



Financial Performance Evaluation of the Nagaland State Transport: A Case Study

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KEYWORDS :

Introduction

The achievement of a socialistic pattern of society has been one of the evolved objectives of economic policy of India. This is sought through 'assigning an expanding role to the public sector'. However, the tilt towards privatization in the world economic today under globalization requires an objective assessment of public sector enterprises.

Public sector enterprise comprises large variety of manufacturing undertaking producing basic goods like steel, fertilizers, chemicals, mining, electrical goods etc and non-manufacturing activities like industrial and agricultural finance, insurance services and transport etc. Just after independence, owing to obvious reason; public sector enterprises were regarded as an important vehicle to achieve socio-economic objectives, although there has been a shift in the approach to achieve such objectives, particularly due to globalization after 1991. The need for public sector arises out of the fundamental duty of the state to work for the welfare of the people, to increase their economic welfare by adjusting production to social needs, and ensuring equitable distribution of such goods and services. Accordingly, several key activities were kept reserved for public enterprise. Many of them are still continuing in the public sector even in a liberalized economy. Transportation is of such activity which is still carried on by public sector in addition to private participation.

Public Transport Services are quite different from other manufacturing and trading industries as its principal aim is rendering services rather than earning profits. The financial performance of road passenger transport organization has to be viewed against the background of the organizations objectives. Although it may be conceded that performance analysis of any organization runs on business principle is incomplete without an analysis of financial performance, it has to be borne in mind that satisfaction of public demand for transportation is the basic objective of these organisations. That this must be undertaken in an economic manner inherent in the objective itself, since this organizations can not serve their customers efficiently and for long unless they observe strict economic discipline. One of the requirements of such discipline is to generate a surplus which must at least partly take care of their sustenance and growth.

OBJECTIVES OF THE STUDY

The over all objective of this study is to evaluate Financial Performance of the Nagaland State Transport (NST). However, the specific objectives are identified as follows:

1. To analysis the operational efficiency of NST with reference to selected indicators of Financial Performance.
2. To study the growth of NST by determining the Annual Percentage Growth Rate of the parameters of the Financial Performance.

RESEARCH METHODOLOGY

The primary objective of NST is to provide efficient, adequate, economical and co-ordinated transport services to the traveling public. However, it is to organize itself on business terms, while achieving the aforesaid objectives. The appraisal of these necessitates elucidation of financial factors. A period of fifteen years from 1997-98 to 2011-2012 is considered for the purpose of this study. The indicators of financial performance are the Cost and Revenue, Cost and Revenue per Bus and Per Effective Kilometres, Operating Ratio, and Capital Employed.

Present study is an empirical in nature and mainly based on second-

ary data. The data required for the study are collected from the Annual Administrative Reports of NST, Records of the Department of Transport and Communication, other Periodical and Publications of the concern Department and Statistical Hand Book of Government of Nagaland. The data so collected are classified, tabulated and analysed as per the requirement of the study. The important statistical tools like Percentage, Average, Ratios and Growth Rate using Annual Percentage Growth Rate (APGR) formula and Compound Annual growth Rate (CAGR) formula have been used to analysis and interpret the collected data in order to draw inferences and conclusions.

ANALYSIS AND INTERPRETATION

In order to have a meaningful analysis of the Financial performance of NST, parameters of evaluation are discussed at length in the ensuing text.

1. Cost and Revenue:

Cost and revenue are the two important financial indicators that contribute to the profitability of an under taking. The total cost and Total Revenue and difference thereof indicate net surplus/deficit. For NST, the total cost includes the total operating cost, miscellaneous expenses, depreciation, taxes and others. While, total revenue is calculated by adding miscellaneous receipts with the operating revenue.

It is observed from the Table 1.1 that NST had been incurring net loss in each year from the period 1997-98. The net loss or deficit of Rs. 8.82 crores in 1997-98 has risen to Rs.22.63 crores in 2011-12. There has been an increase trend of net loss over the period excepting the years 2004-05, 2005-06, 2007-08 and 2011-12 when the deficit declined as compared to their previous years. The total cost of Rs. 10.36 crores in 1997-98 has increased to 38.03 crores in 2011-12, indicating APGR of 17.81 percent annually. Similarly, the total revenue showed an increasing trend from Rs. 2.42 crores in 1997-98 to Rs. 15.40 crores in the year 2011-12 with an APGR of 35.76 percent annually. However, during the year 2006-07 when the revenue earned declined to Rs. 8.03 crores as against Rs. 9.45 crores in the previous year.

