PREFACE

1. This Report has been prepared for submission to the Governor under Article 151 of the Constitution.

2. Chapter-1 of this report indicates auditee profile, authority for audit, planning and conduct of audit, organisational structure of the offices of the Principal Accountant General (C&CA) and Accountant General (WF&RA) and response of the Departments to the draft paragraphs. Highlights of audit observations included in this report have also been brought out in this Chapter.

3. Chapter-2 deals with the findings of performance audit while Chapter-3 covers audit of transactions in various departments including the Public Works and Water Resources Departments, Autonomous Bodies, *etc.,* Chapter-4 comments on functioning of Government Department(s).

4. The Reports containing points arising from audit of the financial transactions relating to Zilla Panchayats, Statutory Corporations & Government Companies and Revenue Receipts are presented separately.

5. The cases mentioned in the Report are among those which came to notice in the course of test-audit of accounts during the year 2009-10 as well as those which had come to notice in earlier years but could not be dealt with in previous Reports; matters relating to the periods subsequent to 2009-10 have also been included, wherever necessary.

Chapter 1

Introduction

1.1 About this Report

This Report of the Comptroller and Auditor General of India (C&AG) relates to matters arising from performance audit of selected programmes and activities and compliance audit of Government departments and autonomous bodies.

Compliance audit refers to examination of the transactions relating to expenditure of the audited entities to ascertain whether the provisions of the Constitution of India, applicable laws, rules, regulations and various orders and instructions issued by the competent authorities are being complied with. On the other hand, performance audit, besides conducting a compliance audit, also examines whether the objectives of the programme/activity/department are achieved economically and efficiently.

The primary purpose of the Report is to bring to the notice of the State Legislature, important results of audit. Auditing Standards require that the materiality level for reporting should be commensurate with the nature, volume and magnitude of transactions. The findings of audit are expected to enable the Executive to take corrective actions as also to frame policies and directives that will lead to improved financial management of the organisations, thus, contributing to better governance.

This chapter, in addition to explaining the planning and extent of audit, provides a synopsis of the significant deficiencies and achievements in implementation of selected schemes, significant audit observations made during the audit of transactions and follow-up on previous Audit Reports. Chapter-2 of this report contains findings arising out of performance audit of selected programmes/activities/departments. Chapter-3 contains observations on audit of transactions in Government departments and autonomous bodies. Chapter-4 presents an assessment of functioning of the Departments of Animal Husbandry & Veterinary Services and State Educational Research & Training.

1.2 Auditee Profile

There are 87 departments in the State at the Secretariat level, headed by Additional Chief Secretaries/Principal Secretaries/Secretaries, who are assisted by Directors/Commissioners and subordinate officers under them, and ten autonomous bodies which are audited by the Principal Accountant General (Commercial & Civil Audit), Bangalore and the Accountant General (Works, Forest & Receipt Audit), Bangalore.

The comparative position of expenditure incurred by the Government during the year 2009-10 and in the preceding two years is given in **Table-1** below.

Table 1: Comparative position of expenditure

(₹ in crore)

Disbursements	2007-08			2008-09			2009-10		
	Plan	Non-plan	Total	Plan	Non-plan	Total	Plan	Non-plan	Total
Revenue expenditure									
General services	86	10,786	10,872	110	12,165	12,275	98	12,664	12,762
Social services	4,784	8,340	13,124	5,925	9,948	15,873	7,245	11,874	19,119
Economic services	3,443	8,010	11,453	3,699	7,438	11,137	4,191	8,991	13,182
Grants-in-aid and contributions	-	1,926	1,926	796	1,578	2,374	769	1,705	2,474
Total	**8,313**	**29,062**	**37,375**	**10,530**	**31,129**	**41,659**	**12,303**	**35,234**	**47,537**
Capital Expenditure									
Capital outlay	7,199	1,450	8,649	9,135	735	9,870	11,118	1,018	12,136
Loans and advances disbursed	752	5	757	223	508	731	916	65	981
Repayment of public debt (including transactions under ways and means advances)	-	1,329	1,329	-	1,778	1,778	-	2,308	2,308
Contingency fund	-	-	-	-	2	2	-	-	-
Public account disbursements	-	-	54,055	-	-	54,783	-	-	64,029
Total	**7,951**	**2,784**	**64,790**	**9,358**	**3,023**	**67,164**	**12,034**	**3,391**	**79,454**
Grand Total	**16,264**	**31,846**	**1,02,165**	**19,888**	**34,152**	**1,08,823**	**24,337**	**38,625**	**1,26,991**

1.3 Authority for Audit

The authority for audit by the C&AG is derived from Articles 149 and 151 of the Constitution of India and the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971. C&AG conducts audit of expenditure of the Departments of Government of Karnataka under Section 13[1] of the C&AG's (DPC) Act. C&AG is the sole auditor in respect of 10 autonomous bodies which are audited under sections 19(2)[2] and 20(1)[3] of the C&AG's (DPC) Act. In addition, C&AG also conducts audit of 310 other autonomous bodies, under Section 14[4] of C&AG's (DPC) Act, which are substantially funded by the Government. Principles and methodologies for various audits are prescribed in the Auditing Standards and the Regulations on Audit and Accounts, 2007 issued by the C&AG.

[1] Audit of (i) all transactions from the Consolidated Fund of the State, (ii) all transactions relating to the Contingency Fund and Public Accounts and (iii) all trading, manufacturing, profit & loss accounts, balance sheets & other subsidiary accounts

[2] Audit of the accounts of Corporations (not being Companies) established by or under law made by the State Legislature in accordance with the provisions of the respective legislations

[3] Audit of accounts of any body or authority on the request of the Governor, on such terms and conditions as may be agreed upon between the C&AG and the Government

[4] Audit of all receipts and expenditure of a body/authority substantially financed by grants or loans from the Consolidated Fund of the State and (ii) all receipts and expenditure of any body or authority where the grants or loans to such body or authority from the Consolidated fund of the State in a financial year is not less than ₹ one crore.

1.4 Organisational structure of the Offices of the Principal Accountant General (C&CA) and Accountant General (WF&RA), Bangalore

Under the directions of the C&AG, the Offices of the Principal Accountant General (C&CA) and Accountant General (WF&RA), Bangalore conduct audit of Government Departments/Offices/Autonomous Bodies/Institutions under them which are spread all over the State. The Principal Accountant General and Accountant General are assisted by six Group Officers.

1.5 Planning and conduct of Audit

Audit process starts with the assessment of risks faced by various Departments of Government based on expenditure incurred, criticality/complexity of activities, level of delegated financial powers, assessment of overall internal controls and concerns of stakeholders. Previous audit findings are also considered in this exercise. Based on this risk assessment, the frequency and extent of audit are decided.

After completion of audit of each unit, Inspection Reports containing audit findings are issued to the heads of the departments. The departments are requested to furnish replies to the audit findings within one month of receipt of the Inspection Reports. Whenever replies are received, audit findings are either settled or further action for compliance is advised. The important audit observations arising out of these Inspection Reports are processed for inclusion in the Audit Reports, which are submitted to the Governor of State under Article 151 of the Constitution of India.

During 2009-10, in the Civil Audit Wing, 6,579 party-days were used to carry out audit of 517 units and to conduct one performance audit review and audits of two departments. In the Works and Forest Wing, 106 units were audited by utilising 1,120 party-days. The audit plan covered those units/entities which were vulnerable to significant risk as per our assessment.

1.6 Significant audit observations

In the last few years, Audit has reported on several significant deficiencies in implementation of various programmes/activities through performance audits, as well as on the quality of internal controls in selected departments which impact the success of programmes and functioning of the departments. Similarly, the deficiencies noticed during compliance audit of the Government departments/organisations were also reported upon.

1.6.1 Performance audits of programmes/activities/departments

The present report contains two performance audits and functioning of the Departments of Animal Husbandry & Veterinary Services and State Educational Research and Training. The highlights are given in the following paragraphs.

1.6.1.1 Compliance with environmental legislations in Bangalore Metropolitan Region

Increasing population and the rapid growth of industries and commercial activities have created tremendous pressure on the finite resources. Various legislations have been enacted by Government of India to safeguard the precious resources and to improve the quality of life. The performance audit of compliance with the legislations for preventing and controlling water and air pollution in Bangalore Metropolitan Region (BMR) revealed that the Karnataka State Pollution Control Board, with inadequate technical and scientific staff, was ineffective in identification and inspection of polluting units and, as a result, a large number of polluting units were operating without installing pollution control systems. The existing sewage network was inadequate as it covered only 40 *per cent* of the BMR. The existing Sewage Treatment Plants received only 47 *per cent* of the sewage generated from the source points due to the weak sewage lines. The remaining 53 *per cent* was discharged directly into storm water drains and lakes, contaminating the water bodies and ground water. Ground water quality was also adversely affected in BMR due to the presence of pollutants in excess of permissible limits. Although data on air pollution at different locations of BMR was collected, no action plan for abatement of air pollution had been prepared due to non-finalisation of source apportionment studies.

(Paragraph 2.1)

1.6.1.2 Minor Irrigation Projects

The irrigation schemes serving *atchkat* up to 2,000 ha are classified as minor irrigation schemes. The performance audit noted that the financial management of the department was ineffective as savings were not utilised for clearance of pending claims. The scarce plan resources were distributed thinly on many works. A large number of works witnessed time and cost overruns for a variety of reasons such as non-acquisition of lands, inadequate budget provision *etc*. The area irrigated ranged from 13 to 17 *per cent* of the irrigation potential created, despite huge investment over the years.

(Paragraph 2.2)

1.6.1.3 Department of Animal Husbandry and Veterinary Services

The Department of Animal Husbandry and Veterinary Services is responsible for improving the productivity of livestock through scientific breeding and providing healthcare to protect them from disease. An audit of the department showed huge shortage of veterinary officers and support staff and also irrational distribution of veterinary institutions across the State. The department did not prioritise conservation of indigenous breeds of cattle, some of which registered negative growth. Management of vast tracts of departmental farm land in several districts was ineffective as large areas had been encroached upon. Fodder and fodder seed production did not receive due attention of the department despite availability of land. The department witnessed huge shortfall in spending, year after year, due to tardy implementation of Centrally sponsored schemes. It also failed to monitor the

implementation of various schemes and key activities, losing the opportunity of identifying the shortcomings and initiating corrective action.

(Paragraph 4.1)

1.6.1.4 Department of State Educational Research and Training

The Department of State Educational Research and Training administers teachers' education in the State. It provides pre-service and in-service training to primary and secondary school teachers and also implements schemes to impart computer education and computer based education in secondary schools. An audit of the department revealed non-compliance with rules governing budgetary and expenditure controls, accountal of transactions *etc*. Implementation of computer education programmes was not effective as IT assets created in 238 schools were not put to use and computer education was disrupted for two years in 1,000 schools. There was huge shortfall in training of teachers by DIETs. Inadequate funds and huge shortage of teaching and non-teaching staff affected the functioning of the District Institutes of Education and Training and Colleges of Teachers' Education. Monitoring of the implementation of various programmes was also inadequate and ineffective.

(Paragraph 4.2)

1.6.2 Compliance audit of transactions

Audit has also reported on several significant deficiencies in critical areas which impact the effective functioning of the Government departments/ organisations. These are broadly categorised and grouped as:

- Non-compliance with rules.
- Audit against propriety/Expenditure without justification.
- Persistent and pervasive irregularities.
- Failure of oversight/governance.

1.6.2.1 Non-compliance with rules

For sound financial administration and financial control, it is essential that expenditure conforms to financial rules, regulations and orders issued by the competent authority. This not only prevents irregularities, misappropriation and frauds, but helps in maintaining good financial discipline. This report contains instances of non-compliance with rules involving ₹ 7.28 crore. Some significant audit findings are as under:

- *The Bangalore Development Authority prepared estimate for construction of a part of the Outer Ring Road in contravention of specifications prescribed by the Ministry of Road Transport and Highways. This led to preparation of a faulty Bill of Quantity, resulting in an inadmissible payment of ₹2.66 crore to a construction company.*

(Paragraph 3.1.1)

- *Bangalore Development Authority disregarded contractual provisions and chose different Schedule of Rates for different items of work, leading to excess payment of ₹1.64 crore to a company.*

  (Paragraph 3.1.2)

- *Executive Engineer, Canal Division No.5, Yermarus made suspected fraudulent payments aggregating ₹ 2.98 crore to contractors for maintenance of canals and distributaries on fictitious bills by furnishing false references to measurement books, task work agreements, etc., and not following the prescribed procedure for preparation and payment of bills.*

  (Paragraph 3.1.3)

1.6.2.2 Audit against propriety/Expenditure without justification

Authorisation of expenditure from public funds is to be guided by the principles of propriety and efficiency of public expenditure. Authorities empowered to incur expenditure are expected to enforce the same vigilance as a person of ordinary prudence would exercise in respect of his own money and should enforce financial order and strict economy at every step. Audit has detected instances of impropriety and extra expenditure involving ₹ 10.45 crore, some of which were as under:

- *Visveswaraiah Technological University, Belgaum spent ₹1.40 crore for providing on-line learning platform which was not utilised by the students; the University also made an unproductive investment of ₹70.33 lakh on other IT products and services*

  (Paragraph 3.2.1)

- *The Bangalore Water Supply and Sewerage Board procured galvanised heavy duty mild steel pipes under a contract without a price variation clause, although pig iron, the raw material for the pipes, was vulnerable to price fluctuations. As a result, the Board lost ₹1.15 crore due to non-availing of the benefit of the declining price of pig iron in the market.*

  (Paragraph 3.2.5)

1.6.2.3 Persistent and pervasive irregularities

An irregularity is considered persistent if it occurs year after year. It becomes pervasive when it is prevailing in the entire system. Recurrence of irregularities, despite being pointed out in earlier audits, is not only indicative of non-seriousness on the part of the Executive, but is also an indication of lack of effective monitoring. This, in turn, encourages wilful deviations from observance of rules/regulations and results in weakening of the administrative structure. A significant case was as under:

- *During 2009-10, in 857 cases relating to 29 district treasuries, Public Sector Banks made payment of family pension at enhanced rate beyond the period indicated in the Pension Payment Orders, resulting in excess payment of ₹3.19 crore.*

  (Paragraph 3.3.1)

1.6.2.4 Failure of oversight/governance

The Government has an obligation to improve the quality of life of the people for which it works towards fulfilment of certain goals in the area of health, education, development and upgradation of infrastructure and public service *etc.* However, Audit noticed instances where the funds released by Government for creating public assets for the benefit of the community remained unutilised/blocked and/or proved unfruitful/unproductive due to indecisiveness, lack of administrative oversight and concerted action at various levels involving ₹ 209.61 crore. A few such cases are mentioned below.

