CHAPTER – 6

FINANCIAL EFFICIENCY
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6.1. INTRODUCTION:

In this chapter an attempt is made to understand the issue financial efficiency in the power sector in Andhra Pradesh. The study period as before, as divided in to two parts i.e., pre-reform period (1990-91 to 1998-99) and post-reform period (1999-2000 to 2005-06). In pre-reform period the entire power sector was under the control of Andhra Pradesh State Electricity Board.

As we saw in earlier a chapter that is the post-reform period there was change in the organizational structure in the state sector through corporatization and dividing up of the APSEB. Further, power sector was opened up to the private sector. The Board’s financial health can be improved through cost reduction and additional revenue earnings. Cost can be reduced in many ways. There are possibilities of cost reduction though technical efficiency improvement and reduction in labor cost, pilferage and interest burden, and the last of these can be reduced through proper capital restructuring. Although the technical performance has improved but there is scope of reducing auxiliary and coal consumption. Reductions in auxiliary losses will earn additional revenue through selling of the additional electricity that will be available.

HYPOTHESES:

The following hypotheses were set for examination in this chapter:

\[ H_7 = \text{The financial efficiency has improved in the post reform period compared to pre reform period.} \]

\[ H_8 = \text{Because of the reforms the financial condition of the Andhra Pradesh} \]
power sector has improved.

6.2. CAPITAL INVESTMENT & SALES OF ENERGY:

Table 6.1 capital investment indicates the capital investment incurred in generation, transmission and distribution since 1991-2006. The capital investment for generation of the power increased from 191.14 to 561.41 during 1991-1999 and registered 14.59% of growth during the same period for the transmission and distribution of power the capital investment also increased and registered 1.75% and 15.57%. During the same period respectively. It also can be seen from the table 6.1, that the capital investment in the power generation has slow down and registered only 12.52% of growth during the post reform period. Same declining tendency also observed in the case of transmission process. However the capital investment has increased and registered 16.42% of growth during the post reform period more over in the post reform period (11.47% of growth) comparative the pre-reform period (9.52% of growth).

Table 6.2, sales of energy category wise. The data presented in the table 6.2 tells the sales of energy from 1991-1992 to 2005-06. The table mainly shows sales of energy from L.T category, H.T. categhory and ytotal L.T and H.T categories. In L.T. category the Exp. Growth rate was 5.67% it is in pre-reform period. In post-reform period the exp. Growth rate increased considerably to 6.21%. In all sectors in L.T. category from 1 to 8 categories in sales of energy is increasing constantly. Specially in category 5th catefgory I.e., in agriculture that sales are in 1993-4, 1994-95, 1995-96, 1996-97 and 1997-98 the sales in MU are 9022.00, 10922.00, 13399.00, 7833.00 and 9336.00 respectively. It is light or slow fluctuation in its sales. But after post-reform period its growth rate was lowly increased.

In H.T. sector during the years 1991-92 to 1998-99 the sales shows an exp. growth rate of 0.99% after reforms in 1999-2000 to 2005-06 the exp.growth rate is 11.81. it is rapid change and improvement in its sales. It could be observed from the data that major proportion of sales of energy had been recorded in the case of sales of energy in pre-
reform period the exp.growth rate was 4.12% and in post-reform period the exp.growth rate was 7.73%. It is a remarkable increase it its sales. So the table shows after reforms the sales of energy is increased.

6.3. DEVELOPMENT IN FIVE YEAR PLANS:

Table 6.3 progress under five year plans shows the progress under the five year plan for, fixed assets and revenue. During the first five year plan and 2nd plan period the gross capital is 27.95 and the gross revenue is 6.78. During the third five year plan the gross capital is 89.52 and accumulated depreciation is 15.78, gross revenue is 18.00. During the fourth plan period the gross capital is 281.23, accumulated depreciation is 66.59, and total revenue is 56.70. Again during the period of seventh plan period is gross capital is accumulation depreciation capital is and total revenue is 1015.98. During the tenth plan period is the gross capital is 13049.24 and accumulated depreciation is 5410.97 and the total revenue is 12361.53 rupees in Crores

6.4. DETECTION OF THEFT OF ENERGY:

Table 6.4 detection of theft of energy It could be also observed that detection of theft of energy during the period of 1990-91 the number of theft cases booked 1387. It increased to 5863 during the period of 1995-96. During the period of 2000-01 the number has increased to 6100. Further it has been increased to 57828 during the period of 2005-06.

It could be also observed the number of malpractices noticed. During the period of 1990-91 the number of malpractice are 3281; it reduced to 2305 during the period 2000-01. It then increased to 6463 in the year 2005-06. The efficiency of electricity of administration and performance can be seen from the table 6.4, the administrative efficiency can be assessed through the protection of electricity thefts and the malpractices cases.
The theft cases booked by the electricity department has increase during the study period and registered 35.65 % of growth in pre reform period and 44.84 % of growth in post reform period comparative to the pre reform period that the notified malpractices cases has declined in the post reform period. However the revenue also increased during the entire period due to the power control of misusing electricity facility and appropriate monitoring efficiency.

