State-Level Economic Reforms Relating to Fiscal Sphere and Privatization

Contents
I. Evaluation of Economic Reforms with respect to State-level Budget Deficit and Rationalization of Tax Structure
II. Evaluation of Economic Reforms with respect to State-owned Enterprises and Corporations

Introduction

India has undertaken the task of economic reforms with a firm commitment. The second-generation reforms focus at the state level fiscal management. When the reforms process started some time ago in 1995-96, the states' budgetary position was under severe stress in many states of India. The key ingredients were restoration of fiscal sustainability, reforming public sector enterprises, encouraging private sector participation in infrastructure and evolving suitable policy and institutional framework for promoting competition and efficiency.

Andhra Pradesh is one of the pioneering states to earnestly initiate economic and fiscal reforms. All the states have then initiated fiscal reforms to improve their respective budgetary position. A medium term fiscal framework needs to be developed first to help restore the much needed fiscal stability and fiscal sustainability in states that are faced with deteriorating budgetary positions having implications for development. Insufficient revenue sources and uncontrolled growth of current expenditure have been pushing the states to unsustainable indebtedness.

Therefore fiscal restoration should include better management of expenditure through control on current expenditure, prioritization of capital expenditure through core investment plan. There is also a need for speeding up the restructuring of public sector undertakings for bringing about transparency and accountability through closure, outright sale or merger according to their role in development.

This Research Study focuses on:

1. The State Level Budget Deficit and Rationalization of Tax Structure where State Level Budget Deficits, Importance of State Finances, State Level Budget, State Level Fiscal Imbalances, Need for Fiscal Reforms are discussed in Part I and State Government
Finances in Gujarat along with Fiscal Reforms formed by the state are discussed in detail in Part II.

2. Evaluation of economic reforms with respect to state-owned enterprises and corporations where public sector reforms in India since 1991 and Public Sector Reforms made by State Government of Gujarat is discussed.

In the Research Study I have attempted to compare the impact of Economic Reforms amongst five states, but by keeping in view that an in-depth study is required, a more detailed study has been conducted for the state of Gujarat.

I. Evaluation of Economic Reforms with respect to State-level Budget Deficit and Rationalization of Tax Structure

A. State-level Budget Deficit

A.1. State Finances in India

a) Aggregate position of state finances
b) Growing importance of State Finances
c) State-level Budget Deficit
d) State-wise fiscal imbalances

a) Aggregate position of state finances

The last decade has seen a steady deterioration in state finances. The reasons responsible for fiscal crisis can be listed as follows:

i. The first and foremost culprit was the 'fifth pay commission award'. The decision of the central government to implement large pay scales to the employees of the central government was followed by the state governments that resulted in a massive size of the salary bill of the states and an increase in the revenue deficit. For example, in Karnataka, the salary bill increased by 23% in 1997-98, whereas pension bill increased by 58%. In Tamilnadu, pension bill and the salary bill grew by 33%, whereas in Maharashtra the bill grew by a huge 65%.
ii. The second factor was the public sector salary increase that followed the pay rise of direct government employees.

iii. The third factor was that over the 1990's the states were hit by higher interest rates. At the start of 1990's, the states faced higher interest rates than even the center but the gap increased from 2.5% in 1990-91 to as much as 5.1% ten years later in 2000-2001.

iv. The fourth contributing factor to the state level fiscal crisis was the inability or unwillingness of the central government to limit the borrowings. States responded to fiscal stress by heavy borrowings. In 1998-99 state governments borrowed 68% more than in the previous year. In 1999-2000 they borrowed 22% more than 1998-99.

v. The fifth factor was the rise of budget liabilities particularly the acute financial weakening of the power sector and the rise of off-budget borrowings.

There has been a steady deterioration in states' own tax revenues, significant drain on state resources due to losses by public enterprises and proliferation of implicit and explicit subsidies and transfers. Thus despite a decade of reforms, fiscal consolidation at the state level has remained elusive.

An additional dimension to state finances in recent years has been the lending by multi-lateral lending institutions (World Bank and Asian Development Bank) to states, although the loans are released conditionally to the states willing to undertake effective fiscal reforms. But serious problems arising out of excessive borrowing should be avoided.

b) Growing importance of Sate Finances

The growing importance of state finances in the macro-economy is evident from the fact that the total expenditure of state governments (Rs. 3,25,635 Crores) has overtaken those of the center (Rs. 3,13,258 Crores). The size of the overall development expenditure of the states have always been higher than that of the center and the difference has got widened rather significantly in the 1990s. In 1990-91, the states development expenditure exceeded that of the center by less than 10% but by 2000-01 it has exceeded by 55%. 
c) State-level Budget Deficit

To designate the deficit budget of the government the usage of the term fiscal deficit has become very common. Before the concept of fiscal deficit was evolved, we have been talking about revenue deficit, i.e., deficit on revenue account, capital deficit, i.e., deficit on capital account, budget deficit, i.e., overall deficit, monetized deficit, deficit financing etc.

The total budget is defined as the sum total of revenue account deficit and capital account deficit. Total budgetary receipts would include receipts both on revenue account as well as those on capital account.

The fiscal situation of states has been worsening over recent years. The situation is likely to deteriorate further.

Table - A
Selected Financial Indicators of the State Government
(Rs. In Crores)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total Expenditure</td>
<td>91088.1</td>
<td>134648.5</td>
<td>273762.9</td>
</tr>
<tr>
<td>2</td>
<td>Expense on Revenue Account</td>
<td>71775.8</td>
<td>109376.2</td>
<td>228810.8</td>
</tr>
<tr>
<td>3</td>
<td>Interest Payment</td>
<td>8654.8</td>
<td>15800.5</td>
<td>36399.3</td>
</tr>
<tr>
<td>4</td>
<td>Administrative Services</td>
<td>7018.4</td>
<td>10472.6</td>
<td>31786.1</td>
</tr>
<tr>
<td>5</td>
<td>Share in Central Taxes and Grants from Centre</td>
<td>26884.3</td>
<td>43570.8</td>
<td>75110.7</td>
</tr>
<tr>
<td>6</td>
<td>Receipts on Revenue Account</td>
<td>66466.3</td>
<td>105563.7</td>
<td>203176.0</td>
</tr>
</tbody>
</table>

(Source: 'Fiscal Deficit of States in India' – edited by Janak Raj Gupta, Page 15)
Table - B
Comparison of selected indicators of Table - A in terms of percentage change over base period 1990-91

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Item</th>
<th>% Change in 1993-94</th>
<th>% Change in 1998-99</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total Expenditure</td>
<td>147.82</td>
<td>300.54</td>
</tr>
<tr>
<td>2</td>
<td>Expense on Revenue Account</td>
<td>152.38</td>
<td>318.78</td>
</tr>
<tr>
<td>3</td>
<td>Interest Payment</td>
<td>182.56</td>
<td>420.56</td>
</tr>
<tr>
<td>4</td>
<td>Administrative Services</td>
<td>149.21</td>
<td>452.89</td>
</tr>
<tr>
<td>5</td>
<td>Share in Central Taxes and Grants from Centre</td>
<td>162.06</td>
<td>279.37</td>
</tr>
<tr>
<td>6</td>
<td>Receipts on Revenue Account</td>
<td>158.82</td>
<td>305.68</td>
</tr>
</tbody>
</table>

The Table - A presented above shows finances of the state governments during the period 1990-91. The table shows that during this period the total expenditure of the state governments became almost three times but the expenditure on revenue account has risen faster. Further the receipts on revenue account have not kept pace with the increase in the expenditure on revenue account and that from the year 1994-95, the situation has tended to be somewhat alarming in view of the rapid increase in expenditure on revenue account.

State governments have been faced to resort to increased borrowings from the Union Government as also from the market and other sources. It is clear from the table that interest payments have consistently increased.

Another feature of the state finances witnessed during recent years is the increasing expenditure on administrative services. It has become slightly more than four and a half time during the period 1990-91 to 1998-99.

It is also clear from the table that the state governments are significantly dependent on Center. The table shows that the state share in central taxes and grants from the center has increased by 2.8 times. But with the deteriorating fiscal situation of the center, there will be some kind of restraint on the center for providing assistance to the states.
The table given below shows increasing quantum of Fiscal Deficit and Revenue Deficit of the State Governments:

**Table - C**
Fiscal Deficit and Revenue Deficit of State Governments
(Rs. In Crores)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Years</th>
<th>Gross Fiscal Deficit</th>
<th>Revenue Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1990-91</td>
<td>18787.0</td>
<td>5309.0</td>
</tr>
<tr>
<td>2</td>
<td>1993-94</td>
<td>20596.0</td>
<td>3812.5</td>
</tr>
<tr>
<td>3</td>
<td>1996-97</td>
<td>37444.4</td>
<td>16113.5</td>
</tr>
<tr>
<td>4</td>
<td>1998-99</td>
<td>59276.6</td>
<td>25634.8</td>
</tr>
</tbody>
</table>

(Source: 'Fiscal Deficit of States in India' – edited by Janak Raj Gupta, Page 16)

