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Existence and stability of solutions for generalized strong vector quasi-equilibrium problem.

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Summary: We study the generalized strong vector quasi-equilibrium problem without assuming that the dual of the ordering cone has a weak* compact base. We establish an existence theorem of solutions for the generalized strong vector quasi-equilibrium problem by using Kakutani-Fan-Glicksberg fixed point theorem and discuss the closedness of the strong solution set. Moreover, we also derive a stability result for this problem.

MSC:

90C29 Multi-objective and goal programming
90C47 Minimax problems in mathematical programming

Keywords:

vector quasi-equilibrium problem; set-valued mapping; existence of solutions; stability; Kakutani-Fan-Glicksberg fixed point theorem

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