


Chapter 3

Urban Sustainable Growth, Development, and Governance Structures for Revitalization of Open Vacant Spaces in Agriculture and Farming

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ABSTRACT

This chapter analyzes the implications of urban sustainable growth, development, and governance structures for the revitalization of open vacant spaces in agriculture and farming. After reviewing the extensive corpus of literature on the subject, the authors used the critical socio-ecological analysis methodology to determine the main issues, trends, practices, and implications of the urban vacant spaces in relation to the urban sustainable growth and development, the use of urban vacant land in urban agriculture, farming, and gardening, and the collaborative urban governance structures and revitalization of open vacant spaces. It is concluded that transitional use of vacant land and parcels are to be used and utilized for developing a sustainable green city. However, urban vacant land and parcel spaces are required to be utilized for revitalization purposes to be stimulated. Social-ecological analysis focusing on vacant lots in underdeveloped urban spaces hold potential for urban transformation to meet the social needs and improve the ecological services.

INTRODUCTION

Cities losing population have to deal with high levels of land and structures vacancies. Population changes have an impact on the elasticity of towns that may have high levels of urban vacant land, and in turn, on the housing market. Population trends and urban land use and vacancy patterns have to consider their

DOI: 10.4018/978-1-6684-5352-0.ch003

impacts on vacant land and structures. Deflating cities losing population and the territory is not expanding, have less vacant land, and more vacant structures.

Urban vacant land may stand out in some exceptional cities among the post-industrial cities in the developed world from where residents migrated following the new patterns of industrial jobs. City policies, growing local economy, and immigration tend to reduce the amount of urban vacant land. Urban farming and agriculture in empty and vacant lots and other urban spaces of post-industrial landscapes are reminiscent of the urban streetscape with vegetable gardens and livestock enclosures.

Vacant spaces are part of the holistic study on the relationships between urban ecology and urban patterns related to temporal and spatial dynamics. Urban vacant land, buildings, and structures are considered temporary and transitory, albeit long-term, in some cases, conditions. Urban ecology has emerged from vacant urban land, where abandoned urban landscapes have the potential to serve as ecological laboratories. Vacant landscapes are laboratories providing critical resources for data collection and observations in urban ecology subject to the city regulations of land and natural resources. High vacancy areas may begin to represent the city as an ecology scale development of new emergent ecosystems. Urban ecology laboratories well managed to provide vacancy solutions related to biodiversity, land management, ecosystem services, education, employment, etc.

Transitional use of vacant land and parcels are to be used and utilized for developing a sustainable green city. Social-ecological analysis focusing on vacant lots in underdeveloped urban spaces hold potential for urban transformation to meet the social needs and improve the ecological services.

This paper opens with a socio-ecological analysis of urban vacant spaces and their interrelationships with urban sustainable growth and development. After determining the relevant implications, it is analyzed the current trends of using urban vacant land in urban agriculture, farming, and gardening. Finally, the article analyses the collaborative urban governance structures and revitalization of open vacant spaces. The goal is to present the main conclusions on the proposal that urban spaces hold potential for urban green transformations to meet social needs and improve ecological services of communities. These transformations from urban vacant land and parcel spaces to be utilized for revitalization purposes require a collaborative governance structure to provide support to be stimulated.

URBAN VACANT SPACES

Urban vacant land, as a broad concept, include diverse forms and sizes from greenfields, greenbelts, brown-fields, wastelands, abandoned land, derelict and uncultivated land, etc., all of them that have different types of land in urban areas which have subtle differences (Bowman & Pagano, 2000; Bowman & Pagano, 2004; Kremer et al., 2013). Vacant land has been described as wasteland (Mathey & Rink, 2010) dead space (Coleman, 1982), derelict landscape (Jakle & Wilson, 1992). Dead spaces are derelict land, vegetated wastelands, and abandoned buildings, construction sites, materials dumps, etc. Another typology of urban vacant land was identified as post-industrial, derelict, unattended with vegetation, natural, and transportation-related (Kim, Miller, & Nowak, 2018).

Urban vacant space is defined as unused and unexploited spaces in the city, as well as the parking lots (Communauté Urbaine de Montréal, 1996). Open land private or public have been intrinsically associated with the underdeveloped nature of the land, vegetated or not. A building or lot is vacant if it has been vacant for two years or more (Accordino & Johnson 2000). Small public and private-owned vacant and unused land plots and open green spaces located in inner and dense urban areas are usually easy to

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