Urban green infrastructure as common good

Presented by: Maros FINKA

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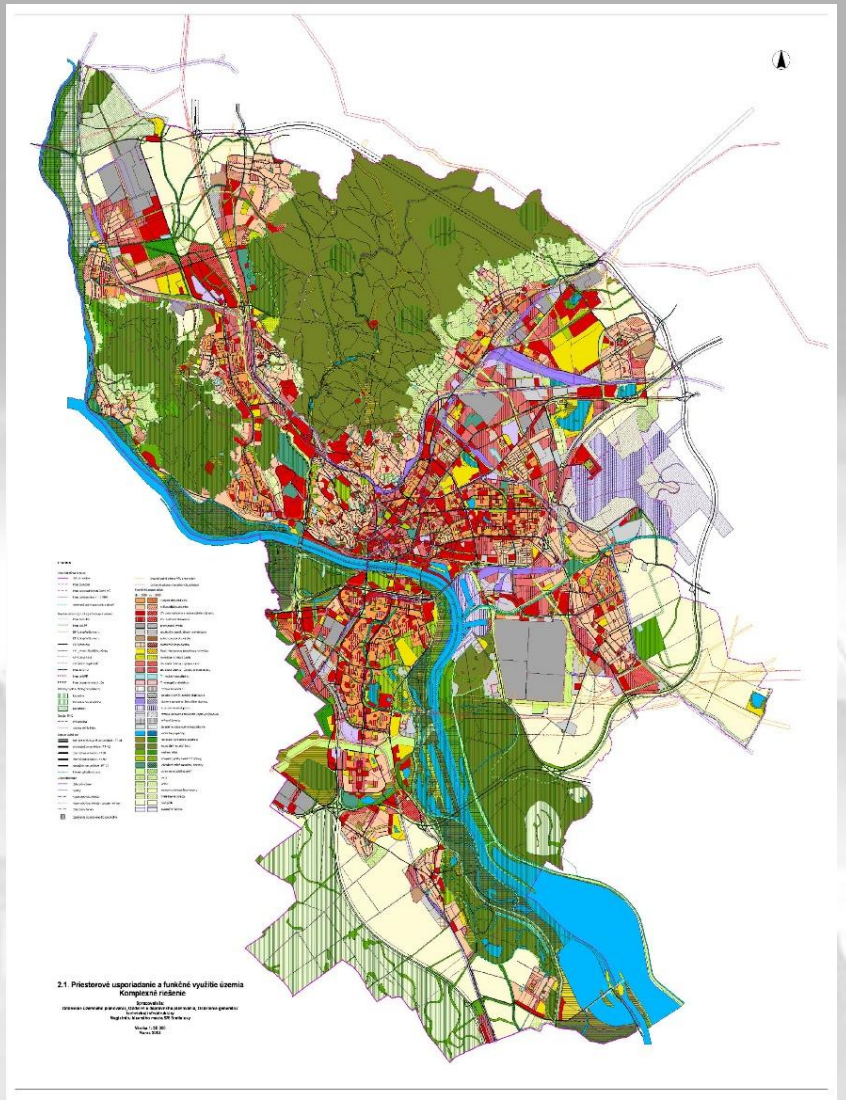
1. Initial idea:

Conventional concepts and approaches in planning and operational management of urban systems seem not to be able to respond effectively to new challenges for their sustainable development, especially to those connected with the growing vulnerability of settlement systems



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1. Initial idea

Responds in the theory and practice:

1. Different positions: descriptive-analytical, normative and policy-conceptual (not beyond explanatory substantive theories)

The Territorial System of Ecologic Stability in Bratislava

Source: Finka, M. at al. , Land-use plan of the capitol Bratislava – The Territorial System of Ecologic Stability and composition of green areas 2003

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1. Initial idea:

Responds in the theory and practice:

2. Different dimensions: morpho-structural, functional,

lacking behind dimension – processual (self-organisational and managerial) – new concepts of (territorial) governance

The General Plan of Green Infrastructure in Bratislava

Source: Finka, M. at al. , Land-use plan of the capitol Bratislava – The General Plan of Green Areas in Bratislava areas 2003