- *The Government in Housing Department failed to act upon HUDCO's offer of lower interest rate on outstanding loan in time, resulting in payment of higher rate of interest for four years. This entailed an additional financial burden of ₹18.30 crore.*

  (Paragraph 3.4.1)

- *Karnataka Housing Board embarked on acquisition of land without conducting any demand survey or feasibility study. The Board also overlooked other controls, showed undue haste in purchasing 30 acres and 31½ guntas of land from two persons at a huge cost of ₹50 lakh per acre. The utility of the lands purchased in bits and pieces at a cost of ₹16.85 crore was doubtful.*

  (Paragraph 3.4.3)

- *Karnataka Urban Water Supply and Drainage Board passed on the benefit of Central Excise Duty exemption of ₹ 6.30 crore to two contractors by irregularly arranging exemption certificates. It had also foregone Central Excise Duty exemption of ₹ 4.01 crore in three other cases due to delay in arranging exemption certificates.*

  (Paragraph 3.4.5)

- *The Bangalore Development Authority (BDA) unilaterally paid a lower rate of interest on a loan availed of from the Karnataka Urban Infrastructure Development and Finance Corporation. BDA pre-closed the loan by unilaterally fixing the interest at five per cent per annum against 15 per cent per annum as per the terms of the sanction. The outstanding dues were settled after three years by paying an additional interest of ₹7.67 crore.*

  (Paragraph 3.4.8)

1.7 Lack of responsiveness of Government to Audit

1.7.1 Inspection reports outstanding

The Hand Book of Instructions for Speedy Settlement of Audit Observations issued by the Finance Department in 2001 provides for prompt response by the Executive to the Inspection Reports (IRs) issued by the Accountant General (AG) to ensure rectificatory action in compliance with the prescribed rules and

procedures and accountability for the deficiencies, lapses, *etc*., noticed during the inspections. The Heads of Offices and next higher authorities are required to comply with the observations contained in the IRs, rectify the defects and omissions promptly and report their compliance to the AG, who forwards a half-yearly report of pending IRs to the Secretary of the Department to facilitate monitoring of the audit observations.

As of 30 September 2010, 389 IRs (1,711 paragraphs) were outstanding against Housing, Forest and Water Resources (Minor Irrigation) Departments. Year-wise details of IRs and paragraphs outstanding are detailed in **Appendix-1.1.**

A review of the IRs pending due to non-receipt of replies, in respect of these three departments revealed that the Heads of Offices had not sent even the initial replies in respect of 69 IRs containing 439 paragraphs issued between 1992-93 and 2009-10.

1.7.2 Response of departments to the draft paragraphs

The Draft paragraphs/Reviews were forwarded demi-officially to the Principal Secretaries/Secretaries of the concerned departments between June and September 2010 with the request to send their responses within six weeks. The departmental replies for two out of four Reviews and seven out of 19 paragraphs featured in this Report have been received. The replies, wherever received, have been suitably incorporated in the Report.

1.7.3 Follow-up on Audit Reports

Besides the Hand Book, the Rules of Procedure (Internal Working), 1999 of the Public Accounts Committee also provide for furnishing, by all the departments of Government, detailed explanations in the form of Action Taken Notes (ATNs) to the observations, which featured in Audit Reports, within four months of their being laid on the Table of Legislature to the Karnataka Legislature Secretariat with copies thereof to Audit Office.

The administrative departments did not comply with the instructions and 21 departments, as detailed in **Appendix-1.2,** had not submitted ATNs for 68 paragraphs for the period 1995-96 to 2008-09 even as of 18 January 2011.

1.7.4 Paragraphs to be discussed by the Public Accounts Committee

Comments on Appropriation Accounts which featured in Audit Reports for the years 1989-90 and onwards are pending discussion by the Public Accounts Committee. Details of paragraphs pending discussion as of 18 January 2011 are detailed in **Appendix-1.3**.

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Chapter 2

Performance Audit

Forest, Ecology and Environment Department

2.1 Compliance with environmental legislations in Bangalore Metropolitan Region

Executive Summary

Increasing population, rapid growth of industries and commercial activities in Bangalore have created tremendous pressure on its finite natural resources. Various legislations have been enacted to safeguard the precious resources and to improve the quality of life.

A performance audit covering the period 2005-10 was conducted between May 2010 and August 2010 to verify compliance with the existing legislations and other instruments to prevent and control water and air pollution and to secure environmental safeguards in construction activities in Bangalore Metropolitan Region (BMR).

The performance audit showed the following deficiencies.

- ➔ The Karnataka State Pollution Control Board had not drawn up any concrete action plan to address pollution related issues, leading to under-utilisation of available funds. The Board had unspent balance of ₹ 208.03 crore at the end of March 2010.
- ➔ The Board did not maintain a proper inventory of polluting sources and faced huge shortage of manpower. This resulted in ineffective identification and inspection of polluting units and facilitated operation of a large number of polluting units without installing pollution control systems.
- ➔ The existing sewage network covered only 40 *per cent* of BMR and the sewage treatment plants received only 47 *per cent* of the sewage generated. The remaining 53 *per cent* was discharged directly into storm water drains and lakes, contaminating the water bodies and ground water. The ground water quality in BMR was affected due to presence of pollutants in excess of permissible limits.
- ➔ Although concentrations of air pollutants continued to be high at many places in BMR, an effective plan to control air pollution could not be drawn up due to non-finalisation of source apportionment studies.

2.1.1 Introduction

Bangalore has witnessed a fast paced multifarious growth and development. Its population increased from 12 lakh in 1970 to 75 lakh and the vehicle population in the city increased exponentially over the years. The rapid growth of industries and commercial activities have created tremendous

pressure on the finite natural resources. The increasing population has had an undesirable impact on water supply, sanitation, transport and management of waste in Bangalore. Air quality has also been badly affected. In recognition of the need for environmental protection, various legislations have been enacted to safeguard the precious resources and to improve the quality of life. This review attempts to examine the operation of the safeguards in matters relating to water and air pollution and construction activities in Bangalore.

2.1.2 Organisational set-up

At the Government level, Additional Chief Secretary, Forest, Ecology and Environment Department assisted by Secretary, Ecology and Environment Department is responsible for coordinating various activities concerning ecology and environment, including monitoring of compliance with various environmental legislations. Karnataka State Pollution Control Board (KSPCB) headed by the Chairman and assisted by the Member Secretary and 15 other members enforces the environmental legislations relating to water and air pollution in the State. Eleven[1] Regional Offices of KSPCB enforce these legislations in Bangalore Metropolitan Region (BMR). While Bangalore Water Supply and Sewerage Board (BWSSB) is responsible for water supply and sewerage services to the Bangalore City, Department of Mines and Geology (DMG) monitors ground water quality. Lake Development Authority (LDA) under the Department of Ecology and Environment is entrusted with the task of protection, conservation, reclamation, restoration, regeneration and integrated development of lakes in Bangalore.

While Government of India (GOI), Ministry of Environment and Forests (Ministry) issues environmental clearance (EC) for Category[2] 'A' construction projects, the State Environment Impact Assessment Authority (SEIAA) is responsible for issuing EC for Category 'B' projects. The Ministry's Regional Office, Southern Zone, Bangalore (MRO) monitors the construction projects for which ECs are given by the Ministry and the SEIAA.

2.1.3 Audit objectives

The objectives of the audit were to examine whether:

- KSPCB utilised its financial resources economically, effectively and efficiently;
- the administration of Water and Air Acts by KSPCB and monitoring of air and water quality was efficient and effective in BMR and whether the environmental safeguards prescribed for construction projects/activities functioned effectively; and
- the institutional capacity of KSPCB was adequate to discharge its mandated functions.

[1] Bangalore City-1, Bangalore City-2, Bangalore City-3, Bangalore North-1, Bangalore North-2, Peenya, Bangalore South-1, Bangalore South-2, Bangalore West, Bangalore East-1 and Bangalore East-2

[2] Construction projects have been divided into Category 'A' and 'B', depending upon their impact on the environment

2.1.4 Coverage, scope and methodology

Reviews on "Administration of Water Act" and "Implementation of Air Act" were included in the Report of the Comptroller and Auditor General (Civil) for the year ended March 2000 and March 2001 respectively. The Public Accounts Committee (PAC) in their Report No 10 of 11th Assembly (2002) had recommended several measures to be taken by KSPCB to mitigate the water pollution issues in the State. Performance Audit of "Waste (Solid & Biomedical) Management in Karnataka" was also included in the Comptroller and Auditor General's Report for the year ended 31st March 2008. The action taken by Bruhat Bangalore Mahanagara Palike (BBMP) on the recommendations made in the Report was verified. Action taken on the recommendations of the PAC was also verified.

Audit of compliance with the provisions in the Water (Prevention and Control of Pollution) Act 1974, and Air (Prevention and Control of Pollution) Act 1981 in BMR for the period 2005-10 was conducted during May 2010 to August 2010 by test-check of the records of Secretary, Ecology and Environment, KSPCB, BWSSB, LDA, DMG, BDA, BBMP and Commissioner of Transport. Besides, compliance with the environmental safeguards prescribed for construction projects undertaken in Bangalore was also verified through a test-check of the records of Secretary, Ecology and Environment, SEIAA, KSPCB and MRO.

The audit commenced with an entry conference with the Principal Secretary, Forest, Ecology and Environment Department in May 2010 wherein the scope, audit objectives and criteria were explained. The audit comprised scrutiny of documents, discussion with officials and field visits and joint inspections. The audit findings were discussed with the Additional Chief Secretary, Forest, Ecology and Environment Department in the exit conference held on 19 October 2010.

2.1.5 Action taken on PAC/Audit recommendations

PAC's recommendations, *inter-alia*, required the KSPCB to initiate the following measures to address water pollution related issues:

- Prepare annual action plan for implementing water pollution control programmes
- Identify and categorise industries and their monitoring, besides setting discharge standards
- Accord priority to enforcement of the Water Act
- Arrest uncontrolled growth of borewells in coordination with DMG and
- Install Sewage Treatment Plant as a pre-condition for the development of any private layout.

Except for the recommendation relating to installation of Sewage Treatment Plants in private layouts, none of the other recommendations had been acted upon as also discussed subsequently in this review.

In pursuance of audit recommendations on Solid Waste Management review, BBMP took up development of landfill sites over 370 acres allotted by Government, set up three solid waste processing units at Mavallipura, Mandur and Doddaballapura, involved Resident Welfare Associations, NGOs and rag-pickers in segregation of wastes at Sanjayanagar and Hennur Banaswadi and planned door-to-door collection of waste in a phased manner. BBMP stated (August 2010) that public resistance to setting up of disposal sites hindered the effective implementation of the recommendations.

Functioning of KSPCB

2.1.6 Finance

KSPCB's spending on pollution abatement programmes was meagre

The receipts of KSPCB consist of grants received from GOI, appropriations made by GOI under the Water Cess Act, fees collected from industrial units for issuing permits or consents for establishment/operation, interest on investments and other miscellaneous receipts. The receipts and expenditure of KSPCB during 2005-10 are given in **Table-2.1.**

Table-2.1 : Receipts and expenditure

(₹ in lakh)

Year	Grant-in-Aid from GOI	Receipts				Total Receipts	Expenditure	Closing balance
		Water Cess	Other Fees[3]	Interest on Investment	Misc. Receipts			
2005-06	2.00	155.94	2,441.56	239.93	2.36	2,841.79	1,450.52	5,042.52
2006-07	5.00	147.36	2,665.19	327.36	98.25	3,243.16	2,089.34	7,628.96
2007-08	23.50	148.59	3,233.25	609.04	189.34	4,203.72	1,698.53	10,654.84
2008-09	36.34	203.44	3,326.72	887.03	335.55	4,789.08	2,057.46	15,815.44
2009-10	13.87	88.00	3,618.22	1,470.22	136.54	5,326.85	2,722.87	20,803.36
Total	**80.71**	**743.33**	**15,284.94**	**3,533.58**	**762.04**	**20,404.60**	**10,018.72**	

Source: Annual Accounts of KSPCB

Out of ₹ 100.19 crore expended during 2005-10, ₹ 68.54 crore were spent on administrative expenses, ₹ 15.73 crore on creation of capital assets like land, building and office equipment and ₹ 15.82 crore on miscellaneous and maintenance including ₹ 4.98 crore on pollution related measures like laboratories, pollution awareness programmes, Spatial Environment Programme, Bio-mapping, National Air Monitoring Programme *etc*. Thus, only five *per cent* of the expenditure was spent on pollution control measures.

