

A NOTE ON CONVERSE DUALITY IN NONLINEAR PROGRAMMING WITH CONE CONSTRAINTS

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Abstract. An attempt is made to correct various converse duality theorems proved by Yang et al. [European J. Oper. Res., 170 (2006), 350-354].

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1 Introduction

Nanda and Das [6] considered the following nonlinear programming problem with cone constraints:

Problem (P)

Minimize $f(x)$

subject to $g(x) \in C_2^*$

$$x \in C_1,$$

and formulated four types of dual models associated to (P). Chandra and Abha [2] removed certain omissions and inconsistencies in the dual formulations of Nanda and Das [6]; they presented following correct forms of these duals as follows:

Problem (ND1)

Maximize $f(u) + y^t g(u) - u^t \nabla(f + y^t g)(u)$

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