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Mures

Stripe of  
Impulse



## Potentials:



Salt spring / Spa



extraordinary view on surrounding landscape

people already using the area for recreational purpose.  
e.g. fishing, barbecue, sunbathingarea is habitat for rare species  
high biodiversity

water is an attractive landscape element



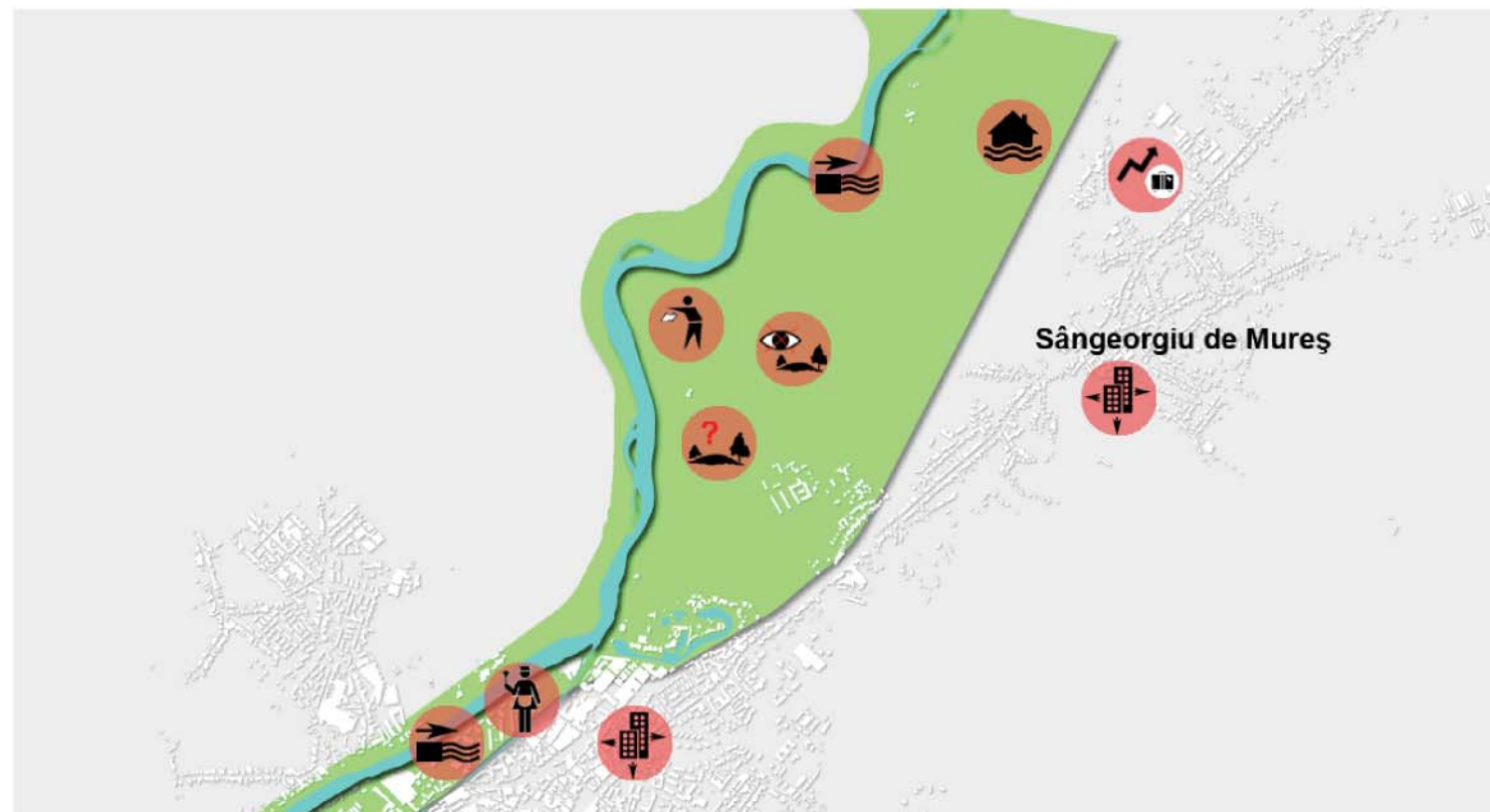
water is an attractive landscape element



Water resort „Weekend“ is popular in Târgu Mureș and attracts a lot of people



the project area is not far from the city center



## Conflicts / threats:



high risk of flooding in the project area / restrictions for constructing



promotion of attractions to increase local / regional tourism



only few possibilities to experience the water from the river / missing infrastructure



illegal waste deposits in the landscape



low appreciation / awareness for landscape



infrastructure to connect the surrounding villages with Târgu Mureș



identity of project area is unclear



no money for maintaining green spaces

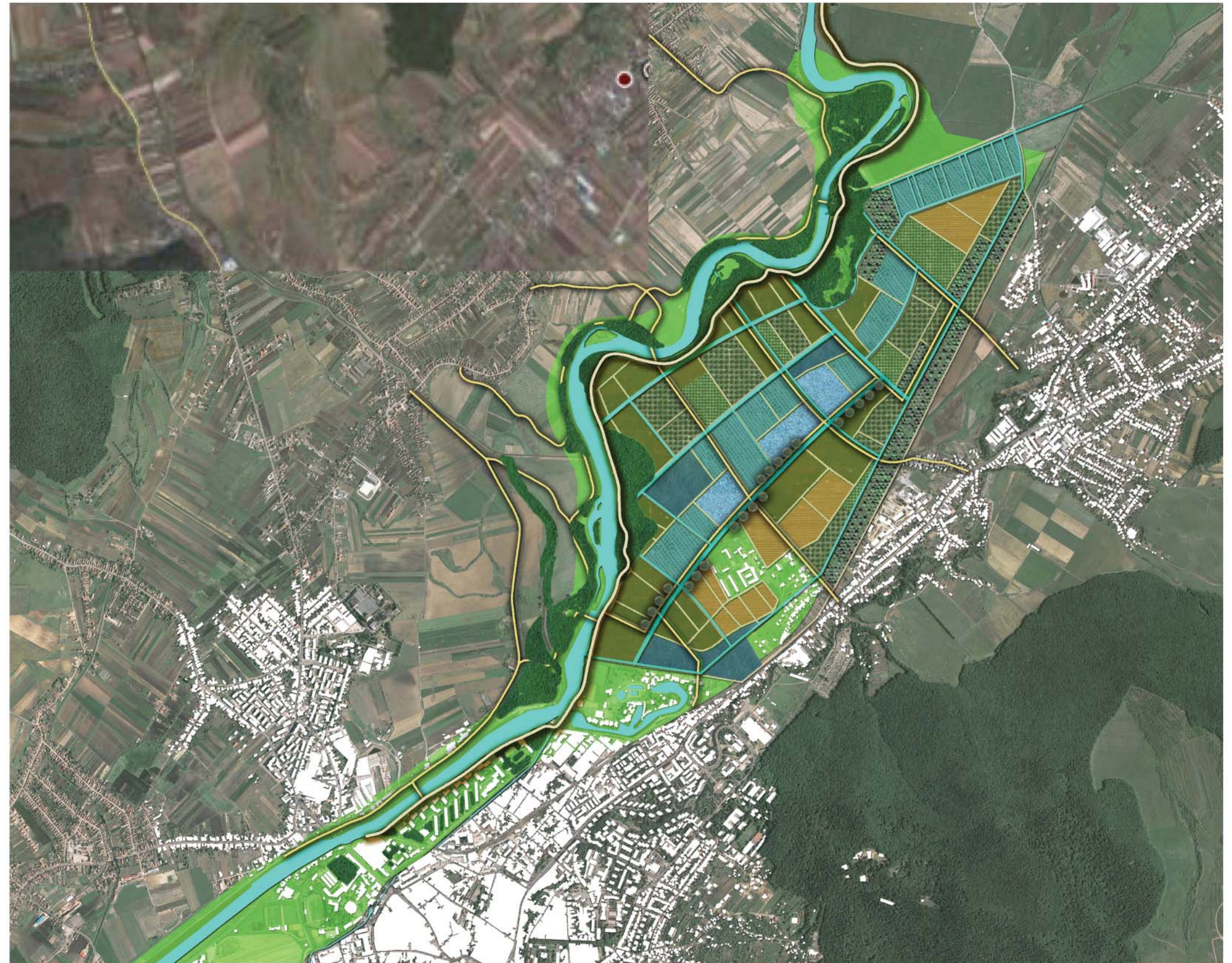
### Mission:

