Report of the
Comptroller and Auditor General of India
on Public Sector Undertakings

for the year ended March 2015

Government of Karnataka

Report No.3 of the year 2016

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Preface

This report deals with the results of audit of Government Companies and Statutory Corporations for the year ended March 2015.

The accounts of the Government Companies (including companies deemed to be government companies as per the provisions of the Companies Act) are audited by the Comptroller and Auditor General of India (CAG) under the provisions of Section 619 of the Companies Act 1956 and Sections 139 and 143 of the Companies Act 2013. The accounts certified by the Statutory Auditors (Chartered Accountants) appointed by the CAG under the Companies Act are subject to supplementary audit by the officers of the CAG and the CAG gives his comments or supplements the reports of the Statutory Auditors. In addition, these companies are also subject to test audit by the CAG.

The Reports in relation to the accounts of a Government Company or Corporation are submitted to the Government by the CAG for laying before the State Legislature of Karnataka under the provisions of Section 19-A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971.

CAG also conducts the audit of accounts of the State Road Transport Corporations, State Warehousing Corporation and State Finance Corporation as per their respective Legislations.

The instances mentioned in this report are those, which came to notice in the course of test audit for the period 2014-15 as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports. The matters relating to the period subsequent to 2014-15 have also been included wherever felt necessary.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Overview

Overview

1. Overview of Government Companies and Statutory Corporations

Audit of Government Companies is governed by Sections 139 and 143 of the Companies Act, 2013 (Act). The accounts of Government Companies are audited by Statutory Auditors appointed by the Comptroller and Auditor General of India (CAG). These accounts are also subject to supplementary audit by the CAG. Audit of Statutory Corporations is governed by their respective legislations. As on 31 March 2015, the State of Karnataka had 81working Public Sector Undertakings-PSUs (75 Companies and 6 Statutory Corporations) and 12 non-working PSUs (all Companies), which employed 1.92 lakh employees. The State PSUs registered a turnover of ₹ 48,765.18 crore during the year 2014-15 as per their latest finalised accounts. This turnover was equal to 7.12 *per cent* of the State Gross Domestic Product indicating the important role played by the PSUs in the economy. The PSUs had accumulated profit of ₹ 731.66 crore as per their latest finalised accounts.

Investments in PSUs

As on 31 March 2015, the investment (capital and long term loans) in 93 PSUs was ₹ 83,282.11 crore. Infrastructure Sector accounted for about 50.08 *per cent* of the total investment and Power Sector about 40.09 *per cent* in 2014-15. The Government contributed ₹ 13,957.53 crore towards equity, loans and grants/subsidies in 2014-15.

Performance of PSUs

The working State PSUs earned a profit of ₹ 1,438.53 crore in the aggregate and incurred loss of ₹ 899.59 crore as per their latest finalised accounts as at the end of September 2015. The major contributors to profit were Mysore Minerals Limited (₹ 313.53 crore), Hutti Gold Mines Company Limited (₹ 144.63 crore) and Bangalore Electricity Supply Company Limited (₹ 113.44 crore). Huge losses were incurred by Karnataka Neeravari Nigam Limited (₹ 295.59 crore) and Bangalore Metropolitan Transport Corporation (₹ 147.59 crore).

Audit noticed various deficiencies in the functioning of the PSUs. Cases discussed in the subsequent Chapters of this Report indicate that there was a financial effect of ₹ 758.70 crore. The losses could have been minimized or profits enhanced substantially with better management. There is a need for greater professionalism and accountability in the functioning of the PSUs.

Quality of accounts

The quality of accounts of working Government companies needs improvement. During the year, out of 75 accounts finalised, the Statutory Auditors had given unqualified reports on 25 accounts, qualified reports on 47 accounts, adverse reports (which means that the accounts did not reflect a true and fair view) for 3 accounts. The compliance with the Accounting Standards by companies was poor as there were 101 instances of non-compliance in 33 Companies during the year.

Arrears in accounts and winding up

Thirty eight working PSUs had arrears of 44 accounts as at the end of September 2015. The arrears pertained to the years 2013-14 and 2014-15. There were 12 non-working PSUs including five under liquidation. The Government may take a decision on the revival or closure of these non-working Companies.

2. Performance Audits relating to Government Companies

The Report includes observations emanating from the Performance Audits on the **'Implementation of Niranthara Jyothi Yojana by Electricity Supply Companies in Karnataka'** and **'Resettlement and Rehabilitation in Upper Krishna Project'.** The Executive summaries of the audit findings are given below:

➢ Performance Audit on the 'Implementation of Niranthara Jyothi Yojana by Electricity Supply Companies in Karnataka'.

Introduction

Karnataka is a power deficit state, with a deficit of about 15 *per cent*. In order to have an everlasting solution in bridging the gap between demand and supply, the Electricity Supply Companies (ESCOMs) implemented (2005-09) a scheme called Rural Load Management System (RLMS), which failed due to large scale tampering. Considering the benefits of a scheme implemented in Gujarat, by segregation of feeders, the GoK decided to implement the Scheme called Niranthara Jyothi Yojana (NJY) in Karnataka, after conducting pilot study at Malur.

Niranthara Jyothi Yojana

In NJY, the concept was to segregate the agricultural loads and non-agricultural loads by bifurcation of feeders (11 kV) at the substations by drawing a new independent line (11 kV) feeder, called 'NJY feeder' and shifting the non-agricultural load onto this feeder.

The objectives of NJY were mainly to provide 24 hours of uninterrupted and reliable power supply to non-agricultural consumers, to have better control on agricultural load and improve the Transmission and Distribution (T&D) losses, metered sales and reduction in peak load.

Audit objectives

The performance audit was conducted to assess whether the NJY

- ➢ was planned and implemented after assessing the technical advantages and funding arrangements and
- ➢ has achieved its intended objectives.

Audit findings

***The audit findings on the first audit objective on* assessing the planning, implementation and funding of NJY indicate that:**

- *Planning* was deficient as large scale implementation was taken up before analysing the Pilot studies in GESCOM and HESCOM. Further, in CESC, the estimates for the works were prepared in an unrealistic manner, necessitating periodic revisions, thereby delaying the implementation.

- *Implementation* of NJY was affected owing to the delays in finalisation of tenders (GESCOM), delays by contractors (HESCOM), delays in completion of load bifurcation works and instances of clubbing of NJY feeders with non-NJY feeders (all ESCOMs). The Special Design Transformer (SDT) intended to provide power to farmhouses on agricultural feeders had design deficiencies due to failure to include overload protection.

- *Funding* to BESCOM and CESC was inadequate, which would affect the implementation of NJY.

- The NJY, planned to be completed in three years (by 2012), is lingering for the last three years with 543 of the 1,748 feeders yet to be completed (as at March 2015) resulting in loss of energy savings of 1,128.70 MUs valued ₹ 569.63 crore.

***The audit findings on the second audit objective on* assessing whether the NJY has achieved its intended objectives indicated that:**

- ESCOMs were able to provide about 20 hours of three phase power supply to NJY feeders, but the quality of power supply had not improved with the interruptions continuing unabated.

- There was reduction in peak load. However, the practice of providing power to IP feeders during peak hours and also supply of power for more than scheduled hours to IP feeders, in a power deficit scenario was imbibed with poor load management.

- 40 *per cent* of test checked feeders showed an adverse trend in T&D losses.

- Though there was increase in the number of hours of supply of three phase from 10 hours (pre-NJY) to 20 hours (post NJY), the increased hours of supply was partly owing to increased purchase of power, which was necessitated as the envisaged reduction of distribution losses did not materialise.

- KERC's directive on assessing the IP consumption based on meter readings in DTCs/ IP feeders has not been complied with.

Conclusions

Audit concluded that:

- NJY is showing positive results with the ESCOMs being able to provide about 20 hours of three phase power supply to non-agricultural feeders, as against 10 hours earlier. The achievement is partly owing to increased purchase of power. However, it did not achieve the envisaged supply for 24 hours a day.

- The quality of power supply had not improved with the interruptions continuing unabated.
- The reduction of distribution losses to enable supply for enhanced hours (24 hours) is yet to materialise to the extent envisaged under NJY.
- There was delay in implementation of NJY, mainly on account of deficiencies in preparation of estimates, delay in tendering, delay in bifurcation of loads from existing feeders, apart from constraints in labour and obtaining statutory clearances.
- The risk areas hampering the realisation of the success of NJY include
    - failure to reduce the T&D losses in the NJY feeders as compared to rural and mixed feeders,
    - failure of Special Design Transformer for providing single phase supply in IP feeders, due to non-installation of the overload protection,
    - resorting to manual operation at substation (Group Operating Switch) to provide power under rostering method, taking the situation to pre-NJY period,
    - clubbing of NJY feeders with other feeders and non-completion of LT side works, and
    - supply of power to IP feeders during peak hours and more than scheduled hours, even when the State faced a deficit in power.
- The directive of KERC to assess the consumption of IP sets with metering under NJY has not been complied with. As a consequence, the subsidy for IP set consumers, claimed from GoK was not transparent and the distribution losses were not realistic.

Recommendations

Audit recommends that:

- The ESCOMs may analyse the results of pilot study before implementing projects on a large scale.
- ESCOMs need to prepare estimates after survey, investigation and duly taking cognizance of works being implemented under other schemes.
- ESCOMs need to adhere to the directions of GoK to have financial tie-ups with REC/Financial institutions well in advance so as to avoid extension of validity periods/re-tendering and consequent delays and cost overruns.
- ESCOMs need to award the works only after assessing the financial ability of the contractors to execute the works so that implementation of works are not delayed.
- ESCOMs need to ensure that the bifurcated NJY feeders are not clubbed with non-NJY feeders. Action needs to be taken to install breakers at the earliest on the bifurcated feeders, else the objective of bifurcating the feeders under NJY would be defeated.
- The ESCOMs need to undertake a study to analyse the pros and cons of installing overload protection with SDTs *vis-à-vis* the open delta model and explore the feasibility of using the idling SDTs to realise the benefits of NJY.

- ESCOMs and KPTCL should devise a mechanism to ensure that staff posted at substations do not resort to 'rostering' in IP feeders during non-scheduled hours of supply, by monitoring and analysing SCADA data.
- In order to improve quality of supply by having minimal interruptions, the ESCOMs need to identify and replace NJY feeders that have crossovers with other feeders.
- In order to have better load management, the ESCOMs may issue instructions to its staff at substations not to supply power to IP sets during peak hours and for more than scheduled hours of supply, in a power deficit scenario and also ensure its observance.
- The ESCOMs need to address the reasons for non-reduction of T&D losses in the bifurcated feeders so as to reduce the additional power purchases at higher costs and also make available 24 hours of power supply as envisaged under NJY.
- The GoK needs to re-assess the financial model of funding the NJY as the ESCOMs have not been able to fully meet the objective of NJY in terms of reduction of T&D losses, delays in implementation and additional purchase of power.
- ESCOMs need to comply with the directives of KERC on assessing the IP consumption based on meter readings in DTCs and IP feeders, so that the subsidy claim and distribution losses are realistic.

(Chapter 2.1)

- **Performance Audit on the 'Resettlement and Rehabilitation in Upper Krishna Project'.**

Introduction

The Upper Krishna Project (UKP) consists of construction of Narayanpur dam to the height of 492.25 metres and Almatti dam to 524.25 metres and network of canals to irrigate parts of drought-prone districts of Vijapura, Bagalkot, Kalaburgi and Raichur of northern Karnataka.

The Resettlement and Rehabilitation (R&R) of 173 out of 176 villages, affected by the backwaters of both Narayanpur and Almatti dams (up to Reservoir Level-RL 519.60 metres), was completed in 2001-02 and that of balance three villages was under progress (September 2015). The R&R of the people living in Bagalkot Town was completed up to RL 521 metres and for the subsequent levels, the work was under progress. Besides, R&R of 14 villages affected under the floods of Narayanpur dam was in progress.

The modalities of implementation of R&R were specified through Executive Orders issued by the GoK during 1989-95 and these Orders are continued to be in force even now (2015-16).

Implementing authorities

Krishna Bhagya Jala Nigam Limited (Company), a wholly owned Government Company, was responsible for overall implementation of irrigation projects including R&R under UKP. The funding was met from borrowings and the State Budget.

The Commissioner for Land Acquisition and R&R and Ex-officio Additional Secretary to Government was given powers for land acquisition under UKP. Bagalkot Town Development Authority (BTDA) was created solely for the purpose of implementation of R&R of Bagalkot town.

Audit objective

The Performance Audit was conducted to assess whether rehabilitation and resettlement packages for the project displaced people of UKP were planned and implemented in an expeditious manner so as to enable them to reap the intended benefits.

Audit findings

Absence of R&R Policy

The Karnataka Resettlement of Project Displaced Persons Act, 1987 was notified (August 1994) by the GoK envisaging various policies on R&R. But, the GoK did not implement the Act. The GoK had not adopted the National Rehabilitation and Resettlement Policy, 2007 either, which was notified in October 2007. But, continued to implement the orders issued during 1989-95 even for the R&R implemented after the policy was notified.

The Executive Orders issued (1989-95) by the GoK for implementation of R&R did not include an important provision of 'allotment of land in command area to Project Displaced Families (PDFs)' which was envisaged in the National Rehabilitation and Resettlement Policy 2007. The PDFs, who had lost their agricultural lands were not only deprived of allotment of land in the command area but also received insufficient compensation.

The GoK did not make provision for indexing the R&R benefits to the Consumer Price Index in violation of National R&R Policy. As a result, the various monetary benefits fixed during 1989-95 were continued to be paid even now (2015-16) without revision.

Socio-Economic Survey

The GoK had not mandated any specific criteria for conducting socio-economic survey. The Socio-Economic Survey reports did not contain income of the PDFs, details of rural artisans, families belonging to the scheduled caste or scheduled tribe categories; vulnerable persons such as destitute, orphans, widows.

In the absence of base line data with regard to living condition of the PDFs pre and post project implementation, the improvement or otherwise in the economic condition of PDFs was not assessable and also the priority or special attention for certain sections of the society was not ensured, which was not in line with the National R&R Policy.

Inordinate delay in completion of R&R

Though 14 villages, which came under the submergence of backwaters of Narayanpur reservoir, were within the purview of acquisition norms of CWC, the rehabilitation was taken up only when these villages were inundated by flood water discharge during August 2005 and after requests by the affected people. The GoK issued orders for R&R of these villages only in January 2007/ September 2009.

Insufficient land procurement and non-disbursement of benefits

There was abnormal delay in acquisition of structures (houses and buildings of PDFs) and land for establishing Rehabilitation Centres (RCs) in respect of 14 villages affected under the backwaters of Narayanpur reservoir. There were 4,274 PDFs in these villages awaiting rehabilitation (December 2015).

There were cases of insufficient procurement of land and delays in acquisition of land resulting in delay in formation of RCs. The process of acquisition of structures and land was completed only between December 2014 and December 2015. The land acquisition for two out of 14 villages was not completed (December 2015).

Other benefits such as land and house construction grants, income generating grant, *etc.*, had not been disbursed to any of the PDFs in these 14 villages (December 2015).

Poor implementation

Based on the protests and complaints from the affected people in Bagalkot town (living between RL 521 metres and RL 523 metres) of Almatti dam, the GoK ordered (November 2002) for rehabilitation as they were suffering from serious unhygienic conditions due to backwaters.

Despite receiving directions from the GoK in November 2002, BTDA brought the subject matter before the Board of Directors of the Company only in June 2010 and the rehabilitation of PDFs was yet to take place (December 2015). The works for underground drainage system, construction of roads and electrification were taken up only during 2013-14 and water supply works were initiated in 2014-15.

Allotment of land for non-R&R activities

BTDA acquired (1986-87) 4,544 acres of land for relocation of Bagalkot town. Out of this, 3,230 acres was utilised for rehabilitation of PDFs affected up to RL 523 metres and 1,168 acres was provided for the purposes other than that of R&R, despite the fact that there was a requirement 3,600 acres for further R&R, thereby necessitating acquisition of additional land and consequent delay in rehabilitation of PDFs.

Monitoring

The monitoring of R&R was not effective at Government, Company and Project levels resulting in abnormal delay in completion of works at various stages of implementation. There was shortage of staff at key posts in project offices. The grievance redressal mechanism was absent.

Conclusions

Audit concluded that:

- The Government did not frame a comprehensive R&R Policy specific for the State in line with the National Rehabilitation and Resettlement Policy, 2007.
- As the Government had not conducted Socio-Economic Survey as per the National Rehabilitation and Resettlement Policy, 2007, the restoration of the pre-project economic status of the PDFs could not be assessed. This defeated the very purpose of R&R.

- 6,329 PDFs in BTDA and 4,274 PDFs in the 14 villages were yet to be rehabilitated since 2002 and 2007 respectively, due to apathy of the Government in carrying out R&R.
- The Government's failure to rehabilitate the affected people within a reasonable time deprived many PDFs of their due benefits under R&R and had forced the PDFs to live in temporary sheds for the last ten years.
- The ineffective monitoring and inadequate manpower hindered the implementation.

Recommendations

Audit recommends that:

- The Government should formulate a comprehensive R&R Policy specific for the State in line with the National Rehabilitation and Resettlement Policy, 2007 and ensure that its provisions are adhered to so as to enable the project displaced families get their legitimate benefits.
- The applicable norms of CWC for acquisition of land and structures should be complied with and RCs should be formed with all basic amenities as per the norms in a time bound manner.
- The Government should issue suitable orders preventing the use of land procured for R&R activity for other purposes.
- Committees formed for the purpose of monitoring should hold regular meetings to discuss and resolve the bottlenecks in implementation of R&R. The Company should also discuss in the meetings of its Board of Directors the progress of R&R works and take action for speedy completion of works within a timeframe.
- Adequate manpower should be deployed at Project Offices to implement R&R package in a timely manner.

(Chapter 2.2)

3. Compliance Audit observations

The observations included in this Report highlight deficiencies in planning, investment and other activities in the management of PSUs, which resulted in financial irregularities. The observations are broadly of the following nature:

Unproductive investment amounting to ₹37.21 crore.

(Paragraphs 3.2, 3.3, 3.10, 3.16, 3.17)

Violation of contractual obligations/undue favours to contractors resulting in loss of ₹14.97 crore.

(Paragraphs 3.5, 3.7, 3.8, 3.9, 3.15.4)

Non-recovery of dues amounting to ₹30.60crore.

(Paragraphs 3.1, 3.11)

Avoidable expenses amounting to ₹65.34crore.

(Paragraphs 3.4, 3.6, 3.12, 3.15.4)

Miscellaneous and other cases amounting to ₹1.53crore.

(Paragraph 3.15.7)

Gist of some of the important audit observations are given below:

- Karnataka Power Transmission Corporation Limited failed to follow the procedures prescribed in the KERC Regulations, 2004 and continued to sanction Open Access facilities without ensuring collection of outstanding dues resulting in loss of revenue of ₹ 29.21 crore.

(Paragraph 3.1)

- Establishment of substations at Jalamangala, Kutagallu and Chikkaganganawadi at a total cost of ₹ 15.97 crore, without studying the load pattern at Melehalli substation was not need based and this investment gave no value addition to Karnataka Power Transmission Corporation Limited.

(Paragraph 3.2)

- Implementation of co-generation project by The Mysore Sugar Company Limited without ensuring fuel and non-synchronisation with modernisation of mills resulted in investment of ₹ 124.08 crore becoming unfruitful, besides interest burden of ₹ 59.04 crore.

(Paragraph 3.4)

- Adoption of a different group of Wholesale Price Index by Karnataka Neeravari Nigam Limited for the left bank lift works of Singatalur Lift Irrigation Scheme, which had higher rates as compared to all the other similar works, was without any rationale and resulted in undue benefit of ₹ 5.18 crore to the contractor.

(Paragraph 3.8)

- Upward revision of quoted rate after entering into agreement with the supplier by Karnataka State Coir Development Corporation Limited and unwarranted addition of Value Added Tax to the quoted rate benefited the supplier to the extent of ₹ 3.17 crore.

(Paragraph 3.9)

- The Karnataka Renewable Energy Development Limited (KREDL), which was nominated as a nodal agency for development of Renewable Energy (RE) Sector did not play its assigned role properly due to which much of the targetted addition to Solar and Wind Power remained unharnessed. The Biomass sector has failed for want of raw material and remunerative tariff, while the Waste-to-Energy project has not seen the light of the day for the last 12 years.

(Paragraph 3.13)

- Failure of the Karnataka State Tourism Development Corporation Limited to ensure compliance with the operational standards and establish an effective call centre to facilitate taxi service to the commuters going to the Bangalore Airport, had put to risk not only the image of the Company and the city of Bangalore, but also the safety of commuters, which is of paramount importance.

(Paragraph 3.14)

- Karnataka State Warehousing Corporation had not achieved the augmentation of the planned storage capacity. There were delays in completion of construction of warehouses. The system of collection of storage charges was deficient. The Corporation did not meet the norms of Warehousing Development and Regulatory Authority manual for scientific storage and trained manpower.

(Paragraph 3.15)

- Bangalore Metropolitan Transport Corporation took up the construction work for establishing Bus Depots on the disputed land without conducting proper due diligence and getting the title in its favour. Continuing with the construction against the Court Order and without adhering to the conditions of allotment resulted in idling of assets created and blocking up of investment to an extent of ₹ 16.52 crore.

(Paragraph 3.16)

Chapter - I

Overview of PSUs

Chapter - I

1. Functioning of State Public Sector Undertakings

Introduction

1.1. The State Public Sector Undertakings (PSUs) in Karnataka consist of State Government Companies and Statutory Corporations. The State PSUs are established to carry out activities of commercial nature keeping in view the welfare of people and also occupy an important place in the State's economy. As on 31 March 2015, there were 93 PSUs in Karnataka. Of these, two PSUs[1] were listed on the stock exchange(s). During the year 2014-15, two PSUs[2] were incorporated while four[3] were closed down. The details of the State PSUs in Karnataka as on 31 March 2015 are given below:

Table No.1.1: Total number of PSUs as on 31 March 2015

Type of PSUs	Working PSUs	Non-working PSUs[4]	Total
Government Companies[5]	75	12	87
Statutory Corporations	6	0	6
Total	**81**	**12**	**93**

The working PSUs registered a turnover of ₹ 48,765.18 crore as per their latest finalised accounts as of September 2015. This turnover was equal to 7.12 *per cent* of the State Gross Domestic Product (GDP) for 2014-15. The working PSUs earned net aggregate profit of ₹ 538.94 crore as per their latest finalised accounts as of September 2015. The PSUs had employed 1.92 lakh employees at the end of March 2015.

As on 31 March 2015, there were 12 non-working PSUs existing for the last 13 years having investment of ₹ 582.52 crore. This is a critical area as the investments in non-working PSUs do not contribute to the economic growth of the State.

Accountability framework

1.2. The process of audit of Government Companies is governed by respective provisions of Section 139 and 143 of the Companies Act, 2013 (Act). According to Section 2(45) of the Act, Government Company means any Company in which not less than fifty one *per cent* of the paid up share capital is held by the Central Government, or by any State Government or Governments, or partly by the Central Government and partly by one or more

[1] The Mysore Paper Mills Limited and The Mysore Paints and Varnish Limited.

[2] Karnataka Solar Power Development Corporation Private Limited and Karnataka Mining Environment Restoration Corporation Limited.

[3] Karnataka EMTA Collieries Limited, Karnataka State Coal Mining Company Limited, Chamundi Machine Tools Limited and Karnataka State Textiles Limited.

[4] Non-working PSUs are those which have ceased to carry on their operations.

[5] Includes other companies referred to in Section 139(5) and 139(7) of the Companies Act, 2013.

State Governments, and includes a Company which is a subsidiary Company of such Government Company.

Further, as per subsection 7 of section 143 of the Act, the CAG may, in case of any Company covered under subsection (5) or subsection (7) of Section 139, if considers necessary, by an order, cause test audit to be conducted of the accounts of such Company and the provisions of Section 19A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 shall apply to the report of such test Audit. Thus, a Government Company or any other Company owned or controlled, directly or indirectly, by the Central Government, or by any State Government or Governments or partly by Central Government and partly by one or more State Governments is subject to audit by the CAG. An audit of the Financial Statements of a Company in respect of the financial years that commenced on or before 31 March 2014 shall continue to be governed by the provisions of the Companies Act, 1956.

Statutory Audit

1.3. The financial statements of the Government Companies (as defined in Section 2(45) of the Companies Act, 2013) are audited by Statutory Auditors, who are appointed by the CAG as per the provisions of Section 139(5) or (7) of the Act. Thereafter, a copy of the Audit Report is submitted to the CAG under Section 143(5) of the Act, which, among other things, includes the Financial Statements of the Company. These financial statements are subject to supplementary audit to be conducted by the CAG within sixty days from the date of receipt of the Audit Report under the provisions of Section 143(6) of the Act.

Audit of Statutory Corporations is governed by their respective legislations. Out of the six Statutory Corporations in Karnataka, the CAG is the sole auditor for four State Road Transport Corporations[6]. In respect of State Warehousing Corporation and State Financial Corporation, the audit is conducted by Chartered Accountants while the Supplementary audit is conducted by the CAG.

Role of Government and Legislature

1.4. The State Government exercises control over the affairs of these PSUs through their administrative departments. The Chief Executives and Directors to the Board are appointed by the Government.

The State Legislature also monitors the accounting and utilisation of Government investments in the PSUs. For this, the Annual Reports together with the Statutory Auditors' Report and Comments of the CAG, in respect of State Government Companies and Separate Audit Reports in case of Statutory Corporations are placed before the Legislature under Section 394 of the Act or

[6] Karnataka State Road Transport Corporation, Bangalore Metropolitan Transport Corporation, North Eastern Karnataka Road Transport Corporation and North Western Karnataka Road Transport Corporation.

as stipulated in the respective Acts. The Audit Reports of the CAG are submitted to the Government under Section 19A of the CAG's (Duties, Power and Conditions of Service) Act, 1971.

Stake of Government of Karnataka

1.5. The State Government has financial stake in these PSUs. This stake is of mainly three types:

- **Share capital and loans** – In addition to the Share Capital Contribution, GoK also provides financial assistance by way of loans to the PSUs from time to time.
- **Special financial support** – GoK provides budgetary support by way of grants and subsidies to the PSUs as and when required.
- **Guarantees** – GoK also guarantees the repayment of loans with interest availed by the PSUs from financial institutions.

Investment in State PSUs

1.6. As on 31 March 2015, the investment (capital and long-term loans) in 93 PSUs was ₹ 83,282.11 crore as per details given below:

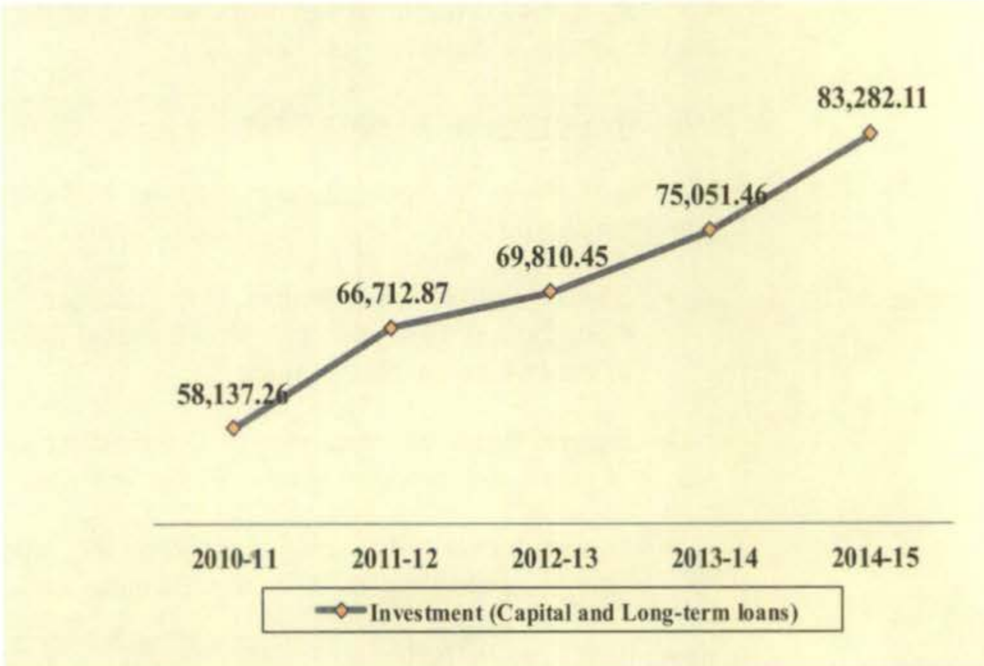
Table No.1.2: Total Investment in PSUs

(₹ in crore)

Type of PSUs	Government Companies			Statutory Corporations			Grand total
	Capital	Long term loans	Total	Capital	Long term loans	Total	
Working PSUs	49,092.90	28,800.71	77,893.61	1,942.06	2,863.92	4,805.98	82,699.59
Non-working PSUs	160.21	422.31	582.52	-	-	-	582.52
Total	**49,253.11**	**29,223.02**	**78,476.13**	**1,942.06**	**2,863.92**	**4,805.98**	**83,282.11**

As on 31 March 2015, of the total investment in State PSUs, 99.30 *per cent* was in working PSUs and the remaining 0.70 *per cent* in non-working PSUs. This total investment consisted of 61.47 *per cent* towards capital and 38.53 *per cent* in long-term loans. The investment had grown by 43.25 *per cent* from ₹ 58,137.26 crore in 2010-11 to ₹ 83,282.11 crore in 2014-15 as shown in the graph below:

Chart No.1.1: Total investment in PSUs (₹ in crore)



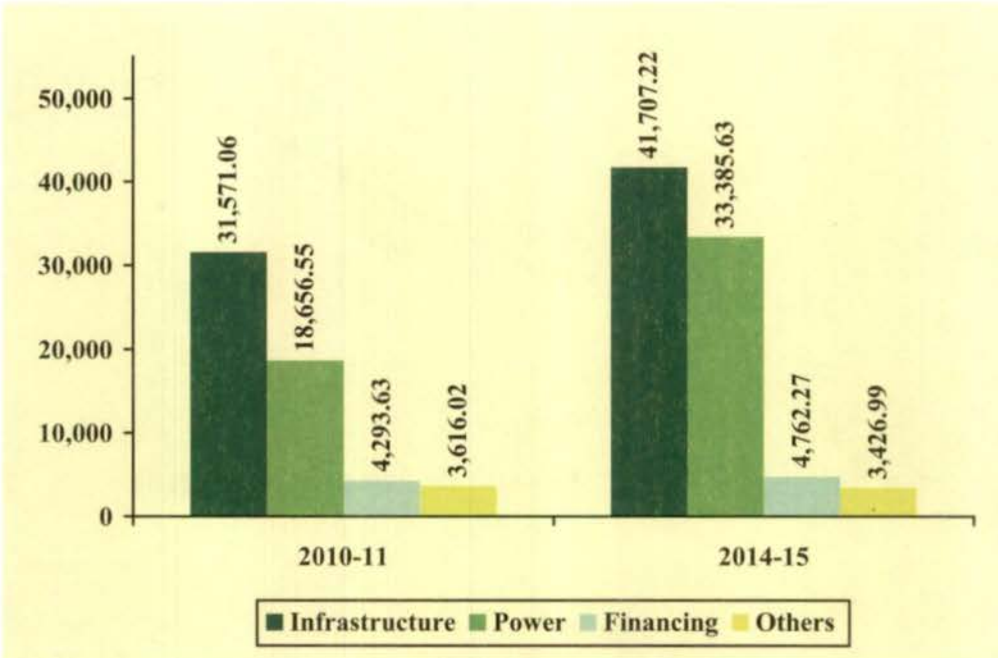
1.7 The sector-wise summary of investments in the State PSUs as on 31 March 2015 is given below:

Table No.1.3: Sector-wise investment in PSUs

Name of Sector	Government companies		Statutory corporations	Total	Investment (₹ in crore)
	Working	Non-working			
Agriculture and allied	12	5	1	18	249.71
Financing	14	-	1	15	4,762.27
Infrastructure	12	-	-	12	41,707.22
Manufacturing	19	7	-	26	1,062.58
Power	12	-	-	12	33,385.63
Service	3	-	4	7	2,114.59
Miscellaneous	3	-	-	3	0.11
Total	**75**	**12**	**6**	**93**	**83,282.11**

The investment in four significant sectors and percentage thereof at the end of 31 March 2011 and 31 March 2015 are indicated below in the bar chart.

Chart No.1.2: Sector-wise investment in PSUs



The thrust of investments in the PSU was in Infrastructure and Power sectors accounting for 50.08 *per cent* and 40.09 *per cent* respectively in 2014-15. Between 2010-11 and 2014-15 the investment in power and infrastructure increased by ₹ 14,729.08 crore and ₹ 10,136.16 crore respectively.

Special support and returns during the year

1.8. The State Government provides financial support to PSUs in various forms through annual budget. The summarised details of budgetary outgo towards equity, loans, grants/subsidies, loans written off and interest waived in respect of State PSUs for three years ended 2014-15 are given below:

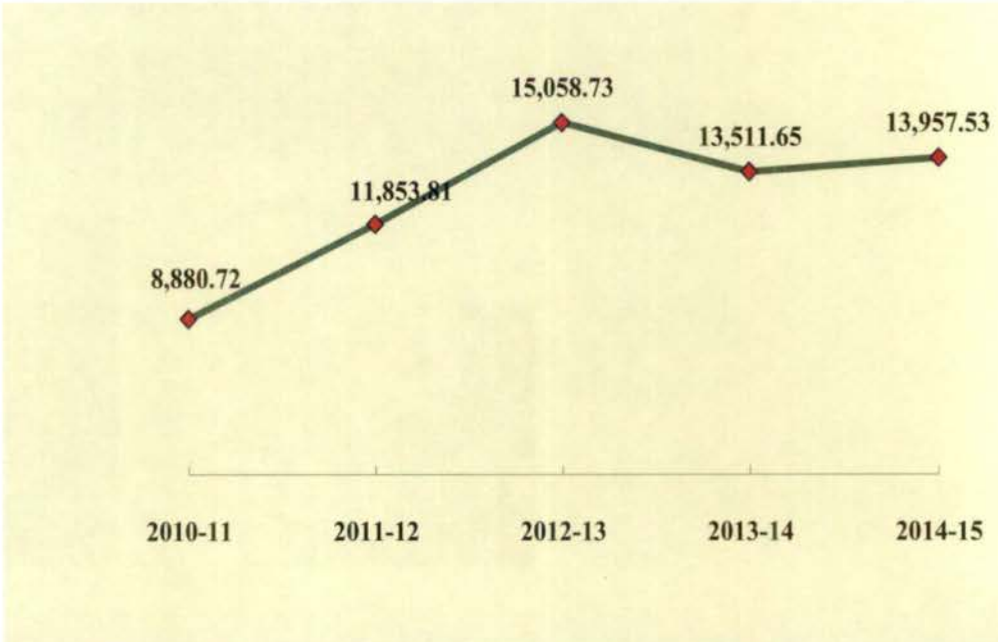
Table No.1.4: Details regarding budgetary support to PSUs

(₹ in crore)

Sl. No.	Particulars	2012-13		2013-14		2014-15	
		No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount
1	Equity capital outgo from budget	23	4,660.59	21	4,078.15	22	3,990.66
2	Loans given from budget	3	11.08	3	67.55	5	38.88
3	Grants/Subsidy from budget	36	10,387.06	32	9,365.95	27	9,927.99
4	**Total outgo (1+2+3)**	**51**	**15,058.73**	**42**	**13,511.65**	**41**	**13,957.53**
5	Waiver of loans and interest	-	-	-	-	1	8.25
6	Guarantees issued	7	557.19	12	1,775.65	9	3,736.46
7	Guarantee Commitment	20	3,500.88	21	4,542.73	15	7,251.35

The details regarding budgetary outgo towards equity, loans and grants and subsidies for past five years are given in a graph below:

Chart No.1.3: Budgetary outgo towards equity, loans, grants and subsidies



The budgetary support in respect of equity, loans and grants and subsidies increased from ₹ 8,880.72 crore in 2010-11 to ₹ 13,957.53 crore in 2014-15.

Guarantees for loan and guarantee commission outstanding

1.9. In order to enable PSUs to obtain financial assistance from Banks and Financial Institutions, the State Government gives guarantee under Karnataka Ceiling on Government Guarantees Act, 1999 (as amended by Act 15 of 2002). The Government would charge a minimum of one *per cent* as guarantee commission, which shall not be waived under any circumstances. The guarantee commitment increased from ₹ 3,500.88 crore in 2012-13 to ₹ 7,251.35 crore during 2014-15. Nine PSUs paid guarantee fee to the tune of ₹ 37.27 crore during 2014-15 whereas 21 PSUs[7] did not pay guarantee fees or commission during the year and accumulated guarantee fees or commission there against was ₹ 168.66 crore (as on 31 March 2015).

Reconciliation with Finance Accounts

1.10. The figures in respect of equity, loans and guarantees outstanding as per the records of State PSUs should agree with that of the figures appearing in the Finance Accounts of the State. In case, the figures do not tally, the PSUs concerned and the Finance Department should carry out reconciliation of the differences. The position in this regard as at 31 March 2015 is given below:

[7] The PSUs which had major arrears were Rajiv Gandhi Rural Housing Corporation Limited (₹ 51.26 crore), Karnataka Neeravari Nigam Limited (₹ 26.06 crore), Karnataka State Police Housing Corporation Limited (₹ 20.35 crore), Krishna Bhagya Jala Nigam Limited (₹ 19.56 crore) and Karnataka State Finance Corporation (₹ 17.35 crore). The outstanding dues of the remaining PSUs was ₹ 34.08 crore.

Table No.1.5: Equity, loans and guarantees outstanding as per Finance Accounts *vis-a-vis* records of PSUs

(₹ in crore)

Outstanding in respect of	Amount as per Finance Accounts	Amount as per records of PSUs	Difference
1	2	3	4 = 2-3
Equity	55,651.51	48,600.17	7,051.34
Loans	1,683.90	1,434.92	248.98
Guarantees	8,299.58	7,251.35	1,048.23

There were differences in respect of 83 PSUs. The Government and the PSUs should take concrete steps to reconcile the differences in a time-bound manner.

Arrears in finalisation of accounts

1.11. The financial statements of the Companies for every financial year are required to be finalised within six months from the end of the relevant financial year *i.e.* by September end in accordance with the provisions of Section 96(1) of the Act. Failure to do so, may attract penal provisions under Section 99 of the Act. Similarly, in case of Statutory Corporations, their accounts are finalised, audited and presented to the Legislature as per the provisions of their respective Acts.

The table below provides the details of progress made by working PSUs in finalisation of accounts by 30 September 2015.

Table No.1.6: Position relating to finalisation of accounts of working PSUs

Sl. No.	Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
1	Number of working PSUs	75	76	79	81	81
2	Number of accounts finalised during the year	69	59	81	73	82
3	Number of accounts in arrears	25	42	40	48	44[8]
4	Number of working PSUs with arrears in accounts	24	37	36	41	38
5	Extent of arrears (number in years)	1 to 2 years	1 to 2 years	1 to 2 years	1 to 3 years	1 to 2 years

During the year, 82 accounts have been finalised, which includes 7 accounts of 6 Statutory Corporations. The number of accounts in arrears has increased from 25 (2010-11) to 44 (2014-15). Of the 44 accounts, 39 accounts pertained to the working Government Companies, which have arrears ranging between one and two years. The arrears includes five accounts pertaining to five Statutory Corporations.

[8] Two PSUs (Karnataka Vishwakarma Community Development Corporation Limited and Bangalore Suburban Rail Company Limited) were yet to finalise their first accounts. Further, as Karnataka EMTA Collieries Limited was closed down during the year, its arrears is excluded.

The Administrative Departments have the responsibility to oversee the activities of these PSUs and to ensure that the accounts are finalised and adopted by these PSUs within the stipulated period. The PAG/AG has periodically taken up the matter with the State Government/Administrative Departments concerned for liquidating the arrears of accounts.

1.12. The State Government had invested ₹ 8,305.33 crore in 38 PSUs during the years for which accounts have not been finalised as detailed in **Appendix-1.** In the absence of finalisation of accounts and their subsequent audit, it could not be ensured whether the investments and expenditure incurred have been properly accounted for and the purpose for which the amount was invested was achieved or not and thus the Government's investment in such PSUs remained outside the control of the State Legislature.

1.13. In addition to the above, as on 30 September 2015, there were arrears in finalisation of accounts by non-working PSUs. Out of 12 non-working PSUs, five were in the process of liquidation whose accounts were in arrears for ten to twelve years. Of the remaining seven non-working PSUs, only two PSUs[9] had arrears of accounts.

Table No.1.7: Position relating to arrears in finalisation of accounts in respect of non-working PSUs

No. of non-working companies	Period for which accounts were in arrears	No. of years for which accounts were in arrears
5	-	-
1	2014-15	1
1	2013-14 to 2014-15	2
1	2005-06 to 2014-15	10
2	2004-05 to 2014-15	11
2	2003-04 to 2014-15	12

Placement of Separate Audit Reports

1.14. The position depicted below shows the status of placement of Separate Audit Reports (SARs) issued by the CAG (up to 30 September 2015) on the accounts of Statutory Corporations in the Legislature.

