

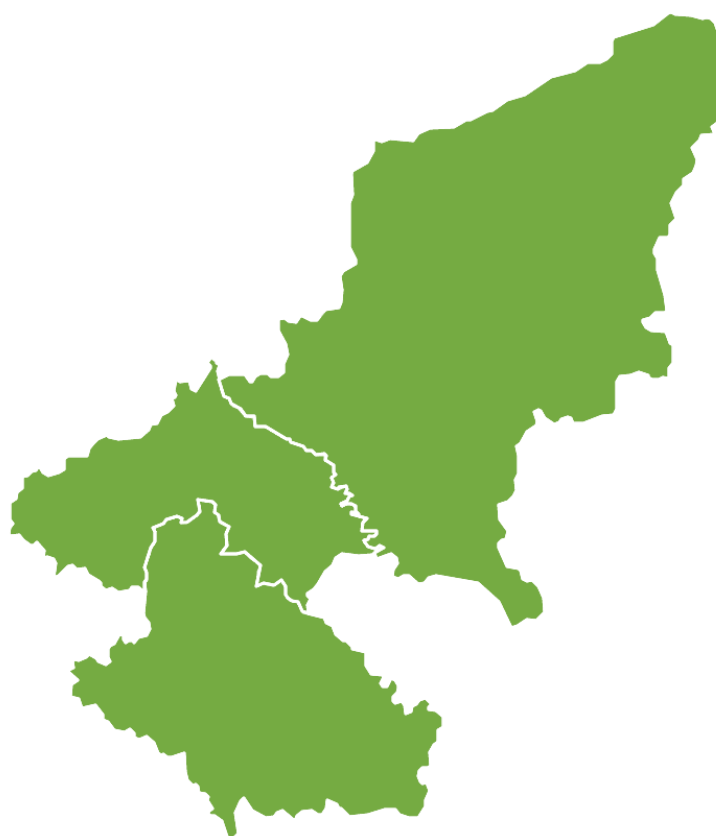
„Common Cross Border Strategy”

Development of common cross border strategy
for Somogy, Koprivnica-Križevci and Bjelovar-
Bilogora Counties



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Summarising Study



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Summarising Study

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The study below has been done as the common methodology and proposition description specified. The sectoral and county studies constitute as the study's primary sources.





1. Short Introduction of the Cross Border Region

The region which is the study's object consists of two Croatian and one Hungarian County. The Croatian counties traditionally are smaller administrative units than the Hungarian counties. It is worth mentioning, from the three of the counties, Bjelovar-Bilogora may not be adjacent to Hungary, but because of the County's proximity it is part of the cross border region.

Somogy County can be found in the south-eastern part of Hungary, south of Lake Balaton. It is part of the Southern Trans-Danubian region and its neighbouring counties are Zala, Fejér, Tolna, Baranya and Veszprém from the Hungarian side; and Verőce-Dravamente and Koprivnica-Križevci counties from the Croatian side. The area of the region is 6 036 km², it is about 6.5% of Hungary's area, its population counts 318 thousand people, which is 3.2% of Hungary's population. The population density is 52 people/ km², which means that Somogy is the scarcest habited County of the country (2013).

Koprivnica-Križevci County lies at the northwestern part of the Croatian Republic. Considering the size of the Croatian counties it takes the 17th place with its area of 1748 km², and covers 3.2% of the land. The County's population is 115 thousand people, which gives 2.7% of the Croatian population. The population density of the County is 66.12 people/km² (2013).

The cross border region's third part is **Bjelovar-Bilogora County**; it can be accounted as a medium-sized County in Croatia. It is the southeastern neighbour of Koprivnica-Križevci. It is only adjacent to Croatian counties. Its area is 2 640 km², the population is 119 thousand people, which is 2.8% of the population, while the population density is 45.37 people/km² (2013).

Altogether the cross border region's population is 552 thousand people, its area is 10 423 km².

Both Bjelovar-Bilogora's and Koprivnica-Križevci counties' population density lag behind the Continental Croatia's (NUTS-2 region) average (excluding Zagreb). Both counties belong to the scarcer habited areas.

Major characteristics of the cross border region

The two counties of the Croatian region lie beyond the agglomeration of Zagreb. Their proximity to the capital could be beneficial, but the poor quality of the transportation connections makes the availability of the counties more difficult. The Hungarian border, the Drava boundary river and the few crossing opportunities over the river are making cross-border connections more difficult. Somogy County is quite distant from the capital and it also does not have excellent transportational connections (excluding the M7 motorway, which is at the northern border of the County). The Balaton makes a natural boundary from north of the County. Further east the Danube and its few crossing routes, also the undeveloped east-west transportational connections indirectly make the connections of Somogy more difficult.





Figure 1: Bjelovar-Bilogora, Koprivnica-Križevci and Somogy counties

The geographical location could allow Somogy to be able to tend fine relations with its Croatian neighbours: Koprivnica-Križevci and Verőce-Drávamente counties (the latter does not constitute part of the current developmental region), however this activity only develops slowly following the joining to the European Union, the motorway construction and the border-opening.

It should be emphasized, that in the studied region there is only one public road (Gola-Berzence) and one railway (Botovo-Gyékényes) border crossing point! Excluding these, the Mura-Letenye motorway border crossing point should be accounted as a state affecting border station in the cross border region, which is exceptionally significant considering the relations of the two countries. The border crossing railway at Murakeresztúr has an importance in freight traffic, which does not include Koprivnica-Križevci and Bjelovar-Bilogora stations because of the connecting railways. The Barcs-Terezino Polje border crossing point has significance for the region





of the three counties, because the E661 road, which crosses Barcs, connects the southern part of Somogy with the Daruvar region of Bjelovar-Bilogora County

From the geographical and infrastructural status it can be recognised, that the three counties of the cross border region are **relatively isolated**. This can be said about the region as a whole and also about the cross border relations within the area. **The relative isolation essentially limits the opportunities of economic development and tourism, and also detains the social-economic development. Chronic decadence of demographic circumstances is specific in all three counties.** The population of the cross border area is consistently decreasing for more than one and a half decade. It is typical for the inner migrating processes, that the **smaller settlements, after being almost completely marginalized economically too, lost their population retention capability and started to decline demographically too.** This is a significant challenge in all three counties! The population is aging, the average age is increasing, while the number of children is decreasing and also the supporting rate is increasing, putting an ever growing burden on the social supporting systems, which are partially upheld by local municipalities. Younger people are moving to the cities and outside of the area for the hope of better economic perspectives, while the unemployed stay.

Census datas of 2011 *:Datas of 2014	Full population	0-14 years old age group rate	14-65 years old age group rate	Older than 65 years old age group rate	Average age	Aging index
Bjelovar-Bilogora County	119 764	15.40%	66.22%	18.38%	42.0	114.9
Koprivnica-Križevci County	115 584	15.70%	66.56%	17.73%	41.6	110.5
Somogy County	317 947	14.11%	68.49%	17.40%	41.1*	134.9*

Chart 1: Demographic data (source: HCSO, CBS, 2015)

The economy of the counties is emerging very slowly from the effects of the economic crisis (which affected more the less competitive counties). Koprivnica-Križevci and Bjelovar-Bilogora counties' economy is shrinking. However the agriculture, stock farming, agricultural food processing industry, timber industry, forest management and tourism partly have the factors to recover from this state. **The economy is having major capital shortage** in the cross border area. There are no investments in the industries mentioned earlier; the local competitive disadvantage is significant. The improvement of the agriculture's productivity and pump-priming ability is limited by the major **fragmentation of the lands**, which is aggravated by the fact, that local farmers are reluctant to establish associative cooperations. From the cross-border's many natural assets the **Drava River and its area** stand out. The river has serious tourism potential, but the region is difficult to reach and lacks the appropriate touristic infrastructure (for example: accomodations). In the Drava region, beneath the surface, there are plenty of resources. Not only the extraction of hydrocarbon is important but the **geothermal energy** can be used with high effectiveness, but this also – among many reasons - is prevented by capital shortage.