- to give a look from outside to the river region
- to bring new ideas and new backgrounds from different countries
- to give new impulses to this area

### Vision:

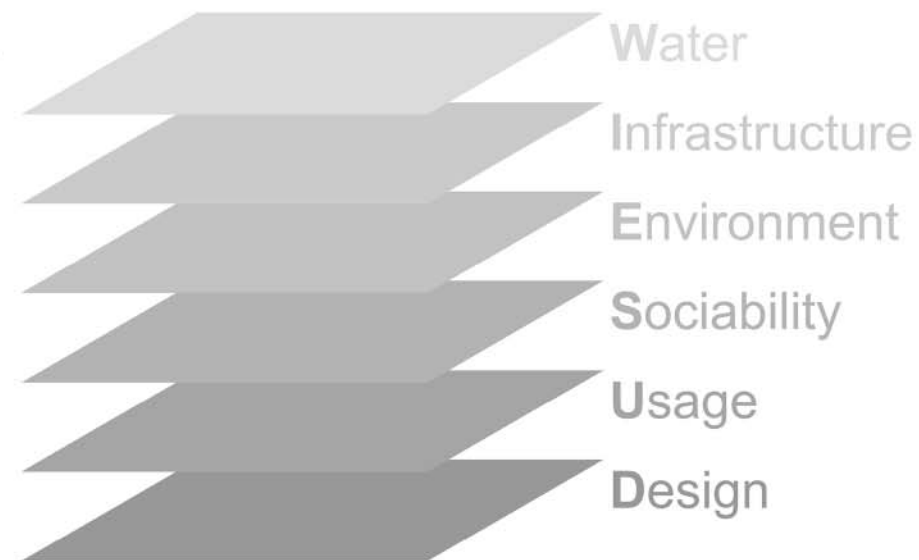
The river Mures is giving impulses for a sustainable future landscape combining possible pressures on landuse with growing recreational needs.

Main goal is to use natural processes of the river as a landscape element and to keep the compartmentalized structure of the culture landscape.



## Strategy

To approach the main conflicts we use a layer structure where every layer is a component of our concept.



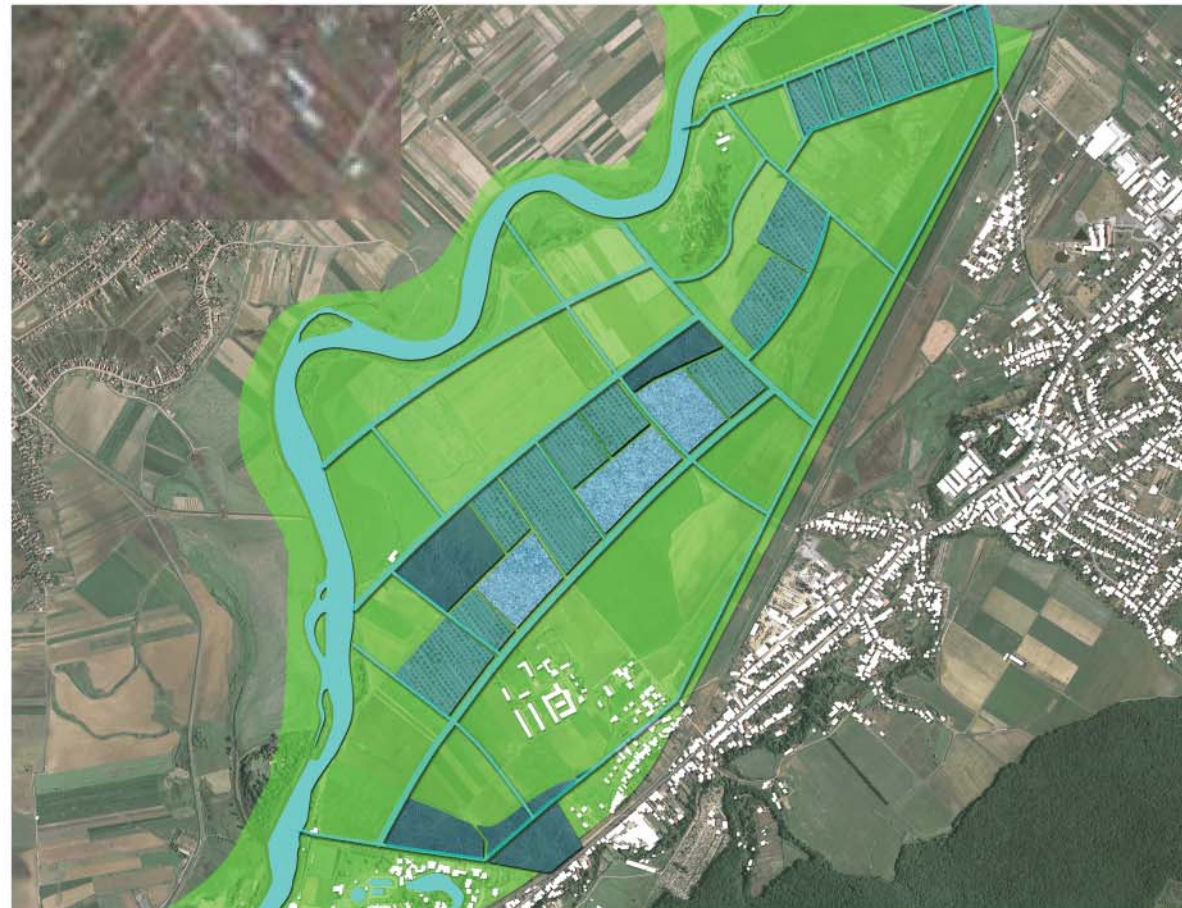
## Water:

Water as the main defining landscape element is very attractive for recreational purposes as well as a carrier for biodiversity.

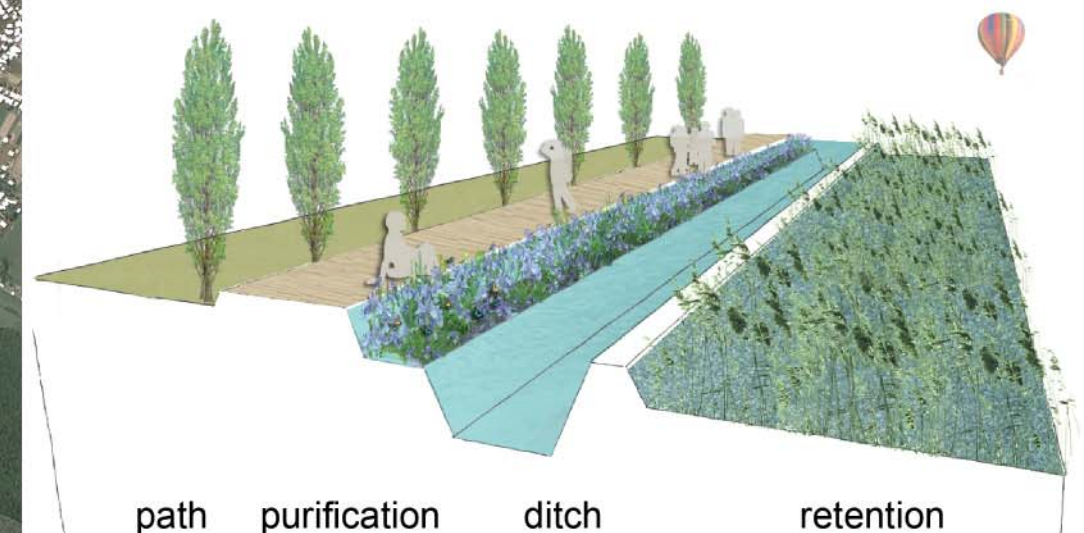
This element appears in various aspects:

stream, wetland and ditches

Over time the project area is regularly flooded.



Declared water areas in the center of our project area work as re-search water basins with emphasis on retention (flood protection), purification, water plants and water engineering. These basins can also work as show water gardens.



## Infrastructure:

There are only few roads connecting Târgu Mureș with the surrounding villages. They are heavily used by cars and trucks and not very suitable for bikers or pedestrians.

