A STUDY ON MEASUREMENT OF MSRTC OPERATING COST WITH REFERENCE COST MANAGEMENT.

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ABSTRACT:
The research study is conducted on measurement of operating cost of MSRTC with reference to cost management. Various operating cost are considered for the measurement, the costs like personnel cost, material cost, M.V taxes Depreciation, interest, Miscellaneous expenses etc. and it ratio to total cost. The profit /loss of MSRTC during study period. This is very important to analyze the various cost and its effect on overall performance of MSRTC. The information is collected from profile and performance of State Transport Corporation Undertakings. The study period is 2012-13 to 2015-16.

KEY WORDS: MSRTC, operating cost, Economic Development, Performance Measurement

INTRODUCTION:
Maharashtra State Road Transport Corporation (MSRTC) provide network across the entire state of Maharashtra. Problems of MSRTC about private competitors are increased. For economic profitability, measurement of operating cost management is very important. MSRTC provides connectivity to each and every village by bus service at reasonable fare and concessions. MSRTC’s principal slogan is "Where there is a road there is a bus service".

Growth in industrialization, urbanization helps to develop economy of road transport. The road transport is one of the major revenue earning departments of the state government. The economic improvement of a country and the advancement of civilization depend on the road transport. The research study is conducted on measurement of operating cost of MSRTC with reference to cost management. The research paper is focused on various operating costs of Maharashtra State Road Transport Corporations is primary objective of study and secondly it considers the impact of operating cost to total cost. This is very important to analyze the various cost and its effect on overall performance of MSRTC. The information is collected from profile and performance of State Transport Corporation Undertakings. The study period is 2012-13 to 2015-16.
OBJECTIVES:
1) To study the operating cost of MSRTC
2) To determine the impact of various cost like personnel cost, material cost, various taxes, interest cost, Miscellaneous and other cost, Depreciation.

RESEARCH METHODOLOGY:
The research paper contains primary and secondary data. The study period covers from 2012-13 to 2015-16. For required information related to research is collected from CIRT. Statistical tools used to calculate averages, percentage, ratios etc.

OPERATING COST OF MSRTC:

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<tbody>
<tr>
<td>1</td>
<td>Personnel cost</td>
<td>263343.34</td>
<td>280354.93</td>
<td>306251.08</td>
<td>317869.69</td>
<td>291954.8</td>
</tr>
<tr>
<td>2</td>
<td>Material cost</td>
<td>233293.52</td>
<td>287768.54</td>
<td>310133.93</td>
<td>263081.26</td>
<td>273569.3</td>
</tr>
<tr>
<td>3</td>
<td>M.V. Taxes</td>
<td>1588.20</td>
<td>1005.77</td>
<td>1357.31</td>
<td>1123.88</td>
<td>1268.79</td>
</tr>
<tr>
<td>4</td>
<td>Depreciation</td>
<td>36457.28</td>
<td>40817.62</td>
<td>37294.78</td>
<td>35466.38</td>
<td>37509.02</td>
</tr>
<tr>
<td>5</td>
<td>Interest</td>
<td>250.24</td>
<td>120.03</td>
<td>150.93</td>
<td>145.90</td>
<td>166.775</td>
</tr>
<tr>
<td>6</td>
<td>Miscellaneous expenses</td>
<td>20447.62</td>
<td>26674.99</td>
<td>24572.21</td>
<td>23829.47</td>
<td>23881.07</td>
</tr>
<tr>
<td>7</td>
<td>Total cost</td>
<td>555380.2</td>
<td>636741.88</td>
<td>679760.2</td>
<td>641516.6</td>
<td>628349.7</td>
</tr>
<tr>
<td>8</td>
<td>Profit /Loss</td>
<td>-42883.30</td>
<td>-57265.55</td>
<td>-39101.18</td>
<td>-12188.47</td>
<td>-37859.6</td>
</tr>
</tbody>
</table>

(fig.in lakhs)
From the above table it is found that every year MSRTC is in loss during study period. Various cost are considered for the study like personnel cost, material cost, M.V taxes, Depreciation, interest, Miscellaneous expenses etc. The average personnel cost on MSRTC is Rs.291954.8 lakhs for the year 2012-13 to 2015-16. Personnel cost is increased by Rs.17011.6 in the year 2013-14 as compared to previous year i.e.2012-13. the amount of personnel cost is increased by Rs.25896.2 in the year 2014-15 as compared with last year. Personnel cost is increased minimum by Rs.11618.6 in the 2015-16 as compared to previous years i.e.2012-13.2013-14 and 2014-15. The average cost of MSRTC is Rs.273569.3. The amount of material cost is increased by Rs. 54475.02 in the year 2013-14 as compared to previous year i.e.2012-13. The material cost is increased by Rs. 22365.39 in the year 2014-15. The material cost is decreased by Rs.47052.67 in the year 2015-16. M.V. taxes average paid by MSRTC is Rs.1268.79. every year M.V. Taxes amount is fluctuating. The highest amount paid by MSRTC is Rs.1588.20 in the year 2012-13 and lowest amount paid is Rs.1005.76 in the 2013-15. The average depreciation for last four years is 37509.02. Depreciation amount is increased by Rs.4360.34 in the year 2013-14. The amount of depreciation is decreased by Rs.3522.84 in the year 2014-15. Depreciation amount is decreased by Rs.1828.4 in the year 2015-16. The average interest paid
by MSRTC is Rs.166,775lakhs. Miscellaneous expenses paid by MSRTC is Rs.23881.07. Interest paid by MSRTC is highest in the year 2012-13 is Rs.250.24 lakhs and lowest amount of interest is paid by MSRTC is Rs.120.03 in the year 2013-14. the amount of miscellaneous expenses is increased by Rs.6227.37 and is decreased by Rs.2102.78 lakhs and Rs.742.74 lakhs from 2014-15 to 2015-16.

