

PURCHASE MANAGEMENT IN STATE ROAD TRANSPORT CORPORATION IN INDIA

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ABSTRACT

Apart from the executive, social and cultural, benefits of a decent and efficient system of transport, it's now recognized that an efficient transport system could be a key consider the economic development of an under developed country. It's of course a precondition for strengthening economy. Within the absence of excellent roadways, railways, waterways and airways, a backward country will forever remain confined to the shell of its stagnant economy. The contribution made by road transport to employment is incredibly substantial. It's said that every transport vehicle on the road provides jobs for eleven persons. We've got an ambitious programme at industrial development. But such a programme can only be distributed with the assistance of road transport. Otherwise the raw materials might not reach the factories and also the manufactured goods might not reach the markets. Both production and distributions are to a greater extent obsessed with the supply of road transport facility. Road transport is indispensable for agriculture development too. The agriculturists won't be ready to pay proper remuneration required for his labour and also his investment of capital are blocked unless the markets for agricultural produce are made easily accessible. This can be only possible when good roads connect the villages with market centers in order that wastages of agricultural product are going to be eliminated. Road transport not only moves goods to assist industry, but also transport human resources. Buses and trucks are the sole type of the transport means, which might be used for the daily movement of enormous number of individuals from places around new industrial cities. Thus road transport mobilizes materials furthermore as human resources.

Keywords: *Efficiency, Development, Road Transport, Resource Management, Road Development.*

Introduction

Transport is that the life-blood of civilization and constitutes a crucial item of infrastructure for economic process. Effective transport system and communication are essential for the event of economy and standards of living of a rustic. It's been rightly observed that transportation sector is that the system of the economy when agriculture and industry are the body and bone of the national organism. It's also viewed that "Transport is Civilization". The importance of well developed means of transport is far needed within the Indian Sub-Continent due to its great size, long distances to be covered, and an oversized number of under developed areas to be developed and an outsized population to be served. Agriculture, industry, trade and the other economic activity depend to an outsized extent on the event of the transport system. No wonder, the quality of living of a rustic is rated in keeping with the event of transport system. Within the sphere of passenger road transport, public bus passenger transport provided by State Road Transport Undertakings (STUs) play a pivotal role. The individual in India heavily depends on public bus transport because it's the mode of cheap transport available and suitable to their pockets. It's appropriate at this stage to seem at the start of STUs in India. Road transport is that the second important mode of transport in India. It covers every corner of the

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country which the railway transport even couldn't cover. Road transport provides the essential infrastructural facilities to both the agricultural and industrial sector of the country. Moreover, construction and maintenance of roads can generate huge employment opportunities because it is twice as labour intensive as agriculture or housing. The highways, compose only 2 per cent of the road network by length, but carry 40 per cent of this traffic.

Objective of Study

The broad objective of this study is to look at the prevailing materials management system in State Road Transport Corporations, critically evaluate it and suggest methods for improving it so on achieve better results. This broad objective is crystallized into the subsequent sub-objectives:

- To look at the materials management practices on the premise of assorted parameters like materials consumption per vehicle, materials consumption per km, inventory per vehicle, etc.
- To review the purchasing systems and practices with a view to search out out major problems within the procurement of materials.
- To review the storekeeping systems and practices and to assist to develop computer-based issues and receipt systems so as to get reports on a true time basis.
- To review the forecasting method employed presently, and to suggest an acceptable method.
- To create appropriate suggestions for improving the materials management systems and practices in State Road Transport Corporations.

Review of Literature

B.N. Swamil has emphasised that conveyance is constrained with many objectives like provision of cheap, efficient, and economical services. Besides, there are many variables viz., inflation, occupation ratio, and rates which influence the earning capacity.

Anil Dey, the deficiencies within the system of managing materials are : (i) Materials had not been classified in terms of their cost relevance; (ii) Inventory levels had not been fixed; (iii) Procurement planning was left, mostly to the discretion and skill of the concerned store keepers; (iv) There was no semblance of any purchase control section; and (v) the fireproof fighting of emergent local purchases to much stock-outs, had been chronic.