[9] Karnataka Agro Industries Corporation and Vijayanagar Steel Limited

Table No.8: Status of placement of SARs in Legislature

Sl. No.	Name of Statutory Corporation	Year up to which SARs placed in the Legislature[10]	Year for which SARs not placed in the Legislature	
			Year of SAR	Date of issue to the Government/ Present Status (December 2015)
1	Karnataka State Road Transport Corporation	2013-14	2014-15	SAR was issued to Government on 23.10.2015.
2	Bangalore Metropolitan Transport Corporation	2013-14	2014-15	Audit is under progress
3	North Eastern Karnataka Road Transport Corporation	2013-14	2014-15	Audit is under progress
4	North Western Karnataka Road Transport Corporation	2013-14	2014-15	SAR issued to GoK on 31.12.2015
5	Karnataka State Financial Corporation	2013-14	2014-15	SAR was issued to Government on 13.10.2015.

Impact of non-finalisation of accounts

1.15. As pointed out above (paragraph 1.11 to 1.13), the delay in finalisation of accounts may also result in risk of fraud and leakage of public money apart from violation of the provisions of the relevant statutes. In view of the arrears of accounts, the actual contribution of PSUs to the State GDP for the year 2014-15 could not be ascertained and their contribution to State exchequer was also not reported to the State Legislature.

It is therefore, recommended that:

- The Government may setup a cell to oversee the clearance of arrears and set the targets for individual companies which would be monitored by the cell.
- The Government may consider outsourcing the work relating to preparation of accounts wherever the staff is inadequate or lacks expertise.

Performance of PSUs as per their latest finalised accounts

1.16. The financial position and working results of working Government Companies and Statutory Corporations are detailed in **Appendix-2.** A ratio of turnover of PSUs to State GDP shows the extent of PSUs' contribution in the State economy. Table below provides the details of working PSUs' turnover and State GDP for a period of five years ending 2014-15.

[10] SARs up to the year 2013-14 in respect of all the five Statutory Corporations have been forwarded to the State Legislature for placement. The information regarding their placement is awaited (December 2015).

Table No.1.9: Details of working PSUs turnover *vis-a-vis* State GDP

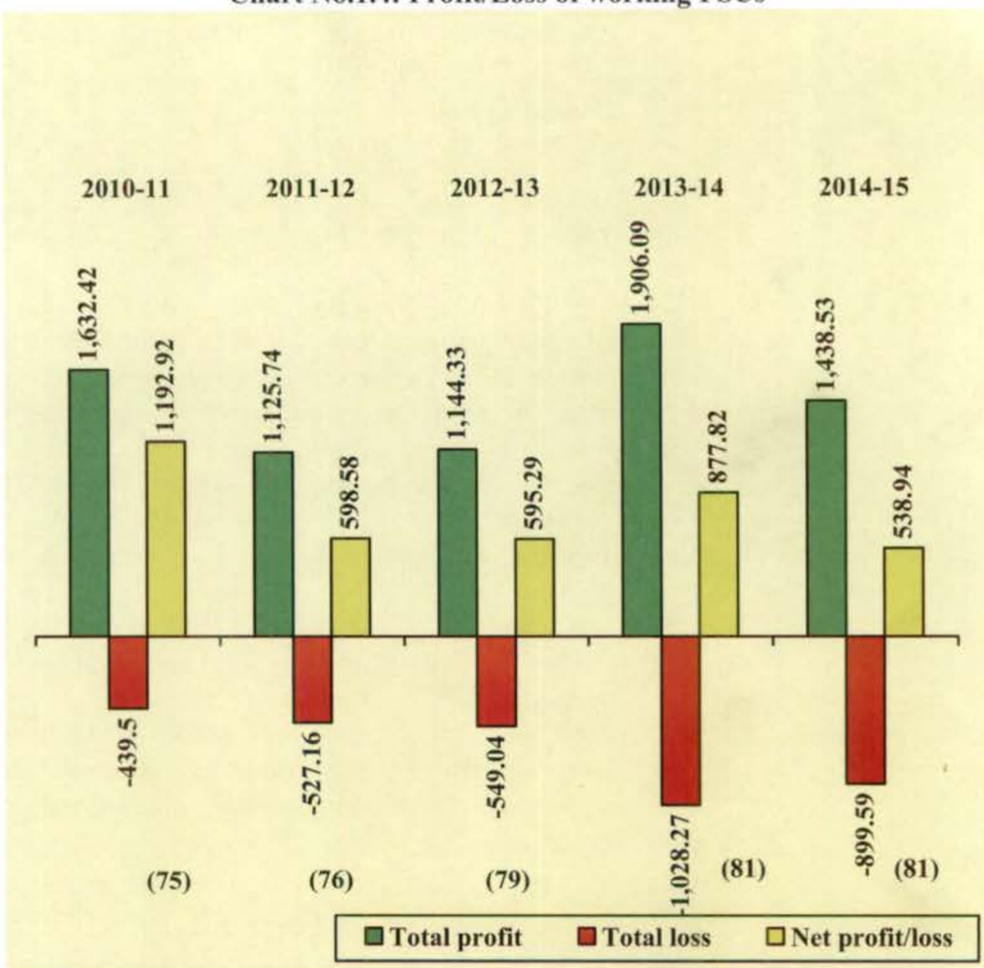
(₹ in crore)

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
Turnover[11]	41,493.51	34,490.58	37,867.13	44,908.32	48,765.18
State GDP	4,10,703.00	4,55,212.00	5,22,673.00	6,14,607.00	6,85,207.00
Percentage of turnover to State GDP	10.10	7.58	7.24	7.31	7.12

The percentage of turnover to State GDP had reduced from 10.10 *per cent* in 2010-11 to 7.12 *per cent* in 2014-15.

1.17. Overall profit (losses) earned (incurred) by State working PSUs during 2010-11 to 2014-15 are given below in a bar chart.

Chart No.1.4: Profit/Loss of working PSUs



(Figures in brackets show the number of working PSUs in respective years) (₹ in crore)

As per their latest finalised accounts, out of 81 working PSUs, 50 PSUs earned profit of ₹ 1,438.53 crore and 21 PSUs incurred loss of ₹ 899.59 crore. Further, Karnataka Vishwakarma Community Development Corporation Limited, Bangalore Suburban Rail Company Limited, Karnataka Mining

[11] Turnover as per the latest finalised accounts.

Environment Restoration Corporation Limited and Karnataka Solar Power Development Corporation Limited incorporated in February 2014, March 2014, June 2014 and March 2015 respectively have not finalised their first accounts. Three companies[12] did not prepare profit and loss account and had only pre-operative expenditure. One Company (Rajiv Gandhi Rural Housing Corporation Limited) prepared income and expenditure account and capitalised the excess of expenditure over income. Another Company (Karnataka Vocational Training and Skill Development Corporation Limited) prepared statement of income and expenditure. One Company (Karnataka Urban Infrastructure Development and Finance Corporation Limited) recorded zero profit by claiming management fee equal to the net administrative expenses incurred.

The major contributors to profit were Mysore Minerals Limited (₹ 313.53 crore), Hutti Gold Mines Company Limited (₹ 144.63 crore) and Bangalore Electricity Supply Company Limited (₹ 113.44 crore). Huge losses were incurred by Karnataka Neeravari Nigam Limited (₹ 295.59 crore) and Bangalore Metropolitan Transport Corporation (₹ 147.59 crore).

1.18. Some other key parameters of PSUs are given below:

Table No.1.10: Key parameters of State PSUs

(₹ in crore)

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
Return on capital employed (*per cent*)	4.40	4.22	4.77	5.46	5.16
Debt	25,364.38	29,197.31	27,434.29	28,434.00	32,086.94
Turnover[13]	41,493.51	34,490.58	37,867.13	44,908.32	48,765.18
Debt-Turnover ratio	0.61:1	0.85:1	0.72:1	0.63:1	0.66:1
Interest payments	2,269.00	2,555.79	2,557.69	3,038.67	4,090.73
Accumulated profits / losses (-)	1,007.36	1,368.93	1,388.01	1,894.94	731.66

(Above figures pertain to all PSUs except for turnover, which is for working PSUs).

1.19. The State Government had formulated (May 2003) guidelines according to which Government nominees on the Boards of Public Enterprises or Joint Ventures, where the State Government had equity holding, should insist on the declaration of minimum dividend of 20 *per cent* on share holding. As per their latest finalised accounts, 54 PSUs[14] earned an aggregate profit of ₹ 1,438.66 crore, but only 17 PSUs declared dividend amounting to ₹ 64.93 crore.

[12] Cauvery Neeravari Nigama Limited, Raichur Power Corporation Limited and Tadadi Port Limited.

[13] Turnover of working PSUs as per the latest finalised accounts as of 30 September 2015.

[14] Including four non-working PSUs.

Winding up non-working PSUs

1.20. There were 12 non-working PSUs (all companies) as on 31 March 2015. Of these, five PSUs have commenced liquidation process. The number of non-working companies at the end of each year for the past five years is given below:

Table No.1.11: Non-working PSUs Particulars

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
No. of non-working companies	14	14	14	14	12

Since the non-working PSUs are not contributing to the State economy and are not meeting the intended objectives, these PSUs may be considered either for closure or action may be taken for their revival. During 2014-15, non-working PSUs incurred ₹ 27.81 crore towards establishment costs. This expenditure was financed by the State Government (₹ 3.09 crore) and through rental, interest receipt and other receipts.

1.21. The stages of closure in respect of non-working PSUs are given below:

Table No.1.12: Stages of closure of non-working PSUs

Sl. No.	Particulars	Companies
1	Total number of non-working PSUs	12
2	Of (1) above, the number under	
(a)	Liquidation by Court (liquidator appointed)	5
(b)	Closure *i.e.* closing orders/ instructions issued but liquidation process not yet started	7

During the year 2014-15, two Companies/Corporations were wound up. The companies which have taken the route of winding up by Court order are under liquidation for a period ranging from ten years to twelve years. The process of voluntary winding up under the Companies Act is much faster and needs to be adopted vigorously.

Comments on Accounts

1.22. Sixty four working companies forwarded their 75 audited accounts to the Accountant General (AG) between 1 October 2014 and 30 September 2015. Of these, 49 accounts (of 42 companies) were selected for Supplementary Audit. The Audit Reports of the Statutory Auditors (appointed by the CAG) and the supplementary audits of the CAG indicate that the quality of maintenance of accounts needs to be improved. The details of aggregate money value of comments of statutory auditors and the CAG are given below:

Table No.1.13: Impact of audit comments on working companies

(₹ in crore)

Sl. No.	Particulars	2012-13		2013-14		2014-15	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1	Decrease in profit	5	78.31	15	524.19	14	746.20
2	Increase in profit	5	3.33	6	11.72	7	38.75
3	Decrease in loss	10	1.97	3	37.19	1	1.36
4	Increase in loss	9	228.28	10	499.83	8	656.53
5	Non-disclosure of material facts	-	-	-	-	5	-
6	Errors of classification	-	-	-	-	10	-

During the year 2014-15, the Statutory Auditors had given unqualified reports on 25 accounts, qualified reports on 47 accounts, adverse reports (which means that accounts did not reflect a true and fair position) on three accounts. This includes comments by the CAG on four accounts. The compliance of companies with the Accounting Standards remained poor as there were 101 instances of non-compliance in 33 accounts during the year.

1.22.1. Similarly, six working Statutory Corporations forwarded their seven accounts to PAG during the year 2014-15. Of these, four accounts of four Statutory Corporations pertained to sole audit by the CAG, while the other three were supplementary audits after audit by Statutory Auditors. The Audit Reports of Statutory Auditors and the sole/supplementary audit of the CAG indicate that the quality of maintenance of accounts needs improvement. The details of aggregate money value of comments of the Statutory Auditors and the CAG are given below.

Table No.1.14: Impact of audit comments on Statutory Corporations

(₹ in crore)

Sl. No.	Particulars	2012-13		2013-14		2014-15	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1	Decrease in profit	4	35.39	2	12.03	3	4.63
2	Increase in profit	-	-	1	2.47	-	-
3	Decrease in loss	-	-	-	-	-	-
4	Increase in loss	2	21.37	3	27.15	4	27.92

During the year all seven accounts received qualified certificates. Two Statutory Corporations reported a total profit of ₹ 76.88 crore while four reported losses amounting to ₹ 329.65 crore.

Response of the Government to Audit

Performance Audits and Paragraphs

1.23. For the Report of the Comptroller and Auditor General of India for the year ended 31 March 2015, two performance audits and 17 compliance audit paragraphs were issued to the Additional Chief Secretaries or Principal Secretaries of the respective Departments to furnish replies. Replies in respect of three Compliance Audit Paragraphs were awaited from the State Government (December 2015).

Follow up action on Audit Reports

Replies outstanding

1.24. The Report of the CAG represents the culmination of the process of audit scrutiny. It is, therefore, necessary that they elicit appropriate and timely response from the executive. The Finance Department, Government of Karnataka issued (January 1974) instructions to all Administrative Departments to submit replies to paragraphs and performance audits (PAs) included in the Audit Reports of the CAG within a period of three months of their presentation to the Legislature without waiting for any questionnaires from the COPU.

Table No.1.15: Replies not received as on 30 September 2015

Year of the Audit Report (Commercial/ PSUs)	Date of placement of Audit Report in the State Legislature	Total PAs and Paragraphs in the Audit Report		Number of PAs/ Paragraphs for which replies were not received	
		PAs	Paragraphs	PAs	Paragraphs
2013-14	13.02.2015	2	19	2	7

It could be seen that replies for two performance audits and seven paragraphs in respect of three departments[15], which were commented upon, were not furnished by GoK (September 2015).

Discussion of Audit Reports by COPU

1.25. The status of Performance Audits (PAs) and Paragraphs that appeared in Audit Reports on PSUs and discussed by the Committee on Public Undertakings (COPU) as on 30 September 2015 was as under:

[15] Energy Department, Commerce and Industries Department and Water Resources Department.

Table No.1.16: Status of discussion of Pas and paragraphs

Period of Audit Report	Number of PAs/paragraphs			
	Appeared in Audit Report		Para discussed	
	PAs	Paragraphs	PAs	Paragraphs
2009-10	2	16	2	15
2010-11	2	11	1	11
2011-12	2	12	0	11
2012-13	2	12	2	9
2013-14	2	19	0	5
Total	**10**	**70**	**5**	**51**

Compliance to Reports of Committee on Public Undertakings (COPU)

1.26. Action Taken Notes (ATN) from the GoK to four Paragraphs pertaining to Six Reports of the COPU presented to the State Legislature between December 2011 and March 2015 had not been received (December 2015) as indicated below:

Table No.1.17: Compliance to COPU Reports

Year of the COPU Reports	Total number of COPU Reports	Total no. of recommendations in COPU Report	No. of recommendations where ATNs not received
2011-12	1	25	25
2012-13	2	18	18
2013-14	2	18	18
2014-15	1	5	5
Total	**6**	**66**	**66**

These reports of COPU contained recommendations in respect of paragraphs pertaining to four Departments[16], which appeared in the Reports of the CAG of India for the years 2008-09 to 2011-12.

It is recommended that the Government may ensure: (a) sending replies to inspection reports/ draft paragraphs/ performance audits and ATNs on the recommendations of COPU as per the prescribed time schedule; (b) recovery of the system of responding to audit observations.

Response to Inspection Reports

1.27. Audit observations noticed during audit and not settled on the spot are communicated to the head of PSUs and departments concerned of State Government through Inspection Reports. The heads of PSUs are required to furnish replies to the Inspection Reports through respective heads of departments within a period of one month. Department-wise break-up of Inspection Reports and audit observations outstanding as on 31 March 2015 is given in **Appendix-3.**

It is recommended that the Government may ensure that a procedure exists for taking action (a) against officials who fail to respond to Inspection Reports based on the reports of Audit Monitoring Cell constituted by the Government

[16] Commerce and Industries Department, Energy Department, Urban Development Department and Women and Child Development Department.

and (b) to recover loss/outstanding advances/ overpayment within the prescribed time.

Coverage of this Report

1.28. This Report contains 17 Compliance Audit observations and 2 Performance Audits on the 'Implementation of Niranthara Jyothi Yojana by Electricity Supply Companies in Karnataka' and 'Resettlement and Rehabilitation in Upper Krishna Project', involving a financial effect of ₹ 758.70 crore.

Disinvestment, Restructuring and Privatisation of PSUs

1.29. The State Government had approved and adopted (February 2001) a comprehensive policy on public sector reforms and privatisation of public sector undertakings in the State. Accordingly, the Government identified 31 PSUs for closure, restructuring and privatisation. Seven Companies[17] were dissolved/amalgamated at the end of September 2015. The position about action taken by the Government in respect of the remaining 24 companies identified for closure/ privatisation/ restructuring was as under:

Table No1.18: Status of disinvestment / restructuring of PSUs

Particulars	No. of companies	Government order issued	Government order not yet issued
Non-working Government Companies decided for closure	12	12[ͽ]	-
Working Government Companies decided for closure	3	1[¢]	2[@]
Working Government Companies decided for privatisation	8	6[♥]	2[♣]
Restructuring of Working Government Companies	1	1[Ω]	-

In October 2005, the Government adopted a Policy on Public Sector Enterprises Reforms, which enunciated an assessment on a case-to-case basis including mechanism for its implementation by incorporating the earlier reform process. After the study, appropriate specific solution was to be considered. The present status of the recommendations of study on case-to-case basis of PSUs was awaited (December 2015).

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17 Karnataka Tungsten Moly Limited, Karnataka Agro Proteins Limited, Vishveswaraya Vidyuth Nigam Limited, Karnataka Film Industries Development Corporation Limited, Karnataka Small Industries Marketing Corporation Limited, Chamundi Machine Tools Limited and Karnataka State Textiles Limited.

ͽ All the non-working companies as per **Appendix-2.**

¢ Karnataka State Construction Corporation Limited.

@ The Karnataka Fisheries Development Corporation Limited, Karnataka State Electronics Development Corporation Limited.

♥ Karnataka Silk Industries Corporation Limited, Karnataka Soaps and Detergents Limited, The Mysore Electrical Industries Limited, Karnataka Vidyuth Karkhane Limited, Mysore Minerals Limited, Sree Kanteerava Studios Limited.

♣ The Mysore Sugar Company Limited, The Mysore Paper Mills Limited.

Ω The Karnataka State Forest Industries Corporation Limited to be merged with Karnataka Forest Development Corporation Limited.

Chapter - II

Performance Audits of Government Companies

Chapter - II

2. Performance Audits relating to Government Companies

2.1 Performance Audit on the 'Implementation of Niranthara Jyothi Yojana by Electricity Supply Companies in Karnataka'.

Executive Summary

Introduction

Karnataka is a power deficit state, with deficit of about 15 *per cent*. In order to have an everlasting solution in bridging the gap between demand and supply, the Electricity Supply Companies (ESCOMs) implemented (2005-09) a scheme called Rural Load Management System (RLMS), which failed due to large scale tampering. Considering the benefits of a scheme implemented in Gujarat, by segregation of feeders, the GoK decided to implement the Scheme called Niranthara Jyothi Yojana (NJY) in Karnataka, after conducting pilot study at Malur.

Niranthara Jyothi Yojana

In NJY, the concept was to segregate the agricultural loads and non-agricultural loads by bifurcation of feeders (11 kV) at the substations by drawing a new independent line (11 kV) feeder, called 'NJY feeder' and shifting the non-agricultural load onto this feeder.

The objectives of NJY were mainly to provide 24 hours of uninterrupted and reliable power supply to non-agricultural consumers; to have better control on agricultural load; and improve the Transmission and Distribution (T&D) losses, Metered sales and Reduction in peak load.

Audit objectives

The performance audit was conducted to assess whether the NJY

- was planned and implemented after assessing the technical advantages and funding arrangements; and
- has achieved its intended objectives.

Audit findings

The audit findings on the first audit objective on* assessing the planning, implementation and funding of NJY indicate that*:

- *Planning* was deficient as large scale implementation was taken up before analysing the Pilot studies in GESCOM and HESCOM. Further, in CESC, the estimates for the works were prepared in an unrealistic manner, necessitating periodic revisions, thereby delaying the implementation.

- *Implementation* of NJY was affected owing to the delays in finalisation of tenders (GESCOM), delays by contractors (HESCOM), delays in completion of load bifurcation works and instances of clubbing of NJY feeders with non-NJY feeders (all ESCOMs). The Special Design Transformer (SDT) intended to provide power to farmhouses on agricultural feeders had design deficiencies due to failure to include overload protection.

- *Funding* to BESCOM and CESC was inadequate, which would affect the implementation of NJY.

- The NJY planned to be completed in three years (by 2012) is lingering for the last three years with 543 of the 1,748 feeders yet to be completed (as at March 2015) resulting in loss of energy savings of 1,128.70 MUs valued ₹ 569.63 crore.

The audit findings on the second audit objective on **assessing whether the NJY has achieved its intended objectives indicated that:**

- ESCOMs were able to provide about 20 hours of three phase power supply to NJY feeders, but the quality of power supply had not improved with the interruptions continuing unabated.

- There was reduction in peak load. However, the practice of providing power to IP feeders during peak hours and also supply of power for more than scheduled hours a day to IP feeders, in a power deficit scenario was imbibed with poor load management.

- 40 p*er cent* of test check feeders showed an adverse trend in T&D losses.

- Though there was increase in number of hours of supply of three phase from 10 hours (pre-NJY) to 20 hours (post NJY), the increased hours of supply was partly owing to increased purchase of power, which was necessitated as the envisaged reduction of distribution losses did not materialise.

- KERC's directive on assessing the IP consumption based on meter readings in DTCs/ IP feeders has not been complied with.

Introduction

2.1.1. Karnataka is a power deficit state, with a deficit of about 15 *per cent*. The increase in generation did not match the demand and the supply-demand gap widened, resulting in load-shedding for the consumers. In such a scenario, the farmers in Karnataka installed Irrigation Pump (IP) Sets to bore wells and open wells to meet their requirement of water for agriculture and farming. The consumption of electricity by the IP Set consumers was nearly 40 *per cent* of the total energy sold by the State. As a result, the power scenario in the State worsened.

In order to have a lasting solution to bridge the gap between demand and supply, the Electricity Supply Companies (ESCOMs[18] in Karnataka implemented (2005-09) a scheme called Rural Load Management System (RLMS). The concept behind RLMS was to segregate the load on each transformer into IP set and non-IP set consumers by using a Rural Load Management Unit (RLMU). While power supply was to be given for 24 hours to non-IP set consumers, for the IP set consumers, it was regulated by RLMU for specified hours as per a pre-determined program. The Scheme was implemented in 756 feeders[19] (about 1/3rd of the total feeders in rural areas) in all ESCOMs. However, the deterioration in the power supply position led to power cuts in RLMS feeders resulting in non-supply of power during the stipulated time to IP set consumers. This led to large scale tampering of the RLMU by the farmers, which the maintenance contractors (for RLMU) could not handle. The situation aggravated with the rising gap in the supply-demand scenario of power.

In order to overcome the above problems, a team headed by the then Managing Director, BESCOM visited (July 2008) Gujarat to study 'Jyothi Grama Yojana (JGY)'. In JGY, the agricultural (IP) loads and non-agricultural loads were segregated by bifurcation of feeders at the substations. After studying the JGY, the Board of Directors (BoD) of BESCOM concluded (August 2008) that tampering was not possible under the scheme, the substation load would be reduced to one-third, and there would be improvement in tail-end voltage. The BoD of BESCOM also noted (August 2008) that the greatest advantage of the scheme was that 24 x 7 power supply could be provided to rural areas, without serious impact on the total energy handled, as the non-agricultural load of rural areas constituted a small percentage of the total energy handled. It was in this background that 'Niranthara Jyothi Yojana (NJY)' was conceptualised in Karnataka.

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[18] Bangalore Electricity Supply Company Limited (BESCOM), Chamundeshwari Electricity Supply Corporation Limited (CESC), Gulbarga Electricity Supply Company Limited (GESCOM), Hubli Electricity Supply Company Limited (HESCOM) and Mangalore Electricity Supply Company Limited (MESCOM).

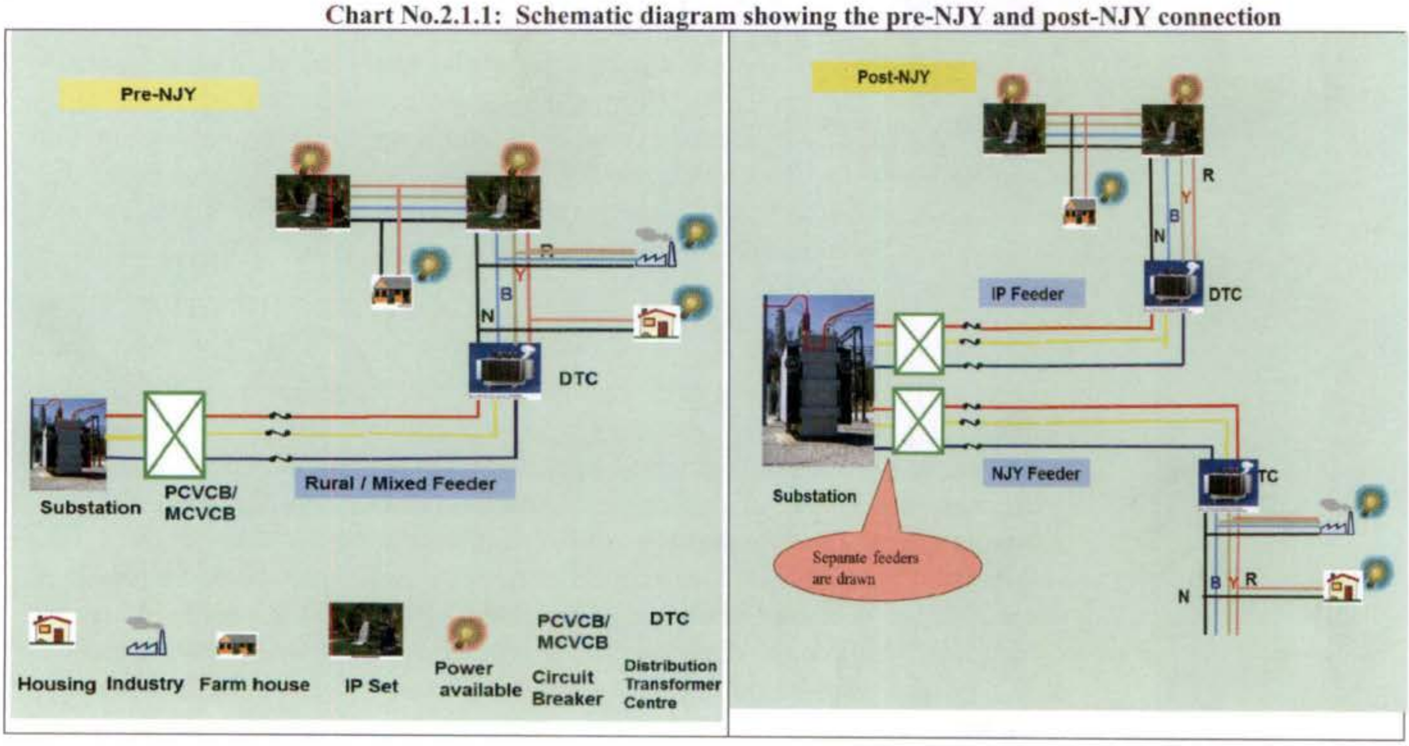
[19] Feeder is an electrical line emanating from the substation and traversing up to the Distribution Transformer Centre (DTC) and from there to the consumers.

Niranthara Jyothi Yojana

2.1.2. In the pre-NJY power supply scenario[20], power supply to both agricultural (IP set) users and non-agricultural (domestic lighting, commercial supply *etc.*,) was through a common 11 kV feeder (rural/mixed feeder) emanating from the substation[21]. The ESCOMs provided three phase power supply[22] for limited number of hours (about 10 hours) [23] and single phase for a few more hours (about 4 hours) with power cuts for the remaining hours (about 10 hours) in a day. This method of limiting the number of hours to three phase and single phase supply was called rostering.

In NJY, the concept was to segregate the agricultural loads and non-agricultural loads by bifurcation of feeders (11 kV) at the substations. This was achieved by drawing a new independent line (11 kV) feeder, called 'NJY feeder' and shifting the non-agricultural load[24] onto this feeder. The existing feeder, which would then have only agricultural (IP) loads on it, was called 'IP feeder'. Thus, the pre-NJY 'mixed/rural feeder' was bifurcated into 'NJY feeder' and 'IP feeder'. An illustration of pre and post NJY is given below.

Chart No.2.1.1: Schematic diagram showing the pre-NJY and post-NJY connection



[20] As RLMS scheme had failed, the pre-NJY scenario refers to the supply of power prior to implementation of RLMS and NJY.

[21] The substation is located in the premises of Karnataka Power Transmission Corporation Limited (KPTCL), the Public Sector Undertaking vested with transmission of power, wherever the step down voltage was more than 66 kV.

[22] Three phase power supply (denoted as R,Y,B with N as neutral) is required to run Irrigation motors and for industries with motive power. For purposes of domestic lighting, single phase supply would suffice.

[23] The number of hours of supply in *three phase*, *single phase* and *no power* in different ESCOMs, prior to implementation of NJY, as per DPR were : BESCOM and CESC (10 hours, 4 hours, 10 hours); GESCOM (6 hours, 8 hours, 10 hours); HESCOM (6 hours, 12 hours, 6 hours).

[24] These are also referred as Low Tension (LT side) load works.

2.1.3. The objectives or benefits sought to be achieved through NJY were as under:

- to provide 24 hours of uninterrupted and reliable power supply to non-agricultural consumers;
- to have better control on agricultural load;
- increase in billed energy and demand;
- reduction in peak load on the system/improved load management and
- reduction in distribution losses.

The Government of Karnataka (GoK) proposed (October 2010) to fund the NJY with 40 *per cent* equity support, while the balance 60 *per cent* was to be funded by ESCOMs, which they did through debt.

Audit Objectives

2.1.4. The objectives of the performance audit were to assess whether the NJY

- was planned and implemented after assessing the technical advantages and funding arrangements and
- has achieved its intended objectives.

Scope of Audit

2.1.5. The Performance Audit covering planning, implementation and evaluation of the achievements of the objectives of NJY in four[25] ESCOMs was conducted between November 2014 and June 2015. The examination involved scrutiny of records at the Corporate Office of the ESCOMs and 17 divisions[26] (31 *per cent*) out of the 54 divisions, which were selected based on probability proportional to size of the number of feeders commissioned in each division. Further, the data on supply of power, distribution losses, peak voltage *etc.*, for 88 feeders[27] and its corresponding 161 IP feeders in these 17 divisions were analysed to evaluate the extent of achievement of the objectives of NJY. In addition, in order to assess the performance of NJY with respect to load management of IP feeders during peak hours, data in respect 118 IP

[25] BESCOM, CESC, GESCOM and HESCOM. MESCOM did not implement NJY, as the objective of supplying 24 hours power supply was met through RLMS Scheme.

[26] Chitradurga, Davanagere, Harihara, Ramanagara, Tumakuru in BESCOM; Arasikere, Hassan, Pandavapura, RAD Mysuru (Nanjangud) in CESC; Kalaburgi-I, Hosapete, Koppal, Yadgir in GESCOM; and Vijapura, Jamakhandi, Ranebennur, Haveri in HESCOM.

[27] 100 feeders were selected (25 feeders in each ESCOM) in the 17 divisions. Comparable data was however, made available by ESCOMs only in respect of 88 NJY feeders and corresponding 161 IP feeders. The reason for excluding 12 feeders is given in **Appendix-7.**

feeders (of the 161 feeders) captured by SCADA/ALDC,[28] were also analysed. The Performance Audit covered the period from the inception (2008-09) of NJY up to 2014-15.

Audit Methodology

2.1.6. The methodology adopted for attaining the audit objectives involved explaining audit objectives to the top management, scrutiny of records at ESCOMs and their divisions, analysis of power supply data and issue of audit observations.

Audit explained the objectives of the Performance Audit to the Government and to the Management of the ESCOMs during an 'Entry Conference' held in March 2015. The draft Performance Audit Report was issued to the Government in October 2015. The Exit Conference was held in December 2015 wherein the audit findings were discussed with the Government represented by the Additional Chief Secretary to the GoK, Energy Department and the Managing Directors of the ESCOMs. The views of the Management and Government have been incorporated in the Report.

Audit Criteria

2.1.7. The audit criteria considered for assessing the achievement of the audit objectives were derived from instructions/circulars/orders of GoK and Karnataka Electricity Regulatory Commission (KERC), minutes of the Board of Directors (BoDs) of ESCOMs, Detailed Project Reports (DPR), Letter of Intent (LoI), Detailed Work Awards (DWA), Demand Collection Balance (DCB) statements, Load Management Records and good practices adopted in other States, which implemented similar schemes.

Acknowledgement

2.1.8. Audit acknowledges the co-operation extended by the Energy Department of the GoK and the Management of the ESCOMs in facilitating the conduct of Performance Audit.

Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Audit Findings

2.1.9. The audit findings are discussed in succeeding paragraphs.

Status of NJY

2.1.10. Based on the results of pilot study at Malur, the GoK decided (November 2008 /January 2009) to extend NJY to the entire State.

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[28] SCADA/ALDC i.e. Supervisory Control and Data Acquisition (SCADA)/ Area Load Dispatch Centres (ALDC) are centres from where the power situation on the feeders is monitored for the entire State. However, as SCADA is still under implementation, data for only 32 of the 88 NJY feeders and 118 of 162 test checked IP feeders were found captured by it.

A total of 1,614 feeders[29] in 126 taluks at an estimated cost of ₹ 2,123.73 crore were planned for implementation in the four ESCOMs. The total additional revenue per annum, envisaged to accrue to the ESCOMs after implementing NJY was ₹ 725 crore with an average payback period of three years for the ESCOMs, as a whole.

2.1.11. The physical and financial progress achieved for the first two phases[30] as on 31 March 2015 are given below:

Table No.2.1.1: Physical and financial progress of NJY

Particulars	BESCOM		CESC		GESCOM		HESCOM	
	Phase-I	Phase-II	Phase-I	Phase-II	Phase-I	Phase-II	Phase-I	Phase-II
No. of taluks covered	19	23	10	14	20	10	20	14
No. of existing rural feeders	555	542	270	369	467	198	695	692
No. of NJY feeders proposed	271*	281	161#	235	235	109	246	210
No. of villages covered	4,691	4,607	3,358	3,440	2,765	1,087	1,972	1,464
Estimated cost of NJY (₹ in crore)	374.53	385.72	248.47	356.12	286.90	153.26	276.60	219.51
BoD approval date for implementation	February 2009		June 2009		March 2009		June 2009	
Envisaged time frame for completion	March 2010	March 2012	March 2010	March 2011	March 2010	March 2011	March 2010	March 2011
Scheduled date of completion[31] as per contracts awarded	May 2010 to Aug. 2010	June 2012 to Dec. 2015	July 2011 to Feb. 2012	May 2013 to June 2015	Apr. 2011 to Dec. 2014	Mar. 2012 to Dec. 2014	Feb. 2012 to June 2012	July 2012 to Sep. 2012
No of feeders commissioned within the scheduled date of completion	5	7	0	8	0	3	1	1
Revised date of completion	-	-	April 2013	Mar. 2015 to June 2016	-	-	Sept. 2015	Sept. 2015
Number of feeders commissioned as at March 2015	271	229	105	70	138	54	169	143
No of feeders pending completion	-	52	56	165	97	55	77	67
Expenditure incurred (₹ in crore)	305.68	367.67	180.59	259.46	252.87	115.86	165.84	116.35

* Including feeders proposed under Malur Pilot Project.
# Including 26 feeders which were short-closed subsequently.
(Source: Details as furnished by the respective ESCOMs, Records of ESCOMs and Energy Department, GoK.)

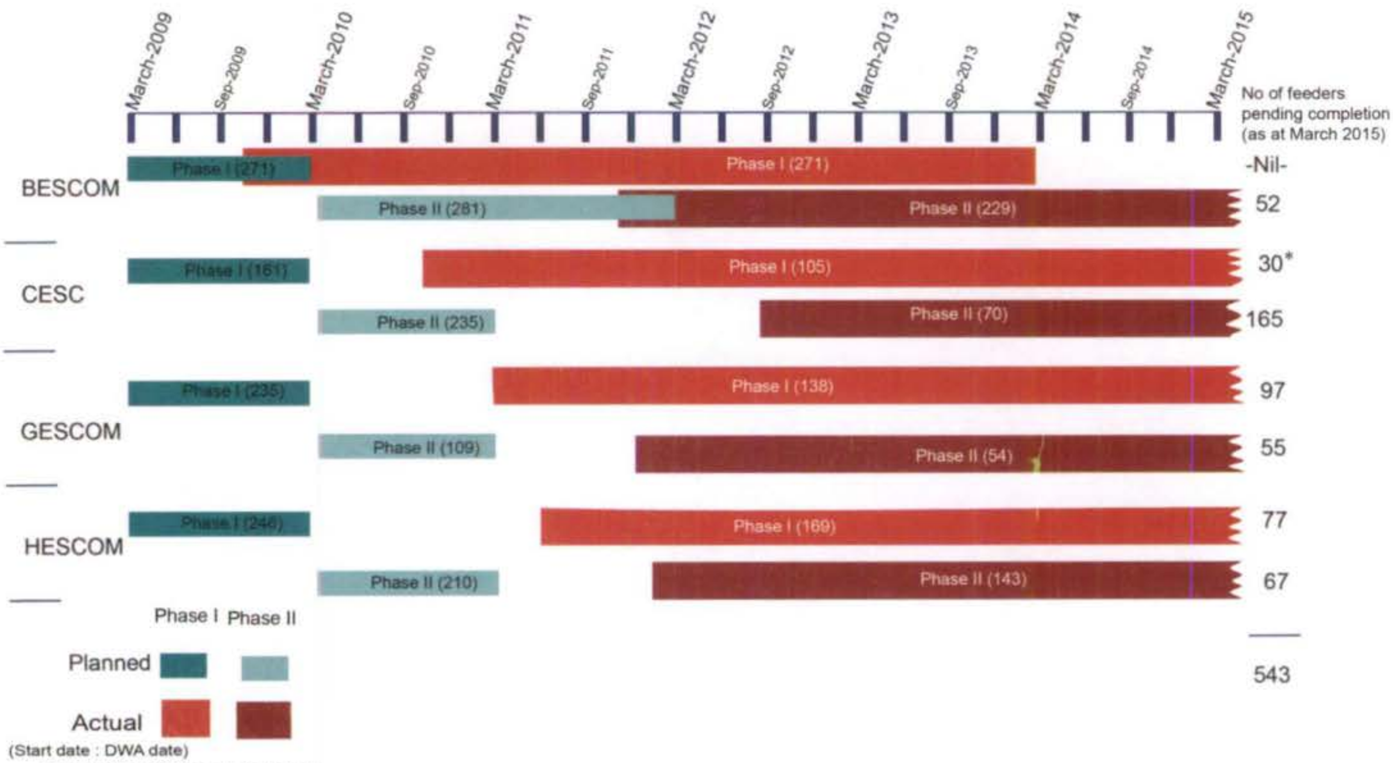
As could be observed from Table 2.1.1 above, the implementation of NJY was much below expectation, with only 25 of the 1,748 feeders being commissioned within the scheduled date. The implementation is already delayed by three to four years and as at the end of March 2015, only 1,179 feeders have been commissioned with 543 feeders yet to be completed (March 2015). A Gantt chart of the timelines for implementation *vis-à-vis* actual implementation is given below:

[29] This was periodically modified subsequently, and the actual position as at end of March 2015 is given in Table 2.1.1.

[30] In addition to the two phases, a total of 371 feeders, which included coverage of implementing NJY in RLMS feeders, are proposed under third phase of NJY, under the Deendayal Upadhyaya Gram Jyoti Yojana sponsored by Government of India. Third phase is yet to be taken up (March 2015).

[31] Tenders for few packages of phase-I were awarded after inviting tenders for more than once owing to high rates in bids, necessitating cancellation of tenders/re-inviting tenders. Later, tenders (packages) called for works under phase-II were finalised, while phase-I works remained without being awarded. This is the reason for scheduled date of completion for phase-I being later than phase-II.

Chart No.2.1.2: Timeline for implementation of NJY as at March 2015



* excluding 26 feeders in CESC

The loss of energy savings due to delay in completion was ₹ 569.63 crore.

2.1.11.1. As could be seen from the Chart 2.1.2 above, even after a delay of three to four years, the NJY is not fully implemented, with 543 feeders yet to be completed (as at March 2015). Reasons for the delay are given in paragraph 2.1.11.2. The loss of energy savings in the four ESCOMs for the delay between the scheduled date of completion[32] *vis-à-vis* actual date of completion was 1,128.70 MUs and the revenue loss to the ESCOMs was ₹ 569.63 crore[33].

Though BESCOM was nominated as a Nodal agency for implementation of NJY on behalf of all ESCOMs and the Chief Engineer, BESCOM was to monitor the NJY, co-ordination meetings were not held after May 2009.

In compliance to the directives of KERC, BESCOM and GESCOM had given commitment that the NJY would be completed by March 2015 while CESC had stated that NJY would be completed by June 2015. HESCOM had not given any commitment.

Audit, however, noticed that even these commitments had not been adhered to. At the current rate of implementation, it would take another two years to commission all the NJY feeders.

2.1.11.2. The delay in implementation of NJY has limited the coverage of the achievement of the objectives of NJY. The achievement of the objectives of NJY is brought out in paragraph 2.1.21. The main factors responsible for delay in implementation of NJY are as under:

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[32] Scheduled date of completion refers to date given in the LoI/DWA. The delay from the envisaged time-frame for completion of NJY up to DWA is not considered.