In addition the river works as a barrier in this area.

To enhance the infrastructure is a important impulse for a development in this area.



path of 1st level - urban promenade



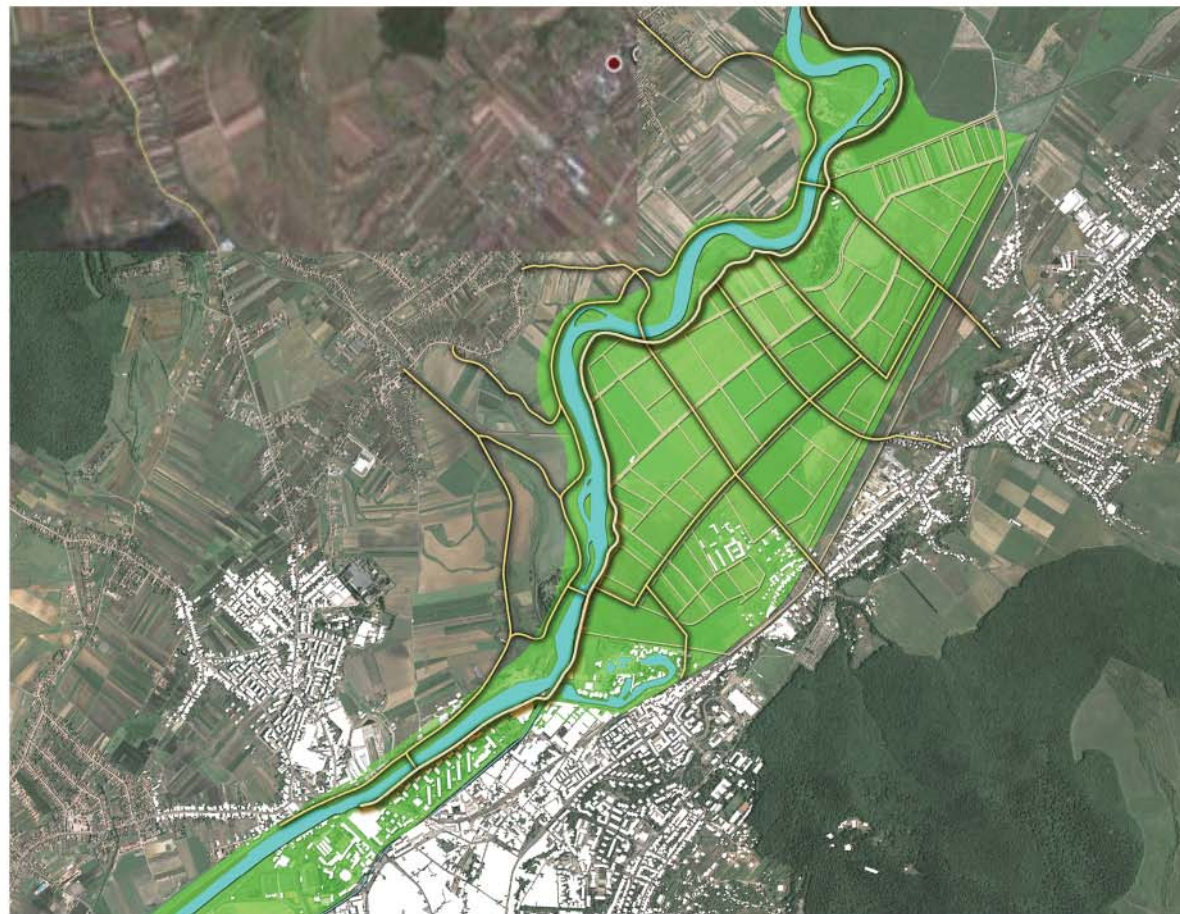
path of 1st level - rural promenade

## 1st level pathes

An „urban“ promenade on the dam with possibilities to go down to the water and small terraces for resting and having a nice view to the river and landscape.

Also a „rural“ promenade along the river for experiencing the nature and the landscape.

Pathes of 2nd and 3rd level are mainly made of waterbound surface. Wooden planks are used in wetlands.



Overview path system



path of 2nd level



path of 3rd level

## Environment:

Space within only 5m from the river is protected by national law. But the surround area is very rich in flora and fauna with rare and valuable species.

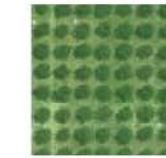
To protect and to improve the biodiversity a **green corridor** along the river has to be established.



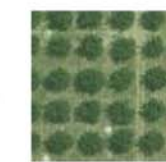
afforestation / timber



grazing



cultivation of plants for short term plantations / tree nursery



short term plantation / energy crops



research / biotopes



research / purification / retention / hydrology



gravel extraction / swimming ponds



vegetable cultivation



In future the question will come up what to do, if farmland is no longer needed or profitable. Demand for other landuses will increase. This catalog shows possible landuses afterwards combining environmental matters (water) with recreational demands.

## Socialbility:

A good neighborhood in the city quarter next to the river is one factor that the city turns towards the river. Besides green spaces help the people identify with the riverside. The peak of the island (an neglected area) marks the transition from urban to more rural area, which is in our case a „Neighbourhood Park“, that refers to usergroups that have now the park adopted.



before



after

To increase the appreciation for local landscape and environment, it is important to involve young people. The benefits are possibly less illegal waste dumping and more awareness for the nature.



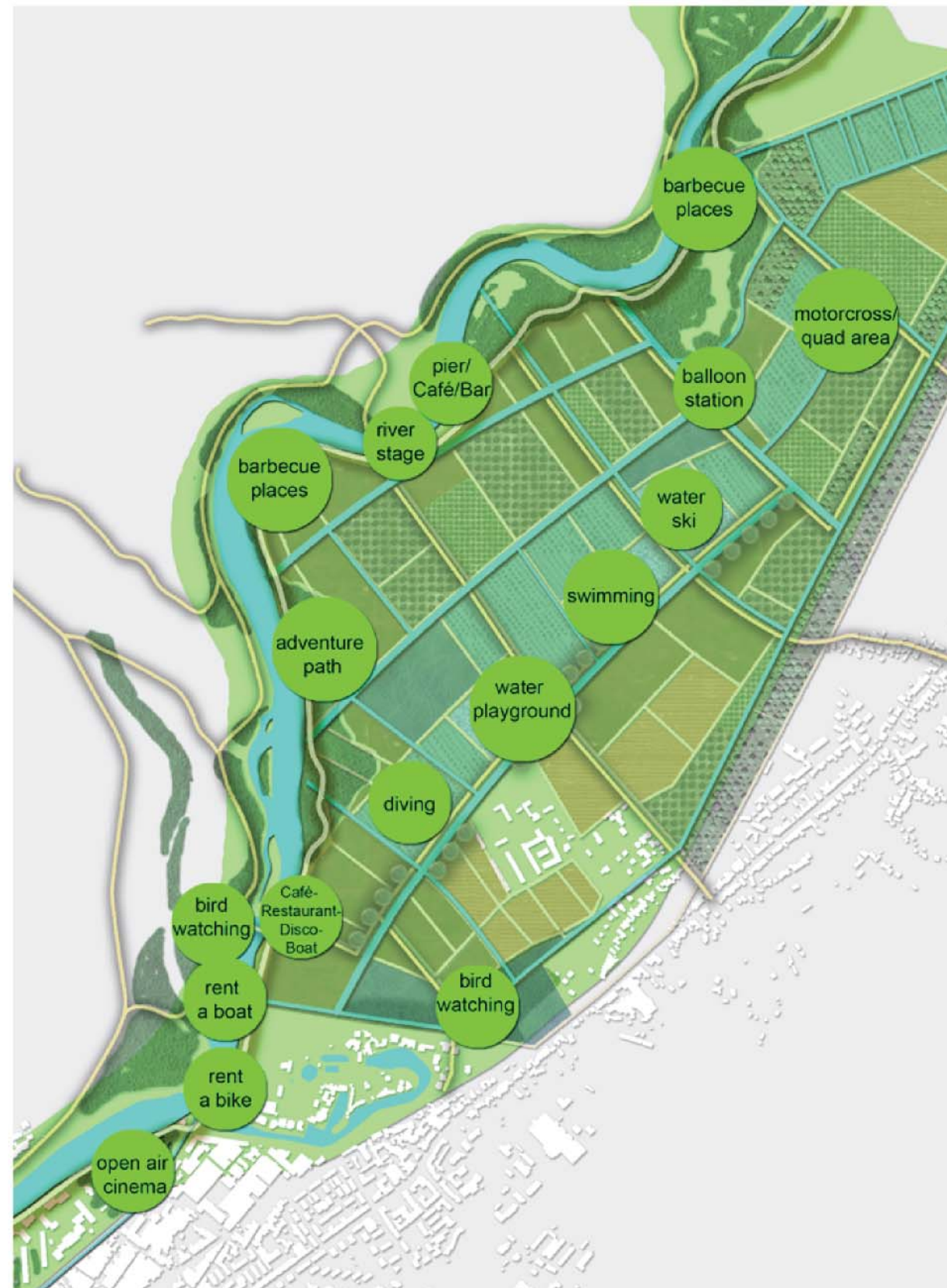
schools around the project area



## Usage:

Further north of the „Weekend“ there is no noticeable usage.