It can be seen clearly that the **problems of the region and its exit opportunities are showing similarities, which justifies the establishing of common development strategy.**





	2010	2011	2012	2013	2014
Bjelovar-Bilogora County	116 435	115 800	115 148	114 580	114 089
Koprivnica-Križevci County	121 325	120 139	118 722	117 508	116 160
Somogy County	320 578	317 947	318 778	318 096	315 512

Chart 2: Population change (source: Eurostat, 2015)

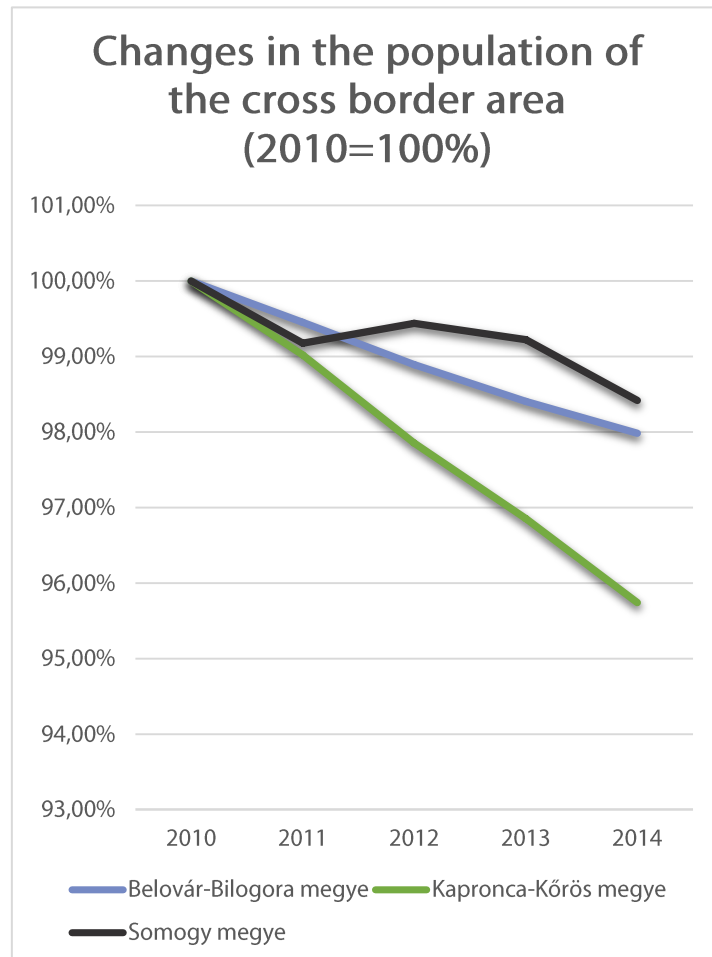


Figure 2: Changes in the population of the cross border (2010=100%) (Eurostat, 2015)

Somogy County

Somogy County excluding the agglomeration line next to Balaton is mostly a rural region and in a functional meaning it has a lack of cities. In the County there are 245 settlements, only 16 of them are cities. Examining Somogy County's demographic status, the consistent declining of population is conspicuous. While there were 337 thousand people living in the County in 2001, by 2014 there were only 315 thousand residents. The society's aging is growing. The average age grew by 3.5-3.6 years in just 14 years, women's average age became 44.9 years, men's average age was 40.8 years in Somogy. This value of average age is higher by one year than the national average.

Examining the inner constitution of the County from an economical view, three representative areas, emerging from their environment, can be singled out: the southern part of Somogy, the region of Balaton's vicinity, also Kaposvár and

its area.

The chain of Balaton's neighbouring settlements from Siófok to Marcali, which features a well built transportational infrastructure (M7, railway), and the tourism based economy, but also in larger cities the processing industries have old traditions. This area has tight connections with settlements on the Balaton-coast in Zala and Veszprém counties.

Kaposvár is the administrative centre of the County; also it is a city with County authority. (As a city with County authority it has special developmental political competencies and in many cases the city might be treated separately from other parts of the County.) Advanced service sector specifies the city and the settlements in its vicinity, but processing industry capacities are present too. The area of Dombóvár in Tolna County connects integrally to this region, which axis is formed by





settlements located on the sides of Road 61. With the construction of the M9 express road, the connection between the two cities could be strengthened. Kaposvár is on the map of tertiary education, because of the University of Kaposvár. The Faculty of Agrarian- and Environment Sciences increases the economical competitiveness of both the settlement and region.

In the County the southern part is in the most disadvantageous position (Inner-Somogy, Drava-coast), but in smaller settlements lying farther from the cities and main road lines (Outer-Somogy), negative processes can be experienced. These areas of the County have relatively small population density, but unemployment is specifically high, the level of income and the labour force's qualification significantly falls behind the County's average.

Somogy County possesses better than the average agricultural conditions. The agriculture's, forest management's and fishery's rate countrywise is higher (Somogy 6.8%, Hungary 3.5%) just as the accomodation services and catering (Somogy 8%, Hungary 3.3%). This proves both the importance of the tourism of Balaton and Somogy's agricultural orientation, and the lack of innovative, marketable services and activities. Agricultural conditions are quite diverse. More than half of the County's area is covered by hills; erosional damages are great most time of the year. 40% of the hills are heavily teared, divided by dales of rivers and streams, unsuitable for large-scale economy. The other 60% are mostly gently sloping lands, which combined with the plane areas certainly gives beneficial conditions for agricultural exploitation. The climate is fair, both mediterranean and Atlantic effects prevail. Despite these facts, on the larger part of the land agricultural activities take place. The rate of the forest area is much higher than the country's average (Somogy: 31.3%, countrywise: 20.8%), furthermore Somogy is the third County in the view of the forest area's size. For the woodland the soil conditions are excellent. The forest areas' size expected to grow further more. Fractured regions (material sources, refuse dumps) are planned for rehabilitation, so more favourable conditions are expected. It is worth mentioning, that the wildlife management represents a highlighted potential.

The processing industry based on agricultural production has great traditions in Somogy. Here can be found the only remaining sugar factory of the country, which affects the sugar beet growing, also there is significant processing capacity in the area of milk- and meat-processing too. Beside the food industry, more significant capacity can be found in the timber industry of the County.

The County's main appeal of tourism (and business) is the Balaton and its surroundings. Despite these facts, tourism represents only a small portion, relative to the conditions of the County, in its economy concerning both employment and investment. Cultural and natural conditions of Somogy are beneficial from the view of the development of tourism. The Drava and Inner-Somogy possess fine opportunities, but the infrastructure of tourism is not sufficiently advanced in these areas.

Extraction of hydrocarbon (crude oil and natural gas) is in progress in multiple areas of Somogy. The County has significant potential at the area of renewable energy, primarily in types of biomass energy sources, but the areas of exploiting geothermal energy hold rich opportunities too. Potentials of biomass based energy sources are above average countrywise. For the exploitation of geothermal energy the micro-region's area of Marcali, Nagyatád, Barcs and Kaposvár have opportunities.





Somogy County's status of transportation is determined by its location. Lake Balaton, on the northern border, blocks opportunities of connections to the north at a 70 km stretch. Connections with the country's western and northern counties are poor too; the existing road network's complexity is making it difficult. Defects in the road network are explicable with topographic conditions. Deficiencies contribute to the development of smaller towns' with function deficit. Connections of towns and their agglomerations are incomplete or function on bypass roads. The traffic's state is worsened by the inadequacy of the road network's line sketching, bearing capacity and condition. The E71 motorway (M7-7) and the Budapest-Gyékényes railroad line have international importance in Somogy County, because these two lead towards Adria and are parts of the European TEN-T network. An additional important railroad line is the Budapest-Székesfehérvár-Nagykanizsa line (electrified). On both lines passengers and cargos are being transported, so further developments are being needed on both lines.

Koprivnica-Križevci County

Koprivnica-Križevci County consists of 264 settlements, which belong to 25 local municipalities, from which 3 are cities (Koprivnica, Križevci, Đurđevac) and 22 are districts. Koprivnica is the administrative centre of the County.

Average age in the County is 41.6 years. (Approximately equal to the national average.) 42.8% of the County's population have secondary qualifications, 10.6% have diplomas, while those with elementary school graduations reach 37%. 1.5% of the residents have no educational background. In Koprivnica-Križevci County, just as in other regions of Croatia, the population declined for the last five decades. This was caused by the negative natural growth, plus a lot of different factors are involved, which are affecting negatively the natural alteration of population. This negative example of the declining in population is most visible in the districts of Koprivnica-Križevci County. The population is declining continuously in every district, except Podravske Sesvete District, where the population is stagnating. Main reasons for this are the following: high mortality and low birth rates, the residents - mostly the younger people - are moving to the cities of the County, and outside the borders of it, and also the general status of the Croatian economy. There are two tertiary educational institutions in the County: the Agricultural College of Križevci (VGUK), and the „Northern University“, whose residence is in Koprivnica.

The most significant industry of the County is the processing industry. This division provides 48% of the yearly income, trading is 28%, agriculture is 8%, while the construction industry is only 6% of it. On Koprivnica-Križevci County's area there are currently 12 functioning entrepreneur zones, in which 115 economic enterprises are active. The number of employees reaches 2885 people, who are mostly working in the area of processing, trading and services.

Despite the fact, that the ones making a living in tourism cannot count on significant income source, the County itself possesses a great touristic potential, especially in the area of religion, wine, hillside, cyclist, cultural, sports, hunting and fishing tourism.

