

TICAD

Transnational Strategy
and
Policy Recommendations

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I. Introduction

The Tisa Catchment Area stretches to the eastern half of the Carpathian Basin and is flanked by the interior ranges of the Carpathian Mountains. The territory of 157 thousand square kilometres is rich **in natural resources**.

In March 2001, after two significant waves of pollution that arrived from Romania and spread along the Tisa River and certain streams in its catchment area and caused ecological disaster, the decision of the Ministerial Committee of the European Council asked the concerned states (Hungary, Romania, Serbia and Montenegro, Slovakia and Ukraine) to cooperate in order to prevent cases similar to the disasters affecting the Tisa and Someş rivers, including the potential elaboration of an agreement under the auspices of the European Council.

With the active participation of the European Council, the “Expert Group” of experts delegated by the above countries as well as other international organisations concerned prepared the basic document of cooperation entitled “Initiative on Sustainable Spatial Development of the Tisa River Basin”, which the five countries concerned adopted unanimously.

With signing the “Initiative”, joint work started. For the coordinated continuation and extension of the work the responsible ministries and planning institutes of the partner states submitted a successful application to the **South East Europe Transnational Cooperation Programme**. In June 2009 the implementation of the project started, with the cooperation of 14 organisations from the five affected countries and the Tisa Group of the International Commission for the Protection of the Danube River (ICPDR).



The **aim of the Tisa Catchment Area Development – TICAD – transnational project** is to contribute to the harmonisation of the integrated territorial developments implemented in the river basin, to facilitate the creation of a sustainable economic structure, the optimal utilisation of natural and cultural resources, the development of areas of competitive growth and to promote the establishment of the internal and external functional interdependencies of the network of settlements.

The strategy focuses on the following specific issues:

- to reduce vulnerability;
- to improve the knowledge of spatial consequences of different measures;
- to improve the physical and functional communication channels;
- to harmonize the use of natural and cultural assets;
- to agree on the common development goals and promote the efficient allocation of investment funds.

Within the framework of the project the partners elaborated a common methodology and data base, on the basis of which they prepared the analysis of territorial processes on national level and following that on catchment level, developed transnational complex development strategy. The present document is the **transnational complex development strategy of the catchment area**, elaborated on the basis of the analysis of territorial processes on catchment level as well as the results of the three pilot projects focusing on specific areas and problems of the tributaries.

II. Consistency of the TICAD strategy with relevant EU policies

The fundamental principle of TICAD strategy is **territorial approach**, the recognition and enhancement of the importance of territorial interconnections and cooperation. The **CEMAT initiative** is the direct premise of the TICAD project and determines the TICAD strategic objectives.

In the **Europe 2020 Strategy** there is a variety of ambitious target figures related to employment rates, educational attainment, business develop-

ment and information services, etc. which deserve consideration when the priorities and measures of the TICAD strategy are set.

The issues which are addressed in the **Territorial Agenda of the EU2020** are relevant in the TCAD region. Depopulation, social deprivation especially of rural but also of peripheral urban areas are common difficulties. The cities, even the largest ones are in the secondary row of the national urban system. Polycentric urban development needs to be pursued in the manner



which can be of benefit for the rural peripheries to, that is, urban development needs to be an active, stabilising process rather than draining of and praying upon local energies. The safeguarding of the highly vulnerable natural and cultural resources is even more important than elsewhere. The adaptation of climate change and management of risks is important in view of the regrettable recent experiences. Improvements of connectivity and – especially – the contribution of territorial cohesion at cross-border, national and inter-regional level are persistent needs.

For its implementation the TICAD strategy must be in harmony with the one for the Danube Region, as the area is a constituent part of the Danube River Basin. The main objectives and commitments of the TICAD strategy and the **European Union Strategy for the Danube Region** are in harmony.

Agriculture and forestry have very high (70-90%) share in the land use of the Tisa Catchment Area. Considerable is the ratio of agriculture in the employment structure especially in the Romanian counties. The **EU agricultural – Rural Development Strategy** is therefore essential for this region. The policy aims – promoting sound, sustainable agriculture and forestry, landscape management, integrated rural development – are the same, and the funds allocated in the EU budget for these purposes are indispensable for the implementation of policy aims in these relatively less prosperous regions.



The **Green Paper on Territorial Cohesion** raises the issue of balanced territorial development, convergence and cooperation as well as the responding to specific features of regions and the enhancement of territorial identity: all these aspects are highly relevant for the TICAD strategy.

III. Definition of the territorial categories in the Tisa Catchment Area

For the classification of the territorial units of the target area the following spatial characteristics have been explored:

- settlement structure;
- demography;
- economic characteristics;
- land cover, land use features;
- infrastructure.

III.1. Settlement structure

Three indices have been examined: size (number of population) of the central city; population density; ratio of small settlements (with population below 5.000). In conclusion the following characteristics are identified:

- In the Tisa Catchment Area there are ten central cities with population over 150.000.

In counties (NUTS3 regions) Cluj, Timiș, Csongrád, Hajdú-Bihar, and Južnobačka a high ratio of population is concentrated in these centres. Population density is high. The counties of the other large centres – Bihor, Sibiu, Arad, Košice, Borsod-Abaúj-Zemplén – large urban concentration is paralleled by a high share of rural population.

**TICAD
URBAN CLUSTER 2006**



- There are medium size centres (over 50.000 inhabitants) in 19 counties. Some of these are characterised by high rate of urban population and high density (Uzhorod, Severnobačka and Satu Mare), in others there is a balance of urban and rural population (Mukachivskiyi, Mureş, Békés and Zapadnobačka). In the third group besides the medium-size centre there is rural majority in population ratio (Sălaj, Bistrița-Năsăud, Prešov, Szabolcs-Szatmár-Bereg and Heves).
- There are also counties with overwhelming rural majority in population and with relatively small urban centre (Harghita, Nógrád, Severnobačka and Banská Bystrica – this minor area unit has no urban centre).

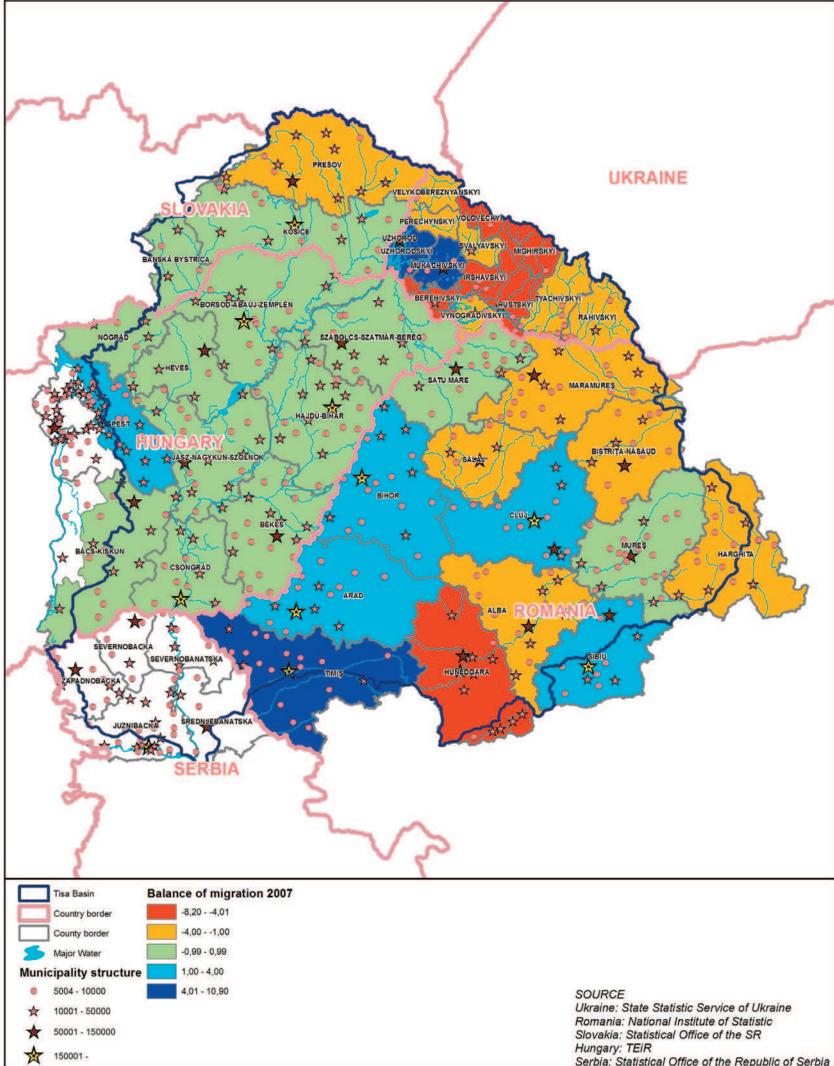


III.2. Demography

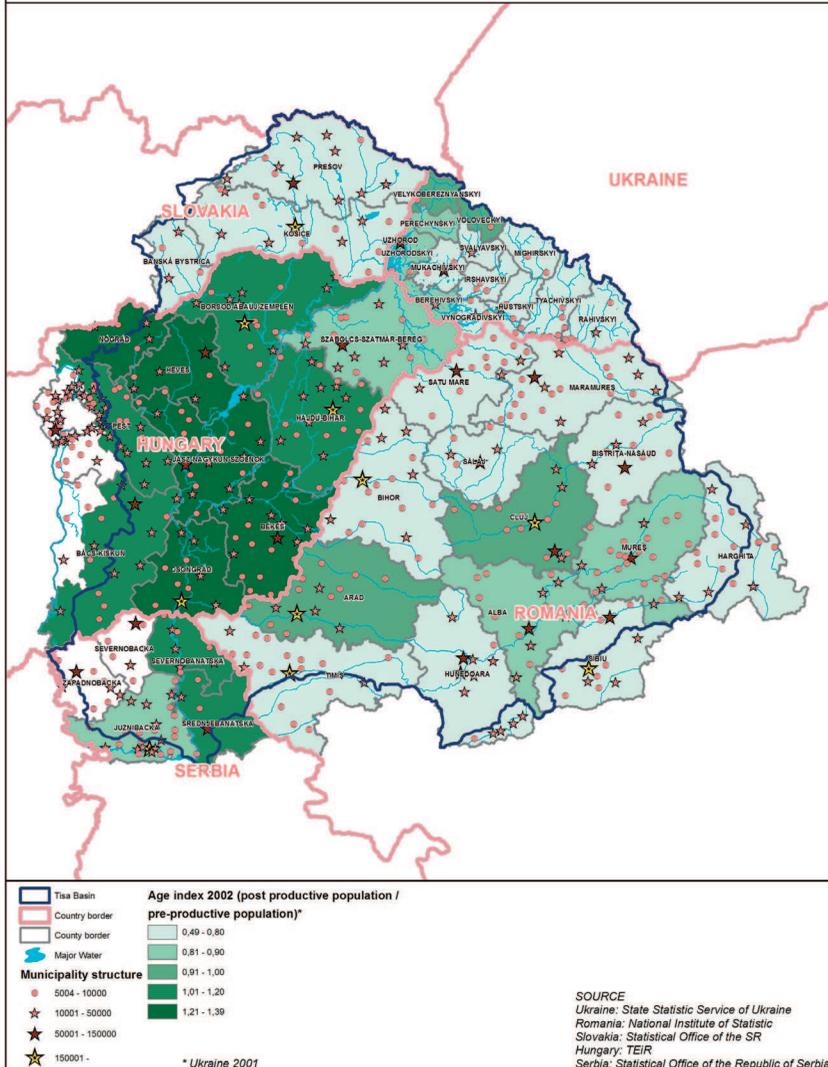
Three components are characteristic for the demographic processes in the Tisa Catchment Area. The future trends are rather determined by the migration, age structure and ethnic composition. With regard to this latter the ratio of Roma population has been taken into account because of the high birth-rate in this group and because they are under the pressure of exclusion and peripheral status. The following demographic trends have been identified:

- Migration gain and relatively young age structure is characteristic in oblasts Uzhorod and Mukachivskiyi in Ukraine and in Timiș, Bihor and Sibiu counties in Romania.
- Migration gain too but with balanced or aging age structure is typical in Cluj, Arad in Romania and in Pest County in Hungary.
- Migration loss and young age structure prevails in the other Ukranian counties as well as in Prešov (Slovakia), Hunedoara, Harghita, Maramureș, Alba, Sălaj, Bistrița Năsăud (Romania).

**TICAD
SOCIAL SITUATION - MIGRATION**



TICAD
SOCIAL SITUATION - AGE INDEX



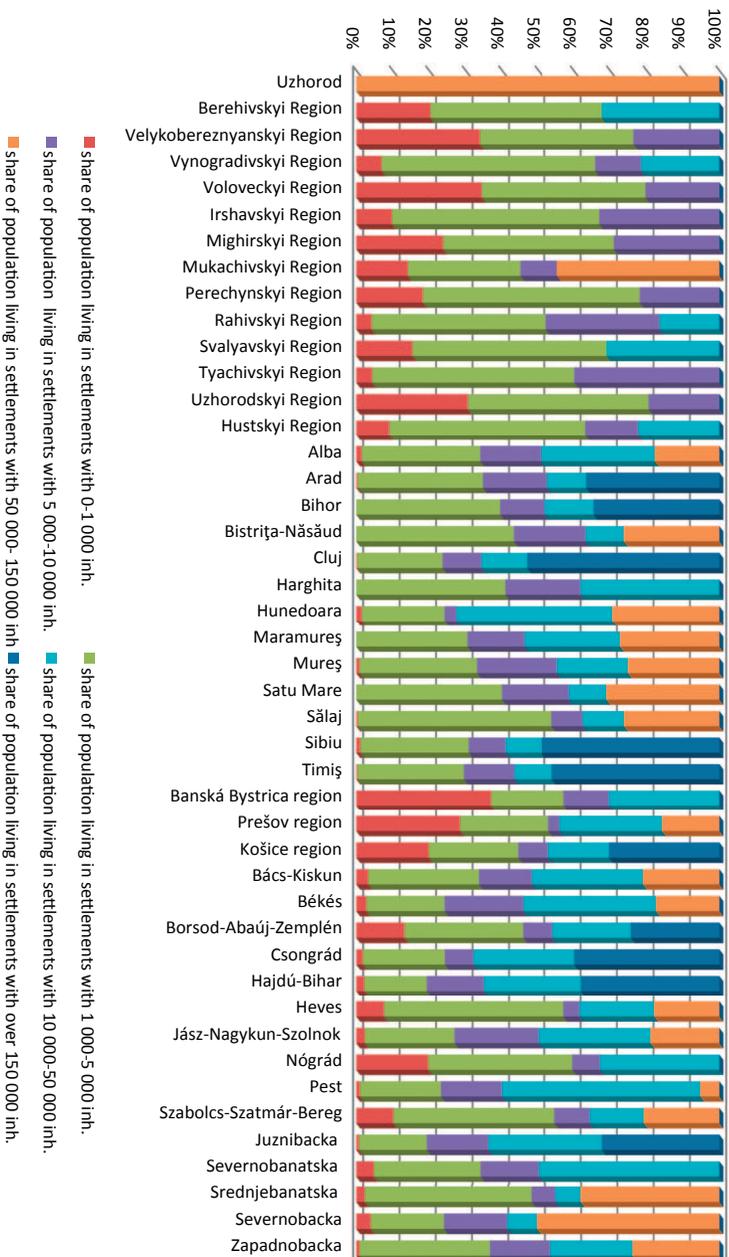
- There is balanced migration rate and relatively young age structure in Košice, Banská Bystrica, Satu Mare, Mureş and Szabolcs-Szatmár counties. The young age structure follows from the high rate of Roma population.
- The majority of the counties of Hungary (with the exception of Pest and Szabolcs- Szatmár) have balanced migration rate and aging age structure. Roma population is of high rate in Borsod-Abaúj-Zemplén, Heves and Nógrád counties.
- From the counties of Serbia there are no official migration data. There was a tendency of substantial growth during the last decade of the 20th century due to migration from the conflicts and uncertainties in the southern parts of the country.
- If the current trends are extrapolated substantial population decrease can be foreseen in the majority counties in Hungary: Borsod-Abaúj-Zemplén, Jász-Nagykun-Szolnok, Békés, Bács-Kiskun and in Romania: Timiş, Cluj, Alba.

III.3. Economy characteristics

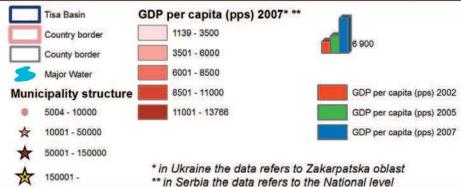
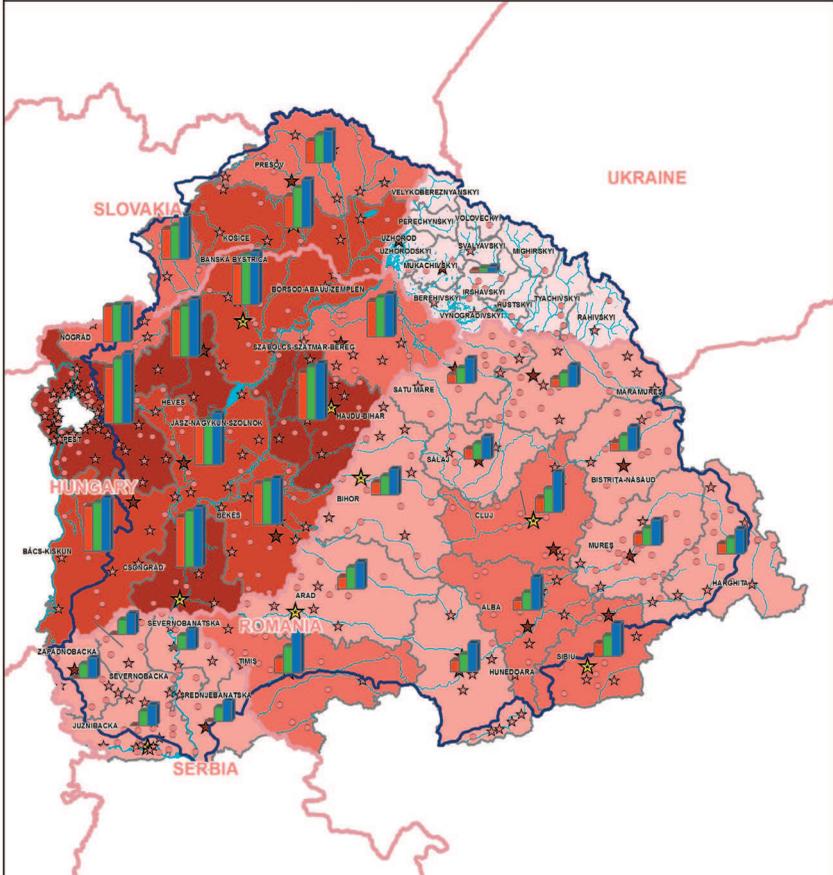
GDP per capita, trend of change of GDP, rate and structure of employment are figures characterising the economic situation of the Tisa Catchment Area.

- The highest GDP per capita occurs in counties of Hungary: Pest, Csongrád, Heves, Hajdú-Bihar, though employment rate is rather low.
- Medium is the level of GDP per capita and low is the employment rate in the other counties of Hungary and in Košice of Slovakia.
- Medium level of GDP per capita and low employment rate with high agricultural employment are characteristic in the Hungarian Great Plain counties of Hungary (Jász-Nagykun-Szolnok, Bács-Kiskun and Békés).
- In both other counties of Slovakia, in Nógrád and Szabolcs-Szatmár of Hungary as well as in the counties of Romania and Serbia GDP per capita is below average and very low in the counties of Ukraine.
- Between 2002 and 2007 there was a general improvement of GDP in the whole Tisa Catchment Area. In four counties (Timiş, Cluj, Alba, Sibiu) of Romania rise was great and sudden between 2005-2007. In Nógrád County of Hungary there was practically no change in GDP in this period.

