A COMPROMISE MODEL FOR SOLVING FUZZY LINEAR PROGRAMMING PROBLEMS

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Abstract. In this paper, we concentrate on two kinds of fuzzy linear programming problems: linear programming problems with only fuzzy technological coefficients and linear programming problems in which both the right-hand side and technological coefficients are fuzzy number. We consider here only the case of fuzzy numbers with linear membership functions. The symmetric method of Bellman and Zadeh [1] is used for a defuzzification of these problems (min operator). Two-phase approach had been proposed to generate an efficient solution for the linear programming problem. In this study, we shall show a revised two-phase approach to the case of the fuzzy linear programming problems [FLP]. This revised model can improve the optimal decision obtained from min operator. Moreover, a compromise model embedded two-phase approach and average operator will be proposed to yield a fuzzy-efficient solution between non-compensatory and full compensatory.

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Key words. Fuzzy linear programming, two-phase approach, fuzzy number.

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