

# An Analysis of the Disequilibrium in the Supply of Rail Freight Services

T. V. S. Ramamohan Rao and S. Sriraman

## 1. DYNAMICS OF MOVEMENT

The infrastructure provided by the railway system has all along been one of the most important factors responsible for sustaining a growing and diversified economy. Movements of individuals, raw materials, as well as finished goods, made possible by the availability of the railway network, facilitated efficient utilization of resources over both space and time.

From about an average of 119.80 million tons in 1960-61 the total freight movements reached a peak of 212.60 million tons in 1976-77 but tapered off to 193.06 million tons by 1979-80. In the case of coal the tonnage more than doubled from 30.88 million tons in 1960-61 to 61.96 million tons in 1979-80. The highest recorded movements were 69.15 million tons in 1977-78. The foodgrains movements showed a similar trend. From about 12.65 million tons in 1960-61 it went up to 19.96 million tons in 1976-77 but levelled off at 18.35 million tons by 1979-80. When considering the length of haul the observation was that from about an average of 560 km in 1960-61 for all commodities, it has gone up to almost 750 km in 1979-80. The change was substantial for certain commodity groups. For instance, in the case of foodgrains, the average length of haul increased from 760 km in 1960-61 to 1279 km by 1979-80. The trend in the length of haul was generally one of a steady increase.

In response to the demands on the network the railways produce different quantities and qualities of service for different users depending on the freight moved, origin and destination, and the time profile. In general, the railways can be considered to be choosing a combination of the following in their search for a supply procedure: (a) creation of additional track capacity and adding to wagon stock, (b) improving the scheduling and routing so as to reduce delays in transit, and (c) rationing out the available supply among competing users by appropriate freight rate choices and other priority specifications. Over the years 1960-61 to 1979-80 there was an overall improvement in the wagon stock available and its actual usage. However, there has been a