Given the obvious benefits to democratic governance and sustainable development, it is strongly recommended that governments require the establishment of Citizens’ Advisory Councils that are operated solely by and for the citizens of the region. Such councils will provide an unprecedented level of transparency and will enable the realization of citizens’ procedural rights to access information and participate in decision-making regarding industrial activities.

Professor Rick Steiner (afrgs@uaa.alaska.edu) is a conservation consultant based in Anchorage, Alaska. He works internationally on extractive industry responsibility, energy and environment, and ecosystem sustainability.

The URBIS Partnership: An Approach to Achieve Social and Environmental Resilience in Urban Regions

Christine Alfsen, Laura Dickinson, Keith Tidball, Vahan Galoumian, and Moramay Navarro

The URBIS Partnership, a proposed global network of scientists, planners, governments, educators, and policy-makers who discuss and share ideas and approaches to metropolitan, provincial, and national frameworks for urban sustainable planning, is a platform for creating more resilient and equitable urban regions. Local governments participating in this network would share sustainable management experiences and document the process of linking science, education, and policy while using an ecosystem approach to urban planning.

This approach applies the experiences of local urban communities as drivers of international environmental cooperation and policy and relate directly to rights-based approaches to conservation. Local communities are acknowledged as rights-holders and best practices and solutions developed at the local level are shared internationally as useful tools for other communities to draw upon. This partnership also includes a proposed designation process to recognize urban areas’ efforts to engage in participatory and comprehensive social and ecological approaches in urban planning for sustainability. Throughout this process, sustainable management practices will be developed and then catalogued for sharing and dissemination as part of a global knowledge network. The URBIS Partnership takes a unique approach to these efforts by enabling stakeholders to actively participate and subsequently be recognized for planning and managing for urban resilience.

Rights-Based Approaches to Conservation and URBIS

Theorists and practitioners of conservation have become increasingly interested in rights-based approaches to sustainable development. Simply put, rights-based approaches posit that governments, donors, and societies have a responsibility to promote and maintain a minimum standard of well-being and rights for all. For environmental sustainability and conservation, these rights include (but are not limited to) the right to a clean environment, the right to participate, the right to access to water, and the right to health. Increasingly, environmental sustainability has been strongly associated with...
Towards an Ecosystem Approach for Urban Regions

Globally, the unsustainable and inequitable use of resources and demographic changes result in extensive pressures on existing environmental and social resources. The consequences of such pressures are arguably felt acutely in urban regions, often due to factors such as high population density and altered ecosystems. This is all the more important as, for the first time in history, more than half of the world’s population lives in cities. Effects of urbanization include the alteration of resource flows, increase in regional temperatures, and degradation of air and water quality. In the case of biodiversity, urbanization processes such as land use and changes in land cover greatly affect ecosystem structure and function and eliminate natural habitat for many species. Hence, current urban growth and development patterns are considered important drivers of biodiversity loss and the consequent homogenization of species composition within cities. Decreases in biodiversity may be linked to decreases in response diversity within communities (including human communities), which may erode resilience and the ability to adapt in the face of rapid and unexpected change. Urban areas are also vulnerable to climate change, particularly to effects such as rising sea-levels and temperatures. The fact that 11 of the world’s 15 largest cities lie on coastal areas or estuaries highlights the importance of conservation and restoration plans to ensure the provision of key ecosystem services such as flood mitigation by wetlands, as well as engaging the most vulnerable communities. In this sense, urban regions can be incubators of novel conservation and restoration strategies and solutions that can ultimately increase resilience. For example, in New Orleans, citizen-led community greening efforts have fostered local leadership and community action, contributing to biological diversity and social and ecosystem recovery in the aftermath of Hurricane Katrina. Such initiatives have provided an opportunity for formerly marginalized and vulnerable individuals to rebuild and redevelop their communities through practices that reduce the negative impacts on human health and the environment while fostering conservation and restoration efforts and promoting human rights.