**Table - D**
%age change in Fiscal and Revenue Deficit of State Government over base period of 1990-91 when Gross Deficit was Rs. 18787 Crores and Revenue Deficit was Rs. 5309 Crores (Table-C)
(Rs. In Crores)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Years</th>
<th>% Change Gross Fiscal Deficit</th>
<th>% Change Revenue Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1993-94</td>
<td>109.62</td>
<td>71.81</td>
</tr>
<tr>
<td>2</td>
<td>1996-97</td>
<td>199.31</td>
<td>303.51</td>
</tr>
<tr>
<td>3</td>
<td>1998-99</td>
<td>315.51</td>
<td>482.85</td>
</tr>
</tbody>
</table>

The quantum of fiscal deficit had become slightly more than three times. The quantum of revenue deficit was slightly less than 5 times during this period. The rapid increase in the revenue deficit of the state governments is indicative of the fact that day-to-day financial requirements of the state governments have far exceeded their day-to-day income. Therefore, if the state governments cannot reduce their day-to-day expenditure requirement, they have to necessarily make efforts to mobilize additional resources and at the same time, also avoid wasteful expenditure wherever possible.
d) State-wise fiscal imbalances

**Table - E**

State-wise Imbalances in Fiscal Deficit

(% of NSDP)

<table>
<thead>
<tr>
<th>State</th>
<th>Year_1990-91</th>
<th>Year_1995-96</th>
<th>Year_1999-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>2.79</td>
<td>3.36</td>
<td>5.16</td>
</tr>
<tr>
<td>Gujarat</td>
<td>6.42</td>
<td>2.71</td>
<td>6.01</td>
</tr>
<tr>
<td>Karnataka</td>
<td>2.3</td>
<td>2.76</td>
<td>3.29</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>2.65</td>
<td>2.93</td>
<td>6.03</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>3.55</td>
<td>1.79</td>
<td>4.16</td>
</tr>
</tbody>
</table>

(Source: EPW, August 3 – 9: 2002 'State Finances in India – Issues and Challenges' – M. Govind Rao)

**Graphical Presentation of Table E**

State-wise Imbalances in Fiscal Deficit (% of NSDP)
Table - F
State-wise Imbalances in Revenue Deficit
(% of NSDP)

<table>
<thead>
<tr>
<th>State</th>
<th>Year_1990-91</th>
<th>Year_1995-96</th>
<th>Year_1999-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>0.46</td>
<td>1.03</td>
<td>2.34</td>
</tr>
<tr>
<td>Gujarat</td>
<td>2.51</td>
<td>0.34</td>
<td>2.75</td>
</tr>
<tr>
<td>Karnataka</td>
<td>0.33</td>
<td>-0.12</td>
<td>1.71</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>0.09</td>
<td>0.43</td>
<td>4.11</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>1.74</td>
<td>0.44</td>
<td>3.09</td>
</tr>
</tbody>
</table>

(Source: EPW, August 3 – 9: 2002 'State Finances in India – Issues and Challenges' – M. Govind Rao)

Graphical Presentation of Table F

State-wise Imbalances in Revenue Deficit (% of NSDP)
A.2. **Selected Indicators of Size and Growth of Government**

An unstated objective of reforms process is that the size of government should decrease. It means the employment given by the state government should decrease in order to reduce the expenditure and secondly, the expenditure as percentage of SDP should also decrease. Fiscal crisis highlight one important point that is - the state government expenditure (revenue as well as capital) had been increasing in the last decade.

To highlight this aspect, data on two indicators that would give a picture of the government expenditure is presented here. These indicators are:

A.2.1. State Expenditure as percentage of GSDP

A.2.2. State Employment as percentage of Total Employment

- **State Expenditure as percentage of GSDP**

**Table - G**

State Expenditure as Percentage of GSDP

*(Rs. In Crores – Expenditure and GSDP)*

<table>
<thead>
<tr>
<th>State</th>
<th>Year_1994-95 Expenditure</th>
<th>GSDP</th>
<th>%</th>
<th>Year_1998-99 Expenditure</th>
<th>GSDP</th>
<th>%</th>
<th>Year_2001-02 Expenditure</th>
<th>GSDP</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>12459</td>
<td>68923</td>
<td>18</td>
<td>21957.5</td>
<td>114937</td>
<td>19</td>
<td>32823</td>
<td>150096</td>
<td>21.8</td>
</tr>
<tr>
<td>Gujarat</td>
<td>9497.7</td>
<td>63516</td>
<td>14.9</td>
<td>19171.1</td>
<td>105305</td>
<td>18.2</td>
<td>33466.7</td>
<td>124905</td>
<td>26.79</td>
</tr>
<tr>
<td>Karnataka</td>
<td>8859.3</td>
<td>47915</td>
<td>18.48</td>
<td>14885.6</td>
<td>87807</td>
<td>16.95</td>
<td>23364.1</td>
<td>109461</td>
<td>21.34</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>20026.3</td>
<td>130073</td>
<td>15.39</td>
<td>30317.2</td>
<td>214080</td>
<td>14.16</td>
<td>42268.5</td>
<td>271406</td>
<td>15.57</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>11432.4</td>
<td>68666</td>
<td>16.64</td>
<td>19879.7</td>
<td>118275</td>
<td>16.8</td>
<td>28471.7</td>
<td>148585</td>
<td>19.16</td>
</tr>
</tbody>
</table>

(Source: ‘Public Finance” – CMIE Report, Year 2002)
From the above table and graph we can clearly infer that government expenditure of all the states under study has increased but at the same time, GSDP has also increased. If we discuss for individual states, the picture is as follows:

a) Andhra Pradesh
   During three different time periods, the expenditure has increased from 18% to 21.8%.

b) Gujarat
   There has been tremendous increase in state government’s expenditure from 14.9% to 26.79% in between 1994-2002.

c) Karnataka
   There was little increase in expenditure from 18.48% to 21.34%.

d) Maharashtra
   There was marginal increase from 15.39% to 15.57%, which shows stability in expenditure.

e) Tamilnadu
   There was an increase from 16.64% to 19.16% in state government’s expenditure.
If we compare the government expenditure as %age of GSDP and gave ranks at three different time periods we can interpret the positions as follows:

**Table - H**

Comparative Position of States regarding Government Expenditure as a %age of GSDP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Gujarat</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Karnataka</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

From the above table we can clearly make out that the position of Karnataka, Maharashtra and Tamilnadu has improved, that of Andhra Pradesh there was no change, whereas in case of Gujarat its position has slipped from being the best to the worst in terms of Government Expenditure management.

- **State Employment as percentage of Total Employment**

In past few years the GSDP has grown but not the employment. State governments have downsized fresh recruitments as expenditure on salaries had increased disproportionately. It was a part of reform process to reduce government expenditure by reducing the size of government.

In the table given below an analysis is offered regarding the Employments generated by the States as %age of Total Employment in organized sector.
**Table - I**

State Employment as Percentage of Total Employment in Organized Sector
(Numbers in '000 - Thousands)

<table>
<thead>
<tr>
<th>State</th>
<th>Year_1991</th>
<th></th>
<th>Year_2000</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Government Employment</td>
<td>Total Employment</td>
<td>%</td>
<td>State Government Employment</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>681.8</td>
<td>1763.1</td>
<td>38.67</td>
<td>776.4</td>
</tr>
<tr>
<td>Gujarat</td>
<td>387.6</td>
<td>1660.5</td>
<td>23.34</td>
<td>362.3</td>
</tr>
<tr>
<td>Karnataka</td>
<td>621.4</td>
<td>1447.4</td>
<td>42.93</td>
<td>729.7</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>776.2</td>
<td>3647.5</td>
<td>21.28</td>
<td>78.04</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>979.8</td>
<td>2289.5</td>
<td>42.79</td>
<td>1004.6</td>
</tr>
</tbody>
</table>

(Source: Economic Times, dated 20th October, 2003 by Tushar K Mahanti)

The employment scenario of the five states under Research is as under:

1. **Andhra Pradesh**  
The percentage of employment has decreased from 38.67\% in 1990-91 to 37.47\% in 2000. Fresh recruitments were minimized leading to downsizing and therefore the salary component of expenditure has also gone down.

2. **Gujarat**  
Gujarat successfully received large chunk of investments in the post reforms period but the organized employment by the states decreased from 23.34\% in 1991 to 21.43\% in 2000, which has helped the government to reduce expenditure.

3. **Karnataka**  
State government was providing maximum employment, i.e., 42.93\% prior to reforms but it also reduced its size to 39.15\% in 2000.

4. **Maharashtra**  
Employment in organized sector by Maharashtra was 21.28\% in 1990, which was reduced to 20.75\% in 2000.
5. Tamilnadu

The government was providing employment to 42.79% out of the total employment in 1991, which became 39.79% in 2000, which shows an attempt by the state government to reduce expenditure through employment.

If we carry out inter-state comparative study of the states employment then Maharashtra and Gujarat emerge as two states providing least employment among the five states under study.

If we carefully analyze the above two indicators, we can clearly see that over the period and since the Fiscal Reforms have been started, the size of government, i.e., Government Expenditure, has increased whereas the Employment provided by the state has actually gone down. This shows that the increase in Expenditure has not been towards funding the salaries or employment. This shows that the fiscal reforms are progressing in the desired direction.

We can see that mostly the state governments have been participating pro-actively in fiscal reforms process as can be seen from the above performances. It can be said that they could be more effective in several other ways, but there is one important aspect which needs to be given due consideration – that the state governments have a limited say in certain matters relating to overall fiscal policy. In other words, in federal structure, price based reforms in excise and custom duties, exchange rate and interest rate structure or administrative price mechanisms fall under the jurisdictions of Central Government. State Government can exercise control only in matters pertaining to sales tax, minor taxes and user charges and fees on services provided by them.
A.3. Need for Reforms

Sharp deterioration in the fiscal health at the state level during the last decade has been a cause for serious concern although preoccupation with restoration of fiscal balances at the center level took center stage in most discussions.

