

Models of Sustainable Local Development: an Interdisciplinary Systematic Review

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Current unsustainability, both environmental and social, at the global and national levels (Fanning and Raworth, 2025; Fanning et al., 2022) drives further exploration of the potential at the local level to address the sustainability challenge. The local development approach, by focusing on the distinctive characteristics of territories and their inhabitants, has the capacity to adapt and leverage these specificities, thereby fostering the radical changes that the challenge requires. Evidence of this contribution is growing, for instance with regard to cities' roles in climate governance, circular economies and sustainability transition in general (Schmid, 2023). Moreover, it is estimated that the attainment of 65% of the SDG targets is dependent on the active engagement of subnational levels (OECD, 2022). Nevertheless, current economic models that encompass social and environmental concerns rarely integrate this level of analysis (Hardt and O'Neill, 2017; Lauer et al., 2025).

This research therefore aims to conduct a systematic literature review on the models of sustainable local development, in order to provide a comprehensive overview of the state of knowledge on sustainable development models which encompass the local scale. Both theoretical reflections and empirical applications are considered. The focus is on models, both quantitative and qualitative, to complement the analysis of the components of sustainable local development, with the examination of the factors that underpin its attainment. In fact, understanding the necessary factors for achieving the objective, and their interrelations, is crucial, in addition to defining and measuring sustainable local development.

The Web of Science database is used, specifically the Core Collection's Social Sciences Citation Index (SSCI) and the Emerging Sources Citation Index (ESCI). These indices are chosen to reduce the number of included journals and to focus on those that comply with recognised high-quality standards. Moreover, the inclusion of both SSCI and ESCI balances reliance on well-established journals (indexed in the former), with coverage of emerging journals (indexed in the latter). In addition, Web of Science provides the useful filters "Citation Topics" ('Meso' and 'Micro', based on cited and citing documents), which have proved to facilitate the extensive screening process. These filters have helped exclude papers whose "Citation Topics" were widespread across the identified records, but apparently not pertinent to the topic under investigation.

The adopted search string is composed of four main conceptual blocks, each of them corresponding to one of the elements of the research topic: the local scale, development, sustainability, and modelling. The first two blocks are linked by the proximity operator NEAR/3, while the other blocks are linked by AND. NEAR/3 is chosen to balance the inclusion of works that contain variations of the expression "local development" (such as "local sustainable development" or "development at the local level") and the need to reduce the number of irrelevant results.

Only articles in English are included, in order to identify works that aim to contribute to the international academic debate. Moreover, only journal articles are considered. The review is also designed to encompass the post-development and post-growth literature. In fact, these strands inherently integrate sustainability concerns into reflections on development (Kothari et al., 2019; Kallis et al., 2025). For this purpose, an additional search string is performed: its structure is similar to the main one, but the development and sustainability blocks are consolidated into a single block which comprises post-development and post-growth paradigms, such as *buen vivir* or doughnut economics. Lastly, the review is designed to integrate economic contributions with those from other social sciences. Indeed, the complexity and multifaceted nature of the sustainability challenge call for interdisciplinarity (Wu, 2014). Specifically, in addition to the “Economics” Web of Science Category, “Urban Studies”, “Regional Urban Planning”, “Geography”, “Development Studies”, “Social Sciences Interdisciplinary”, “Public Administration”, “Area Studies”, “Green Sustainable Science Technology”, “Sociology”, “History”, “Anthropology”, “History Philosophy Of Science”, “History Of Social Sciences”, and “Environmental Sciences” are included.

Two exclusion criteria are adopted: the non-pertinence of the study to the topic under investigation, and the non-applicability of the results to high-income contexts. In addition to them, the common criterion in systematic reviews on the unavailability of the full text is applied. The first exclusion criterion consists of four sub-criteria, each corresponding to one of the elements characterising the topic under investigation, i.e. the local scale, development, sustainability, and modelling. Meeting any one of them is sufficient for exclusion from the final sample. Specifically, the local scale sub-criterion requires that the scale studied is not local, considering the local scale in a broad sense, including the regional one. The development sub-criterion requires that the research does not adopt a comprehensive framework of development, but either focuses on a single sector (e.g. agriculture, tourism), or on a single component (e.g. entrepreneurship, innovation), or on a different primary subject. Only studies dealing with the whole local economic system are therefore kept. The sustainability sub-criterion requires that sustainability is partially addressed, without integrating both social and environmental aspects. Lastly, the modelling sub-criterion requires that the adopted framework does not encompass the factors necessary to achieve the objective of sustainable local development. The article therefore mainly concerns either the outcome (rather than the inputs), or the relation of development with other issues. With regard to the second exclusion criterion, the focus on high-income contexts is motivated by their disproportionate responsibility for current unsustainability, for example, they are responsible for 74% of global resource overshoot (Hickel et al., 2022), and by the need to reduce their impacts to ensure global basic needs satisfaction within planetary boundaries (O’Neill et al., 2018). Lastly, with regard to the full text criterion, it excludes papers which are neither open access nor accessible via institutional accounts. Preliminary results show that the development sub-criterion is the most selective, with many papers excluded because centred around the tourism or food sectors, or around transportation.

The analyses conducted are both bibliometric and content-based. The bibliometric analysis examines publication years, authorship, keywords, disciplinary domains, and journals. Preliminary evidence from the papers meeting the inclusion criteria shows a growing trend in the publication years, with the largest increases from 2015 onwards. Moreover, the most represented disciplinary social-science Categories are “Urban Studies”, “Regional Urban Planning”, “Economics” and “Geography”. The most productive journal is by far *Sustainability*, which covers around one fourth of the documents. Excluding the post-development and post-growth string and restricting the local block to the term

“local” and the development block to the term “development”, 1,334 records are identified. Of these, 179 have the “Economics” Category; 1,002 fall under other social sciences Categories, and the remaining 153 are classified as “Environmental Sciences”. More than half of the other social-science records (526) are labelled as “Green Sustainable Science Technology”, of which the majority (356) is published in *Sustainability*. With regard to the content analysis, it covers three main domains: definitions, modelling, and empirical evidence. The first domain concerns the definitions of local sustainable development, encompassing the thematic areas considered, the conceptions of development involved, and the meanings attributed to the local scale. The second domain comprises the typologies of models outlined, the underlying theories, the methodologies applied, the factors included and their interrelations. The third domain addresses the operationalisation of variables and the case studies presented.

This is the first review on sustainable local development in high-income contexts that is centred on models and combines a systematic methodology with an interdisciplinary approach. Indeed, Korolenko et al. (2025) conduct a review on the topic that is not systematic. Milàn-García et al. (2019) develop a bibliometric analysis, which is not focused on models. Kahachi et al. (2024) publish a systematic literature review, which instead is not interdisciplinary, as it restricts the scope to planning studies, and which does not analyse the necessary inputs. The systematic review by Abujder Ochoa et al. (2025) concerns the specific intersection with complexity theory, and devotes particular attention to urban growth and urban planning; while Moallemi et al. (2021) limit their systematic review to systems modelling. Finally, the systematic review by Canário Borrega et al. (2026) applies only to the European Union context. This review therefore fills that gap, by systematising existing literature, according to the outlined three domains and across disciplines. Ultimately, it aims to offer a useful contribution to foster the role of the local scale in more sustainable development models.

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