6.5. REVENUE FROM SALES OF POWER :

Table 6. 5 shows Percentage of income and expenditure in Andhra Pradesh electricity board have been presented in the table 6. 5. Major proportion of revenue comes from sale of power. But its share has not remained constant but fluctuates. During the pre reform period its share in total revenue declined from 92.97 % in 1990-91 to 58.51 % in 1998-99. Moreover the subsidy shares significantly increased from 2.987 % to the 35.03 % during the same period. In the case of expenditure major proportion has been incurred on fuel cost and power purchase cost. The fuel cost share in the total expenditure has slightly increased from 23.69 % to 26.39 % and power purchased cost also increased from 19.50 % to 28.98 % during the pre reform period. The share of establishment, general and office expenses sharing total revenue declined from 17.22 %, 12.27 % and other expenses have major percentage of total share which can be negligible.

The data presented in the table 6. 5 explains that during the post reform period the share of revenue by sectors of power in the total revenue receipts has recorded an increase from 58.45 % to 71.80 %. However share of subsidy steeply declined from 35.71 to 12.94 % in the post reform period. Even during the post reform period, the cost of power purchases has occupied major proportion in the total expenses. After the power purchasing cost establishment, general and operation and management expenses are the major constitutes. The depreciation and interest charges have declined in the post reform period comparative to the pre reform period.
Table 6.6 provide the revenue receipts and expenditure details of transmission and distribution during pre and post reform period. In the pre-reform period the revenue receipts registered 20.48% growth rate. It is mainly because of the increasing tendency of sale of power which has increased from Rs.1210.2 crores or in 1990-91 to Rs.3479.64 crores in 1998-99. The revenue expenditure and other expenses also registered positive growth rates in pre-reform period. Growth rate is revenue receipts, revenue expenditure and other expenses has declined during the post-reform period compared to the pre reform period. Like pre-reform period major revenue accrued from the selling of power. During the post-reform period revenue receipts growth have slightly declined comparative to the pre-reform period and registered 20.16% growth rate. The revenue expenditure also declined in the post-reform period due to the decline in the power purchase expenditure. It is important to note that gross generating result as recessionally increased in post-reform period indicates that the profitability and progress of the electricity in the Andhra Pradesh.

The data presented in the table 6.7 reveals the revenue from selling of power during 1990-91 to 2005-06. The table mainly shows revenue from low tension category and high tension category from sales of power. In L.T category, the compound growth rate was 23.25%. In pre-reform period. After reform period compound growth rate reduced considerably to was 10.84%. In all sectors in LT category from 1 to 8 in revenue is increasing constantly in the pre-reform period. But after post reform period the revenue having some fluctuation in its growth. Specially it is observed in category number 5 to 7 (the 5th category is agricultural sector and 7th category is general purpose), that revenue from 5th category in 2001-02, 2002-03, 2003-04 and 2004-05 was 208.22, 818.37, 416.94 and 402.29 respectively. In 7th category during the years 1999-2000, 2000-01 and 2001-2002 revenue was 29.49, 34.52 and 33.17 respectively. In agricultural sector the thefts are high and general purpose misuses are high. Because of these two reasons the revenue was less and also the compound growth rate also less.

In HT sector during the years 1990-91 to 1998-99 the income is shows a compound growth rate of 12.64%. After reforms from 1999-2000 to 2005-06 the
compound growth rate is higher at 13.01 %. Rebate to new industries during the pre reforms period is 8.09 % and it is 43.00 % after reform period. On the aggregate level the revenue compound growth rate is 16.53 % in pre-reform period and, 12.00 % in post-reform period.

It could be observed from the data that major proportion of revenue had been recorded in the case of selling low tension power. In details the revenue from low tension category increased from 357.54 cr in 1990-91 to 1953.14 cr in 1998-99 and registered 23.259 % of growth. It is ascribed to the rapid revenue increase from category I, II, and III. The revenue from high tension category registered 12.64 % of growth. Moreover during the pre reform period the revenue from the selling of power recorded 16.52 % of growth. It is important to note that the revenue growth rate from low tension category has significantly declined where as the revenue growth rate from high tension category has increased in the post reform period compared to the pre reform period. However the total revenue from the selling of all category power has a recorded 12.1 % of growth in post-reform period which is also lower compare to the pre reform period. The annual data on power sector revenue reveals that during the total study period income from the selling of power has continuously increased even in the post reform but at a lower rate compare to pre reform period.

Table 6.8 shows gross revenue indicates the gross revenue incurred from APSEB during 1990-2006. The gross revenue increased from Rs.1301.70 crs to Rs. 4260.47 crs during 1990-91 to 2005-06 and registered 16.77 % growth rate during the same period. From the table we can be seen that the gross revenue increased and registered 17.93 % of growth rate in post-reform period. So the table’s shows positive performs year by year during the study period and the gross revenue increased

6. 6. CONCLUSION :

As we saw in earlier chapters that are the post-reform period there was change in the organizational structure in the state sector through corporatization and dividing up of
the APSEB. Further, power sector was opened up to the private sector. Financial health can be improved through cost reduction and additional revenue earnings. Cost can be reduced in many ways. There are possibilities of cost reduction though technical efficiency improvement and reduction in labor cost, pilferage and interest burden, and the last of these can be reduced through proper capital restructuring. The capital investment has increased and registered 16.42 % of growth during the post reform period more over in the post reform period (11.47 % of growth) comparative the pre-reform period (9.52 % of growth ). From the analysis it was found that after reforms the sales of energy is increased. the revenue also increased during the entire period due to the power control of misusing electricity facility and appropriate monitoring efficiency. The annual data on power sector revenue reveals that during the total study period income from the selling of power has continuously increased even in the post reform period but at a lower rate compared to pre reform period. Further it was found that the gross revenue increased during the study period .so the above analysis indicate that the reforms have improved the financial efficiency during post-reform period.