Urban areas are continuously growing in size and number, and urban ecology has studied drivers and effects of cities. However, almost half of the urban areas in the world are near the coast and the interaction with the marine environment has been poorly studied. In this revision of literature, we made a critical evaluation of existing coastal urban ecology research focusing in urban ecology paradigms *in-*, *of-*, and *for- the city* to explore spatial and temporal changes, enlightening its gaps, challenges, and needs, and reporting its biases and consequences.

Our results indicate that studies are disciplinary, geographically, and environmentally biased, and most of them focus on ecological aspects of urbanization. Evidence suggested that there is a need for integration across marine and terrestrial ecosystems, and the inclusion of developing country coastal urban areas. These will allow supporting ongoing urbanization trends and cultural settings in coastal zones across the world.

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