

# TRANSPORT

## HIGHWAYS EXPANSION

### OR MAINTENANCE

Transport by road, of both passengers and goods, dominates this sector in Sri Lanka today and public highways are therefore a matter of increasing concern among all types of road users in the country. Studies by our engineers have shown that about 3000 miles of roads need rehabilitation while the cost of this task would amount to Rs 1,000 million at present costs. The Prime Minister, who is also the Minister in charge of Highways, replying to a question in Parliament indicated that funds were a problem in carrying out a road rehabilitation programme. Such a programme would have to be phased out, he said, over a period of years. However, at the present level of resources available, roads should be re-metalled once in five to ten years as presently done once in 120 years; while roads that have to be tarred once in three to five years are done only once in 60 years.

Over the years, this aspect of periodic or preventive maintenance has not been given the attention it demanded. The little maintenance that was done happened to be in the field of emergency repairs.

Recent developments in the economy have placed an increased strain on our already weak road system. Due to the massive development schemes like the accelerated Mahaweli programme and the liberal economic policy, there has been unprecedentedly large influx of vehicles in recent years. In relation to the upkeep of the road network, what is more significant than the number of vehicles, is the size and weight of many of them. Our roads were never meant to carry the heavy construction equipment and the containers which we now see on the roads.

The annual allocations on the maintenance of highways has been as follows during the last 6 years:

Year	Rs. Million
1978	56
1979	82
1980	102
1981	110
1982	125
1983	136

Although monetary allocations increased over the years, costs have increased many times more due largely to inflation.

Budgetary funds that are allocated are far from adequate to maintain the roads at even minimum standards and the Government in its attempt to give this vital infrastructural asset more attention had even launched a road development programme on a Shramadana basis with the intention of effecting routine maintenance work. As part of this programme the government has also called for tenders to set up a plant to manufacture bituminous emulsion, a material which could be utilized to repair roads in any weather condition. World Bank assistance is being utilized for this purpose and discussions are underway to secure World Bank funding for a road and bridge rehabilitation programme, on the same lines as an earlier (1979) programme funded by the World Bank. Organisational changes are also due to be effected in the Department of Highways in order to make more effective the operational aspects of road maintenance, which should be a vital aspect of 'highways' policy as the experience of the World Bank indicates.

#### World Bank's fears on costs of poor road maintenance

The problem according to the World Bank, however, is that funds are being used disproportionately on road expansion rather than maintenance. In its World Bank Development Report, 1983, the Bank maintains that the world wide road-building boom of the 1960s and 1970s threatened to become the road - maintenance crisis of the 1980s and 1990s.

Over the past ten years, roads in many developing countries have been allowed to deteriorate beyond the point where normal maintenance could be effective. Traffic loading has been much heavier than intended, and maintenance has been widely neglected. Funds budgeted for highways have been mostly absorbed in expanding rather than maintaining the network.

In several West African countries roads have had to be rebuilt at costs 20 to 40 percent higher than necessary had they been properly maintained earlier. For tarred roads, rehabilitation or reconstruction costs \$ 125,000 to

\$ 200,000 per kilometer, four to eight times what it would have cost had these roads been maintained and strengthened as weakness arose. In a recent survey of twelve developing countries, more than 25 percent of the tarred road network in eight of them required rehabilitation, strengthening or resaling.

To prevent further deterioration, maintenance budgets need to be increased by at least 25 percent in three-quarters of the countries for which recent studies are available; in more than half, the required increase exceeds 75 percent. But more money is not the only answer. Maintenance costs could be significantly reduced by improved efficiency. For example, use of plant and equipment is often extremely low, sometimes only a quarter or a third of the rates achieved by the best maintenance organizations. Of a sample of seventeen countries, ten had utilization rates of 35 percent or less. Only three countries - the Dominican Republic, Malawi and Niger - had rates of 50 percent or more. In 1981 Malawi was the only country to reach a 75 percent utilization rate, a reasonable target for all countries.

The lack of spare parts and fuel is often to blame for poor plant utilization. In addition, maintenance costs are frequently inflated by serious overstaffing. And foreign aid donors have sometimes undermined efficiency by:

- \* Making finance for new equipment readily available, but leaving it to the country to buy spare parts.
- \* Promoting an uneconomic proliferation of different makes and models of equipment through tied aid or other procurement regulations.
- \* Supporting capital projects that divert the country's own resources from more urgent maintenance work.

When road authorities are not able to afford maintenance work, the costs passed on to road users are larger than the in public expenditure. Over the life of a road, the total operating costs of vehicles are typically four to ten times the costs of road construction and maintenance. Since operating costs may easily double on poorly maintained roads, the economic loss is considerable. Moreover, in most countries the extra costs chiefly involve spending foreign exchange on spare parts, fuel and replacing vehicles.

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