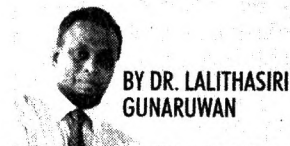
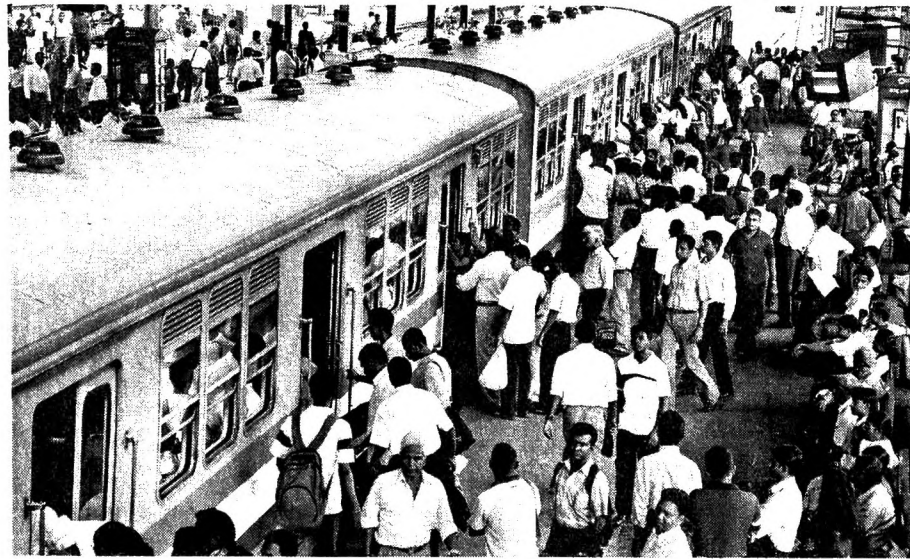


Role of transport in accelerated development



BY DR. LALITHASIRI
GUNARUWAN

Can the Transport Sector Continue to be a Driver of Economic Activity in Sri Lanka?

Transportation is a vital element of well-being and development of any economy. It provides the required mobility for people and goods, and enables access to places and markets. It serves as the medium through which the resource endowment differences among localities and social segments are smoothed out. Being a country with a tradition of

exchange with the rest of the world, the role played by the transport sector in the economic development of Sri Lanka has been significant throughout the history. Studies also indicate significant contributions made by the transport sector towards social development of post-independent Sri Lanka. The operation of public bus services by the Ceylon Transport Board (CTB), providing mobility to the public all over the country and enabling them to access places and services, appears to have had a significant influence over Sri Lanka's outstanding performance in a number of social development indices, which are generally considered to be direct results of

public expenditure on health and education sectors.

The challenge faced by the transport sector during the first few decades since independence was basically in the provision of basic services. The low levels of income received by people and the consequent deficiency of effective demand in the market, together with long pay-back periods of transport related investments and the welfare oriented political ideology that prevailed since mid 1950s, made the industry a service-oriented, non-profit seeking and essentially State-funded sector in the economy. Thus, the focus was to expand the capacity of transport infrastructure (such as road development),

to provide accessibility to regions and rural areas, and to ensure basic mobility of people at affordable prices through State-owned transport operators.

Given the low level of market competition, demand conditions insisting less qualitative parameters (such as punctuality and standards) and comparatively low values assigned for travel time, transportation has been essentially supply driven, with insignificant pressure to be cost conscious, efficient, competitive or to manage the demand.

The role expected to be played by the transport sector has thus been one of being a 'supporter' to the process of socio-economic development.

The evolution of the sector has essentially been pulled by the pressures exerted from socio-economic development, including economic growth, rise in per capita income and in trade, in addition to being closely influ-

enced also by political concerns. The sector therefore evolved with a lag, resulting in the commonly observed 'backwardness' and capacity constraints in service provision. These fundamental characteristics, particularly visible in public land transportation, do not seem to have significantly changed, despite the economy reaching a per capita income level of \$ 2300.