Table 1.1.
Cost and Revenue (Rs.in Crores)

Year	Total Revenue earned	Total Cost	Surplus/Deficit (Net)
1997-98	2.42	10.36	-8.82
1998-99	2.50	11.32	-11.55
1999-00	3.82	15.37	-11.55
2000-01	5.16	16.68	-11.52
2001-02	5.10	16.98	-11.88
2002-03	5.52	17.61	-12.09
2003-04	5.75	20.67	-14.92
2004-05	7.30	18.58	-11.28
2005-06	9.45	20.26	-10.81
2006-07	8.03	22.63	-14.60
2007-08	9.91	23.58	-13.67
2008-09	9.37	27.55	-18.18
2009-10	11.22	32.22	-21.00
2010-11	12.74	36.27	-23.53
2011-12	15.40	38.03	-22.63

Source: - 1. Annual Administrative Report of NST, 1997-98 to 2011-12.

2. Statistical Hand Book of Nagaland 2004, 2007, 2008, 2009 and 2011.

3. Statement of Resource NST, 1997-98 to 2011-12

2. Operating Cost and Operating Revenue:

Operating cost and operating revenue as well as operating surplus/deficit are also important indicator of financial performance. Operating costs is calculated by deducting miscellaneous expenses, depreciation fund, taxes, and others from the total cost. While operating revenue is obtained by deducting miscellaneous receipts from the total revenue. The difference between operating cost and operating revenue is the operating surplus/deficit. The operating costs indicate the cost of running the fleets. While operating revenue indicates the revenue earning of the fleets.

Table: 1.2. Operating Cost and Operating Revenue (Rs. in Crores)

Year	Operating Cost	Operating Revenue	Operating Loss/Deficit
1997-98	8.66	2.11	6.55
1998-99	9.65	2.31	7.34
1999-00	13.12	3.51	9.81
2000-01	14.43	4.81	9.62
2001-02	14.34	4.83	9.51
2002-03	15.43	5.22	10.21
2003-04	18.00	5.62	12.38
2004-05	15.24	6.90	8.34
2005-06	16.56	9.00	7.56
2006-07	18.58	7.73	10.85
2007-08	19.43	9.46	9.97
2008-09	22.27	9.10	13.67
2009-10	26.03	10.62	15.41
2010-11	31.17	12.24	18.93
2011-12	33.66	14.70	18.96

Source: - 1. Annual Administrative Report of NST, 1997-98 to 2011-12.

2. Statistical Hand Book of Nagaland 2004, 2007, 2008, 2009 and 2011.

3. Statement of Resource NST, 1997-98 to 2011-12

Table 1.2 shows the pattern of operating cost, operating revenue and operating surplus/deficit of NST over the period under study. It is observed from the table that NST continued to incur operating deficit or loss in each year during the period of last 15 years from 1997-98 to 2011-12. Operating costs increased to Rs.33.66 Crores in 2011-12 as against Rs.8.66 Crores in 1997-98. This indicates 19.25 percent Annual Percentage Growth Rate (APGR) during the period under study. The highest operating cost of Rs.33.66 Crores was observed in 2011-12. The lowest operating revenue of Rs.2.11 Crores recorded in 1997-98. Although, the operating revenue of NST grew at the rate of 39.78 percent annually during the period from 1997-98 to 2011-12, The operating loss during the period has increased from Rs. 6.55 Crores in 1997-98 to Rs. 18.96 Crores in 2011-12 with an APGR of 12.63 annually.

3. Operating Ratio:

Operating ratio is an important index for measuring the financial performance of public utilities like transport organisation. The operating ratio is defined as:

$$\frac{\text{Operating Cost}}{\text{Operating Revenue}} \times 100$$

For the purpose of calculating operating ratio, miscellaneous expenses, depreciation, taxes and others are excluded from the total cost.

Operating Revenues are the main source of income for the transport

undertaking. All the sources under which a bus operator gets his income are classified into traffic and non-traffic sources. The former is called operating revenue. The traffic source includes the passenger fares, freight, receipt from contract and tourist bus service and reservation fees. While the latter includes the proceeds from publicity and advertisement, royalty from canteens and stalls, sale proceeds of obsolete buses and spares and other receipts like interest and dividends on the investment of surplus funds, though sources of income are many, but earnings from non-traffic sources are meager.