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2. THEMATIC SCOPE

Management of urban green infrastructure as a part of integrative urban (landscape) management

Common good approach as a basis for new concepts of urban green infrastructure governance

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3. CONTENT OF THE PRESENTATION

1. Socio-ecosystem city as a phenomenon of urban life quality
2. Ecosystem services provided by urban green infrastructure and as the shared benefits
3. Urban green infrastructure as common good
4. Position and structure of the instruments of common goods management in integrative planning systems

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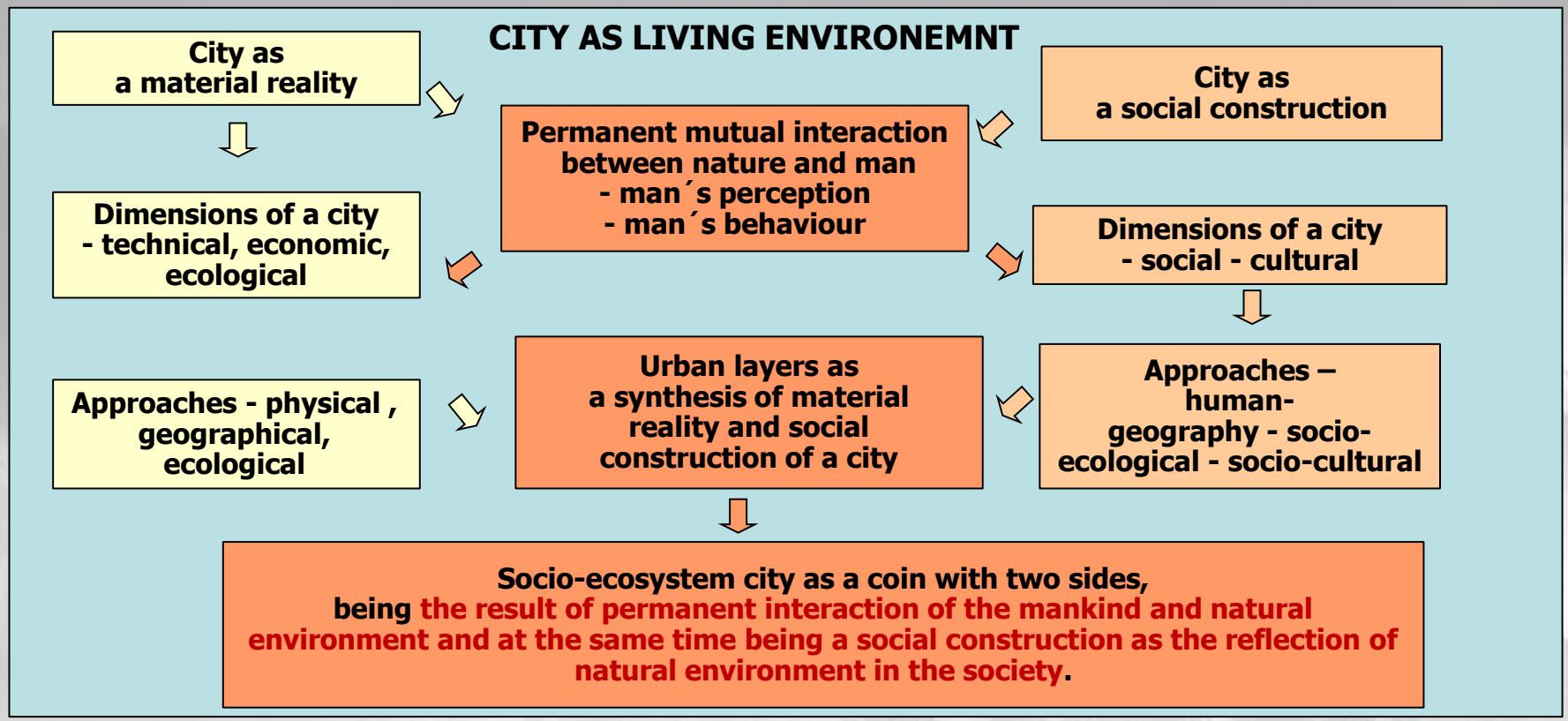
4. SOCIO-ECOSYSTEM „CITY" AS A PHENOMENON OF URBAN LIFE QUALITY