To attract different usergroups to the project area a sequence of recreational activities is set along the promenade as well in a next step along the water features that can be developed in the future.



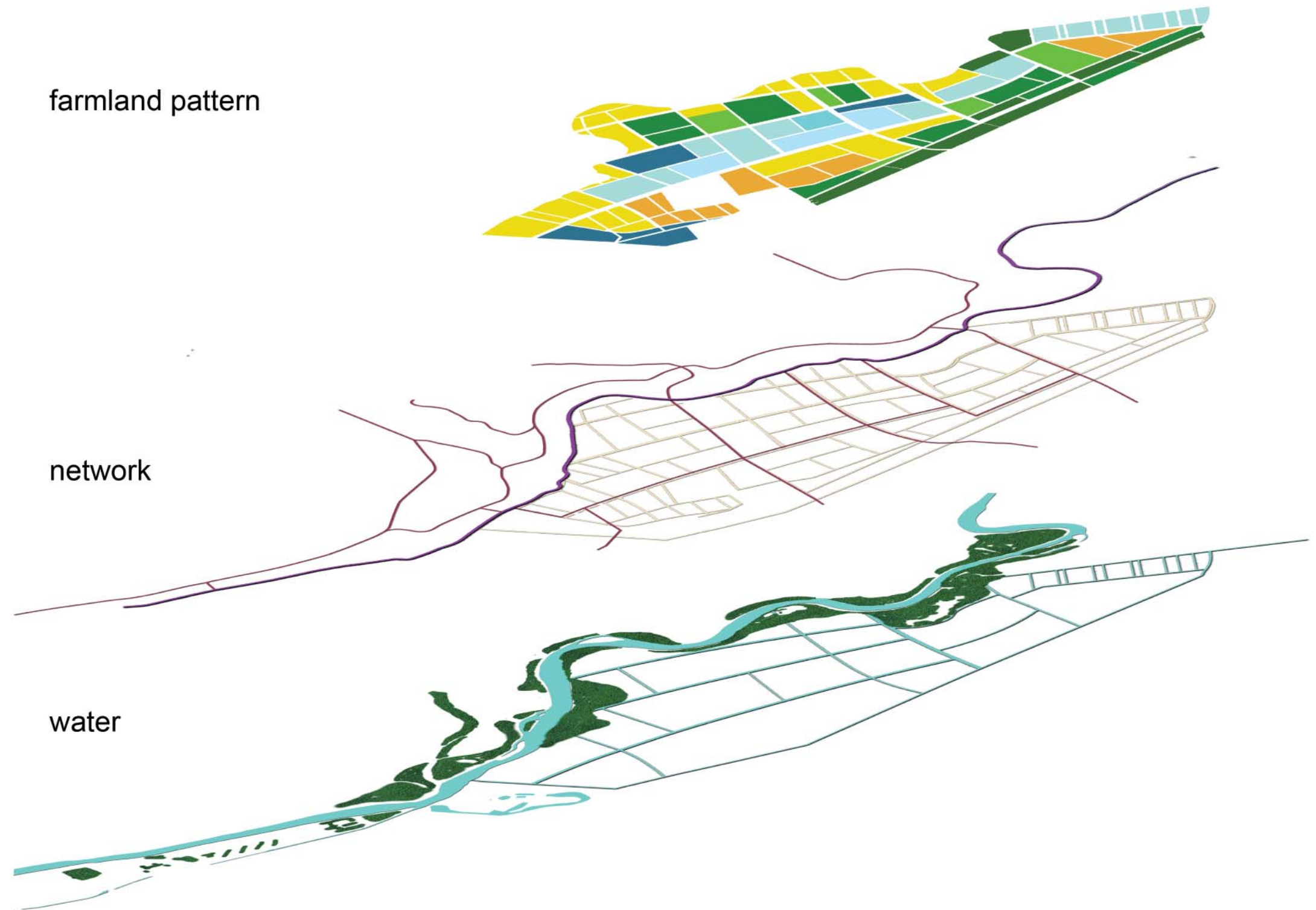
## Design:

The main design principle refers to the structure given by the typical farmland pattern in the region, the processes of the river Mures and the trailnetwork.

farmland pattern

network

water



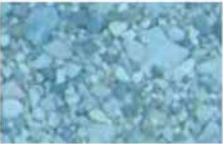
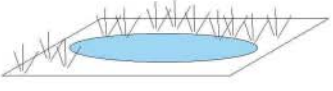


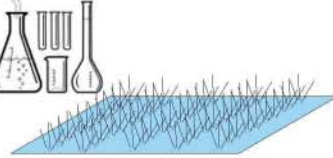
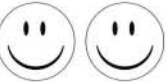

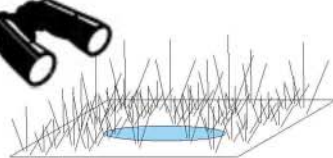
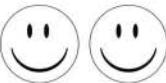
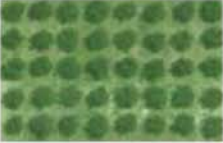
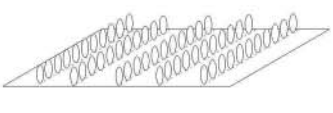


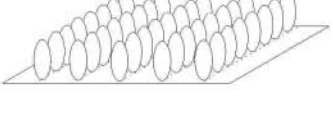


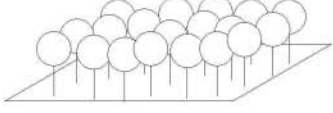





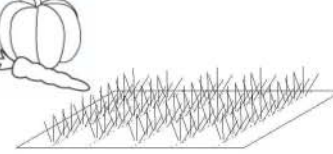
## Funding:

Moreoften there is no money provided from the municipality to maintain green spaces.