Share of population in different settlement type



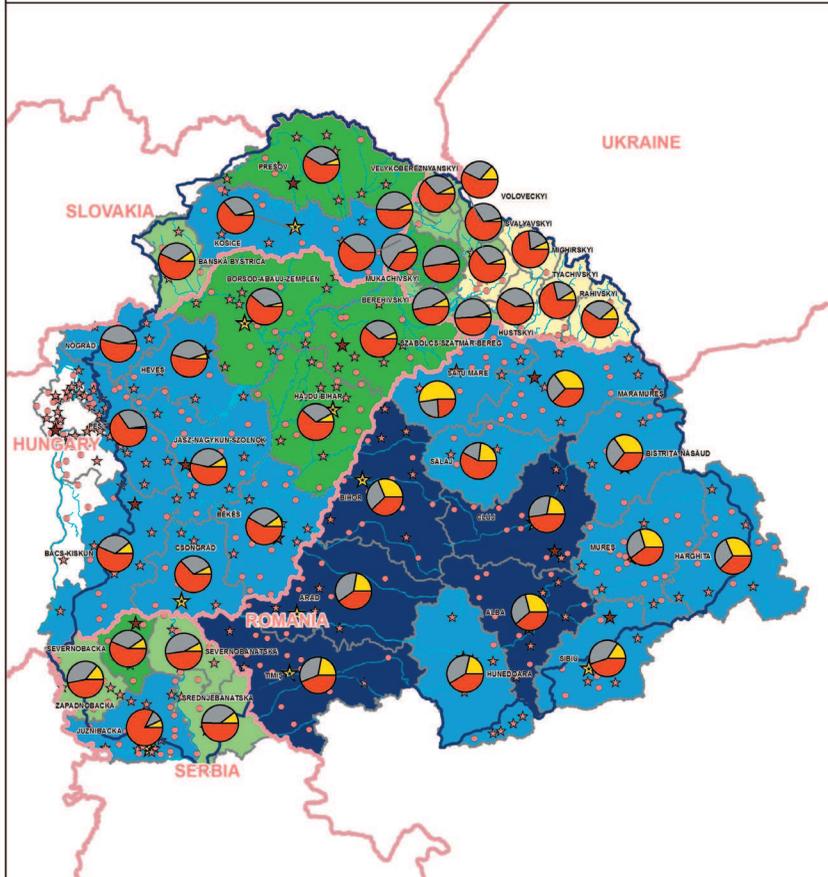
**TICAD
ECONOMIC BASE - GDP**



* In Ukraine the data refers to Zakarpatska oblast
** In Serbia the data refers to the National level

SOURCE
Ukraine: State Statistic Service of Ukraine
Romania: National Institute of Statistic
Slovakia: Statistic Office of the SR
Hungary: TEIR
Serbia: Statistical Office of the Republic of Serbia

TICAD
SOCIAL SITUATION - EMPLOYMENT



Tea Basin	Share of employed people 2007 (No. of employed people / No. of pop)	Share of people employed in different sectors
Country border	9,85% - 15,00%	Share of people employed in agriculture, forestry, fisheries and food 2007
County border	15,01% - 25,00%	Share of people employed in industry and building industry 2007
Major Water	25,01% - 35,00%	Share of people employed in service sector 2007
Municipality structure	35,01% - 45,00%	
5004 - 10000	45,01% - 52,81%	
10001 - 50000		
50001 - 150000		
150001 -		

SOURCE
 Ukraine: State Statistic Service of Ukraine
 Romania: National Institute of Statistic
 Slovakia: Statistical Office of the SR
 Hungary: TEIR
 Serbia: Statistical Office of the RS / Vojvodina Cess

-
- The counties with low GDP can be ranged in three groups in terms of employment rate. Medium is the rate in Uzhorod and Južnobačka, so is in several counties of Romania, where it is due to the high rate of agricultural employment. The third group with low GDP level has low employment rate in counties of Ukraine and Serbia and in two counties of Slovakia and Hungary each, both with two lowest GDP level.
 - The current economic tendencies may lead to the rise of the number of jobs in 2031 in counties Pest, Heves, Borsod-Abaúj-Zemplén, Békés of Hungary and Satu Mare, Cluj, Bihor, Arad in Romania.

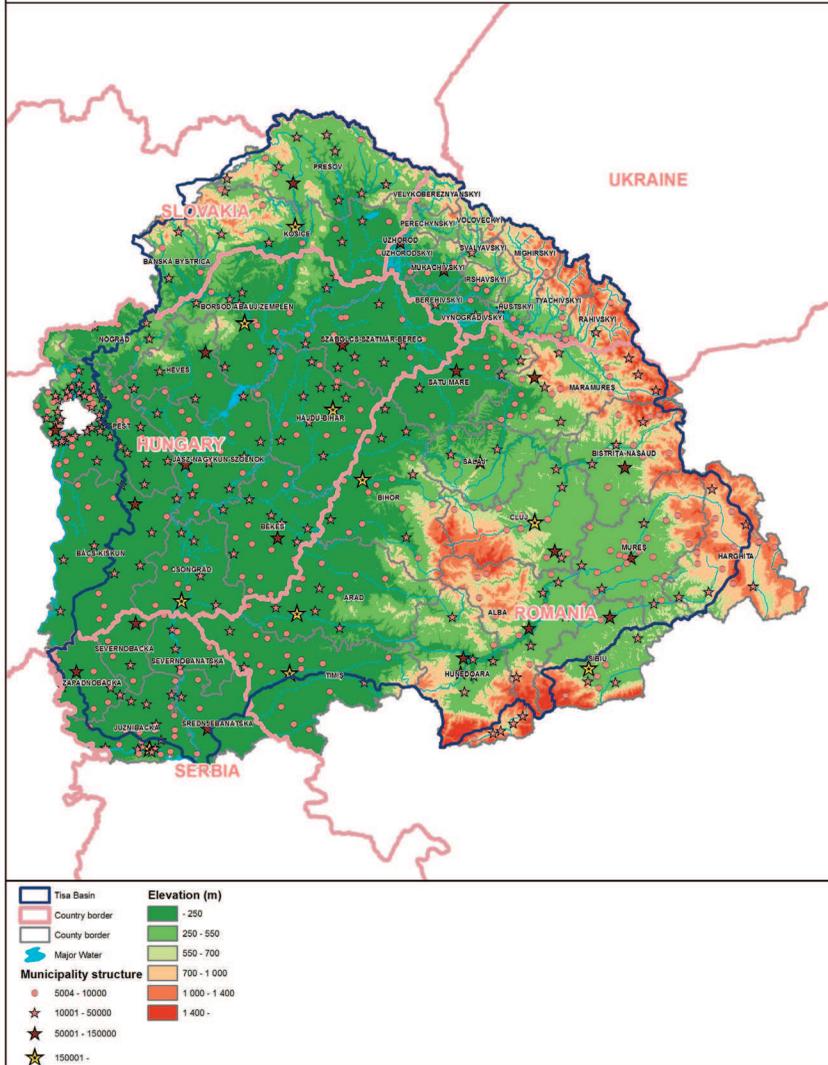
III.4. Land use structure

The characteristics of land cover / land use have been explored with regard to geography (morphology), the respective ratios of land cover with special regard to natural and semi-natural areas, agricultural areas and their specific uses and the size and ratio of forests. Assessment has been also made of the exploitation of land use potential (based on the actual land use and the potential derived from morphologic and soil features). The resulting ratios indicate the difference between actual and ideal land uses. The territorial characteristics of land cover and morphologic features are the following.

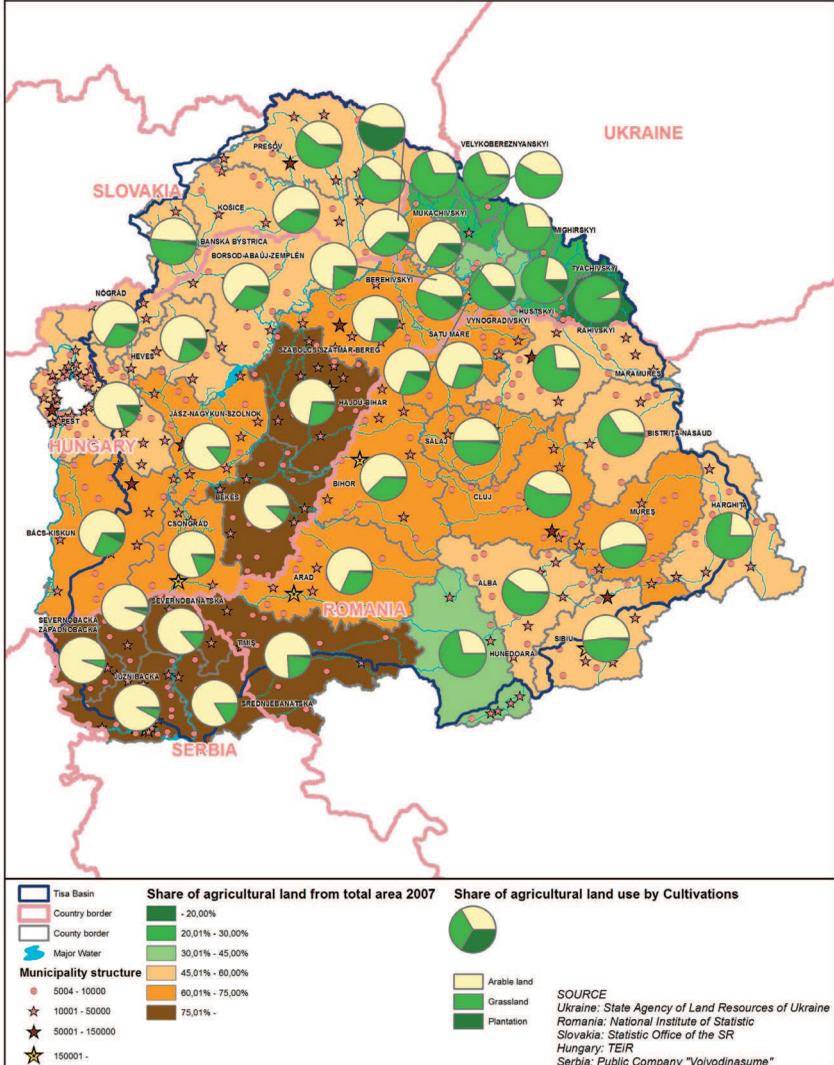
In terms of morphology four territorial groups are differentiated: plains, hilly and mountainous areas as well as high mountains.

- The high mountains of the Carpathian range with extensive forests are in Ukraine.
- On the high Tatra Mountains in Slovakia and on the Carpathian Mountains in Romania the ratio of agricultural areas is low; the semi-natural areas are extensive, with high, though lower ratio of forests (Prešov, Košice, Harghita, Hunedoara, Maramureș, Alba, Bistrița-Năsăud, Sibiu).
- Relatively higher is the ratio of agricultural areas on the mountains of Heves, Bihor, Cluj and Mureș counties, with lower rate of semi-natural areas and forests.

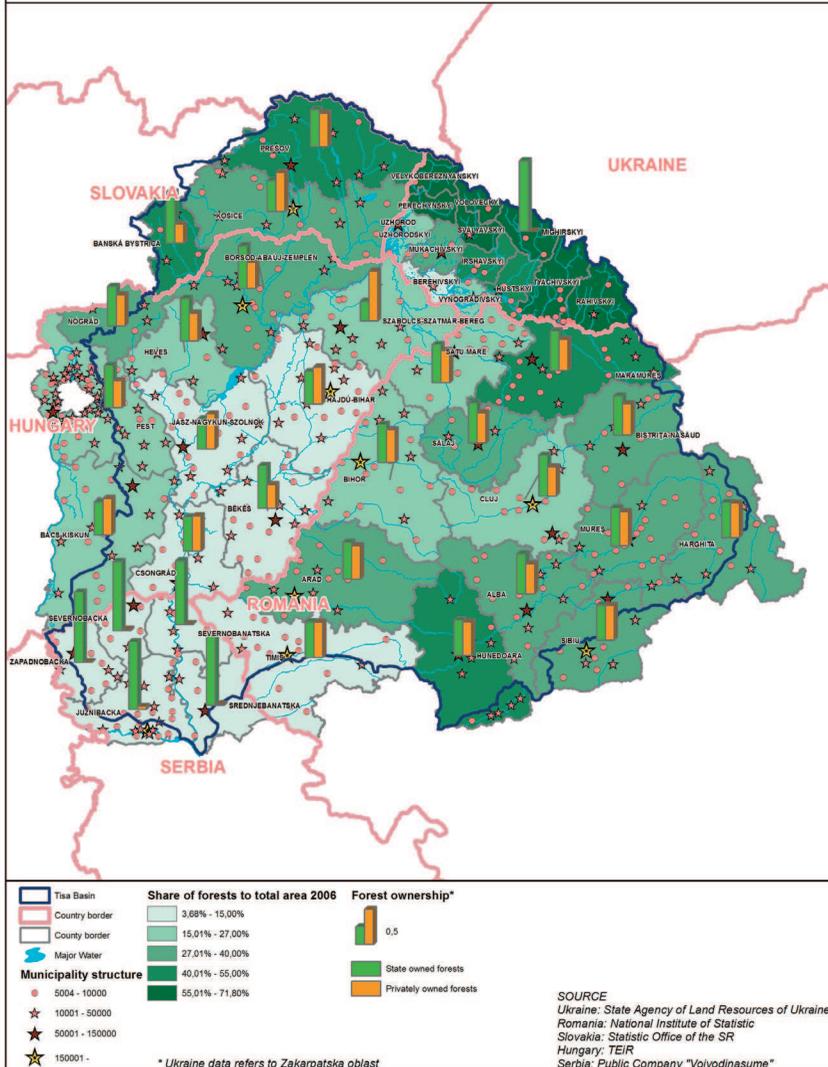
**TICAD
NATURAL AND ENVIRONMENTAL FEATURES - ELEVATION**



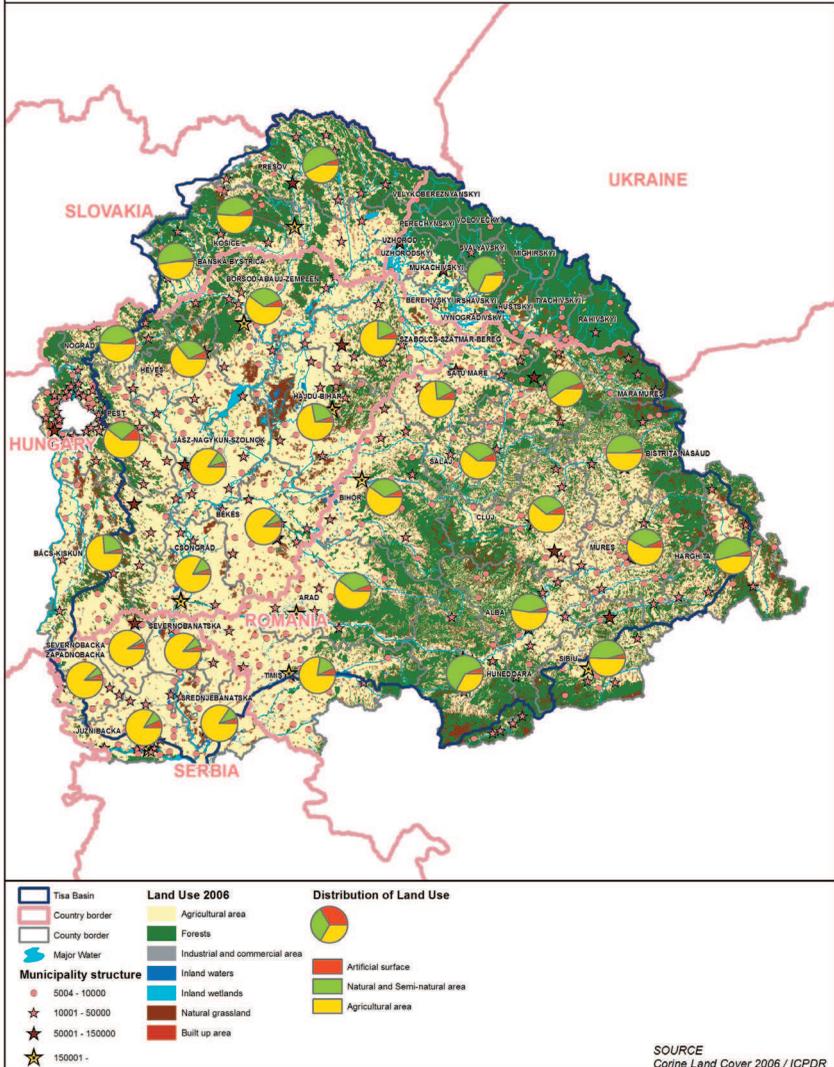
**TICAD
ECONOMIC BASE - AGRICULTURAL LAND**



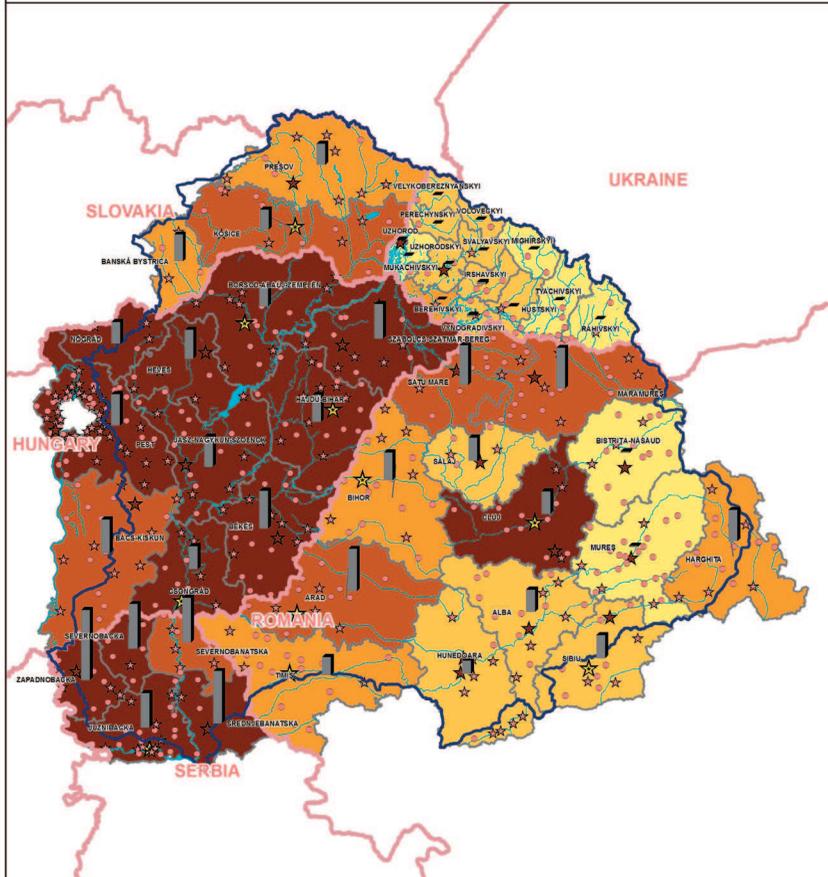
**TICAD
ECONOMIC BASE - FOREST**



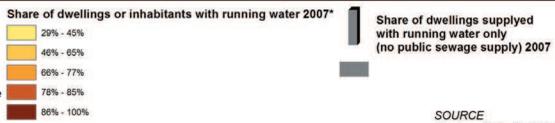
**TICAD
NATURAL AND ENVIRONMENTAL FEATURES - LAND USE**



TICAD
REGIONAL AND LOCAL INFRASTRUCTURE - RUNNING WATER SUPPLY, PUBLIC SEWAGE SUPPLY



- Tisa Basin
- Country border
- County border
- Major Water
- Municipality structure**
- 5004 - 10000
- 10001 - 50000
- 50001 - 150000
- 150001 -



* For Romania the data is estimation and is based on calculation of various available indicators

SOURCE
Ukraine: State Statistic Service of Ukraine
Romania: National Institute of Statistic
Slovakia: Statistical Office of the SR
Hungary: TEIR
Serbia: Statistical Office of the Republic of Serbia

**TICAD
REGIONAL AND LOCAL INFRASTRUCTURE - ROAD NETWORK**



TICAD
REGIONAL AND LOCAL INFRASTRUCTURE - RAILWAY NETWORK



Tisa Basin	Railway network	Border crossing point of railway
Country border	high speed railway lines (proposed)	existed
County border	trans-European Railway lines	planned
Major Water	railway lines of national and regional importance	
Municipality structure	railway lines of national and regional importance (proposed)	
5004 - 10000	railway lines of local importance	
10001 - 50000	wide-gauge rails	
50001 - 150000		
150001 -		

SOURCE
 Ukraine: Ministry of Infrastructure of Ukraine
 Romania: The Ministry of Regional Development and Tourism National Spatial Plan
 Slovakia: Topographical Institute Banská Bystrica / Geodesy, Cartography and Cadastre of the Slovak Republic
 Hungary: National Spatial Plan
 Serbia: Serbian Railways

REGIONAL AND LOCAL INFRASTRUCTURE - WATER MANAGEMENT



- There are extensive peripheral areas in counties of Ukraine, as well as in Békés, Arad, Timiș, Harghita, Hunedoara, Sibiu and Maramureș.
- There are somewhat smaller peripheries (accessibility) in Banat counties in Serbia, in Szabolcs-Szatmár-Bereg (Hungary), Košice, Prešov (Slovakia), Bihor, Satu Mare, Mureș, Bistrița Năsăud (Romania).
- Lowest is the supply of housing in Slovakia (though here the data are old) and in Ukraine.
- The supply of drinking water is good in the counties of Hungary and Serbia and in Cluj County, but sewage treatment is inadequate at several places. In the other counties the gap between water supply and sewage treatment is less. The worst rate of public utility supply occurs in rural areas where water supply is the lowest in Bistrița-Năsăud, Mureș and in the mountains of Ukraine.
- Security from flood hazards is the lowest, where high quality areas are flood prone, in Ukraine as well as in counties Prešov and Borsod-Abaúj-Zemplén as well as in great part of the counties of Romania, Cluj, Timiș, Mureș, Sălaj, Sibiu, Maramureș, Bistrița-Năsăud.