Although the grants given by GOI and 75 *per cent* of the appropriations under the Water Cess Act are to be utilised on programmes and activities for the prevention and control of pollution, KSPCB had been accumulating funds year after year and investing these in Fixed Deposits. Out of these unspent balance of ₹ 208.03 crore, ₹ 121.01 crore had been invested in Fixed Deposits as of March 2010. KSPCB stated (August 2010) that savings were due to adoption of austerity measures in spending and inadequate staff. The reply was not

[3] includes Consent Fee, Environmental Statement Fee, Hazardous Waste Management Fee, Cess Appellate Fee, Monitoring and Analysis Charges, *etc*.

acceptable as no austerity measures on spending had been prescribed by GOI. The Board had not drawn up any concrete action plan on its own to address the pollution related issues since inception, leading to under-utilisation of available funds.

2.1.7 Legal framework for pollution control

The following legal and regulatory instruments framed by GOI, empower KSPCB to enforce prevention and control of pollution of water and air.

- The Water (Prevention and Control of Pollution) Act, 1974 & Rules 1975
- The Water (Prevention and Control of Pollution) Cess Act, 1977 & Rules 1978
- The Air (Prevention and Control of Pollution) Act, 1981 & Rules 1982 and
- The Environment (Protection) Act, 1986 & Rules 1986.

KSPCB, *inter* alia, is entrusted with the following functions under these Acts and Rules:

- Planning comprehensive programmes for prevention, control or abatement of pollution of water and air and securing execution thereof
- Laying down location specific standards for (i) sewage and trade effluents and for the quality of receiving waters and (ii) emission of air pollutants into the atmosphere from industrial plants and automobiles
- Inspecting (i) sewage or trade effluents, works, plants for the treatment of sewage and trade effluents and (ii) any control equipment, industrial plant or any manufacturing process, besides air pollution control systems for assessing the quality of air therein, and
- Collecting and disseminating information in respect of matters relating to water and air pollution

2.1.8 Regulation of pollution

KSPCB is to identify the polluting sources, prescribe the conditions for their operation and monitor the compliance by these sources under the Water and Air Acts.

2.1.8.1 Non-availability of a proper inventory of polluting sources

Large number of industries operating without consent

The Water and Air Acts require the KSPCB to plan comprehensive programmes for prevention and control of water and air pollution and secure the execution thereof. To discharge this function, knowledge of the polluting sources and an inventory thereof is essential. For this purpose, identification of the polluting sources and the type and quantity of pollutants discharged into environment is necessary. The resultant inventory is to form the basis for planning pollution reduction programmes. KSPCB did not conduct any survey to identify the polluting industries and also did not maintain any such

inventory for planning purposes. Consequently, it did not draw up any comprehensive plan for preventing or controlling water and air pollution.

The inventory of polluting sources maintained by KSPCB was based on the industries applying for Consent for Establishment/Consent for Operation and others that came to light during the limited inspections conducted by its Regional Offices. Ineffective identification of the polluting sources enabled many polluting units to operate without obtaining the consent. The Chief Environmental Officer of the Board stated (September 2010) that staff constraints hampered effective identification of polluting sources. According to information furnished by KSPCB, 535 industrial units were operating without consent in BMR as of March 2010. KSPCB did not furnish information as to how long these industries had been operating without consent. A test-check of 30 consents issued for construction projects showed that seven projects, for which consents had expired in December 2008, continued to operate without renewal of consents (July 2010).

In order to secure the coordination of water pollution control efforts between departments such as Health, Agriculture, BWSSB, DMG, LDA, KSPCB *etc*., a formal mechanism and means of co-operation and information exchange is essential. It was seen that no such mechanism had been set up and as a result, the ground water table declined alarmingly, water bodies were polluted and sewage and industrial effluents were inadequately treated as discussed below:

Industries operating in the catchment of a reservoir

Establishment of industries in the catchment of a reservoir without consents

Thippagondanahalli reservoir built in 1930 at the confluence of Arkavathi and Kumudavathi rivers, supplies 125 MLD of water to the city during normal monsoon. The increased development of industrial estates in the catchment area of the reservoir impacted water inflow, storage capacity and water quality due to untreated effluent discharge into these rivers.

To protect the catchment of the reservoir from industrialisation, the Government had approved (November 2003) zonal division of the reservoir area and prescribed restrictions for setting up industrial units as shown in **Table-2.2**.

Table-2.2 : Restrictions for setting up industrial units

Zone	Area falling under the Zone	Restrictions for industrial development
1	Entire reservoir catchment	KSPCB not to issue any consent to any new industry, industrial operation, industrial activity or an extension or an addition thereto
2	Area within 2 km from the reservoir	
3	Area within 1 km from the river banks of Arkavathi and Kumadavathi	
4	Area within 1 to 2 km from the river banks of Arkavathi and Kumadavathi	KSPCB to allow only those new industrial units listed in Green Category subject to adoption of rain harvesting systems and installation of waste water treatment plants

Source: Annual Accounts of KSPCB

After KSPCB noticed operation of some industries in Zone 3, an inspection of the catchment area by a Committee appointed (May 2009) by the Principal

Secretary, Department of Forest, Ecology and Environment was undertaken in June 2009. The Committee found that 46 industrial units (highly polluting-12, moderately polluting-6 and least polluting-28) were operating in Zone-3, besides 46 godowns, 12 layouts and three colleges. All these establishments had been set up in Zone-3 after issue of Government notification in November 2003. KSPCB stated (August 2010) that six industries had been closed, closure order had been issued for 31 polluting industrial units, three cases were pending with appellate authorities/court. Consent had been given to four units and applications for consent in 2 cases were pending. Records of the Board, however, revealed that 31 polluting industries for which closure orders had been issued between September 2004 and April 2010 continued to operate (August 2010).

Unauthorised establishment and operation of a large number of industries in the catchment of the reservoir despite the ban, indicated failure of inventorisation of the polluting units by KSPCB in BMR. The State of Environment Report, Bangalore 2008 issued by the Department of Forest, Ecology and Environment observed that the number of industries registered with KSPCB accounted for only 10 *per cent* of the total industries in BMR and the number of actual polluters would, therefore, be greater. KSPCB replied (September 2010) that identification of polluting sources was not effective due to staff constraints.

2.1.8.2 Delay in issue of consents

Delay in processing applications for consents

Consents are of two types; Consent for Establishment (CFE) is sought for establishing a polluting unit while Consent for Operation (CFO) is required for operating the polluting unit. KSPCB is to issue consent to the potentially polluting operations. The principal steps leading to issue of consent by KSPCB are given in **Table-2.3**.

Table-2.3 : Steps for issuing consent by KSPCB

Action	Remarks
Submission of a formal application for consent by the polluter	The application for CFE or CFO is to be disposed of by KSPCB within 60 and 30 days respectively. Any consent, unless refused or given earlier, is deemed to have been given unconditionally on expiry of 4 months from the date of application
Advertisement[4]	To enable public to comment/object
Technical consideration	To decide conditions if consent is to be granted
Decision	Taking into account comments/objections
Issue of consent	Consent is issued and entered in the register
Renewal of consent	After review on expiry of the period stipulated in the earlier consent

As of March 2010, 1,033 applications for CFO and another 168 for CFE received from April 2009 were pending with KSPCB. A check of 261 out of 1,201 pending applications showed that 220 applications for CFO and 41 for CFE were pending with KSPCB for periods ranging from 4 to 14 months as of

[4] Only in cases where environmental clearance is required

August 2010. As a result, these cases were deemed to have been given consent unconditionally without the KSPCB having examined their merit. Thus, the important regulatory control of authorising/barring establishment of potentially polluting operations was not exercised effectively by KSPCB.

2.1.8.3 Irregular consents

Consent for operation issued before environmental clearance

According to Notification dated 14 September 2006 issued by the Ministry, Environmental Clearance (EC) is mandatory for eight categories of projects/ activities. These projects/activities are further grouped into two categories viz, Category A and Category B based on the spatial extent of potential impact and potential impact on human health, natural and man-made resources. While the Ministry is to issue EC for Category A projects, the State Environment Impact Assessment Authority (SEIAA) is responsible for issuing EC for Category B projects at the State level. Proposals for EC are to be submitted by the entrepreneur to the Ministry/SEIAA and work on the project is to commence only after EC is issued by the Ministry/SEIAA.

Scrutiny of 50 CFOs issued by KSPCB during 2007-10 for projects operating in Bangalore showed that in five cases, work on the project was commenced without obtaining EC from SEIAA and KSPCB had issued CFO without insisting on EC. KSPCB replied (August 2010) that at the time of issuing CFO, it was ensured that the applicants were in the process of obtaining EC.

As EC is a regulatory mechanism to ensure admissibility of a particular activity with remedial measures for the expected environmental impact, KSPCB's action of issuing CFO without EC in these cases showed that the controls prescribed to ensure balance between development and environmental concerns were not effective in their functioning.

2.1.8.4 Non-Installation of Emission Control Systems by Industries

Many industries did not install systems for emission control

Section 21(5) of the Air Act requires that every person to whom consent has been given is to install air pollution control equipment in the premises where the industry is carrying on its operation and it is to be kept in good running condition. The position regarding industrial units working without Emission Control Systems (ECS) and those not complying with the standards out of the total 7,427 industrial units granted consents under the Air Act as of March 2010 is as shown in **Table-2.4.**

Table-2.4 : Industries working without ECS

(In numbers)

Category of industries in Bangalore (Urban) with investment of	ECS installed & complying with standards	ECS installed but not complying with standards	ECS not installed	ECS under construction
More than ₹ 5 crore	1,015	5	27	156
₹ 1 crore to ₹ 5 crore	1,994	3	44	138

Source: Information furnished by KSPCB

Thus, 373 polluting units continued to operate without installing air pollution control systems. KSPCB stated (August 2010) that instructions had been

given to industries where ECS were either not installed or were not complying with the standards. Operation of these industries without installing ECS indicated failure of the Board to enforce compliance by these units with the conditions imposed by it.

2.1.8.5 Non-installation of Effluent Treatment Plants

Many industries did not install Effluent Treatment Plants

Section 25 of the Water Act envisages that every person to whom consent has been granted by KSPCB is to install treatment equipment in the premises where the industry is carrying on its operation and keep it in good running condition. The status of industrial units working without Effluent Treatment Plants (ETPs) and those not complying with the standards out of the total 8,029 industrial units granted consent under the Water Act is given in **Table-2.5**.

Table-2.5 : Industrial units working without ETPs

(In numbers)

Category of industries in Bangalore (Urban) with investment of	ETPs installed & complying with standards	ETPs installed but not complying with standards	ETPs not installed	ETPs under construction
More than ₹ 5 crore	1,140	8	40	196
₹ 1 crore to ₹ 5 crore	1,593	11	89	160

Source: Information furnished by KSPCB

Thus, 504 industries continued to operate without treatment plants. KSPCB stated (August 2010) that the industries which did not install ETPs had been commissioned long back and notices were being issued to some of the chronic violators, besides initiating legal action in some cases. The action taken was not effective enough and these industries continued to contravene the provisions of the Water Act. Besides, KSPCB issued consents to such industries without ensuring compliance, thereby failing to discharge its duties as an enforcer.

2.1.8.6 Inadequate inspection of Industries

Shortfall in inspection of industries by KSPCB

The frequency of inspection of industries prescribed (December 1999) by the Ministry varied according to the classification of the industries as Red (highly polluting), Orange (moderately polluting) and Green (least polluting). While the number of industries granted consent under Water Act in Bangalore was 8,029 (March 2010), those coming under the Air Act aggregated 7,427. KSPCB furnished category-wise details only for the industries covered by the Air Act as shown in **Table-2.6**.

Table-2.6 :Industries coming under Air Act

Category of industry	Number of Industries
Red	1,556
Orange	784
Green	5,087
Total	**7,427**

Source: Information furnished by KSPCB

The frequency of inspections of these industries prescribed by the Ministry is shown in **Table-2.7**.

Table-2.7 : Frequency of inspections

Category	Small Scale Industry	Large and Medium Industry
Red	At least once in a year	At least once in 3 months
Orange	At least once in 3 years	At least once in 6 months
Green	At least once in 3 years (random check)	At least once in 1 year

Source: Schedule IV of Notification dated December 1999

While prescribing the frequency, the Ministry also permitted the State PCBs to improve upon the frequency as might be necessary. KSPCB, instead of improving upon the frequency of inspections, reduced (November 2002) it for Orange and Green category industries as shown in **Table-2.8**.