[33] Loss of energy savings and loss of revenue were BESCOM (174.33 MUs, ₹ 86.12 crore); CESC (559.41 MUs, ₹ 273.48 crore); GESCOM (148.38 MUs, ₹ 78.37 crore), HESCOM (246.58 MUs, ₹ 131.66 crore).

Table No.2.1.2: Factors responsible for the delay in implementing NJY

As per ESCOMs	Additional factors, noticed in Audit (referred in paragraph)
BESCOM ➢ Short supply of poles and insulators to the partial turnkey contractors. ➢ LT bifurcation work not included in the scope of DWAs. ➢ Delay in obtaining approval for railway crossings, highway crossings and Electrical Inspectorate.	➢ Delay in completion of load bifurcation work (paragraph 2.1.16). ➢ Failure of Special Design Transformers (paragraph 2.1.18.1 to 2.1.18.2).
CESC ➢ Difficulty in availability of labour, as different projects were under execution at the same time in all ESCOMs. ➢ Shortage of Reinforced Cement Concrete (RCC) square poles. ➢ Right of Way (RoW) problems.	➢ Deficiencies in estimates warranting periodical revisions (paragraph 2.1.13). ➢ Delay in completion of load bifurcation work (paragraph 2.1.16).
GESCOM ➢ Incorrect estimates of works, which led to the estimated materials getting exhausted by usage in lesser number of feeders. ➢ Delay in supply of poles and insulators.	➢ Deficiencies in conducting the pilot study (paragraph 2.1.12). ➢ Delay in finalising tenders (paragraph 2.1.14). ➢ Delay in completion of load bifurcation work (paragraph 2.1.16).
HESCOM ➢ Non-availability of skilled labour as NJY and other development works were going on simultaneously in Karnataka and Maharashtra. ➢ Objection by farmers for erecting poles.	➢ Deficiencies in conducting the pilot study (paragraph 2.1.12). ➢ Contractors having financial difficulties (paragraph 2.1.15). ➢ Delay in completion of load bifurcation works (paragraph 2.1.16). ➢ Clubbing of NJY feeders with Non-NJY feeders (paragraph 2.1.17).

Planning

Deficiencies in conducting pilot study

2.1.12. A Pilot Study is a preliminary study conducted on a small scale, whose results provide valuable insights, before taking up a project on a full scale.

In a meeting chaired by the Minister for Energy, it was decided (July 2008) to conduct pilot study of the separation of feeders at Malur taluk in BESCOM and the process be told to other ESCOMs so that they can also take up one such project in their areas.

BESCOM conducted (August 2008) pilot study of the NJY at Malur taluk and after analysing the results, the GoK decided (November 2008/January 2009) to implement NJY. Accordingly, BESCOM had invited tenders in June 2009 for implementation NJY in other taluks (large scale). Similarly, CESC had taken up (December 2008) a pilot study in Malavalli taluk and completed it in November 2009. The results were analysed in March 2010 and tenders for large scale implementation were invited in April 2010.

The results of Pilot Study were not analysed before going in for large scale implementation of NJY.

Audit, however, observed that HESCOM and GESCOM had invited tenders for large scale implementation before analysing the test results of the Pilot Study. HESCOM had taken up (February 2009) pilot studies, initially in one taluk (Bailahongal) and later in Savanoor and Shiggaon taluks (six feeders). As at end of March 2015, while the pilot study in Bailahongal taluk was completed (July 2009), the pilot studies in the other two taluks were pending. HESCOM, however, had invited tenders for large scale implementation in August 2009. Similarly, in GESCOM, the pilot study was taken up in Kusthagi taluk in January 2009 and completed in February 2014, while tenders for large scale implementation had been invited in August 2009. The results of the pilot study were yet to be assessed (March 2015).

Thus, the purpose of conducting the pilot studies in HESCOM and GESCOM was defeated.

GoK replied (January 2016) that results of pilot study in HESCOM were analysed in September 2009, while GESCOM had taken action to appoint (February 2015) a third party for evaluation of Pilot Study. The fact, however, remains that tenders for large scale implementation were invited much before the results of pilot study were analysed in these two ESCOMs.

Recommendation No.1: The ESCOMs may analyse the results of pilot study before implementing projects on a large scale.

Deficiencies in preparation of estimates

2.1.13. A sound estimate provides a fair assessment of the cost of the work. The following deficiencies were noticed in the preparation of estimates:

2.1.13.1. In the BoD meeting held in May 2009 in CESC, it was proposed to implement NJY in 341 new feeders at a cost of ₹ 496.24 crore in 24 taluks, in two phases *i.e.* by December 2010 and June 2011. Notice Inviting Tenders was invited in June 2009 for 21 taluks[34]. The BoD, considering the budget provision of ₹ 100 crore, decided (June 2009) to limit NJY works to about 70 feeders. In the Action Taken Note submitted to BoD in October 2009, it was, however, intimated that NJY works were initiated in 161 feeders (10 taluks in phase-I), at a total cost of ₹ 246.37 crore, and the remaining 14 taluks were planned for phase-II, as the entire amount would not be required in the same financial year and expenditure would be spread over next financial year.

In March 2010, the BoD was informed that discrepancies were noticed between the tendered quantities and quantities mentioned in the DPR for the 161 feeders. The DPR cost for the 161 feeders was revised to ₹ 208.86 crore. The DWAs for the 10 taluks were issued in October 2010, December 2010 and May 2011.

Subsequently, in December 2011, the DPR cost of these 161 feeders was again revised to ₹ 306.48 crore considering re-arrangements of load bifurcation and providing new breakers at substations. Again in March 2012, the DPR cost

[34] Tenders for remaining three taluks were invited in November 2009 (Arisikere and T.N.Pura) and March 2012 (Arkalgudu taluk - Phase-II).

was revised to ₹ 248.47 crore, considering the fact that earlier DPR (₹ 208.86 crore) was prepared with limitation in cost per feeder and without considering the site conditions.

CESC had prepared estimates for the NJY works in an unrealistic manner, necessitating periodic revisions, thereby delaying implementation.

The materials issued for the envisaged works[35] were used in lesser number of works due to the deficiencies in estimates necessitating periodical revisions. This affected the implementation of the first stage of NJY and also had a cumulative effect on the phase-II. As at end of March 2015, a total of 105 feeders of the 161 have been commissioned, with delays ranging from 15 days to 1,353 days, from their scheduled completion. This resulted in foregoing of energy savings of 521.51 MUs[36] (up to March 2015) valued ₹ 253.41 crore.

CESC informed (July 2015) that the DPR/estimates were prepared based on the guidelines given by BESCOM with criteria to ensure that cost per feeder was within ₹ 1.5 crore and one transformer was proposed per village. CESC admitted that the delay was not only due to improper estimates but also due to Right of Way (RoW) issues from various departments/farmers, quantity variations as per field conditions and other reasons[37]. GoK replied (January 2016) that the nature of works involved drastic and dynamic changes in field conditions of distribution network due to various other ongoing schemes.

The reply is not acceptable as the delay in implementation due to deficient estimates was controllable by CESC with proper survey and estimation. Further, CESC should have taken cognizance of other ongoing works while preparing the estimates.

2.1.13.2. Further, considering the progress of implementation of NJY, the BoD of CESC, approved (June 2014) short-closure of the work of 26 feeders (of the 161 awarded in phase-I), where the work had not started. The reason attributed was the periodic revision of estimates resulting in exhausting the materials that were estimated for the work as there were variations in quantities by more than 25 *per cent* as compared to DPR quantities and also for the reason that the contractors were requesting for new rates.

Short closure of the work had resulted in depriving 24 hour power supply to the consumers living in those rural areas. The energy savings expected in 17 of the 26 short closed feeders was 9.57 MUs, whereas in 17 executed works, the energy savings was 0.97 MUs, indicating poor prioritisation of works, as works with lower energy savings had been taken up for execution rather than selecting works, which had higher energy savings.

GoK attributed (January 2016) the short closure of works to reasons bey[illegible] the control of ESCOMs, such as agitation from farmers, quality variation[illegible] obtaining forest clearances. The reply is not acceptable as there [illegible] justification for not taking up works, which had higher energy savings[illegible]

[35] The works were awarded on partial turnkey (ESCOMs provided the contra[illegible] materials).

[36] Worked out considering taluk wise average savings (as per DPR) per f[illegible] cost of short term purchase of power for the respective years.

[37] Contractors starting work in many feeders simultaneously, shortag[illegible] non-availability of sand/jelly, non-supply of poles by the Pole m[illegible] heavy penalty for delay.

2.1.13.3. In GESCOM, though the scheduled date of completion of drawing 11 NJY feeders in H.B Halli taluk of Hosapete division was July 2011, the work was commissioned (January 2013/May 2014) only in respect of six[38] feeders (cost: ₹ 3 crore). Poor estimation of the length of feeders (six numbers), which increased from 145.70 kilometres (estimated) to 213.80 kms, was a cause for the delay in completion of works.

Further, three feeders[39] were yet (March 2015) to be commissioned, while works in respect of two[40] feeders, which were not started, were re-tendered (July 2014) and the work was under progress (March 2015).

Government replied (January 2016) that during execution of works / detailed survey, the field officers had reported that quantities provided in DPR were inadequate. This had arisen as water works, Thandas/Hamlets had been excluded while preparing the estimates. The reply confirms the observation that there were deficiencies in the preparation of estimates.

Recommendation No.2: ESCOMs need to prepare estimates after survey, investigation and duly taking cognizance of works being implemented under other schemes.

Implementation

Delay in finalisation of tender

2.1.14. GESCOM invited (August 2009) tenders for NJY works in five taluks[41]. In respect of one taluk (Manvi), a lone bidder had quoted ₹ 8.92 crore, which was 61 *per cent* above the DPR cost (₹ 5.54 crore) on partial turn-key basis. The total estimated cost for the work (Manvi) on turn-key basis was ₹18.47 crore. The validity of the bid was up to March 2010.

The BoD decided (December 2009) to award the work at 26 *per cent* above (estimated cost: ₹ 5.54 crore), based on the Schedule of Rates of 2009-10, subject to achieving financial tie-up. GESCOM approached REC and banks in
2010 for financial assistance. Meanwhile, as the work was not awarded
March 2010, GESCOM requested (March 2010) the bidder to
of his bid up to September 2010, which was agreed to by
placing DWA, the GESCOM again requested, first
December 2010 to extend the validity of bid up
ectively. The bidder, however, did not

ember 2011 and April 2012 did not
ed or a single bid was received with
celled.

Marabihal, Magimavinahalli.

uru, Siraguppa.

In spite of GoK's directions (January 2009) to avail financial assistance from REC/bankers for NJY works, GESCOM approached bankers only in April 2010. Meanwhile, the tenders invited in August 2009 lapsed and the works had to be re-tendered resulting in extra cost and delays.

Tenders were invited again in January 2013 on total turn-key basis and after negotiations, the LoI was issued (September 2013) to a contractor for ₹ 28.82 crore for the same work (Manvi taluk). The work, which was to be completed by July 2014, was not completed as of March 2015.

GESCOM stated (August 2015) that the delay in awarding the tenders was due to the absence of a financial tie up, and it had requested (August 2010) the GoK for full funding since it would not be in a position to repay huge amount of loan availed from REC/Commercial banks. GoK replied (January 2016) that loan sanctioned by Bank was not availed as the interest rates were higher than the REC loan. GoK further stated that it was ultimately decided to avail loan from REC, which led to delay in issuance of Letter of Intent to the contractor. As a result of two years of delay in project implementation, the project cost, quoted price of second award went up significantly.

The contention is not acceptable as GoK had directed the ESCOMs to avail financial assistance from Rural Electrification Corporation (REC)/ Power Finance Corporation (PFC)/Financial Institutions as early as in January 2009. In the BoD meeting held in December 2009 wherein it was decided to award the works, the BoD had also authorised the Managing Director to approach banks and issue LoI for supply of materials for NJY, subject to tie-up of funds. It was only in April 2010 that GESCOM had requested REC for loan, which was sanctioned in October 2010, but the same was not availed. GESCOM also had (December 2010) a Letter of Arrangement from a Bank, but had not availed the same citing high interest rates. Finally, as the request (August 2010) of GESCOM for additional equity support was not forthcoming from GoK, it again approached (August 2012) the REC for revalidating its earlier sanctioned loan. Finally, the loan was availed in June 2013 from REC to meet the funding requirements.

Thus, failure of GESCOM to award the work within the validity of the tender resulted in denial of the envisaged benefit of 24 hours of quality power supply to the consumers in Manvi taluk from July 2010 to March 2015, apart from incurring additional cost of ₹ 8.92 crore[42] on the work, due to time over-run.

Similar developments were noticed in the other four taluks (**Appendix-4**) covering 47 NJY feeders, resulting in incurring extra expenditure of ₹ 22.69 crore, apart from denial of 24 hour power supply.

Recommendation No.3: ESCOMs need to adhere to the directions of GoK to have financial tie-ups with REC and Financial institutions well in advance so as to avoid extension of validity periods/re-tendering and consequent delays and cost overruns.

Delay in execution by contractors

2.1.15. HESCOM placed (May / September 2011, January / March 2012) DWAs for construction of 246 feeders covering 20 taluks in phase-I and for

[42] ₹ 28.82 crore *less* ₹ 18.47 crore *less* tender premium in the original tender ₹ 1.43 crore.

210 feeders covering 14 taluks in phase II with a stipulation to complete the work by February / June 2012 and February/September 2012 respectively.

At the end of scheduled date of completion (July/September 2012), only two out of the 456 feeders were commissioned. The contractors cited the non-availability of skilled labour, taking up of works simultaneously in the neighboring State, objections by farmers as the reasons for the slow progress (refer Table 2.1.2) and this was appraised to the BoD of HESCOM while seeking extension. The contractors also expressed (August/September 2012) that they had financial difficulties because of investment in procuring the material and increased labour cost. They requested HESCOM to arrange release of additional 30 *per cent* payment, which was approved (February 2013) by the BoD, subject to completion of all works by March 2013, failing which, penal interest was to be levied.

The work was not completed by March 2013. In fact, even after two years *i.e.* as at March 2015, only 169 out of 246 feeders in the phase-I and 143 feeders out of 210 feeders in the phase-II have been completed. Thus, undue delay in completion of the work resulted in loss in envisaged energy savings (246.58 MUs) and revenue loss of ₹ 131.66 crore. Incidentally, the penal interest of ₹ 1.07 crore on the additional advance of ₹ 7.39 crore, had not been raised/recovered in three test checked divisions[43].

GoK replied (January 2016) that the progress of work as at end of November 2012, *i.e.* before payment of additional advance, was 10.09 *per cent* (both phases) and this had increased to 93 *per cent* as at end of April 2015.

The fact, however remains that in spite of paying additional advance the works were not completed within the committed date of March 2013 and even two years later (April 2015), the work was still pending completion. The issue of delay in spite of providing additional advances needs to be analysed and responsibility fixed for delays and non-recovery of penalties.

Recommendation No.4: ESCOMs need to award the works only after assessing the financial ability of the contractors to execute the works so that implementation of works are not delayed.

Non-completion of bifurcation work before commissioning of feeders

2.1.16. In order to achieve the objectives of NJY *i.e.,* 24 hours of power supply to all non agricultural consumers and restricted hours of power to IP set consumers, it was necessary to bifurcate the load from the existing rural feeders into agricultural and non-agricultural consumers. This is achieved by releasing the existing Low Tension (LT) lines and restringing them on the new NJY feeders.

In the 17 test checked divisions, Audit observed that there were differences in the date of commissioning of NJY feeders as per the data of Corporate Offices

[43] In test checked divisions of Vijapura (₹ 14.57 lakh), Haveri (₹ 71.34 lakh) and Jamakhandi (₹ 21.50 lakh).

There were delays in load bifurcation works.

of the ESCOMs (received from Divisions) and the actual commissioning date as per the Division, in respect of 71 of the 346 feeders[44]. This difference in dates ranged from 4 days to 771 days. This indicated that though the bifurcation of LT work was not complete, whereas all the associated works are to be completed and line charged for declaring the feeder commissioned, it was intimated so to the Corporate Office of the ESCOMs. As the data of the Corporate Office were used for monthly meetings with GoK, the achievement of NJY depicted in the meetings stood inflated.

GoK replied (January 2016) that in BESCOM there was difficulty in bifurcating the feeders due to corridor issues and objection from farmers. In CESC and HESCOM, initially, the date of charging of the substation was considered as 'date of commissioning' but later, the shifting of loads or bifurcation works were taken up and completed, and hence the difference in dates. The reply further stated that action has now been taken to rectify this aspect and the feeder was declared as 'commissioned' by the Divisions/Corporate Office only after 100 *per cent* bifurcation, *i.e.* after the last consumer or the IP set was bifurcated.

The fact, however remains that the achievement of NJY projected in the meetings of the Top Management of ESCOMs, was exaggerated.

2.1.16.1. In HESCOM, the work of bifurcation of load works (LT side), valued at ₹ 5.83 crore[45] was awarded subsequent to award of construction of NJY feeders. Thus, this cost (₹ 5.83 crore) was not included in the projections for claiming equity support from the GoK. As a result, HESCOM had to bear the 40 *per cent* equity component (₹ 2.33 crore) as debt.

Non-bifurcation of load

2.1.16.2. The work of construction of 57 feeders in Bagalkot, Mudhol and Vijapura Taluks of HESCOM were awarded (January 2012) for ₹ 49.17 crore. The work was to be completed within six months from the date of award. In respect of eight[46] feeders which were commissioned between June 2012 and July 2014, bifurcation of load (IP and Non-IP) was not done till March 2015, which enabled IP sets in the feeder to get power for more than the stipulated supply time of six hours. In a power deficit State, providing power to IP sets beyond the scheduled hours and during peak hours indicated poor load management, as brought out in paragraph 2.1.25 and 2.1.26.

[44] BESCOM (39 out of 155 feeders) with delay ranging from 5 to 771 days, CESC (25 out of 63 feeders) with delay ranging from 4 to 312 days, and HESCOM (14 out of 83 feeders) with delay ranging from 5 to 365 days. In GESCOM, the data on date of commissioning of the divisions were matching with Corporate Office records.

[45] In four subdivisions and four divisions (including two divisions selected). The other divisions/subdivisions had not submitted the estimates for LT line bifurcation works as at March 2015.

[46] Manahalli, Katageri/Hangaragi, Belur, Nagur, Kaladgi, Hallur, Shirur, Simikeri. Further, of the 57 feeders, four feeders were pending completion as at March 2015.

Clubbing of other feeders with NJY feeders

2.1.17. The work of constructing the NJY feeder was an important task for segregating the IP consumers and non-agricultural consumers. In respect of the five[47] out of 19 selected feeders in three test checked divisions[48] (out of 17 divisions with 88 feeders selected for test check), Audit observed that commissioned NJY feeders were clubbed with other feeders for periods ranging from 2 to 33 months. Further, even after the release of clubbed feeders from these NJY feeders, the load on the LT side of NJY feeders had not been bifurcated, for periods ranging from 12 months to 33 months. Thus, the objective of segregation of feeders under NJY had been defeated.

GoK replied (January 2016) that in the event of completion of line works of new feeder and non-availability of idle breaker/new breaker for commissioning, feeders were commissioned by clubbing with existing breakers in town or rural feeder breakers, in order to ensure early commissioning the new NJY feeders. The reply further states that action was now taken to provide separate breakers by co-ordination with KPTCL. The reply confirms the clubbing of feeders as a result of inaction of the ESCOMs to procure and install breakers, defeating the objective of NJY.

Recommendation No.5: ESCOMs need to ensure that the bifurcated NJY feeders are not clubbed with non-NJY feeders. Action needs to be taken to install breakers at the earliest on the bifurcated feeders, else the objective of bifurcating the feeders under NJY would be defeated.

Special Design Transformer

2.1.18.1. With the implementation of NJY, it was envisaged to control the power supply to each category of consumers from the substation. IP set consumers had to be provided with the scheduled 6 to 7 hours of supply a day[49]. In the pre-NJY period, the ESCOMs resorted to 'rostering' (refer **Appendix-5**) limiting the power supply to two phases. But, the IP consumers used to install phase shifters to get three phase supply and hence, under NJY, it was a challenge to provide power supply to farmhouses[50] connected to the IP feeders beyond the scheduled hours (6 to 7 hours), without providing enough power for IP sets to operate. This was made possible by installing Special Design Transformers (SDT) on IP feeders, at the substations.

The SDT was to be so designed that a Current Transformer (CT) was fitted to the phase (230 Volts), with a maximum current limit[51]. In the event of current flowing more than the designed level (happens when consumers use phase shifters to obtain three phase supply), the CT would send a signal to the relay to break the circuit, thereby tripping the IP feeder.

[47] Belur, Chatra, Gundenahally, Kittur and Handigannur.

[48] Ranebennur, Havrei taluk in HESCOM and Nanjangud taluk in CESC. In respect of other 14 divisions test checked, the data on clubbing of feeders is awaited.

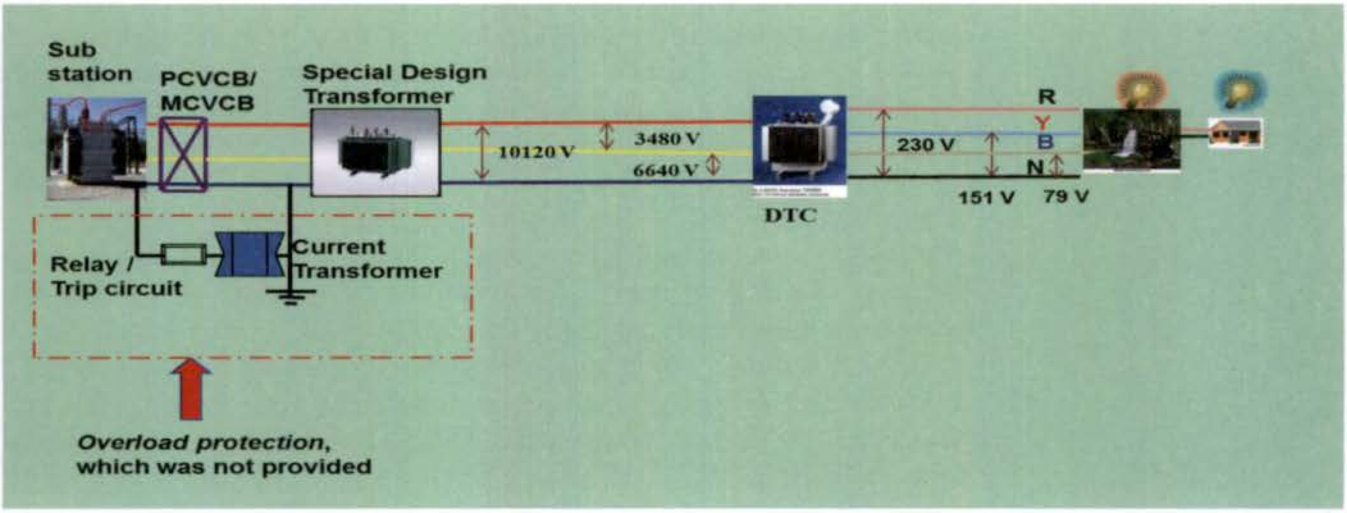
[49] Seven hours with effect from November 2014.

[50] Farmhouses are small hutments near the agricultural fields, where farmers store their tools and equipment and also they keep their farm animals, poultry *etc*.

[51] A pre-determined limit of 35 amperes.

An illustrative connection of SDT on an IP feeder, along with voltage profile is given below:

Chart No.2.1.3: Schematic diagram of the SDT including overload protection on IP feeder



Non-inclusion of overload protection in the design of SDTs

2.1.18.2. KAVIKA (a State Government Public Sector Undertaking) supplied 416 SDTs to BESCOM which were installed at the substations, on the IP feeders. The maximum load current for the circuit to trip was 35 amperes.

During the period of single phase power supply, BESCOM[52] observed overloading of the SDTs, which burnt off the fuses. BESCOM, finding SDTs faulty, kept them out of service/ idle charged (connected to circuit, but idle). All the SDTs remained idle charged[53] at the end of March 2015.

Overlooking the need to provide *overload protection* to the Special Design Transformer put the entire NJY at risk.

The actual reason for the failure of the circuit to trip was the absence of *overload protection*. The SDTs were envisaged in the DPR/Estimates of NJY, but there was no mention about the overload protection. The SDTs manufactured by KAVIKA were based on the design approved (July 2010) by BESCOM and the design had formed part of the purchase order.[54] The design sheet/technical parameters (given with purchase order to KAVIKA) did not make a mention about the requirement of overload protection[55].

Thus, overlooking the need to provide *overload protection* circuit in the design for the SDTs put the entire NJY at risk, as any supply beyond scheduled hours of supply (for IP sets) could be tapped by IP consumers using phase shifters (pre-NJY situation). Further, it also resulted in infructuous expenditure of ₹ 5.37 crore[56] being the cost of SDTs lying idle. Though the failure to provide

[52] The other ESCOMs had not installed SDTs till then.

[53] Of the 416 SDTs, 403 were installed. Of the 403 SDTs, 345 have been already idle charged and 58 SDTs were to be idle charged.

[54] Purchase Order of September 2009.

[55] The cost per overload protection was about ₹ 60,000.

[56] ₹ 1.29 lakh per transformer x 416 Transformers = ₹ 5.37 crore. In addition, idle energy charges of 1.37 MUs of energy from the date of idle charge of SDTs till date (March 2015), was lost.

overload protection was reported from January 2012 onwards, the matter has not been brought to the notice of the BoD of BESCOM till date (March 2015) for corrective action.

2.1.18.3. In HESCOM, proposal to install SDT was placed (September 2011) before the Technical Advisory Committee (TAC) of the Company, which opined that before going in for procurement of SDTs, the performance of SDT with respect to design and effect on the system, protection and safety should be reviewed.

The officers of HESCOM visited (September 2011) Maharashtra State Electricity Development Corporation Limited (MSEDCL), where a similar scheme was implemented. The team *inter alia* noted that MSEDCL had expressed its satisfaction about the performance of SDTs. As far as the protection and safety of the line and SDTs were concerned, it was noted that a CT provided in the phase (overload protection), was earthed, which in turn was connected to the control panel through relays to take care of earth fault and over current.

However, HESCOM placed (December 2011) Letter of Intent on KAVIKA for 50 SDTs (value: ₹ 64.50 lakh) without overload protection but did not install them upon receipt.

2.1.18.4. The other two ESCOMs (CESC and GESCOM) had also procured 96 and 10 SDTs at a cost of ₹ 1.24 crore and ₹ 12.90 lakh respectively, but had not installed them. Non-installation of SDTs was as a result of receiving directions after the State level NJY review meeting held in September 2012, not to install SDTs, where such works had not been taken up.

As a result of non-installation of SDTs with overload protection on the IP feeders, the agricultural consumers (farmhouses) were deprived of single phase supply during non-scheduled hours. Resultantly, the ESCOMs were deprived of the revenue by supply of single phase power amounting to ₹ 59.71 crore[57].

CESC and HESCOM replied (July and August 2015) that the power supply was given through *open delta* method (refer paragraph 2.1.19 for definition of *open delta*) to farmhouses and hence revenue was not foregone. The reply of CESC is factually incorrect as the examination of records indicated that single phase power was provided in 14 feeders during various months (June 2013 to January 2015). HESCOM stated that IP feeders were switched off after three-phase supply in certain areas. This confirms the audit observation that power was not provided to farmhouses on IP feeders during non-scheduled hours.

2.1.18.5. Instead of opting to install the overload protection to SDT, the ESCOMs have opted for supply of power under the *open delta* method

[57] IP feeders corresponding to 175 NJY feeders commissioned in CESC (₹ 14.61 crore), on 192 feeders commissioned in GESCOM (₹ 16.95 crore), on 312 NJY feeders in HESCOM (₹ 28.16 crore). Worked out based on consumption for six hours a day for the period from the date of commissioning of the IP feeders to up to March 2015, with the average realised cost of energy at ₹ 3.26 per unit. BESCOM is not considered, as power was supplied under open delta.

(paragraph 2.1.19), by providing overload relay for the circuit to trip, in the event of excess drawal of current in the IP feeders.

The JGY scheme, which was similar to NJY, implemented with SDTs (provided with overload protection) was stated to have delivered quality services to citizens of Gujarat in a cost efficient and innovative way. The Madhya Gujarat Vij Company Limited (MGVCL), Gujarat had obtained (February 2010) a patent for the SDT design. The ESCOMs, had not taken any action to explore the options to purchase or enter into technical collaboration with MGVCL/other agencies until November 2014, when the GoK, citing that two agencies[58] had developed Pilot Advance Transformer-PAT (a form of SDTs) in Gujarat, directed ESCOMs to purchase and analyse their performance and submit results. HESCOM had placed (April 2015) Purchase Order for PAT, but supplies were yet to be received (September 2015).

Thus, failure to provide overload protection to the SDTs coupled with inaction to study the working models in Gujarat and Maharashtra (paragraph 2.1.18.3), resulted in denial of power to farmhouses, besides putting the entire NJY at risk.

GoK replied (January 2016) that:

- There was no revenue loss as power was provided under *open delta* method for farmhouses.
- Provision for SDT was part and parcel of the NJY scheme. During the State Level NJY review meeting in September 2012, it was decided not to take up installation of SDTs, wherever works had not yet started. The concept of SDT has been discontinued in phase-II because of its numerous disadvantages. An effective solution has been developed by BESCOM with the provision of over load protection relay for the segregated IP feeders by limiting the current drawn (open delta with protection relay).

The reply is not acceptable due to the following:

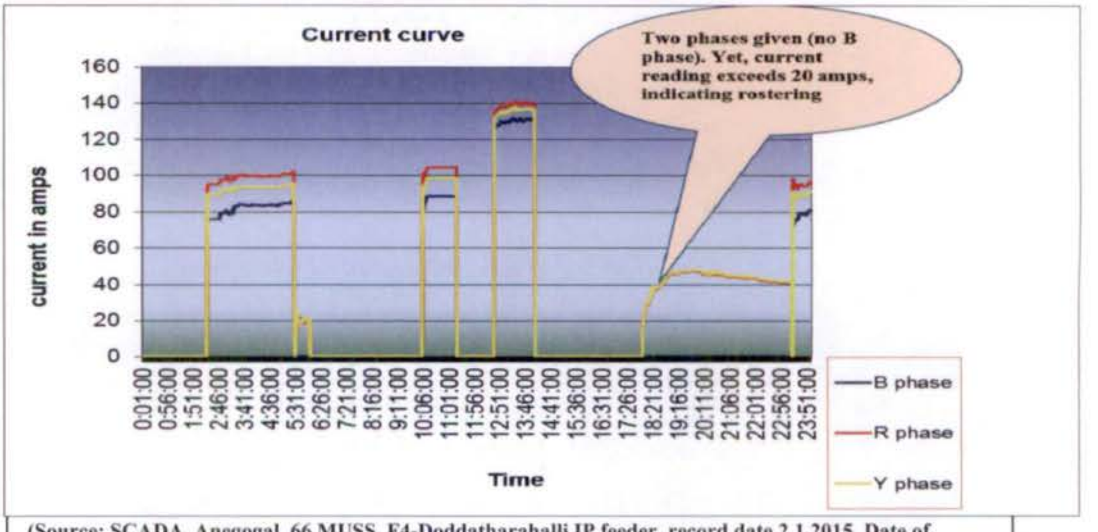
- There was revenue loss due to non-supply to farmhouses as CESC had not supplied power in all the IP feeders and HESCOM had admitted to switching off power in IP feeders after the scheduled hours of supply, as mentioned in paragraph 2.1.18.4.
- The reply is silent on the failure to provide the design of the *overload protection* to KAVIKA alongwith the design of SDT.
- The reply of GoK that an effective solution has been found in *open delta* confirms the observation that SDTs were lying idle and the benefits of NJY were not being realised. On a further analysis of supply under open delta model, we observed that there were evidences of manual intervention at the substation level indicating that open delta is not entirely fool proof. This is described in the following paragraph.

[58] Uttara Gujarat Vij Company Limited and Vidhia Electronics Limited.

2.1.19. In open delta system[59] one phase of power supply is kept open. A protection relay is installed in the system so that the system trips automatically, if the current carried by the feeders exceeds the pre-set levels.

Audit observed that though the current curve[60] in the IP feeder had exceeded the pre-set limit[61] (20 amps), the system had not tripped indicating that open delta system was also prone to risk of failure. An illustrative sample is given below:

Chart No.2.1.4: Illustrative graph of the Current curve on an IP feeder



(Source: SCADA, Anegogal_66 MUSS, F4-Doddatharahalli IP feeder, record date 2.1.2015, Date of commissioning: 1.8.2014).

It can be seen that after about 17:26 hours, there is a change from three phase power supply (three colors) to two phase (two colors). The feeder should have tripped as the current had exceeded pre-set level of 20 amps. However, this had not happened and the current had gone up to almost 45 amps. Evidently, the feeder was operated under 'rostering' method, by manual intervention as done in pre-NJY period. When such two phase supply is provided during non-scheduled hours, it enables the farmers to use phase shifters and operate the IP sets.

Recommendation No.6: The ESCOMs need to undertake a study to analyse the pros and cons of installing overload protection with SDTs *vis-à-vis* the open delta model and explore the feasibility of using the idling SDTs to realise the benefits of NJY.

Recommendation No.7: ESCOMs and KPTCL should devise a mechanism to ensure that staff posted at substations do not resort to 'rostering' in IP feeders during non-scheduled hours of supply, by monitoring and analysing SCADA data.

59 A write-up of the open delta with schematic diagram is given in **Appendix-6.**

60 The current curve captures the current and the phase of current that flows through the feeders.

61 Pre-set limits are in the range of 10 amps to 20 amps, based on consumption of the farmhouses on the feeders.

Funding

2.1.20. GoK issued (October 2010) an order intimating that it would fund 40 *per cent* of the total cost of implementation of NJY as equity investment while the ESCOMs had to bear the remaining 60 *per cent* of the cost.

On a review of the equity releases by the GoK, Audit noticed that BESCOM and CESC had not received the requisite equity support totaling ₹ 42.80 crore and ₹ 32.87 crore, respectively. BESCOM replied (July 2015) that it was pursuing with GoK for release of funds. Thus, failure to provide funds would have a bearing on the implementation of NJY.

In respect of GESCOM, however, funds of ₹ 104.22 crore were released in excess. The GoK advised GESCOM to propose a 'New Scheme' to utilise the funds. Release of funds without specific purpose, and then directing to propose 'a new scheme' to utilise the funds, was against the canons of financial propriety.

GoK replied (January 2016) that in GESCOM the funds of ₹ 35 crore released during 2008-09 had been utilised for system improvement works since NJY works had not started and tendering was under progress. After adjusting this amount, and considering the present awarded cost (₹ 562.90 crore), the amount released almost meets the required support of 40 *per cent* equity. The reply is not acceptable as 40 *per cent* equity support was based on the project cost (₹ 388.17 crore) and an amount of ₹ 104.22 crore represents excess releases for which the GoK itself had advised GESCOM to propose a 'New Scheme' for its utilisation.

Evaluation of the objectives of NJY

2.1.21. In order to assess the extent of achievement of the objectives, Audit conducted test check with the data from divisions/subdivisions in respect of 88 NJY feeders[62] and its corresponding 161 IP feeders for one year pre and post implementation of NJY.

The feeder wise details of the achievement of objectives of NJY are given in **Appendix-7**. The extent of achievement of the objectives are discussed below:

[62] Data in respect of all parameters is not available for the 88 test checked feeders.

Uninterrupted supply to non-agricultural consumers

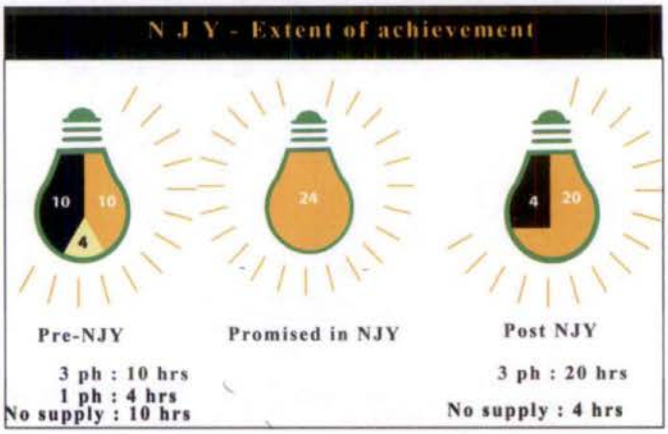
2.1.22. The results of test checked divisions are given in the following table:

Table No.2.1.3 : Number of hours of power supply in NJY feeders in test checked divisions

ESCOM	Division	No of feeders analysed	No. of feeders, where power supply data was made available	Average 3 phase power supply per day (31 days month)
BESCOM	Ramanagara	5	5	20.34
	Tumakuru	4	4	21.58
	Chitradurga	4	4	19.60
	Harihara	4	4	21.40
	Davangere	5	5	20.86
				20.76
CESC	Arasikere	5	5	19.41
	Hassan	6	6	22.47
	Pandavapura	5	2	18.81
	Nanjangudu	6	6	12.81[63]
				18.37
GESCOM	Hosapete	6	6	20.73
	Koppal	5	5	21.99
	Yadgir	5	5	23.45
	Kalaburgi	7	7	21.86
				22.01
HESCOM	Vijapura	6	6	21.58
	Jamakhandi	5	5	21.16
	Haveri	7	6	20.68
	Ranebennur	3	3	20.90
				21.08
	Total	**88**	**84**	**20.57**

Post-NJY, the power supply to rural areas had improved.

Audit noticed that the power supply position has improved to 20 ½ hours of three phase supply, from 10 hours provided in the pre-NJY situation. However, Audit observed that the supply was still lower when compared to the assured supply of 24 hours projected in the DPR. A graphical representation is given alongside. The number of hours of power supply can be further improved with better load management as brought out in paragraph 2.1.25 to 2.1.27.



2.1.23. Regarding the objective of providing *uninterrupted and reliable power supply,* it was seen that the number of interruptions in the post NJY period continued unabated with only 13 out of 84 test checked feeders,

[63] It was seen that single phase power supply was provided in the test checked feeders.

Quality of power supply remained poor as the interruptions had increased.

showing a decreasing trend. The number of interruptions in 13 feeders decreased from 1,381 instances in pre-NJY period to 968 in the post NJY period. In 71 feeders, it increased from 6,076 instances to 11,522 instances. In short, over test checked 84 feeders, the total interruptions increased from 7,457 to 12,490 instances *i.e.,* an increase of 67 *per cent* from pre-NJY period. Hence, the objective of providing uninterrupted and reliable power supply was not fully achieved.

GoK replied (January 2016) that during power deficit scenarios, as per instructions from Load Dispatch Centres, the power supply was restricted to control the load. The interruptions had increased as line clearance had to be taken on NJY feeders while attending to faults of other feeders crossing it. GoK further stated that action was taken to split the NJY feeders, whenever new substations are constructed to avoid crossing and reduce the interruptions. The fact however remains that the objective of providing uninterrupted and reliable power supply was yet to be achieved.

Recommendation No.8: In order to improve quality of supply by having minimal interruptions, the ESCOMs need to identify and replace NJY feeders that have crossovers with other feeders.

Providing scheduled hours of supply to IP consumers

2.1.24. One of the objectives of the NJY was to have better control over the agricultural load. The Managing Director of BESCOM, had informed the GoK in July 2012 that the stipulated hours of three phase power supply to agricultural loads could be provided. In the Organisational Review Meeting held in September / October 2012, it was noted that as per discussion with Karnataka Electricity Regulatory Commission, six hours of continuous power supply should be given to IP feeders under NJY.

On a test check of data for IP feeders (161 numbers) corresponding to the 88 NJY feeders, Audit observed that three phase supply for scheduled number of hours (six to seven hours) was provided in 138 feeders, while the remaining 23 feeders were given power ranging from 5 to 6 hours.

Audit also noticed that in BESCOM, CESC and HESCOM, the schedule for three phase power supply to IP consumers was not continuous and was provided many times over the course of the day/night to meet the scheduled hours (6 to 7 hours). In GESCOM, there was a larger degree of compliance in the scheduling to provide continuous supply of power to IP consumers for the scheduled hours. In GESCOM, however, the supply of single phase supply during non-scheduled hours, for use of farmhouses was not maintained.

GoK replied (January 2016) that power supply to IP sets was as per its policy. It further stated that in CESC/HESCOM/GESCOM in order to manage the load, the power supply has not been given continuously and given in two batches of 3 hours to 4 hours per day. During power deficit situations, as per instructions from Load Dispatch Centres, the power supply was restricted to control the load.

The reply is not tenable as (i) the NJY is modelled to work in a power deficit scenario (ii) supply of power *continuously* (during scheduled hours) to IP feeders is a policy assurance of GoK (iii) there are no power deficits during non-peak hours.

Improvement in load management

Post NJY, the Peak load showed improvement.

2.1.25. Improvement in peak load was an objective of NJY. Audit observed that in 77 of the 86 test checked NJY feeders, the peak load had shown improvement.

In order to analyse whether the load management was optimum, Audit analysed data of IP feeders from SCADA. Of the test checked 161 IP feeders, the SCADA was capturing data of only 118 feeders. Audit analysed the data of these 118 IP feeders to check whether the feeders were recording power supply during peak hours (6 am to 9 am and 6 pm to 9 pm) during 2014-15. During these hours, there would be huge demand for power on the system and supply of power to IP feeders during this time would indicate improper load management.