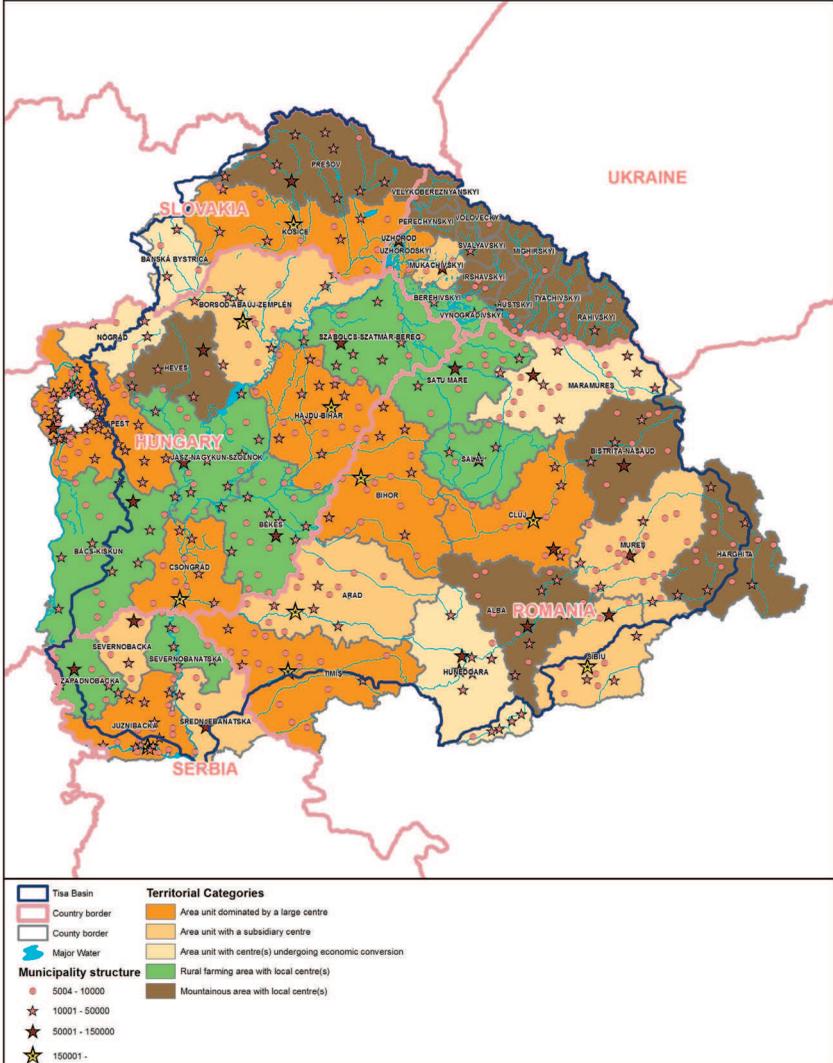
IV. Territorial categories

Area unit dominated by a large centre

Pest, Hajdú-Bihar, Csongrád, Južnobačka, Timiș, Bihor, Cluj, Košice, Uzhorod + Uzhorod Oblast

The area is characterized by the dominance of a large centre concentrating the majority of the inhabitants. The city with its workplaces and services is of good accessibility from the surroundings. Migration gain is a feature of demography. GDP per capita is relatively high compared to the national figures, and employment rate is higher than average. Industry and services are dominant sectors of employment. With the exception of Košice, the terrain is flat; the landscape is varied, with share of agriculture, semi-natural landscapes and forests. Side by side with the concentration of a wide range of services (including cultural, medical, financial, engineering, etc.), the supply of technical infrastructure is adequate.

**TICAD
TERRITORIAL CATEGORIES**



Area unit with a subsidiary centre

Arad, Borsod-Abaúj-Zemplén, Sibiu, Mureş, Mukachivskiy, Srednjebanatska, Severnobačka

In this category the central city is medium size or large (Miskolc, Sibiu) and is a dominant core of the area, although the extent of population concentration is lesser than in the former category. In and out migrations are balanced. Agriculture is an important economic activity in the hinterland. The protection from flood is, however, generally inadequate. The concentration of services includes various types and levels of education partly as independent institutions and partly faculties belonging to large university centres. The accessibility of the centres is suitable but needs to be improved especially in the eastern areas.



Area unit with centre undergoing economic conversion

Nógrád, Banská Bystrica, Maramureş, Hunedoara

The centres in this territorial category are medium size or relatively small and declining. The areas are losing population through out-migration, though the age structure of population is fairly young, due the relatively high share of Roma population and short life expectancy. A typical feature of economic structure is the dominance of heavy industries, of coal and metal mining in the process of decline or actually reviving. This form of employment and industrial activity has a marked impact on the landscape and environment. The natural landscape is at the same time rich in attractions with the hills, mountains and forests and semi-natural elements. Accessibility is generally inadequate.

Rural farming area with local centre

Sălaj, Satu Mare, Békés, Jász-Nagykun-Szolnok, Bács-Kiskun, Szabolcs-Szatmár-Bereg, Zapadnobačka, Severnobanatska, Berehivskiy, Vynogradivskiy

The spatial pattern is characterized by medium size or small urban centres as well as minor local centres and the spread of rural communities.

The demographic structure is ageing; migration loss is a typical trend. The general feature of the morphology is floodplain with scattered small forests and semi-natural landscapes of meadows and extensive farmland. The plough land and the settlements are generally, more or less safe from flood hazards. Accessibility is good or fair considering the scattered settlement pattern. Agriculture as well as services are the main forms of employment. GDP as well as employment rate is low. Though overwhelmed by problems due to uncertainty and low productivity, farming (including processing and farm-based manufacturing) is a great tradition and promising future potential of the area.

Mountainous area with local centre

Heves, Prešov, Alba, Harghita, Bystrița Năsăud, Velykobereznyanskyi, Volovecky, Irshavskyi, Mighirskyi, Perechynskyi, Rahivskyi, Svalyavskyi, Tyachivskyi, Hustskyi

A general feature of this territorial category is the dramatic, varied geographical morphology with high mountains and step valleys covered by woodland and semi-natural areas with scattered pastures and some arable land. The settlement structure is scattered with medium size and small centres and little villages. Accessibility is usually difficult. GDP is low (exception:



Heves), employment rate too. The age structure is young in Ukraine and in areas with large Roma population. The supply of services and public utilities is poor in the rural areas. The rural peripheries suffer from the shortage of infrastructure and services but benefit from the abundant natural beauty.

V. Detailed description of the SWOT elements in the different territory categories of the Tisa Catchment Area

The Tisa Catchment Area is not homogenous. The internal features and processes (strengths, weaknesses) show territorial differences and can be



classified by territorial categories. The strengths and weaknesses will be presented therefore separately for each territorial category. To define the necessary strategies, account has been taken of the internal features (strengths and weaknesses) for the different territorial categories.

External positive and negative processes (opportunities and threats) are affecting the Tisa/Tisza River Basin all units. Because of their general relevance they are discussed first.

Opportunities¹

The EU policies, directives as well as financial instruments related to and supporting regional development have been identified as opportunities for the Tisa Catchment Area. The opportunities indicate development trends of the Tisa regions mobilising the internal strengths and mitigating the weaknesses.

The scope of regional development is determined by the EU cohesion policy and the relevant financial instruments. For the ongoing elaboration of the TICAD strategy the regional development instruments for the current 2007-2013 period could be considered. The new policy instruments to be introduced from 2014 are not clarified yet. The priorities which they serve can be derived from the document entitled “Europe 2020 Strategy”.

Threats²

The threats are external effects confronting the European Union and thus the Tisa Region too in the process of policy implementation. Regional development aims at mitigating these harmful effects in the area under its responsibility by means of the mobilization of internal strengths and of the elaboration of crisis strategies.

1 www.ec.europa.eu

2 **Territorial Agenda of the European Union 2020** Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions agreed at the Informal Ministerial Meeting of Ministers responsible for Spatial Planning and Territorial Development on 19th May 2011 Gödöllő, Hungary II. Challenges and potentials for territorial development

V.1. The whole area

When **delimiting the target area of the project**, the natural border of the Tisa catchment area was determinative. An agreement was accepted by the partners in shaping the common methodology, stating that the territorial unit of the assessment will be level NUTS3. Ukraine and Serbia NUTS categories are not yet in use³, therefore the corresponding Serbian “oblast” and the Ukrainian “regions” (districts) are used, though the latter are smaller than the NUTS3 categories.

Based on those mentioned above, the planning area concerns 45 NUTS3 regions in five countries. The whole territory is 175,818 km².

Brief characteristics

The consideration of general approach in assessment of the catchment area based on the fact that all environmental and natural processes affect the entire region and are interconnected. The arising problems regarding environmental, water management, landscape and nature conservation issues have to be solved horizontally and in a synthesised way.

Another aspect of the general approach is that the Tisa Region economic and social ability have similar characteristics in the entire catchment area. The dominance of agriculture in economy, the high share of rural population and the rural areas are dominant in the whole region.



Strengths

The **scenic value of the landscape** all over attracts tourism and of high ecological significance. The **share of natural and semi-natural areas is significant** in the whole area. The national parks and of course a range

3 Serbia has officially adopted NUTS categories in December 2009, after the TICAD workshop where this issue was decided. “Oblast” equals to NUTS 3 level.

of NATURA 2000 areas are also available and easily accessible. **Sites of cultural heritages** are in great number and extension both in the historic cities and villages. **The significance of natural and cultural heritage lies – over and above tourist attraction – in the enhancement of territorial identity and integrity and in the attraction of quality industries (speciality products).**

The River Tisa and its immediate surroundings, even in its present form, is one of Europe's most natural rivers. The Tisa River and its tributaries serve as a **green corridor network**.

The availability and quality of **freshwater and sub-surface water resources** is vital. The water resources of the Tisa River Basin are mainly used for public water supply, irrigation and industrial purposes, but also for other agricultural uses, such as fishery, and recreation.



The total population of the target area, 15,5 million people, live in 3.572 settlements. Over 40 % of the settlements (with a population of 22,64% of the total) are of the category of 1000-5000 inhabitants. In Romania 75 % of the settlements are in this category. These 753 settlements comprise 33 % of the population of the Romanian catchment area. In Slovakia and Hungary a substantial ratio (80% and 40 % respectively) of settlements are micro villages each with less than 1000 inhabitants. The highest ratio of population living in micro settlements (24 %) is in Slovakia. 6 % of the total population of the Tisa Catchment Area lives in micro villages.

Weaknesses

The border areas of the catchment area are mainly **underdeveloped rural areas with low social and economic status** that can be ascribed to historical reasons. By the end of the 19th century, a series of regional development areas started to form, which could have become real regions in time in case of unhindered development. In addition to the new state

borders, a significant lack of urban centres appeared on the Hungarian side, in comparison to which Budapest became an “overweight” centre in the network of settlements. As a result of the extension of the European Union in 2007, the role of the border region is re-evaluated, and the economic relations with the former urban centres are strengthening, and the border can represent a possibility of breakthrough.

The so-called internal **peripheries (isolated crisis areas, far from urban and other regional centres, mountainous villages) are characterized by long term economic recession, employment crisis, poor infrastructure, difficult access.**

While the rural hinterland undergoes depopulation, urban – rural migration is characterised by the movement of young, qualified groups from the rural areas. The result is **increasing difficulties of social service for the aging and of the exclusion of deprived groups (Roma minorities).**



The low educational levels and outdated skills of the labour force are general problems.

The poor educational level and low level of internet accessibility causes that in the rural and periphery areas the level of benefiting from information and communication technologies is very low.

The appropriate accessibility fails not just in the periphery, but the whole area because of the **poor quality of the existing road networks** as well as the **railways.**

In the field of tourism the **qualitative and quantitative conditions of guest reception are still incomplete.** The levels of the present product supply, the accommodation structure and its quality, as well as the performance of hotel and catering services are just satisfactory.

The exquisite quality of **cultural and national resources is threatened by the lack of upkeep and maintenance** involving the risk of the decay of these resources.

High percentage of the **natural water flows** are **below the good ecological level**. The **water bodies are at risk** mainly due to hydro-morphological alterations and nutrient pollution followed by organic pollution and hazardous substances. **Hazardous substances**, however, were the main reason for the classification of tributary water bodies as ‘possibly at risk’



(especially in Romania, Hungary and the Slovak Republic). The hazardous substances are mainly heavy metals and cyanides from Romanian mines, chlorides from Ukrainian mines as well as mercury. Tisa water bodies at risk due to nutrient pollution were classified mainly in Hungary and Serbia. The main reason

for failing the WFD objectives for nutrient pollution is the **incomplete implementation of the urban wastewater treatment directive and diffuse nutrient pollution from agriculture**. Nutrient pollution in Romania is caused by diffuse pollution sources from human settlements, especially in rural areas where a small part of the population is connected to sewage systems and wastewater treatment plants. The high risk of tributary water bodies due to **hydro-morphological alterations is related to the frequent presence of bank reinforcements, canalisation and transverse river structures for flood protection and urbanisation**.

The **environmental awareness** of the population and the business sector is **low**.

In the project area various kinds of renewable energy sources are available, but their **exploitation is at a very preliminary stage**. Renewable energy resources in use, with varying degrees of efficiency in the project area, are hydropower energy, solar energy, geothermal energy, wind energy and the energy resulting from burning and, possible decomposing the biomass. The use of renewable energy sources is particularly beneficial not only for the improvement of air quality and natural environment protection but also in economic and social terms, through promoting energy security/independence, providing employment and contributing to business development.

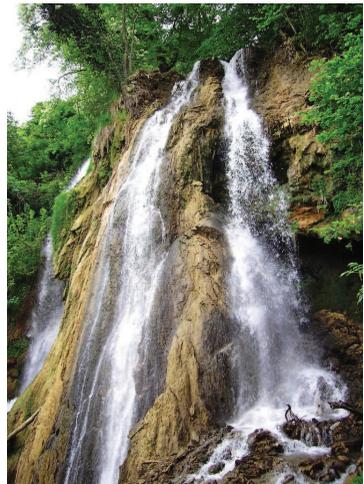
The lack of appropriate water management results **flood hazards, inland water stagnations and draught** frequently side by side of closely following each other. **Increasing of extreme weather phenomena** consequences of climate change will lead to increased water level variations, especially flood events. Therefore the implemented flood protection measures along the major courses solve the security of the citizens and business in the concerned counties. In the Tisa Valley, organised, systematic flood protection started in the mid 19th century. The backbones of these works are the flood protection dikes along the main river, but also include river training works, bank protections, flood retention reservoirs and polders. At this time drainage systems with pumping stations were also built. The **maladapted land use and ownership structure** cause not only increasing natural and environmental risks, but also economic disadvantage.

V.2. Mountainous area with local centre(s)

(**Ukrainian Oblasts:** Velykobereznianskyi, Perechinskyi, Volovecky, Svalyavskyi, Mighirskyi, Irshavskyi, Hustskyi, Tyachivskyi, Rachivskyi; **Romanian counties:** Bistrița-Năsăud, Harghita, Alba; **Slovakian county:** Prešovsky; **Hungarian county:** Heves)

Brief characteristic

The mountains are of dramatic landscape, outstanding natural beauty, great natural resource and tourist attraction. This great asset of the region needs special care and protection. It follows from the morphological features that in these areas the density of population and settlements is lower and the supply of conventional infrastructure is scarcer. Protection and wise management of the natural as well historic heritage deserve here special attention. Restoration of the natural environment is also needed, as the shrinkage of the woodland is taking already dangerous dimensions.



Strengths

The area is characterised by varied, unique and valuable landscape units with **large proportions of quality forests and high share of protected areas, NATURA 2000 network**. The share of area covered by forests is the highest (above 58.1%) in the eastern part of Zakarpatska Oblast in Ukraine. The ratio of protected areas is high (over 20%) in Slovakia and in Heves County in Hungary. The Carpathian Biosphere Reserve's area is located in Rakhivskiyi, Tyachivskiyi and Hustskiyi Regions in Ukraine. Also a part of Uzahnskyi Park is introduced into the World Network of UNESCO within the framework of trilateral Biosphere Reserve "Eastern Carpathians" (Poland, Slovakia and Ukraine).

The **diverse landscape and cultural features offer excellent potentials for active and health tourism**. The almost contiguous zones of natural beauty though of diverse character can be identified all over the area: dramatic mountainous landscapes, peaceful hillsides. The towns, cities and several rural municipalities are cultural centres with high class activities as well as folklore events. For example, Zakarpatska Oblasts tourist potential occupies one of leading places in Ukraine. The main recreational resources include its climate, therapeutic mud and brine of lakes, mineral waters, forests, water bodies, landscape peculiarities. The **geological diversity of the mountainous area is a basis of the mining industry**. The **leading mining centres** are occurs on the mountainous territories of Slovakia, Ukraine and Romania. Salt mines are located in Solotvyno in the Tisa Floodplain (at the Ukrainian-Romanian reach of Tisa), golden and poly-metallic in Muzhievo village in the Verke River Sub-basin. Gold resources in the Romanian Alba County are mainly concentrated around the cities of Baia de Arieş and Zlatna. In the target area of the Prešov region there prevail deposits of industrial minerals like zeolite, rock salts in Prešov, calcareous clays and construction materials. The lignite at Visonta (Hungary, Heves County), exploited by a joint-stock company by means of strip mining is the base of the largest coal-fired





power plant in Hungary, the Mátrai Erőmű with an installed output of 836 MW.

