the procedure of selecting concessionaires;
- providing professional assistance to the owners of natural assets as well as owners of land in the protected areas;
- professional control over the implementation of nature conservationist tasks;
- cooperation in the implementation of conservation measures regarding natural assets of national concern;
- implementation of professional tasks in the sphere of nature conservation in compliance with this law and other regulations;
- ensuring uniform professional methods and procedures in the sphere of nature conservation;
- cooperation in the preparation of a nature conservation education program, and
- building public awareness of the significance of nature conservation.

In addition to the tasks stipulated by law – this includes Slovene legislation and strategies from the sphere of nature conservation – the institute is dedicated to various international and national projects enhancing nature conservation.

The institute is a professional body of the Republic of Slovenia for the implementation of the CITES international convention and the principal of the EU LIFE III – Nature Project entitled “Natura 2000 in Slovenia - Management Models and Information System”. Projects carried out within the LIFE framework are intended to advance the EU nature-conservancy legislation (Bird Directive 79/409/EEC, Habitat Directive 92/43/EEC) as well as to establish Natura 2000 areas in order to conserve plant and animal species and habitat types of European concern.

As a partner, the IRSNC takes part in numerous domestic and international projects. In carrying out their activities they strive for expertise, objectivity and constructive dialogue, and try to establish the best possible relations with all participants, e.g., representatives of local communities, locals, farmers, tourist workers, entrepreneurs, etc., and with experts from other fields.

Resources: limited funds from the national budget, projects, experts with a lot of knowledge and experience, regionally organized network of offices.

Farmers

The role of farmers in general has already been described on page 66, but farmers can also be important actors in nature and biodiversity preservation. They can contribute to it or on the contrary, help to destroy it. Farms in the Koper area are more or less small, mostly with extensive forms of production. There can be negative effects from the use of mineral manures and pesticides. On the other hand, they can implement agri-environmental measures and contribute to nature and biodiversity preservation.

Resources: property, knowledge and experience, their associations and cooperatives etc.

Forestry Institute of the Republic of Slovenia

The Slovenia Forest Service is a public institution established by the Republic of Slovenia (Forests Act, 1993), which performs public forestry service in all Slovenian forests, irrespective of ownership. Its strategic goal is the preservation and close-to-nature development of Slovenian forests and of all their functions for sustainable and good management and use, as well as nature conservation in the forest space for the good of present and future generations.

At the workshop with stakeholders, one strategic aim of the institute was expressed: preservation of forests on less favoured areas for agriculture and in small islands in agricultural and peri-urban landscape. Bigger complexes must be preserved, while small forest islands are an aesthetic element in the landscape and a source of biodiversity, as well as having a recreational purpose.

Resources: network of 14 regional units, 93 local units and 408 forest districts, funds for their activities, staff with knowledge and experience, property.

University of Ljubljana and University of Primorska

(Their roles and resources have already been described on page 60).



Figure 32: Village of Koštabona in the rural hinterland of Koper



Figure 33: Coast at Debeli rtič (protected natural monument)

4.5 Strategies to cope with main land use issues in the Municipality of Koper

Strategies aims to focus on the above mentioned three main land use issues which are most pronounced in the peri-urban area of the municipality:

- land pressure due to housing,
- agriculture under pressure (maintenance of agriculture),
- preservation of nature and biodiversity.

Strategy 1:

“Land use efficiency and protection of the best agricultural land”

The pressures of urbanization have caused the sealing and destruction of quality agricultural land in the peri-urban area. Suburbanization and individual house construction along main roads have diminished land use efficiency and caused a decrease in agricultural production. A clear and science-based policy on spatial development and land use should provide a tool for the preservation of valuable agricultural land and production capabilities as well as define rules for resolving disputes between different land use needs.

In Slovenia, in spatial plans of the state and of local communities, agricultural land is divided in two categories: agricultural land of the best quality and other agricultural land. The evidence data are linked to the base of the land cadastre.