The fiscal mess in which the states have found themselves was created due to rising non-plan expenditure, combined with a reluctance or lack of aggression to raise additional fiscal resources.

Thus the fiscal reforms at the state level are important. It would be useful to understand the nature and extent of the problem of state finances and its impact on micro-economic stability. Thus fiscal reform at the state level is important from the viewpoint of both macroeconomic stability and microeconomic allocative efficiency.

Of course there has been increasing awareness of the need to undertake fiscal reforms. Some states, Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu have brought out white papers to increase public awareness. Initiatives have also been undertaken to appoint tax reforms commissions and administrative reforms commissions in some of the states.

States have to traverse far in restructuring their finances. These require reforms in expenditure and tax systems, power sector reforms and restructuring state enterprises, administrative re-engineering, building a proper information system and computerization of tax administration.

A.4. Issues of debate

i. It appears that State Governments are heavily relying upon the Centre and could not mobilize new resources from tax and non-tax resources.

ii. Due to lack of state-level reforms in pattern of public finance state budget deficits have increased sizably in absolute amount but in percentage found stationary.

iii. State subsidies have gone to relatively rich farmers who have benefited by planned agriculture sector investment but could not contribute to State governments. Cross-subsidization adversely affected state finances in general and rising budget deficits in particular.
iv. The state governments have used Central protection force during riots and communal harmonies in the case of border and non-border states, which increased non-plan wasteful expenditure.

v. The state government could not increase land revenue and sales tax, which are stagnant for the last many years and hence total revenue proceeds could not increase at the desired levels by the states.

vi. We do not have permanent Finance Commission to monitor the state Government expenditure and there is no co-operation between State Planning Board and the Planning Commission and Planning Commission with the Finance commission. Why do we not have public expenditure commission to monitor wasteful expenditure of both the Central and State Governments?

vii. Internal public debt of States increased sizably and State could not repay loans received from the Centre. The RBI could not manage to monetize State budget deficits for the different States of India.

viii. Can Indian State learn lesson from Australian and USA federal governments to manage State budgets for sustainable period of time?

ix. Why State Governments could not introduce Value Added Tax system and rationalization of tax structure at State levels?

A.5. **Prospects and Issues**

The state governments fully appreciate that financial sector reforms have implications for fiscal management at the state level and are making efforts to meet the fiscal challenges that they face.

The overall strategy for fiscal improvement is three-fold:

i. Commercial activities such as power, transport and water for irrigation will have to be funded and operated commercially to reduce the fiscal burden and also to attract financial sector resources especially from banks.

ii. State governments will have to concentrate their efforts on institutional infrastructure, especially that relating to law & order, and the provision or delivery of essential services such as drinking water, sanitation, primary education and primary health care.
iii. Public investments have to be enhanced in agriculture to accelerate gainful employment and reduction of poverty.

A.6. Measures

i. As a measure of reforms in their tax structure, the state governments have to think very seriously regarding mobilization of resources at least from relatively richer section of the rural population.

ii. Relatively increasing the tax revenue by tightening the tax administration machinery.

iii. During recent period the state government have been competing each other in providing incentives/tax concessions to attract investors. State governments should not enter into a tax war to attract new investments; rather they should develop such infrastructure facilities, which help to sustain development and at the same time provide an incentive for investment in the state.

iv. The state government should take steps to gradually withdraw from all loss making public sector undertakings. From the point of view of investment, any further expenditure in them is self-defeating.

v. The state governments have been incurring substantial losses on their electricity schemes, irrigation works, and road transport facilities. The beneficiary of these services ought to pay at least the user charges so that these schemes may be run on a no-profit, no-loss basis and at least become sustainable.

vi. Many of the high cost social sector services such as higher education, and specialized health services that are highly subsidized need a careful scrutiny.

vii. Need to control fast growing burden of subsidy.

viii. Need to phase out non-merit subsidy.

ix. There is considerable scope for increasing tax revenue by rationalizing tax rates, plugging loopholes and improving tax administration.

Each state government must address itself and identify the areas where the economy in expenditure is practiced. The above areas need to be carefully scrutinized from the point of view of additional resources mobilization by the state governments. Any laxity on the part of state governments in this direction will have serious repercussions on their finances.
B. State Government Finances in Gujarat

B.1. Introduction

State government finances administration has drawn attention of economists, administrators and planners all over India. Since 1980s state government finances in Indian Economy have been found under heavy stress as most of the state governments are facing a worsening budgetary situation. This has happened largely due to declining share of tax and non-tax revenue in their budgets.

Govind Rao (1992) made aggregate analysis of state finances in India so as to prescribe policy options after economic reform period. He has critically reviewed expenditure of state governments which include salaries of state employees, raising level of subsidies, inefficient public sector enterprises, rising amount of debt payments to the center, debt outstanding etc.

B.2. Background of Gujarat State’s Finances

Gujarat’s economy showed a significant growth in the early 1990s., but after 1995-96 the growth rate has come down. In the first four years of the decade the growth rate of GSDP was as fast as 12% per annum. But it came down to only 4.5% in the following years. The slowdown in economic growth has affected the financial position of the Gujarat government. The fiscal deficit had doubled from 2.15% of GSDP in 1995-96 to 5% in 1999-2000. If effective steps are not taken in time, the fiscal condition is likely to deteriorate further. Revenue deficit has grown faster than fiscal deficit from 0.27% of GSDP in 1995-96 to 2.13% in 1999-2000.

The deterioration in the fiscal position has caused primarily by the fact that revenue expenditure has shown buoyancy far surpassing that of revenue receipts. In last five years (1995 – 2000) expenditures have grown by 19% per annum whereas revenue receipts have grown by 13%. As much as 30% of revenue expenditure currently goes towards pay, allowances and pensions.

To restore the health of Gujarat’s finances, attention has to be focused on subsidies of all kinds – most importantly, subsidy to GEB itself amounts to nearly Rs. 1,100 Crores.

Gujarat government has done reasonably well in mobilizing tax revenues in terms of per capita tax collection. The state ranks among the highest of all the states. Clearly, therefore, there is a limited scope for further increase in the tax rates.
Gujarat's public finances have to focus on realizing full revenue potential on the one hand and enhancing expenditure effectiveness on the other hand. Revenue maximization calls for both tax and non-tax revenue. Tax reforms should aim at rationalization and simplification of tax rates as well as elimination of numerous tax exemptions and concessions that will contribute to better tax compliance and tax enforcement. Non-tax reform should focus on the cost recovery of various services provided by the state government keeping in view the need for proper use of real resources. Government expenditure reforms calls for elimination of unnecessary subsidies and their proper targeting wherever needed on welfare grounds.
### Table - 3
General Budgetary Position
(Rs. In Crores)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Item</th>
<th>1999-00</th>
<th>2000-01</th>
<th>2001-02</th>
<th>2002-03 (*)</th>
<th>2003-04 (#)</th>
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</thead>
<tbody>
<tr>
<td>I</td>
<td>Revenue Account</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Revenue Receipts</td>
<td>13900.34</td>
<td>15738.59</td>
<td>15986.06</td>
<td>17161.41</td>
<td>18744.85</td>
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<tr>
<td>B</td>
<td>Revenue Expenditure</td>
<td>17517.10</td>
<td>22040.82</td>
<td>22717.60</td>
<td>23361.96</td>
<td>24062.24</td>
</tr>
<tr>
<td>C</td>
<td>Surplus (+) or Deficit (-)</td>
<td>(-) 3616.76</td>
<td>(-) 6302.23</td>
<td>(-) 6731.54</td>
<td>(-) 6200.55</td>
<td>(-) 5317.39</td>
</tr>
<tr>
<td>II</td>
<td>Capital Account</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Capital Receipts</td>
<td>5869.42</td>
<td>13904.38</td>
<td>27640.02</td>
<td>30862.56</td>
<td>10744.35</td>
</tr>
<tr>
<td>B</td>
<td>Capital Expenditure</td>
<td>5033.04</td>
<td>9103.42</td>
<td>20496.35</td>
<td>25691.28</td>
<td>6709.03</td>
</tr>
<tr>
<td>C</td>
<td>Surplus (+) or Deficit (-)</td>
<td>836.38</td>
<td>4800.96</td>
<td>7143.67</td>
<td>5171.28</td>
<td>4035.32</td>
</tr>
<tr>
<td></td>
<td>Surplus (+) or Deficit (-) within consolidated Fund</td>
<td>(-) 2780.38</td>
<td>(-) 1501.27</td>
<td>412.13</td>
<td>(-) 1029.27</td>
<td>(-) 1282.07</td>
</tr>
<tr>
<td>III</td>
<td>Contingency Fund (Net)</td>
<td>7.46</td>
<td>(-) 95.49</td>
<td>102.54</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IV</td>
<td>Public Account (Net)</td>
<td>2896.55</td>
<td>2003.50</td>
<td>(-) 902.58</td>
<td>519.64</td>
<td>849.10</td>
</tr>
<tr>
<td></td>
<td>Overall Surplus (+) or Deficit (-)</td>
<td>(+) 123.63</td>
<td>(+) 406.74</td>
<td>(-) 387.91</td>
<td>(-) 509.63</td>
<td>(-) 432.97</td>
</tr>
</tbody>
</table>