Scheme of views and approaches reflecting city as human living environment (Zigrai, F., Finka,M. 2009)

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5. SOCIO-ECOSYSTEM CITY AS SOURCE/MEAN FOR SATISFACTION OF HUMAN NEEDS

City as a material reality

Dimensions of a city - technical, economic, ecological

Approaches - physical , geographical, ecological

City as a social construction

Dimensions of a city - social - cultural

Approaches – human-geography - socio-ecological - socio-cultural

Needs in Maslow´s pyramid as the driving force of human activities

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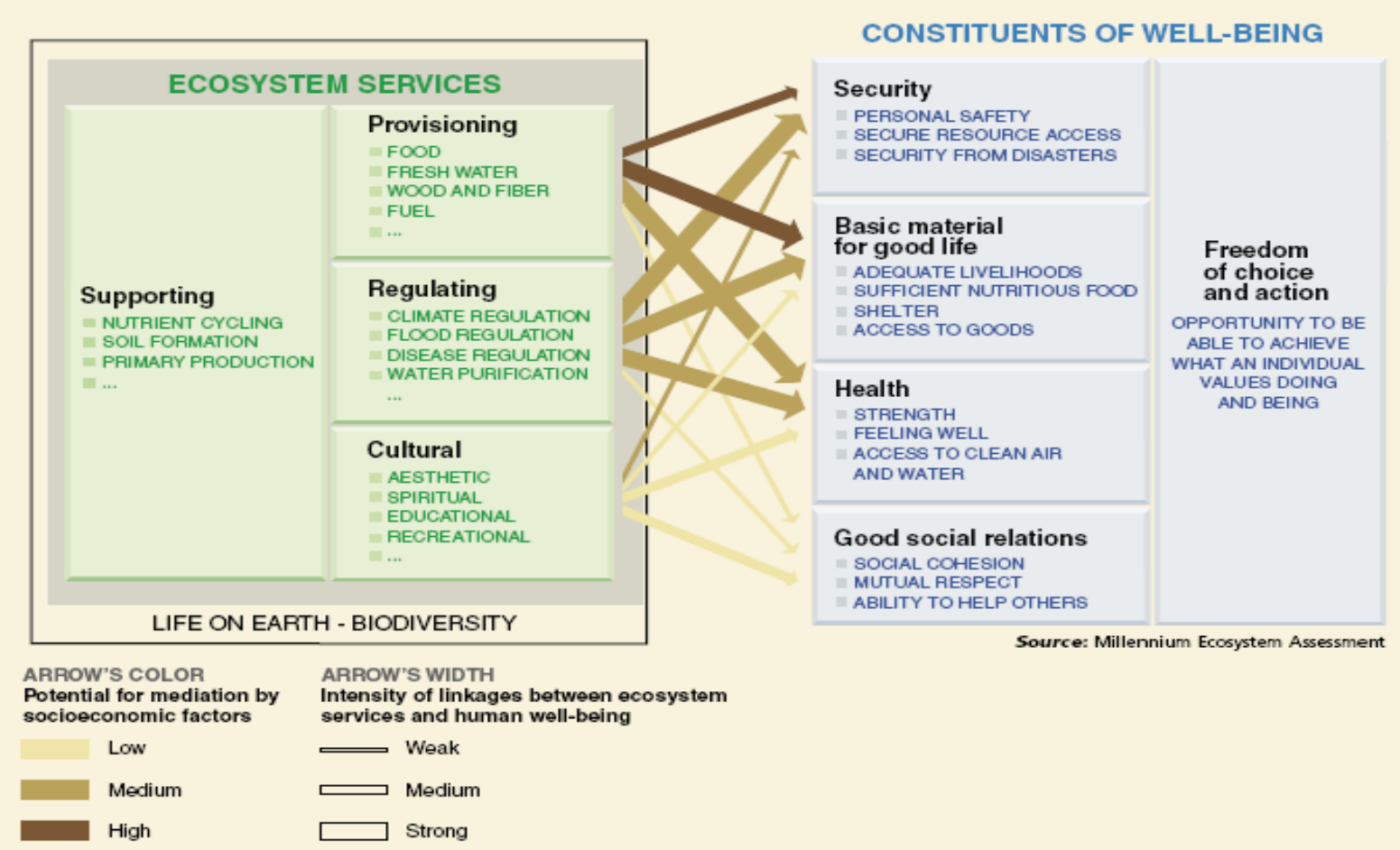
6. URBAN GREEN INFRASTRUCTURE AS A SOURCE SATISFYING HUMAN NEEDS PROVIDING ECOSYSTEM SERVICES