Table-2.8: Reduction in number of inspections

Category	Small Scale Industry	Large and Medium Industry
Orange	At least once in 3 years	At least once in a year
Green	At least once in 5 years (random check)	At least once in 2 years (random check)

Source: Information furnished by KSPCB

As KSPCB's inventory of Red, Orange and Green categories of industries did not have information on the number of small, medium and large industries, the number of inspections to be undertaken by the Board and the shortfall, if any, could not be assessed in audit. In the absence of this information, Board was also not in a position to determine whether all the polluting units were inspected at the prescribed interval.

The number of inspections required to be conducted during 2005-10 for the industries under the Air Act even at the reduced scale fixed by KSPCB for small scale industries was 7,780, 784 and 5,087 for Red, Orange and Green categories respectively. Against this, only 186 air stack samples had been collected. KSPCB replied (August 2010) that it was a fact that there was requirement for more number of inspections than those carried out giving priority to complaints and red category industries. The reply of the Board is not acceptable as the mandate of KSPCB is to inspect the industries at the prescribed intervals and not to show only a reactive response. Further, any shortfall in assessing compliance meant a lost opportunity of measuring conformity by the industries with the standards prescribed. Audit observed that out of 2,162 industrial effluent samples and 30 air stack samples tested by KSPCB during 2008-10, 58 *per cent* of the effluent samples and 30 per *cent* of the air stack samples did not conform to the prescribed standards. As a large number of samples did not comply with the standards, the huge shortfall in inspection of industries assumes significance.

2.1.8.7 Environmental Statements

Delay in submission of environmental statements

Section 14 of the Environment (Protection) Rules, 1986 lays down that every industry, operation or process requiring consent under Section 25 of the Water Act and Section 21 of the Air Act is to conduct environmental audit every year and submit an Environmental Statement to KSPCB by 30 September of the

following year. Against 8,029 industrial units in operation in BMR, only 1,293 (16 *per cent*) had submitted Environmental Statements to KSPCB for the year 2008-09 (March 2010). KSPCB did not furnish the status of receipt of Environmental Statements for earlier periods. Non-receipt of Environmental Statements, besides evidencing poor enforcement, handicapped KSPCB in evaluating the policies, operations and activities of the industries and ensuring compliance with prescribed standards.

2.1.8.8 Research and Development

No research activity despite mandate

Although the provisions of the Water Act require KSPCB to research and investigate water and air pollution to evolve viable methods of prevention, control and abatement, KSPCB had neither taken up any research programme nor financed any research activity. KSPCB replied (August 2010) that it did not take up any such activity due to shortage of technical and scientific staff and that action was being taken to fill up the vacant posts.

2.1.8.9 Shortage of manpower

KSPCB faced huge shortage of manpower

The pre-requisite for any sustainable development of the environmental resources is that organisations, assigned with the responsibility of managing and regulating the finite environmental resources, possess the capability to carry out this task. KSPCB's sanctioned strength as of March 2010 consisted of 251 technical posts comprising the cadres of Chief Environmental Officer, Senior/Deputy/Assistant Environmental Officer, 146 scientific posts consisting of Chief/Senior/Deputy/Assistant Scientific Officers and Scientific and Field Assistants and 313 non-technical posts. Of these, 50 *per cent* of the technical posts, 67 *per cent* of the scientific posts and 62 *per cent* of the non-technical posts had remained vacant for five years. The existing sanctioned strength included additional posts (Technical Officers: 94, Scientific Officers: 85 and non-technical staff: 89) sanctioned by KSPCB in October 2005. Against this, KSPCB recruited only 12 scientific staff members and 32 members of non-technical staff and did not make any recruitment thereafter, despite increasing urbanisation and steep increase in the number of polluting industries. Eleven Regional Officers were entrusted with the compliance assessment of 8,029 industries in Bangalore Metropolitan Region. The staff composition of these Regional Offices in Bangalore showed that each Regional Office had only one Environmental Officer, one Deputy Environmental Officer, one Assistant Environmental Officer and meagre support staff. The distribution of industries under Red and Orange categories among these Regional Offices was also very uneven ranging from 78 in respect of Bangalore City-2 to 460 in respect of Peenya. KSPCB had not made any scientific assessment of the requirement of technical and scientific officers based on the distribution of industries among different regions. KSPCB with its present manpower shortages is significantly under-equipped to enforce pollution control, especially in BMR. KSPCB replied (July 2010) that a study on strengthening the Board had been entrusted to an outside agency in July 2009 and necessary action would be taken on receipt of the study report.

2.1.9 Water pollution

Bangalore generates 1,000 MLD of waste water, about 80 *per cent* of its daily water requirement, from both the surface water supplied by BWSSB and ground water resources. The city has natural undulating terrain and slopes that help easy flow of water in all the four directions. The city has three principal valleys, *viz*., Vrishabavathi, Koramangala/Challaghatta, Hebbal and five minor valleys**.** The geographical area of Bangalore was 598 square kilometres (sq kms) which increased to 800 sq kms (November 2006) on including the areas under seven City Municipal Councils and one Town Municipal Council. BWSSB's sewage network with 17 Sewage Treatment Plants (STPs) at various locations covers an area of only 317 sq kms. The Government had approved (June 2005) the Cauvery Water Supply Scheme, Stage-IV, (Phase II) at a cost of ₹ 3,383.70 crore to provide water, sewage system, *etc*., in the remaining 281 sq kms of the original area. A separate scheme for providing underground drainage facilities to the recently added areas was also approved (2005) by Government at a cost of ₹ 1,085 crore. While Phase-II is scheduled for completion in 2013, the underground drainage programme for the recently added areas is expected to be completed by March 2012. Thus, out of the total area of 800 sq.kms, the existing sewage network covers only 317 sq kms as of March 2010.

2.1.9.1 Grossly inadequate sewage treatment

STPs treated only a part of the waste water generated

A review of the performance of 17 STPs, including four Tertiary Treatment Plants (TTPs) under the control of BWSSB, during the period 2005-09 showed that against the total installed capacity of 781 MLD, waste water treated by these STPs averaged only 251 MLD (32 *per cent*) as shown in **Appendix-2.1.**

It was seen that only one out of 17 STPs with an installed capacity of 1 MLD was functioning optimally. The sub-optimal functioning of other STPs was due to choking up of intermediate sewer lines, crown corrosion and incomplete sewage lines. Further, there was a huge mismatch between the quantities of waste water generated in BMR and those treated by the STPs as discussed below:

According to the norms of Central Public Health and Environmental Organisation (CPHEO), 80 *per cent* of the water supplied flows back to the environment as waste water. Except during 2006-07, only 34 to 48 *per cent* of water supplied to the city by BWSSB had flowed back into the sewage network for treatment as shown in **Table-2.9**.

Table-2.9 : Waste water collecting in sewage network

(In million litres)

Year	Water supplied	Sewage generation as per norms	Sewage treated	Percentage of sewage treated
2005-06	1,42,372	1,13,897	53,357	47
2006-07	1,52,233	1,21,786	96,208	79
2007-08	2,46,317	1,97,054	95,207	48
2008-09	3,45,807	2,76,646	1,06,687	39
2009-10 (up to January 2010)	2,98,238	2,38,590	82,298	34

Source: Information furnished by BWSSB

If the ground water extraction of 567 MLD[5] in BMR is also considered in addition to the quantity of water supplied by BWSSB, the waste water generation would be higher than that estimated as per norms shown above. BWSSB stated (July 2010) that the present sewage system had been laid 30 years ago and was not functioning properly due to silting up or choking up of intermediate sewer stretches and crown corrosion. As a result, several sewer stretches remained surcharged chronically, leading to overflows through manholes. BWSSB further stated that it had resorted to temporary diversion of the surcharged sewers to lead the sewage into nearby storm water drains or open valleys and it was, therefore, not possible to convey the entire sewage generated to the STPs.

KSPCB replied (August 2010) that it was a known fact that 53 *per cent* of the sewage was being discharged into storm water drains and lakes directly, thereby contaminating the water bodies and BWSSB had formulated action plans for laying of sewer lines and rehabilitation of the existing sewers by 2015.

Thus, the sewage network in BMR is grossly inadequate to collect and treat the waste water generated.

Rehabilitation of existing trunk sewers

Delay in completion of rehabilitation of sewage network

A review of the action plans formulated by BWSSB showed that three Environmental Action Plans (EAPs) were prepared for replacement and rehabilitation of the existing trunk sewers.

While works on EAP-A and EAP-B commenced in 2003 and 2009 respectively, work on EAP-C had not started. The status of works under these two EAPs as of March 2010 is detailed in **Table-2.10**.

Table-2.10 : Status of EAPs

(₹ in crore)

	EAP-A	**EAP-B**
Cost of the project	46.27	176.75
Funding pattern	GOI share -70 *per cent* [under National River Conservation Plan (NRCP)] State share -30 *per cent*	GOI share-35 *per cent* State share -15 *per cent* Japan International Cooperation Agency - 50 *per cent*
Year of commencement	February/April 2003	June 2009
Scheduled date of completion	July 2010	December 2011
Status as of March 2010	93 *per cent* completed	Work in 3 out of 7 packages commenced between June 2009 and November 2009. The progress in these three packages ranged from five to 25 *per cent* as of March 2010. Work was yet to commence in the other packages.
Total expenditure as of March 2010	45.29	20.08

Source: Information furnished by BWSSB

[5] Source: State of Environment Report, Bangalore 2008 prepared by the Department of Forest, Ecology and Environment

EAP-A was sanctioned in August 2002 by the Ministry under NRCP for rehabilitation of the trunk sewers feeding four STPs. Although an investment of ₹ 47.20 crore had been made on EAP-A as of September 2010 and 94 *per cent* of the work completed, the quantity of waste water treated in 2008 and 2009 by these four STPs did not improve significantly from the 2004 levels prior to commencement of rehabilitation work as shown in **Table-2.11**.

Table-2.11 : Sewage treated by the STPs rehabilitated under EAP-A

Name of the STP	Capacity of STP	Average sewage treated (in MLD)		
		2004	2008	2009
Vrishabhavathi	180	54	51	67
Koramangala I	218	85	92	85
Koramangala II	30	2	9	9
Hebbal	60	31	32	33

Source: Information furnished by BWSSB

Thus, the rehabilitation of the existing sewers has largely failed to improve waste water collection and its treatment.

Inadequate design of STPs

STPs were not designed to treat water for all the parameters fixed by KSPCB

Although KSPCB prescribed compliance by BWSSB with 32 standards before releasing the treated effluents into the valley, the design of the STPs operated by BWSSB was not capable of treating the effluents to all the prescribed standards. The design characteristics did not include treatment of pollutants like arsenic, copper, lead, cyanide, *etc*.

The Chief Environmental Officer of KSPCB replied (August 2010) that the results of analysis of samples drawn from the STPs operated by BWSSB were not conforming to the prescribed standards and these STPs were overloaded and need to be upgraded. However, BWSSB had not taken up upgradation of the existing STPs (August 2010).

2.1.9.2 Non-utilisation of treated water

Treated waste water was not fully utilised

Tertiary Treatment Systems employ methodologies for treatment of waste water to a level where the treated water can be used safely in irrigation and industries. Tertiary treatment reduces treatment costs considerably, pollution is minimised and economic activity is created due to reuse of treated water.

In order to conserve fresh water and to reduce the demand for potable water, BWSSB set up (2003-05) four TTPs with an installed capacity of 73 MLD at a cost of ₹ 51 crore. BWSSB was to identify potential buyers for the treated water in order to recover the cost of treatment. During 2007-10, although these four TTPs treated 12.03 MKL of waste water, only 3.13 MKL of treated water was sold and the remaining quantity of 8.90 MKL of water treated at a cost of ₹ 5.35 crore was discharged into the water bodies.

BWSSB replied (September 2010) that the water treated by three of these TTPs had been either used for irrigation or sold. TTP at Vrishabhavathi valley had been constructed mainly to cater to the Naphtha-based power plant

planned by the Karnataka Power Corporation Limited (KPCL) at Bidadi. KPCL dropped the power plant due to steep increase in cost of Naphtha and changed over to a plant based on gas for which treated water would be supplied from 2012. As there were no takers for the treated water, 10 to 12 MLD of treated water was being discharged into a nearby stream, which helped in brining down the pollution load. Thus, large quantity of treated water, though available, did not yield the desired result of conserving fresh water.

2.1.10 Pollution of lakes

Lakes in Bangalore are increasingly polluted

The Lake Development Authority (LDA) registered in 2002 under the Karnataka Cooperative Societies Registration Act is responsible for protection, conservation, reclamation, restoration, regeneration and integrated development of lakes.

As per the State of Environment Report, Bangalore 2008 prepared by the Department of Forest, Ecology and Environment, only 55 lakes are surviving (August 2009) against 603 lakes in Bangalore as per LDA's records. As sewage management by BWSSB was poor, untreated sewage water released into storm water drains flowed into the lakes contaminating the water bodies. Tests of 251 samples collected by LDA during January 2010-March 2010 from 59 lakes in Bangalore indicated that the levels of carbon-dioxide, lead, Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), iron, *etc.,* were in excess of the prescribed limits as shown in **Appendix-2.2**.

