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FINANCIAL PERFORMANCES OF THE GULBARGA ELECTRICITY SUPPLY COMPANY (GESCOM)

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ABSTRACT

Electricity today is a basic human need .It is important infrastructure facility on which the economic activities are fully dependent upon. The vital role of power in economic development is well recognized by the development economists and planners. The development plans in India and other developing countries are largely concerned with building up of agricultural, industrial sector for creating necessary pre-conditions of economic growth accordingly to the power sector development has assumed significant place. The study intends to the Financial and Operational Performances of the Gulbarga Electricity Supply Company (GESCOM). The present study is mainly based on secondary data.The data has been collected for twelve years from 2003-04 to 2014-15 as the period of the study. The data is analysed with the help suitable statistical techniques like Annual Growth Rate (AGR), average andpercentage etc. in the present study, financial and operational performances of the GESCOM in terms of efficiency issues like billing, tariff, demand, supply, sale of power, power purchase, revenue, subsidies, expenditure, losses, consumption and other related problems especially after the reform process. The study found that GESCOM is performing significantly effective.

KEYWORDS : *Electricity , development economists and planners.*

INTRODUCTION

Electricity today is a basic human need .It is important infrastructure facility on which the economic activities are fully dependent upon. The vital role of power in economic development is well recognized by the development economists and planners. The development plans in India and other developing countries are largely concerned with building up of agricultural, industrial sector for creating necessary pre-conditions of economic growth accordingly to the power sector development has assumed significant place. Electric power, which is one form of energy, is an essential ingredient of economic development and it is required for commercial and non-commercial uses. The commercial uses include use of power in industries, agriculture, transport and other productive activities. Non-commercial uses include electric power required for domestic lighting, cooking, use of mechanical gadgets like refrigerators, air conditioners etc. With the growth of population and with the increase in the use of modern gadgets in daily life, it is quite natural that the demand for electricity for domestic use has grown at a faster rate.

Power development during the last 50 years has been significant in the economic history of India. The total installed capacity from all sources had increased from 2.300 Mega Watt (MW) in 1950 to 1, 04,900 MW by 2001-02 and in year 2014-15 to 271.722 (MW) . Besides this the enlargement of generating capacity, in the last five decades have witnessed the growth of power system from the rudimentary stage of isolated stations to fairly well integrated systems in most of the states and emergence of grids. Construction of inter-state and inter-regional lines had also made headway. Despite this tremendous growth, the country has always faced the chronic power shortage.

The critical problem in the area of power sector is poor performance of the State Electricity Boards (SEB's) which generate and distribute power set power tariffs and collect revenue from the users. Each SEB operated as a state monopoly authority combining function relating to generation, transmission and distribution of electricity. Yet SEB's have continued to suffer from huge losses over the last 5 decades. The serious weakness is, the sub-optimal capacity utilization of their thermal generation units and high Transmission and Distribution losses. Thermal power plants have generally suffered from low capacity utilization largely due to deficiencies in the generating equipment, for Poor quality of coal received by the power plants etc. This has been an important factor the chronic shortage of power in the country.

Therefore, the new economic policy introduced in 1991as a result of it and later the power sector reforms aim at brining competitive structures in power sector .The Karnataka state has introduced power sector reforms in 1999. The state Government has first Established Karnataka Electricity Regulatory (KERC) and it disbanded Karnataka Electricity Broad (KEB) and replaced Karnataka Power Transmission Corporation Limited (KPTCL) five distribution companies. Mainly Bangalore Electricity supply company (BESCOM),Mangalore Electricity supply company (MESCOM), Hubli Electricity supply company (HESCOM), Kalaburagi Electricity Supply Company (GESCOM) and Chamundeshwari Electricity Supply Corporation Ltd. (CESC) for providing adequate and reliable quality power to consumers for commercial and domestic use for ensuring better service to consumers.

The process of reforms and changes made in this period needs to be studied in detail. The studies undertaken so far are focused mainly at macro level analysis. It is essential to come down at the micro level i.e. the unit level to assess the process of reforms and evaluate the performance. Hence, the present study is about the financial performances of Gulbarga Electricity Supply Company (GESCOM).