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7. URBAN GREEN INFRASTRUCTURE AS A MANAGED SHARED SOURCE

		Sustractability/ Rivalry of Use	
		Low	High
Excludability	Difficult/ Costly	Public Goods	Common Pool Resources
	Easy/Cheap	Toll Goods	Private Goods

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8. URBAN GREEN INFRASTRUCTURE AS COMMON GOOD – composition of the green areas in Bratislava

TYPE OF THE GREEN AREA	AREA IN 10 000 SQM	AREA/INHABITANT IN SQM
parks	50,7	1,12
small parks	432,1	9,57
green in the dwelling areas	380,8	8,44
cemeteries	71,2	1,58
botanic gardens, ZOO	89,4	1,98
green in the leisure time areas and school complexes	443,0	9,81
private green areas and private gardens	1115,9	24,72
protecting green areas	536,2	11,88
other green areas	517,3	11,46
Total	4958,6	109,85

9.URBAN GREEN INFRASTRUCTURE AS COMMON GOOD

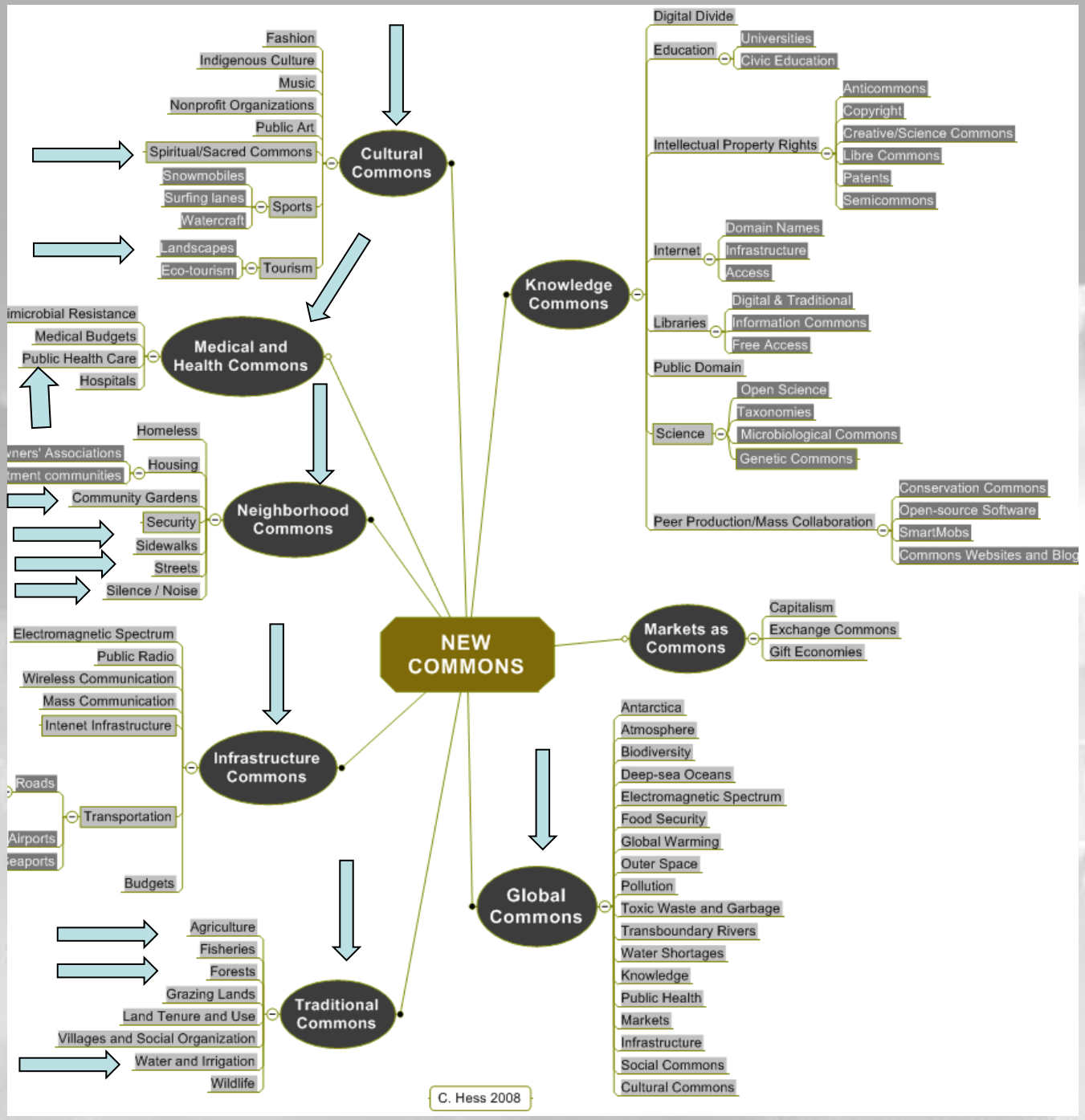
What are commons (common goods) ?

