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Siting refugee camps in mainland Greece using geographic information systems-based multi-criteria decision-making

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Abstract:	<p>Purpose – Refugee camps are not easily welcomed by local communities. The purpose of this paper is to outline a structured approach to support the decision-making process for siting refugee camps in mainland Greece using multiple criteria, including local opposition. A suitability analysis generates a list of potential sites and a multiple criteria evaluation is applied. The motivation is the development of a methodology that can support choices and policies regarding the refugee camps siting problem, incorporating the need to address local opposition. Design/methodology/approach – The proposed methodology combines geographic information systems (GIS) with multiple criteria decision-making (MCDM) techniques. These are used to develop a location classification and ranking model based on related criteria and subcriteria, attributes and weights. The region of Peloponnese in Greece is selected as a case study to validate the approach. Findings – The lack of predefined candidate sites for refugee camps necessitates, initially, tackling a site search problem to generate a pool of potential sites through a suitability analysis. Subsequently, using the GIS the pool yields a subset of potential sites, satisfying all the criteria to setup a refugee camp. Through the current analysis the suitability of the single existing refugee camp site in Peloponnese can be evaluated. Finally, a “with and without” analysis, excluding the social criterion, depicts the changes in the candidate sites pool and their scores. Research limitations/implications – There is a lack of relevant literature taking into account the local opposition or sociopolitical implications as decision criteria. The selection of the appropriate criteria is a complex process that involves the cooperation of many experts. The main criteria, subcriteria and their attributes were determined according to existing literature and authors’ informed judgment. Originality/value – The proposed methodology can help decision-makers to setup a decision-making system and process for identifying refugee camps’ sites using multiple criteria, including local opposition.</p>