(*) Revised Estimates
(#) Budget Estimates

B.3. *Action Plan by the State*

i. It is most necessary for the state government to make disinvestments in order to raise resources out of the budget in order to manage the budget deficit and to manage planned investment of the ninth five-year plan period. These include loss making State enterprises as well as profit making enterprises also for better management and efficiency of the enterprises.

ii. The State Government should allow private players for enterprises require special skill and cannot be managed by the Government machinery. The State Government should not incur drought expenditure but hand it over to non-Government voluntary organization and the different departments of the government should monitor it. This exercise can stop malpractices observed by political leaders in the management of drought expenditure.

iii. There is need for Public Expenditure Commission to monitor and watch State Government expenditure as different ruling governments spend money wastefully from the treasury.

iv. It is most necessary for the State Government to receive adequate share of salt cess, oil cess and other royalties for the units located in Gujarat, which are managed by the Central Government enterprises. A northern state has successfully done so.

v. The Government should execute recommendations of previous committees for State finances and for raising of tax and non-tax revenue by the state. Now, there is no need for further committees.

vi. The State Government and local self-government should increase cost of public utilities like water, bus services, and electricity charges to manage budgets.

vii. The State Government should stop all wasteful subsidies looking to rise in income of people and position of State finances.

viii. The Central Bureau of Investigation should enquire about assets of political leaders in the state irrespective of political affiliation and attempt to publish a list for recoverable amount of outstanding taxes from them.

C. *Tax Reforms made by Gujarat*

The primary task of tax reforms is to improve the efficiency of the tax system. This means simpler rate structures and procedures, fewer exemptions and a streamlined machinery for collections that is also user-friendly. The committee which was formed in respect of
rationalization and reform of the tax system which has taken place so far and the plan which government has on hand,. The committee’s recommendations on Sales Tax and other taxes are given below:

C.1. Sales Tax Reforms

There is little scope for further increase in tax rates. Further increase in tax rates may cause a serious disincentive for growth of trade and industry. Much progress has been made in recent years in sales tax reform. But further scope exists for further rationalization of the tax structure and improvement in tax administration. The ultimate objective should be introduction of value-added tax in place of sales tax.

C.2. Electricity Duty

i. Electricity duty is levied by the state government at varying rates depending upon the category of consumer of the power. The average rate of duty as percentage of the average price of power is about 15%. There are some 17 different slabs on top of varying tariff rates. There are fuel cost charges, peak load charges etc. according to the ORG, the total number of tariff rates is more than 70. and on top of these, there are the duty rates thus multiplying the total number of rates. Such complexity is wholly unnecessary. The GEB’s tariff structure already provides whatever differentiation may be necessary in the rates having regard to the nature of the user. There is no need for the state government to add its own scheme of priorities by levying electricity duty at different rates. Though it can be fully endorsed the ad-valorem nature of electricity duty but it is still desirable and recommendable that it be charges at a flat rate. During transition multiple rates may be kept but the number of rates need not be more than 3 at the most. The actual rate may be so determined as to be revenue neutral. In view of the substantial revisions in the power tariff recommended by the GERC, revenue neutrality will require a reduction in the duty rates. Given the uncertainty ion this question, it is not feasible to make an estimate of the average duty rate needed to maintain revenue neutrality.

ii. The electricity duty is levied by the state government but collected by the GEB. The practice has been for the GEB to offset its dues arising to the government from the electricity duty against Government’s dues to the GEB arising from the subsidy to the agriculturist. This is a non-transparent method and we recommend that electricity
duty collected by GEB must be credited to Government’s account and Government should separately disburse subsidy due to GEB, thus putting an end to the offsetting mechanism.

iii. There is also a tax on the sale of power. The committee recommends that it should at a flat rate not exceeding 4%.

iv. The committee also recommends that in line with the action taken with respect to the general sales tax, electricity duty should also not be used as a means of providing exemption, incentives or as a relief to sick units. So long as it continues to be levied, it should be on all users of power.

C.3. **Entertainment Tax**

i. The structure of the tax has been rationalized with effect from 1st April 1999 and the entertainment tax is now equivalent to the amount of entry tickets in cinema houses. In rural areas, the composite scheme is in operation under which the tax is collected on the basis of the number of seats in cinema house. The committee recommends that an option of such a composite tax should also be available to the taxpayer in the urban areas as well. If it is legally feasible such a scheme maybe introduced straightaway.

ii. The state government loses substantial amount of revenue because of the exemptions granted to the so-called multiplex cinema houses and other forms of entertainment. These exemptions also create distortions and inequity among taxpayers. The committee, therefore, recommend that they should be withdrawn and entertainment tax be collected from all sources of entertainment.

D. **Institutional Reforms**

i. Government should submit to the legislature a document giving the total picture of all direct and indirect subsidies. This document may be part of the Budget papers and should give estimates for the current and preceding years. The methodology given in ORG report may be used for estimation. The document should also analyze the efficacy and impact of subsidies based on evaluation studies done through independent agencies and should describe the Government’s strategy for targeting them and relieving their burden on the Budget.
ii. for improving research and policy formulation capability of the Finance Department, s Cell, which may be called - The Gujarat Finance Restructuring Centre (GUFINREC) may be set up.

iii. Government should also interact with research institutions on a regular basis to derive benefit from ongoing research bearing on policy formation.

iv. Budget formation and monitoring should be fully computerized.

v. Every Department should be formally asked to give proposals, at the time of Budget preparation, for increasing cost recovery in the services provided by them. Approval of a Department’s estimates should be made contingent upon it presenting such proposals and securing Cabinet approval for them.

vi. Each year’s budget must be prepared in the perspective of the medium term plan of fiscal consolidation.

vii. Database relating to loans given by Government is poor; with the result that recovery of interest and loans is also very poor. An internal group of Finance Department should examine this.

viii. At the time of approving annual budget estimates, the Finance department must secure commitments of loan recovery before approving new estimates.

ix. A policy decision must be taken to put a ceiling on the aggregate of guarantees given by Government the ceiling should not exceed 12% of GSDP.

x. At present the pay-as-you-go system applies to Provident Fund, Pension and other retirement benefits. These benefits should be suitably funded rather than left to be dependent on annual budget provisions. This reform may put a transitional pressure on the budget and may, therefore, be implemented in phased manner.
II. Evaluation of Economic Reforms with respect to State-owned Enterprises and Corporations

A. Evaluation of Economic Reforms with respect to state-owned Enterprises and Corporations

A.1. Introduction

Public sector in India is a direct offshoot of the concept of mixed economy, which we adopted at the time of Independence. Public Enterprises were regarded as the best means of ensuring growth and equity, which were the pride of the government.

The main objectives of the PSUs were:

i. Setting up the basic industries needed for the development of the country such as power, defense and engineering.

ii. Achieving self-reliance

iii. Providing a source of livelihood to a large population base a majority of which was low-skilled in the form of reservation of jobs

Not only did the number of PSUs grow, but the investments in these Enterprises also increased substantially. About 50% of the capital formation took place in Public Enterprises. The rate of growth of employment was about 5% in these Enterprises. The magnitude of investment in these Enterprises assumed a compounded rate of 15% per annum. However, these Enterprises turned out to be net non-savers as their financial profitability was negative.

In course of time these units came to be identified with inefficiency, under-production and corruption. The pride of country became a huge liability for the government and the people. Their poor performance is reflected in low profits and in some cases mounting losses year after year. Thus public enterprises in our country have not been able to justify the trust reposed in them. Out of 240 PSUs 120 units are loss making. There were 56 units that reported chronic losses and 64 units that reported occasional losses. Losses of Public Enterprises upset fiscal balance of the government because their losses are eventually met from budget resources. If the government can get rid of these it can reduce budgetary deficit.
The chronic losses by these Enterprises compelled the government to change its outlook towards these Enterprises.

A.2. Privatization

Today the role of government has changed from that of as the owner of Industries to that of a facilitator and regulator. With the growing importance of private investment in the post-reform period with its higher productivity expectations, it would be economically wise for India to disinvest burdensome public sector investment and widen scope for privatization in all spheres of production over time, so as to reap the benefits of accelerated pace of economic growth. Hence privatization of Public Enterprises was accepted as an essential component of the new economic policy.

Privatization of Public Enterprises has become a global phenomenon. Both the developed and developing countries have chosen the path of privatization to tackle their internal economic problems. India introduced economic reforms in 1991; as a part of New Economic Policy, both the State and Central Governments have initiated bold steps for privatization.

India provides a very good example of a developing country where privatization has provided both the options and challenges in a big way. Two decades ago, the concept of privatization as a catalyst was hardly acknowledged in India. With new Economic Policy, privatization debate is open now.

Privatization may be defined as:

i. Sale of all or some assets of Public Enterprises

ii. Leasing of Public Enterprises to Private Sector

iii. Transfer of management of Public Enterprises to the Private Sector

Privatization implies 'withdrawal of the state from production of goods and services or transfer of ownership from the Public Sector to Private Sector'.

In the narrow sense it refers to the sale or leasing of assets in which the state has a major interest, contracting out publicly provided services, substitution of user charges for tax finance and liberalization measures aimed at providing competition and efficiency in enterprises hitherto
reserved for the public sector. In the broad sense the concept of privatization can be used to
describe any activity implying the rolling back of the State or Government.

