Land Use Efficiency and Value Capture

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This article aims to relate intrinsic aspects of urban planning that are becoming increasingly important both within the international scientific debate and within urban planning tools. These aspects are land consumption and land value capture. Their centrality is given by the growing importance that in recent years have assumed the aspects related to the sustainable development of settlements. This article aims to summarize the main theories regarding the relationship between the efficiency of land use and the policies of capturing public value. The reference scenario is dictated by sustainable development policies that, if contextualized in the sphere of urban development, imply a rational use of resources to ensure the formation of resilient, safe, and inclusive settlements. This aspect introduces the existing link between urban form and sustainability. It is therefore understood how the achievement of the targets set at the international level are implemented in local urban policies. For this reason, many scholars have argued that the challenge of adapting to new pressures, such as climate change, necessarily means creating efficient urban settlements. The question becomes: which land use can be considered more efficient than the others? This article intends to answer this question by investigating the main theories that have tried to define the mechanisms and methods of comparison of different urban development scenarios. The article goes on to reconstruct the steps that have helped to evaluate urban development according to purely fiscal aspects up to the introduction of qualitative aspects related to public value. To do so, it analyzes the terms and tools related to the concepts of public value and the capture of public value and attempts to synthesize the main theories and research in the sector.

land take land use efficiency terms and tools of public value capture

The frame of sustainable land development embraces the issue of value capture. Historically, different assessment methods based on purely economic indicators have been applied to achieve the objective of evaluating the quality of urban growth and development. Urban growth has often been assessed on a purely quantitative basis. The criteria involved in this type of assessment typically has included the number of inhabitants, the number of city users, the expansion of urbanized land, and the economic value of the land. This latter parameter has often been used to decide whether to undertake an urban development operation.

However, theories have emerged in recent years that are slowly helping to change the sensitivity and orient the principles of urban development towards qualitative issues [1]. These theories are based on the principles that land rent has led to an imbalance in the use of resources, especially those related to the environmental sphere. One example is the urban taxation enforced in some European countries in the second half of the twentieth century, in which the urbanization of vacant areas was favored, as it allowed the collecting of charges that were used for the purposes of current expenditure and, therefore, contributed to increasing the municipal budget.

It is thus easy to understand the existence of link between how the soil is used and the type of urban taxation that is enforced in respective areas [1].

Issues related to sustainable urban development have forced other environmental, ecological, and social factors to be considered in territorial governance policies, such as the link between historical values and land values [2]. This has led to the gradual definition of public value—a parameter that can measure urban quality involving not only the economic sphere but also hedonistic aspects, e.g., the level of satisfaction of citizens living in a certain area.

The concept of public value is not entirely new. It has its origins in the value of land that in turn constitutes a next step compared to the purely economic concept of land rent.

The definition of the concept of public value leads to another important strand of scientific literature that relates to issues concerning the capture of public value (PVC), another aspect that is useful to consider within the mechanisms of territorial development.

In this article, the main theories underlying the concepts of land value (LV) and public value (PV) are analyzed. These concepts constitute a foundation of urban planning techniques. The concept of property, including real estate, has influenced philosophical debate since the XVIII century [3]. This concept began to have a weight in the scientific literature beginning in the 1990s, in particular regarding land value. However, within the last ten years, the debate has been animated considerably, and the number of publications concerning these terms has increased significantly.

This aspect allows to contextualize one of the basic problems of contemporary urbanism. With the aim of reducing land consumption and better managing of natural and environmental resources, is there a way to use land that maximizes its efficiency [4]? If so, how can the efficiency associated with each possible use be measured [5]?

To answer these questions, it is necessary to understand the connection between the use of the resource soil and the value associated with such use [6][7].

It is important to understand, therefore, the link between land use and the value that this use generates [8]. This value is not only economic, but it is also approached to the annuity, that is, to the gain because of an urban planning operation. The land value also has profound social and environmental consequences. To understand these concepts, it is important to think of the speculative phenomena that characterized much of the second half of the twentieth century that have led to the construction of dormitory districts with low architectural quality, which were often poorly equipped with minimal services. These areas have led to a very high consumption of resources [9]. Currently, within the planning process, attention is also paid to aspects such as the assessment of ecosystem services or social integration [9][10][11][12].

References

1. Botticini, F.; Auzins, A.; Lacoere, P.; Lewis, O.; Tiboni, M. Land Take and Value Capture: Towards More Efficient Land Use. Sustainability 2022, 14, 778.
2. Tiboni, M.; Botticini, F.; Sousa, S.; Jesus-Silva, N. A Systematic Review for Urban Regeneration Effects Analysis in Urban Cores. Sustainability 2020, 12, 9296.
3. Alterman, R. Land-Use Regulations and Property Values: The “Windfalls Capture” Idea Revisited. In The Oxford Handbook of Urban Economics and Planning; Oxford University Press: Oxford, UK, 2012; pp. 1–34.
4. Auziņš, A.; Viesturs, J. A values-led planning approach for sustainable land use and development. Balt. J. Real Estate Econ. Constr. Manag. 2017, 9671, 275–286.
5. Auzins, A.; Geipele, S.; Geipele, I. New Indicator System for Evaluation of Land Use Efficiency. In Proceedings of the 2014 International Conference on Industrial Engineering and Operations Management, Bali, Indonesia, 7–9 January 2014; pp. 2285–2293.
6. Aveline-Dubach, N.; Blandeau, G. The political economy of transit value capture: The changing business model of the MTRC in Hong Kong. Urban Stud. 2019, 56, 3415–3431.
7. Hendricks, A.; Kalbro, T.; Llorente, M.; Vilmin, T.; Weitkamp, A. Public Value Capture of Increasing Property Values–What are the “Unearned Increments”? COST Association: Brussels, Belgium, 2017; pp. 257–281.
8. Ingram, G.K.; Hong, Y. Value Capture and Land Policies. Land Policy Series, 1 Online Resource (Xiv, 465 Pages). 2012. Available online: https://www.lincolninst.edu/sites/default/files/pubfiles/value-capture-and-land-policies-chp.pdf (accessed on 15 February 2020).
9. La Greca, P.; Tira, M. Pianificare Per La Sostenibilità Energetica Della Città; Maggioli S.p.A.: Rimini, Italy, 2017.
10. Nolè, G.; Murgante, B.; Calamita, G.; Lanorte, A.; Lasaponara, R. Evaluation of urban sprawl from space using open source technologies. Ecol. Inform. 2015, 26, 151–161.
11. Tira, M.; van der Krabben, E.; Zanon, B. Land Management for Urban Dynamics: Innovative Methods and Practices in a Changing Europe; Maggioli S.p.A.: Rimini, Italy, 2011.
12. Tira, M.; Pezzagno, M. Town and Infrastructure Planning for Safety and Urban Quality. In Proceedings of the XXIII International Conference on Living and Walking in Cities (LWC 2017), Brescia, Italy, 15–16 June 2017; (English Edition). CRC Press: London, UK. Available online: https://www.amazon.it/Infrastructure-Planning-Safety-Urban-Quality-ebook/dp/B07FM8L1KP/ref=sr_1_10?dchild=1&qid=1587152654&refinements=p_27%3AMaurizio+Tira&s=books&sr=1-10 (accessed on 1 December 2022).

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