

LEVELS OF UTILISATION

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1. This paper sets out to define and quantify levels of utilisation of four important capital assets of the Indian Railways in which more than Rs. 4,000 crores were invested (at book cost in 1973-74). The study is divided into three sections. Section I deals with some of the theoretical and practical issues involved in the estimation of capacity utilisation. The sources of data and methods adopted to quantify levels of utilisation of capital in Indian Railways during the four Five Year Plans are undertaken in Section II. Alternative methods of aggregation of utilisation rates are presented in Section III.

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2. *Concepts of Capacity Output*

Capacity output may be interpreted in two ways — theoretical and potential. The former refers to that number of trains which can be moved if a perfect condition of train operation exists where no delays, other than those set by the time-table schedule, are considered. Potential capacity on the other hand means maximum number of trains that can be run under existing method of directing of train movements where it is assumed that trains are perfectly operated according to the rules. Thus the former concept does not consider delays set by rules such as safety operation while the latter takes into account such delays. This article adopts the latter concept since it is more pragmatic.

3. *Problem of Quantification*

Measurement of capacity in railways is a nebulous task, since railways operate with different types of capital assets such as track, engines, vehicles and tele-communication equipment. Track capacity is not a static concept. It depends on the type of tele-communication system and the locomotives. Thus the nature of the Problem is so highly technical that very few studies are undertaken so far.¹ Since Utilisation ratios indicate to what extent the economy is utilising the capital stock of the railways, it is not possible to ignore the levels of

¹ These refer to instudies carried out by the Railway Board which are not published.