The **hydro-geological diversity** of the area constitutes its huge renewable energy potential. There are hydro-power stations, plants primarily in the Slovakian Prešovski Kraj, in Zakarpatska Oblast and in the Romanian mountainous counties.

In the isolated mountainous areas is formulated **strong local community cohesion**.

The **high percentage of traditional subsistence farms** helps the solving of livelihood problems in the rural areas as self-employment potential.

Weaknesses

In the mountainous area the accessibility and standard of public services are poor. **Public utilities are not fully built and accessible**. The **supply of drinking water and sewage system is limited** primarily in the Ukrainian, Romanian and Slovakian mountainous areas. They are characterised by **low quality subordinate road network lacking connections and railway branch lines** of poor condition which increases the **isolation of some rural areas**.

Unemployment is above the national average and the **proportion of the inactive population is extremely high**. This is partly due to the centres with a limited ability to attract employees, to **industrial crisis areas and to the outdated industrial structure**. In several small settlements the only employment is offered by the public sector (local government, school, etc.). The share of employed people is at a low level in the Ukrainian, Slovakian and Hungarian mountainous areas. In field of unemployment rate, some of the Ukrainian, Slovakian, Romanian and Hungarian areas are under the average of the Tisa Catchment Area.

The innovative groups of society **turn their back to the peripheral areas** of typically small scattered villages. Therefore the **educational level of**



the population is low; the number of business enterprises and employees is very small and the **income level is permanently low.**

The lowest range category concerning enterprise density (1.4 – 14.6) is composed by Zakarpatska Oblast from Ukraine, the Slovakian regions, the least developed Romanian counties (Bistrița-Nășăud and Alba).

Undercapitalisation and the low level of effective demand pose an obstacle to the evolution of business enterprises. The existing landscape and **natural features cannot be exploited** because of the **underdeveloped tourist infrastructure.** In spite of the broad and varied tourist potentials, very low turnover was recorded in Heves County in Hungary, Alba and Harghita in Romania. Tourist accommodation and weekend homes are in the greatest number in the Slovakian regions and in the mountains. The provision of accommodation is fairly low in the Romanian mountainous areas.

Inappropriately selected land uses (for example deforestation) **increase soil degradation and flood risk.** As a consequence of climate change it is experienced a rapid increase in the frequency of **flash flood events.** The spread of built up areas in the flood prone areas and ownership constrains in the implementation of flood prevention measures are problems to be solved.

V.3. Rural farming area with local centre(s)

(Ukrainian oblasts: Berehivskiy, Vinogradivskiy; **Romanian counties:** Satu Mare; Sălaj **Hungarian counties:** Szabolcs-Szatmár-Bereg, Jász-Nagykun-Szolnok, Békés, Bács-Kiskun; **Serbian counties:** Zapadnobačka, Srednjobanatska, Severnbanatska)

Brief characteristic

There are rural farming areas in several NUTS3 units, also in those dominated by one or another urban centres, and there are NUTS3 areas, where

the rate of concentration in the urban centre is less dominant. The rural farming areas are important though not always appreciated assets of the Tisa catchment area. Their productive capacity is still an untapped resource, so are the local skills, traditions and ecological treasures and historic monuments. They need sensitive assistance to recover after a long period of abuse and neglect. The towns and cities of these areas are of high cultural value.

Strengths

The counties are characterised by **good agro-ecological features**: a high proportion of arable land (the share of agricultural land use in the affected counties is over 60%) with appropriate **production capacities** and **traditional industrial processing of the various agricultural produce**.

The **conditions** are excellent **for renewable energy** utilisation based on the high potential of - geothermal, solar, wind and agricultural waste – resources. In the plains of the Tisa Catchment Area, in West Plains of Romania, Great Plain of Hungary and the plains of Voivodina the geothermal gradients are double of the global average. Exploitation and use of the solar energy is, however, at a very early stage. There are suitable sites on the plains of the catchment area too, with 3-4 m/s wind power, but the potential is used in Hungary only. These unique resources are not exploited as yet in any of the countries, but one can expect the increasing use of geothermal energy in the future.



The **unique** and valuable **landscapes** in the area together with many cumulative **touristic attractions**: architectural monuments, ethno-folklore and spiritual-religious heritage, protected natural and scenic values (farmstead regions) and traditional wine regions are excellent conditions for water, village and ecotourism. This completes the above mentioned rural market towns' traditions, local products, gastronomy and trades crafts as well. At the local level the most effective way is to link a cou-

ple or more potentials and activities, like excursion and country walk with rural farming and the sale of local farm products or paddling and canoeing with cycling and riding, eco tourism and cultural festivals etc.

Weaknesses

Among the affected counties are some areas with frequent social problems. In many settlements the proportion of the **inactive population** is high, the **age structure** can be described as ageing and proportion of the **Roma population** is on increase which imposes a major social burden on local governments.



These settlements are characterised by **outward migration of the innovative groups** of society, by **low educational level** and by **recurrent employment problems**. These rural, through its low accessibility level **isolated areas**, are characterised by **poor conditions of public utility services**. They are peripheral zones mostly along the country borders for example - in case of rural farming area - the Hungarian / Ukrainian and Hungarian / Romanian one where based on traditional development policies they become back warded (Szabolcs-Szatmár-Bereg and Békés counties, Zakarpatska Oblast). Some rural areas are characterised as inner peripheries because the lack of the necessary transport links (micro region Tiszafüred in Hungary).

Generally the **service level is underdeveloped** mostly due to the low effective demand of the local population. It is the reason for **insufficient facilities and low quality of tourist services** also. In the most of affected (especially in the Ukrainian, Romanian and Serbian) counties in the rural farming area it shows a low number of accommodation beds and accordingly the tourist guests nights.

The profitability of the agricultural sector as well as its ability to provide livelihood for the population are weakened by the two-pole land structure (**fragmented land, with low average farm size and large estates**),

by **land uses (and the homogenous crop structure)** not in conformity with landscape features, by low local added value and by the **lack of cooperation in production**.

The low profitability of the agricultural sector is aggravated by the high **risk of floods and excess waters and by draught**. There is a marked decrease of subsoil water levels in the sandy ridge between the Danube and Tisa, in Nyírség and in the thermal karst area of the Plain. The **spread of build up territories in the flood prone areas** increases the risk factor for human and economic assets.

The characteristics include the standard and **poor state of surface and subsurface waters** and their vulnerability as well as **environmental pollutions arising from infrastructural deficiencies and diffuse agricultural (nitrate) pollution**.

The **average farm size** is very low and the **farm structure is fragmented** in general in the entire catchment area.

V.4. Area unit dominated by a large centre

(**Ukrainian oblast:** Uzhorodskyi; **Romanian counties:** Timiș, Cluj, Bihor; **Slovakian county:** Košický; **Hungarian counties:** Pest, Hajdú-Bihar, Csongrád; **Serbian counties:** Južnobačka)



Brief characteristics

NUTS3 units with large urban concentrations: cities around or over 200 thousand population (largest of all is Timișoara with over 300 thousand inhabitants) surrounded by an urbanized belt, with links to transport nodes and corridors. The central cities concentrate a significant ratio

40 % or more of the population in the region and represent by far the highest output (GDP), highest employment in industry and number of

enterprises. The cities are centres of higher education, scientific research and cultural activities (media, arts, performance). They have the highest rate of people with advanced (tertiary) education. Therefore they have the potential of being engines of growth in the region. The communities outside the cities are either directly dependent on the centre cities (in residence - workplace or direct productive relationship) or they are of rural character.

Strengths

The **migration gain, relatively high ratio of young age-groups** and of **qualified work force** are conditions for further development of the knowledge base, demanding workplaces both in manufacturing and services. Population growth in these regions is particularly visible from the turn of the centuries (since 2000), when the majority of the TICAD areas, and the whole macro region underwent population decrease. The main component of population growth in this area category was and has been **migration towards a more promising direction** (western in Romania, central in Hungary, northern in Serbia) and also **migration from rural to urban areas**. In other words this process may also be called rural exodus. This latter tendency of migration and population growth is of particularly strong attracting growth from broad areas even from beyond the NUTS3 boundaries.



The central cities themselves are the main poles of attraction with the possibilities of a range of workplaces in manufacturing and service. In the national context they are second level (following the capital cities) **national poles with metropolitan potential and transnational influence**: Timișoara, Cluj-

Napoca (over 300000 inhabitants), as well as Oradea, Košice, Debrecen, Szeged, Uzhorod, Novi Sad are highly attractive centres, **located on major transportation axes, with high economic potential, well-defined**

historic and cultural identity, which can develop tertiary services, with influence in Europe.

The leading position of these units in social and economic terms is interconnected with their (accessibility) **nodal position in the transport network**. The international railway lines connect all major cities. Motorway access is only available for the units in Hungary and Serbia (M5 and M3, Budapest - Szeged



and Budapest – Debrecen). The former goes up until Novi Sad. The upgrading of railways and roads and the construction of motorways has been on the agenda and still is. Mention is deserved by the airports available in all of the urbanized units, the largest is the one in Timișoara.

The central cities have all the characteristics **to justify the need to promote education at all levels** by their delegated responsibility for the cultural advancement and extension of education and qualification to all those living and moving into the area (county).

The relatively recent phenomenon in this territorial category is that population growth tends to extend beyond the administrative boundaries of central cities and affect the surrounding small cities and former rural communities, and in this process more or less views of these continuous urbanized areas are evolving around the central cities and along the major transport accesses. This is a marked tendency around Timișoara, Košice as well as Debrecen and Szeged, though in the latter cases the development of conurbations – intensifying links between the central cities and the surrounding smaller towns is a typical process. County Pest in Hungary (with the exception of the south-eastern corner) is actually the urbanized belt around the capital city Budapest. **This suburbanisation process indicates intensifying interconnections between central cities and their surroundings** and the development of both traditional residence – workplace relations (commuting to the workplaces in the

central cities) as well as new, more decentralised form resulting from the spread of workplaces in the evolving urban regions.

Migration and **the attraction of a variety of workplaces and educational facilities** have favourable impact of the changing age structure in this territorial category. In contrast to the overall demographic structure of the TICAD region, the ratio of young age groups is fairly high and growing.

The occupational structure is dominated by services, and particular important in this regard is education. **Higher education is essential and dominant.** The universities in each of the central cities have over 10 thousand students affecting the social and cultural climate. Significant is the ratio of other **educational services** (schools, training programs), **cultural facilities** serving both the local and regional population as well as domestic and international tourism. Significant is the role of **medical and services taking care of the local population as regional and community centres.** The link between medical services, research and education has a tendency to grow in Debrecen, Szeged and Cluj.



Trade (shopping centres, warehouses) and business services (financial, managerial, legal services) are outstanding, employing a growing number of people and operated increasingly by foreign companies.

Manufacturing is also essential economic activity, and the central cities as well as their subsidiaries are major concentrations. Steel processing and energy production are dominant in Kosice still preserving its heavy manufacturing role in Slovakia. In the other areas of this category heavy manufacturing has progressively given way to string, logistics and the manufacturing of machinery, electric and electronic products as well as chemical and textile industries and food processing. In manufacturing production technological modernisation is in progress in Košice,

and innovative products are released at small scale by the enterprises of Debrecen, Miskolc and Szeged. In Uzhorod wood processing is also noteworthy. In Timișoara foreign investments (US, German, French, etc.), especially in high-tech sectors (mobile telephony) and chemicals (detergents) have been determinant. In Oradea furniture, textiles and clothing, footwear and food are the main industries. The decline of the manufacturing sector is a marked tendency in Voivodina, including South Bačka, just like in the whole of Serbia. In Szeged (with various food industries and petrol chemistry) and Debrecen (pharmaceutical industry and manufacturing of medical instruments) there is a tendency to promote cooperation between manufacturing enterprises and R+D pursued at academic and other centres, there are similar initiatives in Košice and Timișoara too.

Tourism is a major and growing activity, undertaken both as main occupation and part time and main of supplementary economic activity in all areas of this territorial category. Tourism as well as **tourist infrastructure is concentrated in the urban centres** where both the services and the attractions are available. Tourism, however, is spreading to small towns and rural communities to, as interest in folklore, rural landscape and sports is growing among the domestic and international customers.



Although agriculture is on decline all over the TICAD region (with a possible exception of Zakarpatia), it is not to be underrated in this territorial category, with **special regard to the exceptional farming potential of the plains** (Csongrád, Hajdu-Bihar, Pest, Timiș, part of Bihor, South Bačka).

Forest cover is rather low in this territorial category, the exception is Košice County. Although human intervention is considerable in this populated territorial category, **the share of natural and semi-natural areas is significant** in districts Košice and Uzhorod. Areas under nature protection are of special national interest in counties Csongrád, Hajdú-

Bihar and Košice. **The scenic value of the landscape all over attracts tourism and of high ecological significance.** So are the water bodies and wetlands along the middle and lower courses of River Tisa (Csongrád, South Bačka).

Sites of cultural heritages (ancient palaces, churches, castles, archaeological sites, rural monuments, etc. like the Baroque civic and clerical monuments of Oradea, 18th and 19th century architecture of Timișoara, ancient churches, public and civic monuments of Košice, castle, ancient churches and monasteries of Uzhorod, Vladičin dvor and the remains of the fortification of Novi Sad, elegant urban architecture along the squares and avenues of Debrecen and Szeged) are in great number and extension both in the historic cities and villages. The small but exquisite gems of architectural history in small towns and villages (Lugoj, Salonta, Csongrád, Gödöllő, etc.) deserve special mention. The national parks in this territorial category include the Slovak Karst National Park (Košice Kraj), Hortobágy (in Hajdú-Bihar County), Apuseni (partly in Bihor), Mureș Valley (partly in Timiș), and of course a range of NATURA 2000 areas are also available and easily accessible. **The significance of natural and cultural heritage lies – over and above tourist attraction – in the enhancement of territorial identity and integrity and in the attraction of quality industries** (speciality products).

The units of the urbanized territorial category are above the TICAD average in terms of infrastructure like water supply, sewage disposal, electric and electronic networks. **The supply of public facilities** (childcare,



schools, medical and social services, waste collection, public safety, sports grounds and open spaces, etc.) **is also above average, particularly in the cities.**

All these favourable features (“strengths”) need, however, qualification. The figures above the average of the

catchment area (in terms of GDP, educational level, quality of services, nodal position, etc.) do not indicate actual high qualities. Even the highest figures are below the acceptable European standards.

Weaknesses

The **economic performance** of all of the urbanized territorial units (though themselves are relatively better situated than the other units and of course than TICAD region average), with the exception of Pest County linked to the Hungarian capital city, **is below the EU average in terms of GDP per capita.** This



figure in the GDP per capita in purchasing power standards is over 11.2 thousand in Pest and Csongrád, over 8.7 thousand in Hajdú-Bihar County and Košický Kraj. In the Romanian units (Cluj and Timiș) it is somewhat lower, in Bihor as well as in the Uzgorod and South Bačka even lower).

From among the infrastructural conditions of progress and advancement -particularly deficient are the ones of accessibility. The **delay of motorway development** in the neighbouring countries and regions imposes difficulties even in Hungary.

This risk is aggravated by the **general lack of environmental awareness** and by the **inadequacies of various environmental actions** like air and water pollutions, deficient infrastructure for waste management, sewage management.

Although tourism has been recognized as an economic activity of high potential, **little** – if any - **integrated action has been taken to promote is.** The tourist potential of the waterways is hardly and poorly exploited. The lack of cycle routes is an obstacle of eco- and rural tourism and also of the flexible inter-community and cross-border movement of people. The major resource of this area, land and water is generally underused and abused. This is why the most attractive landscapes and **natural**

and cultural heritage are threatened by uncontrolled land use and construction activities.

The flood hazards affect the highly valuable built up areas, endanger their state and even the survival of some of the precious element of built heritage and new developments.



The effectiveness of the knowledge base of the cities is restricted because of the **weak cooperation between business and education/research activities**. The output of scientific efforts may gain recognition, but is not made of practical use in the local urban context. Furthermore, the qualified workforce released from the institutes of higher education and special training does not find appropriate employment and is either bound to take less demanding jobs or moves to more attractive employment outside the region.

V.5. Area unit with a subsidiary centre

(Ukrainian oblasts: Mukachivskyi; Romanian counties: Mureş, Sibiu, Arad; Hungarian County: Borsod-Abaúj-Zemplén; Serbian counties: Severnobačka, Srednjebanatska)

Brief characteristics

NUTS3 units of this category are centred by large cities, which however are somewhat behind the former group. They also concentrate a large part of the district population, are centres of industrial employment and culture, but the local industries are mainly assembling plants (foot-loose enterprises). Their role in culture and education is important and may follow suit the bigger centres in terms of the development of an active and productive knowledge base. There is a greater than average gap between the cities and their hinterlands. In spite of the relatively high

development level of the central cities the rates of the NUTS3 regions are low due to the deteriorating impact of the indices of the rural peripheries.

Strengths

The characteristics of **manufacturing are determined by the availability of abundant raw material**. In the Romanian Tisa Catchment Area, there are the most important deposits of natural gas (methane gas, respectively associated gas), methane gas deposits being located particularly in Mureş County as well as in adjacent County Sibiu. Natural resources in Arad are worthy to be taken into account as there are oil and associated gases, points of extraction in the west of the county, molybdenum mines, marble quarries, and uranium deposits in different part of the county. In the north-western part of Borsod-Abaúj-Zemplén County there are some potential coal extraction areas and some special silicate mines. In Severnobačka of Serbia there are many oil and gas wells – more than 100 gas wells and 8 oil fields in Vojvodine.

The towns in the region are **long-established industrial, mining and commercial centres**. The predominant industries in Mukachivskiyi and the Romanian counties are the machine and automotive components, construction materials, food industry, textile industry, wood industry. Dominant is heavy industry (electricity, chemical and heavy engineering) in Borsod-



Abaúj-Zemplén County. In Subotica the traditional diverse manufacturing industry is characteristic. Economic growth is indicated by the high ratio of commercial, transport and communication services in the cities of Mukachivskiyi, Borsod-Abaúj-Zemplén, Arad, and Sibiu counties.

The great centres of higher education and research are in the large cities. Nevertheless, these **subsidiary cities are also locations of education and research**. Due to their industrial and economic relevance, it is important

to mention the Nanotechnology Research Institute (Nanotechnológiai Kutatóintézet) and the Logistics and Production Engineering Institute (Logisztikai és Gyártástechnikai Intézet) in Miskolc. In Zrenjanin of Srednjejbanatska, Serbia all levels of education are present. There are different university programs (branches of The University of Novi Sad) and the number of programs is expanding. It concentrates high-school and university students from the vast area around and therefore makes it dominant cultural hub in the district.

The economic importance of the subsidiary centres is enhanced by **the access to the European transport corridors**. Arad is connected to Route IV of TEN-T. There is an east-west access to international E highway at Mukachevo via E50 and E58, at Târgu Mureş via E60, at Oradea and Sibiu via E68. Highways E71 and E79 are accesses for Miskolc, highway E75 for Subotica. Zrenjanin is an important transportation node in Serbian part of Banat. It is set on the cross-point of the Magisterial road M7 (links Timișoara with the Pan-European corridor 10) and the Magisterial road M24 (north-south transportation corridor).



The **semi-natural and unique landscapes and cultivated areas**, thermal water resources and the rich cultural heritage **outstanding tourist features**. Although the main destinations are the big cities (Mukachivskyi, Miskolc, Sibiu, Târgu Mureş, Subotica) as they offer a great number and diversity of architectonic and cultural-historical attractions as well as many events and cultural activities. In the rural area the diverse landscape and cultural features offer excellent potentials for active and health tourism (e.g. the stalactite

caverns from Aggtelek, Tokaj-hegyalja historical wine-region, Ocna Sibiului, Bazna and Miercurea Sibiului, Sovata, Palič, Păltiniş mountain resort).

