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The Forum Landscape, Alps, Parks (FoLAP)

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Science-based decision-making—even if not favored by all political forces—is a must in finding sustainable solutions in today's complex world. But how can this process be made more effective? We at the Forum Landscape, Alps, Parks (FoLAP) believe that science-based decision-making is successful only if it is embedded in a well-mediated dialogue between science and practice. In addition, when land use decisions are at stake, "landscape" seems to be the relevant spatial dimension to engage people in a dialogue about their living environment and to achieve sustainable land use solutions.

Mainstreaming the landscape approach

In 2019, the Swiss Academy of Sciences merged 3 platforms involved in furthering the science-driven debate on sustainable landscape development. The aim of the merger was to concentrate forces and build a platform for interdisciplinary exchange between science and practice on landscape issues, with special emphasis on the Alps and protected areas (ie parks of national importance). To fulfill its mission, the Forum Landscape, Alps, Parks (FoLAP; hereafter "the forum") has a board of trustees, a plenum, and a specialist office. It is active in the following 3 areas: (1) knowledge development and education, (2) knowledge dialogue, and (3) raising awareness of landscape issues across disciplines and policies. After a phase of consolidation, the forum is now gaining momentum. Examples of its activities include the Swiss Landscape Congresses, collaboration as an observer organization in the Alpine Convention with the International Scientific Committee on Alpine Research (ISCAR), and participation in political consultation processes. It also regularly publishes a newsletter.

From its inception, the forum adopted the landscape approach as its overarching principle, aiming to integrate consideration of the landscape into all relevant policy fields so that it becomes a mainstream concern. The landscape approach was initiated by early landscape ecologists in the 1930s and further developed by the International Association for Landscape Ecology (IALE) and the European Landscape Convention (ELC). It was charted systematically by Reed et al (2015). Kienast et al (2007) and Termorshuizen and Opdam (2009) have clearly shown that the intermediate spatial level of the landscape is key to producing knowledge relevant to planning that can be integrated into multifunctional, actor-led land management efforts. These latter efforts aim to "balance competing land use demands in a way that is best for human well-being and the environment. It means creating solutions that consider food and livelihoods, finance, rights, restoration and progress towards climate and development goals" (Global Landscapes Forum n.d.).

Challenging the landscape approach in mountainous areas

Mountain areas and their forelands are ideal places to implement and improve the landscape approach. Inhabitants have to cope with climatic and economic extremes. They see on a daily basis how different land management schemes directly influence each other, for example, how land clearing in the upper part of a watershed is related to higher flood risk in the lower part. Furthermore, considerable cultural differences are found across very small areas, so that negotiations over land across cultural borders are essential. Areas such as the one shown in Figure 1 will demonstrate whether the landscape approach is capable of producing better long-term solutions than sectoral approaches. This is particularly the case with the management of the following fundamental transformations:

- *Changes in land use:* Globally, land and soil are increasingly under pressure from intensive agriculture and forestry, an increase in infrastructure facilities, and the expansion of settlements. In many regions—particularly in mountainous areas—this trend is contrasted by the abandonment of agriculture in peripheral areas.
- *Growing mobility and migration:* Lifestyles of increasingly individualistic societies reinforce the interdependence between (1) cities and their surroundings, (2) work and leisure areas, or (3) the Swiss landscape and landscapes in other regions of the world. This interdependence requires a fundamental rethink of the rules of cooperation. This rethink includes debates on where to allow or promote wilderness or refuges for plants and animals and on the role of peripheral spaces in an increasingly digitized working world. Migration and increasing mobility will also generate changes in expectations about landscapes, as new user groups participate in landscape negotiations and make legitimate claims to pursue identification and integration through the landscape.

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FIGURE 1 Challenges in future landscape uses: reconciling infrastructure, tourism, agriculture, nature, and energy production in the Alps. View from Stoos cable car in Muotathal, Switzerland. (Photo by Anea Schmidlin)



- *Climate change and energy landscapes:* The direct effects of climate change on the landscape, especially in the Alpine region, are difficult to assess and require scientific and societal debate. In addition, the effects of mitigation and adaptation on the landscapes are still unclear, especially regarding the promotion of renewable energy for carbon dioxide reduction.
- *Digitization:* Current and expected digitization has an impact on all forms of land use but also on planning. For example, previously unprofitable sites may be profitably managed through the use of robotics, but the effects on the landscape are uncertain. Artificial intelligence and virtualization could fundamentally change spatial planning and possibly facilitate participatory planning.
- *Knowledge society:* The production of knowledge is accelerating and is no longer an exclusive matter for science; the distinction between knowledge producer and consumer is no longer clearly defined. A growing volume of knowledge brings implementation challenges, which call for suitable exchange mechanisms (clearing house mechanisms) to bring together knowledge producers and consumers in the search for and evaluation of knowledge. This linkage fundamentally strengthens a transdisciplinary knowledge-based discourse.