Looking at the agriculture, in Koprivnica-Križevci County people are specifically concerned with livestock husbandry, but in the last few years the farmers' number has decreased. The vegetable-, fruit-, herbs-, grape growing and wine production, also gardening are less present than before





However, there are more ecoproducers. The area covered by forests reaches 570 km², which is 32.9% of Koprivnica-Križevci County's and 2.8% of Croatia's area. The area of land covered with forests, which are state property, extends to 426.9 km².

It is important to mention, that the County has rich gas- and oil sources, especially in the districts of Molve, Kalinovac, Virje, Gola and Ferdinandovac. These sources ensure Croatia's entire gas extraction's 70%. The greatest and most significant oil- and gas extraction takes place on the area of the Molve district.

Koprivnica-Križevci County has serious geothermal potential, which has been developed and exploited quite poorly (so far there is one known extraction site known for geothermal source on the border of Lunjковec-Kutnjak). Authorised researching areas can be found near Legrad-1 and Ferdinandovac-1, while based on the design dossier of land-use planning, the authorization is anticipated for the requalification of existing oil- and gas wells onto researching scenes of geothermal sources, next to Gotalovo and Légar settlements.

Analysing the infrastructural status, it can be seen, that Koprivnica-Križevci County has relatively fine connections with the capital, Zagreb. Motorways are leading through only in the northern and western neighbour counties, but across Koprivnica city, Zagreb is approachable from the Hungarian border on road 41. Road 2 leads in north-west-south-east directions, and is parallel with the border and Drava River. There is only one border crossing opportunity by public road, between Gola and Berzence. The Croatian road 41 continues as the Hungarian road 681 from here. Nearest towns of Somogy from the border crossing point are Csurgó and on the end of road 681, Nagyatád.

On the area of Koprivnica-Križevci County 133.1 km of railways have been built, from which 48.4 km are international, 50.1 km regional and 34.6 km are local railways. The Croatian M201 railway leads across the county, connecting Zagreb with Križevci and Koprivnica cities, also with the border, from there through the Hungarian railways 30 and 41 with the southern region of the Balaton, then with Budapest. This line is part of the European TEN-T network. Because of the junctions at Varazsd and Eszék, the county is accounted as an important traffic junction. The railways run into each other in Koprivnica, so the train station in the city plays a significant role in the inland - and international cargo- and passenger traffic. The cross border railway between Koprivnica and Gyékényes which connects Hungary belongs to the I. category cross border railways. Somogy and Koprivnica-Križevci counties have fine relations due to the railway.

River traffic, as well as air traffic has no significant economical effect. The Hungarian Hévíz-Balaton international airport is an exception, for although it is not in Somogy but located near the county and supplies the Balaton's region with air connections, which greatly improves that region's touristic approachability. The significance of the airport lowers as we examine regions farther. It does not affect other parts of the cross border region. In water traffic, the Drava has a limited ability for cargo transport.

Bjelovar-Bilogora County

Bjelovar-Bilogora County is Koprivnica-Križevci County's southern neighbour. Its largest settlements are Bjelovar (county seat) and Daruvar. There are 18 districts and 5 cities in the county.





Constant decline in population specifies its demographic status. In 2001 it had more than 133 thousand residents, though that number decreased to under 120 thousand by the population census. The complete measured decline was more than 13 thousand people under 10 years. The average age in 2011 was 42 years, which was a bit more than the national average (41.7 years). From a region-functional view, the county belongs to the eastern Croatian counties. It is located near the main traffic junctions and roadlines, but these are regionally avoiding Bjelovar-Bilogora County. The Croatian development policy managed poorly the region's significance, an example of this is that a planned roadline will not be constructed, which would have connected the country's northern and southern sides with Bosnia-Herzegovina and would have lead across it. The county's section would have provided fine connections by the east-west directed roads (road 2 and motorway A3), which avoids it from north and south.

The total lenght of public roads is 1484.45 km. The county's economic development is strongly affected by both the lacking in quality traffic connections and deficits of in-county public roads. The latters can be characterised with lack of capacity in cross-section, size, and wearing course and as a result, speed. The density of road network can be accounted as adequate, but worsens the approachability of settlements, so the quality of roads is just slightly adequate. The infrastructure's quality is not appropriate and it is lowering the population retenting ability of the settlements. The county's railway connections are just average among the Croatian conditions. The Zagreb-Budapest passage (line M201) does not include the county. The L204 category railway connects to the latter mainline at Križevci town, also it connects it with the R202 Koprivnica-Eszék railway line at Kloštar. Daruvar is connected to the R202 railway on the L205 local railway line (Pčelić-Daruvar-Pakráč-Lipik-Banova Jaruga).

Despite the fact that the county is located near the borders and the capital, the limitations of infrastructure makes it relatively isolated from them.

Bjelovar-Bilogora's economic development is 23.29% of the national average. The county belongs in the I. developmental category and it possesses Croatia's weakest county economy. Unemployment is growing; local economy is shrinking, although local forests could provide a fine fundament for the timber industry's upswing. The agricultural processing industry also has traditions in the region. Agriculture is more significant than the national average. It possesses better opportunities than anywhere else in the country. Forest management's, agriculture's (and livestock husbandry) and fishery's participation is higher than the national average (instead of 5%, it is 7.3%). This means, beyond the importance of agriculture, the other more developed, knowledge- and capital-demanding industries are less advanced in the county.

The county is in the same situation on the area of renewable energy sources, as the region's other counties: there are fine opportunities for the usage of geothermal energy. There would be capacities for biomass production and processing. Solar energy could be exploited with adequate efficiency.

Zagreb's proximity is an important factor because of the so called continental tourism and it is an advantage to the county. The importance of the sector is not high, but the touristic offers can be accounted as diverse, which during the year can provide a consistent income. The spa- and health tourism are comparative advantages of the county, but also touristic attractions which ensure





active recreational experience. Opportunities of cultural-, religious- and gastro-tourism are worth mentioning.

Protection of the region's environmental and natural assets

The environment conditions are favourable and it generally specifies for the cross border region. Social economic improvements did not much effect the nature's environment countrywise and multiple, in European meaning, rich, natural habitats have been left undamaged. Heightened rate of biodiversity, specific to the forests and rivers, is also a prominent value of the region. The Drava's region is significant and has cross border importance and it is a nature conservation area on both Hungarian and Croatian sides. These values are protected by the counties with different nature conserving categories, such as the Mura-Drava Regional Park in Croatia and the Danube-Drava National Park in Hungary.

These different nature conserving areas are basically not threatened considering the expected and hoped rapidity and nature of economic development. Damage needing environmental indemnification is only specific primarily in the brownfield areas, on the sites of abandoned industrial and military establishments. The expected growing of forest areas will basically improve the air quality and serve a purpose in climate protection.

Wild management is highlighted in Somogy, but it also represents potential in Koprivnica-Križevci and Bjelovar-Bilogora counties. Developmental potentials lie in wild management, the multifarious utilization (tourism, level of procession, unique products).

Somogy County's environment quality is generally favourable; this can be said about the region's two Croatian counties. Because of the county's distance from the economical centres, its conditions are exceedingly well regarding its many forests, waters, the diverse surface of the landscape and nature and environment.

In Bjelovar-Bilogora County the natural environment's quality is also favourable. Only a few stream and watercourse are exceptions. Soil quality, comparing to the western European countries is better.

Koprivnica-Križevci County abounds in natural resources. Because of its enormous forest areas and major part of the Drava's river valley plane, Koprivnica-Križevci County exceeds with biological- and landscape diversity. The county also possesses significant drink water basis.

The water potential of Drava River is not completely exploited on the section where it crosses through the county's area. As a result, two hydroelectricity powerplants are planned to be constructed (Molve 1 and Molve 2), which fell into the Energy Development Strategy of Croatia. It can be seen from this, that the construction of hydroelectricity powerplants is a priority from the aspect of energetic improvements, and would be built solely on Croatian area. It is important to note, that in Somogy County (rather in Hungary) the exploitation of the Drava's water power is not planned, instead the objective is to protect the natural values of the river. The building of the Croatian hydroelectricity powerplant would cause, for the present, unknown environmental and natural effects. Researches in Western Europe and other regions forecast, that the Drava, as natural habitat and biosphere would significantly change after the establishment of the powerplants.





Natural values mean comprehensible competitive advantage on European level for the cross border region.

In Somogy and Koprivnica-Križevci counties the flood and internal water endangerment appear as environment risks, which are kept under the countrywise average by the topographic feature, but regardlessly are a potential source of danger – especially along the coast of Drava.

Air pollution is low in all three counties. Effects of the industry are minor; basically the main polluter is traffic. The air pollution lags behind the levels of both Hungary and Croatia, because the main traffic lines bypass, or only briefly touch upon the counties. Concerning noise effects of traffic, the region is considered to be less endangered by environmental damages.