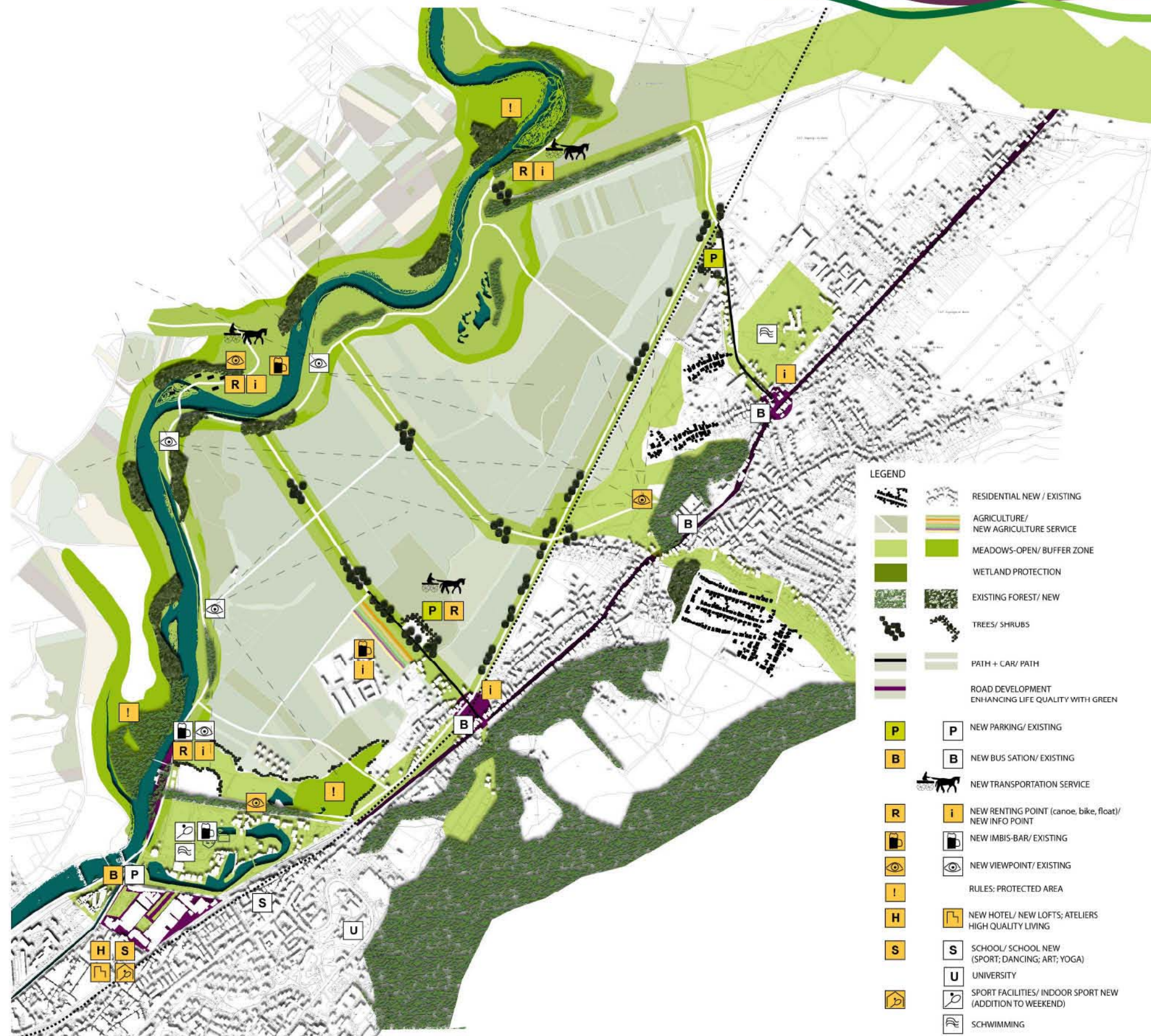
As consequence those green spaces must be economically used and that use influences the structure of the patterns.

Especially use of short term plantation as an alternative to conventional agriculture will be a profitable use.

According to the European Union 20 percent of the energy demand should covered out of renewable energies from 2020 on. To achieve this target, the usage of wood as biomass becomes indispensable. Short term plantations of populus and salix have an enormous potential to produce biomass in an economic effective but also ecological sensitive way. The plantations need only a low input of energy. They are profitable for 20 years and have to be harvested every 4 years.

Form of cultivation	Pattern	Structure	Economic value	Usage value
Gravel extraction Swimming ponds			€€€€€ €	
Research Purification, Retention, Hydrology			€€	
Research Biotopes			€€	
Cultivation of plants for short term plantations tree nursery			€€€	
Short term plantations Energy crops Salix, Populus, Miscanthus			€€€€€	
Afforestation timber			€	
Grazing			€€	
Vegetable cultivation			€€€	

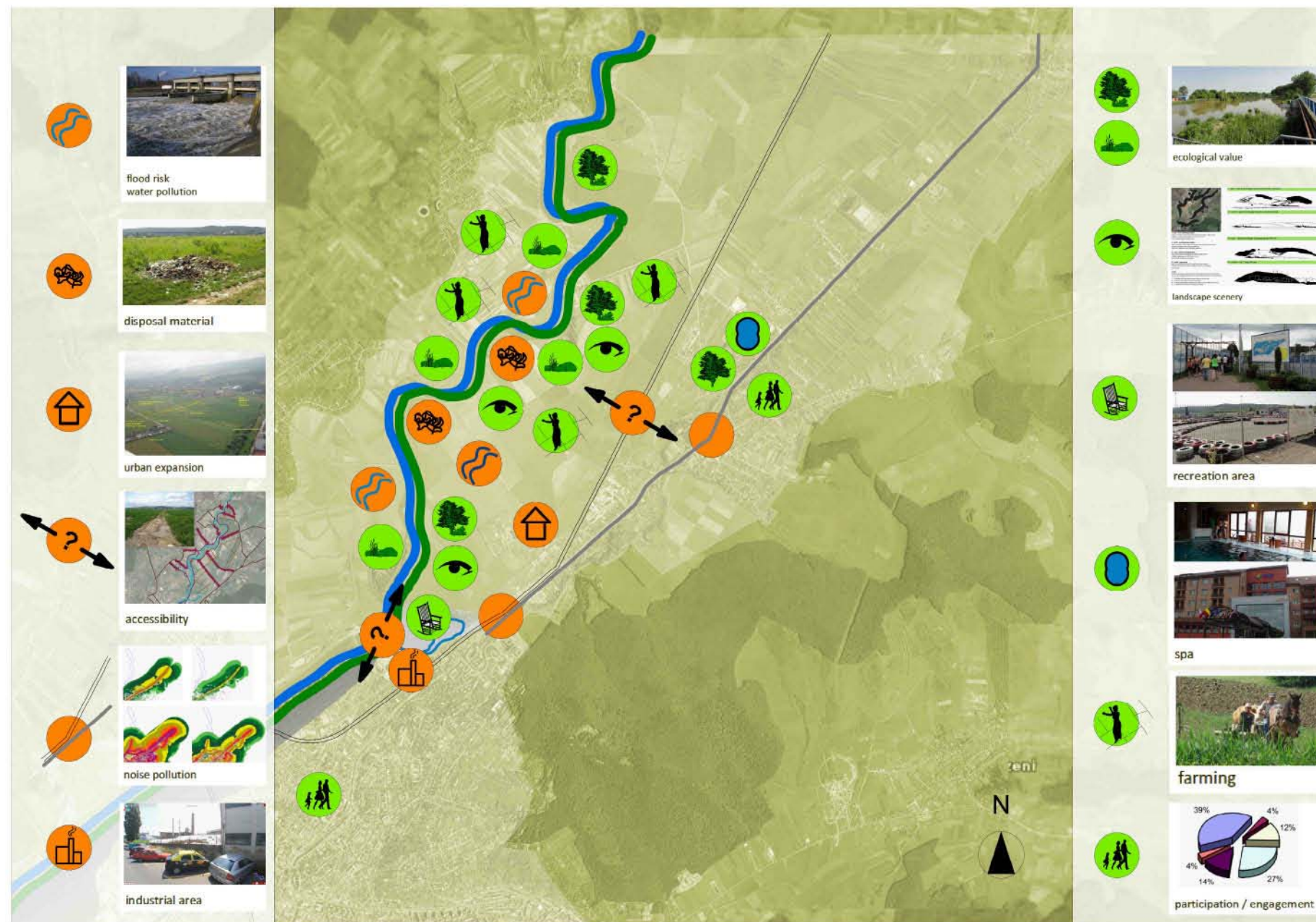
# mures . point of connection



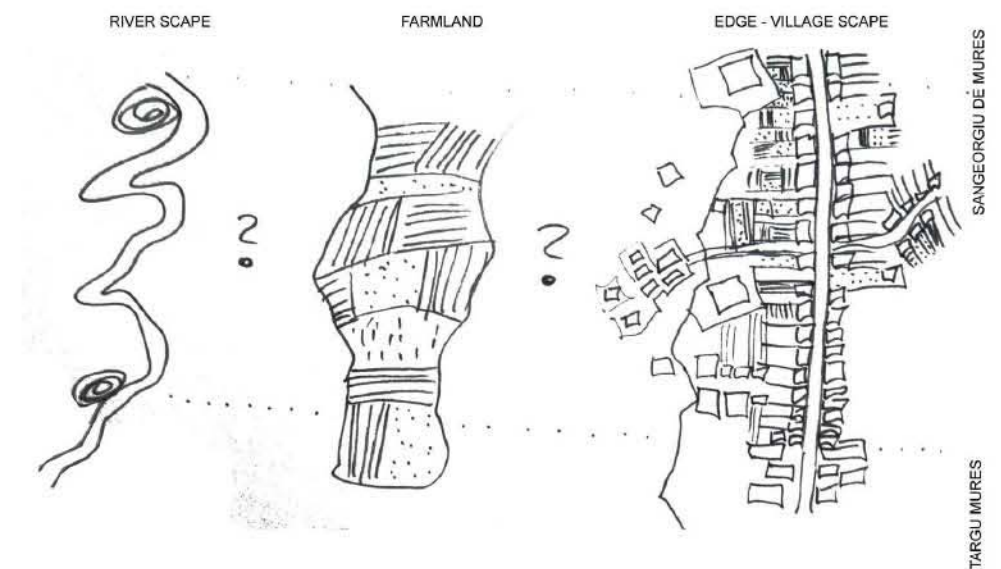
## conceptual masterplan - site scale

landscape scene | STRONG PATHWAY STRUCTURE | land use | urban | landscape patterns | yoga school | ecological value | semi-urban | ADDING FUNCTIONS kajak station | nature workshops | health tourism | ADDING ALTERNATIVE INCOME | recreation | transformation | ALTERNATIVE SPACE | dancing school | thematic trails | meadows | signs | local materials |





