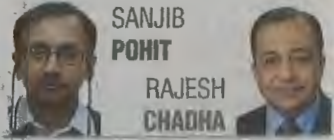


Strengthening logistics network

India is in dire need of a long-term national logistics plan that can help minimise gaps, reduce costs, align developmental projects so we can all reap economic benefits



SANJIB
POHIT

RAJESH
CHADHA

In today's world, economic climate changes more quickly, and countries realise that globalisation has made the world smaller and more competitive. Also, customers seek products and services that can respond to their specific needs and firms make effort to create competitive advantages to keep their profit and market share. All of the above trends lead firms and countries to focus on supply chain and integrated logistics. In layman terms, logistics basically imply the distribution of products and services from the point of origin to the point of consumption.

Making supply chain activities more effective and efficient is a sustainable competitive advantage for countries. One of the important parts of these activities is logistics activities, which can make a significant reduction in costs. Efficient management of logistics activities is a perfect source for creating competitive advantages. Besides, it allows firms to respond to their customers' specific needs, which in turn results in customer satisfaction.

In this context, it is important to quantify national logistics cost and to identify the sources through which this cost can be reduced so as to increase competitiveness of the nation. Unfortunately, estimates of such costs for India, based on detailed studies, are not readily available. It is generally believed that the cost of logistics is very high in our country. The ball mark figure, often quoted in the context of India, is about 13 per cent of Gross Domestic Product (GDP), though the methodology of the same is not published anywhere. Incidentally, this is higher than that of US (nine), Europe (10), Japan (11) and Germany (eight).

Inefficiencies have grown over the years from a combination of a non-conducive policy environment, extensive industry fragmentation and lack of good basic infrastructure. India's indirect tax regime discouraged large cen-

tralised warehouses and over a period of time, led to the fragmentation of the warehousing sector. Extensive disintegration meant the inability of players to develop the industry as a whole and poor support infrastructure, such as roads, ports, and telecom, which led to a situation where opportunity to create value is limited.

No doubt, high logistics cost reduces competitiveness of Indian goods, both in domestic as well as export market. The development of modern logistics is essential for 'Make in India' mission and, thus, would give a boost to both domestic as well as external demand, thereby encouraging manufacturing growth and job creation.

However, much of this is changing as the Government is now demonstrating a strong commitment towards providing an enabling infrastructure and creating conducive regulations. Recently, the logistics sector has been granted infrastructure status, which will help it access loans on easier terms. A logistics division has been constituted under the Department of Commerce, Ministry of Commerce and Industry to look after the logistics issues. At the same time, regulations around rationalisation of tax structures and rollout of the Goods and Services Tax are creating an environment of positive change. Players now have the opportunity to leverage economies of scale, complemented with better infrastructure, to provide integrated logistics solutions, which are cost effective.

Most of the developed countries, as well as emerging countries, compute performance indicators for logistics activities on a regular basis to measure operational costs and efficiency levels. These indicators provide information on lacunae, which needs urgent attention. Measuring operating costs helps identify whether and where to make the changes to control expenses and identify areas for improved performance of assets, both at the micro as well as at the national level.

Unfortunately, similar attempts have not been undertaken for India. In this context, we have undertaken a back-of-the-envelope calculation to estimate the logistics costs for our country. Typically, the following elements are consid-



ered worldwide to estimate logistics costs:

Transportation costs: These include costs for both primary and secondary transportation. Primary transportation is the movement of finished goods from plants and vendors to warehouses. It includes costs for replenishment movement from plants or distribution centers to other plants or distribution centers, and inbound freight on purchased finished goods, movement to plants or distribution centers for resale.

On the other hand, secondary transportation is the delivery of finished goods to customers. It includes payments to carriers, pickup allowances, truck or rail equipment and operations costs, and freight allowed.

Inventory carrying costs: These include the cost of money (opportunity or interest), ad valorem taxes, insurance, among others.

Management and administration cost of distribution: These include indirect management personnel and support staff, including

Table: Costs as per cent of GDP in 2007-08

Total Transport cost	7.44
Railway transport services	0.85
Land transport	6.14
Water transport	0.16
Air transport	0.29
Other Logistics costs	1.44
Supporting and auxiliary transport activities	0.45
Storage and warehousing	0.10
Insurance	0.89
Logistics cost	8.88

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the central distribution staff, inventory planning and analysis staff, and the traffic department. Nowadays, computer software and hardware cost allocations are an important distribution expense.

Ideally, estimates of logistics cost are computed from primary as well as secondary data sources. The National Accounts Statistics and input-output tables provide limited information on some of the elements of the logistics costs. Below, we provide a tentative estimate of logistics cost using a secondary source of information.

As noted earlier, there are three

principal components of logistics costs namely, transportation costs, inventory carrying costs and administration costs of distribution. Out of these, one can derive an estimate of the transportation cost from India's input-output table. The input-output table of a country provides the cost structure of each sector of the economy by the principal inputs (goods and services), value added (returns to factors of production) and indirect taxes paid to the Government. Since transportation is a principal input in the production process, IO table typically provides estimates of such costs.

To some extent, the second component of logistics cost (inventory carrying cost) is also documented in the IO table. However, the last component of logistics cost is subsumed in other inputs. As a result, it is difficult to arrive at the estimate the logistics costs from IO table. In Table 1, we have shown our estimate of logistics cost (primarily first two components) from the latest published IO table of India, which refers to the year 2007-08. Our estimate comes to about 8.9 per cent of Gross Domestic Product (GDP).

It may be noted this is a crude estimate of logistics cost in the production process and excludes the logistics cost of delivery from the points of production to the final demand. It must be mentioned that neither the inventory carrying cost nor the management and administration cost is fully accounted for here.

The insurance cost shown in the Table is an overestimate as it reflects total insurance cost and not specific to logistic activities. Our estimated transport cost (7.4 per cent) is on the higher side compared to that of South Africa (6.8 per cent) or Brazil (6.3 per cent) in 2010. The management and administration component of logistics cost is about two per cent in South Africa. If we assume the rate to be of the same magnitude in India, our estimate of logistics cost as per cent of GDP turns to be near 11 per cent of GDP. This is a back of envelope estimates and dated sometime back.

Like other countries, there is urgent need to track national logistics cost to increase the competitiveness of India.

(The writers are Senior Fellows, NCAER)