The rate of tourist turnover (number of nights spent by tourists) was high (more than 500 000) in Mureş and Borsod-Abaúj-Zemplén, but Sibiu is outstanding as well. The relevant data were not accessible for

Serbia and Ukraine. As for the capacity of tourist accommodation the rate of County Borsod-Abaúj-Zemplén is outstanding.

The most **important areas of agriculture** are the traditional wine districts (Borsod-Abaúj-Zemplén, Arad counties), forestry is of high importance in Mureş and Sibiu, whereas arable land is of high quality in Severnobačka. Srednjebanatska has strong agricultural profile, embodied in the collective memory of the people as typical Banat landscape.



In the rural areas the natural conditions are pre-eminent especially the valuable landscapes and semi-natural biotopes. Some of the **rural areas are surrounded by vast protected natural areas**. Over 20 % is the ratio of protected nature conservation areas in Mureş, Sibiu and Borsod-Abaúj-Zemplén

counties (with large woodlands), and over 10 % in Arad and Mukachevo. The designation of nature protection areas in Serbia is in delay (NATURA 2000 areas are not designated yet), the ratio there is therefore low. The most significant protected nature conservation areas are the Aggtelek National Park, Bükk National Park, Zemplén Protected Landscape (Borsod-Abaúj-Zemplén County), Defile of the Upper Mureş (Mureş County), Mureş Floodplain (Arad County), Ludas Lake (Severnobačka).

Weaknesses

Distribution of population in these NUTS3 Regions is polarised. Density is high in the central cities of Miskolc, Mukachevo, Sibiu, Mureş, Arad, whereas it is low in the rural peripheries. The difference is even greater in terms of population change. There is some growth in certain cities (Mukachevo, Arad), while **the rural hinterland undergoes depopulation. Urban – rural migration is characterised by the movement of young, qualified groups from the rural areas.** The result is **increasing difficulties of social service for the aging and of the exclusion of deprived groups (Roma minorities).** A significant ethnic minority are

the Roma. They themselves are a mixture of different nationalities; speak the language of their place of living as well as one of their own languages. In the catchment area of highly mixed nationality the ratio of Roma population is the highest in counties Borsod-Abaúj-Zemplén and Mureş. A high concentration of Roma in the total rural population at the county level is also recorded in Sibiu (8.6%). In the rural areas of low educational and employment levels of the Roma minorities are especially great concerns.

Urban – rural differences are great in terms of economic levels too. In the rural, especially **small communities there are narrow possibilities of livelihood**. In several cases the only employer is the local government with its educational and social services. The small farms serve for subsistence. Provision of employment is difficult because of **low accessibility due to the poor quality of secondary roads and the scarcity of public transport services**.



The low overall rate of communal services is due to the **scarcities of infrastructure in the rural areas**. In the Tisa Catchment Area 64 % of the total number of dwellings has access to communal water supply. The poorest is the supply (below) 45 % in the Ukrainian and Romanian counties, in the isolated mountain villages. 46 % of the dwellings of the project area are connected to the public sewage disposal systems. Less than 30 % is the supply in districts with extensive rural areas in Romania (Sibiu).

The impact of **economic restructuring after the change of the political system is still prevailing**. At the beginning of the 1990's the large manufacturing firm were closed down, the remaining were converted, reorganized and updated. The resulting large-scale unemployment led thousands of people to turn to start some sort of small business. In most

areas the firm period of restructuring and related privatisation have been completed, at several places the second restructuring period has also begun involving the out movement of foot-loose multinationals (with low production of added value) further to the east.

One of the multiple causes which induce such vulnerability is **the structural imbalance, both at national and local level**. This imbalance may be found both in the internal fragility of the economic companies (level of technology, insufficient level of know-how, unconsolidated markets) and in the horizontal and vertical relations within the economy.

Service sector consists mainly of human services, productive tertiary sector is limited to larger towns.

In contrast to the significance of tourist attractions the capacity of accommodation is very poor (less than 20,000 beds) in the Romanian counties. The tourist services are even poorer in Ukraine and Serbia (less than 500 beds). In the field of tourism the **qualitative and quantitative conditions of guest reception are still incomplete**. The levels of the present product supply, the accommodation structure and its quality, as well as the performance of hotel and catering services are just satisfactory. Sales and communication activities are even weaker in spite of the fact that we encounter several touristic elements, but with regards to strategic planning, targeting, the exploitation of cooperative advantages, there is much room for improvement.

V.6. Area unit with centre(s) undergoing economic conversion

(**Romanian counties:** Maramureş, Hunedoara; **Slovakian county:** Banská Bystrica; **Hungarian county:** Nógrád)

Brief characteristics

These areas are characterized by persisting problems of industrial decline. Here the manufacturing and mining industries have fallen victims of economic restructuring and their recovery is still to happen. Their special difficulties are on the one hand social because of the large number of redundant workers of outdated skills and on the other hand environmental, because of the pollution and decay left behind by the company closures. The natural envi-



ronment as well as the historic architectural heritage in and outside the cities deserves restoration and revival. This as well as thorough clean-up of the derelict sites could and should be the way towards consolidation.

The communities outside the cities are either directly dependent on the centre cities

(in residence - workplace or direct productive relationship) or they are of rural character.

Strengths

The areas of this territorial category are traditionally prosperous with a magnificent history testified by the surviving architectural monuments and cultural traditions. They are mountainous areas with **forests, beautiful landscapes and the treasures of the earth**. In distant and recent history these treasures, the mineral resources were highly valued and exploited. The audacity to explore the treasures of the earth and turn them to promote material prosperity determined the fate of these areas. Coal in Banská Bystrica Kraj and Nógrád County and Jiului Valley of Hunedoara, gold and other precious metals in Maramureş as well as various other **mineral resources all over encouraged the development and expansion of mining and gave rise to other heavy industries**: metallurgy, power generation, engineering as well as the processing of timber available in abundance.

Mining and manufacturing were the chief sources of livelihood of these area units and **are likely to remain so in new circumstances, in new forms and technological conditions**, serving as **suitable sites for investment, with their strong industrial traditions and infrastructure**.

County Nógrád in Hungary (where GDP per capita is the lowest in the country), and especially the central micro regions of Salgótarján and Bányavetereny are typical examples of the victims of restructuring. The former coal mining and manufacturing centres (steel, machinery, glass) are still in the depth of

des-industrialisation, where no local employment is available apart from those in services and small manufacturing firms. Somewhat more promising is the situation of the small towns and their micro regions. Balassagyarmat and Szécsény take efforts to capitalise from their historic traditions. The former has succeeded to attract multinational companies (cable factory and the production of compressors and other firms), Pásztó and Rétság.

In Slovakia, in the neighbourhood of Nógrád, in the two micro regions of the Banská Bystrica Kraj belonging to the Tisa Region there are large deposits of magnesite and limestone. Mining, quarrying and food processing are the main industries here amounting to more than 30% of the total employment. In 2007 unemployment was more than 30 % here, much higher rate than the Slovakian average.



In Romania there are two NUTS3 area units in this territorial category. Maramureş with centre Baia Mare is a traditional centre of mining metals like gold, silver, copper. The several century old mining activity accelerated and expanded in the 1960s' and 1970s' giving rise to related and associate industries and

involving large scale growth of the city and the other surrounding communities and the arbitrary intervention into the structure of the landscape and the settlement system. Because of the technological catastrophe in 2000 the mines and the district gained bad reputation and sharp decline of mining and related activities followed. Recently recycling and rehabilitation of the dumps began and made profitable by extracting the refuse metal remains and by processing. Mining is thus likely to continue within new technological conditions. Trade and services are developing side by side with new industries contributing to diversification (production of furniture).

Hunedoara is the most southern unit of this territorial category. Here the main resource of industrial development was coal mining in the Jiul

Valley. The region was heavily industrialised, but due to low efficiency, most of the mines have been closed down. The city of Hunedoara was the production centre for iron and a market for the mountain regions nearby. During the 20th century, population increased to 86,000 inhabitants. The city contained the largest steel works in Romania (later Galați took the lead), but activity gradually diminished after 1990 due to the loss of the market. This was a blow to the overall prosperity of the town. Now there are efforts to recovery with new investments.

In the mountainous area the tributaries have the **potential hydroelectric power** which can be exploited in an environmental friendly way helping the utilisation of the remote rural areas.

Environmental and landscape upgrading is all the more important in view of the highly precious natural and cultural assets. Landscape rehabilitation, afforestation would be essential to restore the **particular natural beauty of these environments**. Rodna and Retezat Maramureș and Hunedoara, several areas in Banská Bystrica (e.g. Muránska Plain National Park) and also in Nógrád are officially recognized nature protection areas to be promoted through the indispensable repair and maintenance actions. To promote tourism – both short and long term – is worthwhile in view of the **lively and rich local folklore and the unique historic monuments**, castles, palaces, fortifications and also of cultural artistic traditions.



Weaknesses

The single-minded industrial efforts by neglecting the environmental considerations led to controversial results especially because the **decreasing productivity of some of the mines and engineering industries** and the resulting redundancies created serious social problems, unemployment and poverty. In these **mono-industrial and outdated production zones the weight of high-tech industry and advanced production is extremely low**. Social conflicts are serious in these areas. The **skills of the local labour**

force are missing or are outdated, the incomes are low, and their future is uncertain and obscure. Particularly critical is the situation of the **Roma communities suffering of multiple deprivation as well as ethnic exclusion** involving sometime militant actions and sharp ethnic conflicts. **Population in these area units is steadily decreasing; the loss is mainly through out-migration.** Especially high has been migration loss in the Romanian counties Sălaj and Maramureş.

Low educational level is a general problem and obstacle to revival in these areas. At varying but high is the ratio of population with only primary education and very low is the one of tertiary qualification (e.g. Nógrád, Banská Bystrica and Hunedoara).

Industry was and still is the main employer in these areas, though agriculture also has important part. Relatively low is the share of the service sector. **Decline and closure of industrial firms results the growth of unemployment** especially in Nógrád, Banská Bystrica and also in Hunedoara. **The environmental problems are associated with the ongoing operation of mines and other industrial firms** causing extremely high load of hazardous



substances around the mines and metallurgical plants, **water pollution** is far reaching and dangerous. No less hazardous and repulsive is the environment of derelict **mines, dumpsites and industrial sites left behind without upkeep and rehabilitation, like giants scars of the landscape.** Consistent intervention for repair is a very urgent task.

Revival and rehabilitation is also made difficult by the **relative isolation of these areas.** Accessibility by road and rail is difficult because of the **lack of high speed transport facilities and poor quality of roads and rails.** Tourism has not yet adequately discovered the attractions of these areas. **An obstacle is low accessibility and of course the inadequacy of tourist services** similarly to **services of general interest.** Upgrading of services would contribute to a great deal to the improvement of general quality of life, to economic recovery and to the development of tourism.

VI. Pyramid of objectives

VI.1. Priority: Cooperation

Specific objectives	Measures				Area unit with centre (s) undergoing economic conversion
	Mountainous area with local centre(s)	Rural farming area with local centre(s)	Area unit dominated by a large centre	Area unit with a subsidiary centre	
I.1. Promoting clusters of innovative enterprises and activities			I.1.1. To strengthen the cross-border cooperation in investment actions, employment and services with special regard to intercity cooperation (Debrecen - Oradea, Szeged – Timișoara, Uzhorod-Košice)	I.1.2. To strengthen the cross-border cooperation in investment actions, employment and services with special regard to intercity cooperation (Miskolc – Kőstce, Sútóntca – Szeged, Arad-Szeged)	
			I.1.3. To develop the knowledge society through the cooperation between business and education/research institutes		
			I.1.4. To enhance the cross-border and national cooperation between education and research centres		
			I.1.5. Strengthening cross-border communication and cooperation between touristic centres by development of joint programs and marketing		
			I.1.6. To protect, enhance and mobilise the existing capacities of local communities with the help of LEADER and other rural development programs		
			I.1.7. Strengthening the logistic centres and multimodal transportation systems		
			I.2.1. Harmonization in the field of spatial planning		
I.2. Strengthening institutional cooperation			I.2.2. Institutional cooperation in the field of environmental risk management		
			I.2.3. To coordinate flood protection actions and implementation of water management plans in the frame of a transnational cooperation		
I.3. Promoting transnational and local transport connections			I.3.1. Harmonized development of major routes of the trans-European network, lifting the barriers of the cross-border transport connections	I.3.2. Promote accessibility by creating the connection to the European transport network	
			I.3.3. To urge the qualitative development of transport network		
			I.3.4. To improve the accessibility of isolated rural areas		
I.4. Cooperation in cultural activities and strengthening identity			I.4.1. To support local actions for enhancement of territorial identity and integrity		
			I.4.2. To promote joint/cross-border institution arrangements in cultural and education activities, programs, festivals		

VI.2. Priority: Promote polycentric and balanced territorial development and innovative urban-rural relations

Specific objectives	Measures				Area unit with centre (s) undergoing economic conversion
	Mountainous area with local centre(s)	Rural farming area with local centre(s)	Area unit dominated by a large centre	Area unit with a subsidiary centre	
II.1. Increasing economic competitiveness and diversification of economic activities	II.1.1. To improve the marketing and trade network of local farm products	II.1.1. Strengthening the economic attractiveness of the area	II.1.3. Strengthening local food supply chains to the centre cities	II.1.4. Strengthen the sales of local food products at the urban market	
	II.1.2. To encourage the cooperation of farmers supporting the processing and marketing of agricultural produce	II.1.5. To encourage the cooperation of farmers supporting the processing and marketing of agricultural produce			
	II.1.6. To support sustainable, risk preventing forest management	II.1.7. To improve local multifunctional, area specific, landscape sensitive and divers agriculture			
	II.1.9. To promote the sustainable use of mineral and non mineral resources	II.1.8. Improving the quality of agricultural products, local produce and farm-based manufacturing		II.1.10. To promote the sustainable use of mineral and non mineral resources	
	II.1.12. To develop the rural, active and health tourism (attractions, marketing, service)	II.1.11. Networking and cooperation in the field of tourism services and programmes	II.1.14. Strengthening the touristic cooperation between the cities and the surrounding rural areas (program packages, 'quest table', promote active tourism)	II.1.15. Enhance the cultural touristic activities in the historic centres	II.1.16. Diversification of economy structure by tourism development based on the unique attractions
II.2. Promoting R&D&I and their spill out effects		II.2.1. To mobilize local innovation capacity for knowledge based / new technology economy	II.2.1. To mobilize local innovation capacity for knowledge based / new technology economy	II.2.2. To mobilize local innovation capacity for the development of manufacturing industry	
		II.2.4. To encourage alternative employment possibilities		II.2.3. To promote entrepreneurship of young people	
II.3. To improve the living conditions to avoid migration of young people	II.3.1. Elaborate and issue minimum standards of public utilities and services in rural and peripheral settlements				
	II.3.2. To improve human and social services including alternative and mobile solutions in rural areas				
		II.3.3. Harmonization of agglomeration processes and the development of human services and supply systems			

VI.3. Priority: Wise management of natural and cultural resources

Specific objectives	Measures				Area unit with centre (s) undergoing economic conversion
	Mountainous area with local centre(s)	Rural farming area with local centre(s)	Area unit dominated by a large centre	Area unit with a subsidiary centre	
III.1. Developing energy resources, maintaining safety	III.1.1. Utilization of hydroelectric power according to Water Framework Directive and by taking into account the hydrological effects	III.1.2. To promote technologies of low energy/ renewable energy consumption in farming and processing	III.1.3. To support the technical and regulatory tools of reduction of the energy consumption	III.1.1. Utilization of hydroelectric power according to Water Framework Directive and by taking into account the hydrological effects	
		III.1.4. To promote development of local and small scale renewable energy production	III.1.5. Transnational interconnection of the energy system network		
III.2. To promote land use which is suitable to the landscape characteristics		III.2.1. To promote diversity and ecological adaptability/ suitability in agricultural land use	III.2.2. Controlling urban development (land regulation, improvement or spatial planning, strengthen the protection of natural areas, contain the uncontrolled urban growth)		
		III.2.3. To support environmentally aware farming			
III.3. Adaptive integrated water management		III.2.4. To introduce the land regulation measures (land consolidation, land use and spatial planning, support system)	III.3.1. To introduce the legal, technical and financial regulation to promote the rational exploitation and use of natural water resources		
		III.3.2. To extend the ecological network along the surface waters			
III.4. Limitation of impact of natural disaster by preventive measures	III.4.1. Introduction and application of restrictions regarding land use to prevent landslides	III.4.2. To promote land use change at territory endangered by inundation water			
	III.4.3. Strengthening water retention capacity, significant reduction of flood risk and potential impacts of climate change by means of afforestation	III.4.4. To support wetland and floodplain restoration			
	III.4.6. To strengthen the technical flood protection and control,	III.4.5. Harmonization of flood management and town/spatial planning by means of regulation to control developments in flood prone areas			
	III.4.7. Improvement and implementation of national climate strategies (financial and regulation background)				

Specific objectives	Measures				
	Mountainous area with local centre(s)	Rural farming area with local centre(s)	Area unit dominated by a large centre	Area unit with a subsidiary centre	Area unit with centre (s) undergoing economic conversion
III.5. Reducing environmental damage		III.5.1. To improve the environmental performance of farms (to decrease the diffuse pollution from agricultural area)	III.5.2. To decrease the urban and industrial pollutions (waste water treatment, waste management including recycling and consumption behaviour change, decrease the emission by using new technologies, environmental sustainable transport development)		III.5.3. To introduce measures for the reclamation of derelict, polluted brown fields, (dump sites, industries sites) III.5.4. To mobilize the available labour force for environmental improvement
III.6. Enhancing and protecting natural resources and the natural and cultural heritage	III.5.5. Strengthening the legal environment, extension of regulatory powers, improvement the effectiveness of control				
	III.5.6. To strengthen environmental awareness of the population, to promote environmental educational training at all levels (NGOs as well)				
	III.6.1. Widening nature management activities (strengthen protection, development the visitor, environmental education and research centres)				III.6.2. To sustain natural and semi-natural areas, forests; strengthening nature protection activities
	III.6.3. To control development actions for protecting the forests and other precious natural sites				
	III.6.4. To enhance restoration and management of the cultural monuments				

VI.4. Priority: Investment into the people

Specific objectives	Measures				
	Mountainous area with local centre(s)	Rural farming area with local centre(s)	Area unit dominated by a large centre	Area unit with a subsidiary centre	Area unit with centre (s) undergoing economic conversion
IV.1. To support actions for specific demographic groups	IV.1.1. To promote model solutions of social integration and development				
	IV.1.2. To develop the local social policies network of civil initiatives to assist and care for the deprived social groups				
IV.2. To keep young generation in the area	IV.1.3. Consistent involvement of inactive and aging people in public activities (social care)				
	IV.2.1. To promote skill-training				
	IV.2.2. To involve young people in local community activities				
	IV.2.3. To promote the socially sensitive basic education				
	IV.2.4. To promote the qualitative features of information society				

VII. Description of the priorities

VII.1. - I. Priority: Cooperation, Developing cooperative structures

Logic of intervention (overall and specific objectives, content, justification)

Cooperation as set in Priority 1 is a broad term and is a key principle of European policy for territorial cohesion. It implies coordinated response of several regions or countries and localities to prevailing or emerging issues. It also implies “the added value of partnership with a strong local dimension, which ensures that policies are designed and implemented with local knowledge”. Furthermore, another dimension of cooperation is the intention “to maximise synergies” by means of the better coordination with sector policies.”