According Walljasper (2010) commons are all what we share. Scholars and representatives of various disciplines offer plenty of different explanations. Scientific literature understands them as "shared resources in which each stakeholder has an equal interest" (Hess, 2006) or one of their products – common goods "creations of nature and society that belong to all and should be preserved and maintained for future generations" (Walljasper, 2010).

Is a city intepretable as commons?

Is the green infrastructure providing ecoservices common good?

Ist this concept relevant for the green infrastructure management in our cities?



10. URBAN GREEN INFRASTRUCTURE AS COMMON GOOD

Inspiration from the common goods concept - parallels

Source: Hess (2008) Mapping the New Commons

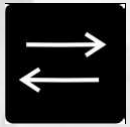
11. URBAN GREEN INFRASTRUCTURE AS A MANAGED SHARED SOURCE

Urban green infrastructure can be perceived as a source with:

- in some cases clear and locally understood boundaries between legitimate users and nonusers of green infrastructure are present
- to certain extend clear boundaries that separate urban green infrastructure as a specific resource from a larger social-ecological system are present

Boundaries – user boundaries and resource

- appropriation and provision rules for urban green infrastructure congruent with local social and environmental conditions
- appropriation rules only in some cases congruent with provision rules;
- the distribution of costs for urban green infrastructure mostly not proportional to the distribution of benefits



Congruence with local conditions and appropriation and provision

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12. URBAN GREEN INFRASTRUCTURE AS A MANAGED SHARED SOURCE

Urban green infrastructure can be perceived as a source with:

in civil society most individuals affected by a green infrastructure regime authorized to participate in making and modifying its rules

individuals who are accountable to or are the users of green infrastructure monitoring the appropriation and provision levels of the other users

individuals who are accountable to or are the users of green infrastructure monitorig the condition of the resource

Collective-Choice Arrangements

Monitoring users and monitoring the resource

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14. URBAN GREEN INFRASTRUCTURE AS A MANAGED SHARED SOURCE

Urban green infrastructure can be perceived as a source with:

sanctions for rule violations starting very low but become stronger if a user repeatedly violates a rule

Graduated sanctions

only in some cases rapid, low-cost, local arenas exist for resolving conflicts among users or with officials

Conflict - resolution mechanisms

the rights of local users to make their own rules recognized by the government

Minimal recognition of rights

when green infrastructure is closely connected to a larger social-ecological system, governance activities are organized in multiple nested layers

Nested enterprises

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15. URBAN GREEN INFRASTRUCTURE AS A MANAGED SHARED SOURCE

Boundaries – user boundaries and resource Y?