A study of Bellandur and Varthur lakes taken up by the Indian Institute of Science in 2008 observed that most of the sewage from the city municipal limits flowed into the Bellandur lake, besides the natural storm water. Against more than 400 MLD of sewage generated in the catchment area of the lake, the STP established by BWSSB had an installed capacity of only 248 MLD, which was also partially utilised due to sewage network problems. The treated water, when released from the STP got mixed with untreated sewage and entered the Bellandur lake. Water from Bellandur lake flows to Varthur lake which ultimately joins the Pennar river. The study further highlighted that conversion of the watershed area of the lake for residential and commercial layouts had altered the hydrological region, lowering water yield in the catchment, affecting the ground water recharge and impairing the ability of the ecosystem due to structural changes.

Though contamination of lakes in Bangalore was known to LDA, it had not undertaken any restoration work during 2005-10. KSPCB replied (August 2010) that it was monitoring 55 lakes, of which 12 were in worst condition and 34 in bad shape. As a pollution control measure, it insisted on construction of STPs in apartments and commercial complexes and booked 18 criminal cases against polluters. As the lakes in BMR are increasingly polluted, their ecosystems have become very vulnerable to degradation.

2.1.11 Ground water pollution

Severe contamination of ground water

Rapid industrialisation and poor waste water management have caused heavy ground water pollution, rendering it unfit for consumption in several parts of BMR. The State of Environment Report, Bangalore 2008 of Department of Forest, Ecology and Environment observed that over-exploitation of ground water in BMR beyond the rechargeable limit had resulted in emergence of increasing number of semi-critical, critical and over-exploited watersheds. Against the ground water extraction of 567 MLD, the recharge from all sources was only 221 MLD. However, no measures such as enactment of legislation to control extraction of ground water and enforce rain water harvesting, use of economic instruments to conserve ground water, prevention of fecal contamination through compulsory use of latrines *etc*., had been taken up by the Government, resulting in continued depletion of ground water beyond its recharging capacity and health hazards due to the presence of pollutants in excess of permissible limits.

The Department of Mines and Geology (DMG) monitors the quality of ground water by testing samples of water collected from dug wells and bore-wells. Test results of 22 ground water samples drawn by DMG from different locations in Bangalore Urban District during 2009 showed that eight samples had higher nitrate content while hardness was in excess of permissible limit in another five samples; one sample had high fluoride content. DMG attributed (July 2010) the deterioration of ground water quality to (i) septic tanks in areas not covered by the sewage network, (ii) industrial discharge and (iii) municipal sewage.

The University of Agricultural Sciences, Bangalore had undertaken a study of the impact of ground water pollution in Vrishabavathi river basin in 2005. The study highlighted that the ground water contamination in the river basin had severely impacted the quality of ground water, rendering it unpotable and unfit for agricultural use.

KSPCB also tested 161 samples collected from the bore-wells and open wells located on either side of three valleys viz. Vrishabavathi, Koramangala/ Chalaghatta and Hebbal during 2006-07. The results showed severe contamination of the ground water in these valleys. Besides high levels of nitrates (14 samples), fluorides (13 samples) and iron (23 samples), fecal matter and total coliform were found in all the samples. KSPCB replied (August 2010) that as the existing sewage network was insufficient, ground water was constantly contaminated by domestic sewage.

Central Ground Water Board (CGWB) also analysed (March 2009) 30 underground water samples collected from different parts of Bangalore. The test results showed Radon[6] concentration in the samples ranging from

[6] When ground water percolates through rocks rich in radio active minerals, it contains high level of radon gas. Radon in water may present dual pathways of exposure to individuals, through drinking water and inhalation of air containing radon released from ground water. Exposure to Radon may cause lung cancer and can escalate health hazards to smokers.

55.96 Bq/l to 1,189 Bq/l against the permissible limit of 11.83 Bq/l. CGWB's report observed that the high concentration of Radon was not to be a cause of worry as Radon was reported in bore-well samples only after flushing for 15-20 minutes and not in stored water in the wells. The report, however, underlined the need for taking up detailed studies for further confirming the health hazards of Radon in ground water in the area. KSPCB had not initiated any further study in this regard. KSPCB replied (August 2010) that it was not monitoring Radon.

Thus, ground water quality remains adversely affected in Bangalore due to presence of pollutants in excess of permissible limits.

2.1.12 Air pollution

Economic growth accelerates increase in the number of vehicles. The two-wheeler population in BMR was 7.5 lakh in 1997 which increased to 34.90 lakh in 2010. The four-wheeler population also increased from 6.18 lakh in March 2006 to 9.85 lakh in March 2010. With the increase in vehicular population, the fuel consumption has considerably increased. Combustion of fossil fuels by vehicles is the main reason for air pollution.

The annual pollution load due to emission of various pollutants by vehicles in BMR is shown in **Table-2.12**.

Table-2.12: Pollution by vehicles in Bangalore

Category of vehicles	Number of vehicles	Average distance covered in Km / day	Distance covered in Km / annum	Emissions in Tonnes per annum				
				PM	SO2	NOx	HC	CO
Motor Cycles	20,97,152	13.5	10,420,805,115	365	208	2,814	6,357	17,194
Light duty (Petrol)	1,88,810	50	3,445,786,150	21	3,032	724	655	9,441
Light duty (Diesel)	90,112	120	4,031,833,800	242	1,572	1,976	1,048	1,210
Heavy duty (Diesel)	1,47,456	150	8,455,918,500	6722	12,684	97,243	3,298	1,02,655

Source: State of Environment Report, Bangalore 2008

2.1.12.1 Issue of Pollution under Control Certificates

73 *per cent* of vehicles did not obtain Pollution under Control Certificates

As per Rule 115 (7) of the Central Motor Vehicle Rules, 1989, all vehicles after a period of one year from the date of registration are to obtain Pollution Under Control Certificates (PUCs) from the agencies authorised by the Transport Department once in six months. During the period 2006-10, 73 *per cent* of the registered vehicles failed to obtain PUCs **(Appendix-2.3)** indicating poor enforcement by the Transport Department.

2.1.12.2 Monitoring of Air Quality by KSPCB

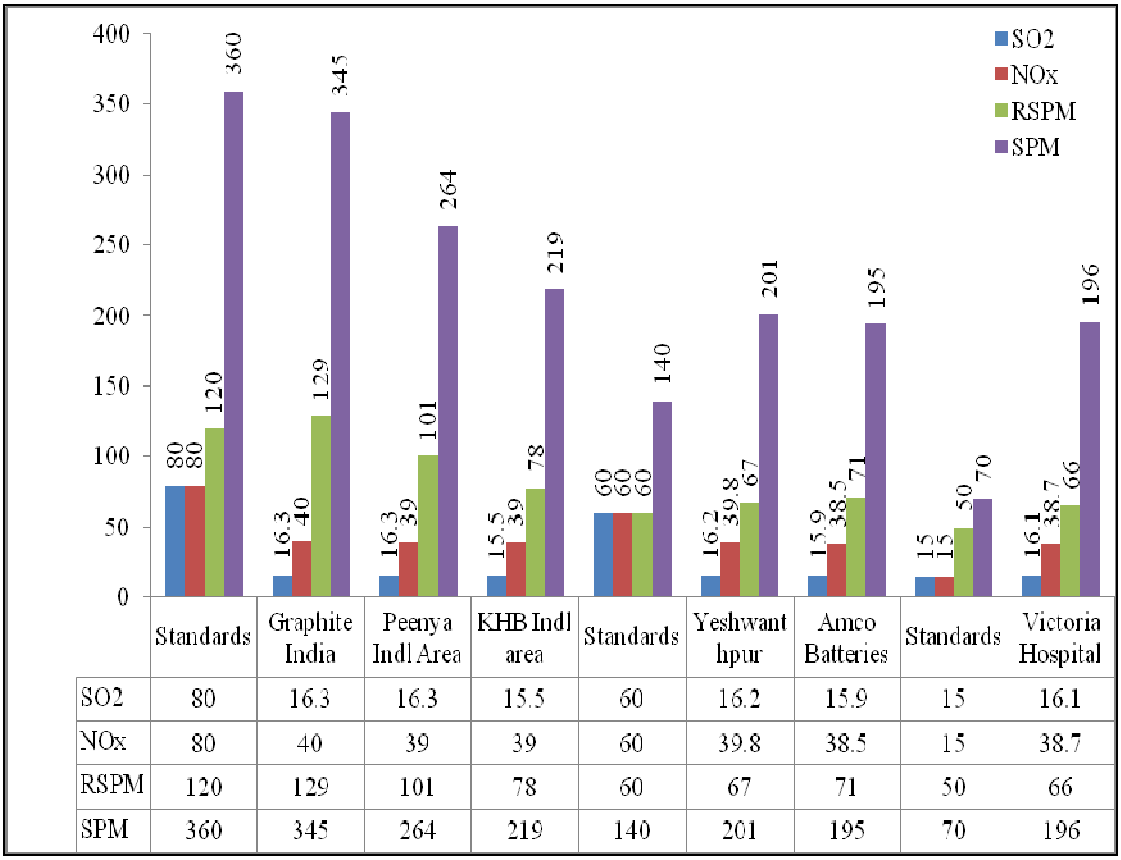
High concentration of SPM, RSPM and NOx

KSPCB monitors ambient air at seven[7] locations in BMR as part of the National Air Ambient Quality Monitoring Programme (NAAQMP). The programme monitors standard air pollutants *viz.*, Suspended Particulate Matter (SPM), Respirable SPM (RSPM), Sulphur-di-oxide (SO_2) and Nitrogen-di-oxide (NOx) in industrial, mixed and sensitive areas.

KSPCB also monitors these four standard air pollutants through its Continuous Ambient Air Quality Monitoring Station (CAAQMS) at two[8] other locations. Besides, KSPCB's mobile laboratory also monitors these pollutants at seven intersections and other polluted places.

The annual average air quality data for SPM, RSPM, SO_2 and NOx at seven locations under NAAQMP during 2007-10 was as shown below:

Annual average values of air pollutants at different locations in Bangalore city for the year 2007-08

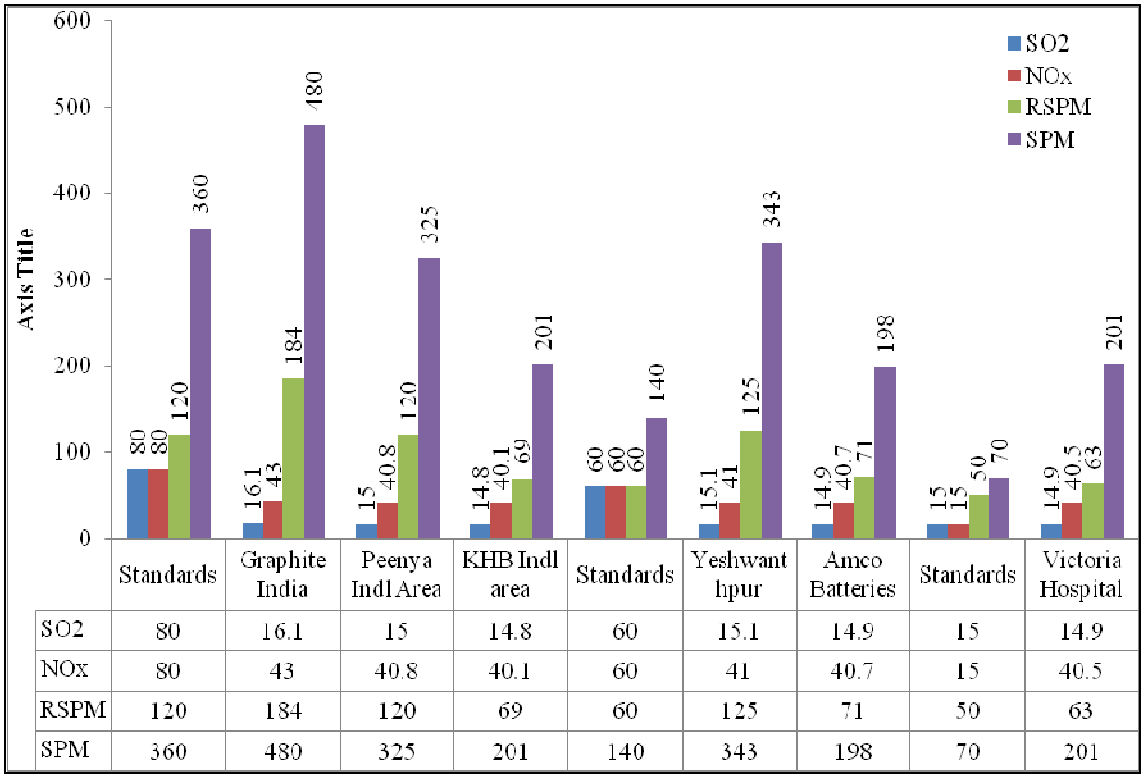


	Standards	Graphite India	Peenya Indl Area	KHB Indl area	Standards	Yeshwant hpur	Amco Batteries	Standards	Victoria Hospital
SO2	80	16.3	16.3	15.5	60	16.2	15.9	15	16.1
NOx	80	40	39	39	60	39.8	38.5	15	38.7
RSPM	120	129	101	78	60	67	71	50	66
SPM	360	345	264	219	140	201	195	70	196