Developing cooperative structures aims

- to promote joint actions of regions, localities, institutions, authorities, people and individuals in various field of societal action (economy, culture, social service etc.);
- to enhance coordination and integration of different sector actions;
- to urge and support the development of the channels and infrastructure of cooperation.

The aim to “improve the co-operation between regions within the Union and with the neighbouring regions outside” is the heart of the



TICAD project too. It is underlined by the transnational character of the project and therefore of TICAD strategy covering NUTS3 area units of new EU member states as well as neighbouring states all dedicated to “promote growth enhancing conditions and factors leading to real convergence.”

The priority related to cooperation – and the dedicated effort of the TICAD project to promote cooperative structures – is justified by the urgency of this issue.

Promoting clusters of innovative enterprises and activities

is related to economic objectives first of all. The purpose is to promote collaboration of enterprises, development of clusters based on the joint procedures of investment action or marketing or knowledge society or information or logistic services. There is a variety of potentials for



the clustering of enterprises of the same or similar profile.

Currently fragmentation of enterprises and the rivalry of economic entities for external funds, multinational companies, for the market and for qualified labour force is more rather typical, although cooperation is a more efficient way for the attainment of competitiveness.

The cooperation of the centres of knowledge like universities, research institutes, secondary and vocational schools is an already recognized useful way of the advancement of learning. It is also essential to strengthen cooperation between research and implementation, that is, the capitalisation of scientific findings in the fields of practice and production. The cooperation of education and training with the market sphere is a condition of the release of appropriately skilled workforce from the schools and of the provision of the local and regional companies with suitable employees.

There are also great possibilities of inter-community, regional, cross-border cooperation in tourism by way of the preparation of joint programs, tourist routes, coordination of tourist offers, exchange of experience and cooperation in marketing and information.

Measures

- *To strengthen cross-border cooperation in investment, employment and services with special regard to intercity cooperation.*
- *To develop the knowledge society through the cooperation between business and education/research institutes.*
- *To enhance the cross-border and transnational cooperation of the centres of learning and between education/research institutes.*
- *Strengthening cross-border communication and cooperation between touristic centres by development of joint programs and marketing.*
- *To protect, enhance and mobilise the existing capacities of local communities with the help of LEADER and other rural development programs.*
- *Strengthening the logistic centres and multimodal transportation systems.*

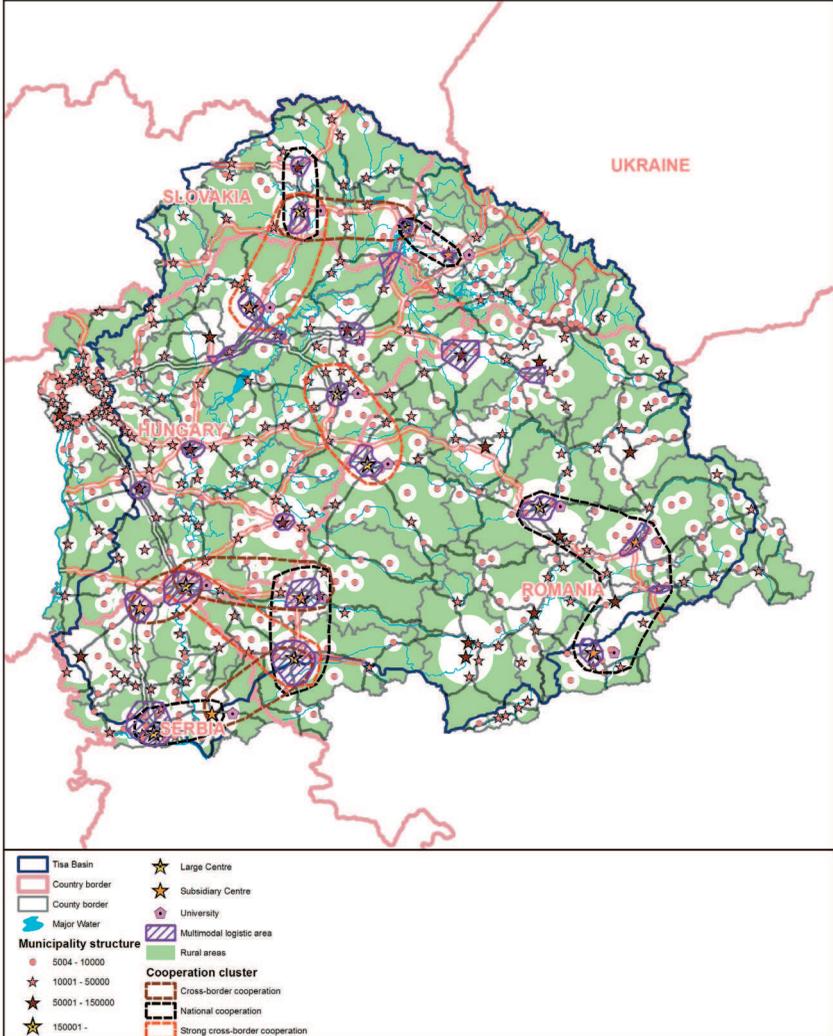
Strengthening institutional cooperation is an essential aim, the Tisa Catchment Area is a coherent territorial entity though divided by administrative - national and regional – borders.

Consistent institutional cooperation is needed for overcoming this division. Coordinated spatial planning proposals and decisions are viable through the cooperation of planning agencies as well as authorities responsible for approving, adopting and implementing the plans. Such cooperation is particularly important in water management in view of the manifold interrelations and interactions of the various territorial components of the river basis.

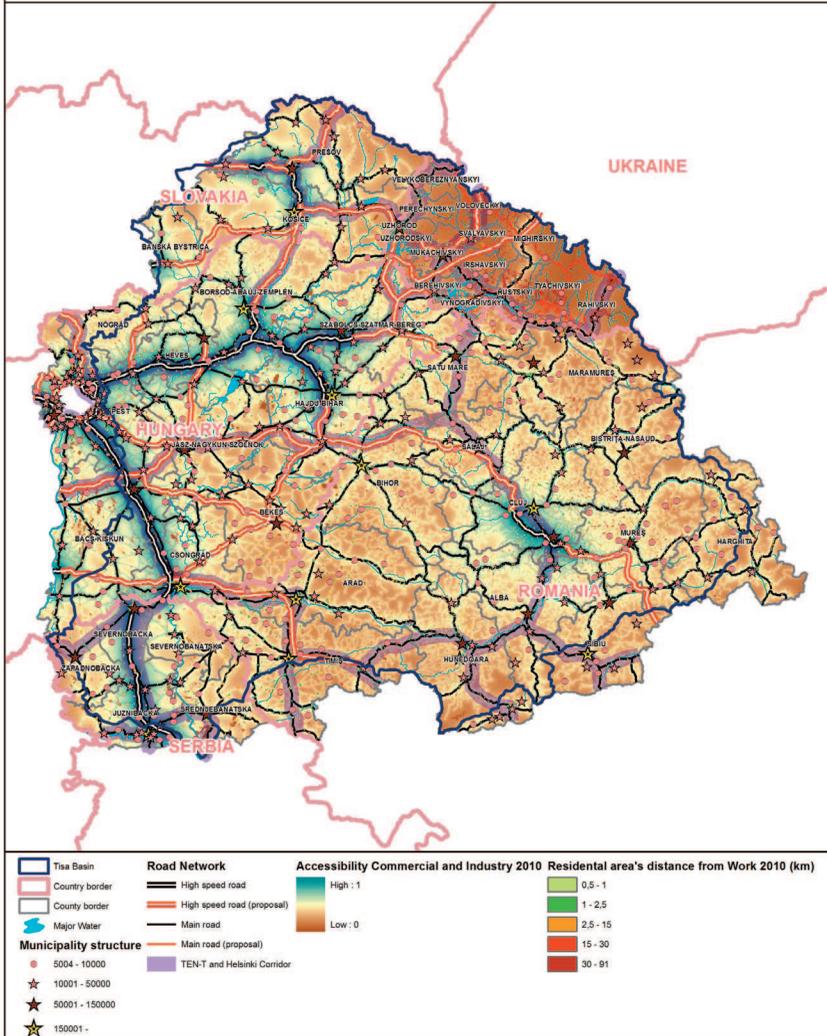
Furthermore, the attainment of integrated strategies is feasible if the different sectors and disciplines are in interaction, exchanging views, willing to come into consensus about the crucial aspects of territorial management and development.



TICAD
TARGET AREA OF SPECIFIC OBJECTIVE:
PROMOTING CLUSTER OF INNOVATIVE ENTERPRISES AND ACTIVITIES



TICAD
TARGET AREA OF SPECIFIC OBJECTIVE:
PROMOTING TRANSNATIONAL AND LOCAL TRANSPORT CONNECTIONS



Measures

- *Harmonisation in the field of spatial planning.*
- *To coordinate flood protection actions and implementation of water management plans in the frame of a transnational cooperation.*
- *Institutional cooperation in the field of environmental risk management.*

Promoting transnational and local transport connections

is a fundamental condition of territorial cooperation. The transport system is incomplete and outdated and of low quality in the whole of the Tisa Catchment Area and especially in its eastern parts. There are plans for motorway developments all



over, but the implementation of these plans is still in delay. Accessibility is difficult. The load of traffic is a great pressure even on the existing links. It is hard if at all possible to proceed on the narrow, low quality roads. Cross-border connections are exacerbated by the shortage and narrow capacity of transit links. The railway system is if possible even more outdated, the rails are unstable, the parallel rails hardly exist, the width of railway tracks differs in Ukraine and other countries, personal and freight railway transport is expensive, inefficient, uncomfortable and slow thus imposing further burden on the highly vulnerable road system. The airports are also in need of modernisation, but the worst shortage is in the intermodal connections adding to the inefficiency of air transport.

Measures

- *Harmonized development of major route of the trans-European network, lifting the barriers of the cross-border transport connections.*
- *Promote accessibility by creating the connection to the European transport network.*

- *To urge the qualitative development of transport network.*
- *To improve the accessibility of isolated rural areas.*

Cooperation in cultural activities and strengthening identity

The manifold historic links, common traditions of lifestyle, work and culture offer a wide choice of potentials for cooperation in cultural activities. Sharing experience would lead to the discovery of several commonalities in cultural traditions, songs, poems, tales



and legends and even common formulation of words, sayings verses and superstitions. The discovery of common heritage will then lead to the recognition of commonalities in views, visions, concerns and aspirations. Cooperation in cultural activities would then help to face and solve tensions, mistrust and misunderstanding. Such cooperation can be the beginning of mutual knowing each other. To discover the advantage of joint efforts is an important prerequisite for further cooperation in other areas.

There are already promising examples of cooperation in cultural activities both at the regional, inter-regional and cross-border, transnational levels. The joint initiatives and programs such as festivities, concerts, art workshops and exhibitions are indeed of great help in strengthening identity. The follow up to these initiatives can be joint educational and touristic programs exploiting the experience of joint activities the practical fields of production.

Measures

- *To support local actions for the enhancement of territorial identity and integrity.*
- *To promote joint/cross-border institutional arrangements in cultural and education activities, programs, festivals.*

Expected results and effects

The effects of the enhancement of cooperation and the development of cooperative structures will be first of the unfolding and upswing of activities. Cooperation will give rise to more and greater variety of joint actions in culture, education as well as trade, tourism and even manufacturing. Cooperation will mobilize the capabilities, talents capacities and willingness to act, do, work together and help one another. In the course of cooperation the actors will recognize the benefit of working towards common purposes.

The cooperative efforts will encourage the people to support mutually advantageous infrastructure development projects for the improvement of transport links, passenger and freight transport and communication networks. They will learn to elaborate joint projects for the development of education, RTD as well as tourism, trade, production services. The synergies of cooperation will be recognized by small and medium enterprises and will encourage them to form clusters and make joint ventures in services, trade, marketing, tourist services. All these will be supported by joint information systems which will facilitate coordina-



tion in marketing, employment policies, mutual support and cooperation in risk prevention. These cooperative structures of all kinds will contribute directly and indirectly to competitiveness, infrastructure development and improvement of economic conditions, prosperity and better social climate.

VII.2. - II. Priority: Promote polycentric and balanced territorial development and innovative urban-rural relations

Logic of intervention (overall and specific objectives, content, justification)

One of the main problems of the Tisa Catchment Area development is urban-rural dichotomy. On the one side the rural territories have lost their economic-social diversity and it became vulnerable, declining

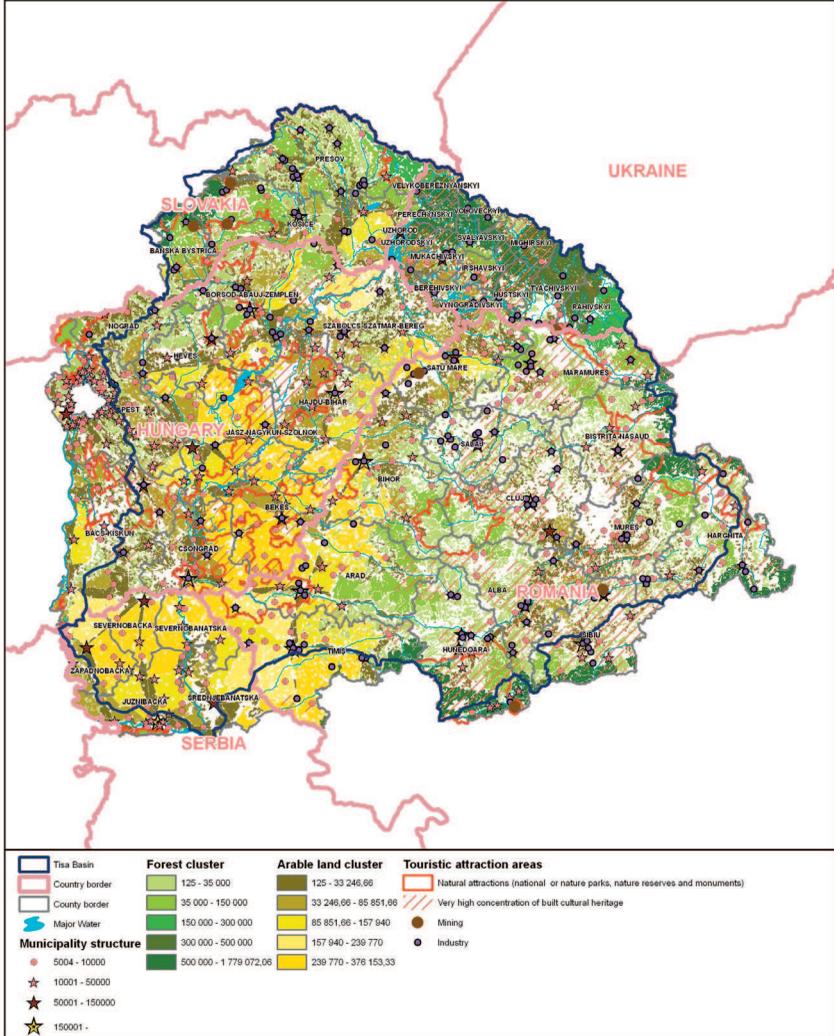


areas; on the other: the cities, urban settlements have concentrated the main economic functions (labour market, processing industry, services, etc.), have attracted the qualified rural population and have become growing poles of infrastructure, general public service, etc. Social and economic decline of the rural areas may evolve side by side with unsound urban congestion, housing shortage, overcrowded public transport, dysfunctions of urban services and uncontrolled urban sprawl. To be able to save rural areas from depopulation and functional draining, to

relieve excessive urban concentration and achieve a balanced territorial development, it is essential to restore the mutual, equal and innovative urban-rural relationships.

The diverse soil, landscape and cultural features are the traditional resources which offer excellent potentials for **increasing economic competitiveness and diversification of economic activities** based on local economic. In the current economic structures of the concerned countries profitability of the *agriculture* is low. In order to improve employment relations, increase and maintain profitability and protect the landscape the EU has adopted a CAP reform aiming at the creation of multifunctional agriculture, with in the technological development of farms, processing of farm produce as well as and sectoral – regional integration, cooperation. Tourism, through its differentiated development may become an additional source of income for both the population and the government. Therefore it is essential to save natural and cultural endowments and promote the development of tourism, provide the necessary infrastructure and improve services. Cultural heritage and intercultural dialogue are typically inter-related topics.

TICAD
TARGET AREA OF SPECIFIC OBJECTIVE:
INCREASING ECONOMIC COMPETITIVENESS AND DIVERSIFICATION OF ECONOMIC ACTIVITIES



Measures

- *Strengthening the economic attractiveness of the area.*
- *To improve the marketing and trade network of local farm products.*
- *Strengthening local food supply chains to the centre cities / Strengthen the sales of local food products at the urban market.*
- *To encourage the cooperation of farmers supporting the processing and marketing of agricultural produce.*
- *To improve local, multifunctional, area specific, landscape sensitive and divers agriculture.*
- *Improving the quality of agricultural products, local produce and farm-based manufacturing.*
- *To promote the sustainable use of mineral and non mineral resources.*
- *Networking and cooperation in the field of tourism services and programmes.*
- *To develop the rural, active and health tourism in the mountainous areas.*
- *Enhance rural tourism based on the unique local attractions.*
- *Strengthening the touristic cooperation between the cities and the surrounding rural areas.*
- *Enhance the cultural tourist activities in the historic centres.*
- *Diversification of economy structure by tourism development based on the unique attractions.*
- *Economic exploitation of forest in a sustainable way (forest management).*

Urban-rural differences are great in terms of economic levels too. Even the urban centres have experienced a significant difference as regards the ability to attract the labour market. We can find centres with major concentration of modern industrial technologically and centres still suffering from economic restructuring where the structural imbalance is due to both the internal fragility of the economic companies (level of technology, insufficient level of know-how, unconsolidated markets) and to the horizontal and vertical relations of the economy. So it is essential **to promote R&D&I and their spill out effects** through the mobilization of local innovation capacity and to support knowledge based economic development in the industrial centres and to promote alternative / flexible employment solutions in the rural area while strengthen the employment capacity of the local / rural centres. Although there has been remarkable development in communication, there



are inadequacies in comparison with the EU levels. Progress in this field is necessary, and especially important is to ease and strengthen communication links in and with the peripheral communities. Advancement and improvement are urgent needs not only in the development and extension of electronic networks but also

in the provision of sound and high quality information and programs with special regard to the fact that for the people living rural areas and urban peripheries the main sources of learning about the world and events are the radio and especially the television programs.