Congruence with local conditions and appropriation and provision Y

Collective-Choice Arrangements Y?

Monitoring users and monitoring the resource Y

Graduated sanctions Y

Conflict - resolution mechanisms Y?

Minimal recognition of rights Y?

Nested enterprises Y

8 principles for common goods management (design principles) (Ostrom, E. 1990)

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16. URBAN GREEN INFRASTRUCTURE AS COMMON GOOD

Inspiration from the common goods concept — difference between Old and New commons

"Traditional"—Natural Resources

Subtractable, low excludability

- Water and irrigation
- Soil/land
- Pastures/forest/agricultural land
- Fisheries
- Wildlife

Require effective **extraction rules**, some provision rules

"New"—Natural and Virtual

Not necessarily subtractable

- Internet infrastructure
- **Urban commons (sidewalks, parks, playgrounds)**
- Open access knowledge
- Cultural, religious congregations

Require effective **provision rules**, some extraction rules

17. URBAN GREEN INFRASTRUCTURE AS COMMON GOOD

Factors favouring use of common goods concept for efficient management of urban green infrastructure elements

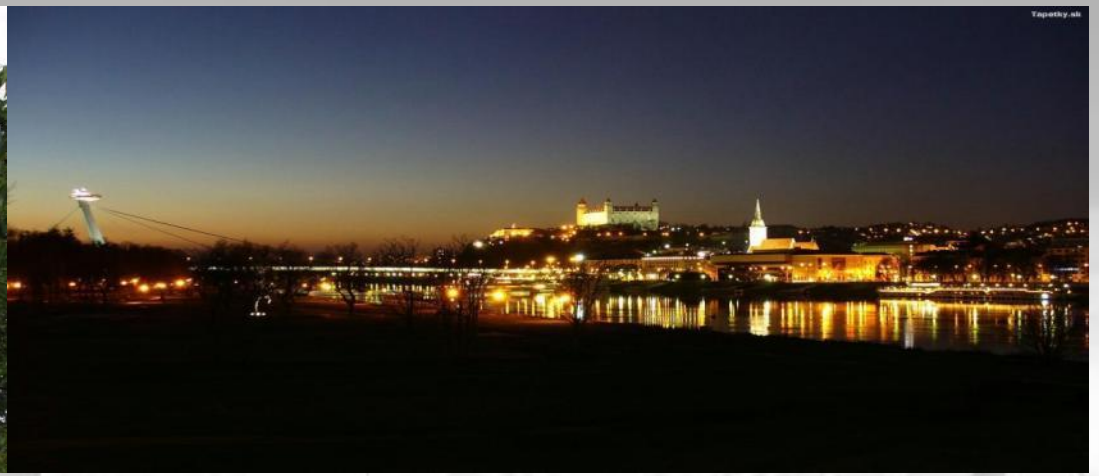
Conditions of green infrastructure element

- Clear definition of the external and internal boundaries
- Predictability (flows, development)
- Limited nature of green infrastructure element susceptible to be appropriated by different users
- Availability of technologies, approaches, tools for poly-funcitional/multiuser sharing respective element
- Identifiable/predictable impact of the use of green infrastructure element of a user on potential use for others
- Identifiable/predictable development of the value of green infrastructure element
- Capacity to regulate the access of potential users (in time, space, form of use, intensity of use)
- A number of urban green infrastructure elements are no longer available to potential users due to previous appropriation

Conditions of user groups

- Multi-actors interest on use
- Shared dependence on the green infrastructure element quality
- Stabil set of dominant users
- Perception of the need and viability of collective action to promote conservation or improvement of the condition of green infrastructure element
- Previous organizational experience
- Shared vision
- Communication
- Trust and reciprocity
- Stabil institutional environment and available authority to make, enforce rules
- Users with economic and political power do not benefit from failures of resource regulation

Banska Stiavnica CULTURAL LANDSCAPE UNESCO Cultural heritage



Bratislava

Thank you, ENJOY THE DAY!

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