RIVER SCAPE	FARMLAND	EDGE AND VILLAGE SCAPE
<ul style="list-style-type: none"> <li>+ shape</li> <li>+ dimension</li> <li>+ diverse biotopes</li> <li>+ fresh air</li> <li>+ presence of water</li> <li>+ view</li> </ul>	<ul style="list-style-type: none"> <li>+ open view</li> <li>+ transit zone</li> <li>- some abandoned plots</li> </ul>	<ul style="list-style-type: none"> <li>+ landmark (church)</li> <li>+ traditional rural patterns</li> <li>+ health spa area</li> </ul>
<ul style="list-style-type: none"> <li>- access</li> <li>- water pollution</li> <li>- disposal material</li> <li>- lack of protection</li> <li>- lack of awareness</li> </ul>	<ul style="list-style-type: none"> <li>- disposal material</li> <li>- maintenance</li> <li>- less landscape elements</li> </ul>	<ul style="list-style-type: none"> <li>- access to river scape</li> <li>- urban sprawl</li> <li>- "trendy" buildings</li> <li>- noise pollution along national road</li> <li>- less green</li> <li>- danger in road crossing</li> <li>- road functions and aesthetics</li> </ul>



## Analysis synthesis

As a result of all analyzed layers of impacts within the Study Area, we could formulate a specific conflict map, which presents the threats and opportunities on site, highlighting sensitive things which should be integrated in the potential proposals of planning and management in the questioned area. There is, no doubt, a high recreational value in a scenic outdoor environment, while at the same time, kept far from being attractive and welcoming for people. There is a high pressure to build on a flooding plain, which is a misunderstood economical trend in the entire country for now.

## „WHEN MONEY HITS“ - URBAN SPRAWL



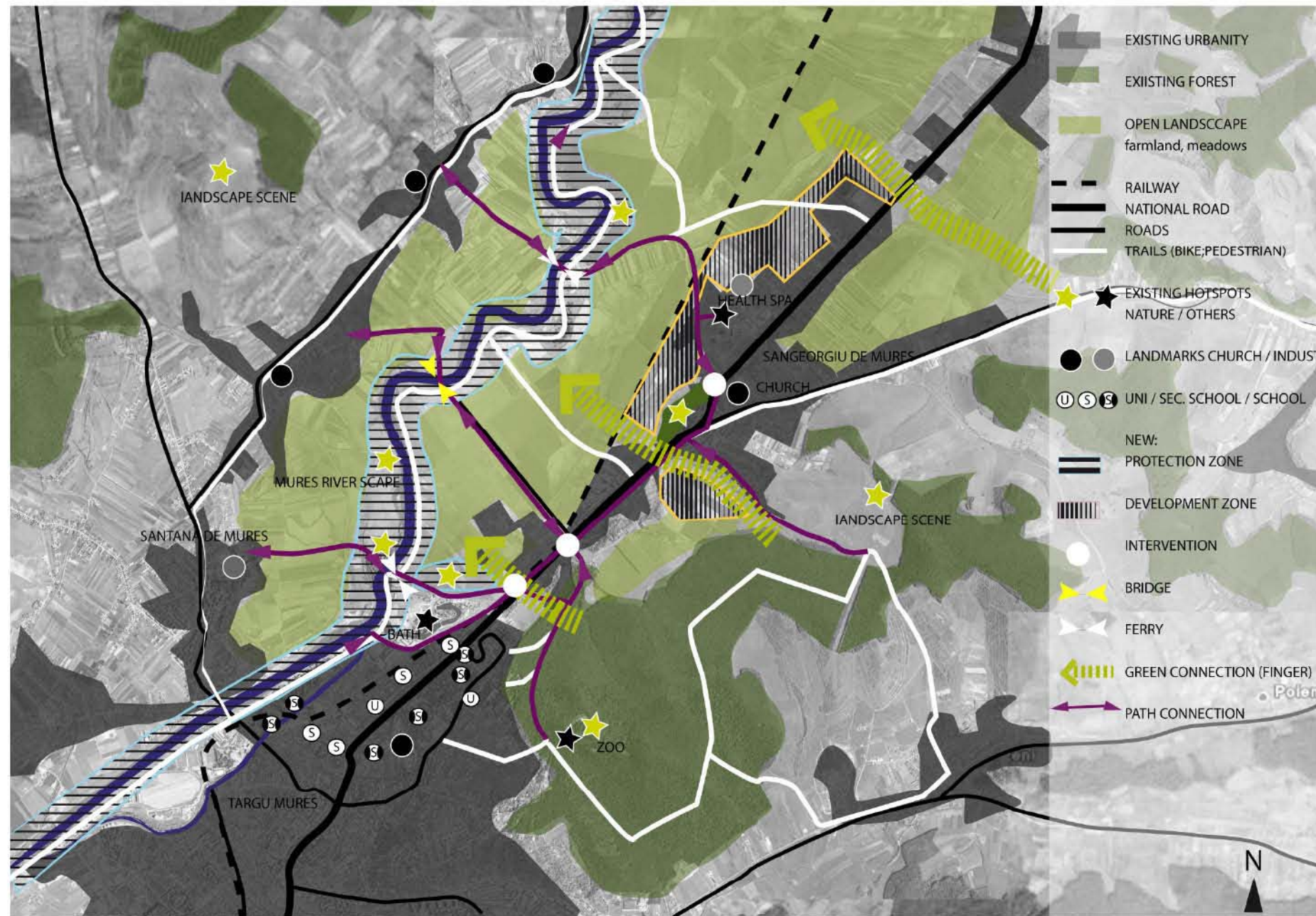
## „WHEN NATURE STAYS“ - IDENTITY AND RECREATION



## Disconnected Units

On a visual and emotional level we discovered a disconnected place. In its current state it is a land in between, with no identical message. The river scape, the farm land and the settlements are units on their own. Visual and emotional connections are missing. To save this place people need to get familiar with it and experience the valuable landscape. When starting to like the place, realizing to need it, then there is the chance stopping the trend and protect this area for future generations as recreation, nature experience and lace for alternative income and life quality.

