TWO-STAGE GOAL PROGRAMMING APPROACH

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ABSTRACT

In this paper, for the first time, the "Two-stage" approach is presented to solve the probabilistic linear goal programming problems (P.L.G.P.) when some or all right-hand side parameters are random variables. The transformed determinstic nonlinear goal programming model (T.D.N.G.P.M.) which is equivalent to the probabilistic linear goal programming model (P.L.G.P.M.) is constructed and the relationships between random deviational variables and their reciprocal determinstic variables are derived and proved.

A simple comparison between this approach and chance-constrained goal programming (C.C.G.P.) approach due to El-Dash (in the case, when the right-hand side parameters are random variables) is introduced.

The procedures of our approach and the comparison between the approach and El-Dash approach have been illustrated by a numerical example.

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