«Thriving Spaces»: Sustainability and Spatial Development

Workshop at the World Biodiversity Forum 2022, Report

Mobility, housing, and individual choices profoundly impact patterns of land use, both in Switzerland and abroad. In the report "Priority Themes for Swiss Sustainability Research", the Swiss Academies identified "Thriving Spaces" to be one of six priority areas where we need to take action. The concept of thriving spaces relates to how we perceive, use, change, restore, and protect our spaces, and how lifestyle choices and economic activities can be reconciled as part of a sustainable whole. Changing course will require being inspired by the best examples of sustainable land use and developing a shared vision of the way forward. The most important unresolved issues listed in the report include, for example, exploring the factors underlying unsustainable lifestyles; dealing with urban-rural divides and unequal opportunities; the impact of (economic) cost transparency on realising a sustainable use of our space; or realising inclusive processes to shape the future together. These and the other proposed most important unresolved issues are now to be put up for discussion and debated more broadly, with the aim of networking the various specialist communities in science and practice and making the topic a strong, integrative and transdisciplinary field of research.

Challenge: **How do we develop more holistic strategies for planning and managing the use of space, while addressing the need of 30% of the area with priority for biodiversity ("ecological infrastructure") to ensure its future existence?**

Key questions

1. **1) Envisioning thriving spaces: society**
   Broad concept of thriving spaces
   Elaboration of essential elements as a basis for public debate, planning, and policy

   - What are joint visions of thriving spaces, and how do they address the concerns of sustainable development and the 2030 Agenda as well as the need to maintain **biodiversity** and associated **natural resources**?
   - How can we link spaces to well-being, and what are the meanings and narratives of well-being in the context of thriving spaces?
   - How do different actors – including citizens, planners, and policymakers – perceive the value of the space in which they live? What role does the aesthetic dimension play in this respect?

2. **2) Spatial development: policy and administration**
   Swiss federal planning law: inward urban development, higher density, attractive urban green and blue spaces
   Land consumption high (0.69 m2 per second): loss of biodiversity and green spaces
   Lack of planning instruments: landscape outside settlement areas, social aspects

   - What are appropriate, socially inclusive strategies, concepts, and instruments to address densification and inward settlement development, protect and revalue unbuilt areas, **ensure adequate biodiversity**, and safeguard essential **ecosystem services**?
   - How can the quality of life in urban areas and other living environments be improved for everyone, in particular the socially disadvantaged?
   - How can the instruments of spatial planning be put to work in the service of **climate protection and adaptation to climate change**?

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3. **3) Urban-rural divide and unequal opportunities: society**
Rapid demographic changes (inward migration, industrial decline) and unrest
new regional divides (cities, agglomerations, rural communities)
rising social inequalities between and within regions
Relationship between global challenges (migration, industrial restructuring) and political divides

- What are the drivers and social consequences of the urban–rural divide? What are the roles of globalization, digitalization, demographic changes, etc., and who are the "winners" and "losers"? How does social inequality manifest itself spatially and what are the implications for thriving spaces?
- How can we build better links between urban/core and rural/peripheral spaces? What form could sustainable urban–rural/core–periphery partnerships take?
- How can we solve these issues without exhausting **natural resources**?

4. 4) Tackling underlying causes of unsustainable lifestyles: economy and society

Current lifestyles: excessive consumption and resources use (mobility, pollution, greenhouse gas)
Mobility and sustainable lifestyles: individual behavior and structural constraints

- What are key causes of unsustainable lifestyles? What are the underlying institutional, political, and structural arrangements that lock them in? How can widely accepted sustainable lifestyles be fostered?
- What are new visions for how communities can meet essential needs and enable well-being (e.g. the "15-minute city" in which all necessary functions such as work, shopping, leisure, etc. are walkable and accessible on foot or by bike)?
- Can such visions enhance or even replace our current ideas about how to develop urban and peri-urban spaces? What can we learn from the COVID-19 crisis to reconceptualize mobility in sustainable ways?
- Will digitalization (e.g. teleworking, integrated mobility services, "industry 4.0") lead to further land consumption or will physical proximity assume a new role in the context of an increasingly digitalized society?

5. 5) Implication of cost transparency on planning: economy

(Ecological) costs are not internalized (e.g. pesticide pollution, noise, pollutants)
Policy measures: congestion pricing, carbon taxes, payments for ecological benefits

- What are the external costs, including those arising abroad, resulting from our economic and private activities related to use of space, especially for **ecosystems**, their **diversity**, and the **ecosystem services** they provide?
- Which framing conditions are needed to create cost transparency and internalize external costs related to how various actors use land and space? Which incentives have the potential to create **ecological benefits**?
- How can the internalization of external costs be implemented politically, e.g. road pricing in the case of mobility?