A.3. **Public Sector Reforms in India since 1991**

i. Reforms were introduced in India in 1991 as part of the process of economic
liberalization

ii. The government constituted the Disinvestments Commission on 23.08.1996. It was
in operation till 30.11.1999

iii. On 10.12.1999 the Department of Disinvestments was constituted as nodal
department to streamline and speedup the process of disinvestments.

The Government of India’s new Public Sector policy is to strengthen those public sector
enterprises, which fall in the reserved areas of operation or are in high priority areas or are
generating good or reasonable profits. In order to raise resources and encourage wider public
participation, a part of Government’s share holding in the PSUs will be made more professional
and given greater powers. At the same time they would be made more accountable with greater
thrust on performance.

The Government’s policy towards the Public Sector is clear and unambiguous. Its main elements
are:

i. Restructure and revive potentially viable PSUs.

ii. Close down PSUs that cannot be revived.

iii. Bring down government equity in all non-strategic PSUs to 26% or lower.

iv. Fully protect the interest of workers employed.
B. Public Sector in Gujarat

B.1. Introduction

Privatization of the state level Public Enterprises would form an important component of the reform process at the state level. Even the restructuring of the Public Enterprises has been a focus area of the reforms process. But standard solutions cannot be prescribed for all the states and privatization process will have to be designed and calibrated according to the specific needs of each state. Thus shape and pace of privatization programme differs significantly from state to state.

The government had public sector participation in 38 enterprises of 12 departments where the total investment was Rs. 18,31,318 Lakhs

The Government of Gujarat approved in 1996 the Public Sector Restructuring Programme (PSRP) based on the State Finance Commission’s recommendations for PSU restructuring as well as considering the recommendations of Rangrajan Committee.

The objective of PSRP was to reduce the participation or exposure of the Government of Gujarat and increase private sector participation. The State-owned Enterprises (SoE) that are selected for restructuring are divided into five categories:

i. Total privatization of 3 SoEs.
ii. Disinvestments in two stages of 51% equity in 4 SoEs.
iii. Closure of 6 SoEs.
iv. Merger of 4 SoEs having synergetic activities.
v. Restructuring of 7 SoEs as per the study made by Price Waterhouse.

The Government initiated the Public Sector Restructuring Programme for the State-owned Enterprises. Under PSRP, the Government has undertaken the closure, restructuring, privatization and disinvestments programme for different PSUs. For this the Asian Development Bank (ADB) has sanctioned a special loan around 1997 and after assessing the reform process and reviewing progress made on relevant commitments, the ADB releases each tranche. For example, GIIC has been recently restructured; Gujarat Tractors Ltd. has been hived off to Mahindra & Mahindra; in the case of GMDC 26% is already given to public and another 26% will be hived off when
improves; GCEL is closed. Similarly, GSTC, Gujarat Construction Corporation and Gujarat Fisheries Development Corporation are also included in the list of enclosure.

B.2. Short-listing of PSUs for Disinvestments

The study recommended that only the undertakings in the area of social, developmental and strategic sectors should be continued as government undertakings. In all other sectors the government’s role should be restricted to the creation of environment for generating wider participation or healthy competition. Social sector has been defined as provision of basic/primary needs of the poor where private enterprises would not normally participate on account of lack of attractive returns.

Following are the Undertakings that should be seriously considered by the government for winding up:

i. Gujarat Films Development Corporation Ltd.
ii. Gujarat Sheep and Wool Development Corporation Ltd.
iii. Gujarat Rural Industries Development Corporation Ltd.
iv. Gujarat State Leather Industries Development Corporation Ltd.
v. Gujarat Fisheries Development Corporation Ltd.
vi. Gujarat State Rural Development Corporation Ltd.
vii. Gujarat State Water Resources Development Corporation Ltd.
viii. Gujarat State Forest Development Corporation Ltd.
ix. Gujarat State Export Development Corporation Ltd.
x. Gujarat State Textiles Corporation Ltd.
xi. Gujarat State Construction Corporation Ltd.

B.3. Status of PSUs

a) Closure of SoEs

Gujarat is the only state that has successfully closed down five loss-making SoEs, namely:

i. Gujarat State Textile Corporation Ltd. (1996)
ii. Gujarat State Construction Corporation Ltd. (1997)
iii. Gujarat Fisheries Development Corporation (1997)
Cabinet sub-committee has also taken decision to close down Gujarat Slum Clearance Board.

b) Total Privatization

- The Government of Gujarat has successfully privatized Gujarat Tractor Corporation Ltd. and succeeded in bringing equity from India's leading tractor and farming equipment manufacture – Mahindra & Mahindra Ltd. on 18th December 1999. 51% of the Governments shares along with the management control have already been transferred to Mahindra & Mahindra and rest of the equity would be transferred as per the sales cum shareholders agreement.

- In case of Gujarat Communications & Electronics Ltd. (GCEL) the state government attempted twice for privatization process but it did not materialize. Ultimately in October 2000 the government took a decision to close down the company.

- In case of Gujarat State Export Corporation Ltd. privatization process is still to be completed.

c) Partial Disinvestments in phased manner

Following cases are typical examples of the initiatives taken by the government:

- Gujarat Minerals Development Corporation (GMDC)
  The highlight of Gujarat Government's divestment programme has been the divestment of 26% of Gujarat Government's holding in GMDC through a public issue offer for sale to public during the month of October-November 1997 with a premium of Rs. 120/- on a share of Rs. 10/-. The issue met with a huge success with over-subscription of 2.5 times even in very depressed stock market conditions.

- Gujarat State Financial Corporation (G3FC)
In case of GSFC, an organization under the SFC Act, where equity was expanded by offering 25% of post-equity to public. This issue was fully subscribed and mobilized Rs. 23.5 Crores by way of equity and Rs. 23.5 Crores by way of premium for GSFC. This issue reduced the government’s holding in GSFC to 49%

- Gujarat Agro Industries Corporation Ltd. (GAIC)
  Both the state government and Central government were holding equal equity in GAIC. As part of PSRP, the Government of Gujarat acquired Government of India’s shareholding, and after that six unviable units were sold off after offering voluntary retirement to its eligible employees.

d) Merger of PSUs

Under the PSRP, following PSUs with synergetic activities were merged:

- Gujarat State Leather Industries Development Corporation & Gujarat Rural Industries Marketing Corporation
- Gujarat State Handicraft Development Corporation & Gujarat State Handloom Development Corporation

B.4. Disinvestments of Government Holding in PSUs

There are undertakings that are making profits. The commission is of the view that this, by itself, cannot be considered as adequate justification for the existence of a PSU. Such PSUs must also be subjected to review as per the touchstone recommended by the Commission. Moreover, even when it is decided to retain State ownership of an undertaking, it has to be decided on the merits of each case whether any useful purpose is being served by retaining 100% ownership of the undertaking by the Government. On the other hand, it has to be seriously considered whether by allowing public participation in the equity of these undertakings the performance of these undertakings would not improve. Government’s majority control should only be held in those cases where it is established on the merits of the case that Government control over the management has relevance to the operations of the undertaking in the broader public interest. We recommend that the decision to retain Government control over the management and with regards to the extent of Government holding should be taken as per these criteria on the merits of each individual cases.
The following Undertakings should be taken up for review leading to decisions on substantial disinvestments in a number of them:

i. Gujarat Power Corporation Ltd.
ii. Gujarat State Handloom Development Corporation Ltd.
iii. Gujarat State Handicrafts Development Corporation Ltd.
iv. Gujarat Small Industries Corporation Ltd.
v. Sardar Sarovar Narmada Nigam Ltd.
vi. Gujarat Scheduled Caste Economic Development Corporation Ltd.
vi. Gujarat Tribal Development Corporation Ltd.
vii. Gujarat Industrial Development Corporation Ltd.
viii. Gujarat State Financial Services Ltd.
x. Gujarat Industrial Investment Corporations Ltd.
xii. Gujarat Communications and Electronics Ltd.
xii. Gujarat Tractor Corporation Ltd.
xiii. Gujarat Mineral Development Corporation Ltd.
xiv. Tourism Corporation of Gujarat Ltd.
xv. Gujarat Agro Industries Corporation Ltd.
xvi. Gujarat Warehousing Corporation Ltd.
xvii. Gujarat Dairy Development Corporation Ltd.
xviii. Gujarat State Seeds Corporation Ltd.
xix. Gujarat Maritime Board
xx. Gujarat Land Development Corporation Ltd.
xxi. Gujarat State Finance Corporation Ltd.

Public sector enterprises have developed an increasing interface with the budgets of the governments. These are meant to be organizations that function on commercial lines and provide adequate return to the states on the capital invested, their actual performance has to be extremely poor. Government needs to find ways of solving this problem through actions such as liquidation and closure, privatization and rationalization of their output prices. A number of states including Andhra Pradesh, Gujarat, Karnataka and Uttar Pradesh have started implementing public enterprise reform programme. It has proven easier to close down than to sell public enterprises at the state level though Gujarat has been successful in privatization.
C. A Case Study of Power Sector:

Power is a critical infrastructure for rapid economic development – it is the engine of all development and progress of economy. Power sector is important in state economy because of its huge impact on state finances and its crucial role in fiscal sustainability. Power sector in India is undergoing a long and slow process of reform.

