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ECONOMIC RAILWAY CONSTRUCTION

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INCHARGE Committee have laid down in their recent report that new railway projects should be undertaken only if they could earn an average annual interest of 5.5%. The object stated for this policy is to provide cheap and efficient transportation throughout India. The present consruction standards have to be improved to comply with "5.5% test" on new railway lines. Construction methods that can help to achieve economy along with required standards form the main subject of this paper. Economic construction is essential in view of existing high fares for the carriage of passengers and goods which can not be raised further. The engineers must find ways to construct serviceable lines under present day conditions approximately at the cost level of first class lines applicable 15 years ago. The new construction approach is of immediate importance in many parts of India and nowhere more than in Punjab.

Optimum benefits with minimal expenditure are the fundamental requirements of economical design of the railway track. Speeds should be kept as low as 25 miles per hour which specially suite agricultural and mainly irrigated country side of Punjab plains. For an average train load of 850 tons, 14 or 15 sleepers per 36' rail length for a 60 lbs rail provide adequate spacing. In case 75 lbs rails can be arranged from the main line renewals, the number of sleepers can be reduced to 13 per 36 feet rail in order to achieve economy. Ballast quantity of 10 cubic feet per foot run is enough for proper functioning of the railway track.