STATEMENT OF THE PROBLEM

The power sector activities like generation, transmission and distribution of electricity in India which are being carried out by the public sector organization namely State Electricity Boards (SEBs) in India. But these organizations became financially non-viable. During 1980s the SEBs started facing problems related to technical, commercial and managerial efficiency. As a result of SEBs have been suffering from, poor financial health, huge Transmission and Distribution (T&D) losses, political interferences, inadequate billing, poor collections, huge theft, lack of proper management, lack of commercial orientation on the part of SEB employees. The consumers of electricity also have been facing a lot of problems in terms of high frequency of power cuts, low & fluctuating voltage, lack of responsiveness of SEB. According to Expert Group 2003, the dues of SEB accumulated to the sum of Rs.41, 473 crore of credit consisting of Rs.25, 727 crore of principal, and Rs 15,746 crore of interest. There was a huge gap between availability and demand for electricity. In order to reorganize the power sector which is core to economic development, Government of India introduced power sector reforms. As a part of these reforms many states in the country initiated power sector reforms, Karnataka is one such state. In 1996 Karnataka Government abolished erstwhile SEB and put in place 5 PDC's. GESCOM. Such power distribution company which has come in to existence in the year 2002.

GESCOM covers six districts namely GESCOM covers six districts namely Bidar, Gulbarga, Raichur, Bellary, Yadagiri and Koppal.

Therefore it is necessary to make assessment of economic efficiency of GESCOM. Hence this study has following objectives.

OBJECTIVES OF THE STUDY

1) To study the Financial Performances of Gulbarga Electricity Supply company (GESCOM).
2) To analyse the Operational Performances of Gulbarga Electricity Supply company (GESCOM)
3) To suggest suitable policy measures to improve the economic efficiency of GESCOM.

METHODOLOGY:-

The secondary data is collected from various sources such as reports of Ministry of power, Government of India, ministry of energy Government of Karnataka (GOK), various annual reports, books, magazines, papers, articles, Economic survey and websites.

Data Analysis:-

The secondary data is analysed with the help suitable statistical techniques like Annual Growth Rate (AGR), average and percentage etc.

RESULTS AND DISCUSSION:

Gulbarga Electricity Supply Company (GESCOM) came into existence on June 1, 2002. Its area of operation covers Six districts Viz., Bidar,Gulbarga, Yadagir, Raichur, Koppal and Bellary. The registered office of the Company is located at Gulbarga.

Table-1
General Information of GESCOM

Sl.No	**Particular (As on 30-09-13)**		
1.	Area	Sq.km.	43861
2.	Districts	Nos.	6
3.	Taluks	Nos.	31
4.	Population	lakhs	95
5.	Consumers as on Sept-13	Nos., Lakhs	24.69
6.	Energy Consumption during FY-14 up to SEPT-13	MU	2802.24
7.	O & M Distribution Zone	Nos.	2
8.	DTCs	Nos.	59422
9.	Assets	Rs. in Crores	1099.47
10.	HT lines	Ckt. kms.	42831.88
11.	LT lines	Ckt. kms	77614.390
12.	Total employees strength	-	-
a)	Sanctioned	Nos.	8326
b)	Working	Nos.	5066
13.	Demand(FY-14 up to Sept-13)	Rs. in Crores	1356.73
14.	Collection(FY-14 up to Sept-13)	Rs. in Crores	1256.04

Source: GESCOM Annual Report, Gulbarga. 2013-14.

The hot and dry tropical climate of the area has primarily an agro – based economy and is economically and educationally lesser developed as compared to other parts of Karnataka. The fact that three rivers (Tungabhadra, Bheema, and Krishna) flowing through this region, provide little respite to the farmer's dependence on rain. Dams constructed across Tungabhadra River in Bellary District and Krishna River in Gulbarga District have obviated this dependence to certain extent. Bore wells and open wells run dry during summer. The primary crops cultivated in this area are Paddy, Sugarcane, Pulses, Jowar and Cotton etc.

