

An integrated decision making model for district revitalization and
regeneration project selection

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Abstract

The main purpose of this research is to propose an effective hybrid process for evaluating district development directions concerning district revitalization and regeneration (DRAR) prospects along with simultaneous positive and negative conflict criteria and their interdependence. Accordingly, the fuzzy Delphi method (FDM), the interpretive structural modeling (ISM), and the analytic network process (ANP) with benefits, opportunities, costs, and risks (BOCR) are integrated to construct a project selection model regarding the DRAR. A real case in Jiufen in Taiwan is studied using the proposed model to evaluate four feasible development directions, and the results verify the applicability of the novel MCDM method. This hybrid process can not only transform complex interaction of district reviving factors into simple quantitative evaluation, but its result can also be guidance for determining future development direction.

Keyword : Project selection; District revitalization and regeneration (DRAR); Fuzzy Delphi method (FDM); Analytic network process (ANP); Benefits, opportunities, costs, and risks (BOCR)