## A Review of Multi-level Non-linear Programming

Hsu-Shih Shih
Graduate Institute of Management Sciences, Tamkang University
Tamsui, Taipei 25137, Taiwan, ROC
hshih@mail.tku.edu.tw

Simulating the actual decision-making process of the hierarchical structure of an organization, multi-level programming is a practical and useful approach to decentralized planning problems. However, most of the applications are formulated as non-linear programming problems, especially for the "green" area. We will organize the current methods and applications of multi-level non-linear programming in a systematic way as a stepping stone of further investigation.

Keyword: multi-level programming, non-linear programming, methods and applications, greenness.