Since the 1990s, India has embarked on fundamental restructuring of the power sector. This restructuring typically involves moving from integrated, monopoly utility structure to competitive industry structure and shift from government / public owned utilities to private utilities.

C.1. Pre-Reform Structure

India is the second largest country in the world in terms of population (over 1 billion) and the seventh largest in terms of geographical area (3.3 million sq. km.).

During recent years, Power (electricity), being one of the most critical infrastructures of the modern industrial economy, has received high priority and resources (manpower as well as financial). As per the constitution, power sector is a joint responsibility of state and central government.

Power sector is governed by three principal Acts, namely:

i) The Indian Electricity Act, 1910, deals with functioning and regulation of the private licensees

ii) The Electricity (Supply) Act, 1948 and mainly deals with establishment and functioning of State government owned integrated monopoly utilities (within the state) called State Electricity Boards (SEBs)

iii) The Electricity Regulatory Commissions Act, 1998. provides for establishment of state level and central level electricity regulatory commissions (ERCs) for regulating the functioning of private licensees as well as SEBs.

The Indian Electricity (Supply) Act led to evolution of state owned State Electricity Boards (SEBs), which were formed in 1960s and soon took over numerous small private generation and distribution utilities in the respective states. SEBs are integrated utilities with monopoly over
generation, transmission and distribution of power within the state. Except few urban-based private distribution licensees in cities like Mumbai, Kolkata and Ahmedabad, entire distribution is in the hands of SEBs.

In late 1970s the central government established National Thermal Power Corporation (NTPC) for generation of power from large pithead coal thermal generating stations. Currently, NTPC accounts for around 25% of India's total installed capacity and sells power to various states utilities (i.e. SEBs).

The central government also regulates investments in power sector through its agencies such as the Central Electricity Authority (CEA), which was created as per the Indian Electricity (Supply) Act 1948. All generation or distribution scheme above a particular size requires approval of CEA.

C.2. Unbundling & Privatization

In mid 1990s, Orissa state on the eastern cost of India began a process of fundamental restructuring of the state power sector. Under the World Bank (WB) loan, the state decided to adopt - what is known as WB-Orissa model of reform. This consisted of a three-pronged strategy of:

i) Un-bundling the integrated utility in three separate sectors of generation, transmission and distribution,

ii) Privatization of generation and distribution companies and,

iii) Establishment of independent regulatory commissions to regulate these utilities.

Soon afterwards several other states such as Andhra Pradesh, Haryana, Uttar Pradesh, and Rajasthan also embarked on similar reforms and also availed loans from multilateral development banks such as the WB and Asian Development Bank. Later states of Karnataka and Delhi also joined the bandwagon.

The Electricity Regulatory Commissions Act, 1998 of the central government enabled states to establish independent regulatory commissions obviating the need for a state level legislation. Several states such as Maharashtra, Tamil Nadu and Punjab have established regulatory commissions under this central legislation. These states have not adopted the WB model of unbundling and privatisation as yet.
In August 2001, the central government had introduced a bill, 'The Electricity Bill 2001'. The Electricity Bill 2001 replaces the above-mentioned three existing electricity Acts. It provides for increased competition in the sector by facilitating open access to transmission and distribution grid, power trading, and also allowing setting up of captive (only for self use) power plants without any restriction.

C.3. **Objectives of Power Reforms:**

The objectives of power sector reforms are:

- To augment sufficient generating capacity to meet the Five-Year Plan targets.
- Generate electricity at an economical cost.
- Provide reliable and high quality services to the consumers.
- Ensure that the power sector is financially viable.
- Provide an attractive environment to bring in private investment.

Quite clearly, the above objectives are a reflection of 'what has not been achieved' or 'what remains to be achieved' in different areas of power sector, namely, from generation of power to its distribution and fiscal management of power sector. For example, speaking for additional generation capacity itself, there were major shortfalls in achieving the desired targets in eighth and ninth five-year plans and the proportionate progress in current plan is lower than desired.

The problems faced by the power sector are many. The main cause of all the problems faced by the power sector could be narrowed down to one single important factor – that all functions related to power sector were ultimately converge at the government be it generation, transmission & distribution, setting up and implementation of tariffs, etc.

Before the State Electricity Regulatory Commissions (SERCs) were set up in 1998, the State Electricity Boards (SEBs) had to set up the tariffs for the final consumers under the recommendations of ad-hoc tariff committees set up from time to time under the guidance of state governments. There was no compulsion to set tariff in a commercial manner. The power tariff structure was based more on the political inclinations of the state governments, agriculture and farming sector being the major consumer of electricity and also being an important and sensitive lobby in overall political setup. Moreover, the SEBs did not retain profits. The state
government appropriated the profits and also bore the losses. Over the years the SEBs became financially sick. By 1991 most of them were making huge losses. Also the central government was in a financial crisis and was unable to provide funds to create new generating capacity.

The principal causes of sickness are:

• **Subsidies:**

The sickness of the power sector is directly attributable to the financial sickness of the SEBs. Electricity is provided to agricultural users at highly subsidized rates. Initially, electricity demand by agriculture was a small part of the total demand. But over the years it has increased as can be seen below:

3.9 % in 1950-51
6 % in 1960-61
30.75 % in 1997-98

The burden of subsidy till mid 70’s was small but increased as the demand grew in later years.

• **Transmission and Distribution (T & D) Losses:**

Even more than the agricultural subsidies for power, large transmission and distribution losses contributed to the financial sickness of SEBs. The table given below shows the transmission and distribution losses:

<table>
<thead>
<tr>
<th>State</th>
<th>Year_1995-96</th>
<th>Year_1996-97</th>
<th>Year_1997-98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>18.9</td>
<td>30.1</td>
<td>25.0</td>
</tr>
<tr>
<td>Gujarat</td>
<td>18.3</td>
<td>18.2</td>
<td>18.0</td>
</tr>
<tr>
<td>Karnataka</td>
<td>17.5</td>
<td>18.5</td>
<td>18.4</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>15.4</td>
<td>15.3</td>
<td>15.2</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>17.0</td>
<td>17.0</td>
<td>17.0</td>
</tr>
</tbody>
</table>

In all of the above states T & D losses were negligible excepting Andhra Pradesh as compared to other states like Delhi, Jammu and Kashmir, Orissa etc. in case of Andhra Pradesh it was negligible in 1995-96 but it increased suddenly in succeeding years.

- Labour productivity and over staffing:

Even though the number of total employees in all the SEBs together has declined - from 0.98 million in 1992-93 to 0.91 million in 1997-98 - most of the SEBs are still overstaffed. The table given below allows us to better study labour performance:

**Table - L**

Indicators of Labour Productivity and Labour Cost per Unit Supply (1996-97)

<table>
<thead>
<tr>
<th>State</th>
<th>Per Employee (1996-97)</th>
<th>Labour Cost (1994-95)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sales (in '000 KWh)</td>
<td>Number of Consumers</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>290</td>
<td>135</td>
</tr>
<tr>
<td>Gujarat</td>
<td>556</td>
<td>128</td>
</tr>
<tr>
<td>Karnataka</td>
<td>333</td>
<td>175</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>380</td>
<td>103</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>278</td>
<td>123</td>
</tr>
</tbody>
</table>


Labour performance was relatively better in some of the SEBs such as Andhra Pradesh, Gujarat, Karnataka and Maharashtra. Even employee cost per unit was lower in Gujarat at 16 paise as also in Andhra Pradesh at 15 paise.

- Arrears:

Almost all SEBs have accumulated a large amount of arrears. The seriousness of the problem of arrears has worsened in recent years as can be seen from the table below:
### Table - M
Arrears of SEBs as on March 1997

<table>
<thead>
<tr>
<th>State</th>
<th>Revenue (Rs. Crores)</th>
<th>Arrears (Rs. Crores)</th>
<th>Arrears (percentage of Revenue)</th>
<th>No. of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>4236</td>
<td>932</td>
<td>22</td>
<td>81</td>
</tr>
<tr>
<td>Gujarat</td>
<td>5065</td>
<td>1165</td>
<td>23</td>
<td>83</td>
</tr>
<tr>
<td>Karnataka</td>
<td>2743</td>
<td>1289</td>
<td>47</td>
<td>172</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>9242</td>
<td>2495</td>
<td>27</td>
<td>99</td>
</tr>
<tr>
<td>Tamilnadu</td>
<td>5606</td>
<td>280</td>
<td>5</td>
<td>18</td>
</tr>
</tbody>
</table>


The situation is better in Andhra Pradesh, Gujarat and Tamilnadu. The SEBs should seriously take some steps towards improving revenue collection.

Arrears amounting to more than six months’ revenue are outstanding for West Bengal, Uttar Pradesh, Orissa, Meghalaya and Assam. The situation is critical for Bihar, which has arrears outstanding equivalent of nearly double the revenue earnings for the year 1996-97. In states like Bihar and Meghalaya there was negative correlation of arrears with employees.