Audit noticed that IP feeders were recording peak demand during these peak hours, indicating that power was supplied to IP feeders during peak hours. The Graphical representation given below (Chart 2.1.5) for a few test checked feeders (illustrative cases) indicate the number of times (in a month) the IP feeders had recorded peak demand during peak hours.

Chart No.2.1.5: Number of days in a month, wherein peak load was recorded during peak hours in IP feeders.

+ Severity -

Feeder	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
F4-Santemagenahalli					14	7	7		16	4	4	12
F2-Ancheberanahalli					9	13	13		3		10	11
F3-Kodambahalli					13	12	5		9	10	7	2
F1-Bolamaranahalli					2	12	8		7	2	7	13
F10-Udagatti	6	6	4	1	3	4	2		6	14	6	16
F5-Singarajapura		8	7	8	2		8		11	3	5	12
F4-Doddatharahalli						5	6		10		6	11
F11-Ratnakatti	10	12	6				1			9	9	17

Providing power to IP sets during peak hours and for more than the scheduled hours, in a power deficit scenario, indicated that load management was not optimum.

On further examination, Audit also noticed that there were supplies to IP sets in the month of March. The period from March to May is summer season, during which periods, the State reels under huge power deficits. The supply of power to IP feeders during peak hours in these months indicates poor load management.

2.1.26. The IP feeders had to be supplied three phase power for the scheduled hours (6 to 7 hours) everyday and supply of power beyond this period must be after considering the power deficit scenario prevailing in the State.
Audit observed supply of power to IP feeders for more than 12 hours everyday throughout the year (2014-15) and it ranged from 14 hours to 23 hours. Illustrative cases for a few IP feeders are given below (Chart 2.1.6):

Chart No.2.1.6: Average number of hours of supply (per day) in IP feeders.

\+ Severity -

Feeder	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Avg
F2-Ankasamudra	22:25	21:26	22:08	22:47	21:24	19:07	19:38	20:33	21:30	22:17	21:51	21:49	21:25
F3-Kopparasi Koppa	19:31	18:02	18:40	22:28	21:06	22:04	22:14	21:28	22:49				20:56
F5-Jevangi	20:48	20:45	19:46	20:15	21:10	22:02	21:30	20:57	19:53	19:59	20:36	22:05	20:49
F11-Agri-Sanaba	19:21	18:48	19:48	20:50	17:49	14:06		14:30	21:26	20:01	19:12	20:47	18:47

Overall, while reduction in peak load is commendable (paragraph 2.1.25), the practice of providing power to IP feeders during peak hours in a power deficit scenario (Chart 2.1.5) and also the supply of power for more than 12 hours in a day to IP feeders (Chart 2.1.6) was imbibed with poor load management. With the State going in for short term power purchases at high costs to meet the deficit, the use of such high cost power for supply to IP feeders during peak hours was not a healthy proposition for the ESCOMs.

GoK replied (January 2016) that the observation to restrict the peak load during peak hours by cutting power to IP sets will be incorporated in future load management.

Recommendation No.9: In order to have better load management, the ESCOMs may issue instructions to its staff at substations not to supply power to IP sets during peak hours and for more than scheduled hours of supply, in a power deficit scenario and also ensure its observance.

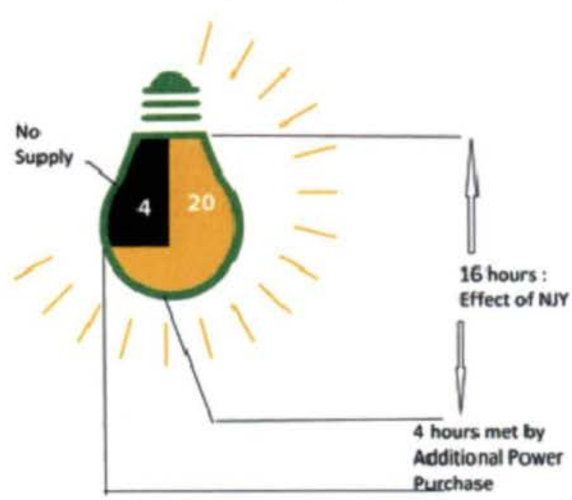
Reduction of power losses

2.1.27. NJY contemplated reduction in T & D losses. The savings in T & D losses was to be utilised to increase the number of hours of supply to NJY feeders.

There was no reduction in T&D losses in 34 of 71 feeders test checked.

On examination of the results of 71 of the 88 feeders for which data was provided, it was noticed that in 34 feeders, the distribution losses had not reduced, but had rather increased.

With power deficit in the State continuing, the power supply to fill the deficit of the increased distribution losses as well as increased consumption of power in the feeders (metered category) would be from additional power purchases. The quantum of power purchased to meet the gap was in the range of average four hours of consumption (every day) in respect of the test checked



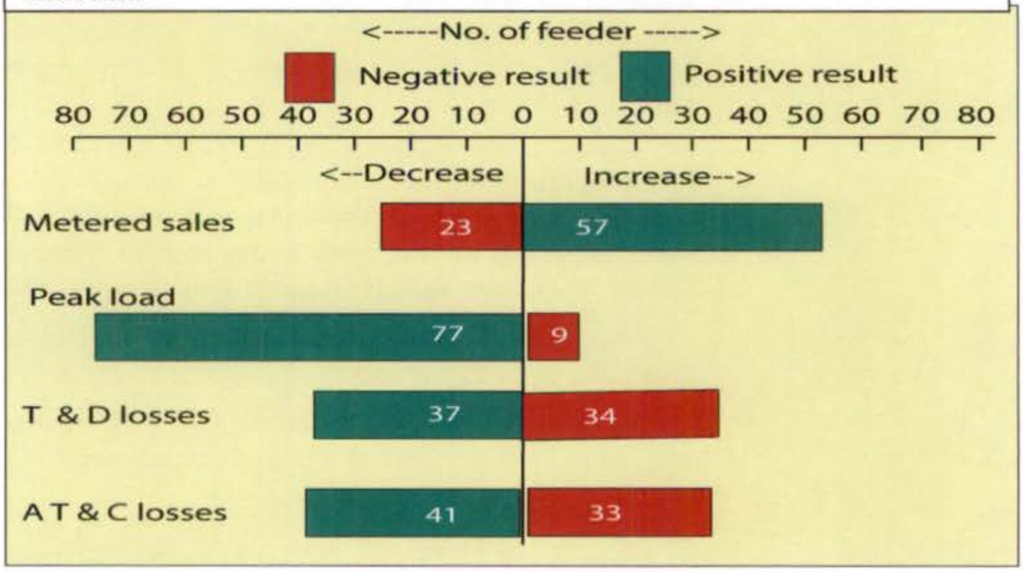
feeders[64].

Therefore, while there was an improvement in three phase power supply from the pre-NJY period of 10 hours *plus* single phase supply of 4 hours, compared with three phase supply of about 20 ½ hours, every day, in the post NJY period, the achievement was not solely on account of bifurcation of feeders under NJY scheme, but also on account of additional power purchases.

Also, the T&D losses could not be relied upon in totality, as it was calculated on assumption basis, as brought out in paragraph 2.1.29.

Another objective of NJY linked to reduction in distribution losses was the increased metered sales. The results of test check of feeders for metered sales, peak load, T&D and AT&C losses are graphically represented below. An increased metered sales coupled with improvement in AT&C losses, increases the financial efficiency of NJY.

Chart No.2.1.7: Evaluation of other objectives of NJY including metered sales, peak load, T&D and AT&C losses



GoK stated (January 2016) that assessment of distribution loss was yet to be done due to incomplete indexing of consumers, incomplete migration of metered installations to billing software and clubbing of feeders. Further, it stated that BESCOM was taking positive steps to resolve the issues.

Recommendation No.10: The ESCOMs need to address the reasons for non-reduction of T&D losses in the bifurcated feeders so as to reduce the additional power purchases at higher costs and also make available 24 hours of power supply as envisaged under NJY.

Financial viability of NJY

2.1.28. The total estimated cost of implementing NJY (two phases) by the four ESCOMs for 1,614 feeders was ₹ 2,123.73 crore. The total additional revenue per annum, envisaged to accrue to the ESCOMs after implementing the NJY

[64] Where T& D losses had not reduced (34 feeders).

was ₹ 725 crore mainly with the improvement in metered sales, reduction in T&D losses and transformer failures, and savings in Unscheduled Interchange (UI) charges. The payback period was an average of 3 years[65] for the ESCOMs, as a whole.

While the metered sales showed an improvement with 57 of the 80 test checked feeders, the envisaged reduction in energy sent out and distribution losses had not been met.

MECON Limited, Bengaluru, which was awarded (February 2014) the work of pre and post analysis of NJY phase-I and concurrent audit of NJY phase-II in Davanagere, Kolar, Bengaluru Rural and Tumakuru Circles of BESCOM in its Report (August 2014) for Davanagere Circle, indicated that there was increase in metered energy consumption, reduction in energy sent out from substation and had noted that commercial losses had remained near about the same while transformer failure was on the higher side.

Thus, as a result of the cumulative effect of non-achievement of these objectives, the envisaged savings in energy would not be achieved, affecting the revenue model. The payback period would increase from the present envisaged time-frame of three years.

In such a scenario, the ESCOMs can meet the envisaged objective of providing 24 hours of power supply to non-agricultural consumers and scheduled hours of power supply to IP consumers only through additional power purchases. As the cost of power purchase was in the range of ₹ 5 per unit, while the average realisation is in the range of ₹ 3.26 per unit, there would be loss to the ESCOMs for every unit of additional power purchased.

GoK replied (January 2016) that it had 'noted' the audit observation.

Recommendation No.11: The GoK needs to re-assess the financial model of funding the NJY as the ESCOMs have not been able to fully meet the objective of NJY in terms of reduction of T&D losses, delays in implementation and additional purchase of power.

Effect of NJY on IP subsidy

2.1.29. The GoK announced free power supply to all IP set consumers with motor-rating up to and less than 10 Horse Power (HP) with effect from August 2008. As per KERC orders, the GoK had to release the subsidy in advance to the ESCOMs. As majority of the IP sets are not metered, the ESCOMs prefer demand for subsidy on the GoK based on the assessed consumption with the tariff rates approved by KERC. The assessed consumption of IP sets and distribution losses were arrived at based on meter reading of feeders *predominantly* supplying power to IP sets, which was then extrapolated for the ESCOM. The details of subsidy are as under:

[65] The cost of implementing NJY for both phases, the total revenue envisaged and payback period were: BESCOM (₹ 732.41 crore, ₹ 217.86 crore, 3.40 years); CESC (₹ 495.16 crore, ₹ 301.80 crore, 1.60 years); HESCOM (₹ 465.60 crore, ₹ 87.81 crore, 5.30 years); GESCOM (₹ 440.70crore, ₹ 117.47 crore, 3.75years).

Table No.2.1.4: Details of IP subsidy

	2010-11	2011-12	2012-13	2013-14	2014-15
No. of IP consumers (in lakh)	18.66	19.58	20.43	20.90	22.34
Consumption (MUs)	12,646	15,502	16,697	16,616	17,580
Subsidy claimed (₹ in crore)	3,973.58	5,230.28	5,513.52	5,321.24	6,504.05
Subsidy released by GoK (₹ in crore)	3,536.14	4,468.89	5,334.73	5,482.02	5,564.52

The KERC, while conducting the Annual Performance Review for 2012-13 had directed each of the ESCOMs to henceforth report the actual IP sets consumption on the basis of data from feeder meters.

The ESCOMs, however, continued to prefer the subsidy claims on the GoK, based on assessment of the predominant feeders while preferring the claim for 2014-15. The subsidy claimed from GoK was, thus, not transparent and the distribution losses were not realistic.

Further, there are large number of IP sets, which remain unauthorised and the consumption of these also affect the assessed consumption and distribution losses.

Photo showing an unauthorised IP connection (including motors and portable transformers) – dated April 2015

Compliance with the directions of KERC is awaited.

In the Tariff Order 2015 dated 2 March 2015 including Annual Performance Review for 2013-14, KERC noted that several consumers had expressed before the Commission their view that ESCOMs might be showing part of their AT&C losses against IP set consumption reported by them. KERC noted that it had earlier issued several directives for Energy Auditing at the transformer level to enable detection and prevention of commercial losses and to assess the consumption of power by IP sets more accurately, but ESCOMs had not complied with the directions. KERC advised GoK to release 10 *per cent* of IP subsidy, from 2015-16 only if feeder level metering/consumption was recorded in the segregated feeders.

GoK replied (January 2016) that BESCOM had provided a software to its subdivisions to calculate technical losses and arrive at the consumption of IP sets, so that it could be used for claiming subsidy from GoK. GoK further stated that action had been taken to comply with the directions of KERC in other ESCOMs.

Recommendation No.12: ESCOMs need to comply with the directives of KERC on assessing the IP consumption based on meter readings in DTCs and IP feeders, so that the subsidy claim and distribution losses are realistic.

Conclusions

Audit concluded that:

- **NJY is showing positive results with the ESCOMs being able to provide about 20 hours of three phase power supply to non-agricultural feeders, as against 10 hours earlier. The achievement is partly owing to increased purchase of power. However, it did not achieve the envisaged supply for 24 hours a day.**

- **The quality of power supply had not improved with the interruptions continuing unabated.**

- **The reduction of distribution losses to enable supply for enhanced hours (24 hours) is yet to materialise to the extent envisaged under NJY.**

- **There was delay in implementation of NJY, mainly on account of deficiencies in preparation of estimates, delay in tendering, delay in bifurcation of loads from existing feeders, apart from constraints in labour and obtaining statutory clearances.**

- **The risk areas hampering the realisation of the success of NJY include :**

    - **failure to reduce the T&D losses in the NJY feeders as compared to rural/ mixed feeders,**

    - **failure of Special Design Transformer for providing single phase supply in IP feeders, due to non-installation of the overload protection,**

    - **resorting to manual operation at substation (Group Operating Switch) to provide power under rostering method, taking the situation to pre-NJY period,**

    - **clubbing of NJY feeders with other feeders and non-completion of LT side works, and**

    - **supply of power to IP feeders during peak hours and more than scheduled hours, even when the State faced a deficit in power.**

- **The directive of KERC to assess the consumption of IP sets with metering under NJY has not been complied with. As a consequence, the subsidy for IP set consumers, claimed from GoK was not transparent and the distribution losses were not realistic.**

2.2 Performance Audit on the 'Resettlement and Rehabilitation in Upper Krishna Project'.

Executive Summary

Introduction

The Upper Krishna Project (UKP) consists of construction of Narayanpur dam to the height of 492.25 metres and Almatti dam to 524.25 metres and network of canals to irrigate parts of drought-prone districts of Vijapura, Bagalkot, Kalaburgi and Raichur of northern Karnataka.

The Resettlement and Rehabilitation (R&R) of 173 out of 176 villages affected by the backwaters of both Narayanpur and Almatti dams (up to Reservoir Level-RL 519.60 metres) was completed in 2001-02 and that of balance three villages was under progress (September 2015). The R&R of the people living in Bagalkot Town was completed up to RL 521 metres and for the subsequent levels, the work was under progress. Besides, R&R of 14 villages affected under the floods of Narayanpur dam was in progress.

The modalities of implementation of R&R were specified through Executive Orders issued by the GoK during 1989-95 and these Orders are continued to be in force even now (2015-16).

Implementing authorities

Krishna Bhagya Jala Nigam Limited (Company), a wholly owned Government Company, was responsible for overall implementation of irrigation projects including R&R under UKP. The funding was met from borrowings and the State Budget.

The Commissioner for Land Acquisition and R&R and Ex-officio Additional Secretary to Government was given powers in land acquisition under UKP. Bagalkot Town Development Authority (BTDA) was created solely for the purpose of implementation of R&R of Bagalkot town.

Audit objective

The Performance Audit was conducted to assess whether rehabilitation and resettlement packages for the project displaced people of UKP were planned and implemented in an expeditious manner so as to enable them to reap the intended benefits.

Audit findings

Absence of R&R Policy

The Karnataka Resettlement of Project Displaced Persons Act, 1987 was notified (August 1994) by the GoK envisaging various policies on R&R. But, the GoK did not implement the Act. The GoK had not adopted the National Rehabilitation and Resettlement Policy, 2007 either, which was notified in October 2007. But, continued to implement the orders issued during 1989-95 even for the R&R implemented after the policy was notified.

The Executive Orders issued (1989-95) by the GoK for implementation of R&R did not include an important provision of 'allotment of land in command area to Project Displaced Families (PDFs)' which was envisaged in the National Rehabilitation and Resettlement

Policy 2007. The PDFs, who had lost their agricultural lands were not only deprived of allotment of land in the command area but also received insufficient compensation.

The GoK did not make provision for indexing the R&R benefits to the Consumer Price Index in violation of National R&R Policy. As a result, the various monetary benefits fixed during 1989-95 were continued to be paid even now (2015-16) without revision.

Socio-Economic Survey

The GoK had not mandated any specific criteria for conducting socio-economic survey. The Socio-Economic Survey reports did not contain income of the PDFs, details of rural artisans, families belonging to the scheduled caste or scheduled tribe categories; vulnerable persons such as destitute, orphans, widows.

In the absence of base line data with regard to living condition of the PDFs pre and post project implementation, the improvement or otherwise in the economic condition of PDFs was not assessable and also the priority or special attention for certain sections of the society was not ensured, which was not in line with the National R&R Policy.

Inordinate delay in completion of R&R

Though 14 villages, which came under the submergence of backwaters of Narayanpur reservoir, were within the purview of acquisition norms of CWC, the rehabilitation was taken up only when these villages were inundated by flood water discharge during August 2005 and after requests by the affected people. The GoK issued orders for R&R of these villages only in January 2007/ September 2009.

Insufficient land procurement and non-disbursement of benefits

There was abnormal delay in acquisition of structures (houses and buildings of PDFs) and land for establishing Rehabilitation Centres (RCs) in respect of 14 villages affected under the backwaters of Narayanpur reservoir. There were 4,274 PDFs in these villages awaiting rehabilitation (December 2015).

There were cases of insufficient procurement of land and delays in acquisition of land resulting in delay in formation of RCs. The process of acquisition of structures and land was completed only between December 2014 and December 2015. The land acquisition for two out of 14 villages was not completed (December 2015).

Other benefits such as land and house construction grants, income generating grant, *etc.*, had not been disbursed to any of the PDFs in these 14 villages (December 2015).

Poor implementation

Based on the protests and complaints from the affected people in Bagalkot town (living between RL 521 metres and RL 523 metres) of Almatti dam, the GoK ordered (November 2002) for rehabilitation as they were suffering from serious unhygienic conditions due to backwaters.

Despite receiving directions from the GoK in November 2002, BTDA brought the subject matter before the Board of Directors of the Company only in June 2010 and the rehabilitation of PDFs was yet to take place (December 2015). The works for underground drainage system, construction of roads and electrification were taken up only during 2013-14 and water supply works were initiated in 2014-15.

Introduction

2.2.1. The Upper Krishna Project (UKP) consists of construction of Narayanpur dam to the height of 492.25 metres and Almatti dam to 524.25 metres and network of canals to irrigate parts of drought-prone districts of Vijapura, Bagalkot, Kalaburgi and Raichur of northern Karnataka. The construction of Narayanpur and Almatti dams, which was funded partially by the World Bank, was completed to their projected heights during 1978-97. The water storage in Almatti reservoir reached to Reservoir Level (RL) 519.60 metres during 2002-03 and the height was restricted at this RL as per the directions issued by the Supreme Court in April 2000. The Krishna Water Dispute Tribunal (KWDT) in its final judgment (December 2010) allowed the State to store water up to Full Reservoir Level (FRL) of 524.25 metres at Almatti reservoir. The water level has not been raised up to FRL of 524.25 metres pending Rehabilitation and Resettlement (R&R)[66] of the people affected by the backwaters of Almatti reservoir between RL 519.60 metres and 524.25 metres.

Project implementing authorities

2.2.2. Krishna Bhagya Jala Nigam Limited (Company), a wholly owned Government Company, was responsible for planning, investigation, estimation, execution, operation and maintenance of all irrigation projects coming under UKP. In addition, the Company was responsible for R&R of the people affected by UKP. The funding for the R&R was met from State Budget and through borrowings.

The Government of Karnataka (GoK) created (October 1995) a post of 'Commissioner for Land Acquisition and R&R and Ex-officio Additional Secretary to Government', giving him powers for land acquisition under UKP. The GoK had also created (April 1985) Bagalkot Town Development Authority (BTDA) for the purpose of implementation of the R&R of the people of Bagalkot town.

Status of Resettlement and Rehabilitation

2.2.3. The Displaced Person[67] and Displaced Family[68] are referred to as Project Displace Person (PDP)/Project Displaced Family (PDF).

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[66] Rehabilitation is the act of restoring something to its original state. Resettlement is the process of moving people to a different place to live.

[67] 'Displaced Person' means any person, either land owning or landless, who for at least one year prior to the date of publication of any notification under Section 4 of the Land Acquisition Act, 1894 for the purpose of acquiring any land for the Project, has ordinarily been residing in or cultivating land or carrying on any trade, occupation or working for gain in the Project Area who would be involuntarily displaced from his or her usual place of residence or work due to such land acquisition.

[68] 'Displaced Family' included each adult displaced person, his or her spouse, minor children and other dependents who habitually resided in one household for at least one year prior to the date of publication of any notification under Section 4 of the Land Acquisition Act, 1894 for the purpose of acquiring any land for the project or prior to the displacement of such family as the case may be.

The R&R of 173 out of 176 villages (68,512 out of 70,176 PDFs) affected by the backwaters of both Narayanpur reservoir and Almatti reservoir (up to RL 519.60 metres) was completed in 2001-02. The R&R of balance three villages (1,664 PDFs) was under progress (December 2015).

Besides, R&R of 14 villages (4,274 PDFs), which should have been taken up along with 176 villages, was initiated only in January 2007 and September 2009 and was under progress (December 2015).

In addition, Bagalkot town was the major town affected by the backwaters of Almatti reservoir. The R&R of the 4,524 PDFs living in Bagalkot town up to RL 521[69] metres was completed in 2000-01. Further, R&R of 6,329 PDFs affected in Bagalkot town between RL 521 metres and RL 523 metres was under progress (December 2015).

National Rehabilitation and Resettlement Policy, 2007

2.2.4. The National Rehabilitation and Resettlement Policy, 2007 came into effect in October 2007 replacing the existing National Policy on Resettlement and Rehabilitation, 2003. The new policy was applicable to all projects where involuntary displacement had taken place. The adverse impact on affected families - economic, environmental, social and cultural, needed to be assessed in a participatory and transparent manner. The policy stipulated that where large numbers of families are affected, it was mandatory to conduct social impact assessments, provide required infrastructural facilities and amenities in the resettlement area and specify the clear timeframes within which the implementation of the rehabilitation package should be completed. The Policy also mandated that an effective monitoring and grievance redressal mechanism was laid down.

The GoK had not adopted the provisions of the R&R Policy of 2007. The various Executive Orders issued during 1989-95 specifying the modalities of implementation of R&R and the type of benefits to be extended to the affected families under the project, continued to be in force (2015-16).

Why we choose the topic

2.2.5. The R&R activities under UKP, which had begun simultaneously with the construction of Narayanpur and Almatti dams (completed during 1978-97), continued even now (December 2015). The R&R activities were perennially delayed due to exclusion of some villages from the purview of R&R, restriction in water storage levels due to disputes and poor implementation at various stages. The World Bank, which had funded the project partially, had also been critical of the implementation of R&R stating that the GoK had followed a linear approach to R&R.

The R&R of 173 villages affected under Narayanpur dam and Alamtti dam was deficient as the Rehabilitation Centres were built without basic infrastructure and the PDFs in 47 out of 173 villages continued to reside in

[69] Rehabilitation in Bagalkot town was done up to RL 521 metres for the storage level of RL 519.60 metres of Almatti Dam.

their original villages as on date though RCs were created. Further, there was encroachment of 146.6 acres in 32 RCs and grants of ₹ 53.41 crore meant for distribution to the PDFs remained undisbursed.

Keeping this in view, Audit conducted a study of the R&R activities of three villages under Almatti dam, 14 villages under Narayanpur dam, besides Bagalkot town, which were taken up during the period 2010-15 to ascertain whether lessons were learnt from the past experience.

Audit Objective

2.2.6. The objective of this Performance Audit was to assess whether R&R packages for the project displaced people of UKP were planned and implemented in an expeditious manner so as to enable them to reap the intended benefits.

Scope of Audit

2.2.7. The scope of the audit was to review:

- Establishment of three Rehabilitation Centres[70] (RCs) related to R&R of three villages[71] (1,664 PDFs), which were under progress during 2010-15.

- R&R of 14 villages[72] (4,274 PDFs) affected by flood discharge of Narayanpur reservoir; and

- R&R of Bagalkot town affected between RL 521 metres and RL 523 metres (6,329 PDFs) and acquisition of land for RL 523 metres to RL 525 metres of Almatti dam.

Audit Methodology

2.2.8. The methodology adopted for attaining the audit objectives involved explaining audit objectives to the top management, scrutiny of records maintained at Water Resource Department of Government of Karnataka, Corporate office of the Company, Office of the Commissioner of R&R and Office of the Chief Engineer, BTDA.

Audit explained the objectives of the performance audit to the Government, Management of the Company, Commissioner of R&R and Chief Engineer of BTDA during the 'Entry Conference' held in March 2015. The draft Performance Audit was issued to the Government in October 2015. The Exit Conference was held in December 2015 wherein the audit findings were discussed with the Government represented by the Additional Chief Secretary to the GoK, Water Resource Department, the Managing Director of

[70] Rehabilitation Centre is an alternate habitation provided to the affected families.

[71] Kamaladinni, Dhannur, Kanakanwadi.

[72] Katagur, Turadgi, Bommanagi, Kengalkadapatti, Bisnal, Bisnalkoppa, Iddalgi, Kamadatta, Adhial, Yemmeti, Anupkatti, Kesarpenti, Kajgal, Varagoddinni.

the Company, the Commissioner, R&R and the Chief Engineer, BTDA. The views of the Government have been incorporated in the Report.

Audit Criteria

2.2.9. The audit criteria considered for assessing the achievement of the audit objectives were derived from the following sources:

- Executive Orders issued by GoK on R&R implementation, Central Water Commission (CWC) norms, Land Acquisition Act, 1894, Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, National Rehabilitation and Resettlement Policy, 2007, Government Orders, Bagalkot Town Development Authority Act and Bagalkot Town Development Authority (Allotment of Sites) Rules, 1993;
- Socio-Economic Survey, FRL Survey;
- Contract agreements, annual work programmes/ annual plans, Budgets.

Acknowledgement

2.2.10. Audit acknowledges the co-operation extended by the Water Resource Department of the GoK, the Company, the Commissioner R&R, Bagalkot and the BTDA in facilitating the conduct of Performance Audit.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Audit findings

2.2.11. The detailed audit findings are discussed in the succeeding paragraphs.

Policy and Survey

Absence of R&R Policy

The R&R was implemented with Executive Orders issued by the Government rather than complying with enacted Acts and Polices.

2.2.12. The implementation of UKP had led to involuntary displacement of people, depriving them of their land, livelihood and shelter and uprooting them from their socio-cultural environment. The Government should have had a definite policy for implementation of R&R of the people displaced by the project to rehabilitate and resettle displaced persons and families. This would also set a bench mark for decision making and implementation by the executive authorities as also for doing a post implementation impact assessment. Audit of policy formulation revealed the following deficiencies:

- The Karnataka Resettlement of Project Displaced Persons Act, 1987 (Act) was notified (November 1994) by the Government envisaging various policies on R&R of the project displaced persons. But the Government did not implement the Act. Delay in obtaining the assent from the President of India and the need to hasten negotiations with the

World Bank for implementation of the project were the reasons attributed by the Government for not enforcing the Act. The Government did not take initiative to implement the Act subsequently though it continued to implement R&R activities even now (2015-16) for the levels beyond RL 519.60 metres of Almatti Dam.

- The Government issued (1989-95) Executive Orders merely specifying the extent of monetary compensation payable for losing land and other structures and various benefits that should be extended to the PDP/PDFs. It did not spell out the processes involved in R&R activities including socio-economic survey, identification of PDPs/PDFs, land acquisition, roles of different authorities, timeframe for completion of various activities, *etc.* The Government had also not adopted the National Rehabilitation and Resettlement Policy, 2007 either, which was notified in October 2007. Instead, it continued to implement the same Executive Orders issued during 1989-95 even for the R&R activities implemented after the National R&R Policy, 2007 was notified.

- The National R&R Policy had envisaged an important provision of 'allotment of land in command area of the project to the affected families'. The National R&R Policy had also stipulated that the State Governments should formulate suitable schemes for providing land to the affected families in the command areas of the projects by way of pooling of the lands. As the Government failed to give effect to the Act and to formulate any policy in this regard, PDFs who had lost their agricultural lands (307.27 acres in respect of 14 villages submerged under Narayanpur dam) were deprived of allotment of land in the command area.

- The National R&R Policy envisaged that the rehabilitation grant and other benefits expressed in monetary terms should be indexed to the Consumer Price Index and the same should also be revised by the appropriate Government at suitable intervals. The Government, in violation of the Policy, had not made any provision for indexation of the various monetary benefits though these were fixed during 1989-95 and continued to provide the same benefits even during 2015-16. As a result, the PDFs who had lost their agricultural land were not only given insufficient compensation but were also deprived of allotment of land in the command area.

- Though the National R&R Policy specified that the States should fix time schedule for completion of R&R, the GoK had not fixed any time frame. Consequent to which, the R&R of people affected (6,329 PDFs) in Bagalkot town between RL 521 metres and 523 metres of Almatti reservoir taken up in November 2002 and R&R of 14 villages (4,274 PDFs) affected under the backwaters of Narayanpur reservoir taken up as per GoK orders in January 2007 and September 2009 was not completed (September 2015) even after a lapse of considerable period of 6 to 13 years as commented in paragraphs 2.2.15, 2.2.16 and 2.2.18.1.

Thus, in the absence of a specific policy on R&R for the State and non-adoption of the provisions of the National R&R Policy, the R&R activities were delayed, depriving the project displaced families their due benefits.

The Government, while replying (December 2015) that the Karnataka Resettlement of Project Displaced Persons Act, 1987 was repealed subsequently, stated that the provision of 'land for land' in the command area was found to be impractical from the implementation point of view. Necessary provision was made for extending monetary assistance up to ₹ 60,000 to land losing PDFs for purchase of agricultural land, in addition to the compensation paid for the land acquired, exemption of stamp duty to purchase agricultural lands and reservation in Government jobs in Group 'C' and 'D' categories. It was further replied that adopting the National R&R Policy was left to the respective States and some benefits given under R&R by the State Government were more beneficial to the PDFs than those provided in the National R&R Policy.

In the Exit Conference, the Government accepted (December 2015) that the indexation of monetary benefits was not done. Regarding Policy formulation, the Government stated that as there was urgency in project implementation and as assent from the President of India was abnormally delayed, Executive Orders had been issued and the National Policy had come into effect at a later stage.

The reply is not acceptable. The National R&R Policy stipulated (Para 1.3) that the Policy must apply to all projects where involuntary displacement takes place. There was no hindrance in implementing the National Policy, for the R&R implemented after it came into effect. Further, the benefits extended by the State Government were not commensurate with that envisaged in the National R&R Policy, as brought out in the following table:

Table No.2.2.1: Statement showing the benefits extended by the Government and that envisaged in the National R&R Policy

Nature of benefit	Benefit as per the National R&R Policy	Benefit as given by the State Government
Allotment of land to the land losing PDFs	Maximum of one hectare of irrigated land or two hectares of un-irrigated land or cultivable wasteland	Compensation to the land and additional incentive up to ₹ 60,000 per PDF.
Agricultural wages for land losers if they were not given land to land	Minimum wages of 750 days.	Subsistence allowance of ₹ 2,800
One time assistance for Schedule Tribe affected families.	Additional wages of 500 days	No such additional benefit was given.
Transportation for shifting of family	₹ 10,000	Maximum of ₹ 2,500
Construction of working shed for rural artisans	Minimum of ₹ 25,000	No such benefit was given
Employment	Employment for at least one person per nuclear family	5 *per cent* reservation in Government Jobs for Group C and D category

Nature of benefit	Benefit as per the National R&R Policy	Benefit as given by the State Government
Indexation of benefits	Benefits to be indexed to Consumer Price Index with the first day of April following the date of coming into force of this policy and shall be revised at suitable intervals.	Indexation not done, benefits announced during 1989-95 remained unchanged

Socio-Economic Survey

2.2.13. For any meaningful monitoring and evaluation, it was essential to have baseline data relating to the pre-project conditions of PDFs. This data could be used for the purpose of comparison with the later changes in living conditions of PDFs that would come as a result of R&R. This would help to assess whether there was a positive change in the lives of the PDFs in the desired direction post R&R.

The Socio-Economic survey neither captured the status of the affected families nor identified the vulnerable and weaker sections of the society.

The National R&R Policy stipulated that the Socio-Economic Survey should consist of data on various parameters *viz.*, members of the family who were permanently residing, engaged in any trade, business, occupation or vocation in the affected area; families who were likely to lose, or had lost, their house, agricultural land, employment agricultural and non-agricultural labourers; families belonging to the scheduled caste or scheduled tribe categories; vulnerable persons such as the disabled, destitute, orphans, widows, unmarried girls, persons above fifty years of age who were not provided or could not immediately be provided with alternative livelihood, and who are not otherwise covered as part of a family; families that were landless and below poverty line, *etc.*

Audit observed that the Government had not mandated any specific criteria for conducting socio-economic survey. The socio-economic status of the PDFs prior to their displacement had not been assessed. The Socio-Economic Survey Reports (in respect of 14 villages submerged under Narayanpur dam) prepared (June 2012) by the Government did not contain income of the PDFs, details of rural artisans, families belonging to the Scheduled Caste or Scheduled Tribe categories and vulnerable categories. The Survey Reports should have projected the data on various parameters, as envisaged in the National Policy, so that Government could give priority or special attention for certain sections of the society. Rather, it served the sole purpose of identification of eligible PDFs under R&R.

The very purpose of preparation of survey reports had been defeated as the Government was unable to provide envisaged benefits to the project affected persons and families that were below poverty line in the absence of relevant information. In the absence of base line data with regard to living condition of the PDFs pre and post project implementation, the improvement or otherwise in the economic condition of PDFs was not assessable.

The Government replied (December 2015) that the details of affected families have been collected showing the pre-project conditions of PDFs and indicated extent of land and house lost. The benefits as stipulated by the Government orders were extended to the eligible persons. The provisions as envisaged in the new Land Acquisition Act, 2013 with regard to socio economic survey would be implemented for the next stages of R&R.

The reply is not acceptable as the survey reports neither captured the socio-economic status of the affected families nor identified the vulnerable and weaker sections of the society, on the lines as mandated in the National R&R Policy.

Recommendation No.1: The Government should formulate a comprehensive R&R Policy specific for the State in line with the National Rehabilitation and Resettlement Policy, 2007 and ensure that its provisions are adhered to so as to enable the project displaced families get their legitimate benefits.

Implementation of R&R

2.2.14. The process of R&R involved identification of affected villages through a survey, their acquisition in consultation with local authorities and Gramsabhas, resettlement of PDFs/PDPs in a new habitation called Rehabilitation Centre (RC) with adequate provision for essential infrastructural facilities including basic amenities such as schools, hospitals, drains, community centres, *etc.*, and providing just and fair compensation to the affected families for improvement in their post-acquisition social and economic status. The major benefits that were entitled by the PDFs/PDPs under R&R were, allotment of free sites at RCs, house construction grant, income generating grant, compensation for the land lost, land purchase grant, transport allowance and subsistence allowance.

A review of R&R of people affected under the backwaters of Narayanpur and Almatti reservoirs revealed multiple instances of delayed and poor implementation in creation of essential facilities, leading to PDFs being denied their rightful dues even after considerable period, as brought out below:

Inordinate delay in taking up of R&R

Though 14 villages were within the norms of CWC, they were included under R&R only when these villages were inundated with flood water discharge.

2.2.15. The norms of acquisition of lands and structures coming under submergence by major and medium irrigation projects, laid down by Central Water Commission (CWC) states that structures along with their lands should be acquired up to the designed Mean Water Level[73] (MWL) *plus* wave height *plus* one foot vertical or 300 feet horizontal (100 metres) from the MWL line whichever was

Bisnalkoppa village – June 2015

[73]The average height of the water surface, determined at equal (usually hourly) intervals over a considerable period of time.

less. 14 villages[74], which were at a distance between 45 metres and 80 metres from the MWL of Narayanpur dam, met the criteria fixed by CWC for acquisition. Despite the fact that these villages were well within the norms of rehabilitation, the Government had not brought them into the scope of rehabilitation before impounding (1982) water in Narayanpur dam. The villagers of Kesarpenti and Bisnalkoppa had abandoned their villages as these villages were below FRL and were washed off in flood discharge. The rehabilitation was taken up only when these villages were inundated by flood water discharge during August 2005 and after requests by the affected people. The Government issued orders in January 2007 for rehabilitation of three villages and in September 2009 for rehabilitation of another 11 villages for taking up R&R.

The Government replied (December 2015) that the delay in implementation of R&R in these villages was due to administrative reasons.

The Government failed to bring these villages under the ambit of R&R before impounding water at Narayanpur Dam although they satisfied the norms of acquisition as per CWC, rather it waited to act till the villages were affected by the floods. Even after belated action for inclusion of these villages, the Government had failed to complete the entire R&R process within a definite time frame as commented in the succeeding paragraphs.

Insufficient land procurement for RCs and non-disbursement of benefits

2.2.16. There were 4,274 PDFs in the 14 villages. The progress in implementation was very poor. Audit observed that in respect of three villages *viz.*, Bommanagi, Katagur and Turadgi, the land procured for establishment of RCs was not sufficient resulting in delay in formation of RCs. As per the criteria adopted for the purpose, a total of 217.75 acres[75] was to be acquired for formation of RCs in respect of these three villages. Against this only 95.35 acres[76] was acquired. The PDFs did not accept the allotment letters and the formation of RCs as the land acquired was not sufficient. The infrastructural works in these RCs were taken up belatedly during September 2010 and August 2013. In respect of Katagur and Turadgi, the works related to drinking water facilities are expected to be completed only during February 2016.

Audit further observed that the process of acquisition of structures (houses and other buildings belonging to the affected families) in 11 flood affected villages[77], which had commenced only in October 2011 after two years from the date of issue of orders, was completed in December 2014. Similarly, the acquisition of land for RCs for 12 villages was completed in December 2015

[74] Katagur, Turadgi, Bommanagi, Kengalkadapatti, Bisnal, Bisnalkoppa, Iddalgi, Kamadatta, Adhial, Yemmeti, Anupkatti, Kesarpenti, Kajgal, Varagoddinni.

[75] 78.75 acres for Bommanagi (315 PDFs x 5 guntas x 2 =3,150 guntas), 63 acres (252 x 5 guntas x 2=2,520 guntas) for Katagur, 76 acres (304 x 5 guntas x 2=3,040 guntas) for Turadgi as per Planning norms. (1 acre = 40 guntas).

[76] 30 acres for Bommanagi, 30.35 acres for Katagur and 35 acres for Turadgi.

[77] Kengalkadapatti, Bisnal, Bisnalkoppa, Iddalgi, Kamadatta, Adhial, Yemmeti, Anupkatti, Kesarpenti, Kajgal, Varagoddinni.

and the land acquisition for the balance two villages (Adhial and Bisnalkoppa) was not completed (December 2015). Further, other benefits such as land and house construction grants, income generating grant, *etc.*, had not been disbursed to any of the PDFs in these 14 villages (December 2015). As a result, the PDFs are continuing to live in temporary sheds.

The Government replied (December 2015) that 244 out of 658 plots in respect of Turadgi village and 302 out of 1,242 in case of Bommanagi village were allotted and many families had moved over to other places for livelihood over a period of time. In respect of Katagur village, additional land acquisition has been initiated. Efforts were being made to educate eligible PDFs in these villages to claim benefits. Further, it was also stated that land acquisition for 12 RCs had been completed and 10 RCs had been formed while the land acquisition process for two RCs were under progress.

Thus, failure to rehabilitate the project affected people within a reasonable period had led to a situation where some of the PDFs in Turadgi and Bommanagi villages had to move away to other places for their livelihood depriving their benefits under R&R. Acquisition of land and formation of RCs in two out of 14 villages, disbursement of other benefits such as land and construction grants in 11 villages and allotment of plots to PDFs in RCs excepting two villages has still not commenced (December 2015).

Failure to provide adequate infrastructure

2.2.17 As per the directions of the Government (January 1993), RCs should be established with basic facilities such as piped water supply, electricity, internal roads, school building, teachers quarters, public health centre, community building, places of worship, *etc*. Audit scrutiny revealed that RCs in respect of Kamaldinni, Dhannur and Kankanwadi were formed without providing these basic facilities as commented in paragraphs 2.2.17.1 to 2.2.17.3 below.

Rehabilitation Centres were formed without providing basic amenities.

2.2.17.1. The RC for Kamaladinni village was formed with 186 plots in January 1988 and other entitled benefits under R&R were distributed, but allotment of plots in RC commenced only in September 2011. Audit observed that the villagers had complained about non-issue of allotment letters which deprived them of constructing houses in the RC and were forced to live in sheds.

