The situation is serious indeed. In the matter of roads, by accident, if not by design, the Government appears to have followed one of the pet tenets of the Wardha school of thought, propounded by Shri J C Kumarappa that if motorists want metalled roads, they should pay for them. The road policy also happens to square with the more popular variant of the Wardha school, now winning all along the line, which goes by the name of "Common Production Programme". More of the road traffic in the country today is carried by carts than any other form of transport. Bullock carts do not pay for the upkeep of the roads. It is meet and proper, according to this theory, that motor vehicles should do so. The balance that is left over of the motor vehicle taxation, after the cost of new construction as well as repairs has been met, should in that case logically go to the improvement of bullock carts for which there is an unanswerable case, whether Wardha or the Ford Team is listened to. This case has been made out very effectively and persuasively by Shri L B Roy in the issue of the AICC Economic Review for June 15, 1954, from which all the data given below have been taken.

Bullock carts carry more loads than all other forms of transport, including railways, taken together. There is a development programme for railways and a production programme for automobiles, but nothing has been done so far to improve the bullock cart, the first and foremost load carrier of the country. Now is it not about time that 25 per cent swadeshi transport has been left in such cold neglect, except for an occasional and fitful attention paid to it by Dunlops some years ago? It is difficult to vouch for the accuracy of the statistics. The author does not say who compiles them, but here are plenty for those who have a stomach for such tilings. In 1951, the latest year for which statistics are available, there were 9,863,311 bullock carts in the country. Their number has apparently been increasing for in 1947-48, it was estimated at 8,569,569. With all-India total of 67,266,000 working cattle and buffaloes, the number of spare bullocks available for more carts must be limited, since in addition to the bullock carts, they have to also draw 32.7 million ploughs, work half a million cane crushers and the same number of village ghanis. Transport problem can, therefore, be relieved, if not solved, not by increasing the number of bullock carts but by making the carts carry more load, increasing their speed and range and by reducing the strain on the animals. Part of the transport problem can be considerably lightened by reducing the present wear and tear on the road surfaces by the iron tyres of the bullock carts.

The solution, in other word, is to improve the construction of the bullock carts and to fix them with pneumatic tyres. The pressure exerted on the road surface by the iron tyre of bullock cans is so great that even cement concrete roads begin to wear off when subjected to heavy cart traffic, 'the damage done to roads by a loaded iron cart doing four miles a day was estimated some years before the war at Rs 228 per annum, from road tests carried out by the Central PWD in New Delhi. If allowance is made for lower value of the rupee today, the money cost of the damage would appear to be fantastically high.—high enough in any case to make it worth while to invest large sums in development to prevent such damage. Moreover, bullock carts with iron tyres impose too heavy a burden on the draught animals and the pay load is consequently much smaller than it could be. The massive wooden hubs of the ordinary cart wheels develop a lot of friction which strains the animals.

If a new type of light cart is put on the roads with pneumatic tyres, not only can the damage to roads be substantially reduced, the carrying capacity of the carts can be improved and the load on the bullocks can be reduced at the same time. If produced on a mass scale, carts of the improved type should not cost more than Rs 500, compared to Rs 300 for an ordinary cart. The carrying capacity of the improved carts, however, would be so much greater that where demand for such transport is already there, eg, for carrying sugarcane to the mills, bullock cart drivers should be able to earn the entire cost in the very first year, without stinting themselves in any way.

There are other attractive features about the improved carts some of which may be noted. According to tests carried out at the Pusa Institute before the war, the normal working life of pneumatic tyres was found to be 7 to 8 years, and that
of axles, roller-bearing hubs and steel wheels 25 to 30 years compared to 4 to 5 years of serviceable life of an ordinary cart. The difference in cost is, therefore, much more than offset by earning capacity and lower depreciation.

It appears that manufacturers of rubber tyres, not being faced with a shrinkage of demand any more, are no longer interested in developing a new line to their sales. They have other reasons perhaps for not going in for something which will call for close collaboration with and a great deal of assistance from the Government. Both the manufacturing capacity for tyres and the engineering capacity for the manufacture of improved tyres of carts are in existence. Why no one is thinking of putting them together in an effective manner, when all the emphasis is now for cottage industries and improving the village, is a question to which it is not so easy to find an answer.

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