

## BOOK REVIEW ON CITIES AS SUSTAINABLE ECOSYSTEMS: PRINCIPLES AND PRACTICES

AUTHORS: PETER NEWMAN, ISABELLA JENNINGS

Ionela Georgiana ŞTEFAN

*Research Centre in Public Administration and Public Services  
Academy of Economic Studies, Bucharest  
Romania  
stgeorgiana@yahoo.com*

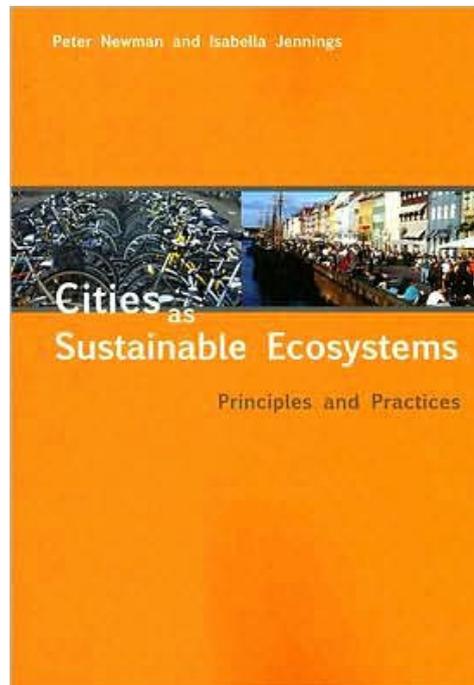
In 2008, Island Press House published an illustrated edition of the book „Cities as Sustainable Ecosystems. Principles and Practices”, ISBN 1597261882, 9781597261883, written by Peter Newman, Isabella Jennings.

The book contains 9 chapters very rich in concepts, theories, ideas, representing a contribution to the development of the literature in the field of cities viewed like sustainable ecosystems.

The first chapter, “Vision”, aims to provide a long-term vision for all the cities based on: sustainability; equity at intergenerational, social, economic and political level and their individuality. Achieving sustainability need a path which starts with the development of a long-term

vision created for current and future generations in order to motivate and guide their actions and decision-making process. The authors provide the basis for setting goals and targets for action plans, for recognizing the ecological and social constraints of a community, and defining the ecological, social and economic characteristics and values that the community has identified as crucial for a sustainable community. The chapter is a guiding framework for future decision-making process.

The second chapter, “Economy and Society”, covers the prerequisites for beneficial of a sustainable city development. The authors talk about fair allocation of resources, economic strategies which should meet the basic human needs in a just and equitable manner and should guarantee the right to potable water, clean air, food security, shelter and safe sanitation, otherwise, cities will become increasingly



unsustainable, unless citizens learn the social and environmental values that focus on the importance of communities and bioregions. Citizens can introduce or stimulate economic mechanisms at different scales, such as true costing, incentives, complementary currencies and green businesses.

The third chapter "Biodiversity" defines concepts like bioregion, natural ecosystem and ecosystem services, and reveals a theoretical approach of how to recognize the intrinsic value of biodiversity and natural ecosystems, and how to protect and restore them. The authors emphasize the reduction of urban resource use (ecological footprints) is vital to reduce biodiversity loss beyond the city boundaries, therefore, cities can provide labor and resources for restoration work in the city and bioregion, acting as biodiversity arks.

The fourth chapter "Ecological Footprints", introduces the biocapacity theory and concepts like autotrophic and panarchy. These theories and concepts enable communities to minimize their ecological footprints. The magnitude and dynamics of urbanization place an enormous burden on organizations responsible for the management of urban services. In this context, the fourth chapter aims to create a framework to measure the amount of land for supporting the basic needs for food, water, energy and materials, and absorbing greenhouse gas emissions and other waste. The ecological footprint is shaped by the urban area and is an important determinant in resource use, and in particular transport energy.

The fifth chapter, "Models city on ecosystems", brings into front the characteristics of ecosystems in the development and nurturing of healthy and sustainable cities, and presents three models that are nested, from high level characteristics and strategies through to specific applied policies. The first model is based on Bossel's work (1998), taking into account the characteristics and strategies of sustainable ecosystems and social-ecological systems as models for reshaping the structure and processes of our cities. The second model shows the patterns that can be used to guide planning and the structuring of the cities, and the third model shows how the cities can be modified after the shape of transportation priorities according to the social-ecological principle of travel time budgets.

The sixth chapter, "Sense of Place", is based on the idea that creating a sense of place amongst city-dwellers is vital for developing connections that support more sustainable lifestyles. Cities that reflect a sense of place protect their assets, natural and cultural; make historical and natural processes visible; they restore and reflect the bioregional context and linkages; and have strong cultural and artistic practices that celebrate and inform a sense of place.

The seventh chapter, "Empowerment and participation", introduces a linkage between the engagement of the communities and regions of a city, and the government and business field. These linkages are necessary for cities to create innovative solutions to the issues of sustainability of ecosystems. This is how ecosystems work - through networks of support.

The eighth chapter, "Partnerships", expands and enables cooperative networks to work towards a common, sustainable future of the city. The emphasis on local and bioregional scales brings feedback and power back to a level so the people can make a difference and take responsibility. Cities can adopt partnership approaches to sustainability rather than just competing as globalization demands.

The ninth chapter, "Sustainable Production and Consumption", promotes sustainable production and consumption, through appropriate use of environmentally sound technologies and effective demand management. The focus for sustainable consumption is on meeting basic needs and living rich lives with fewer resources. The authors had designed support systems to mimic and work with the patterns and processes of natural systems with a focus on an integrated approach.

The last chapter, "Governance and Hope", enables continual improvement of the city, based on accountability, transparency and good local and central governance. Governance facilitates genuine participation of political level in implementing the necessary changes for sustainability. Hope arises from the social capacity of a city, welling up from many sources including arts and sustainability projects, ecological and cultural programs, neighborhood renewal programs and the emergence of bioregional voices.

The book is a positive image of how cities can contribute not only to a better economic and social future but also a profoundly better ecological future. "Cities as Sustainable Ecosystems" shows how cities can begin to reintegrate into their bioregional environment and planned taking into account nature's organizing principles. Therefore, professor Peter Newman and Isabella Jennings reassess urban design by exploring flows of energy, materials, and information, along with the interactions between human and non-human parts of the system. "Cities as Sustainable Ecosystems" describes aspects of urban ecosystems, being a powerful model for urban redevelopment.