Measures

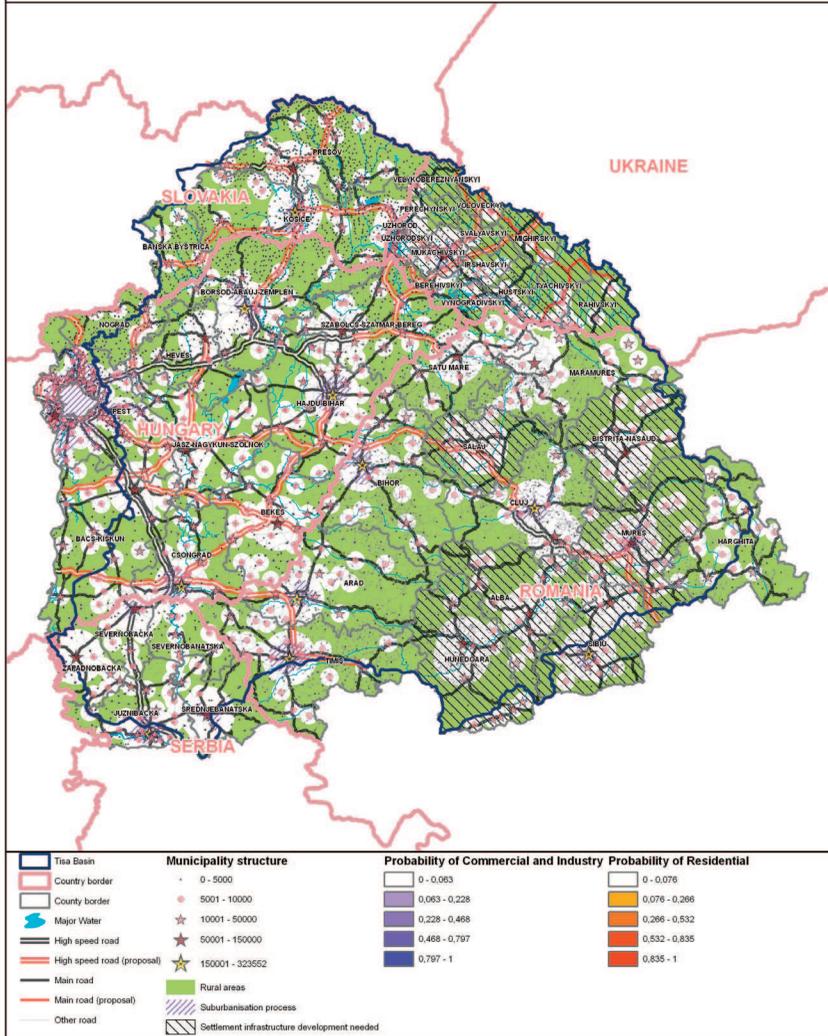
- *To mobilize local innovation capacity for knowledge based/new technology economic.*
- *Strengthen the innovation capacity for the development of manufacturing industries.*
- *To promote entrepreneurship of young people.*
- *To encourage alternative employment possibilities.*

In the Tisa River Basin ***the improvement of living conditions*** requires effective interventions especially in the rural areas to avoid migration of qualified young people. Generally the service level is underdeveloped mostly due to the low effective demand of the population. Therefore this problem can be solved by means of alternative and mobile services. The poor conditions of public utility services in rural areas can be solved efficiently also by means of alternative, small scale, ecologically sound local solutions.

Measures

- *Elaborate and issue minimum standards of public utilities and services in rural and peripheral settlements.*
- *To improve human and social services including alternative and mobile solutions in rural areas.*
- *Harmonization of agglomeration processes and the development of human services and supply systems.*

TICAD
TARGET AREA OF SPECIFIC OBJECTIVE:
TO IMPROVE THE LIVING CONDITIONS TO AVOID MIGRATION OF YOUNG PEOPLE



Expected results and effects

The natural, traditional local conditions are increasingly appreciated worldwide and the global recognition of this should bring new possibilities for rural development. The growing demand for healthy food will motivate ecological management and stop the deterioration of ecological conditions and also the economic exclusion of people living in rural areas. Based on the varied assets areas can become economically more diversified through their wise use. This procedure needs more investment into the people by means of entrepreneurship of young people, behaviour change, and increase cohesion.

The local added value and growing impact of multiplier effect will contribute to the attractiveness of rural life, to the improvement of the quality of life of the farmers and other people employed in agricultural production and finally: it is an alternative strand of rural economy. In the fierce market competition new comparative advantages need to be introduced, most of which are based on the mobilisation of internal resources.

Through planned interventions the regions will be more capable to produce growing income and number of local enterprises, to modernise their technology and improve competitiveness. It will be possible to broaden cooperation and partnership. With the increase of the GDP of the region growth will take place and this in turn will contribute to balanced territorial development, to improvement of employment situation and finally to maintenance of population.

Development of tourism will give rise to other economic activities too (local products, trades and crafts, specific services – gastronomy etc.), will have a multiplier effect in the rural areas. In consequence tourist accommodation, trade and catering facilities will get diversified cultural traditions will revive, and there will be



conscious and active intentions to maintain and protect the natural and rural heritage.

The improving local economy and labour market will help the young qualified people to find their place in the local society. The rising standard of the living conditions can contribute to overcome the general feeling of exclusion and abandonment.

VII.3. - III. Priority: Wise management of natural and cultural resources



Logic of intervention (overall and specific objectives, content, justification)

The natural and cultural value-rich environment provides the long term development potential of the Tisa Catchment Area. The socio-economic development of the traditional agricultural area is heavily dependent on the ecological potential, the clean environment and the water resources. *„Regional development can only be sustainable if it respects the environment. EU regional policy therefore contributes to sustainability by promoting*

environmentally-friendly technologies, and sustainable transport, energy and infrastructure initiatives, as well as measures targeted at the protection of water, air, biodiversity and nature protection.”⁴ The environment can be the source of economic growth, either by encouraging innovative clean technologies, fostering efficient energy use, building up eco-tourism, or by enhancing the attractiveness of areas through ensuring the protection of natural habitats.

4 http://ec.europa.eu/regional_policy/themes/environment/index_en.htm

Developing energy resources, maintaining safety

Technical and regulatory tools should be supported in farming, processing and construction to realise sustainable energy consumption. To establish wise environmental management the material flow, resource management and waste-resource cycle issues have to be reviewed on regional, sub-regional and settlement level.

Along River Tisa there are abundant resources of renewable energy. There are opportunities to establish small scale local power generation systems for their use. Thereby the economic potential of the region would grow without irreversible interventions into the ecological capacities. The use of solar, wind, geothermic



and biomass energy resources would restrict environmental pollution and facilitate regional independence in energy management. To ensure the long-term sustainability of energy and material resource management and the reduction of environmental and landscape damages it is essential to set rules and standards for the size and location of power plants using renewable energy sources. Assessments are needed of the hydrological impacts in the case of hydro energy systems, of the area size demands and the decrease of cropland of solar energy plants, the effects on the landscape and nature conservation of the wind turbines and wind farms. Biomass energy plants may depend on end or by products of agriculture or waste recycling.

Measures

- *Utilization of hydroelectric power according to Water Framework Directive and by tacking into account the hydrological effects.*
- *To promote technologies of low energy consumption in farming and processing.*
- *To support the technical and regulatory tools of reduction of the energy consumption.*

- *Transnational interconnection of the energy system network (policy recommendation).*
- *To promote development of local and small scale renewable energy production.*

To promote land use which is suitable to the landscape characteristic

For regional stability it is indispensable to ensure the use of landscape in harmony with the fundamental natural systems. In consequence of the overwhelming use of landscape without regard of the natural systems the functioning of the natural system of the Tisa Basin has been upset, the sub-systems have suffered serious damages: water management

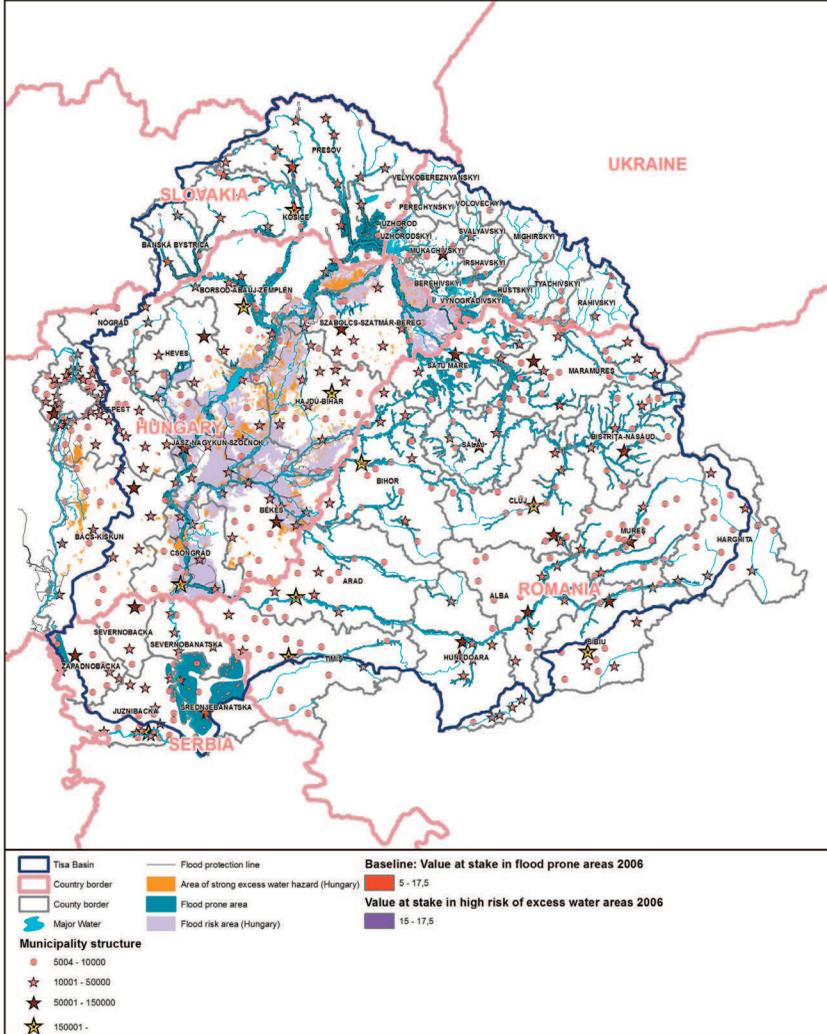


is showing deficit, the climate and water fluctuation show more and more extreme symptoms, the ecological capacities are becoming exhausted. The social impacts of these processes are increasing water and natural hazards and while earlier had been prosperous, today it is hardly sufficient for subsistence. For the restoration of the compliance of land use to landscape characteristics it is needed to improve the environmental awareness of the farmers and to promote and propagate subsidy to land stewardship. An obstacle of productive and sustainable farming is the prevailing chaotic land tenure evolved without the regard to farming features and potentials. Furthermore the quality of landscape and the ecological conditions are at risks because of the growth of built up areas and of the fragmenting effects of infrastructure networks. In order to ensure livable and sound environments it is necessary to undertake periodical revision of the spatial and development plans both at local and regional level and to promote the protective element of land use regulation.

**TICAD
TARGET AREA OF SPECIFIC OBJECTIVE:
TO PROMOTE LAND USE WHICH IS SUITABLE TO THE LANDSCAPE CHARACTERISTIC**



TICAD
TARGET AREA OF SPECIFIC OBJECTIVE:
LIMITATION OR IMPACT OF NATURAL DISASTER BY PREVENTIVE MEASURES



Measures

- *To promote diversity and ecological adaptability/suitability in agricultural land use.*
- *Controlling urban development (land regulation, improvement of spatial planning, strengthen the protection of natural areas, contain the uncontrolled urban growth).*
- *To support environmentally aware farming.*
- *To introduce the land regulation measures such as land consolidation, land use and spatial planning, land use change support system.*

Adaptive integrated water management

For the protection of strategic water resource the threefold tasks include the improvement of water quality through the reduction of pollution and hazards; promotion of sustainable use of water; and the improvement of the ecological conditions of the waters.⁵ The tasks of integrated water management are the following: to issue legal, technical and financial regulation to promote the sustainable use of waters; to attain the reduction of pollution and to maintain and protect the water based habitats.



Measures

- *To introduce the legal, technical and financial regulation to promote the rational exploitation and use of natural water resources.*
- *To extend the ecological network along the surface waters.*

Reducing environmental damage

The sound development of society and economy demands harmoniously functioning, unpolluted natural environment. The development rate of the Tisa Space is thus influenced by the quality of environmental

⁵ according to WFD



management and environmental infrastructure. For the mitigation of pollution it is an urgent task to reduce the volume of solid waste and sewage and to make progress in waste management and recycling. For this purpose it is necessary to enhance the environmental awareness of the people and to develop appropriate waste management systems. There is a great need for

modern waste recycling and disposal infrastructure as well as dumpsites. The rates of water supply and sewage disposal systems must be levelled up and sewage treatment plants must be established.

For the reduction pollution steps are to be taken to promote the recycling of agricultural waste, to control the use of chemicals and enforce the related regulations. Industrial waste can be reduced by means of technological development, intensive regulation and penalty. Major sources of air pollution are heating and transport. The improvement of energy conservation of the buildings is therefore an important issue. For the reduction of the pollution of transport it is essential to promote public transport and alternative transport means as well as the effective transport management schemes. The long-term solution of this problem is the reduction of the needs for transfer, shorter distances between residence and workplaces as well as goods and markets. This must be an objective of regional development programmes.

Measures

- *To improve the environmental performance of farms to decrease the diffuse pollution from agricultural area.*
- *To decrease the urban and industrial pollutions.*
- *To introduce measures for the reclamation of derelict polluted brown fields (dump sites, industries sites).*
- *To mobilize the available labour force for environmental improvement.*
- *Strengthening the legal environment, extension of regulatory powers, improvement the effectiveness of control.*
- *To strengthen environmental awareness of the population, to promote environmental educational training at all levels (NGO as well).*

Limitation of impact of natural disaster by preventive measures

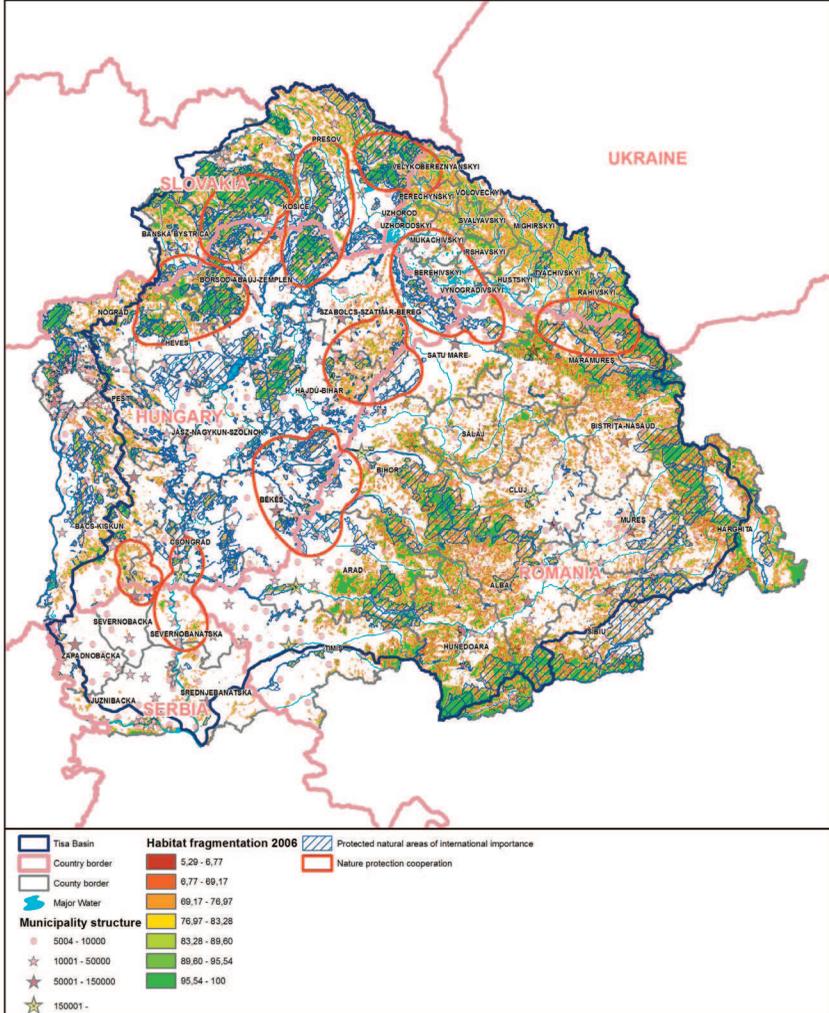
The human interventions into the environmental systems such as the regulation of rivers and the growth of built-up areas have increased more and more the exposure of large areas to environmental hazards. The models of climate change indicate that the environmental risks – likelihood of floods, landslides, draught and excess groundwater – are becoming more frequent and intensive. The means of protection from environmental risks is the control of land use first of all. The spatial plans and their regulations facilitate the control of development, the restriction of development in low-lying, flood-prone and erosion-prone areas. Thereby the intensity of future environmental damages can be reduced. It is also the task of land-use control to identify and delimit ecological buffer zones, that is, low-lying flood-prone areas, which can absorb overflowing water and facilitate water retention. Another important means of flood control is the further development of abatement technology, dykes and forewarning systems.



Measures

- *Introduction and application of restrictions regarding land use to prevent landslides.*
- *To promote land use change at territory endangered by inundation water.*
- *Strengthening water retention capacity, significant reduction of flood risk and potential impacts of climate change by means of afforestation.*
- *To support wetland and floodplain restoration.*
- *Harmonization of flood management and town/spatial planning by means of regulation to control developments in flood prone area.*
- *To strengthen the technical flood protection and control, strengthen the cross-border cooperation in flood forecasting.*
- *Improvement and implementation of national climate strategies (financial and regulation background).*

**TICAD
TARGET AREA OF SPECIFIC OBJECTIVE:
ENHANCING AND PROTECTING NATURAL RESOURCES AND
THE NATURAL AND CULTURAL HERITAGE**



Enhancing and protecting natural resources and the natural and cultural heritage

The greatest resource of the Tisa Catchment Area is the outstanding natural and cultural heritage. For the protection of these assets it is necessary to consolidate and strengthen the institutional system of nature conservation, to prevent the shrinkage and vanishing of natural and semi-natural areas. Nature conservation becomes more effective if the environmental awareness of local population improves, if the residents and the visitors become aware of the natural assets. For the protection of cultural heritage it is also necessary to consolidate and strengthen the institutional system, to promote the organisation of traditional cultural events, promote diversity, harmonize the events and enhance their role in the protection of local cultural traditions.

Measures

- *Widening nature management activities.*
- *To sustain natural and semi-natural areas, forests.*
- *To control development actions for protecting the forests and other precious natural sites, strengthening nature protection activities.*
- *To enhance of restoration and management of the cultural monuments.*

Expected results and effects

The increasing use of renewable energy sources will mobilize the internal, endogenous resources of the region, will enhance energy security, will contribute to regional prosperity and will reduce dependence on external support. The development of local material and energy cycles



(raw material – product – waste – energy – product) will contribute to economic sustainability and to the decrease of environmental pollution. The interrelated implementation of nature compliant land use, inte-

grated water basin management as well as flood abatement will involve the reduction of environmental risks, facilitate for the long-term the protection and supply of healthy water supply in appropriate quantity, and ensure the balance functioning of the landscape. The reduction of environmental pollution will result healthy environment.

The protection of natural and cultural heritage will contribute to the long-term supply of resources for local economic development, to the preservation of local identities and healthy living conditions. By means of the sustainable management of natural resources the natural environment and the favourable climatic conditions can be maintained, the local farming can be provided with soil and water of appropriate quality and quantity, the harmful impacts of environmental hazards can be reduced. The growth of economic productivity and security will be beneficial for social as well as rural development.

VII.4. - IV. Priority: Investment into the people

Logic of intervention (overall and specific objectives, content, justification)

The development of human sources requires effective interventions especially in the rural areas in the Tisa River Basin. The outdated management skills of the agricultural population, the low educational level and



lack in qualification of unemployment people, the training discrepancy and the outmigration of qualified people are all problems to be solved. To reduce economic vulnerability and social exclusion characterised this rural areas it is essential to support investment into the people.

In many settlements the proportion of the inactive population is high, the age structure can be described as ageing and the proportion of the Roma population is on the increase which imposes a major social burden

on local governments. Therefore the strategy should **support actions for specific demographic groups** which promote further cultural and civil society cooperation and serve for development of local communities, strengthening identity and competitive skills to help formulating local economy.

Measures

- *To promote model solutions of social integration and development for the deprived social groups.*
- *To develop the local social policies and network of civil initiatives to assist and care.*
- *Consistent involvement of inactive and aging people in public activities (social care).*



In the main time, in addition to improving living conditions and local economy (II. priority), should be emphasised **to keep young generation in the rural areas**. Projects oriented cooperation should act as a catalyst for exchange and close collaboration between such troubled areas and model solutions can help for extension of experiences.