Considering historical- and cultural assets in the built environment, all three counties are in less favourable situations. Conditions of the buildings with protected status and those that potentially be protected are average or poor. Preservation of them imposes serious pecuniary obligation to all levels of municipalities. In Croatia, the effects of the Yugoslav War enhance this state.

2. Identifying the Common Developmental Challenges

From the first chapter it became clear, that the cross border region has features which make the three counties quite similar to each other. These are essential opportunities for the area. The opportunities are also partly challenges. **The challenges of the cross border region show many similarities, so developing a common developmental strategy is reasonable.** These challenges should be managed as a whole, not one by one.

Basically the most difficult challenge is the **relative isolation of the cross border region**. This type of isolation, beside the fact, that it is specific of the whole region too, it is also present between the counties and between different areas of the counties. What is more the isolation can be defined and experienced more and more specifically on the level of smaller settlements (the marginalised villages that have no transit traffic due to the fact that they can only be approached from one way – so called dead-end villages – are good examples).

The relative isolation means the greatest limitation for catching up in the region. The isolation limits economical development opportunities, tourism and also worsens the social status of the region.

Social challenges

The society is aging. The number of people who are relying on social aid and retirement allowance is increasing which puts an ever growing pressure on social security systems. This is a problem countrywise both in Croatia and Hungary, but the aging of population affects the rural regions more. The population retention ability of small settlements and small villages is low (also because of both economic- and physical isolation). Available services and recreational opportunities are limited. This is partly a transportation problem as well. The supplying of small settlements with public services is highly expensive (for example: operating a physician's office, daycare nursery, kindergarten, schools, post offices) because of economies of scale. The youth moves in hopes of a





better quality of life – even outside of the boundaries of the region (for example: to the capital or to foreign countries).

Not just the elderly stays, but the underprivileged social groups, the permanently unemployed workers, the physically handicapped, the disabled people, the ones living in deprivation and also the Rom population too. (Between the previous categories there are overlappings too.) The Rom population lives between low social circumstances in all three counties.

On the marginalizing settlements the population is decreasing as well as the number of active employees and the rate of the elderly and the underprivileged is increasing. Quality of life should be raised in the smaller settlements.

Educational system

In the region several tertiary education institutes function: the Agricultural College of Krizevc (VGUK), the „Northern University” with its seat in Koprivnica, and the University of Kaposvár; the „Northern University” is still under organisation. These institutes are exceptionally important in the preservation of competitiveness of the region and in supplying local economy with specialists. Their significance exceeds beyond the counties. Despite this the institutes are part of a system where the budgetary resources are tight. The tertiary institutes of the region are important from the view of competitiveness and these establishments could be the foundation of local research-development activities. The role of the University of Kaposvár in the county's agrarian-innovation and the food industry is exceptionally significant; the college of Križevci should be able to undertake a role like this.

In the area of secondary education the proper operation of vocational training is the essential task regarding the future of the cross border region. Practical knowledge that one can use in a workplace should be taught to those young people, who choose this path. Because of the unfavourable economic conditions, the satisfaction of the local enterprises' need for specialists shall be highlighted. The budgetary burdens of operating institutions oppress the municipalities on different levels, which is also a challenge.

The education system should ensure opportunity for all students, but in reality the rural small schools are not able to cease the inequalities, instead they can only regenerate them, conserving the social status. Another problem is the lack of specialists, and the caretaking of underprivileged children. This is especially specific to the schools functioning in small settlements.

The process of learning through life is important and needed in an environment like the cross border region, where one of the most significant problems is the low level of education, the lack of trained labour force, high rate of unemployment and inequality between the supply and demands of labour market. The tertiary education and vocational training should be able to react to the shifting of employment demands.

Capital shortage, unemployment and competition disadvantages

The region's most burning problem is unemployment. Unfortunately the number of workplaces is increasing (if increasing) very slowly, the reason is the struggle of the region with capital shortage. There are economic factors and industrial branches (agriculture, agricultural processing industry,





timber industry, forest management and tourism), where the opportunities are mostly given for development and expansion, but enterprises do not have funds for realising investments. The counties need investors and resources from outside for the situation to change. In order for this to happen, favourable investment conditions need to be made. Free undertaking zones, industrial parks (Hungary), entrepreneurial zones (Croatia) have been established for this purpose. The opening of entrepreneurial (industrial) zones has been planned in almost every district of Koprivnica-Križevci and Bjelovar-Bilogora, but many of them are not active or there are no activities inside them and this is a serious challenge. The same can be said about the seven industrial parks of Somogy, not one of which operates at full capacity, and in some of them there are no economic activities. Unsettled ownership is the primary problem of the establishment of industrial zones in the Croatian counties, and the insufficient financial status of local municipalities makes them incapable of participating in the development of industrial zones. The municipalities of Somogy are also lacking the resources needed to get into a local industrial development.

The strengthening of services and infrastructure of industrial parks, zones, the cooperation between organisations and the development of industrial parks' marketing are needed for these parks to have better index in the area of exploitation. The free undertaking zones are not competitive with their infrastructure in the circle of investors, because they cannot give complex services, also the institution system, which is needed for efficient functioning, has not been organised yet.

The competitive disadvantages of the counties can be exceptionally experienced in the view of research-development. Somogy County's interest of the national charges is only 0,75% (2012). Economic activities are unequal in the area of the county – concentration on the county seats is high.

In the examined region the significance of industry is smaller (this is not entirely true of Koprivnica-Križevci County, where the processing industry is significant in Koprivnica city). Food industry is the one with major significance. More significant capacities can be found on the field of timber industry. Less than third part of the local employees work in the industry. Despite the importance of agriculture, 13-17% of local employees (17% in the two Croatian counties and 13% in Somogy) work in this field. However the rate of workers in services is smaller than the national values: in Croatia 29%, in the cross border region's two Croatian counties this number is slightly higher than 18%; Somogy falls behind only by one percent of the national rate (27%) (Eurostat: NACE activities, 2015.). However on the current level of competitiveness the agricultural sector could not employ more people. The reason for this, beside capital shortage, is that the estate structure is frittered (this has geographical and historical reasons), but land owners and farmers are not showing willingness to form agricultural associations because of negative historical experience, whereas this would have effectiveness increasing role. Using limited resources is a waste.

Difficulties of tourism

Settlements lying near Lake Balaton have plenty of natural values and built heritage, which provide great opportunities for the development of tourism, although guest-nights and touristic





income are having one of the weakest indexes in the South-Transdanubian region. Tourism plays a significant role in the economy of Somogy, which is concentrated on the resort area of Balaton, while other parts of the county are only briefly affected. In the Croatian counties only the mid-year and continental tourism have income for the industrial branch. However the conditions are not exploited enough. The region of the Drava means a similar competitive advantage with the utilization of bathing- and spring water. Latter would give an advantage in health-tourism. Beside rural tourism, active tourism (water sports, cycling tours, etc.) offers opportunities for the counties.

Touristic infrastructure is not available because there are few quality accommodations and enterprises, which are providers of other touristic services; or the basic terms of tourism are unavailable (maps, information portals, centres, brochures). Of course the reason is the above mentioned capital shortage and the fact that the regions, which need to be taken into tourism (for example Drava and its environment) are not yet in the national and international offers – often not even in the county's offer.

Infrastructural deficiencies

Apart from the problems mentioned above, other industrial branches are limited by the status of infrastructure. As known, the road lines, motorways with international importance, bypass the cross border region. The capacity of the railway lines is inadequate. The electrification of multiple railways could be beneficial; other lines have problems with parallel traffic. With the exception of the major cities, almost all of the trainstations require reconstruction, because there are settlements with the complete lack of passenger service establishments. In the Croatian counties, the amount of inadequate and dangerous railways is exceptionally high. The secondary- and tertiary grade roads both in sketching and quality have deficiencies in the whole region. Besides renovating, upgrading and in many cases widening the roads, several roads, bypassing different settlements, are required. As a result of these conditions the time needed for accessing these settlements have been increased, the amount of investments have been kept low and the competitiveness of the region is low. Approaching small settlements and towns is difficult. Also it is difficult to have access to locally unavailable public services, services and recreational opportunities. This also contributes to the lowering of the quality of life. Defects of roads and railways worsen the quality of public transport as well.

Road construction and renovation is quite expensive, and without outside resources the counties of the region are not able to accomplish these improvements. This is also true about railway investments, so involving sources is a problem. Because of unsettled legal and ownership conditions (as a result of unsolved situations of deficiency in land registry) the chance to be supported by EU financial funds is lowered in Koprivnica-Križevci and Bjelovar-Bilogora counties, which could cover the improvements, constructing or widening new roads.