Kamaladinni RC – June 2015

The delay in allotment was because of the refusal by the villagers to occupy the RC as there was lack of basic amenities and non-execution of restructuring works in RC as sought by them. The restructuring of RC was taken up only after receiving complaints from the affected PDFs. The infrastructure works for providing basic amenities such as roads, drains, anganwadi buildings, public toilets, schools, *etc.*, were taken up only during 2012-13. Some of these works were still under progress (March 2015). During this intervening period, 41 people, who died due to passage of time, were deprived of the benefits under R&R. Only 67 out of 186 plots had been allotted up to March 2015.

The Government replied (December 2015) that the villagers continued to stay in the old village as major part of the village remained outside the limits of submergence. It further stated that 107 out of 178 PDFs have received allotment letters. Some of the remaining PDFs failed to prove their eligibility while some of the others had settled elsewhere.

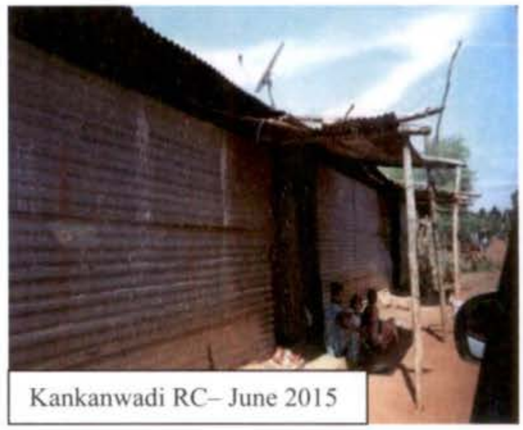
The reply is not acceptable as, though the RC was formed in 1988, the infrastructure works in RCs were taken up only during 2012-13, which was a failure on the part of the Government. Creation of infrastructure was mandatory as per the prevailing orders and the PDFs did not shift to RCs because of non-completion of these works.

2.2.17.2. In case of Dhannur, RC was formed in 1993. The allotment of plots in the RC had commenced only in 2006, i.e. after 13 years of formation. The infrastructure works were taken up only during 2013-14 and some of these works were still under progress (March 2015). 338 out of 462 PDFs were allotted plots in the RC. The PDFs who were not allotted plots continued to live in sheds. The reasons for non-allotment were deaths (20 PDFs), absence of required permission from the Deputy Commissioner (41 PDFs), and absence of certain documents (32 PDFs).

Dhannur RC – June 2015

The Government replied (December 2015) that 343 out of 462 plots had been allotted and the remaining 119 PDFs failed to prove their eligibility (cut-off date: January 1984). Continued vacancy in the posts of Rehabilitation Officers and other levels since 2006 had delayed the process.

The reply is not acceptable as the infrastructure works in RCs taken up in 2013-14 were still under progress. Socio economic survey should have been the base for extending the benefits under R&R rather than seeking PDFs to prove their eligibility through some other documents after a lapse of more than 30 years (January 1984). Thus, these PDFs were deprived of their benefits under R&R.



Kankanwadi RC– June 2015

2.2.17.3. The village of Kankanwadi in Jhamkhandi Taluk of Bagalkot District with 1,024 PDFs came under submergence for the RL 519.60 metres of Almatti dam and should have been rehabilitated by 2002-03 when the water was impounded at Almatti reservoir up to the said RL. Initially the Government issued (November 1995/July 1996) notification under Section 4(1)/6(1) of the Land Acquisition Act for acquisition of 129 acres and 6 guntas of land for providing sites for the PDFs. As against which, Special Land Acquisition Officer (SLAO) could acquire (August 2000) only 85 acres and 14 guntas of land due to objections raised by the owners of land and subsequent litigation in courts and de-notification of lands by the Government. Acquisition of further land had not taken place (August 2015) as a portion of land (28.06 acres), which was proposed to be acquired, was under dispute.

Kankanwadi RC– June 2015

The villagers refused (May 2001) to receive the allotment letters to the RC till acquisition of sufficient land. No infrastructure had been created (August 2015) in the RC and the land in which RC had been formed was covered by shrubs.

Though the Government paid (December 2000) a compensation of ₹ 1.95 crore to the villagers, yet rehabilitation was not successful and the people continued to live in uninhabitable condition as no infrastructure was created in RCs.

The Government replied (December 2015) that the RC has now been equipped with basic infrastructure and civic amenities. Efforts are being made to expedite the disposal of the court case and to acquire remaining portion of land (28.06 acres).

The reply that RC is complete with basic amenities is not acceptable because drinking water facility, school, health centre, teachers' quarters, dhobi ghat, public toilets *etc*., have not been provided in the RC. Further, a portion of the land was yet to be acquired to accommodate all the PDFs.

R&R in Bagalkot Town

2.2.18. In order to plan, develop and manage the resettlement and rehabilitation of PDFs of the Bagalkot town, the Government had established Bagalkot Town Development Authority (BTDA). The Government had also framed rules called BTDA (Allotment of sites) Rules, 1993 for allotment of sites to PDFs. The rehabilitation of PDFs in Bagalkot town up to the RL 521 metres of Almatti reservoir was completed in 2001-02. Audit scrutiny of records relating to rehabilitation of PDFs for RL 521 metres and RL 523 metres and land acquisition for RL 523 metres and RL 525 metres which was under progress during 2010-15 revealed the following (paragraphs 2.2.18.1 and 2.2.18.2).

Poor implementation

2.2.18.1. The Government, based on the protests and complaints from the affected people (6,329 PDFs) in Bagalkot town (living between RL 521 metres and RL 523 metres) of Almatti dam, ordered (November 2002) rehabilitation as they were suffering from unhygienic conditions due to backwaters of Almatti reservoir stored at RL 519.60 metres.

Audit observed that despite receiving directions from the Government in November 2002, BTDA did not take action to acquire the Structures immediately. The subject matter was brought before the Board of Directors of the Company only in June 2010. The Board approved (June 2010) acquisition of structures and infrastructure developmental works for rehabilitation of these PDFs. Though BTDA had completed in 2014-15 the acquisition of 3,723 structures, the R&R of PDFs was yet to take place (December 2015). The works for underground drainage system, construction of roads, electrification were taken up only during 2013-14 and water supply works were initiated in 2014-15.

Thus, the abnormal delay in taking decisions at various stages caused the people to live in unhygienic conditions since 2002 without getting any relief within a definite timeframe. The people were yet to be relocated even after 13 years.

The Government replied (December 2015) that as the State had no mandate to go beyond the level of 519.60 metres and any activity beyond this level would be construed as advance action without any legality and hence the decision taken in 2002 was not implemented. Subsequently in June 2010, a decision was taken to acquire structures from RL 521 to RL 523 metres based on the pressure from the residents.

The reply is not acceptable as the families were affected by the backwaters for water stored within the RL 519.0 metres of Almatti dam. Inspite of the Government Order of November 2002 to take up R&R of the families up to RL 523 metres and also the BoD taking a final decision in June 2010 for shifting the PDFs, it is not completed even now (December 2015).

Recommendation No.2: The applicable norms of CWC for acquisition of land and structures should be complied with and RCs should be formed with all basic amenities as per the norms in a time bound manner.

Allotment of land for non-R&R activities

1,168 acres of land acquired for R&R purposes was allotted for non-R&R purposes, resulting in acquiring additional land subsequently, to meet the requirement.

2.2.18.2. Considering the recommendations of the World Bank, the Government issued (June 1991) an order specifying the facilities or benefits to be extended to the affected people in Bagalkot town. Subsequently, Government notified (May 1994) allotment rules called Bagalkot Town Development Authority (Allotment of Sites) Rules, 1993. The allotment of sites by BTDA was governed by these Rules. These allotment rules were different from those framed for rehabilitation of villages.

With the approval (October 1985) of Government, BTDA had acquired (1986-87) 4,544 acres of land for relocation of Bagalkot town. Out of this, 3,230 acres was utilised for rehabilitation of PDFs affected up to RL 523 metres and 1,168 acres was provided for the purposes other than for R&R such as Horticultural University, Food Parks, *etc.* Further, BTDA (Allotment of Sites) Rules, 1993 provided for certain additional benefits to the affected people in Bagalkot town which *inter alia* included allotment of sites of higher dimension[78] at the option of PDFs, auction of corner plots, allotment of plots to tenants who were residing for a specified period in the project affected area, allotment to host PDFs[79] and non-PDFs, *etc.* These provisions had taken away substantial land acquired at the initial stage and delayed the rehabilitation of PDFs. BTDA, after utilising the land for both R&R and non-R&R purposes, was left with only 146 acres out of 4,544 acres initially acquired.

Audit observed that though the Government was well aware of the fact that the rehabilitation of 42,618 affected people in Bagalkot town was pending for the levels of RL 523 metres to RL 527[80] metres of Almatti dam and 3,600 acres of land was estimated as required for the purpose by the BTDA, yet 1,168 acres of land was given away for other purposes, thereby necessitating procurement of additional land and consequent delay in the rehabilitation of the PDFs.

BTDA issued (between November 2013 and January 2014) notification for 2,032.32 acres to accommodate 9,215 PDFs staying in the contour of RL 523 to RL 525 metres in Bagalkot town, which was not acquired yet (December 2015). This contour required approximately 544 acres of land as per the existing norms. BTDA had a balance of 146 acres out of the initially acquired land of 4,544 acres. As such the requirement was only 400 acres and there was no necessity of fresh acquisition of 2,032.32 acres as this could have been accommodated out of 1,168 acres diverted for other purposes. This process of additional land acquisition had delayed the ongoing rehabilitation process.

[78] PDFs were eligible for 72 square metres free of cost and they were allotted sites of higher dimension at the option of PDFs after collecting differential cost.

[79] Host PDF is one who loses the land for rehabilitating the project affected people

[80] For the FRL 524.25 metres, the R&R in Bagalkot town was proposed to be done up to RL 527 metres.

Government replied (December 2015) that the allotment of plots to non-PDFs was done as a one-time measure to encourage habitation in the newly formed rehabilitated town. Corner sites were allotted as per BTDA (Disposal of corner sites) rules, 2003. It was also stated that intention of allotment for Food Parks was to generate employment and Horticulture University was given land in order to promote horticulture crops in Bagalkot area.

The reply is not acceptable as BTDA should have given priority to R&R activities since the land was acquired specifically for the rehabilitation of people affected by the UKP. Any additional provision could have been made only after suitably rehabilitating the affected people and the Government could have acquired land for specific purpose. Instead, BTDA resorted to diversion without fulfilling its basic social obligation. The purpose of allotment of land for setting up of Food Parks to generate employment was not served as they were yet to come up (December 2015).

Recommendation No.3: The Government should issue suitable orders preventing the use of land procured for R&R activity for other purposes.

Monitoring

2.2.19. The Government accorded (April 1985) approval for constitution of two committees *viz.,* a High Level Review Committee (HLRC) headed by the Chief Minister to review the progress of works done by BTDA and an Action Plan Committee (APC) headed by the Additional Chief Secretary to take expeditious steps to shift the Bagalkot town. Further, the Government gave approval (July 2013) to form similar Committees for R&R of affected people for FRL 524.25 metres. Besides, the Commissioner of R&R at the Project level, and the Company, as funding authority, were also responsible for monitoring.

The Committees set up to review the progress of work were largely inactive.

The Committees (HLRC, APC) formed for reviewing R&R activities of Bagalkot town did not meet during the entire period between 2010 and 2015. Further, the APC formed in July 2013 for rehabilitation of affected people for FRL 524.25 metres conducted just three meetings (January 2014, August 2014 and December 2014). At the Company level, however, the proposals of Commissioner of R&R and BTDA were discussed only during the review of Annual Plans and there was no regular monitoring of the implementation of R&R.

As a result of not holding periodical meetings, the various bottlenecks, such as insufficient procurement of land for RCs, delay in establishment of RCs, abnormal delay in taking decisions at various levels, *etc.,* were not properly dealt with at appropriate levels of the Government/Management. The affected people under Narayanpur and Almatti dams were still (August 2015) waiting for rehabilitation since November 2002/January 2007. The Government should have issued directions to monitor the implementation of R&R at each level so that any deficiency at any level could have been identified and remedial action taken. Periodical meetings would have helped the Government in assessing the status of Rehabilitation and all the deficiencies noticed by Audit could have been set right at the nascent stage of the process itself.

The Government stated (December 2015) that uncertainty in water allocation to the State and continued vacancy of all the key posts including that of the Commissioner, General Manager, Rehabilitation Officers *etc.*, since 2007 had hindered the progress of R&R. It was further replied that periodical meetings are being held at various levels of the Government at present. The reply indicates the lack of initiative by the Government to rehabilitate the people to fill up the vacancies to carry out such a sensitive job. The Government needs to conduct meetings seriously to hasten the R&R activities.

Shortage of manpower affected the implementation of R&R.

2.2.20. There was shortage of personnel in the office of the Commissioner of R&R and office of the Chief Engineer, BTDA as well. These offices were working with 37 *per cent* and 58 *per cent* of the sanctioned strength respectively as of March 2015. The posts of Special Land Acquisition Officer, Rehabilitation Officer, Special Tahsildar, First and Second Division Revenue Surveyors were unfilled for the last three to four years (March 2015). There was no regular Commissioner R&R and Land Acquisition between 2006 and 2013 and in case of General Manager there was no regular officer since 2007. Dearth of manpower was one of the reasons attributable to the inordinate delay in implementing R&R. The Government replied (December 2015) that remedial steps were being taken to fill the vacant posts.

2.2.21. The R&R envisaged a mechanism redressing the grievances. The PDFs had an opportunity to approach Officers serving at field level *viz.,* Rehabilitation Officers, General Manager (Project), Commissioner for redressing their grievances. If they were not satisfied with the action taken at field level, they could also approach the Government or the Minister concerned.

Grievance redressal mechanism was inadequate.

Audit observed that there was no documentation of the process of grievance redressal required as per the Action Plan, which was prepared by the Commissioner, R&R, for different Reservoir Levels. Follow up of petitions or complaints made by the PDFs was absent. The redressal mechanism was poor as was evident from the fact that the people affected by flood discharge of Narayanpur Reservoir were still living in sheds without any remedy in sight. The people, affected between RL 521 metres and 523 metres in Bagalkot, who had been suffering from unhygienic conditions had not been rehabilitated despite complaints and protests since 2002.

The Government replied (December 2015) that Redressal Committee headed by the District Minister constituted for the purpose, had met twice a year since 2013. The official Committee headed by the project Rehabilitation Officer at local levels also meets regularly to attend to the complaints of the PDFs. Monthly meetings by the Commissioner, General Manager and Special DC are now being held regularly to follow up pending cases of grievances.

The reply refers to the recent developments. The very fact that people affected by flood discharge of Naryanpur dam were still living in sheds, suggests that no serious efforts were made in this direction. The Government should monitor the outcome of the Redressal Committee meetings to ensure redressal of the problems of PDFs.

Recommendation No.4: The Committees formed for the purpose of monitoring should hold regular meetings to discuss and resolve the bottlenecks in implementation of R&R. The Company should also discuss in the meetings of its Board of Directors the progress of R&R works and take action for speedy completion of works within a timeframe.

Recommendation No.5: Adequate manpower should be deployed at Project Offices to implement R&R package in a timely manner.

Conclusions

Audit concludes that:

- **The Government did not frame a comprehensive R&R Policy specific for the State in line with the National Rehabilitation and Resettlement Policy, 2007.**

- **As the Government had not conducted Socio-Economic Survey as per the National Rehabilitation and Resettlement Policy, 2007, the restoration of the pre-project economic status of the PDFs could not be assessed. This defeated the very purpose of R&R.**

- **6,329 PDFs in BTDA and 4,274 PDFs in the 14 villages were yet to be rehabilitated since 2002 and 2007 respectively, due to apathy of the Government in carrying out R&R.**

- **The Government's failure to rehabilitate the affected people within a reasonable time deprived many PDFs of their due benefits under R&R and had forced the PDFs to live in temporary sheds for the last ten years.**

- **The ineffective monitoring and inadequate manpower hindered the implementation.**

Chapter - III

Compliance Audit Observations

Chapter - III

3. Compliance Audit Observations

Important findings emerging from audit that highlight deficiencies in planning, investment and activities of the Management in the State Government Companies and Statutory Corporations, which had financial implications are included in this Chapter. These include observations on unproductive investment, violation of contractual obligations, undue favours to contractors, extra/avoidable expenditure, non-recovery of dues and cases where the intended objective of the Projects of the Government were not achieved.

Government Companies

Karnataka Power Transmission Corporation Limited

3.1. Deviation from Regulations

Failure to follow the procedures prescribed in the Regulations and continued sanction of Open Access facilities without ensuring collection of outstanding dues resulted in loss of revenue of ₹ 29.21 crore.

As per KERC (Terms and conditions for open access) Regulations, 2004, the State Load Dispatch Centre (SLDC), functioning under the administrative control of Karnataka Power Transmission Corporation Limited (Company), is the nodal agency for sanctioning Short term Open Access[81] to the customers in Karnataka.

The procedure prescribed in the Regulations stipulated that the customers intending to avail Open Access should enter into an agreement with the transmission licensee (Company) and that such agreements should ensure payment security mechanism. The nodal agency should specify the terms and conditions of payment. The Open Access charges[82] are levied on the customers for use of the transmission system.

Audit observed that the Company/SLDC failed to follow the procedures prescribed in the extant Regulations while sanctioning the Open Access to two firms *viz.,* Shree Kedarnath Sugars and Agro Products Limited (KSAPL) and Surana Industries Limited (SIL). The Open Access charges amounting to ₹ 29.21 crore[83] for the period between December 2010 and July 2013, remained unrecovered on account of following lapses:

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[81] Open Access is the non-discriminatory provision for the use of transmission lines or associated facilities by any licensee or consumer engaged in generation. Short-term Open Access customers are the persons availing access for a period of less than one year.

[82] Open Access charges include transmission charges, wheeling charges, charges for arranging backup supply (for start up of generating plant), Unscheduled Interchange (UI) charges (towards maintaining grid disciple) and any other charges specified from time to time.

[83] KSAPL (₹ 7.30 crore) and SIL (₹ 21.91 crore).

- The Company had not entered into agreement with the firms for Open Access. Hence, the payment security mechanism also remained undefined. The No Objection Certificates (NOC), issued by SLDC to KSAPL and SIL for availing Open Access also did not specify the terms of payment security mechanism (*viz.*, periodicity of billing, quantum of charges, due dates for payment, levy of penalty for default, *etc.*)

- Though there was a precedence of default of Open Access charges by another firm (Konark Power Projects Limited) to the extent of ₹ 1.28 crore during November 2008, the Company failed to take precaution, while sanctioning Open Access to KSAPL and SIL.

- Since NOCs were issued in advance of commencement of Open Access, the Company had an opportunity to verify the outstanding dues of the firms before issue of fresh NOCs. The Company, however, did not exercise this control, but continued to issue NOCs without collecting the outstanding dues. This had resulted in accumulation of dues of ₹ 25.63 crore[84] on subsequent sanctions, which could have been avoided.

- Instead of issuing bills every month, the bills for Open Access charges were raised by the Chief Engineer (Electricals), SLDC with delay ranging from one month to seven months from the date of availing Open Access.

- The Company, also did not take timely action to recover the outstanding dues through legal recourse. In the case of KSAPL, the Company attempted (September 2012) to recover the dues under the Land Revenue Act after a lapse of one and half years of the last billing period (April 2011). This attempt of the Company failed as KSAPL had been wound up and its assets were put for auctioning (July 2013/October 2013) by its bankers for recovering its dues. In respect of SIL, no action has been initiated.

Thus, the failure to comply with the Regulations and continued sanction of Open Access without ensuring collection of outstanding dues resulted in loss of revenue of ₹ 29.21 crore.

The Government replied (November 2015) that SLDC/KPTCL adhered to the CERC Regulations in issuance of NOC and preparation of bills. The calculation of open access charges require collection of a lot of field data relating to generators from various sources which justify the time taken to generate the bills. The non-payment was solely due to the firms' failure to abide by the open access regulations. A petition has been filed with Karnataka Electricity Regulatory Commission (KERC) against SIL for recovery of dues

[84] Amount raised in the first bill *minus* dues accumulated as per final bill. An amount of ₹ 20.73 crore (₹ 21.91 crore - ₹ 1.18 crore) from SIL and ₹ 4.90 crore (₹ 7.30 crore - ₹ 2.40 crore) from KSAPL.

and Hubli Electricity Supply Company (HESCOM) had taken action to recover the dues from KSAPL under the Land Revenue Act.

The reply is not acceptable as the Company had failed to enter into agreement and ensure payment security mechanism, which was in violation of KERC Regulations. The Government is shifting the onus on the firms, when the fact of the matter is that there was no internal control mechanism to ensure timely raising and collection of dues and to ensure that the officials responsible for raising and collection are carrying out their duties.

Karnataka Power Transmission Corporation Limited

3.2. Unwarranted creation of substations

Establishment of new substations without adequately analysing the load pattern resulted in infructuous investment of ₹ 15.97 crore.

Karnataka Power Transmission Corporation Limited (Company) establishes new substations based on load flow study in the feeders connected to the existing substations or on the basis of representations from consumers, local representatives, Members of Legislative Assembly or Members of Parliament, *etc.* Based on the representations, the Company undertakes load flow study of the feeders catering in the areas concerned. If such study necessitates establishment of a new substation, the Company prepares a Detailed Project Report and gets the clearance from the Technical Advisory Committee (TAC).

The 66/11 kV Ramanagara substation, which is fed from Bidadi 220/66 kV substation, was connected with the 11 kV feeders of Jalamangala, Biligumba and Uruguhalli having connected load of 17,877 kVA (15.195 MW). Similarly, the Magadi 66/11 kV substation, which is fed from the 220/66 kV Anchepalya substation, was connected with the 11 kV feeders of Savanadurga and Managallu having connected load of 6,549 kVA (5.567 MW).

In order to reduce the load of 66/11 kV Ramanagara substation and to meet the future growth of demand, improvement in voltage profile and reduction in the length of 11 kV feeders, the TAC approved (January 2005) the proposal for establishing a new substation (66/11 kV) at Melehalli with a capacity of 2x8 MVA. The substation was commissioned in March 2007 at a cost of ₹ 7.15 crore.

During the course of execution of Melehalli substation, the TAC approved three more substations with a capacity of 1x8 MVA, 66/11 kV each at Jalamangala (October 2006), Kutagallu and Chikkaganganawadi (January 2007). The proposals for these substations were approved for the same reasons as in the case of Melehalli. These substations were commissioned (March 2009/July 2010) at a total cost of ₹ 15.97 crore.

Audit findings revealed that creation of these three substations was not warranted as seen from their meagre peak load recorded during the five year period subsequent to their establishment, as discussed below:

- The proposals for establishing substations at Jalamangala and Kutagallu were approved despite the opinion (October 2006) of the Planning section of the Company that the Jalamangala substation was not required as the load for this area was meagre (3.361 MW) and that the load could be met from the adjacent substations at Melehalli and Ramanagara. Moreover, the Chairman of TAC had also observed (January 2007) that the benefit-cost ratio for establishing Kutagallu substation was not adequate. This was supported by the fact that the peak load recorded during 2010-15 ranged from 1.2 MW to 3.1 MW at Jalamangala substation and 2.1 MW to 3.1 MW at Kutagallu substation as against the available capacity of 6.8 MW (8 MVA) each.

- The peak load recorded at the newly established substations of Jalamangala, Kutagallu and Chikkaganganawadi between 2010-11 and 2014-15 was very meagre which ranged from 1.2 MW to 3.4 MW as against the capacity of 6.8 MW available at each of these substations. This load could have been met from the substation at Melehalli, which was established with a capacity of 2 x 6.8 MW, but whose peak load during the said period (2010-15) ranged between 2.8 MW and 7.1 MW. Hence, the decision to establish three new substations without studying the actual load of substation at Melehalli was unwarranted. Further, the insignificant load recorded at these three substations even after five years of commissioning had not contributed to reduction in loads at Ramangara and Magadi substations.

- As per the approved proposal, the existing load of 3,166 kVA (2.691 MW) of Savanadurga and Managallu 11 kV feeders of Magadi substation was to be transferred to newly established Melehalli substation. This was not done (June 2015) even though the Melehalli substation was established in March 2007. The capacity of the Melehalli substation was thus, underutilised and the objective of reducing the load of Magadi substation was also not achieved.

Thus, the establishment of substations at Jalamangala, Kutagallu and Chikkaganganawadi at a total cost of ₹ 15.97 crore, without studying the load pattern at Melehalli substation and without considering the observations made by the Planning section and TAC Chairman, was not need based and this investment gave no appropriate value addition.

The Government replied (October 2015) that the connected load of Melehalli substation, which was 12,280 KVA, could not cater to the total connected load of 17,752 KVA of three new substations *viz.,* Jalamangala, Kutagallu and Chikkaganganawadi. These three substations were proposed to cater to the existing and future load growth. It was further stated that Bangalore Electricity Supply Company Limited (BESCOM) was intimated to take action for bifurcation of load of Savanadurga and Managallu feeders to Melehalli substation.

The reply is not acceptable as the actual peak load was much less, which ranged between 1.2 MW and 3.4 MW during 2010-15 though the connected load of three substations was 17,752 kVA (15.089 MW). This load could be met from Melehalli substation, whose peak load during the same period ranged between 2.8 MW and 7.1 MW as against the connected load of 2 x 6.8 MW. Moreover, the Company did not ensure transfer of the load of Savanadurga and Managallu feeders by BESCOM. As these substations were underutilised even after five years of their commissioning (since March 2009/July 2010), the argument that they were commissioned to cater to the future load growth was not justified and not supported by evidence.

Karnataka Power Transmission Corporation Limited

3.3. Infrastructure creation in violation of conditionalities

The Company created a 33 kV infrastructure at Laxmeshwar substation at a cost of ₹ 1.73 crore, in violation of directions of the Technical Co-ordination Committee to construct the same after taking up the substation at Gudageri. As the proposal for substation at Gudageri has been shelved, the investment remained unfruitful.

Hubli Electricity Supply Company Limited (HESCOM) submitted (March 2008) to Karnataka Power Transmission Corporation Limited (Company) a proposal to create '33 kV reference[85]' at the existing Laxmeshwar substation (110 kV), Gadag district to feed its (HESCOM) proposed 33 kV substation at Gudageri.

The Technical Coordination Committee (TCC) of the Company, while giving the approval to the above proposal, instructed (March 2009) that the work may be taken up only after getting confirmation that HESCOM had awarded the work of substation at Gudageri.

Audit observed that in violation of the direction of TCC, the Chief Engineer (Electricity), Transmission Zone, Bagalkot awarded (April 2011) the work of creating the 33 kV reference at Laxmeshwar substation by installing a transformer (10 MVA) at a cost of ₹ 1.73 crore, even though HESCOM had not initiated action to award the substation work at Gudageri. Though, the work at Laxmeshwar substation was completed in September 2012, the transformer had not been put to use till date (December 2015).

Audit further observed that HESCOM had shelved (March 2015) the proposal for construction of the substation at Gudageri consequent to the proposal of establishing another substation (110/11 kV) at nearby Hireharkuni village. The reason cited for the change in location was load growth and the internal policy that the cost benefits of constructing a 110/11 kV in the first instance was better than constructing 33/11 kV substation and later upgrading it.

Thus, as there were no proposals for construction of 33 kV substation for drawal of power from Laxmeshwar substation, the infrastructure created at a cost of ₹ 1.73 crore remained unfruitful.

[85] The term '33 kV reference' referred to in the approval of TCC held in March 2009 denotes the approval to install 1x10 MVA, 110/33 kV transformer at 110 kV Laxmeswar substation.

The Government replied (August 2015) that the work was awarded pending confirmation from HESCOM. The Government further stated that HESCOM had renewed (May 2015) the proposal of establishing the substation at Gudageri and it was certain that the 33 kV reference at Laxmeshwar substation would be utilised.

The reply is unacceptable as the Chief Engineer had violated the instructions of the TCC by awarding the work without getting confirmation from HESCOM. Further, the reply that the proposal for substation at Gudageri was being renewed is an attempt to justify the improper action of having created infrastructure at Laxmeshwar without a substation for supply of power. Thus, the violation of orders by the Chief Engineer had led to ₹ 1.73 crore remaining idle.

The Mysore Sugar Company Limited

3.4. Deficiencies in the implementation of co-generation project

Implementation of co-generation project without ensuring fuel and non-synchronisation with modernisation of mills resulted in investment of ₹ 124.08 crore becoming unfruitful, besides interest burden of ₹ 59.04 crore.

The Mysore Sugar Company Limited (Company), involved in sugar production with two milling tandems of combined crushing capacity of 5,000 Tonne Cane per day (TCD), proposed (1999) to set up a co-generation plant of 30 Mega Watt (MW) power with bagasse (the fibrous remains of sugarcane) as fuel. The Company envisaged exportable power of 19.22 MW after meeting its captive requirement. The project was proposed to be completed by March 2003 at a cost of ₹ 76.35 crore.

The Company procured equipment worth ₹ 64.37 crore for the plant which was to be commissioned by March 2003, but trial run was conducted only in January 2007 and 9.36 MW power was exported to the grid. The plant was however not operated after the trial run due to non-availability of sufficient bagasse though the DPR did not envisage any shortage of bagasse.

The Company identified (February 2009) coal as a secondary fuel to overcome the shortage of bagasse. The coal-firing and coal-handling plant installed (August 2011) by the Company at a cost of ₹ 4.90 crore including a coal yard constructed at a cost of ₹ 1.20 crore had not been put to operation till date (June 2015).

In order to achieve generation of 30 MW power, the mill was required to crush 5,000 TCD and the expected bagasse requirement was 3.75 lakh MT per annum but its actual production of bagasse between 2007-08 and 2013-14, ranged between 0.23 lakh MT and 1.53 lakh MT per annum. As the existing sugar mills were very old and had never been operated to their maximum capacity of 5000 TCD, the Company decided (December 2008) to modernise the 'A' mill for upgradation to 5000 TCD in sync with co-generation. The work was awarded (September 2010) to Fives Cail – KCP Ltd., which supplied and installed (February 2015) equipment costing ₹ 49.10 crore but the plant scheduled to be completed by July 2011 could not be upgraded till date (November 2015).

On being requested by the Company, BHEL did the overhauling of the Turbo Generator for ₹ 4.51 crore, which was avoidable had the co-generation plant been put in operation.

In this connection, Audit observed the following points:

- GoK released (up to June 2015) ₹ 99.74 crore to the Company towards One Time Settlement of loan availed for co-generation project from HUDCO. The GoK had to bear the interest burden of ₹ 59.04 crore without accrual of benefits from co-generation project.

- The Ministry of New and Renewable Energy, Government of India, announced during XI five year plan (2007-12), a number of incentives[86] for co-generation plants but the Company did not avail any of these incentives, which led to increase in the project cost to that extent.

- Due to non-implementation of co-generation project, the Company could not honour its commitment to export surplus power, instead it had to draw energy from the grid. This resulted in avoidable demand of ₹ 76.17 lakh towards interest on energy charges from the Electricity Supply Company.

Thus, the co-generation project was ill-conceived without ensuring availability of the primary fuel and synchronisation with modernisation work despite being pointed out in the Audit Report of the Comptroller and Auditor General of India for the year ending March 2002. As a result, investment of ₹ 74.98 crore made on co-generation plant and ₹ 49.10 crore on modernisation had become unfruitful, besides interest burden of ₹ 59.04 crore on the Government.

The Company, in its reply (December 2015) admitted that:

- Co-generation plant was not functional on account of shortage of bagasse and it had expected availability of sufficient bagasse.

- Subsequent analysis revealed that the production of power by use of coal was unviable.

- Though 'A' mill and co-generation plant were ready, they could not be operated due to failure of both boilers. The mill and the plant would be ready by December 2015.

[86] Capital subsidy ranging from ₹ 0.40 crore to ₹ 0.50 crore per MW subject to a maximum of ₹ 8 crore, fiscal incentives such as 80 *per cent* accelerated depreciation in the first year, 10 years income tax holiday, concessional Customs Duty and exemption of Central Excise Duty for machinery and components procured for initial setting up of Biomass Power Projects.

The reason for delay in co-generation project as put forth in the reply confirmed audit observation that the project was ill-conceived as even the availability of bagasse, the basic raw-material, was not ensured by the Company.

The matter was brought to the notice of the Government in July 2015. The reply of the Government is awaited (December 2015).

The Mysore Sugar Company Limited

3.5. Undue benefit to the Consultant

Exorbitant increase of consultancy fee without justification and violation of the Karnataka Transparency in Public Procurement Act resulted in avoidable extra expenditure of ₹ 0.84 crore.

The Mysore Sugar Company Limited (Company) was declared a Sick Company by the Board for Industrial and Financial Reconstruction (BIFR) in September 2005. In order to attend to the BIFR case, the Company appointed (July 2009) M/s.Rangaraju and Associates, Chartered Accountants, Bengaluru as consultants. The work involved rendering of consultancy support regarding restructuring/rehabilitation to be finally sanctioned by the BIFR and also review of any modifications that might arise from the submission of Draft Rehabilitation Scheme, till the end of the award by the BIFR. The fee for the duration of assignment (August 2009 to March 2010) was fixed at ₹ 4.50 lakh.

The terms of engagement of consultant were amended (August 2009) to include a clause that in the event of delay in BIFR's final order beyond March 2010, the period of assignment might be extended by mutual discussions and that the fee was exclusive of service tax.

As the BIFR's proceedings were not finalised, the Board of Directors (Board) approved (April 2010) extension of the tenure of the consultants from April 2010 to June 2010 at a consultancy fee of ₹ 2.40 lakh (exclusive of service tax) for a tenure of three months. Further extension was given (July 2010) up to September 2010.

Thereafter, the Board approved (March 2011) continuation of services of the consultant from October 2010 for a period of one year on a monthly remuneration of ₹ 2.50 lakh *plus* service tax, from the earlier remuneration of ₹ 2.40 lakh for three months (*i.e.* @ ₹ 80,000 per month) without assigning any reason for the steep increase. The Board further enhanced (June 2011) the fees by 10 *per cent i.e.* ₹ 2.75 lakh *plus* service tax per month, till discharge of the Company from BIFR.

Audit observed that:

- As per the provisions (Section 4 e and 5) of Karnataka Transparency in Public Procurement (KTPP) Act, no entity shall procure consultancy services except by inviting tender, where the value of such service exceeds ₹ 5 lakh. The Company, however, did not invite any expressions of interest (*i.e.* tender), but directly decided the remuneration of the consultant. The consultancy fee, which was fixed (July 2009) at ₹ 5.05 lakh (including service tax) was later increased (March 2011) to more than ₹ 30 lakh per annum.

- The remuneration to the consultant had been frequently revised upwards without any justification on record. The request of the consultant and the justification by the management for the exorbitant increase in fees from ₹ 80,000 per month to ₹ 2.50 lakh per month and then to ₹ 2.75 lakh per month were not on record.

- This frequent increase of fee ran counter to the observation of the Board (March 2009) that the fee of ₹ 60,000 per month was exorbitant as the consultants did not have regular monthly work in the BIFR matter. The Board also directed that the matter may be placed in the next Board meeting after discussion with the Industrial Finance Corporation of India Ltd. (IFCI - a Government undertaking), who had also offered consultancy services. The Management failed to comply with the Board's directions and there was no record of any discussions with IFCI.

- The Company referred (August 2013) the matter to Government of Karnataka (GoK) seeking their opinion on the applicability of KTPP Act on an objection raised by Internal Audit. Though the GoK directed (August 2013) that the KTPP Act be followed, the service of the consultant was terminated only in April 2014, after a delay of more than eight months.

- The Company terminated the services of the consultant and appointed (October 2014) M/s.T.Srinivasa & Co., Chartered Accountants, Bengaluru as consultant for the same work at the rate of ₹ 680 per man hour for 650 man hours or till the Company came out of BIFR whichever was earlier, which worked out to ₹ 4.42 lakh.

- The previous Consultant approached (June 2014) the High Court of Karnataka against the unilateral termination of the contract and settlement of dues. The Consultant agreed (July 2014) to withdraw the case on payment of ₹ 26.26 lakh (inclusive of taxes) towards consultancy fee dues up to 15 December 2013. The Company agreed (August 2014) for the proposal subject to withdrawal of the case and submission of certified copies of service tax remittance to the Government. The matter was yet to be resolved (December 2015).

Thus, non-compliance with the KTPP Act regarding appointment of consultant and exorbitant increase in the consultancy fee without any justification resulted in undue benefit of ₹ 0.84 crore to the consultant. This calls for fixing of responsibility on the Officers who are at fault.

The Company, in its reply, accepted (June 2015) the audit observations. Reply from the Government was awaited (December 2015).

Bangalore Electricity Supply Company Limited

3.6. Improper Financial Management

Release of Discretionary Funds to the Officers without assessing the need resulted in unwarranted payment of interest of ₹ 1.70 crore.

Bangalore Electricity Supply Company Limited (Company) decided (March 2012) to provide 'Discretionary Funds' to the officers handling Operation and Maintenance works of the Company to spend at their discretion in the interest of the Company .

The Company issued (April 2012) an Official Memorandum specifying the amount that should be provided to each of the Officers[87] and also issued instructions regarding procedure to be followed in operating the fund. The Company released (between March 2012 and March 2014) Discretionary Fund of ₹ 14.14 crore to the Officers of the Zones/Circles/Divisions of the Company.

Audit observed the following lapses relating to the release and utilisation of funds:

- The Company, while taking the decision (March 2012), did not specify the purposes for which the Discretionary Funds were provided. As the funds for the working capital of the Company were met out of the Over Draft (OD) account, the decision had the bearing on the financial interest of the Company. The sanction of Discretionary Funds without proper justification/purpose on record indicated imprudence.

- Consequent to non-utilisation of funds, the Company initially directed (June 2012) the officers concerned to utilise these funds on or before July 2012, which was later extended to September 2012 and then to March 2013. Though the Company was aware at various points of time that the funds were not immediately required, it kept on extending the dead line for utilisation of funds, thereby compelling the Officers to utilise them without any need.

- The funds were utilised mainly for procurement of smart phones, office stationary, furniture, computer accessories, shamiyana for BESCOM day, water purifier, Air Conditioner, UPS repair, banners, flex board printing, LED TV and stand, visitor chairs, wall mounting fans, digital cameras, *etc.*, which did not warrant any emergency. These items could have been procured in the ordinary course of business by requisitioning funds as and when required.

- The progressive fund utilisation during 2012-15 is as indicated below:

[87] Chief Engineers (₹16 lakh), Superintending Engineers (₹ 8 lakh), Executive Engineers (₹ 4 lakh), Assistant Executive Engineers/Assistant Engineers/Section Officers (₹ 2 lakh).

Table No.3.1.1: Utilisation of discretionary fund during 2012-15

(₹ in crore)

As at the end of	Cumulative fund releases	Cumulative fund utilisation	Unutilised funds	No. of months funds remained idle	Interest paid on OD[88] on unutilised funds
October 2012	12.98	3.52	9.46	7	0.60
March 2013	13.48	8.31	5.17	6	0.28
March 2015	**14.14**	**10.37**	**3.77**	24	**0.82**
Total					**1.70**

The above pattern of utilisation of funds indicated that there was no real need for these funds. Even after a lapse of three years from the date of release of funds, 29 *per cent* of the funds remain unutilised.

It was further observed that the Company paid interest of ₹ 1.70 crore over the three year period ending 31 March 2015 on the unutilised funds. Having released ₹ 12.98 crore up to October 2012 with ₹ 9.46 crore unutilised, the Company should have taken action to review the decision. The interest expense could have been avoided, had the Company took timely decision for recalling the unspent amount.

The Government replied (September 2015) that the fund was sanctioned to meet the contingency expenditure by the field officers in order to take quick action for restoration of power supply, purchase of materials and equipment for running the business without any hindrance. Discretionary Fund was withdrawn as many field officers had informed that such fund would not be necessary in future. Action had been taken to investigate the deviations of funds to the other purposes. The guilty officers/officials would be subjected to disciplinary action.

The reply confirms that the decision to create discretionary fund was without analysing the actual need of the field officers and was not a financially prudent move. This is evident from the fact that the field offices resorted to spend the funds for unintended purposes. Thus, the release of Discretionary Funds of ₹ 14.14 crore from the OD account was unwarranted as it was spent on items which cannot be said to be prudent expenditure. Moreover, it resulted in avoidable interest expense of ₹ 1.70 crore due to operation of OD.

Bangalore Electricity Supply Company Limited

3.7. Deviation from bid conditions

Approval of terms of payment in deviation from bid conditions resulted in extension of undue financial advantage to the service provider by ₹ 1.53 crore.

Bangalore Electricity Supply Company Limited (Company) invited (September 2012) bids from service providers to avail services through web

[88] Interest calculated at the minimum rate of 10.90 *per cent* per annum charged by Bank of Baroda vide its sanction letter dated 28 March 2012.

based Total Revenue Management (TRM) system for the subdivisions and accounting sections of Bangalore Rural Area Zone and Chitradurga Zone of the Company. The services included supply and maintenance of hardware and web based software for secured meter reading, billing, collection, disconnection, reconnection, supply and maintenance of Local and Wide Area Network, internet facility and manpower support.

The General terms and conditions of the bid stipulated that the bidders should quote firm prices '*per installation billed per month basis*' considering the entire scope of work. The terms of payment stipulated that the liability for payment would start only on successful generation and delivery of error free bills, generation of all required periodical MIS reports and submission of all deliverables.