It is with this background that the economy is intending to double its per capita income through a phase of accelerated economic growth of over 9% per year over the coming five years.

Could the transport sector successfully withstand the demand pressures emanating from such a high economic growth rate and continue to play its traditional role of 'supporting' the process of development? What would be the implications of such rapid economic growth on transportation and related activities? How best could any

undesirable eventualities be minimised? How should the transport sector be reformed and geared to successfully take part in realising the intended high growth scenario? The first two questions are on the opportunities and pressure the transport sector and its stakeholders are likely to face under the assumption that the growth projections are realistic, while the second two questions call for policy and strategy oriented answers.

Macro-economic outlook and the role of investment

The Sri Lankan economy is projected to have an annual real economic growth rate of more than 9% in average over the next few years.

Table 1

What is the scale of the impact of this expected high growth scenario on the country's transport sector? Let us investigate the growth projections and underlying parameters for a five year period

Table 1 : Medium-term Macroeconomic Framework

Indicator	2010	2011	2012	2013	2014
GDPMP (Rs Bn)	5602	6440	7405	8513	9790
Real GDP Growth (%)	8%	8.5%	9%	9.5%	9.5%
Per Capita GDP (USD)	2399	2794	3200	3660	4190

Source : Annual Report- 2010, Central bank of Sri Lanka.

from 2011 to 2015 in order to perceive the gravity.

A real growth rate of over 9% during the next five years will mean the Sri Lankan economy reaching a Gross Domestic Product of approximately 12 trillion Sri Lankan Rupees at current market prices, reflecting a per capita GDP of around \$ 4800, almost double the per capita GDP of 2010. This would amount to an average per capita income growth (at current market prices) of around 19% per annum over the coming five years. Macro-economic relationships imply that such a growth scenario would associate with corresponding re-alignment among components of the resource balance.

Key to understanding the possible trends of such a re-alignment would be to appraise the behaviour of investment. Thus, it is proposed that this discussion be focused on this vital aspect, namely the behaviour of investment, in appraising the challenges faced by the transport sector in continuing to support economic development.

Growth - Investment Dynamics

Investment is the economic activity which is instrumental in building up the capital stock of an economy (or a sector) to ensure future productive capacity

Table 2 : Estimated Macroeconomic Parameters - 2015

Parameter	2010	2015	Growth
GDP @ Market Prices (Rs Mn)	5602	12200	9.2% p.a.
GDP in 2010 Prices (Rs Mn)	5602	8698	
Per capita Income (USD)	2400	4400	
Consumption (C), in Rs Mn	2440	8900	
C /GDP (%)	81%	73%	
Investment (I) (Rs Mn)	1557	5050	225%
I/GDP (%)	28%	41%	130%
Investment (Rs Mn 2010 Prices)	1557	3601	
Exports(X) - Imports(M) in Rs Mn	- 512	- 1750	- 240%
(X-M)/GDP	-9%	-14%	135%
Total Trade (X+M), in Rs Mn	2942	6900	
Total Trade (volume Index)	100	170	

of that economy (or sector). Thus, investment becomes an essential determinant of growth and development.

The degree of contribution to the national (or sectoral) value added by the capital stock of the economy (or the sector) is determined by the investment productivity, the inverse of which is indicated, at an aggregate level, by the measure called Incremental Capital-Output Ratio (or ICOR). Higher the ICOR, lesser would be the marginal or incremental productivity of capital, meaning that a larger increment to capital stock (higher rate of investment) would be required to achieve a targeted increment in GDP (or a targeted economic growth rate).

Sri Lanka's ICOR currently figures around 4.5, meaning that an addition of 4.5% of GDP to domestic invest-

ment is required to achieve an incremental economic growth of 1%. Thus, the economy would require an investment ratio of more than 40% of the Gross Domestic Product over the period under consideration for it to sustain a growth rate of 9% per annum. This would necessitate an increase of investment of over 200% by the end of the coming five year period compared to its current values, which translates into an average growth rate of investment of over 26% per year sustained during the next five years, if an average of 9% real GDP growth rate per year is to be achieved.