Integrated urban planning initiatives that focus on improving urban ecosystem health, addressing connections between

Environmental sustainability is linked to good governance and the full realization of fundamental rights.

The URBIS Partnership offers an avenue for integrating these rights into policy planning by advocating a community-centered approach in urban planning. While not a legal framework per se, the proposed five-tier approach of the URBIS Partnership is similar to the IUCN step-wise approach to implementing rights-based conservation. The URBIS approach would provide a platform for documenting these five steps at the local level and sharing them with other communities worldwide.

3 The URBIS Partnership’s proposal and draft strategy will evolve through collaboration with the Global Partnership of Cities and Biodiversity and will be further discussed at the City Biodiversity Summit at Nagoya, Japan; the 10th Conference of the Parties to the Convention on Biological Diversity.
rural and urban systems, and providing ecological and social services will not only help create sustainable conditions in these diverse, complex, and changing areas, but will also empower vulnerable communities though promoting their right to a better environment and quality of life. Fostering systems education\textsuperscript{13}, communication, and ongoing discussions among scientists, urban planners, policy-makers, and educators can help urban regions implement strategies that build social and environmental resilience\textsuperscript{14}. This can be achieved through the implementation of a human rights approach whereby solutions come from the people themselves and their own strengths and aspirations, and through good governance, access to public policy, and economic and education opportunities\textsuperscript{15}.

**The URBIS Partnership Designation**

The United Nations Educational, Scientific and Cultural Organization (UNESCO) New York Office has coordinated and linked several urban initiatives to complement the work begun by the UNESCO Man and the Biosphere Programme (MAB) and other United Nations agencies to promote the value of urban areas’ biological diversity and ecosystem services. Institutional partners include Columbia University (2000-2005), Stockholm University (2005-present), and Cornell University (2009-present). Metropolitan areas involved in this discussion include Montreal, Stockholm, Shanghai, New Orleans, Chicago, New York, and Istanbul, among others. Each of these metropolitan areas has shown interest in or has already applied an ecosystem and participatory approach to their planning efforts; all have expressed interest in their efforts being recognized at a global scale. For instance, Montreal has implemented a participatory conservation approach whereby biodiversity areas have been established all around the city to preserve the natural environment, the public’s interests and well-being, and the city’s economic development\textsuperscript{16}. In Cape Town, a cross-disciplinary group of specialists from national, municipal, and civil society institutions was organized with the assistance of UNESCO and Columbia University to explore tools for environmental management, social inclusion, and poverty alleviation. Cape Town faces many challenges in terms of urban development and environmental conservation due to the rapid urban sprawl of impoverished communities and development pressures that have led to a decrease in biodiversity\textsuperscript{17}. This situation indicates a need to provide integral approaches and solutions that take into account both environmental perspectives and socio-economic impacts of policies that can affect the lives of entire communities. Urban planning strategies should also encompass social and human rights issues and ultimately contribute to the alleviation of poverty and empowerment of marginalized communities by establishing a context in which these rights are not only acknowledged, but also actively promoted.

Over the past 10 years, this work has resulted in several key findings that arguably indicate the need for a comprehensive regional ecosystem approach that integrates social learning, including education and outreach, in all steps of participatory planning and features incentives and recognition of sustainable urban efforts. This comprehensive regional ecosystem approach would help inform and complement a rights-based approach to conservation by, \textit{inter alia}, identifying actions, stakeholders, and roles, ensuring public participation in environmental sustainability programmes, and ultimately helping implement conservation programmes\textsuperscript{18}.

