Physical Performance of State Passenger Transport System: A Case Study of CSTC

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State passenger transport everywhere runs on subsidy, its price (fare) being deliberately kept lower than its cost of operation as transport is an intermediate good. The proper utilisation of subsidy is reflected in an efficient performance of the enterprise. A case study of the Calcutta State Transport Corporation, however, shows otherwise. Cobb-Douglas Production Function and correlation and regression analysis of CSTC data reveal a significant relation between the output gross mileage and variable input HSD only, not others. The efficiency parameter is small. Batteries and buses are insignificantly related. All indicate a wastage of inputs, a defective output policy and a lack of business attitude.

I Introduction

The passenger transport has a few unique features. Transport may be subject to joint consumption but the exclusion principle also works for it, hence it may be called a partial public good. It tends to monopoly when left in private hands because of its large scale of production and its inelastic nature. It exerts both positive and negative kinds of externalities, the former by developing the area served and the latter by accidents, noise and air pollution generated. In pure private ownership, there may be under-production with positive externalities and overproduction with negative externalities. There may be a more than desirable price too. So, there is an argument that, transport being an intermediate good, the price should be deliberately kept at a level lower than its market price and its cost of production, so that there is no rise in the general price level. The loss thus faced by the owner, private or state, should be made up by government subsidy (Bonavia, 1942; Due and Friedlaender, 1977).

The subsidy is paid out of the taxpayer's pocket. The taxpayer would obviously be concerned about how his hard-earned money is being utilised. One way of knowing this is to determine how efficiently the public transport system under state ownership is being run. A study involving the Calcutta State Transport Corporation was done to find out this efficiency. The relation between the output produced by the Corporation and the inputs used by it gives a clear picture of this. The study period was the first half of the decade after initiating the liberalisation process, 1990–91 to 1995-96.

II Methodology

The study is based on the application of the theory of the firm to the urban transport undertaking and a few statistical tools. All the quantitative information was collected from the two offices of the CSTC at Calcutta on repeated visits, the data being provided by the CSTC staff from their audited accounts.

The analysis considered of:

(1) Fitting of a production function;

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