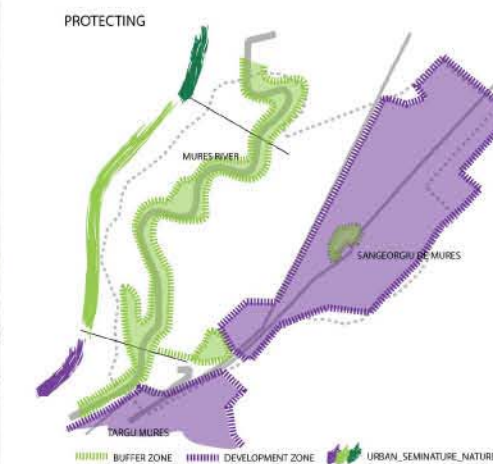
# mures . point of connection



## Conceptual Masterplan - city scale

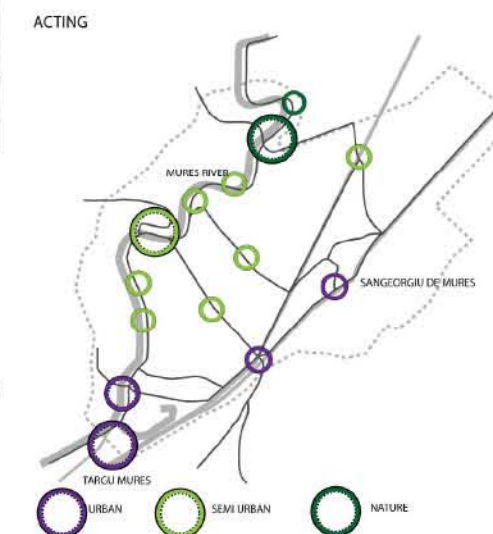
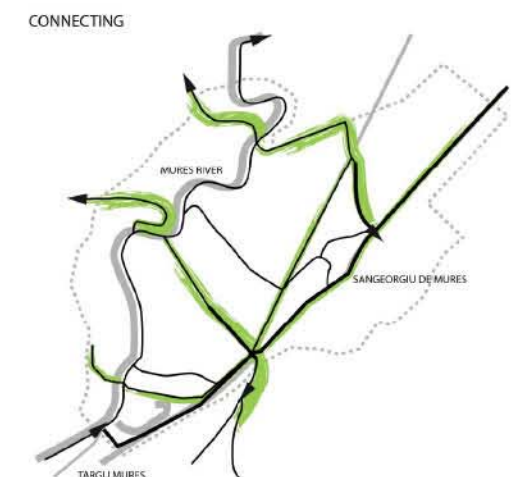
Mures River will get a new Buffer Zone around 25 m wide on each of it's side (left bank and right bank). The existing pathway along the river will be integrated in this zone. There is no allowed urban extension within the area between the railway and the river. The map illustrates also a new development area for Sangeorgiu de Mures. Along the National Road no. 15 (DN15) in Sangeorgiu de Mures there is nearly no view to the Mures valley. The concept proposes 3 "green fingers" (open landscape like farming, meadows) coming from the south east. These will also keep the borders of the village which actually starts to smudge. The concept takes advantage from the existing path and road structures and is just adding a connection over the Mures to Santana de Mures. The purple lines illustrate the connecting pathways. In terms of quality and orientation, these pathways need a new concept and design concerning material, use and signage. The concept likes to connect the existing hot spots with the path way structure and wants to provide best viewpoints to the landmarks and scenic surrounding landscape.

For creating an identical image there is a need of connecting these mentally and spatially separated units river scape, farmland and settlement. Only then people can be able to discover and get to know the place. People only protect what they need and love.



**Protecting**  
Main aim is to protect the vernacular landscape characters. Therefore the concept defines buffer zones for sensitive areas. There will be only use of native species for planting. In addition the concept defines a usability sequence from urban, semi urban to natural uses and materials.

**Connecting**  
First of all it is the connection of the settlements with the river. Therefore the concept defines main access roads which have to represent visual the access to the river. This can be done with thematic trails, pedestrian and bicycle pathways with shelter, special furniture, local materials and signage. An emotional connection can be created by including education to the area e.g. nature workshops.

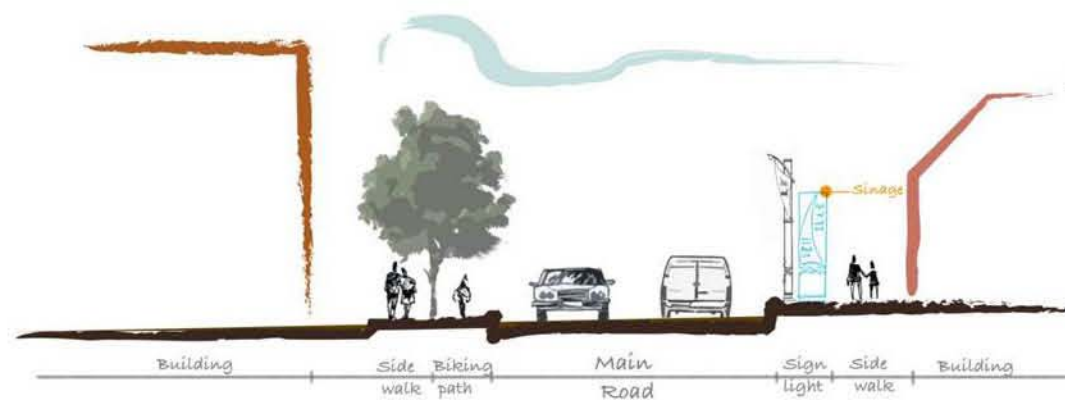
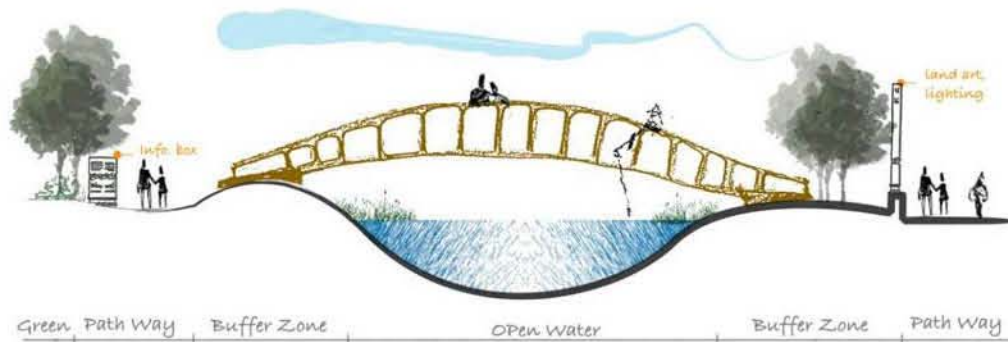


**Acting**  
The new interventions will act in an urban, semi urban and natural sequence. Near settlements you will find intensive interactions and uses. In sensitive areas and especially as far as from settlements it will shift into a more natural interaction – a sensitive use.

## m u r e s . p o i n t o f c o n n e c t i o n

## Principle of Protecting, Connecting and Acting

- \* define buffer zone (15-25m) with restricted usage along the river to ensure maximum protection of the river and enhance the ecological quality
- \* define alternative land for urban expansion which has better opportunities as residential zone taking in account the preservation of vernacular landscape and landscape scenery
- \* connect the river by extending a green finger from the eastern forest which will stand as added value for the wildlife and the leisure activities
- \* define more access to the river (both sides) from the main road using the existing street and walking trails and define the river paths and pedestrian and biking lanes



## mures . point of connection

## URBAN DESIGN INTERVENTION



**Design Elements:**  
 + Art center | Dancing school |  
 Hotel- Accommodation

**Design Principles:**  
 + Strong intervention  
 + Urban materials  
 + Active usage



above: Present Situation - Industrial Site next to the "Week-end" Recreational Area

left: Proposed Situation for Industrial Site Reversion (Urban Design Intervention)



above: Present Situation - Industrial Site next to the "Week-end" Recreational Area

left: Proposed Situation for Industrial Site Reversion (Urban Design Intervention)

## SEMI URBAN DESIGN INTERVENTION



**Design Elements:**  
 + Wooden deck  
 + Promenade path  
 + Playground for children

**Design Principles:**  
 + Urban intervention  
 + Eco-friendly materials  
 + Active usage



right: Present Situation - Go Kart Entrance next to the "Weekend" Recreational Area

left: Proposed Situation for Entry Point Recreation Area (Semi-urban Design Intervention)



## mures . point of connection

## SEMI URBAN DESIGN INTERVENTION



right: Present Situation - Go Kart Entrance next to the "Weekend" Recreational Area

left: Proposed Situation for Entry Point Recreation Area (Semi-urban Design Intervention)



## SEMI URBAN



## Design Elements:

- + Mures Bridge
- + Rest point
- + Fishing points

## Design Principles:

- + Medium intervention
- + Eco- friendly materials
- + Passive activities



above: Present Situation - River Shoreline

left and below left: Proposed Situation for Recreation Area next to the river - soft (left) and hard (below) version

below: Proposed Situation for Recreation Area Meadow Plain



## mures . point of connection

## SEMI URBAN DESIGN INTERVENTION

**Design Elements:**

- + long plots
- + parking
- + shelter

**Design Principles:**

- + kick off by farmers
- + tools, water provided by farmers
- + city people rent plot,
- + maintain and harvest



source: <http://www.meine-ernte.de/so-funktioniert.html>

## Alternative agriculture service – providing farmland, transportation

This idea is coming from Germany. Farmers provide the possibilities to rent a vegetable plot for one season nearby the cities. In this example, the farmer sows and plants 20 different vegetables and flowers. The pattern is similar to the traditional Romanian small scaled farming pattern with long plots. They are doing it in an ecological friendly way with bio quality standards. After sowing, the citizens can rent a plot for one season (May to October). The farmers provide a shelter, water and garden tools. The citizens take over the maintenance and they harvest their own bio products.