Settlements of the region do not possess cycling connections; cycling roads have not been made yet.

In addition to the infrastructure of transportation, the infrastructure of public utilities also has problems in the three counties. There are settlements in the Croatian counties, which are not connected to the common drinking water network. In the complete area of Koprivnica-Križevci





County the piped drinking water network has been constructed, but not every settlement is covered. Only 58.2% of the county's population is connected onto the network, which greatly falls behind the Croatian average (approximately 74%). In Koprivnica-Križevci County the 30.32% of households have been connected to the waste water managing system. This also lags behind the Croatian average (44%). Bjelovar-Bilogora's indices are similar. Because of the structure of settlements in Somogy County, small village areas still have a quite low amount of waste water management possessing settlements. Sewered areas are primarily cities and their agglomerations, and the region formed by settlements on the coast of Lake Balaton and the Drava River. The length of sewage pipes for every km of drinking water duct is 0.54 km (countrywise it is 0.645 km). This is metastatically slightly higher than a 50% rate. The coverage of central waste water drainage is even worse. The gap between the constructed piped-water system and constructed sewerage system (known as utility gap) is large in all three counties. The situation is similar in flats provided with gas pipeline.

Energy efficiency and renewable energy

The challenges of the cross border region should be divided into two groups: the increasing of energy efficiency and the exploitation of renewable energy. The point of both challenges is the demand of enterprises to be more competitive (to use less energy and reduced prices) and to lower expenses of operating public institutions, not increasing the population's energy liabilities further.

Public institutions operating in the counties, for example schools, local council buildings, etc. are all great consumers regarding heating. Because of few modern and well insulated buildings exist, the heating expenses are high. The population faces similar heating problems. Enterprises shall reduce their expenses to bear the market's competition.

Exploitation of biomass, as primary or residual product gives advantage in the region. By growing „energy-plants“, local heating demands could be moderated. Renewable energies based on residual products of plant growing can be counted on in high yielding, soil possessing regions. Local utilization of biomass (and bio-gas) as one resulting product of livestock husbandry would be beneficial. This could contribute to the enterprises' and population's energy demand reduction, at an environment protective way. A fine example of operating bio-gas plant is the unit functioning on the area of the sugar factory of Kaposvár, which exploits the residual product generated during production.

Besides biomass, the geothermal (former is near to the ground, latter is energy contained in plutonic rock) energy sources have significant potential. It is not just an alternative, but also and additive energy source, which can be utilized combined with other sources of energy. Koprivnica-Križevci and Somogy have great potentials in terms of exploiting geothermal sources. Up to now the mapping and exploiting of these sources have been partly successful (in Koprivnica-Križevci, Lunjkovec-Kutnjak; Somogy, the Marcali and Kaposvár district are exceptionally well, but in the Barcs and Nagyatád districts conditions are sufficient). Potential wells (requalified hydrocarbon extracting sites) could be important in the view of energetic, agricultural and recreational exploitation, but it is only possible if the study which directs technical and economical utilization, environmental impact study or a detailed study of exploitation declares it justified. The





study, written on the evaluation of geothermal resources in the Drava-basin is like the one described previously (Geotermális kutatások a Dráva-medencében - HUHR/0901/2.1.3./0006 c. projekt). Those areas are convenient for exploiting deep energy, where karstic, porous, thermal water reserves with debris can be found deep below the ground. Water storage layers for energetic goals can be found mainly in the line of the Drava. Beside the energetic exploitation, the geothermal energy's main advantage shows in the decreasing of heating demands of public institutions.

Wind power can be utilised limitedly in the region for large scale firm energy generation. In term of solar energy the region does not have exceptional opportunities, but specifically the most favourable period of time is between March and October for the utilization of this type of energy source, it would satisfy almost all the demands of hot water in the region. The installment of solar collectors is encumbered by the fact of the lack of investment opportunities as a result of the known reasons.

The utilization of renewable energy sources is capital-intensive and national regulations could be limiting conditions.

Examining hydropower, an economically maintainable hydroelectricity powerplant can be established on the Drava (however it would have major environment protection expenses). However in the Croatian development plans the establishment of a hydroelectricity powerplant is intended. If that project would ever be realised, it would cause serious challenges in environment protection.

Environmental protection

The cross border region overflows with natural resources. With its vast forest areas and the major part of the plane of Drava's river valley, the counties exceed with their biologic diversity. However, these natural assets (resources) are not yet discovered and evaluated adequately enough (for example the plant – and animal races have not yet been systematically noted into inventory, the determination of habitats of specific natural and artificial regions) in Koprivnica-Križevci and Bjelovar-Bilogora counties.

Due to the generally fine quality of traditional planned economy, excellent resources are at service for timber– and wood-processing industries. Somogy's forest-coverage is exceeding countrywise. Approximately 90% of the forests consist of deciduous trees. 9% of produced timber in the county is from Somogy County. The quality of soil is excellent for the forests in the cross border region, and the forest areas are expected to grow further. The wasted lands (material extraction sites, refuse dumps) are intended for rehabilitation, this way a more favourable status can be expected. With this method and the appropriate utilization of agrotechnical tools, the effects of water- and wind erosion can be decreased. In connection with forests it is mentionable, that the wild management represents a highlighted potential, which shall be used in the area of tourism.

The question of waste management shall be discussed in the field of environmental protection. In this area, the continuing of the forming of united waste management systems should be required





in the Croatian counties. Constructing appropriate central refuse dumps and liquidate previous ones (PISKORNICA Regional Waste Management Centre project). Several united waste management organisations are in Somogy County's area, the reorganisation of them is not necessary, however the expenses of waste management has increased, which carries the danger of the population's illegal dumping of waste rate growing. The selective waste collection represents a small proportion in communal waste collection.

Extreme weather phenomena and flood of rivers mean major challenges to the counties. Outdated and not so logical guidance systems work relating the flood-preventive areas in Koprivnica-Križevci County.

The challenges of cross border cooperation

Apart from the fine relations of counties of the region, further inter-institutional cooperation could be required. These cannot replace the connecting points mentioned earlier.

Currently the Drava divides the cross border communities. There are no local border traffic crossing points – partly because of the river. Only two border crossing points exist between Koprivnica-Križevci and Somogy on public roads. These limited crossing opportunities are making the cooperation difficult to communities on the sides of the border, and difficult for creating economical and service areas. The fact, that on the two sides of the border the people speak different languages is another limiting factor and does not help in the development of local cooperations.

It is true, that the cross border region has excellent assets in many areas – meaning agriculture, forest management and partly tourism –, in the last years it shows unfavourable tendencies regarding multiple economical and social indices. Besides the declining population, migration tendencies, above countrywise average of unemployment rate, the decreasing of GDP index per capita and capital attracting ability and low K+F activity are indicating the significance of the need for intervention. Serious settlement and regional demographic challenges require further intervention and development.

3. Common Cross Border Development Strategy

The cross border's common vision of the future

Bjelovar-Bilogora, Koprivnica-Križevci and Somogy counties will create a more united cultural and economical region than nowadays. The main axis of the region will be the Drava River from both cultural and regional view. The Drava will not divide the three counties, instead it will unite them.

The counties of the region will be open to each other and to neighbouring counties. The three counties will be simply approachable and there will be fine connections in the area. Traffic will be faster and easier on the new public- and cycling roads. The railway will be a sufficient alternative to public transportation, regarding both passenger- and freight transport. The border between the countries will be crossable on multiple border crossing points, this way the areas in the border's





vicinity become common cross border economical, service and cultural regions. The region will be an essential part of the Croatian-Hungarian international relation.

The life quality of the three counties and their economical status will improve. The life in small settlements will not be considered as isolation. Local economy will strengthen, new job opportunities will be created, which will moderate unemployment.

New workplaces will be created and the competitiveness of enterprises will improve in agriculture, forest management, timber industry, livestock husbandry, horticulture and fruit management, and food processing industry. This will be assisted by the increase of energy efficiency and exploitation of renewable energy sources in the region. Local industry and enterprises can reduce their long term energy expenses, as a reason of the utilized biomass and bio-gas. Energy consumption of public institutes will be reduced, which will be supplied by solar- and geothermal energy at an expanding rate. With the cooperation of the tertiary educational institutions, the significance of research-development will grow.

Various springs will be utilized effectively and environment friendly – at a higher rate than nowadays – for different objectives, such as generating energy, heating, plant growing, consumption, tourism.

The region will be noted among travel destinations. Touristic offers will be available in the Drava River's region, which will be sought by those wishing to relax and recreate. The touristic services will improve in other parts of the counties as well. The specific cultural programs of the cross border region will appear united. The program series will last all year long and because of previous reasons the tourist season will be longer and more equalized.