Economic implications of a high-growth scenario

Increased investment requirement, together with

the downward rigidity of consumption ratio commonly observed in developing economies with large share of low income earners, tend to widen the macroeconomic resource gap. This needs to be bridged through net import of resources to the economy. An estimate, based on a favourable inflation ratio of 7% and an assumed consumption ratio of 73% over the period under consideration, would indicate a widening of the net imports ratio to 14% from current levels below 10%.

Table 2

Is this a pragmatic scenario? A Widened trade gap inevitably means eating up of a larger proportion of factor income from abroad to finance it, or increased foreign debt. Neither can be considered healthy in view of economic as well as political independence of the nation.

Growth Implications within the Transport Sector

The accelerated growth would require economic sectors also to grow fast. Accordingly, the service delivery capacity of the transport sector will have to be augmented to meet the targeted value generation.

The Transport sector currently constitutes approximately 12% of the country's GDP. It has been observed

that the transport sector's share of the country's GDP increased with the per-capita income growth. Increased affordability of the people to meet their mobility requirements, and increased volumes of trade associated with economic growth, could be behind this trend.

A conservative projection would be that the transport sector would have to contribute approximately 12.5% of the country's GDP.

For this to happen, the sector would have to grow by an average of over 17% per year in nominal terms, or over 10% in real terms.

In practice, where does this necessity to grow stem from?

Firstly, it would be from

trade (imports plus exports of goods and non-factor services) by about 135% in current market prices over the next five years. This would be an annual growth of 11% in volumes of international trade. In terms of physical units, this would correspond to the ports of Sri Lanka having to handle, within a year, almost one million TEUs of import and export cargo alone annually by 2015, compared to little over 500,000 TEUs of containerised import and export cargo currently handled.

Sri Lanka has never experienced such a high growth rate of foreign trade in volumes. For example, the growth of import and export volumes during 1997-2007 has just

two such sub-sectors expected to grow fast over the next few years.

Tourism, for example, displays high transport intensity with almost one-third of the expenditure made in the economy by a tourist would be on transport and tour-related services.

This would be even up to 60% if the expenditure on international air travel is spent on a Sri Lankan source. With tourist arrivals targeted to exceed 2 million by 2016, the transport sector should be prepared to produce value exceeding \$ 1 billion per year on tourism alone by five years from now.

Last, but not least, the demand for mobility would stem from increased afford-

ability of people as a result of high per capita income growth. In Sri Lanka, the average income elasticity of travel demand during the last five years between 2005 and 2010, for example, has been 0.7 for all modes. Private modes indicated a higher income elasticity of 1.3, while public transport

modes showed a lower elasticity of 0.43.

Projections made for the coming five year period based on the above elasticity estimates would indicate alarming trends. Passenger travel demand would experience an increase of more than 60% during this period, indicating an average annual growth rate of 10%, compared to 7% annual growth observed during the previous five year period.

Table 3

Our economy, and particularly her road network, thus will have to be capable of shouldering the cost and load of almost 40% more private vehicles and approximately 25% more buses by 2015.

A 40% augmentation of the

private vehicular fleet would mean much greater scale of capital expenditure requirement on fleet expansion. This capital expenditure burden would reflect entirely on the external account of our economy as almost all new capital additions on motor vehicles have to be imported. All these will put additional pressure on already congested urban and sub-urban roads, causing the requirement to expand the carrying capacity of the country's road network. Needless to emphasise the scale of financial and other challenges the sector and the economy are bound to face in having to meet such a road capacity expansion within a short period of five years.

These requirements will be even higher if the Sri Lanka Railway fails to maintain by then its current market share of approximately 5%, and the private vehicles do not achieve an average loading of three passengers per vehicle.

Implications would be many. Investment requirement on fleet augmentation itself would be enormous. The State and private bus operators, for example, would have to add more than 6000 buses to their fleets anew for this fleet augmentation within the next five years, in addition to what is required to replenish depreciated stock.

This alone would mean a capital expenditure requirement of around Rs. 24 Bn. A 40% augmentation of the

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To be continued...