### C.4. Experience of Power Sector Reforms in India:

Power sector reforms initiated ten years ago in 1991 have progressed on following lines:

1. In 1992 the power sector was opened up to independent power producers (IPPs) so that the power generating capacity could be augmented.
2. Regulatory Commissions were established to rationalize tariffs. The Central Electricity Regulatory Commission (CERC) was set up in late 1996. The states were urged to set up individual State Electricity Regulatory Commissions (SERCs). Eventually fourteen states set up their own SERCs and in many states they have issued tariff order by now.
3. The unbundling of generation, transmission and distribution function by a specified date has already been implemented in several states.
4. Some SERCs have produced their tariff notifications such as in Andhra Pradesh and Maharashtra.
Some states have recently begun taking serious measures towards reforms. Orissa and Delhi are the only two states that have completed the process of unbundling and privatization of these distribution companies. The other states that have commenced reforms include Andhra Pradesh, Haryana, Madhya Pradesh, Rajasthan and Uttar Pradesh.

Even then a lot still remains to be achieved and it is a long journey as is clear from the present situation on power generation front. A case in point is the generation capacity as on June 2003, as explained below:

That into the second year of the Five-Year Plan (June 2003), only 2,958 MW of additional capacity had been provided against a Tenth Plan target of about 41,000 MW. Work had begun on adding another 18,842 MW. Unless the States manage to launch work on the remaining proposals, the balance of 19,309 MW would hang in the balance. It is a grim reminder to the fact that unless the States and the utilities get on with the challenging task of building additional capacities, particularly in the background of the huge slippages in achieving the targets set in the Eighth and Ninth Plans, even the current Plan targets may be hard to achieve.

Also unless work on the projects to generate 19,309 MW begins before the year is out, they cannot be commissioned by the end of the Plan period in 2007.

Of the 41,000-plus MW additional capacities to be built in the current Plan, over 22,800 MW are in the Central sector, a little over 11,000 MW in the States’ sector and only 7,121 MW in the private sector.

According to the Union Ministry, only 53.77 per cent of the target for the Eighth Plan was achieved and during the Ninth Plan, only about 50 per cent of the projected 40,245 MW was added. As such, the target for the Tenth Plan was fixed at the same level, hoping to achieve it at least this time.

To ensure that the target is met at least this time, the Centre and the Planning Commission have accorded top priority to the power sector, allocating a whopping Rs. 1,43,399 Crores to the Ministry, including a gross budgetary support of Rs. 25,000 Crores and the remaining Rs. 1,18,399 Crores in internal extra-budgetary resources. This compares to just Rs. 14,900 Crores and Rs. 30,648 Crores during the Ninth Plan.
Realising the importance of the power sector, many of the State Governments have undertaken crucial reforms and signed MoUs with the Centre to complete this process by accessing funds under the Accelerated Power Development and Reform Programme. They are thus committed to restructuring their State Electricity Boards and helping them turn the corner. Containing transmission and distribution losses, detecting and stamping out 'theft' and providing budgetary support for any subsidies that the boards have to bear are some of the features of the reform programme that the States have embarked on. The Electricity Act, which took a long time to get through Parliament so that the Centre could build a consensus, should also enable the States to speed up the reforms. If the States want to avoid 'privatisation' of transmission or distribution, the only way forward is to curtail line losses and ensure 100 per cent billing of all supplies so that the power boards increase their revenue and can augment generation.

On the distribution front following targets have been set:

- Rationalization of tariff through independent regulatory commission.
- Transparent policies on subsidies.
- Minimum agricultural tariff.
- 100% metering and energy audit.
- Reduction of T&D losses through elimination of theft and strengthening/upgradation of sub-transmission and distribution system.
- Exploring possibilities of privatization of distribution function.
- Decentralized distribution management in rural areas.

C.5. The Status of Power Reforms in individual states

The Status of Power Reforms in individual states under present study is as follows:

Andhra Pradesh

- State Reforms Act came into force w.e.f. 1.2.1999.
- APSEB unbundled into Andhra Pradesh Generation Company Ltd. (APGENCO) and Andhra Pradesh Transmission Company Ltd. (APTRANSCO for transmission and distribution)
- Andhra Pradesh Electricity Regulatory Commission has been operational w.e.f. 3.4.1999
- World Bank loan of US $ 210 million under the Adaptable Programme Loan (APL)-1 w.e.f. 22.3.1999 for reforms & restructuring
• DFID’s 28 million UK Pound as technical co-operation grant

• CIDA is giving technical assistance of Canadian dollar 4 million

**Gujarat**

• State Reforms Bill being finalised

• Restructuring programme has emphasised on metering of all categories of consumers and imposing a cap on agricultural subsidy

• SERC has been functional since 10.3.1999. It has conducted public hearings and invited consultants for making the preliminary presentations and discussions for undertaking tariff and reform related studies

• Negotiations are going on with ADB for loan

**Karnataka**

• State Electricity Reforms Act has come into effect from 1.6.1999

• Two new companies namely Karnataka Power Transmission Corporation Ltd. (KPTCL) and Visvesvaraya Vidyut Nigam Ltd., a GENCO, (VVNL) have been incorporated and come into existence from 1.8.1999

• KPTCL has carved out five Regional Business Centres (RBC) for five identified zones

• SERC has been functional since 15.11.1999

• State Government has signed a Memorandum of Agreement (MOA) on 12.2.2000 with the Ministry of Power, Government of India charting out the actions to be taken towards power sector reforms in a structured and time bound manner

• Completion of privatisation of distribution by December 2001 is one of the main points of MOA. Steps have been taken for this

• As per the MOA, GOI has committed support among other things for reduction in T&D losses, strengthening and improving the transmission network and enabling supply of additional power to Karnataka, Rural Electrification Programme, Structural Adjustment, new generating capacity etc

**Maharashtra**

• State Government is committed to reforms with technical and financial assistance of PFC

• Actions initiated for appointment of consultants for undertaking tariff and reform related studies

• SERC has been functional w.e.f. 6.10.1999

• MSEB intends to carry out study for formation of a Joint Venture Company for distribution of Electricity in Bhiwandi area in the district of Thane
Tamilnadu

- Consultants have been appointed for undertaking the reforms and restructuring study
- Two members of SERC have joined

Restructuring and reforms have been attempted notably in four states – Andhra Pradesh, Haryana, Orissa and Uttar Pradesh. Here the efforts made in Andhra Pradesh (one of the states under present study) are explained briefly.

C.6. **Case Study of Andhra Pradesh:**

The key power utility in the state, Andhra Pradesh State Electricity Board (APSEB) was formed on 01 April 1959. Similar to other SEBs in the country, APSEB had a monopoly in the power sector and functioned under the overall guidance of the state government, interacting with the central power agencies for planning and co-ordination.

APSEB controls 100% power distribution and around 73% of the generation capacity in the state. Apart from its own generation capacity of 5612 MW, APSEB draws from 885 MW capacity of the Central sector generating stations and around 940 MW of IPP & other private sector plants.

Table below shows the growth in power infrastructure in the state.

**Table - N**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Year_1961</th>
<th>Year_2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Installed Capacity MW</td>
<td>213</td>
<td>7709</td>
</tr>
<tr>
<td>Energy handled MU</td>
<td>784</td>
<td>46806</td>
</tr>
<tr>
<td>Consumers Million</td>
<td>0.27</td>
<td>11.0</td>
</tr>
<tr>
<td>Agricultural Consumers Million</td>
<td>0.18</td>
<td>1.9</td>
</tr>
<tr>
<td>Villages Electrified</td>
<td>2680 (10%)</td>
<td>26289(100%, from 1990)</td>
</tr>
<tr>
<td>Per capita consumption</td>
<td>19</td>
<td>404(1999)</td>
</tr>
<tr>
<td>Employees</td>
<td>5000C (1980)</td>
<td>75000</td>
</tr>
</tbody>
</table>

(Source: India Power Sector Reforms, Issue 1, October 2001)
The following Tables give more details on growth of generation capacity, energy generation, transmission capacity, and distribution system and consumer wise energy sales.

**Table - O**
**Generation - Installed capacity & Connected Load**

<table>
<thead>
<tr>
<th>Year</th>
<th>State Owned - MW</th>
<th>Central Share- MW</th>
<th>Private - MW</th>
<th>Total - MW</th>
<th>Connected Load- MW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hydro</td>
<td>Thermal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1961</td>
<td>124</td>
<td>39</td>
<td>-</td>
<td>-</td>
<td>213</td>
</tr>
<tr>
<td>1971</td>
<td>268</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>605</td>
</tr>
<tr>
<td>1981</td>
<td>1038</td>
<td>1260</td>
<td>-</td>
<td>-</td>
<td>2298</td>
</tr>
<tr>
<td>1991</td>
<td>2452</td>
<td>*1679</td>
<td>762</td>
<td>-</td>
<td>4893</td>
</tr>
<tr>
<td>1999</td>
<td>2659</td>
<td>**3225</td>
<td>885</td>
<td>563</td>
<td>7330</td>
</tr>
</tbody>
</table>

(Source: *India Power Sector Reforms, Issue 1, October 2001*)

**Notes:**

1. Central share is the share of power from the Central sector generating plants in southern region. Plants included are NTPC, Ramagundem, HCL at Neyveli and NPC, Kalpakkam.
3. **: Includes 272 MW of the AP Gas Power Corporation.
4. Compounded Annual Growth Rate of connected load is about 8% in 70's, 8.8% in 80's and 7% in 90's.
5. In addition to this, there is an estimated captive power generation capacity of 948 MW (1999).
6. The peak load met in 1961 was 146 MW; in 1999 was 6480 MW.