The relative isolation of Bjelovar-Bilogora, Koprivnica-Križevci and Somogy counties will cease to be and will become a successful, cooperative, competitive region, which utilizes local resources and opportunities effectively.

Strategic objectives

The objective of the cross border development strategy is to **reduce and to cease the relative isolation of the cross border region and its counties; improving quality of life and also the appeal and population retention ability of the cross border region. Reducing unemployment, creating new workplaces and to incite realisation of investments.** The goal is to **increase energy efficiency and exploitation of renewable energy sources.** The strategic goal is to **create a united touristic region by placing Drava's axis in focus.** These objectives carry the expected results of **realising local cross border cooperation, increase of competitiveness,** the region will close the gap compared to the countrywise conditions and the **state and protection of the environment and nature will improve.**

We try to illustrate the connections between the recited strategic objectives in the chart below. In the cells of the matrix (in some cases showing overlapping between goals) in the objective's cross-sections there are specific goals and tasks. Every objective affects all three counties of the cross border region, ensuring the common nature of the strategy.





	Achieving local cross-border cooperation	Increasing competitiveness	Catching up and reducing regional inequalities	The protection of condition of environment and nature
Reducing and removing the relative isolation of the cross border region and the counties of the area	Developing integrated transportational infrastructure of the counties in the region			
	Establishing new crossing points on the border			
	Constructing local border traffic			
	Maintaining cultural relations			
	Inciting cooperation of settlements in the vicinity of the border			
Elevating life quality in the region. Enhancing appeal of the area and population retention capabilities	Upgrading cultural offer of the countryside	Local employment of local, trained specialists and its incitement	Maintaining primary medical care, patient transport and reducing regional inequalities	Construction of rain drainages on the coast of Drava (mostly for flood-prevention)
			Health-promoting and extending preventional activities	Developing drinking water- and waste water drainage and sewage treatment systems
			Increasing capacity of social support (replacing and developing missing services)	further development of waste management system (upgrading recycling)
			Diminution of the gap between the constructed piped-water system and constructed sewerage system ("közműolló")	Increasing the rate of selective waste-collection
			Improving the situation of the Roma population	





	Achieving local cross-border cooperation	Increasing competitiveness	Catching up and reducing regional inequalities	The protection of condition of environment and nature
Reduction of unemployment, creating new workplaces and inciting investments	Expanding the capacity of the food industry			
	Developing local products, common marketing activity			
		Expanding the capacities of the timber industry		
		Recovering the competitiveness of agriculture		Constructing irrigational systems on agricultural areas
		Supporting better quality networking of agricultural workers		
		Recovering education and vocational training		
	Improving tertiary education (establishing cross border inter-university cooperation)	Further strengthening of tertiary and adult educational system	Improving the circumstances of education, modernisation of buildings and equipment	
		Increasing the numbers of students in tertiary education, also graduates'		
	Establishing common investment-inciting office	Realisation of different investment-inciting activities		
		Expanding research-development		
Increasing energy efficiency and exploiting renewable energy sources	Exploitation of geothermal energy			
		Production and local exploitation of biomass and bio-gas		
		Maintaining enterprises to be more energy efficient		
		Maintaning public intitutions to be more energy efficient		
		Maintaning residential energy efficiency		
regio n b	Developing tourism and	Increasing the capacities		Reducing threat to





	Achieving local cross-border cooperation	Increasing competitiveness	Catching up and reducing regional inequalities	The protection of condition of environment and nature
	<i>involving new destinations</i>	<i>of tourism</i>		<i>natural habitats by forming rules for protected natural areas</i>
				<i>Constructing monitoring system for conserving ecological networks, biodiversity</i>
	<i>Common and united touristic marketing activity (brand)</i>	<i>Tourism organising for the new tourist destinations</i>		<i>More effective usage of natural and cultural legacy as an objective of development of culture and tourism, especially rural tourism, also in the interest of developing economy</i>
	<i>Creating joint, unified tourism offers</i>			
		<i>Upgrading qualifications of employees in tourism</i>		

Figure 3: Matrix of the cross border region's strategic and specific objectives

4. Cross Border Effects in the 6 Sectors

Regional development

In the interest of realizing the cross border region's local cooperation and reduction, ceasing of relative isolation of the cross border region's counties the following specific objectives will be achieved in the area of regional development:

Establishing new crossing points on the border

There are only a few border crossing opportunities in the examined cross border region, this needs to be expanded to simplify connections inside the region.

Forming local border traffic

It is difficult to imagine local communities' cross border connections without local border traffic. Because of the various local cultural events, economic services and the flow of tourists, local border traffic crossing should be established at necessary locations. This will also contribute to make tighter connections between the agricultural holdings of the cross border region.





Strengthening cultural connections

Cross border cultural programmes, festivals, village- and gastro-tourism are activities the region's solidarity can be improved with.

Cooperation of settlements in the border's vicinity

These settlements need to cooperate together for the goals mentioned above, and this cooperation should be systematical, depending on the tasks given by the cross border relations.

„Improving quality of life in the region” and „Improving the appeal and population retention capability of the cross border region” strategic objectives’ development area issued by the specific objectives below:

Improving rural cultural offer

For the improvement of population retention ability of small settlements the goal is to extend the area's proposition with non present cultural offers. Under cultural offers we mean, among many, the civic museum's exhibitions, theatrical programmes. The improvement can be done by delivering programmes to small settlements or ensuring discounts to participate in these to residents of these settlements. Moreover, the aid of local cultural institutions (community centres, libraries, etc.) is also an objective.

Local employment of local specialists and the incitement of it

The migration, specific to the region, is also affecting trained specialists, who leave the region in the hopes of better job opportunities. Their absence causes problems in multiple areas for local economic characters. In this specific objective, inciting and supporting programmes will be developed and brought into effect, which will help to create satisfying conditions for these employees to consider staying.

Improving primary medical care and patient transportation, also reducing regional inequalities

Patient transportation suffers lack of capacity in the cross border region. This mostly affects the Croatian counties. Objectives are equalising regional differences and improvement of services.

Increasing capacity of social support (replacing and improvement of missing services)

Improving the social services for vulnerable and deprived social groups and their families. In the counties of the cross border region there are areas, where the support system's limits are narrow or defective. The goal is to make the necessary social service institutes available.

Health-promoting and extending preventional activities

The population cannot be viewed as well informed of the various health damaging activities, illnesses and correct diet. The situation needs to be managed. The necessary screening tests should be performed on the endangered age groups, decreasing healthcare risks.





Diminution of the gap between the constructed piped-water system and constructed sewerage system

The difference between settlements connected to drinking water network and waste water pipe network is significant. This difference is low compared to the national indices. Closing the gap is required at least to catch up to the country's average.

In the coverage of „Competitiveness”, the „Closing gaps and reducing regional inequalities” and the „Reduction of unemployment, creating new workplaces and inciting investments” strategic objectives, the following exact goals are:

Improving education and vocational training

The policy consists of the sub-goals below:

- **Integrate employer demands into vocational education.** An element of forming a competitive region is the direct reaction of education, within it, vocational education to employer demands and to teach their graduating students competitive knowledge, who can settle rapidly in a workplace. This has fair effects on the productivity of enterprises and unemployment.
- **Continuing training and requalification of labour market in the interests of local employees to prevail on the labour market.** Further education of labour force market employees synchronised with secondary- and tertiary educational programmes, also the life-long learning programmes which are in unison with present and future demands of the county's economy.

Further strengthening of tertiary- and adult educational system

The process of learning through life is important and needed in an environment like the cross border region, where one of the most significant problems is the low level of education, the lack of trained labour force, high rate of unemployment and inequality between the supply and demands of labour market. The tertiary education and vocational training should be able to react to the shifting of employment demands. With the supporting of adult educational activities, those who are permanently unemployed could receive new specialized knowledge.

Inciting investments

Investments avoid the cross border region, so active incitement of investments is required. Currently the counties' procedures that are directed at this objective are being supported. The act consists of the following sub-goals:

- **Ceasing administrative barriers.** During outsider investments various authorizational and other burocratic processes mean difficulties. These processes are delaying the realization of investments and discourage new investments. From the view of procedures in county, district, settlement councils' and authorities' jurisdiction the re-examination and simplification of procedures inside the limits of law are required. The ceasing of administrative barriers means also the settlements', providing seat for investments,





collaboration to moderate bureaucratic burdens, providing every logical help to the investors.