As the Act of spatial planning has indicated already, the existing system of land evaluation in Slovenia is not relevant. Recent expert recognitions show that soil characteristics are not the only parameter which determines production potential and consequently economical potential of agricultural land. Suitability (e.g. land exposition) of the land for certain agricultural production, availability of agricultural infrastructure, possibility of carrying out of a certain economically sound agricultural production, accessibility of agricultural plots, and isolation from pollution sources, are very important factors, as well.

Due to above mentioned, the existing agricultural land categorisation should be changed or upgraded. Soil quality, specific suitability of agricultural land for a certain agricultural branch, possibility of introduction of new production type (e.g. sustainable and ecological production), and some other parameters, which importantly influence agricultural land productivity, should be taken into account. This, much higher complexity of the categorisation should be diversified additionally by spatial criteria and in cases of special agricultural branches even in production areas (i.e. districts or any differently defined spatial regions).

The main objectives of the strategy:

- For the best agricultural land, the following principle should be taken into consideration: the higher quality of the land, the more strict criteria should be to change the land designation, because the economy of agricultural production on such land is higher. Similar should be in force for the agricultural land in bigger complex, especially for the complexes, where the basic infrastructure required for intensive agricultural production is built already.
- After preceding reconciliation with the other interests, the agricultural land with high and good soil production potential for agricultural land use should be defined as the best agricultural land, based on environmental and spatial constituent vulnerability.
- Measures for updating and intensification of agricultural production or land reclamation could be implemented in the areas with high and good soil production

potential for agricultural land use, and where no special restrictions regarding groundwater protection for drinking water use are in force. The existing agricultural structure, the field road network, the spatial directions (e.g. directions of field cultivation), the natural corridors, and the landscape pattern logic should be taken into consideration.

Strategy 2:

“Green and recreational areas to increase quality of living”

Urban sprawling and unorganized spatial development have produced a state in which green and recreational areas are scarce and do not provide an adequate quality of living in the peri-urban area. Roadside construction and lack of organized settlements centers make it difficult to plan and allocate green areas, thus diminishing the quality of living. Recognizing the importance of such areas and their integration in the spatial planning process is essential to guarantee a higher living standard of the population in the peri-urban area. The aim is to research the benefits of green areas and to create a policy on green area allocation.

The main objectives of the strategy:

- Green system of the settlement should be formed, where green areas of the settlement, water areas and areas aside water, agricultural land and forest areas will be included. Formative, ecological, and social function should be defined for each part of the green system.
- Green areas form the green system of the settlement. Their internal connection and connection with other systems is inevitable.
- With planned green areas conservation and recreational areas management, the ratio between urban and natural areas is maintained. In the town hinterland, the possibility of simultaneous purpose of recreational areas with agricultural and forest areas should be turned to advantage.
- Green and open areas, crucial for the green system of the town in ecological and social sense, should be protected before the land designation.
- Balance between open and built up areas is important in broader town areas. Segmentation with vegetation, especially with forest, agricultural and other green areas, should be used as a protection against fusion of settlements, or fusion of single rounded up settled areas in bigger homogenous built up area. Man made or natural border of a settlement should be restored and protected for the recognition of the border of a certain settlement.

Strategy 3:

“Rural Development Plan 2007-2013”

Turism and recreation connected with agriculture should be stimulated, because of traditional cultural area quality and attractiveness, what is a result of prevailing agricultural land use in rural areas in the past. For this purpose, maintaining of the traditional land use as well as alternative agriculture will be stimulated, especially in the areas of exceptional landscape, in the whole coastal hinterland and in other areas already protected or designated for protection as natural values. Within this, the principle of sustainable management with renewable natural resources, maintaining of the cultural landscape and environment protection should be stressed.

In the rural settlements with agro-tourism, possibilities for farm enlargement for overnight accommodation capacities, and for other supplemental farm activities in connection with tourism will be assured.