Total average cost of MSRTC is Rs.628349.7 the average loss of MSRTC from 2012-13 to 2015-16 is Rs.37859.6. Highest loss during the study period of MSRTC is Rs.-57265.55 in the year 2013-14 and minimum loss is Rs.-12188.27 in the year 2015-16.

**ANALYSIS OF OPERATING COST TO TOTAL COST RATIO % of MSRTC:**

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<tbody>
<tr>
<td>1</td>
<td>Personnel cost</td>
<td>47.42</td>
<td>44.03</td>
<td>45.05</td>
<td>49.55</td>
<td>46.51</td>
</tr>
<tr>
<td>2</td>
<td>Material cost</td>
<td>42.01</td>
<td>45.19</td>
<td>45.62</td>
<td>41.01</td>
<td>43.45</td>
</tr>
<tr>
<td>3</td>
<td>M.V.Taxes</td>
<td>0.29</td>
<td>0.16</td>
<td>0.20</td>
<td>0.18</td>
<td>0.20</td>
</tr>
<tr>
<td>4</td>
<td>Depreciation</td>
<td>6.56</td>
<td>6.41</td>
<td>5.49</td>
<td>5.53</td>
<td>5.99</td>
</tr>
<tr>
<td>5</td>
<td>Interest</td>
<td>0.05</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>6</td>
<td>Miscellaneous expenses</td>
<td>3.68</td>
<td>4.19</td>
<td>3.61</td>
<td>3.71</td>
<td>3.79</td>
</tr>
</tbody>
</table>

From the above table, performance of MSRTC personnel cost to total cost ratio is highest in the year 2015-16 i.e. 49.55%. Lowest personnel cost during the study period is 44.05% in the 2013-14. During the study period, personnel cost to total cost ratio, the average ratio is i.e 46.52%. Personnel cost to total cost ratio is above the average cost in the year 2012-13 and 2015-16 and is below the average ratio in the year 2013-14 and 2014-15.

Material cost to total cost ratio is maximum i.e. 45.62 in the year 2014-15 and is minimum i.e. 41.01 in the year 2015-16 during the study period. During study period, the material cost to total cost ratio, the average cost is 43.45%. Material cost to total cost ratio is above the average cost in the year 2013-14 and 2014-15 and is below the average cost in the year 2012-13 and 2015-16.

Motor vehicle taxes to total cost ratio is maximum i.e. 0.29 in the year 2012-13 and is minimum i.e. 0.18 in the year 2015-16. The average of Motor Vehicle taxes to total cost ratio is 0.20. The motor vehicle taxes is above the average cost in the year 2012-13 and is equal in the 2014-15. It is below the average cost in the year 2013-14 and 2015-16.

Ratio of depreciation to total cost is calculated. The average depreciation to total cost ratio is 5.99. The maximum depreciation to total cost ratio is in the year 2012-13 i.e. 6.56 and is minimum in the year 2014-15 i.e. 5.49. The depreciation to total cost ratio is above the average cost in the year 2012-13 and 2013-14 and
is below the average cost in the year 2014-15 and 2015-16. The ratio is fluctuating every year during the study period.

The ratio of interest to total cost is considered to analyze the data. The ratio of interest to total cost is maximum in the year 0.05 and is equal in the years 2013-14 to 2015-16. The average interest to total cost ratio is 0.02. Interest to total cost ratio is above the average cost in the year 2012-13 and is equal to average cost in remaining years.

The average cost of miscellaneous expenses to total cost ratio is 3.79. The miscellaneous expenses to total cost ratio is above the average cost in the year i.e. 2013-14 i.e. 4.19 and is below the average cost in the year 2012-13, 2014-15 and 2015-16 i.e. 3.68, 3.61 and 3.71.

**FINDINGS:**

- The average personnel cost on MSRTC is Rs. 291954.8 lakhs for the year 2012-13 to 2015-16. Personnel cost is increased by Rs. 17011.6 in the year 2013-14 as compared to previous year i.e. 2012-13.
- The amount of material cost is increased by Rs. 54475.02 in the year 2013-14 as compared to previous year i.e. 2012-13.
- M.V. taxes average paid by MSRTC is Rs. 1268.79.
- M.V. Taxes amount is fluctuating every year; the highest amount paid by MSRTC is Rs. 1588.20 in the year 2012-13.
- The average depreciation for last four years is 37509.02. Depreciation amount is increased by Rs. 4360.34 in the year 2013-14.
- Total average cost of MSRTC is Rs. 628349.7 the average loss of MSRTC from 2012-13 to 2015-16 is RS. -37859.6.
- Personnel cost to total cost ratio, the average ratio is i.e. 46.52%.
- The maximum depreciation to total cost ratio is in the year 2012-13 i.e. 6.56 and is minimum in the year 2014-15 i.e. 5.49
- Motor vehicle taxes to total cost ratio is maximum i.e. 0.29 in the year 2012-13.

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