Priya Ranjan Chaudhur has reported that the fundamental responsibility of the business department is to supply for the sleek flow of materials at all-time low ultimate cost from the proper sources, in order that production schedule will be effectively mentioned. He also stated that the efficiency of buying function will be assessed by judging reliability and financial stability of the suppliers.

Dr. K.K. Sharma and R.K. Agarwal have analysed that the reduction in inventories could also be taken as an indication of fine inventory management since blocking of money in large inventories will result in an adverse effect on the position of capital contrary to what's desired.

P.C. Basu has explained the impact of the three important factors namely purchase, stores, and consumption of materials, on the inventory management. He also stated that the various aspects of internal control techniques and suggests the way within which the standard of stores management are often improved, with particular techniques and approaches.

G.K. Sant has handled the issues like maintenance of enormous number of buses, management of enormous labour force of various categories from drivers, mechanics to depot and shop managers, and control of big stores to keep up a gentle flow of inputs to any or all operating units without undue inventory holdings. These problems cannot be solved without the utilization of a Management system properly evolved, analysed, and implemented at different levels of management.

P.S. Muthu, in his report has suggested that the mere application of internal control techniques isn't sufficient to induce the ultimate results. But simultaneously the finding of the techniques should be reported to the management in time, neatly, and properly, to require an appropriate decision at a right time and also to come to a decision future policies regarding inventory.

Rational of Study

The research could also be directed towards further refinements and extensions of the models already developed. The important task sooner than such research is in translating the theoretical achievements into practice with necessary modifications. The efforts are also directed towards overcoming the prevailing limitations. There's a desire for developing approximations, which can be amenable for usage in practice. It's useful to increase the applying to the civilian service oriented

organizations, such as, transport organizations and other public utilities. a nonstop monitoring of such systems are often tried. The research efforts should be directed towards attainment of total logistics system design, permitting the interplay of assorted parameters like, operations, breakdowns, repair maintenance, transportations, purchase and consumption patterns and other relevant parameters. It should try to achieve overall system effectiveness, like providing a desired level of service at rock bottom overall cost. Therefore, there's an urgent must change the research strategy in shifting the stress form one sub-system, like inventory function alone, to total materials management function as a full. It's considered that approximate solutions to total system problems is also much better than sophisticated exact optimal solutions to a selected sub-system and no solution to other sub-systems within the total system. Thus, within the future, the concentration of real research should consist developing an integrated systems design, permitting interplay of assorted aspects of the overall systems.

Research Methodology

The study is based on secondary data collected from:

- Published Annual administration Reports of State Road Transport Corporations
- The records of Management data system (MIS) wing of State Road Transport Corporations and
- The reports on the Performance of Nationalized Road Transport Undertakings of Central Institute of Road Transport, Pune.

The data per internal control and Stores consumption has been collected from the records of divisional stores. Besides reports and documents this study is predicated also on personal interviews with various officials - Financial, Technical and stores, sought clarification on the Statistical data and insight into the functioning of the Corporation. The performance Evaluation of an enterprise is also done by making a comparative study of its performance regarding its own past record and also in relevancy that of other corporations. within the evaluation of State Road Transport Corporations both these methods are used.

Results and Analysis

The below table shows the calculation of Expected time to be consumed and its standard deviation for each activity of purchase.

Table 1: Calculation of Expected Time and Relevant Standard Deviation

		a (most optimistic time)	m (most likely time)	b (most pessimistic time)	$(a+4m+b)/6$ Expected time	$(b-a)/6$ Activity Std. Deviation
1	Requisition made by various departments	12	24	36	24	4
2	Scrutinising the requisition-travelling	0	2	8	3	1.33
3	Scrutinising the requisition - special	3	10	15	10	2
4	invite tenders from the suppliers	0	12	36	14	6
5	Scrutinising the tenders by the committee	2	6	12	6	1.67
6	Placing purchase order	2	6	8	6	1
7	Follow-up	6	18	36	19	5
8	Receiving the materials and invoice checking	0	1	2	1	0.33
9	Inspecting the materials	0	5	15	6	3
10	Replacement of rejected materials	3	15	30	16	5
11	Receiving inspection receipt/report	6	12	24	13	3
12	Settlement of accounts	10	20	30	20	3.33

Source: Researcher's own calculations

The above table indicates that the most time consuming activity is requisition made by the department and it reaches to purchase department. After that the maximum time is spend in settlement of the accounts for the payment of vendors for the purchase made from them. However this activity do not disturb the current purchase process but could impact supply to be made for future orders as supplier may delay the supply in case he do not get the payment on time. Another most time consuming activity is taking follow up on order placed.