Important question is, how to steer the development of Istrian countryside that the area will keep to be settled, that the abandoned houses will be renovated, that overgrown terraces will be cultivated again, that new infrastructure will be established in a way to enable contemporary way of life, and together with the development of tourism, and other environmental friendly activities will enable dwellers additional income.

The main objectives of the strategy:

- to build further development on abundant potentials of natural and cultural heritage, having in mind that spatial and cultural continuum enable to build up kind and abundant living and working environment,
- maintaining the settlement and revitalisation of the villages,
- concern for environment protection and revitalisation of the cultural landscape,
- keeping the agricultural production, development of ecological agricultural production, and assurance of appropriate income for the farmers,
- maintaining and renovation of cultural heritage and its inclusion to the market offer,
- development of the rural tourism,
- development of supplementing enterprise and handcraft activities on the farms,
- management of village centres, renovation of common infrastructure and buildings.

5 Conclusions

The purpose of spatial planning is to ensure harmonised spatial development through the coordination of economic, social and environmental protection aspects of development. Spatial planning is one of the mechanisms for ensuring sustainable development in space, since it guarantees the conservation of nature, the protection of natural resources, the cultural heritage and other high quality features of the natural and cultural environment, by the application of spatial planning and urbanistic methods.

Decisions related to matters concerning spatial planning are based on analyses of, and expert findings about the characteristics of space and the developmental possibilities of particular activities located within it. Developmental needs and protection requirements must be incorporated into spatial plans. Analyses of sectoral interests in space and environmental vulnerability studies, which are incorporated into legislative instruments concerning spatial planning, form the foundation for the coordination of developmental needs and protection requirements.

The phase of preparation of new spatial documents in the Municipality of Koper is a good chance to analyse past development, actual problems, development possibilities and needs and to evaluate the municipal space. Some analyses have already lead spatial planners to consider a new spatial concept. The concept of development in three semi-circular belts, which was presented by a spatial planner, is one of the most appropriate, due to the spatial characteristics of the area. The coastal belt is already overburdened with existing settlement, with the presence of Port of Koper as an economic activity of national importance with large spatial needs, activities connected with the sea etc. Because development cannot be stopped, its direction into the "second belt" (peri-urban areas) is the only possible and reasonable solution, but planning its development needs special attention to the qualities of these territory, which must as far as possible be preserved. Agriculture must also be retained in the second belt as well, not just because of the most favourable conditions for such activity there but also because of the "identity" that agriculture gives to the area (i.e., landscape). Agriculture cannot therefore be preserved only in the "third belt" (rural areas). Bearing in mind the quality of natural resources (soil quality, water sources, important environmental areas etc.), an inter-sectoral planning approach and adjustments can contribute to more optimal land use.

Agriculture in the Municipality of Koper is very important, due to its multi-functional role. For some professional farms and agricultural enterprises its economic function is of great importance, for other farms other functions such as social and environmental are also very important. Agriculture contributes to the attractiveness of the area for tourism, with a well preserved cultural landscape and local agricultural products. Because the amount of good agricultural land in the municipality is limited, special attention should be devoted in spatial planning to how to avoid the highest quality agricultural land when planning interventions in space and how to maintain as much of it as possible. One of the findings of the workshops was that the ideas of spatial planners and agricultural experts are not in conflict. Spatial planners also want to preserve the best agricultural land, but they need a more exact definition or, better still, an evaluation of the quality of agricultural land, which will give them information about which land is of better quality and has priority to be preserved. Such an approach is particularly important for peri-urban areas of the Municipality of Koper, because the best agricultural land is located there and other development pressures in this area are also the highest.