[7] Graphite India, Peenya Indusrial Area, KHB Industrial Area, Yeshwantapur Police Station, Amco Batteries, Victoria Hospital and TERI Office

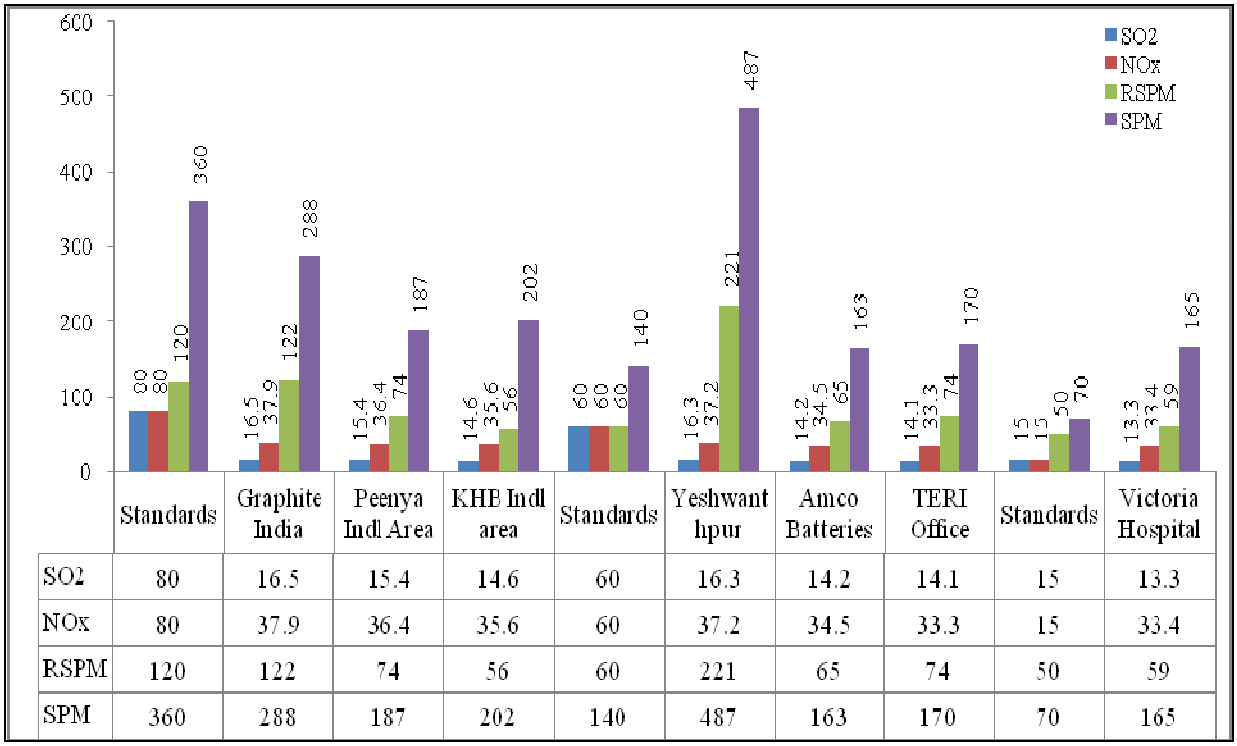
[8] City Railway Station, S.G.Halli

Annual average values of air pollutants at different locations in Bangalore city for the year 2008-09



	Standards	Graphite India	Peenya Indl Area	KHB Indl area	Standards	Yeshwant hpur	Amco Batteries	Standards	Victoria Hospital
SO2	80	16.1	15	14.8	60	15.1	14.9	15	14.9
NOx	80	43	40.8	40.1	60	41	40.7	15	40.5
RSPM	120	184	120	69	60	125	71	50	63
SPM	360	480	325	201	140	343	198	70	201

Annual average values of air pollutants at different locations in Bangalore city for the year 2009-10



	Standards	Graphite India	Peenya Indl Area	KHB Indl area	Standards	Yeshwant hpur	Amco Batteries	TERI Office	Standards	Victoria Hospital
SO2	80	16.5	15.4	14.6	60	16.3	14.2	14.1	15	13.3
NOx	80	37.9	36.4	35.6	60	37.2	34.5	33.3	15	33.4
RSPM	120	122	74	56	60	221	65	74	50	59
SPM	360	288	187	202	140	487	163	170	70	165

An analysis of the NAAQMP data revealed:

Suspended Particulate Matter

The average annual concentration of SPM showed that the concentration of SPM at Victoria Hospital, a sensitive area and Yeshwanthpur Police Station, a residential and rural area persistently exceeded the National Ambient Air Quality Standards (NAAQS) during 2007-10, indicating that these two areas were highly pollution prone. SPM concentration was high at Graphite India during 2008-09.

Source apportionment studies not completed

Though particulate matter persistently exceeded the limits in two locations, its chemical composition for identifying the sources was not available. KSPCB stated (August 2010) that a source apportionment study was entrusted to The Energy Resources Institute, Southern Region, Bangalore (TERI) by the Central Pollution Control Board (CPCB) with the objective of identifying the sources of air pollution, assessing the contribution of sources identified, prioritising sources that needed to be tackled, evaluating options for controlling the sources with regard to feasibility and economic viability and recommending the most appropriate action plan. The draft report submitted by TERI to CPCB was awaiting approval (August 2010).

Respirable Suspended Particulate Matter

The major source of RSPM is the combustion processes which produce inhalable toxic emissions smaller than 10 microns. Concentrations of RSPM exceeded the limits at Amco Batteries, Mysore Road (residential and rural area), Graphite India, Whitefield (industrial area), Victoria Hospital (sensitive area) and Yeshwanthpur Police Station (a residential and rural area). Data of CAAQMS at Bangalore City Railway Station for 2007-10 also showed that the concentration of RSPM exceeded the limits in all the three years.

Sulphur Dioxide

Sulphur dioxide is a major air pollutant emitted from the combustion processes of all fossil fuels. Air monitoring results indicated that the annual average concentrations of SO_2 were compliant with the applicable standards in all the locations.

Oxides of Nitrogen

The source of Nitrogen Oxides is the same as that of Sulphur Dioxide. Annual average concentrations were well within the standards, except at Victoria Hospital and Bangalore City Railway Station.

Government had set up (2001) a mutli-department Task Force with the objective of planning and coordinating the efforts of all stakeholders, non-Governmental organisations and the public to achieve abatement of air pollution. The Task Force drew up a 14-point Action Plan involving the departments of Transport, Food and Civil Supplies and Home, besides Bangalore Metropolitan Transport Corporation (BMTC) and KSPCB. The main components of the Action Plan were (i) conversion of three wheelers

registered after 1 April 1991 to bi-fuel mode of Petrol and LPG, (ii) mandatory registration of three wheelers having bi-fuel mode commencing from December 2003, (iii) taking action for conversion of unauthorised LPG kits and detachable cylinders in 35,000 auto-rickshaws to authorised ones, (iv) setting up of Electronic Emission Testing Centres, (v) checking adulteration of fuel (vi) establishing Auto LPG Dispensing Stations (vii) increasing the fleet size of BMTC *etc*. Most of the activities envisaged in the Action Plan were, by and large, completed as of January 2010.

However, as narrated earlier, the impact of the measures implemented by the Task Force is not visible as the concentrations of air pollutants continue to be high at many places in BMR.

As there was no concrete plan for abatement of air pollution without source apportionment studies, respiratory diseases in BMR continued to be an area of concern and the incidence of cases of respiratory illness as furnished by BBMP and District Health and Family Welfare Officer (DH&FWO), Bangalore (Urban) during 2005-10 was as shown in **Table-2.13**.

Tabl-2.13: Cases of respiratory diseases in BMR

Sl No	Year	Cases of respiratory illness reported by	
		BBMP	DH&FWO, Bangalore(Urban)
1	2005-06	22,047	31,690
2	2006-07	24,265	33,520
3	2007-08	22,250	32,845
4	2008-09	23,822	41,902
5	2009-10	21,484	32,560
Total		**1,13,868**	**1,72,517**

Source: Information furnished by BBMP and DH&FWO, Bangalore

There was also no reduction in the incidence of respiratory illness during 2005-10 and the high levels of air pollution in BMR could be one of the contributing factors.

2.1.13 Environmental safeguards in construction projects

Environmental safeguards prescribed for construction projects were not complied with

The Ministry revised the criteria for obtaining prior EC for construction projects in September 2006. As per these criteria, the construction projects were divided into two categories *viz.,* Category A and Category B. While the Ministry's prior EC is mandatory for building and construction projects belonging to Category A, prior EC is to be obtained from SEIAA for Category B projects. In respect of Category B projects, the proposals for EC are to be submitted by the entrepreneur to the SEIAA after obtaining CFE from KSPCB and work on the project is to commence only after EC is issued by the SEIAA.

Besides Category B projects, KSPCB issues CFE/CFO for the following projects:

- Residential apartments – 50 units and above or having built-up area of 5,000 square metre (sqm) and above.
- Educational Institutions (non-residential) with built-up area of 10,000 sqm and above.

- Commercial Construction Projects (Hotel, Commercial Complexes *etc*.,) with built-up area of 2,000 sqm and above.
- Layouts of area 10 acres and above.

KSPCB issued 1,148 CFEs for construction projects during 2005-06 to 2009-10 as shown **Table-2.14**.

Table-2.14: CFEs issued by KSPCB

Year	CFEs issued
2005-06	25
2006-07	233
2007-08	255
2008-09	363
2009-10	272
Total	**1,148**

Source: Information furnished by KSPCB

In 14 out of 57 test-checked projects where CFE had been issued by KSPCB, the irregularities as shown in **Table-2.15** were noticed.

Table-2.15 : Irregularities in issue of CFE

Nature of irregularity	Number of works
Commencement of work before applying for CFE	1
Commencement of work before issue of CFE	8
Construction of additional tenements with altered plan/formation of excess sites	2
Alteration of building plan without approval	1
Occupation of flats without obtaining CFO	2

Section 15 of the Environment (Protection) Act prescribes a penalty of imprisonment extending to five years or levy of fine extending to one lakh rupees or both for contravention of the provisions of the Act. It was seen that out of these 14 projects, KSPCB issued CFO for six projects without levying any penalty and for eight projects after levying administrative charges ranging from five to ten times the consent fee. KSPCB stated (August 2010) that in the case of projects, where activity was commenced without CFE, punitive action under the Water Act was not taken as no sewage would have been generated from the projects during the construction phase. The reply was not acceptable as KSPCB's role was to enforce the provisions in the Water Act and it was not vested with discretionary powers to relax these.

There was also no uniformity in levy of penalty for the contraventions which was arbitrary as there was no provision for levying administrative charges. KSPCB stated (August 2010) that while there was no provision for levy of administrative charges, these were, nevertheless, recovered as per the Board's decision. The reply is not acceptable as KSPCB's action of issuing CFO in spite of many contraventions indicated ineffective enforcement of the environmental safeguards.

2.1.14 Monitoring

Although the State of Environment Report 2008 stressed on the importance of monitoring of the implementation of mitigating activities by various Government agencies for effective environmental management, the monitoring mechanism at the Government level was weak. The Government also did not establish linkages amongst the agencies responsible for environmental management. KSPCB did not furnish monthly progress reports to Secretary, Ecology and Environment regularly. The progress reports from April 2009 to March 2010 were submitted only in June 2010. MRO responsible for monitoring construction activities of Category A and B projects received 172 ECs from SEIAA and another 141 from the Ministry during 2005-10. While MRO monitored 70 projects cleared by the Ministry, its coverage of projects cleared by SEIAA was only 12. Although the MRO had brought to the notice of the Ministry several violations of the conditions prescribed in the ECs, no action was taken against the project proponents.

2.1.15 Conclusion

KSPCB did not maintain a proper inventory of polluting sources and faced huge shortage of technical and scientific staff. It also failed to draw up any concrete action plan to address pollution related issues leading to under-utilisation of available funds. Due to ineffective identification and inspection of polluting units, a large number of polluting units operated in BMR without installing pollution control systems. As the sewage network in BMR was poor and inadequate, 53 *per cent* of sewage generated was discharged directly into storm water drains and lakes, contaminating the water bodies and ground water. Despite data being available on air pollution trends at different locations in BMR, no action plan had been prepared due to non-finalisation of source apportionment studies.

2.1.16 Recommendations

- The institutional capacity of KSPCB needs to be strengthened by providing adequate technical and scientific staff to ensure that an appropriate match exists between the organisational mandate and the institutional structure.
- A comprehensive action plan for prevention and control of water and air pollution needs to be drawn up and implemented for effective utilisation of funds.
- In order to secure coordination of water pollution control measures, a formal mechanism ensuring the participation of all stakeholders such as departments of Health, Agriculture, BWSSB, DMG, LDA, KSPCB, *etc.,* needs to be established.
- Improvement to sewage network and sewage treatment needs to be given priority.

The matter was referred to Government in September 2010; reply had not been received (December 2010).