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Living the landscape approach

The forum tackles these challenges by encouraging actors from science, practice, and policy fields who are dealing with landscapes to embody and refine the landscape approach. This means working together with practitioners at all respective planning levels to ensure that knowledge from science and practice is incorporated into sustainable design, development, and protection concepts and policies. It also means contributing all available knowledge to international bodies such as the Alpine Convention, the ELC, and international scientific organizations. The forum operates in full agreement with the Sustainable Development Goals and is informed by the Swiss Landscape Concept. Although the main focus of the forum is on Swiss and Alpine landscapes, we are well aware of the impacts that the Swiss economy and society can have on cross-border and global landscapes.

Current **forum activities** range from synthesizing knowledge in debates to facilitating large congresses. Members of the board of trustees are involved in a vast range of research projects, for example, a broad interdisciplinary study investigating the benefits and added value of the ecological infrastructure, and the analysis of the ecological infrastructure in 4 Swiss parks from a social, economic, and ecological perspective against the background of sustainable resource use. Current developments linked with global warming, for example, energy production and landscape protection in mountainous regions, are debated in interdisciplinary and transdisciplinary settings. Under the research commission of the Swiss National Park, landscape use and climate change can be studied using more than 100 years' worth of continuous data. Since the onset of the COVID-19 pandemic, studies by forum members have highlighted the importance of landscapes, particularly mountain areas, for recreation. The effects of the pandemic on landscape use generated a vivid debate on cultural ecosystem services that will continue in the future (Venter et al 2020). Under the overarching theme "Landscape Across Borders," the second Swiss Landscape Congress in October 2020 provided an online forum for more than 200 practitioners and scientists to jointly debate current landscape challenges (Landschaftskongress 2020). Planning for the third Landscape Congress is underway.

In the coming years, the forum will focus upon 5 **core topics** that have an impact on landscapes and their use: (1) changed lifestyles and consumer habits, (2) transition toward a carbon-neutral economy, (3) landscape and its contribution to public health, (4) interdependencies of landscapes, and (5) landscape culture.

Concluding remarks

Climate change and COVID-19 have shown that our society has great difficulty with the fact that science cannot offer immediate solutions. Although science is well informed, it is just one player in society. At FoLAP, we believe that practice and the public in general have enormous amounts of expertise that is underused, particularly in topics such as landscape development and sustainability. Forums such as FoLAP are vital in bridging gaps between disciplines and between science and practice. We do not simply convey research findings but also play a key role in knowledge generation through the integration of practical experience and scientific understanding.

ABOUT THE AUTHORS

Felix Kienast is president of the Forum Landscape, Alps, Parks (FoLAP) of the Swiss Academy of Sciences and chairs the Board of Trustees. Maarit Ströbele is project leader, landscape at FoLAP. Ursula Schüpbach is head of FoLAP.

REFERENCES

Global Landscapes Forum. n.d. What is the landscape approach? *Global Landscapes Forum.* https://www.globallandscapesforum.org/about/what-is-the-landscape-approach/; accessed on 17 December 2020.

Kienast F, Wildi O, Ghosh S, editors. 2007. *A Changing World. Challenges for Landscape Research*. Landscape Series Vol. 8. Dordrecht, the Netherlands: Springer.

Landschaftskongress. 2020. *2. Schweizer Landschaftskongress* [in German and French]. Bern, Switzerland: Forum Landscape, Alps, Parks, Swiss Academy of Sciences. https://landschaftskongress.ch; accessed on 17 December 2020.

Reed J, Deakin L, Sunderland T. 2015. What are 'Integrated Landscape Approaches' and how effectively have they been implemented in the tropics: A systematic map protocol. *Environmental Evidence* 4(1):2. https://doi.org/10.1186/2047-2382-4-2.

Termorshuizen JW, Opdam P. 2009. Landscape services as a bridge between landscape ecology and sustainable development. *Landscape Ecology* 24(8):1037–1052.

Venter Z, Barton D, Gundersen V, Figari H, Nowell M. 2020. Urban nature in a time of crisis: Recreational use of green space increases during the COVID-19 outbreak in Oslo, Norway. *Environmental Research Letters* 15(1):104075. https://doi.org/10.1088/1748-9326/abb396.

FURTHER READING

Kaplan R, Kaplan S. 1989. *The Experience of Nature. A Psychological Perspective*. Cambridge, United Kingdom: Cambridge University Press.

Kittl B, Lässig R. 2020. Forest visits in Switzerland affected by coronavirus lockdown. News. *Swiss Federal Institute for Forest, Snow and Landscape Research WSL*. https://www.wsl.ch/en/newsseiten/06/forest-visits-in-switzerland-affected-by-coronavirus-lockdown.html; accessed on 17 December 2020.

SCNAT [Swiss Academy of Sciences]. n.d. Forum Landscape, Alps, Parks (FoLAP). *Swiss Academy of Sciences (SCNAT).* https://landscape-alps-parks.scnat.ch/en; accessed on 17 December 2020.

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