Measures

- *To promote skill-training.*
- *To involve young people in local community activities.*
- *To promote socially sensitive basic education.*
- *Improve the qualitative features of information society.*

Expected results and effects

The improvement of education and skills plays an essential role into adaptation of market requirements, increasing employment and reducing economic vulnerability. The adult trainings development and creation, expansion of alternative employment opportunities improves



the prospects for social deprived rural areas in field of joining the economic bloodstream and labour market. If the interventions provide a development in networking form, it contributes the spatial expansion of opportunities. Maintain educated population and the strengthening civil society

activates energies, creativity potential of culture. It contributes to completion of rural society, and through all these improves the enforcing ability and identity.

VIII. Policy recommendation

The policy recommendations are derived from the transnational TICAD strategy. They are recommendations for actions, legal measures, for initiatives to support and encourage cooperative structures and development activities. Several recommendations serve for preventing harmful processes and for facing and dealing with challenges.

The policy recommendations are addressed to national and regional authorities responsible for leading and controlling the implementation of the TICAD strategy.

VIII.2. Urgently needed actions for transnational cooperation in the forthcoming 3 – 5 years (transnational and national level)

Strengthening institutional cooperation

Strengthening institutional cooperation is an essential aim. The Tisa Catchment Area is a coherent territorial entity though divided by administrative - national and regional – borders. Consistent institutional cooperation is needed for overcoming this division.

-
- For transnational cooperation ensuring the legal harmonisation in the field of spatial development:
 - Elaborating common/joint spatial plans for cross-border area (harmonised content and processes).
 - Fostering territorial approach in the field of cross-border urban system development.
 - The national governments are responsible for awareness-raising and publicity concerning spatial planning by defining and enforcing minimum requirements of public/social consultation as a compulsory element of spatial planning process; facilitating higher level of public participation, more intensive public/social consultation; fostering multi-sectoral approach, cooperation with or involvement of sectors/organisations.
 - For institutional cooperation in the field of environmental risk management:
 - Enhancing the development and operation of transnational data exchange, monitoring and warning system on pollution as well as elaboration and mutually enforcement transnational environmental agreements.
 - For transnational coordination of flood protection actions:
 - Transnational coordination in the elaboration of the national flood risk maps following the EU Flood Directive.
 - Incorporating the results of risk mapping and flood prevention plans in the territorial and land use plans and regulations.
 - Enhancing the development and operation of transnational flood forecast and prevention system, common standards and data exchange.
 - For establishment of joint working groups of experts to coordinate actions and development in the area:
 - To set up inter-disciplinary groups of experts each focusing on specific strategic priorities; to explore the challenges, solutions and potentials from different angles.

Integrated water management adaptation

For the protection of strategic water resource the threefold tasks include the improvement of water quality through the reduction of pollution and hazards; promotion of sustainable use of water; and the improvement of the ecological conditions of the waters.⁶



- For the achievement of rational exploitation and use of natural resources:
 - Promoting the sustainable (economic) use of water resources by means of awareness raising.
 - The provided information for end users should include economic and ecological advantages of implanting water saving technologies, procedures and appliances.
 - For public institutions provide support to implant these measures and activities.
 - As a feedback develop high level monitoring systems as well as impact assessment methods for the effective realisation of environmental and economic impacts of water consumption.
- For ensuring the progressive extension of the ecological network, water absorption in the local area and preserve sufficient water quality:
 - Review of existing development and land-use plans along important surface water bodies and subsequently update these plans. In cooperation with universities (spatial planning, ecology, landscape planning) setting appropriate spatial and functional land-use restrictions.

⁶ according to WFD

Cooperation in cultural activities and strengthening identity

The discovery of common heritage will then lead to the recognition of commonalities in views, visions, concerns and aspirations. Cooperation in cultural activities would then help to face and solve tensions, mistrust and misunderstanding. Such cooperation can be the beginning of mutual knowing each other. To discover the advantage of joint efforts is an important prerequisite for further cooperation in other areas.

- For supporting local actions for enhancement of territorial identity and integrity:
 - Education of children and young people about their region, supporting local communities to preserve local cultures.
 - Promoting joint/cross-border institutional arrangements in cultural and education activities, programs, festivals.

VIII.3. Long-term⁷ transnational cooperation, coordination of policies, joint support of programs and initiatives by national governments (transnational and national level)

Promoting transnational and local transport connections



The transport system is incomplete and outdated and of low quality in the whole of the Tisa Catchment Area and especially in its eastern parts. There are plans for motorway developments all over, but the implementation of these plans is still in delay. Accessibility is difficult. The load of traffic is a great pressure even on the

existing links. It is hard if at all possible to proceed on the narrow, low quality roads. Cross-border connections are exacerbated by the shortage and narrow capacity of transit links.

7 long lasting

- For the qualitative development of transport network:
 - Survey and evaluation of the road network (technical aspects, network coherence) and then preparation of conceptual framework for progressive renewal programme.
 - By means of differentiated support systems ensuring the optimal allocation of logistic centres along the corridors with consideration of the spatial capacity and optimal network (in view of sustainable development).
 - Taking positive actions to harmonize the trans-European network with local requirements for corridor tracing.

Use of renewable energy resources, maintenance of safety



Along River Tisa there are abundant resources of renewable energy. There are opportunities to establish small scale local power generation systems for their use. Thereby the economic potential of would grow without irreversible interventions into the ecological capacities. The use of solar, wind, geothermic

and biomass energy resources would restrict environmental pollution and facilitate regional independence in energy management.

- For promoting development of local and small scale renewable energy production, interconnection of the energy networks and reduction of the energy consumption:
 - Initiating the analysis of area potential for effective exploitation of renewable energy resources.
 - Providing financial support for preparing and assessing the realisation of technical and regulation tools.
 - Initiating transnational projects with the financial support from national and EU funds aiming to create efficient and flexible energy networks supported by various energy resources.
 - Preparing nation-wide training and educational programmes for awareness raising in energy saving.

- Encouraging new ideas and innovative technologies and promoting their application; introduction of innovative and alternative technologies by means of information and support of SMEs.

Reduction of the impacts of natural disaster by preventive measures

The human interventions into the environmental systems such as the regulation of rivers and the growth of built-up areas have increased more and more the exposure of large areas to environmental hazards. The models of climate change indicate that the environmental risks – likelihood of floods, landslides, draught and excess groundwater – are becoming more frequent and intensive.



- For strengthening water retention capacity, significant reduction of flood risk and potential impacts of climate change by means of afforestation:
 - Supporting local actions for flood prevention and protection.
 - Supporting the forest treatment reforestation programme.
 - Issuing obligations to review the local development plans to ensure flood protection of built up and farming areas.
- For introduction and application of restrictions regarding land use to prevent landslides:
 - Promoting the mapping of land slide areas.
 - Enforcing the application of land use restrictions in local development plans.
- For promoting land use change on territories endangered by inundation water:
 - Issuing and enforcing regulations for the protection of areas defined as inundation areas.

- For promoting the improvement and implementation of national climate strategies:
 - Ensuring the legal and financial background.
 - Implementing the national strategy on climate change: mitigation and adaptation (cross-sectoral regulations; monitoring of implementation).

Reducing environmental damage

The sound development of society and economy demands harmoniously functioning, unpolluted natural environment. The development rate of the Tisa Space is thus influenced by the quality of environmental management and environmental infrastructure. For the mitigation of pollution it is an urgent task



to reduce the volume of solid waste and sewage and to make progress in waste management and recycling.

- For strengthening the legal environment, extension of regulatory powers, improvement the effectiveness of control:
 - Issuing legal regulations for the control and improvement of the environmental conditions.
 - Providing financial support for waste water treatment, waste management including recycling and consumption behaviour change.
 - Taking legal actions for emission control and the use of new technologies.
 - Environmentally sustainable transport development.
- For strengthening the environmental awareness:
 - Promoting the preparation of educational courses and training at all levels of school curricula.
 - Promoting the spread of information on environmentally friendly technologies for municipalities and infrastructure providers.

Protecting and enhancing natural resources and the natural and cultural heritage

The greatest resource of the Tisa Catchment Area is the outstanding natural and cultural heritage. For the protection of these assets it is necessary to consolidate and strengthen the institutional system of nature conservation, to prevent the shrinkage and vanishing of natural and semi-natural areas. Nature conservation becomes more effective if the environmental awareness of local population improves, if the residents and the visitors become aware of the natural assets.

- For protecting the forests and other precious natural sites, control the development actions and widening nature management activities:
 - Revising and updating existing legal acts about protection of natural sites, country side, natural resources and protection of cultural heritage according to latest research in this field.
 - Allocating financial support for restoration and protection activities.
 - Enforcing the review of local development and land-use plans in territories with objects/sites or areas regarding special treatment due to extraordinary cultural or natural values as well as zone-regulations for protected areas.
 - Supporting the preparation, realisation and control of the measures for natural and cultural heritage. (training, financial support).
 - Supporting education in nature protection and ecology.
 - Providing administrative and financial support of research in specific areas.
 - Setting up visitors' centres for the public and for the awareness raising of locals.
 - Subsidising landscape friendly farming on the nature conservation areas.



- For the enhancement the restoration and management of the cultural monuments:
 - Creating suitable legal conditions for cooperation between universities, research centres and practice, cooperation with private investors for participating at the restoration process.

VIII.4. Rural development policies (national level)

Exploration and enhancement of local resources in rural areas



The diverse soil, landscape and cultural features are the traditional resources which offer excellent potentials for increasing economic competitiveness and diversification of economic activities based on local economic potentials. In the present economic conditions of the TICAD

countries profitability of the agriculture is low. In order to improve employment relations, increase and maintain profitability and protect the landscape the EU has adopted a CAP reform aiming at the creation of multifunctional agriculture, with in the technological development of farms, processing of farm produce as well as and sectoral – regional integration, cooperation.

- For protection, enhancement and mobilise the existing capacities of local communities with the help of LEADER and other rural development programs:
 - Taking administrative actions for strengthening the territorial cooperation among LEADER local action groups in the catchment area for realization of the catchment strategy.
 - Encouraging (by means of information and promotion) the involvement of local communities in rural areas.

- For improvement the accessibility of isolated rural areas:
 - Facilitating border crossing (especially through natural barrier – rivers, mountains) and thereby improving accessibility for peripheral rural areas of range.
 - Initiating administrative measures for the harmonisation and development of cross-border public transport systems.
- For improvement the marketing and trade network of local farm products:
 - Encouraging by means of information and promotion the cooperation of farmers in processing and marketing of agricultural produce.
 - Promoting qualification courses, skills training to raise the awareness (activate human local resources with the aim to keep the knowledge source in region). These activities could be provided in cooperation with nationwide educational and research centres (universities).
 - Amending the tax system for the benefit of local food production and consumption.
 - Encouraging and promoting simplified regulation for facilitating the establishment and running of local markets prepare qualification of local products (label, certificate), marketing and presentation of qualified products.
- For Improving the quality of agricultural products, local produce and farm-based manufacturing:
 - Promoting by means of legal and financial support technological development, quality improvement.
 - Meeting of safety and animal welfare standards.
 - Prioritising small scale production and processing.
 - Improving horizontal and vertical cooperation of the agriculture and food sector.
- For networking and cooperation in the field of tourism services and programmes:
 - Initiating programmes for the identification of local values.
 - Better coordination of tourist service development.
 - Cooperation and division of tourist functions, for the establishment of regional clusters or coordinating agencies and thus enhance more efficient marketing and management.

To promote land use in harmony with landscape characteristics

The intensive use of landscape without regard of the natural systems the functioning of the natural system of the Tisa Basin has been upset, the sub-systems have suffered serious damages: water management is showing deficit, the climate and water fluctuation show more and more extreme symptoms, the ecological capacities are becoming exhausted.



The social impacts of these processes are increasing water and natural hazards and while earlier had been prosperous, today it is hardly sufficient for subsistence. For the restoration of the compliance of land use to landscape characteristics it is needed to improve the environmental awareness of the farmers and to promote and propagate subsidy to land stewardship.

- For promotion diversity and ecological adaptability/sustainability in agricultural land use:
 - Initiating training and educational courses about environment friendly farming.
 - Encouraging and support adaptive agricultural practices by means skills training and finances.
 - Introducing land regulation measures (land use and spatial planning, support system).
 - Taking legal actions for land consolidation projects development.
 - Implementing the European Landscape convention (ELC) as well as for the relevant revision of regional and local development plans and land-use regulation.

To improve the living conditions to avoid migration of young people

In the Tisa River Basin the improvement of living conditions requires effective interventions especially in the rural areas to avoid migration of qualified young people. Generally the service level is underdeveloped mostly due to the low effective demand of the population. Therefore this problem can be solved by means of alternative and mobile services. The poor conditions of

public utility services in rural areas can be solved efficiently also by means of alternative, small scale, ecologically sound local solutions.

- For improvement public utilities, human and social services including alternative and mobile solutions in rural areas:
 - Elaborating and issuing minimum standards of public utilities and services in rural and peripheral settlements.
 - Issuing land-use regulations to prevent the extension of subserviced built up areas.
 - Initiating programs for the provision of public utilities and services in deprived communities.
 - Promoting alternative, mobile, affordable solutions.

To support actions for specific demographic / social groups

The development of human sources requires effective interventions especially in the rural areas in the Tisa River Basin. The outdated management skills of the agricultural population, the low educational level and lack in qualification of unemployment people, the training discrepancy and the out migration of qualified people are all problems to be solved. To reduce economic vulnerability and social exclusion characterised this rural areas it is essential to support investment into the people.

- For development the local social policies network of civil initiatives to assist and care for the deprived social groups:
 - Promoting model solutions of social integration and development.
 - Initiating social, community development programmes promoting and supporting social integration and the interchange of relevant skills and experiences.
 - Establishing joint transnational organisations focused on Roma integration in the Tisza catchment area.
 - Promoting and supporting civic initiatives focused on social activities of deprived social groups.
- For promotion the socially sensitive basic education:
 - Devising alternative, socially sensitive educational programs.
 - Ensuring administrative support of alternative, tailor made educational programs.
 - Spreading good practices.

- For involvement of inactive and aging people in public activities (social care):
 - Supporting and strengthening Life-long educational centres and initiatives via cooperation with universities (Third Age University).
 - Devising programs, meetings of the young and the elderly for the exchange of experience, sharing memories.
- For involving young people in community activities:
 - Implementing social awareness programs encouraging young people to participate in the process of decision making and highlighting their responsibility for the well being of the region where they live.
- For promoting the qualitative features of information society:
 - Initiating media programs of appropriate quality and discussion forums about actual problems.
 - Developing and maintaining E-points, together with training sites.
 - Supporting the development and maintenance of the websites of local governments and civil organisations.

VIII.5. Regional level policy recommendations

A. Regions / counties / dominated by a large and subsidiary centre
(Mukachivskiy, Uzhorod + Uzhorod Oblast, Arad, Bihor, Cluj, Mureş, Sibiu, Timiş, Košice, Borsod-Abaúj-Zemplén, Csongrád, Hajdú-Bihar, Pest, Južnobačka, Severnobačka, Srednjebanatska)

Cross-border, inter-city cooperation

- For strengthening the cross-border cooperation in investment action, employment and services with special regard to intercity cooperation (Debrecen - Oradea, Szeged – Timisoara, Uzhorod-Kosice and Miskolc – Kosice, Subotica – Szeged, Arad-Szeged, Timisoara – Szeged – Novi Sad):
 - Preparing joint economic development strategies (clusters, infrastructural preparation for investors, setting up business advisory service).

- Setting up joint working groups for the implementation and impact assessment of the common strategy.
- For promoting cooperation between business and education/research institute:
 - Providing administrative and financial support in order to strengthen cooperation between higher education and business especially SME.
 - Enhancing the cross-border and national cooperation between education and research centres.
 - Initiating the cooperation of regional universities, higher education institutes and research centres. (student exchange, information and know-how exchange, joint workshops, conferences and research programmes, etc.).
- For strengthening cross-border contact and cooperation between tourist centres:
 - Launching cross - border and transnational cooperation projects in regional and local tourism (information interchange, cooperation in marketing and reciprocal presentation, organizing of joint programmes, joint websites, etc.).
 - Strengthening urban – rural cooperation in tourism (program packages, “quest table”, active tourism).
 - Promoting the development of week-end, short-term rural and sports tourism, recreation, visits, meetings, workshops in the vicinity of the urban centres.
- For mobilizing local innovation capacity for knowledge based / new technology in manufacturing industry:
 - Promoting awareness raising, trainings, information service to local SMEs and thereby encourage innovative activities.
 - Providing information for local manufacturers about the opportunities and benefits of cooperation with educational institutions.



Development control

- For controlling of urban growth:
 - Improving spatial planning and land regulation for protection of natural areas and hampering urban sprawl.
 - Promoting and enforcing the regulations and directives related to sustainability in the field of urban development.

B. Regions / counties / districts with centre(s) undergoing economic conversion (*Hunedoara, Maramureş, Banská Bystrica, Nógrád*)

Environmental upgrading

- For introduce measures for the reclamation of derelict, polluted brown fields (dump sites, industries sites):
 - To realize, with the support of the national governments as well as national and multinational companies the reclamation of brown fields, restoration of the environmental damages and rehabilitation of the natural environment.
 - To commission the mapping of existing brown-fields focused on their potential for further development.
 - Supporting the re-use of brown fields areas instead of using green fields.
- For mobilize the available labour force for environmental improvement:
 - Supporting and organising public and voluntary actions for environmental improvement.

C. Regions of mountainous areas with local centre(s) (*Hustskyi, Irshavskyi, Mighirskyi, Perechynskyi, Rahivskyi, Svalyavskyi, Tyachivskyi, Velykobereznyanskyi, Volovecky, Alba, Bystrița Nășăud, Harghita, Prešov, Heves*)

Sustainable use of natural resources

- For supporting sustainable, risk preventing forest management:
 - Promoting the application of innovative, sustainable forest management techniques in cooperation with the forest management authorities.
 - Issuing regulations for sustainable forest management.

- For promoting the sustainable use of mineral and non mineral resources:
 - Initiating EIA of mining operations.
 - To seek the support of the national governments as well as national and multinational companies to reduce and eliminate the harmful effects and apply environmentally cautious technologies.
- For promoting the utilization of hydroelectric power:
 - Prescribing the preliminary assessments of the long term impacts on the whole length of the river before the procedures of permissions, as required by the WFD.
 - Promoting small scale, landscape and environment friendly solutions of hydro-power generation for local electric supply.

Development of tourism

- For development services for rural, active and health tourism (attractions, marketing, service):
 - Preparing local / regional tourist development strategies integrating different recreation activities and preserving the landscape assets.
 - Promoting the development of services (accommodation, fairs, sports facilities etc) for rural, active and health tourism Sustainable agriculture.

D. Regions of rural farming areas with local centre(s) (*Berehivskiy, Vynogradivskiy, Sălaj, Satu Mare, Bács-Kiskun, Békés, Jász-Nagykun-Szolnok, Szabolcs-Szatmár-Bereg, Severnobańska, Zapadnobačka*)

Sustainable agriculture

- For promoting locally based, multifunctional, area specific, landscape sensitive and divers agriculture:



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- Launching training programmes in cooperation with local farmers focused on local particularities, providing know-how to exploit the potential of local conditions.
 - Promoting the improvement of the environmental performance of farms.
 - Disseminating information, documents, TV series and web sites about ecological farming.

Capitalisation of local assets

- For promoting rural tourism based on the unique local attractions:
 - In cooperation with educational institutions mapping the unique values of natural and cultural heritage; promote their protection and enhancement and their utilization for tourist purposes.
 - Preparing local / regional tourist development strategies integrating different recreation activities and preserving the landscape assets.
 - Promoting the development of services (accommodation, fairs, sports facilities etc) for rural, active and health tourism.