Table: 2
Financial Performances of GESCOM for 2003-04 to 2012-13

Sl. No.	Particulars	2003-04	2012-13
1.	Revenue from sale of power	657	2510.45
2.	Revenue from subsidies	422	
3.	Other income	3	30.67
4.	Total income	1082	2541.12
5.	Total expenditure	1027	2301.30
6.	Depreciation	34	82.80
7.	Interest charges	17	157.02
8.	Total Expenditure	1078	191.85
9.	Profit (1082-1072)	4	-26.20
10	Prior Period credit	3	-8.63
11.	Gross profit	7	-4.02
12.	Provision for tax	0.11	-4.61
13	Net profit	6.89	61.31

Source:GESCOM Annual Report, Gulbarga. 2003-04 and 2012-13.

From the above table 2 shows, during the year 2003-04 the GESCOM earned a net Profit of Rs. 6.89 Crores. During the year 2011-12 net profit of Rs. 61.31 Crores.

Sale of Power

The GESCOM's total sales include the metered and unmetered categories, which are as follows table 3.

Table: 3
Sales of Power Sector in Gulbarga

Sl. No.	Sales of Power	2003-04	2011-12
1.	Metered sales	162MU	2532.18
2.	Unmetered sales	1419MU	2909.65
	Total Sales	**2581 MU**	**5441.83**

Source:GESCOM Annual Report, Gulbarga. 2003-04 and 2011-12.

From the above table 3 finds that, By selling 2581 Mu of power to the various category of consumers and collected the revenue of Rs. 657 crores in year 2003-04 and in year 2011-12 Rs. 2510 crores.

Cost of Supply and Average Demand

The GESCOM's cost of supply per of power comes to Rs. Cost of Supply, Average Demand and Realization per unit:

1. The GESCOM's cost of supply per unit is Rs. 4.18.FY 2003-04.
2. The average cost of supply per unit is Rs. 4.68, during FY11-12.

As against to this, the average demand was raised and the cash realization across different categories of consumers are mentioned as below table 4.

Table: 4
Cost of Supply and Average Demand

Category of Consumers	Average Demand Per Unit of Power (2003-04)	Average Realization Per Unit of Power (Rs.) (2003-04)	Average Demand Per Unit of Power (2011-12)	Average Realization Per Unit of Power (Rs.) (2011-12)
Domestic (LT)	3.51	3,01	3.48	3.47
Commercial (LT)	6.28	6.04	7.05	7.01
Industrial (LT)	4.81	4.74	4.93	4.91
Others (LT)	4.11	2.59	4.70	2.48
Industrial (HT)	4.65	4.82	5.71	5.72
Commercial (HT)	5.25	5.28	6.92	6.96
Others (HT)	4.06	3.10	2.90	2.13
Metered (LT and HT)	4.34	4.07	4.83	4.50
Unmetered (LT) (without tariff subsidy)	1.05	0.21	3.95	4.28
Total – Metered and Unmetered (LT&HT)	2.53	1.95	4.36	4.38

Source:GESCOM Annual Report, Gulbarga. 2003-04 and 2011-12.

The above table 4 data made it clear that the metered demand in year 2003-04 (Rs. 4.34) and in year 2011-12 (Rs. 4.83) per unit of power and the realized power per unit (4.07) and in 2011-12 per unit (4.50) is seems to be more costlier than the unmetered power. The unmetered power cost might be subsidized by the government and the consumers are mostly belonging to the farm groups on the one hand and weaker sections (BJ/KJ) 0n the other hand. Including both metered and unmetered average demand per unit (Rs. 2.53) in year 2003-04 and (Rs. 4.36) in the year 2011-12 and average realization per unit of power is Rs. 1.95 in FY 2003-04 is seems to be lower than the other companies in the state and in the FY 2011-12 Rs. 4.38 it as increased.

Operational Performances of the GESCOM.

The GESCOM had 16.78 lakh consumers at the beginning of the year (2003-04) and 0.69 lakh new consumers added during the year. The total number of consumers at the end of the year stood 17.47 lakh. The breakup of different categories of consumers is as follows:

The GESCOM had 22.73 lakh consumers at the beginning of the year, added 0.78 lakh new consumers during the year. The number of consumers at the end of the year stood at 23.51 lakhs. The category wise break up is shown in the below table 5.