Agriculture has always played an important role in the diversity of ecosystems. The maintenance and further development of farming activities is a prerequisite for the conservation and sustainable use of agricultural ecosystems. Bearing in mind the positive impact of low intensity agriculture on wild species, farmers must be given support in the setting-up and maintenance of suitable "created" habitats. The positive effects of agricultural practices and production on the conservation and sustainable use of

biodiversity components and landscape diversity must be guaranteed. Specific sustainable farming methods, in particular, should be preserved and maintained.

In connection with nature and biodiversity protection, small farms play an important role in preserving the existing biodiversity in agricultural areas. Since their goal is often not maximizing the profitability of their agricultural production, they use less intensive production techniques and are more interested in participating in agri-environmental measures. Instead of high productive species, they often use and maintain autochthonous species of plants and animals and use extensive production methods instead of intensive ones.

A decrease in the extent of the best agricultural land, mostly in flatlands, is a serious obstacle to efficient improvement of the agrarian structure and competitiveness of agriculture. Data show a worrying decrease in the extent of agricultural land in the Municipality of Koper, and in Slovenia in general, above all best quality land. Slovenia is already a country with one of the smallest areas of agricultural land per capita. To improve the situation and decrease the trend of building on the best agricultural land, agricultural land policy should be supplemented and implemented strictly, particularly within the framework of the following measures:

- the best agricultural land must be precisely defined and also presented spatially;
- new settlement areas should be directed to areas characterised by agricultural land of lesser quality, or to forest areas;
- the best agricultural areas can be used for construction interventions only when other solutions are not available for the construction of traffic, communal or social infrastructure;
- a portion of revenue from taxation on changes in land usage should be directed to funds designated for other agricultural land quality improvements;
- the quantity of the best agricultural land that becomes the property of non farmers (to limit speculations) must be limited;
- recording of agricultural land trade must be carried out.

The area of the Municipality of Koper is characterised by extremely varied and relatively well preserved nature. The relatively small municipal territory has high biodiversity, which is primarily the consequence of different climate types converging, of the geological structure and great differences in altitude, and which is also largely connected with the traditional agricultural use. These characteristics must be maintained.

The interests of nature protection and the conservation of biodiversity are included in the spatial planning process in compliance with legislation and on the same level as other sectors that represent public interests determined by legislative acts. Procedures concerning the drawing up of spatial planning documents and spatial realisation documents are an important instrument for the inclusion of biodiversity conservation in spatial planning, since the acceptability of the planned activities is assessed according to the expected impact on nature and biodiversity. The provision of reliable data on management, protection, measures and restrictions is a necessity if procedures are to be less expensive, more sensible and not so lengthy.

In the analysis phase of drawing up of spatial documents, the basic spatial objectives, environmental vulnerability studies and integrated environmental impact assessments take into account nature conservation and biodiversity issues. These documents lay the foundations for the selection of forms of activity that maintain natural resources and characteristics and conserve biodiversity, or whose impact is minimal.

In order to avoid negative impacts, the methodology of spatial planning should be improved. Agriculture and other sectors must collaborate in the process of spatial planning, with other users as an equal partner. Solutions should not pursue only short-term economic profits. Natural resources of national importance, such as the best agricultural land and environmentally important areas (protected areas, Natura 2000

areas etc.), should be managed carefully and reasonably, and should be protected to the highest possible extent. Agriculture must ensure an adequate expert basis to ensure optimal spatial planning, and verification and definition of landmark terms, such as farm locations, typical production areas, areas of best quality agricultural land etc. Conflicts should be resolved with consideration for all space users and their needs for development (sectorial plans). Democratic procedures of integrated planning (inter-sectoral approach) should be harmonized, taking into the account the principles of sustainable development.

Spatial planning should be based on professional background studies and decisions. Political power and the power of capital can represent a real danger here and modify professional decisions. In Slovenia, changes to spatial legislation have been frequent in the recent period and almost every change in governmental coalition has also been reflected in spatial legislation. Frequent changes are not good, because they are often not well considered and detailed; they cause confusion and, at the same time, provide opportunities for speculators to take advantage of the “unclear situation”.