**Table - P**
**Generation - Energy**

<table>
<thead>
<tr>
<th>Year</th>
<th>State Owned - MU</th>
<th>Central Share- MU</th>
<th>Private - MU</th>
<th>Total - MU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hydro</td>
<td>Thermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1961</td>
<td>610</td>
<td>174</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1974</td>
<td>910</td>
<td>2196</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1985</td>
<td>6716</td>
<td>5835</td>
<td>-</td>
<td>834</td>
</tr>
<tr>
<td>1991</td>
<td>10017</td>
<td>8102</td>
<td>2725</td>
<td>-</td>
</tr>
<tr>
<td>1999</td>
<td>7189</td>
<td>*21633</td>
<td>6921</td>
<td>3094</td>
</tr>
</tbody>
</table>

(Source: *India Power Sector Reforms, Issue 1, October 2001*)
Notes:

1. Central share is the share of power from the Central sector generating plants in southern region. Plants included are NTPC, Ramagundem, NLC at Neyveli and NPC, Kalpakkam.
2. *: Includes 1799 MU of the AP Gas Power Corporation
3. In addition to this, there is estimated to be a captive power generation of 4338 MU (1999)

Table - Q
Transmission Capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>400 kV</th>
<th>220 kV</th>
<th>132 kV</th>
<th>66 kV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Substations</td>
<td>Circuit kms</td>
<td>Substations</td>
<td>Circuit kms</td>
</tr>
<tr>
<td>1961</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1971</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>1144</td>
</tr>
<tr>
<td>1980</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>2428</td>
</tr>
<tr>
<td>1991</td>
<td>-</td>
<td>-</td>
<td>27</td>
<td>4987</td>
</tr>
<tr>
<td>1999</td>
<td>6</td>
<td>1000</td>
<td>56</td>
<td>8192</td>
</tr>
</tbody>
</table>

(Source: India Power Sector Reforms, Issue 1, October 2001)

Notes:

1. 400 kV system belongs to POWERGRID. State sector also has been setting up 400 kV system from 2000 (46 circuit kms set up by Mar 2000) and has plans to expand the 400 kV network.
2. There are inter-state tie lines to Tamil Nadu and Karnataka- two neighbouring states, which also form part of the Southern Regional grid. Links are also there to Madhya Pradesh (part of Western Region) and Orissa (Eastern Region). There are HVDC links to Eastern Region and Western region.
3. From the table, it can be seen that 66 kV system is getting phased out.

Table - R
Distribution Capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>33 kV</th>
<th>11 kV</th>
<th>LT (415 V)</th>
<th>Distribution Transformers</th>
<th>Consumers (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Substations</td>
<td>Circuit kms</td>
<td>Circuit kms</td>
<td>Substations</td>
<td>Circuit kms</td>
</tr>
<tr>
<td>1961</td>
<td>65</td>
<td>2883</td>
<td>11917</td>
<td>13738</td>
<td>4667</td>
</tr>
<tr>
<td>1971</td>
<td>248</td>
<td>6620</td>
<td>42879</td>
<td>65805</td>
<td>22549</td>
</tr>
<tr>
<td>1981</td>
<td>376</td>
<td>10188</td>
<td>62427</td>
<td>107681</td>
<td>34701</td>
</tr>
<tr>
<td>1991</td>
<td>986</td>
<td>19064</td>
<td>123460</td>
<td>285110</td>
<td>88054</td>
</tr>
<tr>
<td>1999</td>
<td>1593</td>
<td>27258</td>
<td>160198</td>
<td>412235</td>
<td>171766</td>
</tr>
</tbody>
</table>

(Source: India Power Sector Reforms, Issue 1, October 2001)
### Table - S
**Energy & Personnel**

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Loss</th>
<th>Total</th>
<th>Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MU</td>
<td>%</td>
<td>MU</td>
<td>%</td>
<td>MU</td>
<td>%</td>
</tr>
<tr>
<td>1971</td>
<td>179</td>
<td>5.8</td>
<td>394</td>
<td>12.7</td>
<td>1613</td>
<td>52.0</td>
</tr>
<tr>
<td>1981</td>
<td>546</td>
<td>7.9</td>
<td>915</td>
<td>13.2</td>
<td>2966</td>
<td>42.9</td>
</tr>
<tr>
<td>1991</td>
<td>207</td>
<td>10.3</td>
<td>6285</td>
<td>31.1</td>
<td>5715</td>
<td>28.3</td>
</tr>
<tr>
<td>1999</td>
<td>509</td>
<td>13.2</td>
<td>9554</td>
<td>24.7</td>
<td>5786</td>
<td>14.9</td>
</tr>
</tbody>
</table>

(Source: India Power Sector Reforms, Issue 1, October 2001)

Notes:

1. In addition to three consumer categories - Domestic, Agriculture and Industry- some energy is sold to other states.
2. % is taken on the total MU, which is the energy generated and handled by the system- not sold.
3. Loss % was 35.4 for 2001 and is expected to be 32.3 % for 2002.
4. From 1999, APSEB personnel have been distributed in Generation, Transmission and Distribution companies. Personnel from Private generating stations have not been accounted for.

Like many other SEBs, APSEB also had problems of mounting negatives in the balance sheet, high transmission losses and poor quality of power supply. The Electricity Act, 1948 requires SEBs to earn a minimum of 3% rate of return on net fixed assets in operation. State governments are required to provide necessary subsidy to the SEB in case it fails to earn this return. APSEB was a financially healthy utility till 1992. From 1993, it has failed to achieve the rate of return and state government subsidy has been growing from Rs. 9440 M in 1995 to Rs. 16260 M in 2000. High transmission & distribution losses, increasing in-efficiency in metering & collection, very low tariff to agricultural consumers and high cost of power from private generators are some of the factors that have contributed to the deterioration of financial health. One of the major impacts of this worsening financial situation was APSEB's inability to raise finances for the required investments in generation and T&D. As a result AP faced severe power shortages and poor quality of power supply. Installed generation capacity in the state sector increased by 70% in the period 1981 - 1991 where as it increased only by 45% in 1991 - 2001. In this whole period, demand continued...
to grow at compounded annual growth rate of 7-8%. This combined with inadequate Transmission & Distribution infrastructure resulted in poor quality of supply and low reliability.

The Table given below gives figures of revenue and expenses from 1981.

**Table - T**

**Finances**

(In Rs. Million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (Rs. Million)</th>
<th>Operating Expenditure (Rs. Million)</th>
<th>Gap (Rs. Million)</th>
<th>Subsidy (Rs. Million)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>2046</td>
<td>2045</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>12631</td>
<td>12207</td>
<td>424</td>
<td>386</td>
<td>Plough back</td>
</tr>
<tr>
<td>1999</td>
<td>46288</td>
<td>70449</td>
<td>-2416</td>
<td>21915</td>
<td>Losses start from 1995</td>
</tr>
<tr>
<td>2001</td>
<td>58443</td>
<td>86437</td>
<td>-27994</td>
<td>16267</td>
<td></td>
</tr>
</tbody>
</table>

(Source: India Power Sector Reforms, Issue 1, October 2001)

Note: In 2001, for APTRANSCO, Power purchase was 82% of the expenditure, O&M was 8% and Interest & others was 10%.

By the year 1995, the government became concerned at the fast deteriorating financial and overall performance of the Andhra Pradesh State Electricity Board (APSEB) and set up a high powered committee to report on reform and restructuring of APSEB. The committee suggested:

1. The demand should be made on a realistic basis and supply arranged on rational basis,
2. **APSEB should be restructured into different entities** – a Generation Corporation (GENCO), a transmission corporation (TRANSCO) and four or five distribution companies.

The Government of Andhra Pradesh accepted in principle all the recommendations but decided to seek the World Bank's assistance for designing the reform and restructuring of APSEB. The design was not very different from the recommendations of earlier committee.

APSEB was restructured on February 1, 1999 into APGENCO, which was entrusted with all the generation related assets, and APTRANSCO, which got the rest of the assets relating to transmission and distribution. On April 1, 2000 the distribution function was separated from transmission function. In June 2000 APSERC issued its first tariff order recommending a 20% increase in tariff, which triggered an intense and widespread opposition to the reforms. The
government expressed its willingness to provide more subsidies in order to reduce the impact of
tariff shocks to the final consumers. In Andhra Pradesh also the reforms have not led to
significant efficiency gains.

Reform Model:

While every state has tried to adopt a reform model tailored to suit its specific requirements it is
seen that all these models are based on a pattern, which is strikingly similar. The key elements of
the reform model adopted by Andhra Pradesh include:

1. Unbundling of the sector along financial lines.
2. Creation of an independent regulatory mechanism
5. Phased introduction of competition both at retail supply and bulk supply levels at a later
date.

A vast majority of states in India have favoured horizontal unbundling of the power sector by
segregating generation, transmission and distribution of power from each other. Reforms in
respect of proper alignment of pricing and control of pilferage are inescapable in the present
scenario. If these reforms are delayed at the level of states, then central organizations such as
NTPC and NHPC would also suffer because of sick and inefficient SEBs. State Chief Minister do
agree to raise the tariff on agricultural consumers but at implementation stage they develop cold
feet as there is a strong political lobby trying to protect the interest of the agricultural sector –
though it is out of perspective from the point of view of overall economic development. This has
happened even with Gujarat also where the tariff hike for agricultural consumers was strongly
opposed by the farmers' lobby and ultimately the government had to give in to the pressures and
postpone the implementation of revised tariffs.