

# **Planning Tools to Revitalise Urban Vacant Land from Ecological Perspectives: A Systematic Review**

## **ABSTRACT**

Urban vacant land availability offers revitalisation opportunities in the form of improving ecological functions. However, less is known about the available planning tools with which to mobilise this effort. Hence, this systematic review adopts ecological perspectives to explore planning tools to revitalise urban vacant land. The search strategy employs Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines to track original research on vacant urban land from selected electronic databases. The search revealed thirty-six studies focusing on substance-oriented planning tools (indicator systems, Geographic Information System (GIS), models/simulations, field surveys, and experiments) and process-oriented tools (questionnaire surveys, the Delphi method, focus groups, and interviews). This review suggests that future studies adopt hybrid planning tools that combine the essence of substance- and processoriented tools. Furthermore, as a framework, it recommends taking a stepwise approach at various planning stages to revive vacant land. Additional studies from the perspective of growing cities are necessary to provide insights into urban vacant land revitalisation planning, considering the competing objectives of economic prosperity and green space preservation.