Inclusion in the PLUREL project came at the right time for the Municipality of Koper, which is currently in process of preparing new spatial documents. The activities of the project can assist in this process. Professional help from outside (as in the case of the researchers) can facilitate an inter-sectoral planning approach and can avoid land use conflict already in the early preparation phase. The Municipality of Koper is interested in such an approach, as are actors from various sectors that cooperated in the workshops. We can hope that the informal strategies defined among the workshop's participants will help the Municipality of Koper to prepare spatial documents that will enable sustainable future development of the municipality.

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7 Appendix

Appendix 1: Regional specific questions for the interviews

A. Land pressure due to housing / Stanovanjska gradnja, pozidava zemljišč

- A1. Kakšne spremembe v zvezi s pozidavo zemljišč zaznavate v obdobju po osamosvojitvi Slovenije v mestnem, primestnem in podeželskem prostoru?

What changes in connection with new building on land do you perceive in the period after the independence of Slovenia in urban, suburban and rural areas?

- A2. Kaj so vzroki teh sprememb? (rast števila lokalnega prebivalstva v občini, priseljevanje od drugod, turistične, gospodarske, transportne potrebe ali še kaj drugega?)

What are the causes of these changes? (growth in the number of the local population in the municipality, migration from elsewhere, tourist, economic, transportation needs, or anything else?)

- A3. Kakšne so po vašem mnenju posledice teh sprememb in kako se odražajo v mestnem, primestnem in podeželskem prostoru? Kakšne učinke, posledice bodo lahko imele te spremembe?

What do you think are the consequences of these changes and how they are reflected in urban, suburban and rural area? What effects, the consequences will be given this change?

- A4. Kako ocenujete skrb za ohranjanje zelenih površin (in rekreativnih površin) ob pozidavah v mestnem, primestnem in podeželskem prostoru?

How do you assess the concern for the preservation of green spaces (and recreational areas) at the sealing in urban, suburban and rural area?

- A5. Kako ocenujete (podpirate, zavračate, vam je vseeno) zgoraj navedene spremembe v stanovanjski gradnji in siceršnje pozidave v mestu, primestnem prostoru in na podeželju?

How do you assess the (support, decline, you still) above mentioned changes in housing construction and other sealing in the city, suburban and rural area?

- A6. Kdo so po vašem mnenju vplivne skupine in/ali posamezniki na področju stanovanjske gradnje in siceršnje pozidave v mestnem, primestnem in podeželskem prostoru? Ali so vam znani njihovi cilji in strategije za dosego teh ciljev?

Who do you think are influential groups and / or individuals in the field of housing and other sealing in urban, suburban and rural area? Do you know their objectives and strategies to achieve those objectives?

- A7. Kako ocenujete svoj vpliv na tem področju?

How do you assess your impact in this area?

B. The pressure on agricultural land / Pritisak na kmetijska zemljišča

- B1. Kakšne spremembe v obdobju po osamosvojitvi Slovenije zaznavate v zvezi s kmetijskimi zemljišči v mestnem, primestnem in podeželskem prostoru?

What changes in the period following the independence of Slovenia, you perceive in relation to agricultural land in urban, suburban and rural area?

- B2. Kaj so vzroki teh sprememb? / *What are the causes of these changes?*

- B3. Kakšne so po vašem mnenju posledice teh sprememb in kako se odražajo v mestnem, primestnem in podeželskem prostoru? Kakšne posledice, učinke bodo lahko imele po vašem mnenju te spremembe?

What do you think are the consequences of these changes and how they are reflected in urban, suburban and rural area? In your view: what consequences, the effects will these changes have?

- B4. Kako ocenujete spremembe namembnosti in pozidavanje kmetijskih zemljišč (podpirate, zavračate, vam je vseeno)?

How do you assess the change in agricultural land use and building on such land (support, decline, don't mind)?

