

**ROLE OF BULLOCK CARTS & TRUCKS IN RURAL TRANSPORT - CASE STUDIES, 1963****1. The Study**

This study was undertaken by the Programme Evaluation organisation at the instance of Committee on Transport Policy and Coordination, appointed by the Planning Commission, to assess the role played by bullock carts and other traditional modes of transport in rural areas.

**2. Objectives**

The broad objective of the study was to understand and analyse the role of the traditional modes of transport, such as bullock carts, hackney carts and thelas, in the traffic in rural areas and to assess the changes that had taken place in their relative importance as a result of introduction of mechanised road transport.

**3. Sample Size/Criteria for Selection of Sample**

Five markets were selected in five regions of the country, for a case study. It was decided that the selected markets should be intermediate in size and should have functional role. Markets of this type were assumed to be suitable for obtaining a fairly complete picture of the trade and traffic from and to villages and a general idea of its extension in space beyond the market. The following is the list of selected markets:-

<b>State</b>	<b>District</b>	<b>Market</b>
1. Madras	South Arcot	Tindivanam
2. Maharashtra	Nasik	Lasalgaon
3. Punjab	Patiala	Sirhind
4. Uttar Pradesh	Gorakhpur	Gorakhpur
5. West-Bengal	Birbhum	Sainthia

Six villages were selected from the hinterland of the selected mandi. The selection was made on the basis of multistage stratified random sampling. The villages constituting the hinterland were classified into two groups:

(a) Those which were congenial to truck transport and suitable for bringing out a comparative role of trucks & carts; and

(b) Those in which truck transport was at a discount and which were specially suited for cart transport.

In each sample village, 30 per cent of households possessing carts and using them for transporting their own produce or that of others were interviewed.

#### 4. **Reference Period**

The reference period was 1959-60 **except** in Sainthia where it was 1960. The data was also collected for 1949-50 or the year nearest to it so as to obtain some idea of the change over time.

#### 5. **Main Findings**

1. During the last 10 years (i.e over the period from 1950 to 1960), 3 out of 5 mandis witnessed an appreciable rise in the volume of incoming traffic, the increase ranging from 100 to 191 percent. It is only in Gorakhpur that there had been practically no change. The reasons was two-fold. First, the yield of paddy and other foodgrains in this area did not record significant increase; secondly, the arrivals from the bordering areas of Nepal had gone down significantly. In general, therefore, incoming traffic had increased considerably in the mandis over this period.

2. Like the incoming traffic, the outgoing traffic had also risen appreciably during the last 10 years, from 23 per cent to 137 per cent in different markets.

3. For intra-mandi movement, only the non-mechanical modes of transport like, bullock carts and thelas were generally used on account of short distances which such traffic had to cover. Trucks did not make much of a dent on this traffic pattern.

4. Arrivals came ~nmostly by roads. In the two selected mandis practically nothing comes by rail. In the other three, railways handled between 20 and 50 per cent of the traffic. Carts handled 58 to 96 per cent of the road-borne inward traffic. It was significant that the share of carts vis-a-vis that of trucks had witnessed a decline in four mandis, the decline being very sharp in Gorakhpur, significantly large in Sainthia and Lasalgaon

**and not significant** in Tindivanam. The main reason had been the rise in traffic and availability of pucca roads on which trucks can ply. Only in Lasalgaon trucks ply even on Katcha roads and had gained over carts on such roads also. OR the other hand, in spite of the entire traffic being on pucca roads, inward traffic continued to be the stronghold of carts in Tindivanam. The trucks ply mainly on longer distance hauls in these areas and did not try to penetrate in the local traffic. The rise in the traffic handled by trucks had been much more than in **that handled** by carts. The share of trucks was generally higher in the higher distance \*groups and that was relatively greater in the more valuable crops e.g. cotton in Sirhind, onion in Lasalgaon and **paddy** in Sainthia.

5. The principal channels of despatches was the railways and the roads. The railways handled 58 per cent to 75 per cent of despatches except in Tindivanam.

As despatches were generally bound for long distances, railways, were the natural and preferred modes of transport. But the roads not only account for substantial proportions of this traffic in 2 mandis and constitute the dominant channel in Tindivanam, but also wrested considerable traffic from the railways during the last 10 years in all these mandis. These tendencies had resulted mostly from operational factors such as shortage of wagons, multiplicity of in-transit handling, pilferage, dilatory procedure for claiming damages from railways.

6. The trucks were the dominant mode of road transport in despatches from all the markets except Sainthia. The inter-mandi road traffic was, almost all, handled by trucks. Consequently, the entire outward **traffic, not** carried by village carts that come to the mandi and take their requirements on return, for which estimates were not available, was handled by trucks in 3 mandis, while 70 and 46 per cent of such traffic were handled by trucks in Gorakhpur and Sainthia respectively.

7. The carts and trucks operating from and in the mandi (market centre) generally plied for hire. only in Sainthia mandi, there wad a large number of carters handling for their own produce. As has been seen above, the carts did not have much scope for handling outward traffic. Their main work lay in the mandis itself in the transport of goods from the shops to godowns, mills, railway stations and similar points.

8. Between 80 and 100 per cent of the sample carters in the mandis had carting as principal occupation. On the other hand, amongst those coming from the villages, usually the majority were cultivators.

9. The sample carts which were coming from the villages were generally not fully loaded. The percentage of those carrying less than one-half of their capacity ranged from 5 to 35, while those carrying from 1/2 to 3/4ths accounted for between 11 to 35 per cent. Altogether 23 to 69 per cent of the carts carried less than 3/4ths of their capacity.

#### 6. **Major Observations/Suggestions**

Despite the above factors, the survey revealed that the carts continued to occupy an indispensable place in the rural economy. While carts had lost much ground to trucks in the mandis or market centre, they had increased in number in the villages and were not handling any lower volume of traffic than ten years back. Trucks have, however, gained an importance in longer hauls, particularly in the field of despatches from mandis. Therefore, necessary arrangement should be made for maintenance as well as making use of carts in rural areas, for short distance and other vehicles for longer distance.