The Company awarded (December 2012) the contract to Nsoft (India) Services Private Limited (firm), who had quoted ₹ 2.85 *per installation billed per month* inclusive of all taxes for a period of two years. The contract commenced with effect from February 2013 and April 2013 in Chitradurga Zone and Bengaluru Rural Area Zone respectively.

Audit observed that while considering the proposal of award of contract to the firm, the Company approved (November 2012) the rate at ₹ 2.85 *per installation per month* instead of *per installation billed per month* as quoted by the firm. The approval, thus, was in deviation both from the bid conditions and also as quoted by the firm.

The error in decision of the Board of Directors led to the Company paying the firm at the rate of ₹ 2.85 per installation per month even for the inactive installations for which no bills were generated by the firm. In 10 out of 15 Divisions under the jurisdiction of Bengaluru Rural Area Zone and Chitradurga Zone, the Company paid ₹ 1.53 crore towards 53.55 lakh inactive installations during the period February 2013 and May 2015.

The Government replied (December 2015) that the Board of Directors of the Company had approved unit rate at ₹ 2.85 per installation per month. The Detailed Work Award was issued to Nsoft (India) Service Private Limited for implementation of TRM system accordingly. There was no deviation from the approved payment terms and conditions of the contract. The service provider had to generate various reports on disconnected installations and the data needed to be maintained on these installations until the entire dues were recovered.

The reply is not tenable as the bid documents clearly indicated detailed functionalities of the software which should provide for generation of disconnection list, the Support Automatic Recovery Process *viz.*, termination notice, final bill with adjustment of deposits, necessary forms and also related MIS Reports. The firm had quoted per installation billed per month after considering the above bid conditions. Hence, the approval of the Board of Directors for *per installation per month* was not in line with the conditions of contract.

Audit further observed that the Company, while extending the contract of the firm for one year, approved (November 2014) the rate at ₹ 2.85 *per active installation per month* continuing the other existing terms and conditions of the original contract. This decision of the Company confirmed the fact that the earlier approval (November 2012) of the Board of Directors was in deviation from the bid conditions and quotation and thus, resulted in extension of undue financial advantage to the service provider by ₹ 1.53 crore.

Karnataka Neeravari Nigam Limited

3.8. Extra payment towards price adjustment claims

Inappropriate application of index while allowing price adjustment claims resulted in undue favour of ₹ 5.18 crore to the Contractors.

The Karnataka Neeravari Nigam Limited (Company) awarded (April 2010) the following works under Singatalur Lift Irrigation Scheme (SLIS) left bank canal, on turn-key basis to be completed in 18 months:

Name of the work	Contractor	Contract value (₹ in crore)
Construction of 1st lift at Left Bank Canal of SLIS	IVRCL Infrastructure and Projects Limited	46.67
Construction of 2nd lift at Left Bank Canal of SLIS	GVPR Engineers Limited	269.31
Construction of 3rd lift at Left Bank Canal of SLIS	GVPR Engineers Limited	111.86

Clause 44 of the agreement stipulated that the contract price was to be adjusted for increase/decrease in rates and prices of labour, materials, plant and machinery spares, fuels and lubricants *etc*., as per the price adjustment (PA) formulae. All India Wholesale Price Index (WPI) with base year of 1993-94, issued by Government of India (GoI), would be the basis for computation of PA and the index of 'Heavy machinery and parts' group was adopted to represent the component of 'Plant and Machinery spares'.

The GoI revised the base year of WPI from 1993-94 to 2004-05 modifying the commodities and their weightage with effect from 14 September 2010. The revised WPI did not contain the index of 'Heavy machinery and parts' group and taking advantage of this, both the contractors claimed PA with index of 'Pump and assembly' available under 'Industrial Machinery' group in the revised WPI and the Company admitted the same for ₹ 6.61 crore during the period between April 2010 and March 2015.

Audit observed the following lapses/points:

- The adoption of index of 'Pump and assembly' was not approved by Technical Subcommittee/Board. As per the delegation of powers, though the Executive Engineer was not empowered to adopt a different index than in the agreement, the price adjustments were paid by adopting different index than in the agreement.

- Classification of 'Heavy Machinery and Parts' group of old WPI under 'Construction Machinery' group of revised WPI for calculation of PA was approved (June 2011) by the TSC under Upper Bhadra Project. Considering this precedence, the Company should have adopted the same index in the said SLIS (left bank lift) works.

- In all the similar works of SLIS (right bank lift) and Rajanahalli LIS undertaken by the Company and in the case of Alambur Drinking Water Lift works undertaken by Cauvery Neeravari Nigam Limited and Lift Irrigation Schemes undertaken by Krishna Bhagya Jala Nigam Limited, the index of 'Construction Machinery' group was adopted while computing the PA claims under the revised WPI.

Hence, adoption of a different group of WPI by the Company for the SLIS (left bank lift) works, which had higher rates as compared to all the other similar works mentioned above, was without rationale and resulted in undue benefit to the contractor to the tune of ₹ 5.18 crore.

The Company replied (March 2015) that the index of 'Pump and assembly', which is the sub-component of 'Machinery and machine tools' was considered while calculating the price index as the work in question was not comparable with the civil works of general in nature. The major constituent of the work was supply and erection of pumps and motors and the cost of pumps and motors percentage was 31 *per cent* with respect to the total value of work.

The reply was not acceptable as the index adopted should be based on the nature of the items used in the construction work and not on the quantum. However, the Company admitted the PA claims with the index based on the value of the pump and motor as a percentage to the total value of the work, whereas, the civil portion constituted more than 50 *per cent* of the total value of the work. Hence, the contention of the Company in adopting the index of 'Pump and assembly' is not justifiable. Also, the Company had not adopted such index in all similar works such as SLIS (right bank lift) and Rajanahalli LIS.

Further, the old WPI did not include index of 'Pumps' or 'Motors' under 'Heavy machinery and parts' group, but, were available under 'Electrical Industrial Machinery' group, which was not considered at the time of agreement. Hence, it is apparent that the Company had envisaged indexation for machinery as a whole and not 'Pumps' or 'Motors' alone. Therefore, the adoption of the inappropriate index resulted in undue benefit of ₹ 5.18 crore being given to the contractors.

The matter was brought to the notice of the Government in June 2015. The reply of the Government was awaited (December 2015).

Karnataka State Coir Development Corporation Limited

3.9. Undue benefit to the supplier

Upward revision of quoted rate after entering into agreement and unwarranted addition of Value Added Tax (VAT) to the quoted rate benefitted the supplier to the extent of ₹ 3.17 crore.

Karnataka State Coir Development Corporation Limited (Company) invited (June 2013) a tender for purchase of materials, which *inter alia* included Rubberised Coir Bare Blocks. The tender conditions stipulated that the quoted rates should be firm and that the supplier was entirely responsible for all taxes incurred until delivery of the goods.

The contract was awarded (August 2013) to Karnataka Coir Foam & Allied Industrial Corporation (KCAIC) for supply of Rubberised Coir Bare Blocks mainly in two different sizes (*i.e.* 72"x30"x3.5" and 72"x36"x3.5") at *all inclusive rate* of ₹ 1,495 and ₹ 1,815 per unit, respectively.

Audit observed the following points:

- Within a month of placing the Purchase Order, KCAIC expressed (September 2013) its inability to supply materials at the tendered rate on the plea of increase in the cost of raw materials and requested the Company to accept the revised rate of ₹ 2,347 and ₹ 2,699 per unit, respectively.

- Instead of terminating the agreement and forfeiting the EMD as per clause 26 and inviting fresh tenders, the Managing Director accepted (September 2013), after negotiations, the revised rate of ₹ 2,247 and ₹ 2,599 per unit respectively for the different size of coir bare blocks. The Managing Director had not ensured that the increase in price was due to change in policies of the Government or due to reasons beyond the control as required under the tender condition (clause 27). Thus, in the absence of due diligence exercise in this regard, the Managing Director allowed the increase in prices, which resulted in undue benefit of ₹ 2.17 crore to the supplier (KCAIC).

- The rates obtained through the tender invited in June 2013 was an *all inclusive* rate. The request of the supplier for enhanced rates did not mention any tax component. However, when the Managing Director accepted the enhanced rate, the rates were mentioned as excluding Value Added Tax. Thus, the *suo motu* inclusion of the VAT component resulted in the Company bearing an additional expenditure of ₹ one crore.

- The Company extended the contract period for six months.

- The Company also placed Purchase Orders for *other materials* valued ₹ 1.92 crore on the same supplier without inviting tenders. This was in violation of Karnataka Transparency in Public Procurement (KTPP)

Act, 1999, which stipulated that no procurement entity should procure goods costing more than rupees one lakh except by inviting tenders.

From the foregoing observations, it is clear that the Managing Director had shown favouritism resulting in undue gain of ₹ 3.17 crore to the supplier.

The Government admitted (August 2015) the lapses pointed by Audit. Though the Government has confirmed the audit observations, action against the Managing Director for the lapses was not initiated (December 2015).

Mangalore Electricity Supply Company Limited

3.10. Failure to follow Railway Board's directives

The Company failed to follow the Railway Board's directives stipulating the mandatory use of Underground cables while executing line works at its railway crossings resulting in delay in execution of work. As a result, the infrastructure created valued at ₹ 1.43 crore remained idle and the energy savings forgone was ₹ 1.32 crore.

The Mangalore Electricity Supply Company Limited (Company) awarded (September 2012) the work of construction of the 33kV double circuit link line from Navunda substation to Kundapur-Byndoor line, for a distance of 3.118 kilometres for ₹ 1.05 crore to Mangala Electricals with a stipulation to complete the work by December 2012. The objective of creating the link line was to reduce the line losses, minimise the interruptions, reduce the peak load and improve the voltage profile, with savings in energy of 2.55 Million Units (MU) per annum. The work involved erection of towers at 33 locations and stringing of conductors to the towers.

The completion of the line work was delayed as several deviations from the originally proposed survey had to be carried out, due to objections from local people, Forest Department and Public Works Department. By March 2014, stringing of all the towers was completed except between tower No.27 and 28, which was passing over a railway crossing. The total cost incurred on the work up to March 2014 was ₹ 1.43 crore.

The Company had sought (December 2012) approval from Konkan Railway Corporation Limited (KRCL) for drawing overhead lines at railway crossing and KRCL had accorded permission in May 2013. However, in May 2014, the Central Railway authorities directed that all lines up to 33kV were to be laid only by underground (UG) cables in accordance with the directives issued by the Railway Board in October 2011. Thereafter, KRCL accorded (December 2014) permission for laying of UG cable. The cost of the work was revised (March 2015) to ₹ 1.93 crore[89]. The line work was under progress (September 2015).

Audit observed that the Railway Board had issued directives in October 2011 mandating the use of only UG cables for power line crossings up to and

[89] Includes ₹ 14.39 lakh on account of work of laying UG cable.

including 33kV. The Company was also well aware of this position, as its request for clearance for overhead line in respect of another line work (Netlamandur substation to Kukkarabettu), was rejected (November 2011) by the South Western Railway and UG cables was used in line with the directives of the Railway Board. Yet, the Company had not modified its designs from overhead lines to underground lines for the crossing between tower No.27 and 28.

Thus, inspite of being aware of the directive of the Railway Board to use underground cables only, the Company had sought (December 2012) approval for construction of overhead lines for the Navunda substation to Kundapur-Byndoor line. Except the stringing of two towers across railway crossing, the work of stringing on the other towers had been completed by March 2014. The stringing of these two lines was not completed for the last 18 months (April 2014 up to September 2015). The investment of ₹ 1.43 crore on the line work already completed remained idle apart from foregoing the energy savings of ₹ 1.32 crore[90] and other intended benefits.

The Government replied (September 2015) that the Netlamandur-Kukkarabettu line work was handled by *Puttur* Division and it was in the jurisdiction of Southern Railway whereas the Navunda substation to Kundapur-Byndoor line was handled by *Kundapura* Division and it was in the jurisdiction of KRCL. The Government further replied that the Company had acted upon the directives of respective railway authorities and the earlier decisions were revised by KRCL at a later date.

The reply is not acceptable as the fact remains that the Company was well aware of the Railway Board's directive mandating the use of UG cables issued in October 2011. Further, there was lack of co-ordination between the Corporate Office and Divisions, which led to idling of the line work worth ₹ 1.43 crore.

Hubli Electricity Supply Company Limited

3.11. Non realisation of revenue

Hubli Electricity Supply Company Limited failed to realise revenue amounting to ₹ 1.39 crore due to non compliance with the extant Regulations.

The Conditions of Supply of Electricity of Distribution Licensees (Regulation), notified in June 2006, stipulated that in case of temporary power supply, the consumer should deposit, in advance, the estimated power consumption charges for the duration of temporary power supply. The advance was to be adjusted with the periodical bills raised and if the amount of deposit fell short of the estimated power consumption charges, immediate action was to be taken for recovery of the balance amount. The Regulation also stipulated that the bills should be raised at monthly intervals.

[90] 25,45,503 units per annum x ₹ 3.45 per unit (cost of power) x 18 months (April 2014 to September 2015). April 2014 is considered, as other works were completed by then.

Hubli Electricity Supply Company Limited (Company) sanctioned (January 2010) temporary power supply to Shree Kedarnath Sugars and Agro Products Limited (KSAPL), Bagalkot, after collecting (January 2010) advance power consumption charges of ₹ 11.69 lakh for thirty days, under temporary power supply tariff (LT-7). KSAPL availed power supply between January 2010 and July 2010, to set up a co-generation power plant[91].

Meanwhile, from June 2010 onwards, the co-generation plant had become functional and started exporting power to the power grid. As part of its operations, the plant also imported power for its start up (backup power) after seeking permission (June 2010) from the Company.

As per procedure in vogue[92], if in a particular month there was no export[93] of energy from the co-generation plant, then the Company had to claim power charges (for the imported energy) under LT-7 tariff.

Audit observed the following lapses on the part of the Company:

- The Division had failed to raise bills in the months in which there was only import of energy. The bill for six months (June to November 2010) was raised in February 2011, and the bill for 22 months (June 2011[94] to March 2013) was raised only in May 2013. In fact, KSAPL was allowed to import power between May 2011 and March 2013 despite non-payment of ₹ 0.48 crore against the power supplied earlier (June to November 2010). The total amount pending receipt at the end of March 2013 was ₹ 1.39 crore.

- The Division had failed to collect the estimated power consumption charges in advance as per extant Regulations for supplies after July 2010. As such, there was no security deposit available for adjustment.

- Though KSAPL had defaulted in payments since May 2011, the power supply was disconnected only in April 2013 though, it was required to be disconnected after giving 15 days' notice as per KERC (Electricity Supply) Code, 2004.

- Even though the dues were included in the Sundry Debtors of the Company, the Corporate Office had not initiated action.

The Government replied (August 2015) that monthly meter reading was not taken due to lockout of the factory and that action had been initiated to recover the arrears as per Recovery of Dues Act, through the Deputy Commissioner, Bagalkot.

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[91] Co-generation (Combined Heat and Power) is the simultaneous production of electricity and heat, both of which are used.

[92] As per clarification received (October 2010) by HESCOM from the Karnataka Power Transmission Corporation Limited.

[93] For the months in which there was both import and export of energy, the Karnataka Power Transmission Corporation Limited, which monitored the export of energy would raise bills for the net energy (export energy *less* import energy).

[94] The 'date of bill' raised against the power consumption for May 2011 is not on record.

The reply is not acceptable as the Division had failed in its duty to collect the power consumption charges in advance and raise bills periodically as per the extant Regulations resulting in loss of revenue of ₹ 1.39 crore. The Management also did not initiate any action against the officials responsible for collection of dues. Moreover, the Division failed to disconnect the power supply after the first default in payment. Lock out was a subsequent development and dues were recoverable much earlier. The possibility of recovery through Recovery of Dues Act is remote as the bankers of KSAPL had issued (July 2013/October 2013) notice for auction of KSAPL's assets and also filed case in the Supreme Court of India for recovery of their loans.

Karnataka State Industrial and Infrastructure Development Corporation Limited

3.12. Avoidable payment of Corporate Tax

Accounting of interest earned out of Government funds released for specific purposes as its own income led to avoidable payment of Corporate Tax of ₹ 1 crore.

The Karnataka State Industrial and Infrastructure Development Corporation Limited (Company) acts as a nodal agency to take up the investment activities on behalf of the Government of Karnataka (GoK).

GoK had provided (2006-10) funds towards land acquisition for Bangalore International Airport (BIAL) and also to form a Joint Venture Company (JVC) for development of City Gas Distribution (CGD) Project.

Audit scrutiny of utilisation of these funds revealed the following:

- GoK released ₹ 21.31 crore between January 2007 and March 2010 towards acquisition of land for construction of Trumpet Interchange and an approach road to Bengaluru International Airport. The Company spent ₹ 14.43 crore for land acquisition. The unutilised portion of the land was acquired by NHAI by paying ₹ 8.79 crore to the Company. Thus, the unutilised funds of ₹ 6.88 crore and ₹ 8.79 crore received from NHAI were parked in term deposits, which earned interest of ₹ 4.43 crore. The Company treated the same as its own income, on which Corporate Tax of ₹ 0.81 crore was paid.

- GoK released ₹ 7.98 crore to the Company for investing in a JVC for development of CGD project in Karnataka. The Company placed the fund in term deposits earning interest of ₹ 0.95 crore. The Company treated the same as its own income and also paid the Corporate Tax of ₹ 0.19 crore.

Audit observed that in both the above cases that the Company was acting as a nodal agency of the GoK and the funds were released for specific purposes. As per the advice (February 1996) of the ICAI-Expert Advisory Committee the interest income on short term deposits out of grant-in-aid received from Government should not be accounted as the Company's own income.

The action of the Company to treat the interest earned on the funds as its own income rather than adding it back to the respective funds resulted in payment of Corporate Tax of ₹ 1 crore.

The Government replied (October 2015) that the terms of release did not stipulate crediting interest to the funds and in the absence of any stipulation, it was accounted as income. Further in respect of CGD project, the Government stated that the amount released was an equity investment and shares had been allotted (June 2014) to it.

The reply is not acceptable as the GoK placed funds with a stipulation that the same should be utilised for the purpose of land acquisition and investment in JVC. As such, the interest earned should have been credited to the respective fund or refunded to the Government.

Karnataka Renewable Energy Development Limited

3.13. Renewable Energy Sector in Karnataka

Introduction

3.13.1. The Karnataka Renewable Energy Development Limited (KREDL), formed in March 1996, was nominated (August 1996) as the State Nodal Agency (SNA) for non-conventional and Renewable Energy (RE) sources[95] in Karnataka and was entrusted to identify, promote and develop projects in the RE Sector, which included projects in the small hydro, wind, solar, biomass and co-generation sectors. KREDL functions under the administrative control of the Energy Department, Government of Karnataka (GoK).

The energy demand in Karnataka for 2014-15 was 62,643 Million Units (MUs), against which energy generated was 60,668 MUs resulting in shortage of 1,975 MUs (3.15 *per cent*). The installed capacity as on 31 March 2015 was 16,967 MW, including 4,852 MW from RE sources.

Renewable Energy Policies

3.13.2. To promote RE sources, the GoI and GoK have initiated various policy measures. The GoI has formulated the National Action Plan on Climate Change (NAPCC) and National Solar Policy. The NAPCC envisages 15 *per cent* share of RE in the country's generation mix by 2020. Karnataka has achieved the target of 15 *per cent*.

The GoK formulated the 'Karnataka Renewable Energy Policy 2009-14' in January 2010 for systematic and faster development of RE sources, the 'Karnataka Semiconductor Policy' in 2010 to provide assistance to solar photo voltaic manufacturing units and the 'Karnataka Solar Policy 2011-16' in July 2011 for the development of Solar projects to meet Renewable Purchase

[95] Sunlight, wind, rain, tides, waves, geo-thermal heat and biomass, which are naturally replenished, are promoted for clean and green sources of energy.

Obligation (RPO)[96]. The Electricity Supply Companies (ESCOMs) had achieved the targeted RPO of 10 *per cent.*

Audit Objective and Scope

3.13.3. The objectives of the audit were to examine the role of KREDL/GoK in increasing the contribution to electricity from RE sources, providing access to electricity in remote and rural areas as well as its role in promoting research and development in the RE Sector.

Audit examined the records of KREDL, Rural Development and Panchayat Raj Department, GoK and Khadi and Village Industries Commission (KVIC) which implemented the various RE programmes in the State, based on the various Policy measures initiated during 2009 to 2015.

Targets and Achievements

3.13.4. The sectors under RE can be classified as Grid based projects and Off-grid based projects, depending on their connection to the electricity grid. In respect of grid based projects[97], the targets set in RE Policies issued during 2009-14 *vis-a-vis* the achievements in the various sectors of RE are given below:

Table No.3.1.2: Targets and achievements

RE Sector	Estimated Potential (MW)	Target fixed for 2009-14 (MW)	Achievement during 2009-14 (MW)	Cumulative as on 31 March 2015	Shortfall in Percentage (as at 31st March 2014)
Solar power	10,000[98]	256	17	85	93.34
Wind power	12,950	2,969	999	2,685	66.35
Small Hydropower	3,000	600	313	796	47.83
Biomass power	2,500	581	619	1286	No shortfall
Others (including Waste to energy)	135	50	0	0	100
Total	**28,585**	**4,456**	**1,948**	**4,852**	**56.28**

It could also be seen that a large quantum of estimated potential of RE sources was yet to be harnessed.

The sector-wise observations on RE are given in the following paragraphs.

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[96] The targets set by Electricity Regulatory Commission for the Electricity Supply Companies to purchase a certain percentage from RE sources.

[97] Off-grid based projects are discussed from paragraph 3.13.10.

[98] As per Solar Policy 2014-21.

Solar

3.13.5. KREDL had engaged (2011) the World Institute of Sustainable Energy (WISE) for an assessment of Solar potential in Karnataka. The Report, submitted in December 2011, was not discussed by the Board of Directors of KREDL nor any action taken thereon as envisaged in the road map.

The activities of KREDL were mainly limited to inviting competitive bids for purchase of Solar Energy by ESCOMs to meet their RPOs, processing the bids and allotting the projects to the successful bidders. KREDL has not identified sites suitable for establishing solar power projects. It was the Centre for Wind Energy Technology (C-WET), Chennai, an autonomous R&D institution established by MNRE, which had established (September 2011) five[99] ground level Solar Radiation Resource Assessment Stations in Karnataka and the raw and processed data were made available for sale by C-WET, so that potential developers could use them.

While accepting the audit contention, GoK stated (September 2015) that National Institute of Solar Energy had assessed the solar potential at 25 GW and hence WISE report was inadequate. However, considering the relevance of the report, the matter would be placed before the Board of Directors for their evaluation. The GoK informed (September 2015) that a Joint Venture company named Karnataka Solar Power Development Corporation Private Limited has been formed (March 2015) for establishing Solar parks in Karnataka.

3.13.5.1. The target of 256 MW under Solar power (Table 3.1.2) included 156 MW from RPO category and 100 MW under Rural Energy Certificate (REC) mechanism. Against this, only 85 MW has been achieved (March 2015) under RPO category. There was no achievement in respect of REC mechanism.

Further, it was envisaged in the RE Policy 2009-14, that preferential allotment of Solar Projects above 100 MW would be made to Karnataka Power Corporation Limited (KPCL), a State PSU. But, only two projects of 5 MW each were taken up by KPCL of which only one project of 5 MW was commissioned at the end of March 2015. In addition, in the 2011-16 Policy, Bundled energy of 50 MW was envisaged, against which the achievement was nil.

The shortfall was mainly on account of KREDL being involved only in finalisation of bids and leaving the development to the Independent Private Producers, rather than actively identifying, developing and promoting the sector as envisaged in its role as a Nodal agency.

3.13.5.2. The Solar Karnataka Programme, proposed (January 2013) to promote grid connected roof top solar power generators up to one MW capacity with 20 *per cent* State subsidy, was not implemented due to poor response from beneficiaries and the amount of ₹ 12 crore released by the GoK remained unutilised. GoK stated (September 2015) that the amount would be

[99] Kalaburgi, Vijapura, Chikodi, Bellary and Chitradurga.

used for the proposed Solar Pump Scheme for generation of power to run Irrigation Pump Sets.

3.13.5.3. As per Karnataka Solar Policy 2014-21, the GOK contemplated to provide financial assistance for development of solar parks through PPP. GoK also contemplated creating private land banks owned by farmers/associations for the development of solar projects on long term lease basis. GoK stated (November 2014) that it had initiated action by calling for Expression of Interest from farmers to lease their land for development of solar parks.

Wind

3.13.6. As per C-WET, the installable Wind power potential of the State was 13,593 MW. As per the RE policy 2009-14, the wind energy potential was 12,950 MW (Table 3.1.2). Against this, a total of 13,103 MW (570 projects) were allotted up to March 2015. But, only 2,685 MW (20.73 *per cent)* were commissioned up to 31 March 2015. Further, 47 projects (2,859 MW) had since been surrendered by developers and /or cancelled by the State Government and 145 projects of 3,652 MW have been recommended for cancellation by KREDL for non-implementation by the allottees. Thus, projects for only 3,907 MW were in progress as at 31 March 2015.

The RE policy allows a period of up to six and a half years from the allotment of the project for its commissioning. However, 160 projects (2,828 MW) allotted before 2007 were pending commissioning[100] at the end of March 2014, mainly due to non-remunerative tariff.

The State RE Policy 2009-14 envisaged that KREDL would obtain all statutory clearances from different departments beforehand and offer such lands for renewable energy project development. It was, however, seen that there were 18 wind projects[101] (569MW) pending for want of statutory clearances. As a result, addition to RE capacity did not happen.

MNRE had issued (June 1996) guidelines making SNAs responsible for clearance of wind power projects after ensuring adequate availability of wind at specific site and careful scrutiny of capital cost and cost of generation for optimal utilisation of the wind potential. KREDL, however, has not identified potential wind power sites. It was left to the Independent Power Producers (IPPs) to collect the wind data of the sites identified by them. KREDL made the allotments only, thereby limiting its role. Additionally, the C-WET had released (October 2013 to July 2014) ₹ 50.75 lakh for co-ordination activities for installation of 23 wind monitoring stations in Karnataka, the completion of which was under progress (March 2015).

The GoK replied (November 2014) that the guidelines issued by MNRE were not applicable to self-identified projects of the IPPs. The fact however

[100] Excluding 179 projects (5,373 MW) pending for less than 6.5 years.

[101] Three projects for 33 MW were pending for allocation of Revenue land and 15 projects for clearance from the Forest Department.

remains that the approach of the KREDL has not resulted in maximising the development of the wind potential of the State.

3.13.6.1. Further, while Central Electricity Regulatory Commission (CERC) had assigned higher tariffs for wind zones with lower Plant Load Factor (PLF), KERC had determined only one tariff rate for the period 2009-14, considering an average PLF of 26.5 *per cent*. As against this, the average PLF obtained by the wind power sector in Karnataka during the years 2008-09 to 2014-15 ranged from 19.51 *per cent* (2010-11) to 23.74 *per cent* (2012-13). The lower tariffs coupled with lower average PLF did not encourage prospective investors in wind energy sector in Karnataka.

GoK attributed (November 2014) the major setback for not achieving the targets for wind projects to the withdrawal of accelerated depreciation and non-viability of sites. GoK later informed (September 2015) that the GoI had reintroduced the accelerated depreciation from 2014-15. Regarding difference between CERC and KERC tariffs, the GoK stated (September 2015) that KERC invites the stakeholders to present their cases before fixing the tariff and the present tariff was one of the better tariffs in the country.

The fact remains that the tariff so fixed was not remunerative resulting in IPPs not completing the projects and the impact of re-introduction of accelerated depreciation was yet to be ascertained.

Monitoring

3.13.6.2. KREDL had no data on the extent of incentives released by MNRE/availed by the wind power generators. Further, the details of energy generated by individual wind generators were not available with the State Load Despatch Centre, which keeps the accounts of energy injected into the grid at the point of interface based on 'bulk meter' readings. There was no regular monitoring of the electricity generated by the wind generators. As a result, it had failed to perform its role as a State Nodal Agency for the development of RE in the State.

Small Hydro Power (SHP)

3.13.7. As per RE Policy, a potential of 3,000 MW had been identified under SHP. KREDL had not conducted any survey for identification of the projects and their potential. The developers themselves identified the sites for projects, prepared feasibility reports and approached the KREDL for approval.

KREDL had set a target of 600 MW for the period 2009-14 but the achievement was only 313 MW. The cumulative potential created up to the end of March 2015 was 796 MW. KREDL had not analysed the reasons for shortfall.

3.13.7.1. In Western Ghats / Forest areas, keeping in view the environmental issues, only mini hydro projects of up to 5 MW and run-of-the-river projects are encouraged.

Audit, however, noticed that out of 295 pending projects, 208 projects (1,335 MW) were pending for approval from the Forest Department and MoEF for periods varying between 2.25 years and 21 years (from the date of allotment), as the projects were located in the Western Ghats.

GoK informed (November 2014) that obtaining clearances in this ecologically sensitive region was a major hurdle for the implementation of projects and achieving targets.

The State Level Empowered Committee formed (May 2010) for facilitating clearances, thus has not been effective in obtaining the requisite approvals.

Biomass

3.13.8. As per RE policy documents, the biomass potential of the State was considered as 2,500 MW (including co-generation) based on the assessment carried out (2004) in coordination with MNRE (Table 3.1.2).

3.13.8.1. During 2009-14, as against the target of 300 MW for biomass non-bagasse, only 20 MW was commissioned. Thirty six biomass projects (232 MW) sanctioned between 2001 and 2013 were pending implementation. GoK attributed (September 2015) the non-achievement to non-availability of feed stock, seasonality of feed stock availability, crop failures and non-coverage of insurance to feed stock risk besides stating that the tariff was not encouraging for biomass non-bagasse. Audit observed that even the internationally acclaimed and first of the biomass projects (Malavalli) in the State stopped functioning from 2011 onwards due to non-remunerative tariff.

3.13.8.2. As against the target of 281 MW in the biomass-bagasse category, the achievement was 599 MW. The achievement was substantially higher owing to implementation in the bagasse based co-generation plant in the sugar industry. Even though there was good progress, 20 projects (380 MW) sanctioned prior to 2013 were still pending implementation. KREDL has not analysed the reasons for the non-implementation of the projects.

Audit reviewed eight projects in this sector. KREDL did not have the data relating to six projects and Central Financial Assistance (CFA) related information like copies of sanction order/release order was available in file only in two cases. Periodic monitoring of the progress of implementation of biomass projects by KREDL was absent. As such, the reasons for delay in implementation could not be analysed.

Waste-to-Energy project

3.13.9. Reference is invited to Table 3.1.2 on targetted power generation from other sources. The Bruhat Bengaluru Mahanagara Palike (BBMP) had entered (June 2005) into an agreement with Srinivasa Gayathri Resources Recovery Limited (SGRRL) for establishing an integrated Waste to Energy project at Mandur village, near Bengaluru. As per the arrangement, BBMP would supply 1,000 tonnes of Municipal Solid Waste (MSW) per day to the site and provide land required for the processing plant and landfill. The project envisaged setting up an 8 MW power plant for energy recovery through incineration[102] and land fill facility for inert waste. The project was to be commissioned in 20 months from the date of handing over the site.

BBMP handed over 35 acres of land required for the project in September 2005. MNRE accorded (March 2009) CFA of ₹ 10 crore and released (December 2010) first instalment of ₹ five crore. As per the sanction of CFA (March 2009), the total cost of the project was ₹ 70.33 crore.

The Project Evaluation Committee[103] set up for the purpose which met in March 2011 observed that necessary equipment like dioxin mitigation systems, had not been installed and stated that SGRLL must complete the work, without which the project will not be considered as commissioned. SGRRL contended (March 2011) that equipment for mitigation of pollutants was not envisaged in the original DPR and that such additional equipment required additional outlay of ₹ 19.40 crore.

The Project Monitoring Committee concluded (October 2012) that financial assistance of ₹ 10.50 crore would be provided by KREDL (₹ 5 crore), BBMP (₹ 2.50 crore) and BESCOM (₹ 3 crore) and recommended extension of project implementation period till March 2013. Even though KREDL had approved advance of ₹ 5 crore against MNRE subsidy, it did not release the same pending concurrence from MNRE. As per a project status report submitted (February 2014) by the developers, they had spent ₹ 73.34 crore on the project and an additional sum of ₹ 15 crore was required to complete the project. The project was yet to be completed (September 2015).

Meanwhile, unscientific dumping of unprocessed MSW on the site had invited huge public protests and the landfill was proposed to be closed. Thus, even after 12 years from inception and spending ₹ 73.34 crore, the integrated Waste to Energy project did not fructify (September 2015) defeating the objective of scientific disposal of solid waste apart from non-realisation of the incremental addition in generation of power from a renewable energy source.

The GoK in its reply of November 2014 stated that it had 'noted' the audit observation. In its reply of September 2015, the GoK detailed the developments only up to August 2012. The fact remains that the funding has not been provided and the project is on a standstill (September 2015).

Off-grid Programmes

3.13.10. The achievement in respect of Off-grid programmes are given in succeeding paragraphs.

[102] Destruction of waste by controlled burning.

[103] Consisting of representative from MNRE, KREDL, BBMP, lending banks and experts from technical institutes was also to be constituted for monitoring and evaluating the performance of the project.

Remote Village Electrification (RVE)

3.13.11. MNRE channelised grants for the RVE program through KREDL, which executed the program in 62 villages during 2005-08, after which the program was stopped. KREDL does not have the data base of the functional and non-functional projects.

On test check of one village (Shettihally in Shivamogga district) where RVE was implemented, it was observed that the Solar Photo Voltaic System (System) was not working in any of the 44 houses (including one school) in the village due to poor maintenance. There were no maintenance contracts for the systems installed and it was informed that the system had failed after working for two to three years, although the system was required to work for five years.

Solar Photo Voltaic (SPV) Programmes

3.13.12. KREDL has implemented SPV projects for installing Solar Home Lights (11,383 nos), Solar Street Lights (1,483 nos) and Solar Lanterns (5,165 nos) at various places in Karnataka and the CFA released by GoI was ₹ 5.40 crore.

Physical verification of one *per cent* sample of the above installations conducted by Audit along with the representative of KREDL revealed that out of the 115 home lights verified, only 2 were working. Further, out of 15 streetlights and 50 lanterns test checked, none was working reportedly due to poor maintenance. Most of the beneficiaries were not satisfied with the performance of the installations. These units worked for periods ranging from six months to three years and the agency, which supplied and installed these units visited them only once after the installation and did not attend to the problems. GoK replied (November 2014/September 2015) that the systems worked during the warranty period and the beneficiaries thereafter should have gone in for Annual Maintenance Contracts and Audit had visited these locations much after warranty periods, when its performance diminished. However, the fact remains that the purpose for which this project was implemented was unsuccessful and dependence on kerosene and fossil fuels continued.

Biogas

3.13.13. The biogas projects are implemented by Rural Development and Panchayat Raj (RDPR) Department, GoK and Khadi and Village Industries Commission (KVIC). As against the target (2007-14) of installing 87,029 biogas plants, the achievement was 72,033 plants[104].

RDPR had not conducted any survey to identify renewable energy potential from biogas. Though MNRE has mandated that the beneficiary list may be updated on the website, RDPR had not taken action to upload the same, while KVIC has uploaded data only for 2009 to 2011. GoK replied (November

[104] RDPR : Target -76,748 plants *vis-a-vis* Achievement- 62,252 plants.

2014) that it had requested the National Information Centre (NIC) to upload the data on the website.

3.13.13.1. Audit noticed the following irregularities as a result of physical verification of biogas plants in Belagavi, Udupi, Shivamogga and Tumakuru districts under RDPR:

- The MNRE enhanced (November 2009) additional CFA for toilet linked biogas plants from ₹ 500 to ₹ 1,000 per plant, but this was not passed on to 13,287 beneficiaries in Belagavi district (ZP) resulting in short payment of additional CFA of ₹ 66.44 lakh[105].

- Though the photographs of the beneficiary with the completed biogas plants were to be kept along with the Central/State Financial Assistance (CFA/SFA) disbursement records, there were no photographs in respect of 243 applications (Belagavi, Tumakuru and Shivamogga ZPs) and as such Audit could not ensure that the amount of ₹ 26.34 lakh was released to the appropriate beneficiaries. Further, the photographs showed (Udupi and Shivamogga ZPs) incomplete bio-gas (without pipes, connection *etc.*,) and as such the release of ₹ 7.25 lakh was also irregular.

- The CFA and SFA of ₹ 3.22 lakh released by Udupi ZP (46 beneficiaries) was irregular as there were no details of the dates of construction and the commissioning of the biogas plants in their completion reports. The GoK attributed (November 2014) this to clerical error.

- During physical verification of 35 biogas plants in Udupi, Shivamogga and Tumakuru ZPs under RDPR, 10 biogas plants were found to be non-functional due to poor maintenance. On interaction with the beneficiaries, they informed that they were using LPG and firewood for cooking purposes. The GoK replied (November 2014)that beneficiaries were not attending to the plants, there was no availability of cow dung and beneficiaries were inclined to use LPG.

- The Bio-Energy Technology Development Group, MNRE requested (October 2010) GoK to review the field inspection report on the Biogas based CDM projects installed at Bagepalli by Agricultural Development and Training Society and furnish information to the MNRE so that future action for development of CDM projects in the State could be initiated. RDPR prepared a Draft Expression of Interest document for providing upfront additional financial assistance for construction of 50,000 'Deenabandu Model Family' type biogas plants during 2010-13 under CDM route by availing 'carbon emission reduction revenue' out of biogas plants. No further action has been initiated in this regard (August 2014).

[105] 13,287 Nos. of toilet linked biogas plants constructed during 2010-11 (4,357 Nos.), 2011-12 (3,026 Nos.), 2012-13 (3,347 Nos.) and 2013-14 (2,557 Nos).

Research and Development

3.13.14. One of the objectives of MNRE/KREDL was to promote research, design and development of domestic manufacturing industry in Renewable Energy sector.

KREDL had not undertaken any Research and Development activities. It was noticed that Indian Institute of Science (IISc), Bengaluru has been conducting Research and Development activities in Biomass energy in thermo-chemical conversion, while the University of Agriculture Sciences had implemented the Biogas based Power Generation Programme.

General

3.13.15. In addition to the progress achieved in the individual sectors, the Policy documents envisaged various measures for development of RE Sector. Non-achievement in a few areas are given below:

- In order to facilitate funding for Renewable Energy projects, Energy Conservation and Efficiency measures, it was proposed in the Karnataka Renewable Energy Policy 2009-14 to establish a Green Energy Fund 'Akshaya Shakthi Nidhi' by levy of cess on the electricity supplied to commercial and industrial consumers. At the end of March 2015, the Green Energy Fund of ₹ 69.91 lakh, was yet to be utilised, for want of approval from KERC.

- As part of the Facilitation under the Karnataka Renewable Energy Policy 2009-14, the Company was to take steps to develop Model Development Plan (MDP) to harness targetted capacities of various RE Sources. The MDP was not developed. GoK agreed (November 2014) for compliance in future.

- Quarterly review of the progress of approved RE projects was not carried out, to which the GoK replied (November 2014) that progress was updated on daily basis in their website. The reply did not address the issue, as updating data alone would not be sufficient to expedite the progress of RE projects. MNRE had released ₹ 268.34 crore as Central Financial Assistance (CFA) to Karnataka during 2009-14. KREDL, though nominated as the State Nodal Agency, had no information on the releases (including allocation to various sectors) as there were a multitude of agencies implementing RE projects in the State without the assistance/ information of KREDL.

Conclusions

The capacity addition to the Solar and Wind power sectors was very low when compared to the targets set, with large quantum of RE sources remaining to be harnessed. KREDL had limited its role to invitation of bids and allotment of projects, rather than getting involved in identifying, developing and promoting the RE sector as envisaged in its role as a Nodal Agency. In respect of Small Hydro Projects, though State Level

Empowered Committee was set up to facilitate various statutory clearances, 208 projects (1,335 MW) were awaiting clearances from Forest Department and MoEF, as the projects were located in Western Ghats. Further, the additions to capacity to the biomass sector failed for want of raw material and remunerative tariff. The Waste-to-Energy project of the BBMP, which envisaged energy recovery through incineration and land fill facility using Municipal Solid Waste had not fructified even after 12 years of its conception. The Green Energy Fund established for the development of RE sector had not been utilised. Further, though KREDL was nominated as the State Nodal Agency, it had no information on the financial assistance released directly by MNRE to the RE developers in the State.

Recommendations

KREDL being the State Nodal Agency must take up a pro-active role for the development of RE in the State by involving in the identification, development and promotion of the RE sector, rather than leaving it to the private developers. Statutory clearances must be expedited, so that the identified/allotted RE potential are harnessed at the earliest. The measures for development of RE Sector envisaged in the Policy documents *viz*., identification of land, setting up of solar parks, PPP, utilisation of Green Energy Fund *etc*., must be the focus areas so that the contribution of clean energy from the RE sector to the energy pool increases.

Karnataka State Tourism Development Corporation Limited

3.14. Inefficient operation of taxi services

The Company failed to ensure compliance with the operational standards and also establish an effective call centre for the operation of taxi services to the Bengaluru Airport.

Introduction

3.14.1. The Karnataka State Tourism Development Corporation Limited (Company) was formed (1971) with the objective of promoting tourism in the State and operates hotels, restaurants and conducts tours. It also facilitates the operation of taxis services to the Bengaluru Airport.