Table: 1.3. Operating Ratio (Rs. in Crores)

Year	Operating Cost	Operating Revenue	Ratio of Operating Cost to Operating Revenue (%)
1997-98	8.66	2.11	410.43
1998-99	9.65	2.31	417.75
1999-00	13.12	3.51	373.79
2000-01	14.43	4.81	300.00
2001-02	14.34	4.83	296.89
2002-03	15.43	5.22	295.59
2003-04	18.00	5.62	320.28
2004-05	15.24	6.90	220.87
2005-06	16.56	9.00	184.00
2006-07	18.58	7.73	240.36
2007-08	19.43	9.46	205.39
2008-09	22.27	9.10	244.73
2009-10	26.03	10.62	245.10
2010-11	31.17	12.24	254.66
2011-12	33.66	14.70	228.98

Source: - 1. Annual Administrative Report of NST, 1997-98 to 2011-12.

2. Statistical Hand Book of Nagaland 2004, 2007, 2008, 2009 and 2011.

3. Statement of Resource NST, 1997-98 to 2011-12

The lower the operating ratios, better the performance of transport undertaking. In case of NST, the operating ratio is almost double of the Operating Revenue as shown in Table 1.3. The operating ratio in each year is substantially more than hundred which means cost of services could not be met from the revenue. This is not an inspiring performance of NST, also, the financial performance on the basis of total expense and revenue is not healthy.

4. Cost and Revenue per Kilometer:

For any Road Transport undertaking the main and utmost important financial performance indicator is cost per kilometer because it together with earning per Kilometer decides the fare. The profitability of an organisation is a function of both cost and revenue (prices), which are equally valid in the case of the passenger road transport industry too. An organisation may incur loss either because the costs go up, the price remaining the same or costs remaining the same the price/fare may fall. The second phenomenon of fare coming down does not ordinarily arise in the case of passenger road transport industry for reasons of relative inelasticity of demand for the service, monopoly rights conferred on the services and state regulation of fares.

The cost of operation in absolute terms does not by itself indicate measure of costs. Costs have to be worked out to compare the cost of providing the service with the rate of earnings. Cost per kilometer is one of such relative measure which is computed by selecting effective kilometer as a unit of measurement.

The cost per kilometer is computed by dividing the total cost of operations by the total effective kilometre. Similarly, revenue in absolute terms without reference to kilometre will not correctly reflect the 'profitability' of the operation. Revenue per kilometre is one of the useful ratios to indicate the earning potential of a rate/depot/division organisation.

The revenue per kilometre is related to the carrying capacity of the buses, fare structure and the earning potential of the route(s). The

revenue per kilometre is calculated by dividing total revenue by total effective kilometres. The revenue per kilometre is related to traffic revenue and not to gross revenue.

Table : 1.4.
Operating Cost and Operating Revenue per Kilometres (In Rupees)

Year	Operating Cost per kilometer	Operating Revenue per kilometer	Operating loss per kilometer
1997-98	10,677	2,601	8,076
1998-99	4,663	1,116	3,547
1999-00	16,020	3,939	12,081
2000-01	17,138	5,713	11,425
2001-02	6,853	2,308	4,545
2002-03	6,803	2,301	4,502
2003-04	7,224	2,255	4,969
2004-05	4,905	2,221	2,684
2005-06	6,647	3,613	3,034
2006-07	9,132	3,799	5,333
2007-08	8,654	4,213	4,441
2008-09	10,018	4,094	5,924
2009-10	11,093	4,526	6,567
2010-11	12,615	4,954	7,661
2011-12	13,056	5,702	7,354

Source: - 1. Annual Administrative Report of NST, 1997-98 to 2011-12.
2. Statistical Hand Book of Nagaland 2004, 2007, 2008, 2009 and 2011.
3. Statement of Resource NST, 1997-98 to 2011-12

In order to throw more light on the cost and revenue trend of NST, the average cost and revenue per effective kilometre have been worked out and shown in Table 1.4. It is observed that cost per effective kilometre for NST during the period under study increased from Rs. 10,677 in 1997-98 to Rs. 13,056 in 2011-12 with fluctuation in between, indicating APGR of 1.5 percent annually. The highest operating cost per kilometre of Rs. 17,138 was recorded in the year 2000-01 and the lowest of Rs. 4,663 recorded in the year 1998-99. Similar fluctuating trend of revenue per effective kilometre is also noticeable for NST during the last fifteen (15) years. Revenue per effective kilometre of Rs. 2,601 during the year 1997-98, which went upto Rs. 5,702 in the year 2011-12 with APGR of 7.9 percent annually. The highest revenue earning of Rs. 5,713 was recorded in the year 2000-01 and the lowest of Rs. 1,116 recorded in 1998-99. The last column of the table shows the excess of cost per effective Kilometers over revenue per effective kilometre indicating deficit/loss for NST in each year of the study period.