Table: 5
Performances of the GESCOM

Tariff Category	No. of Consumers as On 31.03. 2004	No. of Consumers as On 31.03.2012
Bhagya Jyothi/ Kutir Jyothi	3,86,680	5,56,208
Irrigation Pump sets	1,99,496	2,78,806
Water Supply & Street Light	15,152	25,762
Domestic Lighting & AEH	9,85,628	12,46,358
Commercial Lighting	1,25,156	1,84,970
Industrial (LT)	29,766	45,576
Temporary Supply	4,366	11,729
Water Supply (HT)	46	72
Lift Irrigation Schemes (HT)	99	148
Industrial (HT)	304	966
Commercial (HT)	100	235
Residential Colonies (HT)	19	32
Total	**17,47,505**	**23,50,862**

Source:GESCOM Annual Report, Gulbarga. 2003-04 and 2013-14.

The table 5 indicates that highest number of consumers are there in the Domestic Lighting & AEH category i.e., 985628 to 1246358 in between 2004 to 2013 even in Bhagya Jyothi/ Kutir Jyothi Tariff category we can see 2nd largest number of consumers i.e., 386680 to 556208 in the same period lowest category belongs to Residential colonies (HT) from 19 to 32.

Power Purchase

Prior to10.06.2005, KPTCL was purchasing power Centre from various generating companies and supplied to ESCOMs. Consequent to enactment of the IE Act 2003, State Transmission Utilities were barred from carrying out power trading activities with effect from 10.06.2005. In order to facilitate the smooth working of distribution companies (ESCOMs), the Government of Karnataka constituted a State Power Procurement Coordination Centre under the Chairmanship of Principal Secretary, Energy Department. Further, the State Government issued guidelines to the ESCOMs to make necessary arrangements purchase power directly from the generating Companies and the Power Purchase Agreements already entered into by the KPTCL which has been assigned to ESCOMs with effect from 10.06.2005. In order to arrange timely payments to the Generating Companies, the Government of Karnataka issued directions indicating the share of GESCOM as 13.26% of the total power purchase by all the ESCOMs subject to a final reconciliation of the actual power purchase by each ESCOMs (at the end of each financial year).During the year 2011-12, the Company has received 7177.16 MUs (Except energy balance units) from various power producers viz., KPCL, NTPC, NLC, NPCIL-MAPS & KAIGA, Minor IPPs and Major IPPs etc, as detailed below table 6.

Table: 6
Power Purchase

Particulars	Energy in M.U.	Amount in Crores
Karnataka Power Corporation Ltd. (KPCL)	4333.33	591.20
National Thermal Power Corporation Ltd. (NTPC)	896.39	230.88
Neyveli Lignite Corporation Ltd (NLC)	368.94	128.56
NPCIL (MAPS & KAIGA)	198.53	61.59
Transmission Charges KPTCL	0.00	206.54
Transmission Charges PGCIL	0.00	52.99
Others Companies (Minor–IPPs)	622.98	234.19
Other Power Purchase Cost(UI & Major IPPs)	716.99	275.12
Total	**7177.16**	**1781.07**

Source:GESCOM Annual Report, Gulbarga. 2012-13.

Revenue from Sale of Power

The demand raised during the period towards sale of power was Rs.277.50Crores.The category wise details of demand raised and the collection made out of it are as under the table 7.

Table: 7
Revenue from Sale of Power

Category of Consumers	Demand Raised	Cash collection made (Incl. adjustments)	Collection Efficiency (%)	
	(Rs. In Crores)		2011-12	2010-11
Domestic & AEH (LT)	257.38	256.33	99.59%	101.88%
Commercial Lighting (LT)	140.95	140.07	99.38%	98.44%
Industrial (LT)	83.50	82.99	99.39%	99.65%
Temporary Power Supply	19.91	21.37	107.37%	115.58%