WATER RESOURCES DEPARTMENT (MINOR IRRIGATION)

2.2 Minor Irrigation Projects

Executive summary

The Water Resources Department (Minor Irrigation) is responsible for planning, construction and maintenance of minor irrigation projects with irrigable area up to 2,000 hectares. The total irrigation potential created to the end of March 2010 through minor irrigation projects was 5.45 lakh hectares. An irrigation potential of 34,000 hectares was created during 2005-10 at a cost of ₹ 1,231.11 crore.

Performance audit of minor irrigation projects (excluding lift irrigation schemes) in the State covering the period 2005-10 revealed:

- ➔ Minor irrigation projects irrigated only 13 to 17 *per cent* of the irrigation potential created. The department had not investigated the reasons for their continued poor performance to initiate remedial measures.
- ➔ Huge year-end expenditure indicated weak expenditure controls in the department.
- ➔ The amount of pending claims under Plan sector at the end of each year during 2005-10 ranged from ₹ 12.58 crore to ₹ 67.71 crore, where as ₹ 376.47 crore were surrendered during the period.
- ➔ The number of incomplete works rose from 1,109 to 3,529 from March 2005 to March 2010, *i.e.* an increase of 218 *per cent*. The investment on these incomplete works was ₹ 756.23 crore and ₹ 928.10 crore were required for completing these. This was nearly three times the average Plan provision provided every year to the department during 2005-10.
- ➔ Funds for maintenance of minor irrigation projects were spent in excess of norms during 2005-10. Failure to acquire required land in six works for construction of canals/tanks rendered the expenditure of ₹ 5.82 crore unproductive.
- ➔ Monitoring of implementation of minor irrigation works was deficient.

2.2.1 Introduction

The ground and surface water irrigation schemes having culturable command area (also known as *atchkat*) up to 2,000 hectares (ha) are classified as Minor Irrigation (MI) Schemes. MI schemes comprise water infrastructure facilities such as wells, tanks, pick-ups, *bhandaras*[9], barrages, bridge-cum-barrages and lift irrigation schemes.

[9] Diversion structure across a stream to increase the natural level of water for irrigating lands by gravity

The MI Department (department) is responsible for planning, designing, investigation, construction and maintenance of MI Projects in the State. The department executes MI works having *atchkat* between 40 ha and 2,000 ha. Out of the total irrigation potential of 5.45 lakh ha[10] created, potential of 34 thousand ha was created during 2005-10 through 743 MI projects with an investment of ₹ 1,231.11 crore.

2.2.2 Organisational set-up

The Water Resources Department (Minor Irrigation) is headed by a Principal Secretary/Secretary at Government level, who is assisted by two Chief Engineers (CEs), one at Bangalore for the South Zone and another at Bijapur for the North Zone. The CEs are assisted by four Superintending Engineers (SEs) and 16 Executive Engineers (EEs) and two Quality Control (QC) Divisions.

2.2.3 Audit objectives

The objectives of the performance audit were to examine whether:

- the financial management system was functioning efficiently and effectively and utilisation of resources was economical and effective ; and
- the systems and procedures for programme formulation, implementation and monitoring were functioning efficiently and effectively.

2.2.4 Audit scope and methodology

The performance audit covered transactions of the department during the period 2005-10 relating to MI works excluding lift irrigation schemes. Two CEs, eight EEs and one QC Division were selected for test-check of records by using monetary unit sampling.

Field audit of the records of the selected units was conducted between January 2010 and June 2010. The audit objectives and methodology of audit were discussed with the Secretary, MI Department in the entry conference. In the exit conference held (September 2010) with the Secretary, audit findings were discussed and the response of the Government was elicited. The Secretary appreciated the usefulness of the report and stated that the same would be used for strengthening the system.

2.2.5 Financial management

2.2.5.1 Allocation of funds and expenditure

The Government provides funds for MI works and their maintenance under the heads of account "4702-Capital Outlay on MI (Plan)" and "2702-MI (Non-plan)" respectively. The Finance Department (FD) releases funds under these heads to the CEs who allot these among the EEs under their control. The

[10] Excluding LIS and medium irrigation projects

department also executes MI works financed by National Bank for Agriculture and Rural Development (NABARD). While the Government bears five *per cent* of the cost of these works, NABARD reimburses the balance in the shape of loans. The Government initially incurs the expenditure on the approved schemes and seeks reimbursement from NABARD every month by submitting expenditure statements.

Details of budget provision and the expenditure incurred thereagainst during 2005-10 are as shown in **Table-2.16**:

Table 2.16: Budget allocation and expenditure

(₹ in crore)

Year	Plan						Non-plan			
	Budget provision	Expendi-ture	Savings	Amount surrendered	Year-end unpaid claims	Percentage of unpaid claims	Budget provision	Expendi-ture	Excess	Year-end unpaid claims
2005-06	74.50	74.50	Nil	Nil	36.15	48.53	15.63	19.55	3.92	18.50
2006-07	280.25	256.45	23.80	23.80	40.66	14.51	29.20	36.72	7.52	15.14
2007-08	549.89	268.80	281.09	281.09	12.58	2.29	18.92	20.22	1.30	5.84
2008-09	292.05	288.29	3.76	3.76	26.55	9.09	20.81	21.87	1.06	7.52
2009-10	410.89	343.07	67.82	67.82	67.71	16.48	21.85	21.85	-	8.34
TOTAL	**1,607.58**	**1,231.11**	**376.47**	**376.47**	**183.65**		**106.41**	**120.21**	**13.80**	**55.34**

Source: Final re-appropriation statements submitted to Government

While there were persistent savings under Plan, Non-plan sector witnessed excesses during 2005-10. Savings of ₹ 281.09 crore during 2007-08 were mainly due to non-receipt of funds from Government of India (GOI) for a Centrally sponsored scheme[11] for which provision had been made in the budget. Test check also revealed that during 2006-07, an expenditure of ₹ 6.35 crore was incurred on works under five sub-heads[12] against which no budget grant was provided, and under "4702-Capital Outlay (non-NABARD works)", excess expenditure of ₹ 32.69 crore was incurred. The Government attributed (October 2010) the savings to delay in preparation of estimates, invitation of tenders and land acquisition. The argument is not tenable as it reflected on the quality of the budget formulation and weak budgetary control.

2.2.5.2 Ineffective budgetary and expenditure controls

The Karnataka Budget Manual (KBM) prescribes that savings available under certain heads can be utilised to meet the additional requirement of funds under other heads within the same grant/appropriation.

It was seen that the CEs made re-appropriations under Plan and Non-Plan during 2005-10, pending approval of the FD. The re-appropriation proposals for 2006-07 were submitted three days before the closure of the financial year and during 2007-10, after the closure of the financial year. However, the FD did not accept any of these proposals submitted during 2006-10.

[11] Repair, Renovation and Restoration of Water Bodies

[12] Construction of new tanks (KK), Salt Water Exclusion Dam, Special Component Plan, Tribal Sub-plan and Construction of new tanks (NABARD)

Rush of expenditure indicated weak controls

Further, the Karnataka Public Works Departmental Code (Departmental Code) prescribes that for the financial management to be efficient and effective, the expenditure should be evenly spread over the year consistent with the action plan for the year. This control, besides guarding against financial irregularities due to rush of expenditure towards the end of the financial year, is also intended to facilitate anticipation of savings and their early surrender. It was, however, seen that 27 to 47 *per cent* of Plan expenditure and 22 to 29 *per cent* of Non-Plan expenditure were incurred in the month of March during 2005-10 as shown in **Table 2.17**:

Table 2.17: Rush of expenditure

(₹ in crore)

Year	Plan			Non-Plan		
	Total expenditure	Expenditure during March	Percentage of March expenditure to the total expenditure	Total expenditure	Expenditure during March	Percentage of March expenditure to the total expenditure
2005-06	74.50	19.74	27	19.55	5.17	26
2006-07	256.45	82.70	32	36.72	10.31	28
2007-08	268.80	126.96	47	20.22	5.35	26
2008-09	288.29	127.98	44	21.87	6.45	29
2009-10	343.07	160.04	47	21.85	4.81	22

Source: Expenditure statement submitted by CE to Government

The huge year-end expenditure indicated weak expenditure controls in the department.

2.2.5.3 Savings not utilised for payment of pending claims

Pending bills were not cleared despite availability of funds

The pending claims under Plan at the end of each year ranged from ₹ 12.58 crore to ₹ 67.71 crore during 2005-10 (Table 2.16). Although savings occurred year after year under Plan, these were not utilised for payment of pending bills, after seeking sanction for re-appropriation, wherever necessary. On the other hand, the department allowed the pending bills to accumulate despite availability of funds. The savings occurred as the divisional officers did not submit proposals for re-appropriation of funds. As pending bills at the end of one year eat into the resource allocation for the next year, failure of the department to make use of the savings for payment of pending bills was indicative of skewed financial management, reducing the funds availability for infrastructure creation during 2006-10.

The Government stated (October 2010) that savings were due to availability of funds under one head of account whereas bills pertained to different heads of account. The reply was not tenable as there were no restrictions for using these savings for other purposes after getting necessary re-appropriation proposals approved by the FD.

2.2.6 Programme management

Programme management is the process by which the projects are completed within the scheduled time, budget allotment and in accordance with the prescribed specifications to realise the intended objectives.

2.2.6.1 Lack of focus on completion of spill-over works

For effective planning of the implementation of MI works including the spill-over works, a comprehensive database of all the works incorporating important inputs such as estimated cost, revised estimated cost, year-wise expenditure, achievement of milestones, reasons for slippages, unique problems encountered, balance requirement of funds for completion *etc.*, is essential to prioritise the activities and make optimum use of available scarce resources. The CEs did not maintain such a database and thus, lacked the necessary inputs for prioritisation. Further, the CEs included in the budget estimates of every year new works together with the ongoing works with the balance amounts required for their completion. However, the Government provided budget for these works at a uniform rate of 30 *per cent* of the demand. This *ad hoc* budgetary allocation resulted in distribution of available scarce resources thinly on both new and ongoing works. As a result of huge mismatch between allocation of funds and contractual obligations, the works suffered huge time and cost overruns and the number of unpaid bills of contractors also kept on increasing.

The status of MI works as of March 2005 and March 2010 as furnished by the CEs was as shown in **Table 2.18**:

Table 2.18: Position of ongoing works and fresh works sanctioned

(₹ in crore)

Category	No. of works	Latest estimated cost	No. of works completed during 2005-10	Cumulative expenditure on works completed	No. of works under progress	Cumulative expenditure on incomplete works as of March 2010	Amount required for completion of the works
Works ongoing as on 01.04.2005	1,109	360.15	888	220.02	221	115.81	62.23
Fresh works taken up between April 2005 and March 2010	6,308	1,625.02	3,000	575.36	3,308	640.42	865.87

Source: Details furnished by MI Department

Huge mismatch between allocation of funds and contractual obligations resulted in time and cost overrun

The number of incomplete works rose by 218 *per cent* (from 1,109 works in March 2005 to 3,529 works in March 2010). The investment on these incomplete works was ₹ 756.23 crore and requirement of funds of to complete these works was ₹ 928.10 crore which was nearly three times the average annual Plan provision of the department during 2005-10. CEs did not furnish the details of time and cost over-run in respect of works taken up during 2005-10. However, review of records of 305 works taken up during 2005-10 showed time overruns ranging from 1 to 24 months in 95 works and cost overruns of ₹ 26.62 crore in 246 works due to delay in acquisition of land, poor progress by contractors and execution of extra/additional items of work. The Government stated (October 2010) that efforts were on to complete the spillover works through Accelerated Irrigation Benefit Programme.

2.2.6.2 Poor performance of MI projects

Details of irrigation potential created under MI projects and potential actually utilised during each year from 2005-06 to 2008-09 are as shown in **Table 2.19**:

Table 2.19: Year-wise details of irrigation potential created and area irrigated

(In lakh hectares)

Year	Number of projects	Irrigation potential created	Irrigation potential utilised	Percentage of utilisation	Projects providing 'Nil' irrigation	
					Number	Percentage
2005-06	4,003	5.11	0.85	17	3,141	78
2006-07	4,089	5.14	0.68	13	3,485	85
2007-08	4,196	5.21	0.78	15	3,301	79
2008-09	4,259	5.17	0.79	15	3,318	78

Source: Details as furnished by MI Department

As many as 78 to 85 *per cent* of the existing MI projects were not performing for various reasons

The percentage utilisation of the available irrigation potential was dismal and ranged from 13 to 17 *per cent* during 2005-09. The main reason for the dismal performance was that 78 to 85 *per cent* of the existing MI projects were non-performing. A review of the performance of 25 new tanks constructed by eight divisions during 2005-09 indicated that while no irrigation was possible from 19 to 22 tanks, one to four tanks irrigated only 3 to 30 *per cent* of the command area as shown in **Table 2.20:**

Table 2.20: Performance of newly constructed tanks

(In hectares)

Year	'Nil' utilisation			Utilisation of 3 to 30 *per cent*		
	Number of tanks	Irrigation potential	Irrigation potential utilised	Number of tanks	Irrigation potential	Irrigation potential utilised
2005-06	19	5,216	Nil	3	2,675	475
2006-07	21	7,716	Nil	1	175	29
2007-08	21	5,801	Nil	4	3,785	115
2008-09	22	7,251	Nil	3	2,335	702

Source: Details as furnished by MI Department

The Government stated (October 2010) that the poor performance of majority of the projects was due to (i) actual yield of water was less than the assessed quantity as MI schemes were generally designed using empirical method for assessment of yield (ii) construction of small water bodies on the upstream of the existing tanks by other departments (iii) exploitation by farmers in the initial reaches and (iv) diversion of water for drinking purposes. The reply indicated that though the department was aware of the factors affecting optimal utilisation of the irrigation potential, these obviously had not been taken into account while sanctioning the new projects. As a result, new projects were proposed as a matter of routine which invariably failed to deliver the intended output.