5. Cost and Revenue per Bus:

Similar to cost and revenue per effective kilometre, cost and revenue per bus is also an important financial indicator for evaluating the performance of road transport undertakings. Operating cost and operating revenue per bus are considered for such evaluation. Operating cost per bus is computed by dividing the total operating cost with fleet strength. Similarly, revenue per bus is calculated by dividing total operating revenue with fleet strength

Table 1.5 shows the worked out figure of cost and revenue per bus for NST in each year for the last fifteen (15) years under study. The figures in the table are expressed in lakhs. It is observed from the table that cost per bus in each year is more than revenue per bus making operating loss for NST in each successive years from 1997-98 to 2011-12. Operating Cost per bus of Rs. 4.5820 lakhs in 1997-98 which increased to Rs. 17.7158 lakhs in 2011-12, indicating an APGR of 19.11 percent.

Operating Revenue per bus shows fluctuating trend for NST. In the year 1997-98 the revenue per bus was Rs. 1.1164 lakhs which increased to Rs. 7.7368 lakhs in the year 2011-12, recording APGR of 39.53 percent. The last column in the table shows excess of operating

cost per bus over the operating revenue per bus in each year indicating deficit/operating loss per bus for NST during the study period.

Table : 1.5.
Operating Cost and Operating Revenue per Bus (Rs. in Lakhs)

Year	Operating Cost per bus	Operating Revenue per bus	Operating loss per bus
1997-98	4.5820	1.1164	3.4656
1998-99	6.1075	1.4620	4.6455
1999-00	7.1304	1.9076	5.2228
2000-01	13.8750	4.6250	9.2500
2001-02	10.0986	3.4014	6.6972
2002-03	9.7658	3.3038	6.4620
2003-04	10.0559	3.1397	6.9162
2004-05	7.6583	3.4673	4.1910
2005-06	7.4932	4.0724	3.4208
2006-07	8.6019	3.5787	5.0232
2007-08	8.7130	4.2421	4.4709
2008-09	9.4766	3.8723	5.6043
2009-10	12.0509	4.9167	7.1342
2010-11	15.3547	6.0296	9.3251
2011-12	17.7158	7.7368	9.9790

Source: - 1. Annual Administrative Report of NST, 1997-98 to 2011-12.
2. Statistical Hand Book of Nagaland 2004, 2007, 2008, 2009 and 2011.
3. Statement of Resource NST, 1997-98 to 2011-12

6. Profitability Trend:

Profitability is yet another financial indicator for passenger road transport undertakings. As a matter of fact, profitability trend is the only sole indicator that speaks about how efficiently the transport business is providing services to its commuters. Unprofitable organisations cannot provide better services to its commuters in the long run irrespective of its form of ownership. This is why annual profit or loss is ascertained to know how much is generated against the amount spent. Under profitability trend, four indicators are taken to evaluate the financial performance of NST. These four indicators of profitability trend are –

- (i) Operating surplus/Deficit
- (ii) Gross Surplus/Deficit
- (iii) Net Surplus/Deficit
- (iv) Cumulative Surplus/Deficit

For computation of operating surplus/deficit, total operating cost is deducted from total operating revenue or total traffic earnings.

Gross surplus/deficit is obtained by adding/deducting the difference between the miscellaneous receipts and miscellaneous expenditure with the operating surplus/deficit.

Net surplus/deficit is ascertained by deducting depreciation reserve fund, taxes, interest payment to the state govt., central govt. and others from the gross surplus.

Cumulative surplus/Deficit is arrived by adding successive net surplus/deficit. In case of NST, it is surprising to note that it has been incurring losses or deficit in each year from 1997-98 to 2011-12 as shown in Table 1.6. In the year 1997-98 the operating loss was Rs. 6.55 Crores, gross loss was Rs. 7.94 Crores and Net Loss was Rs.7.94 Crores. The operating loss increased to Rs. 18.96 Crores in 2011-12. Gross loss recorded Rs. 18.69 Crores and Net loss recorded Rs. 22.63 Crores at the end of the year 2011-12. Upto the last year of the study period the total cumulative loss stood at Rs. 281.41 Crores as against only Rs. 70.98 Crores in the year 1997-98. This indicates that the cumulative loss of NST grew with Compound Annual Growth Rate (CAGR) of 9.62 percent per year.