Irrigation Pump sets above 10 HP and Horticulture	1.89	1.07	56.56%	32.59%
Recoverable (LT) category	**503.62**	**501.83**	**99.65%**	**100.75%**
Bhagya Jyothi/Kutir Jyothi	55.86	85.89	153.76%	77.02%
Irrigation Pump sets	1094.28	1159.53	105.96%	96.85%
Un-metered Category	**1150.13**	**1245.41**	**108.28%**	**95.80%**
Water Supply &Street Light (LT)	125.41	55.33	44.12%	46.28%
Water supply (HT)	29.45	18.93	64.28%	95.21%
Lift Irrigation Schemes (HT)	10.41	8.41	80.77%	71.84%
Water Supply & LIS	**165.26**	**82.66**	**50.02%**	**57.30%**
Recoverable HT Categories	**553.96**	**555.52**	**100.28%**	**98.48%**
Total(LT)	**1779.16**	**1802.58**	**101.32%**	**93.79%**
Total(HT)	**593.82**	**582.86**	**98.15%**	**97.95%**
Interest on belated payments & Other Miscellaneous	140.19	177.85	126.86%	23.58%
Total(LT+HT)	**2513.17**	**2563.29**	**101.99%**	**89.06%**

Source: GESCOM Annual Report, Gulbarga. 2012-13.

From the above table 7, it is clear that the generally demand is raised for all purposes, but there is a degree of differences. However there is more demand for unmetered category and there is increase in the cash collection its efficiency also.

Revenue from Subsidies.

During the year, Government of Karnataka vide letter No.EN48PSR 2006 dated 13.6.2007 has clarified that "Onlythe amount of subsidy as intimated by State Government needs to be taken in to account by ESCOMs while preparing their Accounts and Balance Sheet". The RE Subsidy released by Government of Karnataka for FY12, amounts to Rs.918.81 Crores and the same along with the tripartite adjustments approved by GOK amounting to Rs.63.83 Crores is considered as the Tariff Subsidy for the financial year ended on 31.3.2012.

Capital Expenditure

The Company has incurred an expenditure of Rs.179.15 Crores on different capital programmes during the year, the details of which areas under the table 8.

Table: 8
Revenue from Sale of Power

(Rs. in Crores)

Particulars	**Expenditure incurred**	
	2011-12	**2010-11**
Extensionand improvement works & APDRP	45.26	85.44
Replacement of faulty distribution transformers	51.45	36.87
Service Connection and Metering	3.85	3.67
IP Set Energisation	6.51	2.87
Kutir Jyothi &Metering	1.99	0.20
Civil Engineering Works	1.63	2.11
RGGVY Works	0.62	2.06
Provisions for completed works & Contracts in Progress	0.00	12.15
Nirantara Jyoti works	67.84	0.00
Total	**179.15**	**145.55**

Source:GESCOM Annual Report, Gulbarga. 2011-12.

Aggregate Technical &Commercial Losses (AT and Closses).

The Aggregate Technical & Commercial losses for the year 2011-12 works out to 20.14% compared to 30.56% for the previous year. Efforts are on to bring down the AT & Closses through various technical and non-technical measures by improving the collection efficiency and reducing the system losses. The details of the AT& Closses are as under table 9.

Table: 9
Aggregate Technical and Commercial Losses (AT and Closses)

Sl.No	**Particulars**	**2010-11 (in%)**	**2011-12 (in%)**
1.	Billing Efficiency (i.e., units billed/input)	77.94	78.29
2.	Collection Efficiency (i.e., Collection/Revenue Demand raised)	89.06	101.99
3.	Business Efficiency (i.e.,Billing Efficiency x Collection Efficiency)	69.44	79.86
4.	Aggregate Technical & Commercial Losses (100-Business Efficiency)	30.56	20.14

Source:GESCOM Annual Report, Gulbarga. 2012-13.

Demand and Supply Position of Power in Gulbarga

Table: 10
Demand and Supply Position of Power in Gulbarga 2003-04 to 2014-15

Year	Requirement	Availability	Deficit	Percentage
	Mega Units	Mega Units	Mega Units	(%)
2003-04	3875.57	2669.87	1205.7	31.11%
2004-05	4236.41	3537.97	698.44	16.49%
2005-06	545.893	497.890	48.003	8.79
2006-07	559.264	519.398	39.866	7.12
2007-08	591.373	548.115	43.258	7.31
2008-09	6483.43	5764	719.43	11.10
2009-10	6651.00	6084.13	566.87	8.52
2010-11	6709.11	5991.96	717.15	10.69
2011-12	7449.93	7041.81	408.12	5.48
2012-13	8001.57	7319.14	682.16	8.53
2013-14	861.591	788.355	73.236	8.51
2014-15	8769	7595.14	1173.86	13.39

Source:GESCOM Annual Report, Gulbarga. 2014-15.