- **Creating favourable investing environment in industrial parks and zones.** Industrial zones and parks have more favourable features yet for potential investors. Despite this, most of these zones are not functioning, there are none or few settled enterprises. One of the reasons, in multiple occasions an enterprise like these requires green field investments for settling in. The possibility of using existing but so far unexploited buildings in the functioning of parks and zones should be studied, as to decrease the costs of the investment. In the boundaries of procedure the tools of improving industrial zones and parks are needed to be researched.
- **Supporting Start-up enterprises.** It means the indirect supporting of small undertakings, which were established for the creation of new services and products. Within the limits of the cross border region's incitement of investments the existing institution system supports the economic materialization of new competitive ideas. An existing, functioning element of this activity is the incubator-house function, where conditions to startup are ensured. This help should be completed with searching for people possessing achievable ideas and who has a mood for entrepreneurship. (This can be aided by conferences, vocational workshops, competitions.) Apparently, the cross border region could hardly compete with the opportunities of Zagreb or Budapest, but ensuring opportunities for local start-ups shall worth doing everything for.

The duality of „**Competitiveness**” and the „**Reduction of unemployment, creating new workplaces and inciting investments**” strategic objectives is represented by the following goal:

Extending research-development

The cross border region falls behind on the area of research-development activities. Small exceptions are tertiary institutes and for example the pharmaceutical plant operating in Koprivnica-Križevci County. For creating knowledge based economy, research-development activities shall be incited and supported, even directly. Advisable is the support of projects, whose results can be exploited for the economy of the region.

At the meeting of the „**Closing gaps and reducing regional inequalities**” and the „**Reduction of unemployment, creating new workplaces and inciting investments**” strategic objectives, we can find the goals below:

Improving conditions of education, modernisation of buildings and equipment

Anachronism of small settlements' educational infrastructure is specific of the whole of the cross border region, buildings are not in good condition and only union financial resources are at hand for the reconstructions. It would be most essential to renovate the buildings of rural elementary- and high schools. In these institutions of marginalised regions learn the most of underprivileged children, whose gap closing needs have to be ensured by the adequate conditions of education. In





addition, there are institutions in the Croatian part of the region, which possess serious capacity deficit and would need completely new buildings.

In the cross-section of **„Reduction of unemployment, creating new workplaces and inciting investments”** and **„Realisation of cross border local cooperation”** strategic objectives, the following procedures have been drawn:

Improving tertiary education (creating cross border inter-university cooperation)

The cooperation of the educational institutions of the region would materialise in the limits of this procedure, connected to education development. At the moment, potential relation could form between the agricultural university in Križevci and the University of Kaposvár, in which the „Northern University” of Koprivnica could be involved. The inter-university cooperation could be successful on the fields of foreign language education and research cooperations.

Establishing common investment-inciting office

Economic and competitive features of the cross border region are similar. Because the economic concentration of the region is an objective, forming united area, it is worth creating an organisation, office, which is concerned with investment-inciting and represents all three counties. An office like this could represent effectively the region with a market of half a million. The primary objective of this office would be to search for and convince investors, advertise the region, even beyond the borders of the countries, and it should be able to provide connections to the region's enterprises for example for their market acquiring activity. The Entrepreneur Centre of Somogy County and the county chamber of industry have already been practicing similar kind of activities. The forming office would not replace these, but would be built on the cooperation of these.

In the coverage of **„Reduction of unemployment, creating new workplaces and inciting investments”** and **„Closing gaps and reducing regional inequalities”** strategic objectives, the following procedures have been drawn:

Increasing the number of graduates and students learning in tertiary education

Currently, in the region's counties, the ratio of graduates is less than in Hungary or in Croatia. Country indices fall behind the European Union's average. The goal is to close the gaps of the cross border region to the Union and national rates.

Agriculture

In the cross-section of **„Competitiveness”, „Realisation of local cross border cooperation”** and the **„Reduction of unemployment, creating new workplaces and inciting investments”** strategic objectives, the following affect the agricultural sector:

Expanding capacities of food industry

The specific objective is about the increasing of the region's existing agrarian processing's and food producing's volume. It is essential for two reasons. First the increase in producing capacities will elevate the amount of locally processed products, as a result, the region's added value will





grow as well, and also potential new workplaces will be created, reducing the burning problem of unemployment. To materialize the goal, various methods will be selected, which can be applied commonly with participants based on the made impact studies.

Improvement of local products, common marketing activity

The products – mostly food –, produced in the region, better marketing activity is the objective. It is completed by supporting the forming of local regional brand too. Activities serving the products' distribution on the market can be supported for this purpose in the case of local products produced in small amounts but marketable. The expected result of the procedure is to find for the local products – independent from the amount – a fine reception and their own demands and to bestow permanent income upon the producing enterprises. The procedure consists of business development and marketing activities.

In the cross-section of „Competitiveness”, „Closing gaps and reducing regional inequalities” and the „Reduction of unemployment, creating new workplaces and inciting investments” strategic objectives, the following specific goals affect the agricultural sector:

Enhancing the capacity of the timber industry

The region's counties abound in outstanding quality forests, the scale of area covered in forests is high, but a large portion of the cut of timber in the region leaves the counties unprocessed. The enhancing of the capacity of the timber industry means that the main part of the cut of timber shall be processed in the region, even made into finished products. This would mean the growing of the counties' contribution, new work places could be made in the timber industry and the involved enterprises would improve. To reach the expected result, there will be actions taken in order to improve enterprises, find resources, marketing activities and activities to help put the products on the market.

Improvement of the agriculture's competitiveness

Despite the fact that the agriculture plays a more significant role in all three counties than the country's average, the sector's productivity and competitiveness is not sufficient. The reasons can be seen above. In many cases there is no cooperation between the actors in agriculture, or the most modern knowledge may not be available, or the exploitation of resources may not be sufficient enough. During the action, there will be the exploration of the sector's problems and their improvement. The researches made in the area will show the best solutions for the problems and in the second part of the act these solutions will be implemented with active intervention. The act will help the actors with counseling. Direct support may not be possible, but other indirect services, such as business development, marketing and market research are in the planned tools. This action involves the improvement of connections between agricultural manufacturers.

In the cross-section of „Competitiveness”, and „Reduction of unemployment, creating new workplaces and inciting investments” strategic objectives, the following specific goals affect the agricultural sector:





Supporting development of agricultural producer's network quality

With the better network quality of agricultural producers, the defects of small parcels, outdated machinery parks will cease to be. All of these should be done to let synergic effects prevail for the survival of agricultural enterprises and development. In the limits of this, due to the cognition and incitement of modern cooperative strategies, forms and constitutional examples the farmers should be able to exploit their common resources, improving the region's productivity of agriculture and competitiveness.

Tourism

On the field of tourism the following specific goals have been assigned by the strategy of the cross border region. These complementary and supporting specific objectives serve the „Competitiveness” and the „Realisation of united tourism region by focusing on the Drava's line” strategic objectives:

Increasing capacity of tourism

In the limits of this procedure the extension of various category accomodations' and restaurants' offers is required. Councils of the cross border region are trying to create more touristic accomodations and service providers planned commonly with touristic organisations and enterprises.

Improving tourism and involving new destinations

Mainly the Drava River's region could become a new travel destination in the cross border region. Improving tour sights are required in other parts of the region too (Kalnik mountain range, Zelic, various health spas in Croatian and Hungarian towns). The goal is to permanently increase the amount of tourists in multiple areas of the cross border region. Apart from this other themes of tourism require improvements:

- **Cycling tourism:** there are no cycling roads between settlements in the counties of the region. In the Drava's region the construction of cycling roads would be essential on both sides of the river (as the cycling road around Lake Balaton)
- **Active tourism (recreation with sports)**
- **Touring routes:** assigning and forming new touring routes are needed, for these tourmaps shall be made.
- **Gastro-tourism**
- **Recreational hunting:** the region possesses exceptionally fine forests and wild management, which can be exploited in the interest of recreational hunting.
- **Village tourism**
- **Ecotourism**
- **Health tourism:** both medical- and health tourism areas could be competent, because some elements already exist, for example spas.

Tourism organising for the new tourist destinations

Cooperation of the previously drawn geographical and thematic tour destinations' touristic service providers and participants is the objective.





Common and united touristic marketing activity (brand)

Creating united touristic offer should be targeted. Concentrating of tourism participants into one group needs to be realised for assembling united touristic offer. These should be advertised in touristic packages on the market of Croatia, Hungary or neighbouring countries. The creating of common marketing activity and brand is the first step to make the cross border region more recognizable.

Improving qualifications of employees in tourism

In the interests of competitive touristic services and comfort and satisfaction of visitors of the cross border region, more qualified employees are required.

Creating united touristic offer

The codification of geographical and thematic touristic offers, as mentioned above, is required. In the limits of this objective the filling of common and united marketing activity and brand with contents will take place. The result will be the creation of a competitive, on foreign grounds as well, common touristic product range, from which potential visitors can browse at will and to let the widest range possible find their choice of recreational opportunity.