- B5. Kakšen je po vašem mnenju interes za kmetovanje in proizvodno rabo kmetijskih zemljišč med kmeti/lastniki v primestnem in podeželskem prostoru?

In Your view: What is the interest in farming and the productive use of agricultural land between farmers / owners in suburban and rural area?

- B6. Kakšen interes imajo po vašem vedenju kmetje/lastniki zemljišč v zvezi z nakupom/prodajo kmetijskih zemljišč v primestnem in podeželskem prostoru?

In Your view: What interest do farmers / land owners have in connection with the purchase / sale of agricultural land in suburban and rural area?

- B7. Kaj menite, kakšen je interes širše družbene skupnosti za ohranitev kmetijstva in kmetijskih zemljišč v primestnem prostoru?

In Your view: What do you think, what is the interest of the wider community for the preservation of agriculture and agricultural land in the suburban area?

- B8. Kakšen je bil po vašem mnenju obseg sprememb kmetijskih zemljišč v zazidalna zemljišča v obdobju po osamosvojitvi Slovenije v mestnem, primestnem in podeželskem prostoru?

What was in your view, the scope of the changes of agricultural land in built land during the period following the independence of Slovenia in urban, suburban and rural area?

- B9. Kateri so po vašem mnenju ključni razlogi za spremembo namembnosti kmetijskih zemljišč?

What do you think are the key reasons for the change of agricultural land use?

- B10. Kdo so po vašem mnenju največji interesenti za spremembo namembnosti kmetijskih zemljišč? Ali se po vašem mnenju pri teh spremembah upošteva

kakovost naravnih virov, kot je npr. kakovost tal, in se gradnje usmerjajo na slabša kmetijska zemljišča?

Who do you think is the most interested for the change of agricultural land? Do you think that these changes take into account the quality of natural resources, such as soil quality, and the constructing is directing on less quality agricultural land?

- B11. Kdo so po vašem mnenju vplivne skupine in/ali posamezniki na področju spreminjanja kmetijskih zemljišč? Ali so vam znani njihovi cilji ter strategije za dosego teh ciljev?

Who do you think are influential groups and / or individuals in the area of changing agricultural land? Do you know their objectives and strategies to achieve those objectives?

- B12. Kako ocenujete svoj vpliv na tem področju? / *How do you assess your impact in this area?*

C. Threats to the values of nature and biodiversity/ Ogroženost vrednot narave in biodiverzitete

- C1. Katere so po vašem mnenju glavne spremembe v zvezi z varovanjem pomembnih vrednot narave, biološke pestrosti in kvalitet prostora?

What do you think are the main changes relating to the protection of important natural values, biodiversity and the quality of space?

- C2. Kaj so vzroki teh sprememb? / *What are the causes of these changes?*

- C3. Kako ocenujete te spremembe (dobre, slabe, niso pomembne)? / *How do you assess these changes (good, bad, are not important)?*

- C4. Ali katero teh sprememb zaznavate kot problem? / *Do any of these changes you perceive as a problem?*

- C5. Katere so tiste vrednote naravnega okolja in prostora, ki bi jih bilo po vašem mnenju nujno potrebno ohraniti in jih upoštevati pri načrtovanju rabe prostora?

What are the values of the natural environment and space, which would you consider absolutely necessary to maintain and should be taken into account in land use planning?

- C6. Ali se po vašem mnenju v dosedanji praksi dovolj upošteva varovanje kakovosti in vrednot naravnega okolja?

Do you think that the current practice consider protection of quality and values of the natural environment enough?

- C7. Kdo so po vašem mnenju vplivne skupine in/ali posamezniki (ne)varovanja teh vrednot? Ali so vam znani njihovi cilji ter strategije za dosego teh ciljev?

Who do you think are influential groups and / or individuals of (non)protection of these values? Do you know their objectives and strategies to achieve those objectives?

- C8. Kako ocenujete svoj vpliv na tem področju? / *How do you assess your impact in this area?*