In the background of the recent incidences regarding the safety of commuters availing taxi services in the country, coupled with complaints to the Lokayukta by taxi drivers about the inefficient operations of the Company's call centre manning the taxi services, and complaints by commuters, Audit reviewed the taxi operations of the Company.

3.14.2. The Company had entered (December 2008) into agreement with Kempegowda International Airport Limited[106] (KIAL) to operate Air-Conditioned (AC) taxis at the Bengaluru Airport, which was renewed in

[106] Erstwhile Bangalore International Airport Limited.

December 2010 and June 2013. Another agreement was entered into in December 2010 to operate non-air conditioned taxis, which was renewed in June 2013.

As per the terms of the agreements, the Company was to ensure that the vehicles and drivers complied with the operating standards and vehicle type and equipment, as prescribed by KIAL from time to time. The taxis were to be equipped with Global Positioning System (GPS) based technology with Mobile Data Terminal (MDT), digital meter, printer and all the bookings, were to be controlled by an advanced 'Taxi Dispatch System' from one central reservation centre, to pick passengers to the Airport. The Company was permitted to operate 500 AC taxis and 150 non AC taxis and was to pay minimum monthly guaranteed revenue share[107] to KIAL. The Company also entered into agreements with taxi owners to operate the taxis and the compliance with operating standards formed part of the agreement.

Non-compliance with operating standards

3.14.3. Audit assessed the compliance of the Operating Standards prescribed to the taxi drivers in the agreements by conducting a test check of 154 agreements[108] of the 531 taxis[109] as prescribed by KIAL from time to time.

Table No.3.1.3: Statement showing the compliance with operating standards in test checked cases

Operating Standards prescribed in agreements	No of cases of non-compliance	Remarks
Drivers were to provide Police verification certificate, as drivers were not to have any criminal cases pending against them.	149	Details of police verification were not in the file. This excludes 18 cases, where owners had employed drivers, whose verification details are also not available.
Drivers were to submit medical certificate annually.	153	Details not available in the file.
Company was to ensure that there was comprehensive insurance coverage for vehicles, covering the life of driver and passengers.	111	108: Insurance had expired. 3: Details not available.
Company was to collect vehicle registration certificate from drivers and provide to KIAL.	1	1: Not available.
To ensure that all vehicles had a permit from Regional Transport Organisation.	14	12: Permits expired. 2: Details not available.
To ensure that all vehicles complied with emission norms.	134	73: Validity of certificates expired. 61: Details not available.

[107] The higher of : ₹ 90 per transaction of AC taxis and 10 *per cent* of the gross turnover for non-AC taxis, with a monthly minimum guaranteed revenue share of ₹ 50,000 up to December 2013, increased periodically up to ₹ 65,000 till December 2016, for AC taxis and ₹ 24,000 for Non-AC taxis up to November 2016.

[108] 139 agreements for operating AC vehicles and 15 agreements in respect of Non-AC vehicles, on random basis as provided by Company, so as to have a coverage of about 30 *per cent*.

[109] Based on total Radio Frequency Identification (RFID) issued.

Operating Standards prescribed in agreements	No of cases of non-compliance	Remarks
To ensure that all vehicles complied with meter calibration.	109	81: Validity expired. 28: Details not available.
Company was to ensure that all vehicle older than four years or which have run above 2,50,000 Kms, should be replaced.	53	51: Year of manufacture more than four years. 2: Year of manufacture not available. (In all cases running kilometres was not available.)
All vehicles to have MDT tracking device and will be monitored on screen with help of GPS tracking system, for safety and quick response time for the customer.	61	No details about fixing of GPS.
Any person can have only one agreement for operation of a taxi. Any person shall have right to operate only one taxi.	3	2: Agreement with two taxis. 1: Agreement with three taxis.

The documentation maintained by the Company was very poor as could be noticed from the above table.

Test check of the number of vehicles active for the period from November 2014 to September 2015 revealed that 118 to 223 taxis were inactive during the period indicating that MDT tracking devices were switched off, putting the safety of passengers at risk.

Further, it was also observed that training was not provided to drivers as required under the operating standards. The training was necessary as it aimed to improve the interaction with the customers, follow the do's and don'ts, telephone etiquettes, *etc*., so as to ensure customer satisfaction.

The Government and Company replied (September/October 2015) that records had not been updated but stated that action was taken to update the records, obtain the necessary records and install/upgrade the tracking devices. The Government assured to provide training to drivers once in six months. Action taken on updating the records, installing devices and providing training was awaited (November 2015).

Complaints by commuters

3.14.4. The agreements defined prohibited acts while waiting at the airport premises and driving. The Company had the obligation to maintain a software based complaint register, accessible at any time by KIAL, but it was not maintained. The complaints were either in the form of mails to the Company or were entered in the register (manual) maintained by the Manager at the Bengaluru Airport.

On verification of the available complaints (through emails) during the period August 2012 to April 2015, and the complaint register at the Airport for the period from October 2014 to June 2015, Audit noticed that complaints were mainly regarding unsafe and rash driving (15 cases), incorrect billing (37 cases), misbehaviour by drivers (22 cases), impersonation (4 cases), poor maintenance of vehicle (8 cases), other reasons (33 cases)[110]. Of these 119 cases, in 26 cases, the Company had taken action to refund amounts, obtain apology from the drivers and disconnect the RFID cards making the cars inactive.

Management of call centre operations

3.14.5. The Company had entrusted the task of establishing and running the call centre to Bengaluru Airport KSTDC Drivers Welfare Association (KTDWA). However, after receipt of complaints, the Company entered into (December 2012) two agreements with CERT Info Track Telematics Private Ltd (CITT)[111], for 'Managing taxi dispatch system call centre on 24x7 basis' and for 'Installation and commissioning of GPS based taxi dispatch system' for ₹ 900 per taxi per month and ₹ 300 per taxi per month respectively. Agreements were also entered with individual taxi owners to operate the taxis from Airport from whom an amount of ₹11,700 per month (excluding service tax) was collected as parking fees and call centre charges.

Audit observed that CITT had commitment to provide one business per taxi per day and considering 531 taxis, a total of 15,930 trips had to be provided per month. But, the check of bookings between April 2013 and April 2014 revealed that CITT had provided only about 329 to 804 trips per month for the 531 taxis. Though the company paid ₹ 68.89 lakh to CITT in 2013-14, in the absence of suitable clause in the agreement, penalty was not levied.

Further, if taxi drivers did not remit the call centre and parking charges in advance, the RFID tags of the vehicles were to be disconnected. This however was not done and the taxis were allowed to continue the operations resulting in accumulation of call centre charges of ₹ 10.65 lakh at the end of June 2015 and the amounts were outstanding for periods ranging from two months to one year. Government replied (September 2015) that recovery was being pursued.

The services of CITT were terminated as per the directions (October 2014) of Upa Lokayuktha, after the taxi drivers complained that they were being denied legitimate business per taxi per day, as the call centre provided information to other taxi operators. Thereafter, the Company invited fresh tenders, and during October 2015, new agreements were entered with Idea Infinity IT Solutions Private Limited and Infotrack Telmatics Private Limited to operate the call centre and operate GPS tracking for the taxis.

Thus, the Company had failed to establish a proper call centre for its taxi operations, in the last seven years, though it had incurred ₹ 1.15 crore as call centre expenses during 2008-14.

[110] Four cases were without mentioning nature of complaint.
[111] Along with Transact BPO Services India Pvt Limited.

Service Tax

3.14.6. The radio taxi service was liable to pay Service Tax with effect from 1 October 2014. But, the Company collected Service tax alongwith parking fees only from April 2015 onwards, with the result that the liability of ₹ 1.33 crore[112] (excluding interest) for the intervening period (October to March 2015) had to be borne by the Company.

Deficiencies in Internal Control

3.14.7. The Internal Audit conducted by Chartered Accountants had highlighted various deficiencies in the internal control system and non-compliance to operating standards in the operation of taxi services. The Board of Directors had also not been apprised of the Reports. The Company had not discussed the Internal Audit Reports.

Conclusions and Recommendations

Failure of the Company to ensure compliance with the operational standards and establish an effective call centre to facilitate taxi service to the commuters going to the Bengaluru Airport, had put to risk not only the image of the Company and the city of Bengaluru, but also the safety of commuters, which is of paramount importance. The operations of the call taxi need to be revamped with focus on the customer.

[112] Calculated based on the Minimum Guaranteed Revenue payable to KIAL as per the agreements.

Statutory Corporations

Karnataka State Warehousing Corporation

3.15. Augmentation of storage capacity and operations of warehouses

Introduction

3.15.1. The main functions of the Karnataka State Warehousing Corporation (Corporation), *inter alia*, include construction and management of warehouses in the State for storage of agricultural produce, seeds, manure, fertilizers, agricultural implements and other notified commodities and preserving them scientifically. The Food Corporation of India (FCI), Karnataka Food and Civil Supplies Corporation Limited (KFCSC), fertilizer companies and individuals are the major users of the storage facilities of the Corporation. The Corporation also hires private warehouses to cater to the demand made by the users. It has 135 warehouse centres (having a total of 466 warehouses) with storage capacity of 13.92 lakh MTs (including 3.50 lakh MTs of hired warehouses) in seven Regional Offices spread across the State as on 31 March 2015.

Warehousing (Development and Regulation) Act, 2007

3.15.2. The Government of India had notified the Warehousing (Development and Regulation) Act, 2007 in September, 2007 with a view to promote professional organisations connected with the warehousing business. The Provisions of the Act had become effective from October 2010. For the operationalisation of the provisions of the said Act, a Warehouse Manual had been prepared by the Warehousing Development and Regulatory Authority (WDRA).

Audit Objective and Scope

3.15.3. The objective of this audit was to assess whether the augmentation of storage capacity of the Corporation was as planned, whether the warehouses were operated and maintained as per the desired standards of scientific storage management specified in the manual of Warehousing Development and Regularity Authority.

Audit scrutinised the records maintained at the Corporate Office and 17[113] (118 warehouses) out of 135 Warehouse Centres under the jurisdiction of four Regional Offices[114] of the Corporation covering the period 2010-11 to 2014-15. Audit also test checked 51 of the 147 construction contracts[115] (construction of warehouses) executed during the audit period. Audit findings have been discussed in the succeeding paragraphs.

Capacity augmentation

3.15.4. The Corporation had taken up augmentation works during 2010-15 envisaging the addition of storage capacity by 5.49 lakh MTs by constructing 147 warehouses at a total cost of ₹ 338.86 crore. The augmentation was funded under the schemes of GoI *viz.*, Rashtriya Krishi Vikas Yojane (RKVY), Rural Infrastructure Development Fund (RIDF), Private Entrepreneurs Guarantee Scheme (PEG), through NABARD and partly through internal resources of the Corporation.

Audit observed that the Corporation added 3.57 lakh MTs (65 *per cent*) with 84 warehouses as at 31 March 2015. Thirteen out of 147 warehouses (27,000 MTs), which were due to be completed in 2013-14 were still under progress (March 2015) and the balance 50 warehouses (1.65 lakh MTs) were due to be completed during 2015-16[116].

The table below shows the extent of delay in completion of warehouses from the scheduled date of completion in respect of 32[117] out of 51 construction contracts test checked by Audit.

Table No.3.1.4: Details of delay in completion of warehouses

No. of months delay from the scheduled date	No. of warehouses	Reasons for delay
< 2 months	5	Defective estimate, change in scope and design, contractors' delay, increase/decrease in capacity of warehouses
>2 months < 6 months	4	
>6 months < 12 months	14	
>12 months up to 18 months	9	

(Source: Information furnished by engineering section of the Corporation)

Audit analysis of reasons for non-achievement of envisaged capacity and its impact revealed that:

- In 18 cases, the Corporation was responsible for the delay in completion due to delay in handing over of the site to the contractors, defective estimates, change in scope and design, *etc.* This had not only

[113] Kalaburgi Region:- Kalaburgi, Muddbehal, Bidar, Shahpur, Yadgir; Mysuru Region:- Mysuru, Chamarajanagar, K.R Pet, Mandya, Kushalnagar; Raichur Region:- Raichur, Koppal, Bellary, Kustagi; Shivamogga Region:- Shivamogga, Shikaripura, Mangaluru

[114] Kalaburgi, Mysuru, Raichuru, Shivamogga.

[115] The awarded cost of 147 contracts: ₹ 338.86 crore; Awarded cost of test checked cases (51): ₹ 211.72 crore.

[116] Earliest due date for completion of these warehouses being January 2016, except one contract which was due in September 2015.

[117] The works in balance 19 warehouses were in progress which were due for completion in 2015-16.

resulted in non-achievement of envisaged storage capacity but also increase in cost by ₹ 5.03 crore (11 warehouses);

- In 17 cases, the Corporation did not levy penalty on contractors as per the agreements (Clause 12) for the delay in completion, though penalty of ₹ 4.25 crore was leviable. The levy of penalty would have acted as a deterrent for containing the delay and in achieving the envisaged storage capacity in time;

- The delay had caused loss of potential revenue of ₹ 7.58 crore[118] by way of storage charges, besides avoidable payment of ₹ 3.60 crore[119] towards rent on hired warehouses.

The Government replied (October 2015) that orders have been issued (September 2015) to recover the penalty. Audit observed that the Corporation was yet to recover the penalty (December 2015).

Construction of warehouses under PEG- 2008 Scheme

3.15.5. The warehouses constructed under the Private Entrepreneurs Guarantee Scheme[120] (PEG-2008) of GoI provided for guarantee of assured storage charges by FCI for six to nine years. The Scheme stipulated certain specifications according to which warehouses were to be constructed. The Corporation constructed 11 Warehouse Centres[121] (32 Warehouses) during 2012-15 under the Scheme with a total capacity of 1.73 lakh MTs at a cost of ₹ 95.89 crore.

Audit observed that FCI utilised only five Warehouse Centres[122] (15 Warehouses) of them having capacity of 0.65 lakh MTs. The balance six warehouse centers of 1.08 lakh MTs (17 Warehouses) capacity were not utilised by FCI as the Corporation had failed to ensure that the construction was as per the stipulated specifications under the Scheme *viz.,* 15 metres' width road in between two rows of warehouses and partition wall inside the warehouses. As a result, the Corporation lost the opportunity of assured storage. The occupancy levels in four[123] out of the six Warehouse Centres (14

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[118] Revenue loss is calculated for the period of delay in completion of construction at ₹ 60 per MT per month considering 75 *per cent* as optimal occupancy.

[119] Represents actual rent paid by the Corporation for the period of delay in completion from the scheduled date to actual date of completion in respect of completed works and from scheduled date to March 2015 in respect of work in progress.

[120] To meet the situation arising out of high procurement level of wheat and rice as a result of increase in Minimum Support Price and to reduce the storage in Cover and Plinth, the GoI formulated (2008) for creation of additional storage capacity for food grains through private sector, CWC and State Warehousing Corporations.

[121] Bagalkote, Belagavi, Hassan, Mandya, Chitradurga, Mysuru Unit-III, Hairhara, Chickmagalur, Raichur, Chamrajanagar, Vijapura.

[122] Mysuru Unit-III (3 warehouses:13,000 MT), Mandya (1 warehouse: 3,500 MT) Raichur Unit-II (2 warehouses:5,750 MT), Hassan (3 warehouses:9,000 MT), Chitradurga (4 warehouses: 27,000 MT) and Harihar (2 warehouses: 6,500 MT)

[123] Two of six warehouse centres (Mandya- two warehouses, Bagalkote-1 warehouse) were occupied by Karnataka Food and Civil Supplies Corporation Limited. The balance four warehouses *viz.* Chickmagalur, Vijapura, Bagalkot and Mysuru Unit-III were occupied by other depositors.

Warehouses) utilised by other depositors remained at less than 35 *per cent.* Consequent to non-occupation of warehouses by FCI and poor occupancy in these four warehouses, the Corporation had foregone the assured revenue of ₹ 9.73 crore[124] during March 2013 to October 2015.

The Government replied (October 2015) that if the standard specifications of FCI for construction of warehouses were scrupulously adopted, the storage capacity of the warehouse would be reduced substantially and the revenue to the Corporation would also be reduced.

The reply is not acceptable as the warehouses under the Scheme were to be constructed specific to the requirement of FCI. Further, in the absence of the Corporation's ability to fill up the storage capacity without the FCI's assurance of storage, the contention of reduction of revenue made by the Corporation also does not hold good.

Ineffective system of collection of storage charges

3.15.6. As per the Schedule of storage and other charges of the Corporation, the storage charges were required to be paid by the depositors at the time of delivery or on accrual basis. The storage charges realised on accrual basis should be adjusted against total charges due at the time of lifting the stock.

A review of the system of collection of storage charges prevailing in the Corporation revealed the following deficiencies:

- There was no system of intimating the depositors of the rates applicable for the stocks stored, the periodicity of payment of storage charges, conditions with regard to revision of charges, *etc.* The Corporation merely issues a warehouse receipt to the depositor at the time of deposit, which is valid for three months without mentioning the above terms. The warehouse receipt mentions only the details such as name of the depositor, name and quantity of the items stored, period of storage.

- There was no mechanism of collecting storage charges from the depositors as and when they had accrued but only at the time of lifting the stock by the depositors. The Corporation failed to take advantage of the tenure of three months for the warehouse receipts, when it could have exercised its option of collecting the accrued charges and then renewing the receipt. In the test checked regions of Kalaburgi, Raichur, Mysuru and Shivamogga, ₹ 3.56 crore was outstanding as at March 2015 from 5,209 depositors despite comments to this effect by internal audit.

The Government replied (October 2015) that at the time of lifting the stock, full storage charges would thereafter be realised from the date of deposit to the date of taking delivery of stocks. The depositors, basically small farmers, might not be in a position to pay the storage charges midway before taking

[124] The loss is worked out on unutilised capacity of 14.39 lakh MTs at ₹ 67.60 per MT in respect of four warehouse centres *viz.* Chickmagalur, Vijapura, Bagalkot and Mysuru Unit-III. The actual capacity of these four centres was 19.02 lakh MTs.

delivery of goods. If the Corporation insisted on paying the accrued storage charges, the farmers might avoid storing their stocks.

The reply is not acceptable as collection of storage charges at the time of taking delivery of stocks, instead of accrual basis, was not in line with the provisions of the schedule of storage charges. As such, the Corporation needs to collect as per the schedule of charges to avoid accumulation of arrears.

Non-revision of agreement

3.15.7. The agreement (June 2003 to June 2008 extended to June 2013) with Karnataka State Beverages Corporation Limited (KSBCL) to utilise storage space of 1,95,654 square feet at 14 Centres was not renewed in June 2013 by the Corporation though the revised agreement was signed and forwarded (June 2013) to it by KSBCL. The Corporation continued to claim storage charges at ₹ 7.98 per square feet prevailing as of June 2013 for the period beyond June 2013.

Meanwhile, the Board of Directors of the Corporation decided (June 2014) to revise the storage charges at ₹ 12 per square feet per month and to incorporate it in the revised agreement. The Corporation failed to sign the revised agreement and to abide by the decision of the Board. There were no recorded reasons for such inaction of the Corporation. There would be short recovery of ₹ 1.34 crore[125] due to non-revision of rates to ₹ 12 per square feet per month with effect from June 2014 as per the decision of the Board.

As per the agreement, storage charges were to be increased once in two years by 10 *per cent* on the existing storage charges. Considering this, the Corporation should have recovered ₹ 0.19 crore at ₹ 8.78 per square feet per month for the period June 2013 to May 2014, which stood foregone due to non-revision of agreement.

The Government replied (October 2015) that the revision of storage charges to ₹ 12 by the Board was communicated to KSBCL, but no reply has been received from them. It further stated that the Corporation was still pursuing KSBCL to accept the revised storage charges.

Audit observed that the Corporation continued to claim at ₹ 7.98 per square feet per month till date (October 2015), despite increase in rate by the Board, thereby incurring recurring loss.

Absence of binding agreement

3.15.8. The Corporation handed over (2013-15) storage space of 76,331 MTs in 33 Warehouse Centres spread across the State, to Karnataka Food and Civil Supplies Corporation (KFCSC), for storing the stocks of Public Distribution System (PDS). The rates for storage were charged as per the Schedule of Rates approved by the Board. The Corporation had not entered into any agreement with KFCSC setting out the terms for storage.

[125] Difference between the rate of actual claim (₹ 7.98) and increased rate (₹ 12) for 1,95,654 square feet from June 2014 to October 2015.

The Corporation had revised the existing storage charges to ₹ 9 and ₹ 12 per square feet for Slab-I and Slab-II respectively[126] with effect from June 2014 which was not agreed to by KFCSC. The request of KFCSC to collect charges at ₹ 4.50 per square feet was rejected (December 2014) by the Corporation.

The Board, however after reconsidering the request of KFCSC, approved (October 2015) reduction in storage charges to ₹ 6.75 and ₹ 9 per square feet as against ₹ 9 and ₹ 12 per square feet for Slab-I and Slab-II warehouses respectively. The Corporation was yet to get acceptance from KFCSC (October 2015). The reduction in storage charges would entail the Corporation loss of revenue by ₹ 1.04 crore, besides accumulation of dues to the extent of ₹ 3.11 crore[127] for the period June 2014 to October 2015.

Thus, the Corporation, by handing over the storage space to KFCSC without any binding agreement, had ended up not only losing the revenue but also holding up of realisation of dues.

The Government replied (October 2015) that as per the decision taken under the chairmanship of Food Commissioner, GoK, the storage space was offered to KFCSC for storing PDS stocks. A reasonable price would be fixed without affecting the interest of both the Corporations and once the price is finalised, the Corporation would realise the dues in arrears.

Storage losses

3.15.9. FCI stored rice and wheat in the warehouses of the Corporation during 2010-15. The Corporation was responsible for transporting and storing the stocks adhering to the norms specified by FCI from time to time. Audit noticed that FCI had recovered ₹ 1.31 crore from the Corporation towards transit and storage losses beyond the norms of FCI during the period from 2010-11 to 2014-15.

The Corporation failed to establish that the excess losses were beyond the controllable factors and proposed (April 2015) a meeting with FCI to resolve the issue which is yet to be convened (October 2015).

The Government replied (October 2015) that the stock was loaded at the loading point without the presence of Corporation's representative and any loss during the transit was recovered by the FCI arbitrarily. A joint meeting was proposed to sort out the issue. Action would be taken to recover the losses from the warehouse managers concerned if the losses were not justified properly.

The Corporation should have ensured presence of its representative at the loading point to certify the actual quantity loaded to avoid recurring losses. Since the Corporation is facing this problem every year, the matter should have been taken cognizance of much earlier and attempted to be sorted out at the earliest to mitigate further losses.

[126] The Corporation had classified the warehouses under three slabs depending on the rating of warehouses *i.e.* Standard (Slab-I), Average (Slab-II) and High rated (Slab-III).

[127] Storage charges calculated as claimed by the Corporation at ₹ 6.75 and ₹ 9 per square feet.

Scientific storage management

3.15.10. As per the warehouse manual of Warehousing Development and Regulatory Authority, food grains were to be stacked scientifically adopting stack plan of block method or crisscross method so as to ensure that the stocks are maintained in good condition with minimum storage loss and also facilitate easy identification and handling of stock. Further, periodic inspection should be done by the warehouse manager once in 15 days for assessing physical conditions of the warehouses in terms of any deterioration of walls, floors, windows, openings, doors, *etc.*, and the warehouse manager should take immediate remedial actions for fixing the same to bring it back to normal state.

A test check of Warehousing Centres revealed the following:

- The condition of the storage facilities was poor and needed better maintenance and higher hygiene standards. This was also pointed out in the pre-feasibility study done (April 2010) by the Government.

Poor condition of warehouses at Raichur – July 2015

- The internal audit report (September 2011 to May 2013) on Kalaburgi Region (Unit 1) had brought out that the stocks were not stacked scientifically making identification and counting of stock difficult. The stocks were mixed up, labels were not affixed on the stocks and the quantity mentioned in the warehouse receipts mismatched with the actual stock found in physical verification. Despite comments by internal audit, there was no improvement in scientific storage management.

- The maintenance of warehouses at Bellary (Unit 1), Bidar, Koppal, Raichur (Unit 1), Shivamogga (Unit 1), Shahpur, and Mysuru (Unit 1) was poor. There were damaged floorings and roofs, water seepages, rusted collapsible gates. There was no evidence to suggest that periodical inspection as mandated in the warehouse manual was conducted.

Water seepages and damaged floors at Raichur-July 2015

The Government replied (October 2015) that instructions have been issued to all Warehouse Managers regarding proper stacking, affixing of stack cards, and identification of deposits. The shortage of manpower was a hindrance to maintain the huge capacity. It further stated that these warehouses were very old and repairs could not be done due to non-availability of funds.

Unless issues are addressed, the Corporation's storage management would not meet the appropriate standards, which may lead to further fall in occupancy.

Accreditation of warehouses

3.15.11. The Warehouse Manual prescribed certain standards to get accreditation under the Warehousing (Development and Regulation) Act, 2007 (Act) which came into effect in October 2010. In order to get the accreditation, the Corporation should ensure compliance to the norms prescribed in the manual *viz.*: (i) construction standards of warehouses as per Bureau of Indian Standards, specifications of CWC and FCI, (ii) storage and handling requirements as specified in the Warehouse Manual, (iii) availability of trained manpower, (iv) insurance policies of the warehouse and the goods stored in the warehouses; (v) proper maintenance of records in the warehouses and timely reporting thereof, and any other requirement for conduct of the warehousing business under the Act. Audit observed that the warehouses operated by the Corporation did not meet the norms of the Act as commented below.

The Corporation did not ensure accreditation norms particularly with regard to construction norms as seen from the warehouses constructed during 2010-15, and also did not ensure availability of trained man power, physical analysis laboratory, firefighting extinguishers and adequate security arrangements. The Corporation applied for accreditation of its warehouses only in April 2013, though the Act came into effect in October 2010. This was mainly because none of the existing warehouses was meeting the accreditation norms. The Corporation received (2014-15) accreditation certificate for only 12 out of the 25 Warehouse Centres (30 warehouses) applied for during 2013-15. The proposals for the balance 13 Warehouse Centres (15 warehouses) were under consideration (March 2015). Accreditation would have resulted in improvement in construction standards, physical condition of the warehouses, availability of trained personnel, scientific storage of stocks, *etc.*, ensuring proper storage.

The Government replied (October 2015) that the construction of warehouses had been taken up as per the financial condition of the Corporation and that the requirements as per the Act would be provided in a phased manner.

Audit is of the opinion that financial position should not be an excuse to compromise on qualitative issues. The Corporation, instead of sacrificing quality parameters, could have reduced the number of warehouses and met the standards.

Manpower

3.15.12. The available manpower with reference to the requirement of provisions of the WDRA was inadequate. The men-in-position as on March 2015 in respect of Warehouse Managers and Warehouse Assistants were only 40 *per cent* (52 of 130) and 20 *per cent* (39 of 200) of the requirement respectively.

The Corporation was working with 383 personnel as against sanctioned posts of 940 (March 2015). Though the Corporation had increased storage capacity from 9.70 lakh MTs in 2010-11 to 13.89 lakh MTs in 2014-15 *i.e.* an increase of 43 *per cent*, no action has been taken to fill up the vacant posts.

Further, the Warehouse Managers should possess adequate knowledge and experience in the field of warehousing, scientific storage of agricultural and other commodities, accounts, quality control management, *etc.* The Corporation, however, compromising on these requirements, filled up the posts of Warehouse Managers with unqualified personnel (junior and senior clerks) who had no expertise in the specific field. The Government also attributed this as one of the reasons that affected the scientific storage management.

The Government replied (October 2015) that action has been taken for IT integration to ensure real time warehouse operation. It also stated that action had been taken to fill the vacant posts and to recruit qualified Warehouse Managers.

Conclusions

The achievement in the augmentation of storage capacity was only 65 *per cent* of the planned capacity. There were delays in completion of warehouse construction. The system of collection of storage charges was deficient. The Corporation did not meet the norms of WDRA manual for scientific storage and trained manpower.

Recommendations

The augmentation of storage should be done according to the plan and the time schedules need be adhered to. The storage charges should be collected as per the schedule of charges as approved by the Board of Directors of the Corporation. The Corporation should ensure adherence to the norms of WDRA manual and follow scientific storage management. Trained man power should be inducted especially in the warehouse management so as to ensure quality service to the depositors.

Bangalore Metropolitan Transport Corporation

3.16. Idling of assets and blocking up of funds

Execution of civil works without obtaining clear title of the land resulted in idling of assets and blocking up of funds of ₹ 16.52 crore.

The Bangalore Metropolitan Transport Corporation (Corporation), in an effort to modernise its services *inter alia* provides capacity enhancement through infrastructure development by construction of bus depots, bus stations, workshops, staff quarters, *etc.* To help the Corporation in its endeavour, the State Government allotted lands to the Corporation.

The Official Memoranda issued for allotment of land by the Government stipulated, *inter alia* that:

- The land should be registered with the Sub-registrar concerned after duly paying the requisite fees;
- The said allotment was subject to the final verdict of the Court in case of any dispute and works on those lands should be taken up only after obtaining necessary permission from the authorities concerned.

Further, the Building Bye Laws of Bruhath Bengaluru Mahanagara Palike (BBMP), under whose jurisdiction the Banashankari land was covered, stipulates that a copy of the property card along with the sketch issued by the Department of Survey and Settlement, land records of City Survey and latest book extract issued by the Corporation indicating the measurements of the property should be submitted to BBMP for obtaining the license.

It was observed in audit that compliance to the conditions attached to the allotment was not ensured by the Corporation in the test checked cases leading to litigation as detailed below:

Construction of Depot and Staff Quarters at Kodathi

3.16.1. The Government of Karnataka (GoK) allotted (October 2007) eight acres of land at Kodathi to the Corporation at ₹ 2.34 crore for the construction of bus depot, bus station, workshop and staff quarters. Out of this, the allotment of five acres was disputed (September 2007/December 2010) by private parties before the High Court of Karnataka/Karnataka Appellate Tribunal (KAT) and the latter set aside (April 2013) the allotment order for five acres. However, the Corporation continued the construction activity awarded in December 2010/October 2012 on the disputed land and incurred ₹ 10.36 crore for construction of depot and staff quarters. This led to permanent injunction (September 2013) by the Civil Court, Bengaluru after a suit was filed by the claimants. The Corporation filed (June 2014) writ petition before the High Court, which granted stay against the KAT order. The case is pending (June 2015) before both Civil Court and High Court for adjudication.

Construction of Depot at Madappanahalli

3.16.2. GoK allotted 36.16 acres of land (April 2011) at Madappanahalli for ₹ 2.64 crore. The High Court, on a writ petition filed by six private parties claiming ownership of 24 acres of land, ordered (July 2013) maintenance of status quo till the disposal of the matter. Subsequently, the Corporation awarded (February 2014) the work of construction of depot on the disputed land and instructed the Contractor to stop the work only during March 2014. The expenditure incurred for construction till then was ₹ 0.96 crore.

Developing additional area with bus shelter at Banashankari

3.16.3. The Corporation awarded (February 2013) the work of developing the additional area of 24,468 square feet and construction of bus shelter towards northern side at Traffic and Transit Management Centre (TTMC), Banashankari, Bengaluru, without obtaining clear title of the land from the Bangalore Development Authority (BDA). As a result, the construction work had to be stopped (July 2013) due to the Civil Court Order (July 2013) to maintain *status quo* after a private party filed a suit claiming to be the owner of the land to the extent of 1 acre 6 guntas. The Corporation had expended ₹ 0.22 crore towards the works till then. Further, there was no record showing that BDA had agreed to hand over the land to the Corporation nor any demand for payment was made till date.

In all the three cases, the Corporation took up the construction work on the disputed land without conducting proper due diligence and getting the title in its favour as evident from the subsequent troubles faced by it. Continuing with the construction against the court order and without adhering to the conditions of allotment resulted in idling of assets created and blocking up of investment to an extent of ₹ 16.52 crore.

The Government replied (September 2015) that the allotted land at Kodathi was to be utilised within two years for the purpose for which it was granted, failing which the land allotment would have been cancelled. It was also replied that the land allotted at Madappanahalli was a 'Gomala' land, which could not be claimed by any person. Further, in respect of land at Banashankari, it was stated that the land belonged to BDA and it had agreed to hand over the property. However, no proof of the same was furnished.

The reply is not acceptable as in the first instance, the Corporation continued construction work in the disputed land on the plea that it was to be utilised within the stipulated time, which led to permanent injunction. In the second case the claimants had produced records for having been allotted the land in their name. The contention that it was 'Gomala' land was therefore contested. Also, violating the order of the Court to maintain *status quo,* the Corporation had awarded and taken up the construction work. In the third case, there was no communication from BDA regarding handing over the site or regarding ownership of the land. Hence, there was no clear evidence on BDA agreeing for the proposal. The Corporation neither had the title for the land nor did it ever make an attempt to obtain legal opinion. Despite this, the Corporation went ahead with the construction not only without ensuring that the land belonged to BDA and that BDA had agreed to part with it, but also, without ensuring that the land was litigation free.

North Western Karnataka Road Transport Corporation

3.17. Non-assessment of adequacy of space for construction of bus depot

Construction of Depot on unsuitable land resulted in infructuous expenditure of ₹ 1.56 crore.

The Chief Civil Engineer, Central Office, North Western Karnataka Road Transport Corporation (Corporation), approved a proposal for construction of a bus Depot (no.4) at the existing guesthouse land available in Belagavi. The work was awarded (January 2009) for ₹ 0.96 crore to a contractor. Before commencement of the work, the Corporation decided to take up construction of a commercial complex and depot no.1 on Public-Private Partnership (PPP) model, on the said guesthouse land, and shifted the construction of depot no.4 to the land allotted by Karnataka Industrial Areas Development Board (KIADB) at Autonagar, Belagavi, adjacent to the proposed divisional workshop. The construction of depot No.4 was completed (June 2010) at a cost of ₹ 1 crore at Autonagar.

The Corporation awarded (February 2011) another work for developing, hardening the parking area, and other related works in depot no.4, which was completed (October 2011) at a cost of ₹ 0.32 crore.

Audit observed the following lapses:

- Line-out for construction of depot no.4 was given (March 2009) to the contractor on the basis of the estimate prepared for the initially identified location at guesthouse land, without assessing the suitability and adequacy of land at Autonagar. The land at Autonagar, in fact, was found not suitable for the depot and the Corporation had to incur additional expenditure of ₹ 0.24 crore to make it suitable.

- Even though the depot was ready for operations in October 2011, the same had not been operationalised as of July 2015 due to space constraints for movement and maintenance of vehicles in and around the depot, insufficient number of ramps for periodical maintenance of vehicles *etc*.

- The Divisional Controller in his letter (September/October 2012) to the Managing Director opined *inter alia* that the place, where depot no.4 was constructed, was not ideal for its functioning. This should have been envisaged at the conception stage itself. Since this was not done, it indicated deficiency in planning.

Thus, construction of the depot without assessing the adequacy of space requirements for regular operations resulted in infructuous expenditure of ₹ 1.56 crore and recurring maintenance expenditure without the envisaged benefits.

The Government replied (July 2015) that based on the recommendations of the General Manager (Technical), the Corporation had decided to construct Depot no.4 at Belagavi exclusively for Swaraj Mazda vehicles and there was no space constraint for turning the buses. As Swaraj Mazda vehicles have been scrapped, it was decided to utilise the Depot No.4 for operation and maintenance of 60 midi buses for Belagavi city services expected under the Jawaharlal Nehru National Urban Renewal Mission Project of Central Government. Hence, the expenditure spent on construction was not infructuous.

The reply is not tenable as the existing Swaraj Mazda vehicles were decided to be scrapped and disposed of as early as in March 2008. The work of construction of the depot was awarded later in January 2009. In fact, the number of Swaraj Mazda vehicles reduced from 160 in 2008-09 to 6 in 2015-16. Moreover, the fact that the depot had not been utilised for more than four years is sufficient evidence of ill planning and unnecessary expenditure. The reply that the depot would be utilised for midi buses could entail additional expenditure to make it operational.

Bengaluru
The

(Bijit Kumar Mukherjee)
Accountant General
Economic and Revenue Sector Audit
Karnataka

Countersigned

New Delhi
The

(Shashi Kant Sharma)
Comptroller and Auditor General of India

Appendices

Appendix-1

Statement showing investments made by the GoK in PSUs whose accounts are in arrears

(Referred to in Paragraph 1.11)

(Figures in columns 4 & 6 to 8 are ₹ in crore)

Sl. No.	Name of the Public Sector Undertaking	Year up to which accounts finalised	Paid up capital as per the latest finalised accounts	Period of accounts pending finalisation	Investment made by the State Government during the year of which accounts are in arrears		
					Equity and Share Deposit	Loans	Grants/Subsidy
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. WORKING GOVERNMENT COMPANIES							
AGRICULTURE AND ALLIED SECTOR							
1	Karnataka State Agricultural Produce Processing and Export Corporation Limited (KAPPEC)	2013-14	0.50	2014-15	0	0	16.09
2	Karnataka Togari Abhivridhi Mandali Limited (KTAML)	2013-14	5.00	2014-15	0	0	0
3	Karnataka Sheep and Wool Development Corporation Limited (KSWDCL)	2012-13	6.05	2013-14 2014-15	0	0	0
4	Karnataka Forest Development Corporation Limited (KFDCL)	2013-14	9.31	2014-15	0	0	0
5	Karnataka State Seeds Corporation Limited (KSSCL)	2013-14	3.61	2014-15	0	0	0
6	Karnataka State Mango Development and Marketing Corporation Limited (KSMDMCL)	2013-14	0.01	2014-15	0	0	7.54
FINANCING SECTOR							
7	The Karnataka Handloom Development Corporation Limited (KHDCL)	2013-14	51.88	2014-15	0	0	6.87
8	Karnataka State Women's Development Corporation (KSWDC)	2013-14	13.56	2014-15	0.65	0	62.18
9	Karnataka Maharshi Valmiki Scheduled Tribes Development Corporation Limited (KMVSTDC)	2012-13	3.82	2013-14 2014-15	4.31	0	0
10	The Karnataka Minorities Development Corporation Limited (KMDC)	2012-13	99.78	2013-14 2014-15	57.41	0	0
11	Karnataka Thanda Development Corporation Limited (KTDCL)	2013-14	0.01	2014-15	0	0	0
12	Karnataka Vishwakarma Community Development Corporation Limited (KVCDCL)	First accounts not finalised					

Sl. No.	Name of the Public Sector Undertaking	Year up to which accounts finalised	Paid up capital as per the latest finalised accounts	Period of accounts pending finalisation	Investment made by the State Government during the year of which accounts are in arrears		
					Equity and Share Deposit	Loans	Grants/Subsidy
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
INFRASTRUCTURE SECTOR							
13	Karnataka State Construction Corporation Limited (KSCCL)	2012-13	2.05	2013-14 2014-15	0	5.53	75.00
14	Karnataka Rural Infrastructure Development Limited (KRIDL)	2013-14	12.25	2014-15	0	0	0
15	Krishna Bhagya Jala Nigam Limited (KBJNL)	2013-14	7095.01	2014-15	0	0	2943.01
16	Karnataka Neeravari Nigam Limited (KNNL)	2013-14	13766.60	2014-15	2276.87	0	321.72
17	Cauvery Neeravari Nigama Limited (CNNL)	2013-14	1243.88	2014-15	601.54	0	40.40
18	Hubli Dharwad BRTS Company Limited (HDBRTS)	2013-14	17.00	2014-15	0	0	179.69
19	Bangalore Suburban Rail Company Limited (BSRCL)	First accounts not finalised					
MANUFACTURING SECTOR							
20	Dr. Babu Jagjivan Ram Leather Industries Development Corporation Limited (LIDKAR)	2013-14	6.85	2014-15	0	0	45.00
21	Karnataka State Small Industries Development Corporation Limited (KSSIDC)	2013-14	26.02	2014-15	0	0	15.19
22	The Mysore Paper Mills Limited (MPM)	2013-14	118.89	2014-15	0	0	0
23	NGEF (Hubli) Limited (NGEFH)	2013-14	3.20	2014-15	0	0	0
24	Karnataka Silk Industries Corporation Limited (KSIC)	2013-14	58.00	2014-15	0	0	0
25	Mysore Minerals Limited (MML)	2013-14	6.00	2014-15	0	0	0
26	The Hutti Gold Mines Company Limited (HGML)	2013-14	2.96	2014-15	0	0	0
27	The Mysore Sugar Company Limited(MYSUGAR)	2012-13	8.73	2013-14 2014-15	0	0	0
POWER SECTOR							
28	Gulbarga Electricity Supply Company Limited (GESCOM)	2013-14	305.14	2014-15	83.44	0	1,144.96
29	Karnataka Solar Power Development Corporation Private Limited (KSPDCPL)	First accounts not finalised					
SERVICE SECTOR							
30	Karnataka Food and Civil Supplies Corporation Limited (KFCSCL)	2013-14	3.25	2014-15	0	0	0

Sl. No.	Name of the Public Sector Undertaking	Year up to which accounts finalised	Paid up capital as per the latest finalised accounts	Period of accounts pending finalisation	Investment made by the State Government during the year of which accounts are in arrears		
					Equity and Share Deposit	Loans	Grants/Subsidy
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
31	The Karnataka State Tourism Development Corporation Limited (KSTDC)	2013-14	6.41	2014-15	0	0	2.93
MISCELLANEOUS SECTOR							
32	Karnataka Vocational Training and Skill Development Corporation Limited (KVTSDCL)	2012-13	0.01	2013-14 2014-15	0	0	0
33	Karnataka Mining Environment Restoration Corporation Limited (KMERCL)	First accounts not finalised					
	Total A (Working Government Companies)	-	**22,875.78**	-	**3,024.22**	**5.53**	**4,860.58**
B. WORKING STATUTORY CORPORATIONS							
AGRICULTURE AND ALLIED SECTOR							
1	Karnataka State Warehousing Corporation (KSWC)	2013-14	7.80	2014-15	0	0	0
SERVICE SECTOR							
2	Karnataka State Road Transport Corporation (KSRTC)	2013-14	242.79	2014-15	0	0	25.07
3	Bangalore Metropolitan Transport Corporation (BMTC)	2013-14	104.59	2014-15	0	0	190.16
4	North Western Karnataka Road Transport Corporation (NWKRTC)	2013-14	142.31	2014-15	0	0	173.35
5	North Eastern Karnataka Road Transport Corporation (NEKRTC)	2013-14	99.15	2014-15	0	0	26.42
	Total B (Working Statutory Corporations)	-	**596.64**	-	**0**	**0**	**415.00**
	Grand Total (A + B)	-	**23,472.42**	-	**3,024.22**	**5.53**	**5,275.58**

Appendix-2

Summarised financial position and working results of Government Companies and Statutory Corporations as per their latest finalised financial statements/accounts.