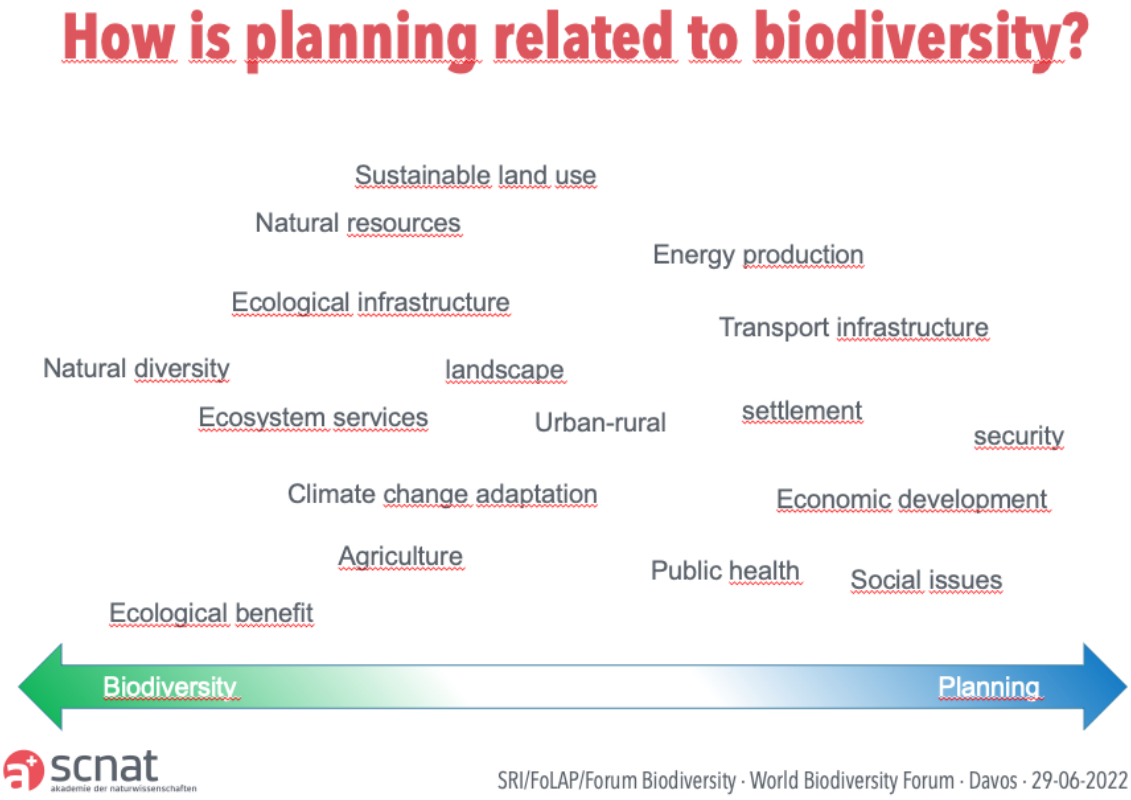
6) Climate protection and adapting to climate change

More frequent extreme weather events will occur. Sustainable development should facilitate adaptation
Increase resilience of the biosphere (reducing CO2 emissions, strengthening **urban ecosystems**, increasing **biological diversity**

- How can built-up areas be developed based on their **natural surroundings** and **landscape** in order to adapt to climate change and assist climate protection?
- How can spatial development be supported by dialogue between experts from a broad range of academic and non-academic fields with different perspectives on the implications of climate change?
- What are concepts of resilience for thriving spaces that enable adaptation to climate change?

Policy, planning, society, economy: how can we realize thriving spaces?

- How can we as a democratic society develop the necessary decisions for **sustainable land use** and thriving spaces?
- How can citizens be more strongly engaged in sustainable urban development?
- How can pilot formats like test planning, real-world laboratories, and pilot projects be used for collectively realizing desirable, sustainable thriving spaces?
- What new governance approaches are needed to address conflicting goals and interests?
- How can inclusive processes to realize thriving spaces be shaped, and how can climate protection and **adaptation to climate change** be made integral parts of them?



Workshop aims: Specify the relationship between biodiversity and planning, by using practical examples

1. **How can we develop a sustainable ecological infrastructure?**
   → Network of large core areas that meet the requirements of species living in them
   - core areas must be interconnected
   - large contiguous areas
   - many small areas in between as stepping stones
   - extensively used corridors
   - facilities to overcome existing obstacles (such as culverts, wildlife bridges or canopies).
   - wide variety of habitats
   - in settlements, along and in watercourses, forests, fields, meadows and pastures, alpine region
   - serves to preserve biodiversity and provides natures contributions to people

   Use bottom up approaches
   Ensure engagement of local communities
   Also apply some top-down regulations

2. **How can this be related to other planning goals (e.g. concerning food security, urbanisation, industry, energy production, transportation)?**

   Need to overcome siloes, address trade-offs
   Coordination/communication between stakeholders and different sectors
   Improved ecological infrastructure: increase food security e.g. by increase in pollinators, address the quality of life

3. **Where and how is there a place for nature?**
   Protect what is not yet protected
   Figuring out how to improve connectivity
   Urban areas: natural corridors, energy control, sustainable home solutions
   Cities: green roofs, gardens with indigenous species, living walls
   Use existing opportunities for nature in cities

4. **Practical examples: win-win situations, pitfalls**
   Failure of river park in Sao Paulo: lack of coordination, lack of community participation, multifunctionality
   Success: Skoganski zatok, Koper (Slovenia): restoration was a win-win-win project
   Pitfall: Marine spatial planning- bringing everything together, but without properly considering trade-offs
   "Earthship" communities are designed as "self-sustainable" homes