Table-10 Shows overall requirement of power year wise in Mega units and the actual power supply available for final use for the consumer in Gulbarga. Power percentage surplus or deficit is shown in the last column it can be observed from the table-that Gulbarga since year 2003-04 to2013-14 financial years the shortage in power varies from 31.11% percent minimum to 16.49% percent maximum. Year 2013-14 was significantly marked by huge power shortage where the anticipated deficit was 8.51 per cent and 13.39 per cent respectively .However, as per last one year the deficit per cent was found to be 13.39 per cent.

Table: 11
Electricity Consumption (in Lakhs Units)

Taluks	Domestic consumption	Industrial Consumption	Commercial Consumption	I.P. Sets	Street Lights	Others	Total	Income from Electricity Consumption 2010-11 (Rs.in Lakhs)
Afzalpur	7.42	1.53	2.21	62.83	1.71	2.25	77.95	3501.44
Aland	11.36	2.32	2.54	70.77	4.31	3.71	95.01	3816.88
Chincholi	0.86	0.54	0.16	4.29	0.46	0.37	6.50	186.96
Chittapur	1.76	1.00	0.39	2.44	0.54	0.61	6.74	225.85
Gulbarga	125.03	24.52	45.12	80.00	19.11	5.59	299.27	12109.17
Jewargi	o.70	0.16	0.20	3.57	0.05	0.14	4.82	9870.28
Sedam	7.00	1.71	1.78	180.85	5.99		197.33	678.22
TOTAL	153.95	31.78	51.3	404.75	32.17	12.67	687.62	30388.72

Source : District at Glance, Gulbarga. 2011-12.

The above table 11 shows the Electricity Consumption for the different purposes from the gescom. The purposes are domestic, industrial, commercial, IP Sets, street light and others

consumptions. Out of the total consumptions, IP set aspect is the highest consumption followed by domestic, commercial, street lights, industrial and others consumption.

SUGGESTIONS FOR THE STUDY

1. There is an urgent need on the part of the government to redesign the subsidy policy in the light of the fact that the largest per cent of the subsidy goes to the richer consumers. The consumers can make the actual payments and those who have sufficient ground for the special treatment should be so provided by the state through vouchers or for other possible ways. Subsidy should be limited to the poor, and the high income group should be excluded from the subsidy.
2. Measures to enhance the responsiveness and accountability of the officials should be taken by effective monitoring and by incorporating the principles of target oriented task.
3. Efforts should be taken to ensure that the macro level policies are properly implemented at the micro level. Service delivery standards and rules framed by the regulatory body at the apex level need to be implemented effectively by the officials at the grassroots level and in this institutions is essential.
4. Monitoring and addressing the issues of service quality, affordability, other consumer concerns (e.g public hearings, consumer surveys, representation on boards, focus groups) should be streamlined.

CONCLUSION

Post reform, there has been a substantial decline in the growth of electrification levels and electrification rates for the poor in Karnataka. In view of the fact that the act makes no explicit commitment to the extension of electricity access for the poor, this is not surprising. It is difficult to comment on the average consumption by poor households in the absence of 100% metering which makes the current estimates of consumption unreliable. However, the increase in tariffs in the post reform era can only contribute to decline in the electricity consumption levels of the poor in the future. From the point of view of tariff for the poor has increased more than the tariffs for the non-poor implies that cross subsidy has decreased, which is actually in conformity with the reform mandate. The present research is made an attempt to study the financial performances of the GESCOM. In the present study made a financial and operationalperformances of the GESCOM in terms of efficiency issues like billing, tariff, demand, supply, sale of power, power purchase, revenue, subsidies, expenditure, losses, consumption and other related problems especially after the reform process. The study found that GESCOM is performing significantly effective.

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