The authors propose coordinating a multidisciplinary, cooperative, and comprehensive group of scientists, planners, governments, educators, and policy-makers into a network, which is referred to here as the URBIS Partnership. This network would engage in comprehensive approaches to urban planning for sustainability through an international designation process (detailed below). The demand for this designation stems from increasing concern and lack of understanding about urban ecological and social processes within our global systems\textsuperscript{19}. Scales at which these problems need to be addressed

\begin{itemize}
\item \textsuperscript{13} Krasny, M. E., and K. G. Tidball, 2009. “Applying a resilience systems framework to urban environmental education”. 
\item \textsuperscript{18} Greiber, 2009.
\item \textsuperscript{19} Alfsen-Norodom, C., B. D. Lane, and M. Corry (eds.), 2004. “Urban biosphere and society: partnership of cities”. \textit{Annals of the New York
Theme I: Initiatives of Duty-bearers

are complex; substitutive results and adaptive plans must involve a wide variety of stakeholders. Involving stakeholders in the decision-making, planning, and education process relates directly to the right of communities to participate in decisions that affect the environment, a right that is entrenched in most national constitutions, as well as in customary international law.20

The perception of human-nature dualism is a primary challenge to sustainable urban planning.21 Opinions that portray humans primarily in the threat they pose to nature and emphasize an intrinsic conflict between humans and nature are unproductive to conservation management. Instead, there is arguably a need for an integrated ecological approach to urban management22 that not only sees humans as rights-holders, but also as part of nature.23 Understanding nature within urban areas as embedded in the larger landscape allows for integration and management at a variety of scales24. Therefore, conservation of biodiversity must be planned and managed to coordinate protected areas along with the entire landscapes in which they occur, including urban and peri-urban environments25. Applying this ecosystem approach to urban areas means the inclusion of flows, processes, and driving forces that create healthy, livable, and resource-efficient cities26. Accounting for the biophysical aspects of the environment in urban planning can lead to the development and application of participatory approaches and new and flexible tools in policy-making such as the URBIS Partnership. Additionally, because such ecosystem-based policies are implemented through deliberative processes that include all relevant stakeholders, they have a greater chance of being successful and of providing synergistic solutions to current challenges27.

In the midst of these complex conditions, the authors propose that urban metropolitan regions should follow a voluntary, participatory, and local planning approach. The URBIS Partnership would provide assessment tools, peer review, case studies, shared experiences, and continued guidance throughout the designation process. Any urban region that is starting, is in the middle of, or has recently abandoned a planning process can engage in this approach. This designation would also be useful for urban regions that would like guidance to refurbish, assess, and gain recognition for an established plan. A draft tiered process, which would be monitored by an URBIS secretariat, is presented in Figure 1.

Figure 1. Proposed URBIS Designation approach.
CONCLUSION

By addressing some of most pressing urban governance challenges, the URBIS Partnership offers an avenue for integrating a rights-based approach to environmental sustainability issues at the local level in urban regions. Since the majority of the world’s population lives in metropolitan regions, it is there that policies must be reconsidered and restructured to equitably and strongly link conservation, restoration, communication, education, design, and participatory regional planning. The proposal presented in this article strives towards working with regions to achieve this goal and resolving the human-nature dualism previously described. The members of the global community of urban metropolitan regions themselves who are currently struggling with these issues are in the best position to inform and lead the process towards an international designation of urban resilience.

Christine Alfsen (alfsen-norodom@un.org) is the acting Director of the UNESCO Office in New York and the founder of the URBIS Partnership. She focuses on governance of urban areas and ecosystems functions in human dominated landscapes. Laura Dickinson, MA, BSc, is the interim Program Science Specialist for the UNESCO New York Office and coordinates the URBIS Partnership. She has worked in New York City to create green roof curriculum in order to increase public understanding of sustainable practices in urban areas. Keith G. Tidball is an Extension Associate and Associate Director of the Civic Ecology Lab in the Department of Natural Resources at Cornell University. His work focuses on civic ecology practices as they relate to urban social-ecological system resilience. Vahan Galoumian, MA, BA (Hons.), is a Consultant at the UNESCO New York Office. He has worked as a Research Assistant at the Geneva Centre for the Democratic Control of Armed Forces and as a Consultant at the Chilean Ministry of Education. Moramay Navarro, MSc, BSc, has worked in environmental education and ecological restoration programs in Colombia.