## Facts for the German example:

- small garden, for singles and couples: 45 m<sup>2</sup> - 179€ (season)
- family garden, family and friends: 85 m<sup>2</sup> - 329 € (season)

**Price Includes:**

- colored vegetable garden for one season (May to October)
- 20 different vegetables and flowers
- basic tools for garden work, water
- regularly professional guidance and help, directly at site if needed (by a farmer or as an announcement displayed on a board)
- information about questions concerning vegetable gardening, tips and tricks
- online community and photo gallery
- experiencing nature and people
- 2 hours per week gardening

source: <http://www.meine-ernte.de>

## Alternative agriculture service – transportation service

In this concept, cars are not allowed to get close to Mures river. We want to provide other transportation systems, especially in combination with renting stations. This idea could provide an extra income by using the farming vehicles as transportation. In Harghita-Madaras we experienced a tour to the top of the mountain by sitting in a wagon pulled by a tractor (source: <http://www.pensiuniharghitene.ro/programs.html?id=5>). The same idea can be adopted for the project area to carry boats, people and bikes to their destination point as our group member Fahad already experienced, after a bicycle problema farmer with his horse waggon took him to next road. with his horse wagon to the next road in a village. He paid a small amount of money for this service.

## NATURAL DESIGN INTERVENTION

**Design Elements:**

- + Birds watchtower
- + Meditation sculpture
- + Research area

**Design Principles:**

- + Soft intervention
- + Natural material
- + Restricted use



right: Present Situation - Wetland Area  
above and left: Proposed Situation for Wetland Area



IMPRESSIONS EXCURSION



figure 35: imla's at excursion in Harghita county - Zetelaka



figure 36: „climbing up the mountains" by tractor and waggon



figure 37: little hiking trip



figure 38: view to landscape of eastern Carpatians



figure 39: on top of a holy mountain



figure 40: Landscape near Cortus (Mures county)



figure 41: contacts in Cortus



figure 42: welcoming with our guest families



figure 43: overnight stay - an amazing landscape

# 4. ACKNOWLEDGEMENT

## 4. Acknowledgement

The imla course would like to thank the entire Târgu Mures Representatives, Ms. Kovács Ange-la, Ms. Ilona Csortán, Ms. Mirela Lungu, Ms. Coralia Goicovici, Mrs. Georgiana Branea, Mr. Klaus Birthler, Mr. Csortán Ferenc, along with the entire Corvinus and IMLA Team, especially the Profes-sors who guided us throughout the whole process of project orientation, starting with Ms. Kris-tin Faurest, Mr. Albert Fekete, Mr. Frieder Luz, Mr. Róbert Kabai and the PhD team, Mrs. Dóra Hutter, Mrs. Anita Szöbölödi, to Mr. Levente Mathiassy from the Maintenance Crew in “Weekend” Recreation Area for all the support, to Antena1 Târgu Mures Crew for healthy publicity, and, of course, the other actors and participants involved in the overall discussions regarding this pro-ject, along with full acknowledgement to the original sources referred to in this paper work, which also include the study/research part of our colleagues previously prepared for our analysis and concept part, naming: Fahad Alghamdi, Wendy Laura Cinta, Issia Habou, Ishrat Mahbub, Christian Polzin, Susanne Raabe, Sven Rosenkranz, Asma Sahboon, Daniel Scheuffele, Kristin Vorloeper, Yujun Zhang. A special thanks goes out to all the involved parties in helping us collecting data: the Water Agency [Directia Apelor], the Environmental Agency [Mr. Peter Ábrán and Mr. Calin Cengher], the Agriculture Agency [Directia pentru Agricultura si Dezvoltare Rurala].

## 5. References

Environmental Data provided by the Water and Environment Agencies

Satellite Images <http://www.360cities.net/image/bridge-over-the-river-mures-tirgu-muresromania#-237.96,86.34,70.0>

Targu Mures Municipality [Official Website] <http://www.tirgumures.ro/>

Local Agenda 21 [http://www.undp.ro/download/LA21\\_mures%5Bcounty%5D\\_\\_2004-2005\\_eng\\_fi-nal.pdf](http://www.undp.ro/download/LA21_mures%5Bcounty%5D__2004-2005_eng_final.pdf)

Real Estate Developments <http://targumures.olx.ro/vand-parcele-de-teren-tg-mures-iid-113897232>

Suggestion of Design Furniture and Materials <http://www.gallowaygranite.co.uk/gallery/large/bench-waterfront.jpg>

Suggestion of Design Furniture and Materials <http://www10.aeccafe.com/blogs/arch-showcase/2011/04/27/holstebro-storaa-stream-in-holstebro-denmark-by-okra-landscape-architects/>

Farming Concept in Germany <http://www.meine-ernte.de>

Local Transport Concept in Romania <http://www.pensiuniharghitene.ro/programs.html?id=5>).

# IMPRESSIONS STUDIO WORK

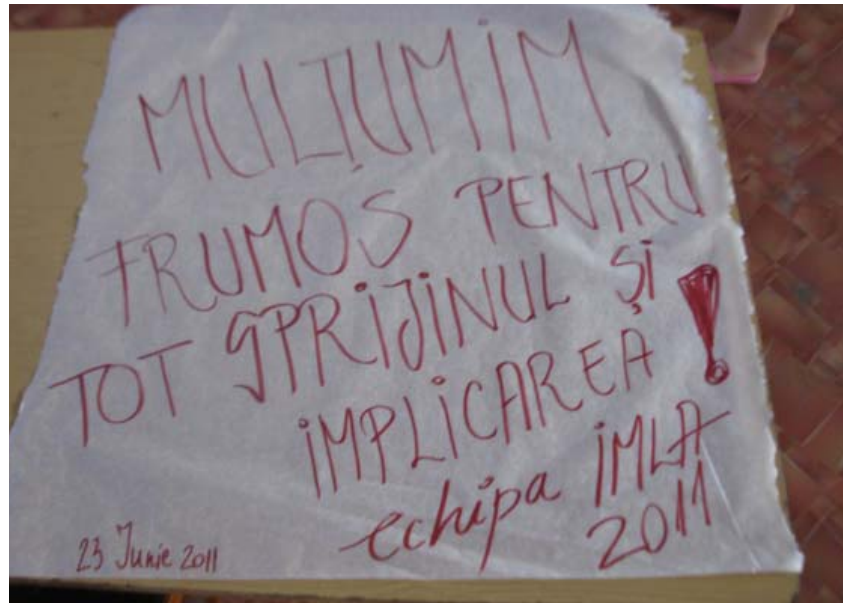


figure 44: We like to thank all involved people for this professional experience!



figure 45: working studio



figure 46: „imla's on the run” - railway on site



figure 47: group work in new studio, at weekend area



figure 48: working place - weekend area of Targu Mures



figure 49: terraces of pension Anna - view over the project area



figure 50: after final presentation - barbeque time



figure 51: visit from vice president of Asop (Romanian Landscape Architects)



figure 52: final presentation - here „Agro Landscape Park Mures”



figure 53: the imla team - after final presentation



International Project June 2011 | Supervisor: Prof. Dr. Frieder Luz | Prof. Dr. Albert Fekete | Prof. Dr. Kristin Faurest | impressum: Susanne Raabe

List of participants:

IMLA 2009/2010 Fahad Alghamdi | Wendy Laura Cinta | Issia Habou | Ishrat Mahbub | Christian Polzin | Susanne Raabe |  
Sven Rosenkranz | Asma Sahboon | Daniel Scheuffele | Kristin Vorloeper | Yujun Zhang