(Referred to in Paragraph 1.15)

(Figures in column 5 to 12 are ₹ in crore)

Sl. No.	Sector / Name of the Company	Period of accounts	Year in which accounts finalised	Paid-up capital	Loans outstanding at the end of year	Accumulated Profit(+)/ loss (-)	Turnover	Net profit (+) / loss (-) (x)	Net impact of Audit comments#	Capital employed @	Return on capital employed $	Percentage of return on capital employed	Manpower (No. of employees) (as on 31.3.2015)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
A. WORKING GOVERNMENT COMPANIES													
AGRICULTURE AND ALLIED SECTOR													
1	Karnataka State Agro Corn Products Limited (KSACPL)	2014-15	2015-16	2.73	24.32	(-)28.80	0	(-)0.22	1.36	(-)1.51	(-)0.22	-	39
2	Karnataka State Agricultural Produce Processing and Export Corporation Limited (KAPPEC)	2013-14	2014-15	0.50	0	15.15	10.42	5.74	0	68.68	5.74	8.36	19
3	Karnataka Togari Abhivridhi Mandali Limited (KTAML)	2013-14	2015-16	5.00	0	(-)30.34	23.81	(-)27.66	0	99.83	(-)27.66	-	7
4	The Karnataka Fisheries Development Corporation Limited (KFDC)	2014-15	2015-16	16.16	2.37	(-)4.96	154.03	1.02	0	16.72	1.02	6.1	126
5	Karnataka Sheep and Wool Development Corporation Limited (KSAWDCL)	2012-13	2014-15	6.05	0	(-)4.72	0.19	0.80	0	18.48	0.80	4.33	63
6	Karnataka Compost Development Corporation Limited (Subsidiary of Company at C-1) (KCDCL)	2014-15	2015-16	0.50	2.28	(-)0.02	10.39	(-)0.65	(-)54.78	4.05	(-)0.53	-	31
7	Karnataka Cashew Development Corporation Limited (KCDC)	2014-15	2015-16	7.59	0	(-)4.20	5.55	0.88	(-)13.74	3.39	0.90	26.50	97
8	Karnataka Forest Development Corporation Limited (KFDCL)	2013-14	2014-15	9.31	0	154.23	121.06	63.50	0.00	202.93	63.50	31.29	506
9	The Karnataka State Forest Industries Corporation Limited (KSFIC)	2014-15	2015-16	2.67	0	16.39	40.60	6.23	(-)7.92	19.07	6.23	32.7	107
10	Karnataka State Seeds Corporation Limited (KSSCL)	2013-14	2014-15	3.60	0.04	60.10	163.83	1.62	0	36.52	1.66	4.50	235
11	Food Karnataka Limited (FKL)	2014-15	2015-16	0.10	0	1.73	0	0.03	0	1.83	0.03	1.60	2
12	Karnataka State Mango Development and Marketing Corporation Limited (KSMDMCL)	2013-14	2015-16	0.01	0	0.66	0	0.35	0	20.48	0.35	1.70	11
	Sector-wise total			**54.22**	**29.01**	**175.22**	**529.88**	**51.64**	**(-)75.08**	**490.47**	**51.82**	-	**1243**

Sl. No.	Sector / Name of the Company	Period of accounts	Year in which accounts finalised	Paid-up capital	Loans outstanding at the end of year	Accumulated Profit(+)/ loss (-)	Turnover	Net profit (+) / loss (-) (x)	Net impact of Audit comments#	Capital employed @	Return on capital employed $	Percentage of return on capital employed	Manpower (No. of employees) (as on 31.3.2015)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
FINANCING SECTOR													
13	The Karnataka Handloom Development Corporation Limited (KHDCL)	2013-14	2014-15	51.88	15.58	(-)90.47	157.17	(-)6.91	(-)4.64	27.10	2.19	8.08	712
14	Karnataka State Handicrafts Development Corporation Limited (KSHDCL)	2014-15	2015-16	4.02	1.07	27.21	55.18	5.66	0	34.70	5.67	16.34	129
15	D. DevarajUrs Backward Classes Development Corporation Limited (DUBCDCL)	2014-15	2015-16	199.21	96.96	92.10	5.56	26.59	0	782.32	29.02	3.71	49
16	Karnataka State Women's Development Corporation (KSWDC)	2013-14	2015-16	13.56	3.94	17.98	3.80	3.12	0	35.81	3.19	8.91	46
17	Dr.B.R. Ambedkar Development Corporation Limited (BRADCL)	2014-15	2015-16	199.39	256.77	62.55	3.00	25.68	0	518.71	33.34	6.43	269
18	Karnataka Maharshi Valmiki Scheduled Tribes Development Corporation Limited (KMVSTDC)	2012-13	2014-15	3.82	75.94	24.46	0.92	6.99	0	104.22	8.61	8.26	21
19	The Karnataka Minorities Development Corporation Limited (KMDC)	2012-13	2014-15	99.78	27.20	32.35	1.47	(-)1.30	(-)277.78	158.79	0.28	0.18	42
20	Karnataka State Industrial Infrastructure and Development Corporation Limited (KSIIDC)	2014-15	2015-16	747.96	15.58	(-)251.14	30.21	56.77	5.32	512.40	67.38	13.15	82
21	Karnataka Urban Infrastructure Development and Finance Corporation Limited (KUIDFC)	2014-15	2015-16	8.06	0	13.98	6.76	**	0	42.33	0	0	377
22	Sree Kanteerava Studios Limited (KSL)	2014-15	2015-16	0.88	0.21	1.72	1.55	0.40	0	2.81	0.40	14.23	8
23	Karnataka Asset Management Company Private Limited (KAMCPL)	2014-15	2015-16	0.50	0	1.41	1.73	0.70	0	1.91	0.70	36.65	5
24	Karnataka Trustee Company Private Limited (KTCPL)	2014-15	2015-16	0.01	0	0.23	0.10	0.07	0	0.24	0.07	29.17	1
25	Karnataka Thanda Development Corporation Limited (KTDCL)	2013-14	2014-15	0.01	0	2.92	0	0.17	0	2.93	0.17	5.80	-
26	Karnataka Vishwakarma Community Development Corporation Limited (KVCDCL)	First Accounts not finalised											
	Sector-wise total			**1,329.08**	**493.25**	**(-)64.70**	**267.45**	**117.94**	**(-)277.10**	**2,224.27**	**151.02**	**-**	**1,741**

Sl. No.	Sector / Name of the Company	Period of accounts	Year in which accounts finalised	Paid-up capital	Loans outstanding at the end of year	Accumulated Profit(+)/ loss (-)	Turnover	Net profit (+) / loss (-) (x)	Net impact of Audit comments#	Capital employed @	Return on capital employed $	Percentage of return on capital employed	Manpower (No. of employees) (as on 31.3.2015)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
INFRASTRUCTURE SECTOR													
27	Karnataka State Construction Corporation Limited (KSCCL)	2012-13	2015-16	2.05	5.53	19.39	4.03	(-)4.14	0	26.98	(-)3.66	-	122
28	Karnataka Rural Infrastructure Development Limited (KRIDL)	2013-14	2014-15	12.25	8.76	178.90	1319.72	69.11	19.61	230.83	69.11	29.94	922
29	Karnataka State Police Housing Corporation Limited (KSPHCL)	2014-15	2015-16	0.12	69.71	41.33	37.08	18.95	0	192.65	18.95	9.84	287
30	Rajiv Gandhi Rural Housing Corporation Limited (RGRHCL)	2014-15	2015-16	3.00	1989.72	0	##	£	0	2833.16	0	0	39
31	Karnataka Road Development Corporation Limited (KRDCL)	2014-15	2015-16	310.00	168.97	(-)100.00	##	(-)7.80	0	379.23	5.60	1.48	80
32	Krishna Bhagya Jala Nigam Limited (KBJNL)	2013-14	2014-15	7095.01	2511.20	(-)458.87	17.74	(-)83.56	0	6375.72	(-)0.63	-	2532
33	Karnataka Neeravari Nigam Limited (KNNL)	2013-14	2014-15	13766.60	481.47	(-)967.95	6.43	(-)295.59	(-)4.48	13280.12	(-)292.41	-	3002
34	Cauvery Neeravari Nigama Limited (CNNL)	2013-14	2014-15	1243.88	500.98	0	##	$$	0	1744.86	0	0	2304
35	Bangalore Airport Rail Link Limited (Subsidiary of Company at A-20) (BARL)	2014-15	2015-16	5.00	0	(-)3.32	0	(-)0.80	0	1.68	(-)0.80	-	9
36	Tadadi Port Limited (Subsidiary of Company at A-20) (TPL)	2014-15	2015-16	0.05	0	(-)0.02	0	$$	0	0.03	0	0	-
37	Hubli Dharwad BRTS Company Limited (HDBRTS)	2013-14	2014-15	17.00	0	(-)0.56	0	(-)0.48	0	17.56	(-)0.48	-	25
38	Bangalore Suburban Rail Company Limited (BSRCL)	First Accounts not finalised											
	Sector-wise total			**22,454.96**	**5,736.34**	**(-)1,291.10**	**1,385.00**	**-304.31**	**15.13**	**25,082.82**	**(-)204.32**	**-**	**9,322**
MANUFACTURING SECTOR													
39	Dr. Babu Jagjivan Ram Leather Industries Development Corporation Limited (LIDKAR)	2013-14	2014-15	6.85	13.63	(-)27.54	14.71	1.93	0	(-)5.75	2.89	0	81
40	Karnataka Soaps and Detergents Limited (KSDL)	2014-15	2015-16	31.82	8.35	132.74	317.88	45.19	-11.81	108.83	45.19	41.52	718
41	Karnataka State Coir Development Corporation Limited (KSCDCL)	2014-15	2015-16	3.01	0.46	(-)1.44	36.35	5.56	(-)0.13	10.09	5.57	55.20	48
42	Karnataka State Small Industries Development Corporation Limited (KSSIDC)	2013-14	2014-15	26.02	12.70	95.76	81.31	17.33	0	137.89	17.61	12.77	295
43	The Mysore Paper Mills Limited (MPM)	2013-14	2014-15	118.89	166.25	(-)425.94	383.71	(-)78.16	(-)15.31	(-)138.02	(-)45.64	-	1710

Sl. No.	Sector / Name of the Company	Period of accounts	Year in which accounts finalised	Paid-up capital	Loans outstanding at the end of year	Accumulated Profit(+)/ loss (-)	Turnover	Net profit (+) / loss (-) (x)	Net impact of Audit comments#	Capital employed @	Return on capital employed $	Percentage of return on capital employed	Manpower (No. of employees) (as on 31.3.2015)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
44	Karnataka Vidyuth Karkhane Limited (KAVIKA)	2014-15	2015-16	5.62	7.84	10.47	160.48	4.87	0	102.28	5.83	5.70	186
45	The Mysore Electrical Industries Limited (MEI)	2014-15	2015-16	9.99	28.54	(-)9.37	48.52	4.79	(-)2.49	64.58	6.75	10.45	146
46	NGEF (Hubli) Limited (Subsidiary of Company at C-10) (NGEFH)	2013-14	2014-15	3.20	10.00	(-)9.95	11.42	(-)3.69	0	6.94	(-)3.27	-	141
47	Karnataka State Electronics Development Corporation Limited (KEONICS)	2014-15	2015-16	21.37	0	70.59	181.02	3.32	0	91.96	3.32	3.61	176
48	Karnataka Silk Industries Corporation Limited (KSIC)	2013-14	2014-15	58.00	0	18.91	103.93	16.68	(-)0.46	78.47	16.71	21.29	658
49	Karnataka Silk Marketing Board Limited (KSMB)	2014-15	2015-16	31.45	12.50	(-)43.48	23.13	(-)4.39	0	0.47	(-)4.35	-	73
50	Karnataka State Textile Infrastructure Development Corporation Limited (KSTIDCL)	2014-15	2015-16	3.22	0	11.16	24.62	0.92	0.03	14.38	0.92	6.40	9
51	Mysore Minerals Limited (MML)	2013-14	2014-15	6.00	0	1101.80	378.53	313.35	0	1107.80	323.00	29.16	945
52	The Hutti Gold Mines Company Limited (HGML)	2013-14	2014-15	2.96	0	1024.52	405.79	144.63	0	1027.62	144.79	14.09	4289
53	The Mysore Sugar Company Limited (MYSUGAR)	2012-13	2015-16	8.73	184.63	(-)416.67	109.79	(-)50.27	(-)9.22	(-)96.06	(-)33.46	-	828
54	The Mysore Paints and Varnish Limited (MPVL)	2014-15	2015-16	1.04	0	29.68	22.99	4.44	(-)0.53	30.72	4.71	15.33	59
55	Karnataka State Beverages Corporation Limited (KSBCL)	2014-15	2015-16	12.00	2.53	172.51	96.58	32.55	0	14.53	32.56	224.07	427
56	Mysore Sales International Limited (Subsidiary of Company atA-20) (MSIL)	2014-15	2015-16	20.18	0	225.41	1235.31	33.56	0.02	245.59	34.41	14.01	279
57	Marketing Consultants and Agencies Limited (Subsidiary of Company at A-56) (MCA)	2014-15	2015-16	3.57	0	70.53	144.19	10.24	0	76.56	10.24	13.38	45
	Sector-wise total			**373.92**	**447.43**	**2,029.69**	**3,780.26**	**502.85**	**(-)39.90**	**2,878.88**	**567.78**	**-**	**11,113**
POWER SECTOR													
58	Karnataka Power Corporation Limited (KPCL)	2014-15	2015-16	4140.67	5181.18	3774.41	6650.46	77.36	13.59	13175.10	1242.28	9.43	5243
59	Karnataka Renewable Energy Development Limited(KREDL)	2014-15	2015-16	0.50	0	107.47	24.25	15.47	0	107.97	15.47	14.33	62
60	Karnataka Power Transmission Corporation Limited (KPTCL)	2014-15	2015-16	2075.32	4858.53	399.35	2325.12	28.59	0	7354.30	515.27	7.01	9030

Sl. No.	Sector / Name of the Company	Period of accounts	Year in which accounts finalised	Paid-up capital	Loans outstanding at the end of year	Accumulated Profit(+)/ loss (-)	Turnover	Net profit (+) / loss (-) (x)	Net impact of Audit comments#	Capital employed @	Return on capital employed $	Percentage of return on capital employed	Manpower (No. of employees) (as on 31.3.2015)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
61	Bangalore Electricity Supply Company Limited (BESCOM)	2014-15	2015-16	546.92	2663.74	(-)475.77	13479.60	113.44	0.15	4597.87	511.10	11.12	11655
62	Hubli Electricity Supply Company Limited (HESCOM)	2014-15	2015-16	707.53	926.10	(-)1189.33	4851.58	30.26	0	477.28	378.69	79.34	7459
63	Mangalore Electricity Supply Company Limited (MESCOM)	2014-15	2015-16	216.07	460.03	85.57	2111.45	13.93	(-)161.75	813.47	208.50	25.63	3711
64	Chamundeshwari Electricity Supply Corporation Limited (CESC)	2014-15	2015-16	325.52	671.24	(-)642.19	2555.19	56.05	(-)373.43	967.66	149.67	15.47	5048
65	Gulbarga Electricity Supply Company Limited (GESCOM)	2013-14	2014-15	305.14	725.92	(-)310.98	2889.59	37.52	0	1194.90	101.66	8.51	4832
66	KPC Bidadi Power Corporation Private Limited (Subsidiary of Company at A-58) (KPCB)	2014-15	2015-16	14.05	0	(-)7.81	0	(-)1.07	0	6.24	(-)1.07	-	10
67	Power Company of Karnataka Limited (PCKL)	2014-15	2015-16	20.05	0	4.17	0.13	1.05	0	24.22	1.05	4.34	35
68	Raichur Power Corporation Limited (RPCL)	2014-15	2015-16	1408.61	7079.22	0	0	$$	0	8487.83	0	0	100
69	Karnataka Solar Power Development Corporation Private Limited (KSPDCPL)	First Accounts not finalised											
	Sector-wise total			**9,760.38**	**22,565.96**	**1,744.89**	**34,887.37**	**372.60**	**(-)521.44**	**37,206.84**	**3,122.62**	**-**	**47,185**
SERVICE SECTOR													
70	Karnataka Food and Civil Supplies Corporation Limited (KFCSCL)	2013-14	2014-15	3.25	0	2.78	555.36	57.81	(-)147.27	3.25	71.78	2208.62	1081
71	The Karnataka State Tourism Development Corporation Limited (KSTDC)	2013-14	2014-15	6.41	6.43	(-)22.69	62.03	(-)3.25	(-)52.05	23.44	(-)1.27	-	243
72	Jungle Lodges and Resorts Limited (JLR)	2014-15	2015-16	0.92	0	56.68	48.35	7.26	0	67.27	7.61	11.31	500
	Sector-wise total			**10.58**	**6.43**	**36.77**	**665.74**	**61.82**	**(-)199.32**	**93.96**	**78.12**	**-**	**1,824**
MISCELLANEOUS SECTOR													
73	Karnataka Vocational Training and Skill Development Corporation Limited (KVTSDCL)	2012-13	2014-15	0.01	0	3.16	1.50	*	0	71.66	0	0	19
74	Karnataka Public Lands Corporation Limited (KPLCL)	2014-15	2015-16	0.05	0	1.79	0.71	0.59	0	1.84	0.59	32.07	18
75	Karnataka Mining Environment Restoration Corporation Limited (KMERCL)	First Accounts not finalised											

Sl. No.	Sector / Name of the Company	Period of accounts	Year in which accounts finalised	Paid-up capital	Loans outstan-ding at the end of year	Accumu-lated Profit(+)/ loss (-)	Turnover	Net profit (+) / loss (-) (x)	Net impact of Audit comments#	Capital employed @	Return on capital employed $	Percentage of return on capital employed	Manpower (No. of employees) (as on 31.3.2015)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Sector-wise total			**0.06**	**0**	**4.95**	**2.21**	**0.59**	**0**	**73.50**	**0.59**	-	37
	TOTAL A (All sector-wise Government Companies)			**33,983.20**	**29,278.42**	**2,635.72**	**41,517.91**	**803.13**	**(-)1,097.71**	**68,050.74**	**3,767.63**	-	**72,465**
B.WORKING STATUTORY CORPORATIONS													
AGRICULTURE AND ALLIED SECTOR													
1	Karnataka State Warehousing Corporation (KSWC)	2013-14	2014-15	7.80	195.38	78.91	74.20	20.99	(-)3.49	341.97	31.72	9.28	394
	Sector-wise total			**7.80**	**195.38**	**78.91**	**74.20**	**20.99**	**(-)3.49**	**341.97**	**31.72**	-	**394**
FINANCING SECTOR													
2	Karnataka State Financial Corporation (KSFC)	2014-15	2015-16	658.56	1675.81	(-)469.75	263.52	44.47	(-)0.94	2621.43	203.10	7.75	1020
	Sector-wise total			**658.56**	**1,675.81**	**(-)469.75**	**263.52**	**44.47**	**(-)0.94**	**2,621.43**	**203.10**	-	**1,020**
SERVICE SECTOR													
3	Karnataka State Road Transport Corporation (KSRTC)	2013-14	2014-15	290.89	314.73	(-)11.26	2608.35	(-)75.56	(-)3.66	709.10	(-)45.34	-	38776
4	Bangalore Metropolitan Transport Corporation (BMTC)	2013-14	2014-15	104.59	618.24	367.51	1765.57	(-)147.59	(-)0.75	1154.59	(-)3.77	-	36474
5	North Western Karnataka Road Transport Corporation (NWKRTC)	2013-14	2015-16	142.31	331.70	(-)509.09	1351.59	(-)66.78	(-)11.53	19.03	(-)36.19	-	23573
6	North Eastern Karnataka Road Transport Corporation (NEKRTC)	2013-14	2014-15	99.15	130.44	(-)417.62	1184.04	(-)39.72	(-)11.98	17.82	(-)12.81	-	19128
	Sector-wise total			**636.94**	**1,395.11**	**(-)570.46**	**6,909.55**	**(-)329.65**	**(-)27.92**	**1,900.54**	**(-)98.11**	-	**1,17,951**
	TOTAL B (All sector-wise Statutory Corporations)			**1,303.30**	**3,266.30**	**(-)961.30**	**7,247.27**	**(-)264.19**	**(-)32.35**	**4,863.94**	**136.71**	-	**1,19,365**
	Grand total (A + B)			**35,286.50**	**32,544.72**	**1,674.42**	**48,765.18**	**538.94**	**(-)1,130.06**	**72,914.68**	**3,904.34**	-	**1,91,830**
C. NON WORKING GOVERNMENT COMPANIES													
AGRICULTURE AND ALLIED SECTOR													
1	Karnataka Agro Industries Corporation Limited (KAIC)	2013-14	2014-15	7.54	68.98	(-)245.40	Not considered for non-working companies	(-)12.35	0	(-)159.47	2.29	-	-
2	The Mysore Tobacco Company Limited (Subsidiary of Company at C-1) (MTC)	2014-15	2015-16	0.78	0	(-)14.83		(-)0.28	0	(-)12.72	0.36	-	2
3	Karnataka Pulpwood Limited (Subsidiary of Company at A-8) (KPL)	2014-15	2015-16	1.25	2.89	(-)20.88		(-)0.003	0	(-)16.74	(-)0.003	-	-
4	The Karnataka State Veneers Limited (Subsidiary of Company at A-9) (KSVL)	2004-05	2005-06	1.00	1.00	(-)8.85		(-)0.45	0	0.26	(-)0.45	-	-

Sl. No.	Sector / Name of the Company	Period of accounts	Year in which accounts finalised	Paid-up capital	Loans outstanding at the end of year	Accumulated Profit(+)/ loss (-)	Turnover	Net profit (+) / loss (-) (x)	Net impact of Audit comments#	Capital employed @	Return on capital employed $	Percentage of return on capital employed	Manpower (No. of employees) (as on 31.3.2015)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
5	The Mysore Match Company Limited (Subsidiary of Company at A-9) (MMCL)	2014-15	2015-16	0.05	0	(-)0.003		0.01	0	0.06	0.01	16.67	-
	Sector-wise total			**10.62**	**72.87**	**(-)289.96**	-	**(-)13.07**	**0**	**(-)188.61**	**2.21**	-	**2**
MANUFACTURING SECTOR													
6	The Mysore Lamp Works Limited (MLW)	2014-15	2015-16	11.81	108.10	(-)280.55	Not considered for non-working companies	(-)11.64	0	(-)147.41	(-)1.30	-	-
7	Vijayanagar Steel Limited (VSL)	2013-14	2014-15	12.91	0	0.04		0.02	0	15.73	0.02	0.13	-
8	The Mysore Cosmetics Limited (Subsidiary of Company at A-56) (MCL)	2003-04	2004-05	0.16	0	(-)3.12		(-)0.79	0	(-)0.23	(-)0.79	-	-
9	The Mysore Chrome Tanning Company Limited (Subsidiary of Company atA-56) (MCT)	2014-15	2015-16	0.76	0.41	(-)8.61		0.05	(-)0.05	(-)7.44	0.05	0	-
10	NGEF Limited (NGEF)	2002-03	2003-04	46.51	227.24	(-)408.85		(-)157.48	0	98.21	(-)157.48	-	-
11	Karnataka Telecom Limited (Subsidiary of Company at C-10) (KTL)	2003-04	2004-05	3.00	0	36.11		0.05	0	(-)29.23	0.05	0	-
12	The Mysore Acetate and Chemicals Company Limited (MACCL)	2002-03	2003-04	12.18	13.11	12.18		(-)0.46	0	0.09	(-)0.46	-	-
	Sector-wise total			**87.33**	**348.86**	**(-)652.80**	-	**(-)170.25**	**(-)0.05**	**(-)70.28**	**(-)159.91**	-	-
	TOTAL C (All sector-wise non-working Government Companies)			**97.95**	**421.73**	**(-)942.76**	-	**(-)183.32**	**(-)0.05**	**(-)258.89**	**(-)157.70**	-	-
	Grand Total (A + B + C)			**35,384.45**	**32,966.45**	**731.66**	**48,765.18**	**355.62**	**(-)1,130.11**	**72,655.79**	**3,746.64**	**5.16**	**1,91,832**

x Net profit/loss includes adjustment for prior income/expenses but excludes appropriations and tax provisions.

\# Impact of accounts include the net impact of comments of Statutory Auditors and the CAG and is denoted by (+) increase in profit/decrease in losses and(-) decrease in profit/increase in losses.

@ Capital employed represents Shareholders fund and long term borrowings.

$ Return on capital employed has been worked out by adding profit with the interest charged to profit and loss account.

* Prepared Statement of Income and Expenditure account (Sl. No.73).

£ Excess of expenditure over income has been capitalised. No profit and loss account was prepared (Sl.No.30).

** Recorded 'zero' profit by claiming management fee equal to net administrative expenditure incurred (Sl. No.21).

$$ No profit and loss account prepared, only pre-operative expenditure (Sl.Nos.34, 36, 68)

\## Turnovers in respect of Companies at Sl.Nos.30, 31, 34 are not included. In respect of RGRHCL (Sl.No.30), the Company is involved in development work and excess of income over is capitalised. KRDCL (Sl.No.31) is involved in construction of roads and hence turnover not considered. Although, the operations of KBJNL (Sl.No.32), KNNL (Sl.No.33) and CNNL (Sl.No.34) are functioning under the administrative control of the Water Resources Department and involved in construction of irrigation projects, the turnover of CNNL is not considered as the Company does not prepare profit and loss account.

Appendix-3

Statement showing the department-wise outstanding Inspection Reports (I.Rs).

(Referred to in Paragraph 1.27)

Sl. No.	Name of the Department	No. of PSUs	No. of outstanding I.Rs.	No. of outstanding Paragraphs	Year from which outstanding
1	Agriculture and Horticulture	9	13	50	2005-06
2	Animal Husbandry, Fisheries/ Forest, ecology and environment	5	12	87	2007-08
3	Commerce and Industries	23	48	385	2006-07
4	Transport	4	101	520	2005-06
5	Co-operation	1	1	30	2011-12
6	Information, Tourism and Youth Service	3	5	49	2005-06
7	Water Resources	3	165	479	2003-04
8	Public Works	2	4	13	2008-09
9	Energy	10	222	1613	2005-06
10	Social Welfare and Labour / Women and Child Welfare	4	10	79	2006-07
11	Food, Civil Supplies and Consumer Affairs	1	3	11	2008-09
12	Finance	3	14	56	2007-08
13	Housing	1	3	18	2008-09
14	Information and Technology	1	1	1	2009-10
15	Urban Development	1	2	24	2011-12
16	Employment and Training	1	1	10	2013-14
17	Infrastructure Development	1	1	7	2012-13
18	Home	1	1	5	2013-14
19	Rural Development and Panchyath Raj	1	2	3	2006-07
	Total[1]	**75**	**609**	**3440**	

[1] Excludes Inspection Reports in respect of Departmental Undertakings and KERC.

Appendix-4

Statement showing the delay in finalising of tender in various taluks in GESCOM

(Referred to in Paragraph 2.1.14)

Particulars/ Taluk --->	Manvi	Sindhanoor	Deodurga	Raichur	Siraguppa
Tender floated	Aug. 2009	Aug. 2009	Aug. 2009	Aug. 2009	Aug. 2009
Tender opening date	Sept. 2009	Sept. 2009	Sept. 2009	Sept. 2009	Sept. 2009
Lowest (L1) finalised in	Dec. 2009	Dec. 2009	Jan. 2010	Dec. 2009	Dec. 2009
Estimated cost (Partial turnkey)	5.54	5.20	3.69	4.42	3.43
Negotiated rate (L1)	6.97	6.55	4.64	5.57	4.33
Firm	Shri. M.Anjaneyulu, Contractor		Pavani Controls & Panels Ltd.		
Bids valid upto	Mar. 2010	Mar. 2010	Mar. 2010	Mar. 2010	Mar. 2010
Bids extended upto	Sept. 2010	Sept. 2010	Sept. 2010	Sept. 2010	Sept. 2010
Letter of Intent (LOI) issued	Feb. 2011	Feb. 2011	Jan. 2011	Feb. 2011	Jan. 2011
Scheduled time for the completion of work	Six months from the date of LOI				
Number of days from LOI by which acceptance was to be given by the firm	7 days	7 days	7 days	7 days	7 days
Acceptance given	No	No	No	No	No
Date of EMD forfeiture and blacklisting	Aug. 2011	Aug. 2011	Aug. 2011	Aug. 2011	Aug. 2011
Date of representation from firm	Aug. 2011	Aug. 2011	Aug. 2011	Aug. 2011	Aug. 2011
Date of revocation of forfeiture and blacklisting	Oct. 2011	Oct. 2011	Oct. 2011	Oct. 2011	Oct. 2011
Number of tenders invited after the original tender (including the final tender)	4	5	3	3	4
Final tender	Jan. 2013	May 2013	Apr. 2012	Apr. 2012	Jun. 2012
LOI date	Sept.2013	Feb. 2014	Dec. 2012	Dec. 2012	Dec. 2012
Firm	V R Patil	Shivchethan	V R Patil	V R Patil	Shivchethan
Turnkey/Partial turnkey	Total turnkey				
Award cost (in crore)	28.82	31.85	15.10	19.48	14.52
Original estimated cost (₹ in crore)	18.47	16.76	12.00	14.61	10.54
Difference (₹ in crore)	10.35	15.09	3.10	4.87	3.98
Tender premium in the original tender	1.43	1.35	0.95	1.15	0.90
Cost overrun (₹ in crore)	8.92	13.74	2.15	3.72	3.08
Total	**8.92**				**22.69**
Status as on March 2015	Work not yet completed				

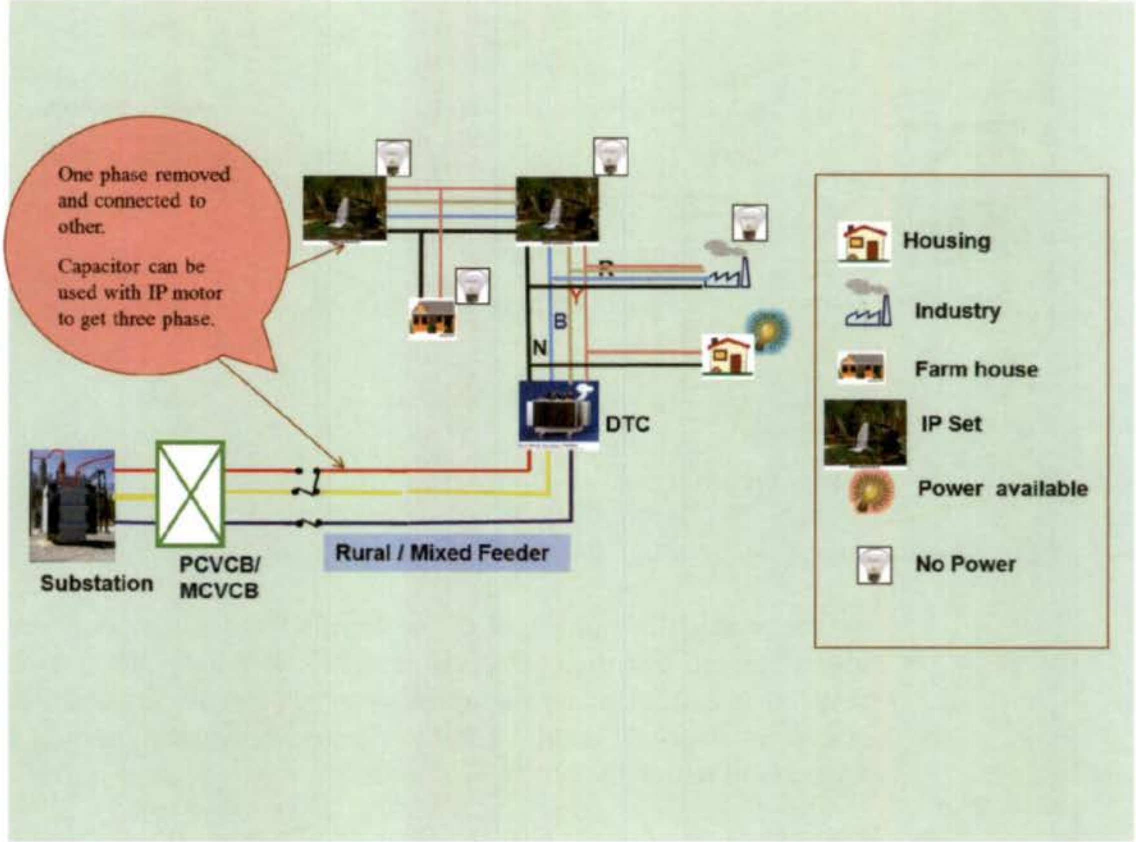
Appendix-5

Write-up on Rostering

(Referred to in Paragraph 2.1.18.1)

In the pre-NJY scenario, power was supplied to all categories of consumers *viz.*, Irrigation Pump sets (IP) and non-IP, through a common feeder (rural/mixed feeder). It was not possible to control the supply exclusive to one category of consumers. As a result, there were either power cuts or one phase of power supply[2] was connected in such a manner so as to disable a phase of power supply (so as to prevent IP sets from operating as IP set motors require three phase of supply to operate). This mechanism of restricting the power supply is termed as 'rostering'. An illustrative diagram of 'rostering' is given in the Chart below:

Pre-NJY system (without SDT) during single phase power supply



Risk: The IP set consumers were installing phase shifters (condenser/capacitor) to counter 'rostering', as this made it possible to obtain three phases even if one phase was removed.

[2] Each of the three phases of power is of 230 Volts (V). While 230 V is enough for purposes of domestic lighting, three phase power of 440 V and above is required to run IP motors.

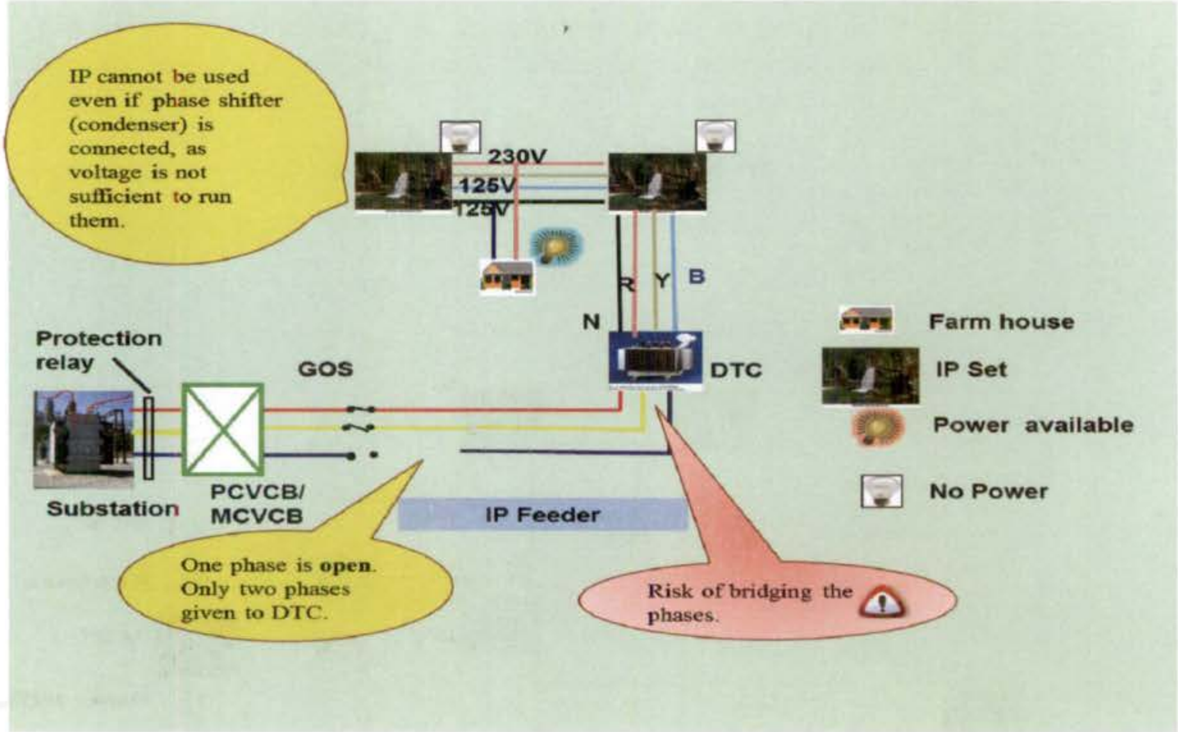
Appendix-6

Write-up on Open delta

(Referred to in Paragraph 2.1.19)

In open delta system, power supply is arranged by energizing two phases at the substation while one phase is kept open and is not shorted on the load side. A overload numerical relay with low current range protects the circuit. A schematic diagram is given below:

Schematic diagram showing the open delta connection



For the proper functioning of the system, KPTCL, in whose jurisdiction the substations fell had directed (October 2009/ February 2013) its Engineers to ensure that current in power transformer should not exceed five amps and ground resistance of neutral circuit of transformers are checked periodically, and are well within the prescribed limits.

Risk: Bridging of phase near the HT side of the transformer and balancing of load on the LT side.

Appendix-7

Statement showing the results of test checked feeders with regard to the objectives of NJY in ESCOMs.

(Referred to in Paragraphs 2.1.5, 2.1.21)

(No of feeders)

ESCOM	Division	No. of NJY feeders selected	No. of NJY feeders analysed	Reduction in energy sent out		Increase in metered energy sales		Reduction in peak load		Reduction in overall T& D loss		Reduction in overall AT& C loss		Reduction in no. of interruptions overall		Reduction in hours of interruptions overall	
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
BESCOM	Ramanagara	5	5	2	3	4	1	5	0	-	-	2	3	0	5	-	-
	Tumakuru	5	4	1	3	1	3	4	0	4	0	-	-	1	3	1	3
	Chitradurga	5	4	2	2	4	0	4	0	2	2	3	1	0	4	0	4
	Harihara	5	4	3	1	2	2	4	0	4	0	4	0	1	3	1	3
	Davangere	5	5	1	3	3	1	5	0	4	0	4	0	0	5	0	5
CESC	Arasikere	6	5	2	3	2	3	4	1	4	0	4	1	1	2	1	2
	Hassan	7	6	3	3	5	1	4	2	2	2	4	2	0	6	0	4
	Pandavapura	6	5	1	3	0	4	3	2	4	0	4	0	0	5	1	4
	Nanjangudu	6	6	0	3	3	0	5	1	1	2	1	1	0	6	0	6
GESCOM	Hosapete	6	6	1	5	6	0	6	0	2	4	2	4	0	6	0	6
	Koppal	6	5	1	4	5	0	5	0	2	3	3	2	2	3	2	3
	Yadgir	6	5	3	2	4	1	5	0	1	4	3	2	3	2	3	2
	Kalaburgi	7	7	4	3	5	2	6	0	1	6	2	5	0	7	1	6
HESCOM	Vijapura	6	6	2	3	1	2	5	1	1	2	1	2	2	4	1	5
	Jamakhandi	6	5	1	3	4	1	4	1	2	2	2	2	1	4	2	3
	Haveri	7	7	2	5	5	2	5	1	2	5	2	5	0	5	0	5
	Ranebennur	6	3	1	2	3	0	3	0	1	2	0	3	2	1	0	3
	Total	**100**	**88**	**30**	**51**	**57**	**23**	**77**	**9**	**37**	**34**	**41**	**33**	**13**	**71**	**13**	**64**
Summary				**81**		**80**		**86**		**71**		**74**		**84**		**77**	

Feeders selected but not analysed (12 feeders) with reasons:

Division/ESCOM	Feeder	Reason
Harihar, BESCOM	Hanumansagara	Bifurcation was not completed
Tumakuru, BESCOM	Sanaba	Data not available
Chitradurga, BESCOM	RD Kaval	No data for IP feeder
Pandavapura, CESC	Chikanahalli, Chanahalli	NJY feeders are combined
Arsikere, CESC	Kadalamagge	No data for IP feeder
Hassan, CESC		Data not available for one feeder
Koppal, GESCOM	Gudigeri & Hydernagar	Feeders are clubbed (one feeder)
Yadgir, GESCOM	Mouneshwar	No pre NJY data for comparison
Ranebennur, HESCOM	Hirebidari, Hosakatti, Hireyadachi	Post NJY data was not available