Table 2: Calculation of EST, EFT and LST, LFT

		Duration (In Days)	Earliest		Latest		Slack
			Start (EST)	Finish (EFT)	Start (LST)	Finish (LFT)	
1	Requisition made by various departments	24	0	20	0	20	0
2	Scrutinising the requisition-travelling	3	25	29	32	32	7
3	Scrutinising the requisition - special	10	30	40	30	40	0
4	invite tenders from the suppliers	14	35	42	35	42	0
5	Scrutinising the tenders by the committee	6	41	46	41	56	10
6	Placing purchase order	6	67	72	67	72	0
7	Follow-up	19	56	68	56	68	0
8	Receiving the materials and invoice checking	1	72	74	72	74	0
9	Inspecting the materials	6	81	86	81	86	0
10	Replacement of rejected materials	16	72	81	72	81	0
11	Receiving inspection receipt/report	13	109	118	109	118	0
12	Settlement of accounts	20	112	126	112	126	0

Source: Researcher's own calculations

It is evident from the results shown within the Table 2 that only 1 activity out of 12 activities was performed by the varied departments i.e., requisition of inventory made by the assorted departments. The range of duration of this activity performed is 30 days, which is considerably an extended duration for a selected activity. Because, the requisitions for the acquisition of inventory are to be made by the amount of departments viz., stores, production and control, and maintenance department. The second sort of activity is said to the executive works for putting the acquisition order. One a dummy activity arises in scrutinising the travelling requisition, which incorporates a slack period of seven days are often an exploratory study to point out that network technique can be applied to buy procedure programme and also to spot critical activities on which the companies can bestow more attention. It's revealed through the applying of the technique that the full time taken for grounding of purchase procedure was 164 days. The entire number of critical activities identified was 11 out of 12 activities considered for the network. Such an outsized number of critical activities is unexpected and maybe unusual. This can be mainly thanks to the existence of an outsized number of sequential activities, as against parallel activities within the network visualised by the transport corporations. It's also necessary to single out the critical activities with larger time durations like, requisition made by various departments (24 days), settlement of accounts (20 days), and follow-up order (19 days), and replacement of rejected materials (16 days). The postponement involved in each of the above critical activities should be minimised considerably. During this context, a correct planning and management of purchase activity should be, stipulated in a very meaningful way in practical adoption.

Conclusion

Purchasing is one in every of the key functions of materials management. Roughly 40% of the revenue of the STUs is employed towards purchasing. Therefore it concerns streamlined purchase procedures and proper planning, execution and control of purchase function. The acquisition procedure in State Road Transport Corporation has been found to be not totally acceptable therein it's dilatory and therein it lacks responsibility and commitment. As discussed earlier the purchasing authority for the procurement of major items rests during a committee consisting officers from various departments. Delays in any enterprise may be disastrous. This has been the most criticism of the personnel belonging to the various departments in State Road Transport Corporation itself. The purchases procedure must be streamlined and authority for purchases delegated and assigned at different levels to make sure efficiency and objectivity within the entire purchase procedure. It's necessary that the authority delegated should be adequate backed by the authority to sanction and get the things that are necessary. It's therefore suggested that a system of rating the performance of major suppliers is also evolved. Within the performance evaluation three important aspects is also included namely the standard of the item, the worth and therefore the delivery efficiency. One other observation which is formed is Analysis of buying systems and practices in State Road Transport Corporation showed the absence of the uses of important analytical techniques like value analysis and network techniques, which have an excellent potential for cost reduction. It are often suggested therefore, that these techniques, particularly value analysis be utilized in bodybuilding, major repairs and fabrication works and within the purchase of non-proprietary and multi source items.

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