Environmental protection

The „Realisation of united tourism region by focusing on the Drava's line" and „Improvement of environment- and nature protection" strategic objectives serve the realisation of procedures below:

Reducing threat to natural habitats by forming rules for protected natural areas

Forming of detailed environment protection rules is needed to ensure that every nature reserve area has adequate protection.

Constructing monitoring system for conserving ecological networks, biodiversity

Developing and constructing instructional- and informatical infrastructure, also separately created regulations for visitors of these protected areas will take place. There is no monitoring system in the cross border region, which would be able to supervise natural habitats' status changes.

More effective usage of natural and cultural legacy as an objective of development of culture and tourism, especially rural tourism, also in the interest of developing economy

As an addition to the reviewed objectives at the sector of tourism, the artificial and natural legacies' touristic and cultural exploitation is required. The result, can be diverse, is a natural and cultural legacies' utilization at a maintainable way.

Previous procedures can be accounted as inter-sectoral procedures, because they are related to the field of tourism too.

In the means of „Elevating life quality in the region, improving appeal of the area and population retention capabilities" and „Improvement of environment- and nature protection" strategic objectives, in environment protection the following goals will materialise:





Constructing rain drainage along the Coast of Drava River (mainly for flood preventing reasons)

On both sides of the Drava the question of adequate water drainage is a problem. This has significance when the river floods. Realisation of flood prevention capability of settlements alongside the river will happen in the boundaries of this objective.

Developing drinking water- and waste water drainage and sewage treatment systems

The completing activities of the drinking water ducts' and waste water channel network's construction belong here. The goal is to neutralize the possibly largest amount of waste water in the sewage treatment system, rated at environment protective category. Ensuring the quality of drinking water also belongs to this objective. By the end of the programme, the target is to provide the region's households with piped drinking water at the highest possible rate.

Further improvement of waste management system (improving recycling)

There are unsupervised, without central administration, legally assigned refuse dumps in the region. The goal is to incorporate these into the waste management system. This procedure is about the liquidation of existing administered and unsupervised waste dumps. They will be replaced by central refuse dumps, where adequate waste storage conditions are ensured. Operating systems in the counties should be further developed, in a way to let selective collection and the connected recycling expand, so an environment friendly, not resource wasting system could be formed.

Increasing the rate of selective waste collection

Adding to the previous objective, this specific goal is about popularizing selective collection of communal garbage, so the amount of waste collected this way would increase.

Specific goals in the „**Improvement of environment- and nature protection**” and the „**Reducing unemployment, creating new workplaces, Inciting investment**” strategic objectives' cross-sections are affecting the environment protection sector:

Constructing irrigational systems of agricultural areas

In the limits of this objective the agricultural exploitation of available waterbase on certain areas of the region is targeted. This is a procedure across a sector, whose expected result is the foundation of a more promising and stable production (fruits, vegetables, herbs and bedding plants). Taking up available waterbase as environment friendly as possible is a major element of the procedure. Complete construction of the system is intended in the period until 2020 in Croatia. The essence of it would be to pump water out of the Drava River, so 2000 Ha area could be irrigated around Legrad, Đelekovac, Veliki Pažut, Drnja and Hlebine settlements. Based on another plan, medium capacity irrigation systems would be constructed, whose water would be supplied by small water output rivers and streams. With it 3500 Ha area could be irrigated continuously. Further 1400 Ha area's irrigation would be ensured with the constructing of a smaller capacity irrigation system, whose water supply would be from deep waterbases. Experiences of these plans would be recognised in Somogy County and participants could judge, based on fair experiences, the initiation of a similar project.





Energy sector

In the interest of the realisation of „**increasing energy efficiency and exploitation of energy sources**” and the „**Competitiveness**” strategic objectives, the following specific objectives – which are affecting the environment protection sector – should be achieved:

Utilization of geothermal energy

The utilization of geothermal energy is necessary in economical and agricultural production. With the exploitation of this type of energy, the extending of greenhouse- and foiled vegetable growing can be based. This specific objective affects the achieving of „**development of environment- and nature protection**”’s objective. Most of the areas of the cross border region have extraordinary prerequisites from the view of utilization of geothermal energy. This can also be said about the region of Drava River. In some locations the conditions even allow power generation. These features should be exploited for heating and generating electricity. Initial examinations have been done, the results have been summarised in a study by the makers in the boundaries of the Drava-Geo project. These results and the requalified wells of hydrocarbon should be utilized, so the exploiting of geothermal energy could be more effective, contributing to operate public institutions, the effectiveness of enterprises to heating systems’ less expensive usage.

Biomass and bio-gas production for local utilization

The objective is to exploit the adequate proportion of residual products made in cultivation, livestock husbandry and forest management for energy generating purposes. The produced biomass and bio-gas are worth utilizing locally and in short distance. This way the affected producers’ energy needs from outside would be reduced, their competitiveness could develop and the region’s exploitation of renewable energy sources would rise.

Upgrading energy efficiency of enterprises

An essential question of enterprises’ – mostly dealing with producing, manufacturing – competitiveness is the upgrading of energy efficiency. Electricity consuming’s and heating demands’ expenses are increasing the cost of operation and producing. With the usage of renewable energy sources their expenses could be reduced as a result of remunerative investments at this specific objective, the enterprises will be supported to upgrade their energetic- and heating systems, then to make those compatible for the application of wind- and solar energy exploiting devices. Other renewable energy utilizing solutions need to be supported too.

Upgrading energy efficiency of public institutions

The energy needs of public institutions’ buildings – mostly outdated – in the cross border region need to be reduced, at the same time a portion of energy needs should be substituted with the exploitation of renewable energy. Modernisation of heating systems, replacement of fenestrations, upgrading insulation, and other activities should be supported. It is necessary to make an effort to satisfy the heating demands of institutions with for example geotherm or solar collectors. This way the maintenance conditions and working circumstances will become better.





For the achievement of the „increasing energy efficiency and exploitation of energy sources” and the „closing gaps and reducing regional inequalities” strategic objectives, the following specific objective – affecting the regional development sector – should be achieved in the energy sector:

Upgrading residential energy efficiency

The population is deficient in funds and does not spend resources on energetic and energy efficient investments in the cross border region. This is especially true for the rural areas. However, the energy needs of the population are exceptionally high and they are increasing. This specific action is meant to decelerate, or in a better case to stop, the increment of energy needs and the growth of energy expenses (electricity, heating) of the population. With upgrading the effectiveness every heating and electricity consuming device would contribute to the reduction of running costs. These measures would happen mostly in the poorer areas of the region: supporting smaller investments, modernisation, replacing equipments and for example establishing solar collectors. As a result the energy efficiency of the population would improve and the usage of renewable energy sources would increase.

Transportation

The following specific objectives will be achieved in transportation in the interest of „realisation of local cross border cooperation” and the „reducing, ceasing the isolation of the cross border region and its counties”:

Improving the integrated infrastructure of the region's counties

In the interest of reducing, ceasing of the cross border region's and its counties' relative isolation and the realisation of local cross border cooperation the following sub-goals will be achieved:

- **Modernisation of public roads connecting the settlements.** With most of the public roads there are different problems. In certain areas of the region essential elements are missing, for example the adequate wearing course or width. This greatly specifies for the two Croatian counties. These roads need to be modernised.
- **Construction of bypass roads.** In the region, secondary and tertiary roads lead across the settlements' centre. This means a great deal of traffic- and noise load, also it significantly slows down traffic. This can be rectified by constructing bypass roads, so the approaching time of the region can be reduced and the competitiveness will grow.
- **Construction of new public road connections as needed.** There are areas in the cross border region, which can be accounted as road-lacking, or difficultly approachable, in these areas the objective is to build new connections. The relative isolation of the region needs to be extended further, apart from the high level connections. If there are available sources, the missing east-western and north-southern road connections need to be constructed. (If there are available resources, the missing east-western and north-south connections should be constructed. Confer: M9 motorway or the new highway planned across Bjelovar-Bilogora County.)
- **Upgrading railway infrastructure, extension of its capacities.** Because of cross border connections and the reduction of economical isolation, a second railway line's construction is needed between Rijeka and the Hungarian border.





- **Modernisation and extension of establishments related to railway passenger transport.** In greater part of the cross border region the quality of railway passenger transport is inadequate. There are no basic services available in most of the smaller settlements.
- **Upgrading railway freight transport.** Extending of the freight transport infrastructure of the Zagreb-Budapest directed railway, which crosses Gyékényes, is needed. Among many other in the Koprivnicai „Danica” named industrial zone the planned freight station needs to be constructed and the construction of intermodal freight junction realising by the relocation of the freight station of Kaposvár would be worthwhile.
- **Increasing traffic safety.** In multiple counties of the region, the modernisation of dangerous railway crossing points is needed.

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