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Necessary optimality conditions for a bilevel multiobjective programming problem via a Ψ -reformulation. (English) [Zbl 1427.90251](#)
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Summary: In this paper, we are concerned with a bilevel multiobjective optimization problem (P). First, using Ψ , a function introduced by *N. Gadhi* and *S. Dempe* [*J. Optim. Theory Appl.* 155, No. 1, 100–114 (2012; [Zbl 1267.90130](#))], we transform (P) into a one level optimization problem (P^*). Second, on terms of convexificators, using a scalarization technique, we derive a Karash-Kuhn-Tucker (KKT)-type necessary optimality conditions to the initial problem (P) under a generalized Abadie constraint qualification without the assumption that the lower-level problem satisfies the Mangasarian Fromovitz constraint qualification. Some examples have been introduced to illustrate our results.

MSC:

90C29 Multi-objective and goal programming

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