Table: 1.6.
Profitability Trend
(Rs. in Crores)

Year	Operating Loss	Gross Loss	Net Loss	Cumulative Loss
1997-98	6.55	7.94	7.94	70.98
1998-99	7.34	8.78	8.82	79.8
1999-00	9.81	11.35	11.55	91.35
2000-01	9.62	11.35	11.52	102.87
2001-02	9.51	9.84	11.88	114.75
2002-03	10.21	10.21	12.09	126.84
2003-04	12.38	12.75	14.92	141.76
2004-05	8.34	8.69	11.28	153.04
2005-06	7.56	7.90	10.81	163.85
2006-07	10.85	11.05	14.60	178.45
2007-08	12.70	13.04	17.62	196.07
2008-09	13.67	14.05	18.18	214.25
2009-10	15.41	16.01	21.00	235.25
2010-11	18.93	18.76	23.53	258.78
2011-12	18.96	18.69	22.63	281.41

Source: - 1. Annual Administrative Report of NST, 1997-98 to 2011-12.
2. Statistical Hand Book of Nagaland 2004, 2007, 2008, 2009 and 2011.
3. Statement of Resource NST, 1997-98 to 2011-12

7. Return on Capital Employed:

A measure of the rate of return on capital employed is the profitability criterion of general significance. It is an important ratio which indicates financial performance of an undertaking. The basic calculation of the rate is profit divided by capital employed, but these terms need more elaboration.

For the purpose of this study, capital employed has been taken to mean investment by owners i.e., networth. Networth is computed as equity capital plus internal capital. However, in the case of transport undertakings, there does not any equity capital base. The main capital bases in transport undertakings have been treated as equity capital in computing the networth. Similarly, in the case of Departmental Undertakings the net capital block is taken as equity capital and included in the computation of networth.

Thus,

$$\text{Net worth} = \frac{\text{Government (Central \& State) contributions/State}}{\text{Government outlays/State Government share Capital} + \text{internal sources.}}$$

While profit is defined as earnings before interest and taxes (EBIT) and thus gross profit plus depreciation fund is taken for computation of return on investment (ROI).

It is noted from Table 1.7 that rate of return on investment is negative in all the years during the period under study. Since, NST has been incurring losses in every year; the negative rate of Return on Capital Employed is fluctuating between 15.75% and 30.49%. In the year 2009-10 the negative rate of return on investment stood at 20.27% as against 25.34% in 1997-98.

Table: 1.7.
Return on Capital Employed
(Rs. in Crores)

Year	Capital Employed	Profit/Loss	Rate of Return On Capital Employed (%)
1997-98	31.97	-8.10	-25.34
1998-99	35.13	-8.85	-25.19
1999-00	37.95	-11.57	-30.49
2000-01	39.91	-11.57	-28.99
2001-02	39.91	-11.74	-29.42
2002-03	48.56	-12.07	-24.86
2003-04	55.12	-14.72	-26.71
2004-05	61.66	-11.08	-17.97
2005-06	67.38	-10.61	-15.75
2006-07	73.73	-14.30	-19.40
2007-08	82.65	-16.34	-19.77
2008-09	89.78	-17.35	-17.33
2009-10	96.20	-19.50	-20.27

Source: - 1. Annual Administrative Report of NST, 1997-98 to 2011-12.
2. Statistical Hand Book of Nagaland 1997, 2000, 2004, 2005, 2007, 2008, 2009 and 2011.
3. Statement of Resource NST, 1994-95 to 2008-09

CONCLUSION

The study highlights the Financial Performance of NST. Over the years the NST has been able to gather the needs of the traveling public by fulfilling their aspiration to a greater extend. The NST provides most economical and well coordinated Transport service to the Traveling public. But, its Financial Performance is not very impressive. It has not been a commercially viable unit, but is being applauded for its social consideration.

The findings of this study will help the government to decide on the share of private and public sector in passenger road transport and for the overall development of Transport system in Nagaland. The study will also help the NST to improve its Performance. Like all other unprofitable Public Sector Undertakings, NST requires to be revitalized and restructured in line with the policy of Corporatisation. Once NST is corporatised, it will not only reduce the burden of the government's ex-chequer but also will be able to take the advantage of a professional management which in turn will revamp the ailing state owned road transport.

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