2.2.6.3 Expenditure in excess of norms for maintenance

In terms of the norms fixed by the Twelfth Finance Commission (TFC), ₹ 300 per hectare are to be provided for maintenance and repairs of MI projects. The norms further prescribe that funds for maintenance are to be allotted for only performing projects. Details of irrigation potential created under the MI tanks, funds requirement for maintenance as per norms and expenditure incurred in excess of the norms during 2005-10 are as shown in **Table 2.21**:

Table 2.21: Year-wise details of maintenance expenditure in excess of norms

Year	Irrigation potential created (in ha)	Funds required as per norms	Expenditure incurred	Excess expenditure	Percentage of excess expenditure
		(₹ in crore)			
2005-06	5,11,168	15.34	19.55	4.21	27
2006-07	5,14,549	15.44	36.72	21.28	138
2007-08	5,21,531	15.65	20.22	4.57	29
2008-09	5,17,253	15.52	21.87	6.35	41
2009-10	5,45,468	16.36	21.85	5.49	34
TOTAL		**78.31**	**120.21**	**41.90**	

Source: Details as furnished by MI Department

Excess expenditure over the norms on maintenance during 2005-10 ranged from 27 *per cent* (2005-06) to 138 *per cent* (2006-07). Further, the fund requirement was assessed by audit for maintenance of all MI tanks in the State, both performing and non-performing. The requirement of funds for maintenance of performing projects alone would have been far lower as 78 to 85 *per cent* of existing tanks (Table 2.19) were non-functional.

Three divisions incurred ₹ 7.31 crore on maintenance of non-performing projects

Records further revealed that three[13] divisions incurred an expenditure of ₹ 7.31 crore during 2005-09 on maintenance of non-performing MI tanks as detailed in **Table 2.22.**

Table 2.22: Expenditure incurred on non-performing projects

(₹ in crore)

Name of the Division	Number of non-performing projects	Expenditure incurred on maintenance
Bijapur	94	2.77
Bidar	45	2.37
Gulbarga	106	2.17
TOTAL	**245**	**7.31**

Source: Details as furnished by MI Department

Persistent spending on maintenance of non-performing projects in disregard of norms resulted in frittering away scarce resources.

2.2.6.4 Overlapping of atchkat of MI tanks with other schemes

Three divisions irregularly spent ₹ 3.69 crore on maintenance of tanks coming under Major/ Medium Irrigation Projects

As per Government instructions (April 1982), all completed and on-going MI tank works whose irrigable command areas were covered by Major/Medium Irrigation Projects were to be handed over to the project authorities concerned to guard against duplication of expenditure on maintenance. However, it was seen that three[14] divisions incurred an expenditure of ₹ 3.69 crore during 2005-10 on maintenance of 43 tanks coming under the command areas of Major/Medium Irrigation Projects. Non-transfer of these tanks, besides being indicative of deficient monitoring, was fraught with the risk of duplication of expenditure.

[13] Bijapur, Bidar and Gulbarga
[14] Bijapur, Bidar and Gulbarga

The Government stated (October 2010) that out of 20 tanks, handing over 19 tanks to the concerned Major Irrigation divisions was in progress. The handing over of the remaining 24 tanks had not been done.

2.2.6.5 Non-handing over of tanks to Zilla Panchayats

As per Government instructions (April 2004), MI tanks having an *atchkat* of 40 ha and below were to be transferred to Zilla Panchayats (ZPs) concerned for maintenance.

Eight divisions irregularly spent ₹ 19.45 crore during 2005-10 on maintenance of 142 MI projects having *atchkat* of 40 ha and below without transferring them to the ZPs.

The Government stated (October 2010) that generally all tanks having *atchkat* of less than 40 hectares had been transferred but some tanks still remaining with the MI department would also be transferred.

2.2.7 Water Users' Associations

As per the National Water Policy, 2002 formulated by GOI, Ministry of Water Resources, Water Users' Associations (WUAs) are to be involved in the operation, maintenance, and management of water infrastructure with a view to eventually transfer the management of such facilities to the user groups. The financing by NABARD for MI works was also subject to the formation of WUAs from the starting of each project. These WUAs are to be registered under the Karnataka Societies Registration Act, 1960.

Against 4,731 MI projects in the State, only 624 WUAs had been formed as of March 2010. The Government stated (October 2010) that the department was constrained to maintain these MI projects as generally water did not fill up in all these water bodies in all the years affecting income and the farmers were used to the old method of maintenance of the projects by the Government. Thus, the department failed to ensure the participation of the user in the management of water facilities. This was in violation of the participatory approach advocated by GOI, according to which management of the water facilities was the responsibility of the WUAs.

2.2.8 Programme implementation

2.2.8.1 Slippages in execution of NABARD Works

1,194 works taken up under NABARD loan witnessed serious slippages in implementation

The department took up another 1,194 MI works during 2005-09 under three tranches with loan assistance from NABARD. The status of these three tranches as of March 2010 was as shown in **Table 2.23**:

Table 2.23: NABARD assisted projects taken up during 2005-09

(₹ in crore)

Sl. No.	Tranche	No. of works taken up	Estimated cost	Revised estimated cost	Finance from NABARD	Expenditure as of March 2010
1	RIDF-XI	247	123.63	125.69	117.04	132.62
2	RIDF-XIII & XIV	947	343.90	344.12	325.82	199.20
	TOTAL	**1,194**	**467.53**	**469.81**	**442.86**	**331.82**

Source: NABARD Progress Reports

Out of these works, 834 were completed, 352 were in progress and eight had been stopped due to problems in land acquisition after incurring an expenditure of ₹ 1.34 crore. Scrutiny of 246 of the completed works showed that delay in their completion ranged from one to 51 months, besides cost over-run of ₹ 26.78 crore. The time and cost over-runs were mainly due to delayed land acquisition and extra/additional items of work entrusted to contractors. Although the progress in financial terms was 71 *per cent* of the projected cost, the reimbursement obtained was ₹ 266.92 crore against eligibility of ₹ 315.22 crore as of March 2010. Due to defective estimation, the scope of work increased leading to an extra expenditure of ₹ 48.30 crore in execution of extra/additional items in lieu of sanctioned items which was not reimbursed by NABARD.

2.2.8.2 Non-acquisition/delay in acquisition of land

₹ 5.82 crore rendered unproductive due to non-completion of works

As per Departmental Code, work should not be commenced by the department unless land for the execution of the work is duly acquired from the responsible civil officers. When land is still to be acquired, the time required for the acquisition of the land should be ascertained from the Deputy Commissioner concerned before issuing the work order.

Non-observance of codal provisions regarding acquisition of land in six out of 20 test-checked cases resulted in non-completion of canals, despite creating storage facilities, in three works and non-completion of tanks in another three cases, rendering the investment of ₹ 5.82 crore unfruitful as discussed below:

Construction of MI tank near Ujalamba village in Basavakalyan taluk

The work of construction of the tank to provide irrigation to 115 ha was entrusted (December 2005) to a contractor for ₹ 1.32 crore for completion by June 2007. The contractor completed the bund and allied works except canals in June 2007. The canal work could not be started due to objection of the land owners. As a result, irrigation to the intended *atchkat* could not be provided, rendering the expenditure of ₹ 1.78 crore incurred on the tank unproductive.

Construction of MI tank across Savihalla near Somanakoppa village in Kalghatagi taluk

The construction of the tank with an *atchkat* of 270 ha taken up in February 1999 was completed in 2008 at a cost of ₹ 1.94 crore. However, right and left bank canals to the tank were partly completed due to non-acquisition of land.

As a result, irrigation was not possible to the *atchkat,* rendering the expenditure of ₹ 1.94 crore on the tank unfruitful.

Construction of MI tank near Belavi village in Hukkeri taluk

The work of construction of the tank to provide irrigation to 58.70 ha was entrusted (May 2006) to a contractor for ₹ 47.27 lakh for completion by August 2007. The contractor completed the bund and allied works at a cost of ₹ 66 lakh. The canals could not be completed due to objection of the land owners. The Government ordered closure of the project in January 2010, rendering the investment of ₹ 66 lakh thereon infructuous.

The Government in respect of above three works stated (October 2010) that canals were not constructed due to objection by land owners as they derived benefits by increase in water table due to storage of water. The reply is not tenable as the objective of these projects was to provide irrigation to 443.70 ha, which was not achieved.

Construction of percolation tank near Rampur village of Humnabad taluk

The work of construction of percolation tank was entrusted (April 2006) to a contractor for ₹ 29.11 lakh for completion by November 2006. The work required 1.92 ha of land in reserve forest area but the department failed to obtain necessary clearance from the Forest Department. The work was stopped after incurring an expenditure of ₹ 13 lakh and had not been resumed (October 2010).

Construction of new MI tank in Nichapura village of Harappanahalli taluk

The work was entrusted to the contractor in February 2000**.** Land acquisition proceedings for the project were, however, initiated only in December 2005. The contractor commenced the work in October 2007 but stopped in March 2008, after incurring an expenditure of ₹ 72 lakh. Though the final award for acquisition of land was issued in December 2008, the division had not taken over the possession of land and the work remained suspended (October 2010).

The Government stated (October 2010) that the work was stopped due to the death of the contractor and the process of rescinding the contract and invitation of fresh tenders for completion of the balance work was under progress. The fact remained that the work on the tank had not been resumed even after more than two years of its stoppage rendering the expenditure unfruitful.

Construction of barrage across Ganagitti Halla and feeder channel in Tarikere taluk

The work of construction of barrage across Ganagitti Halla and feeder canal to Bukkambudi Doddakere (tank) estimated to cost ₹ 78 lakh was sanctioned by the Government in May 2006. The objective of the project was to restore the

lost *atchkat* (43.30 ha) at the tail-end of the existing tank with 230 ha *atchkat*. The work was entrusted to a contractor for ₹ 78.74 lakh, for completion by November 2007. The work was closed (September 2008) after construction of the barrage and feeder channel upto a length of 310 metres against the designed length of 1,700 metres at a cost of ₹ 59.39 lakh due to non-handing over of land by the Forest and Revenue Departments.

Due to non-completion of the feeder channel, the expenditure of ₹ 59.39 lakh incurred on the project was rendered infructuous. The Government stated (October 2010) that the work was taken up in anticipation of the approval from the Forest Department and that partial completion of the channel for 310 metres was providing indirect benefit to 40 ha of land due to increase in water table in surrounding areas, besides drinking water to wild animals/cattle. The reply was not tenable as the objective of restoring the tail end of the *atchkat* was not achieved. The execution of the work itself was questionable as the existing tank irrigated an *atchkat* between 268.12 to 327.11 ha during 2005-10 against the total *atchkat* of 230 ha.

2.2.8.3 Expenditure in excess of approved estimates

Expenditure of ₹ 30.02 crore was incurred without sanction

The Departmental Code envisages that when the cost of a work exceeds or is likely to exceed the estimated cost by more than 15 *per cent*, sanction for the revised estimate is to be obtained from the competent authority.

Scrutiny of records in four divisions[15] revealed that the expenditure of ₹ 128.43 crore incurred on 46 works exceeded their estimated cost (₹ 85.57 crore) by more than 15 *per cent.* Revised estimates of these works were not sanctioned in any case. The expenditure of ₹ 30.02 crore incurred in excess of 15 *per cent* of their estimated cost was, therefore, unauthorised. The Government stated (October 2010) that necessary instructions would be issued to project authorities to take action as per codal provisions.

2.2.8.4 Non-recovery of extra cost

Contracts for nine works were rescinded by the divisions at Bangalore and Gulbarga between February 2007 and January 2009 due to deficiencies in performance. The agreements in all these cases stipulated that the extra cost incurred by the department in completing the balance works through other agencies would be recovered from the defaulting contractors. Although the divisions incurred an extra expenditure of ₹ 2.12 crore **(Appendix-2.4)** in completing the balance works, these failed to take any action to recover the extra cost from the defaulting contractors. It was further seen that ₹ 15 lakh were available with these divisions representing the Security and Earnest Money Deposits of the defaulting contractors. Even after adjusting this amount against the extra cost recoverable, ₹ 1.97 crore was still recoverable. The department had not taken any effective action against the defaulting contractors after rescinding their contracts.

[15] Bangalore, Gulbarga, Mysore and Shimoga

The Government stated (October 2010) that the Divisional Officers had been instructed to take proper action to recover extra cost on execution of balance works. It also stated that the concerned Deputy Commissioner would be asked to recover the same as arrears of land revenue in case of non-recovery from the concerned contractors executing works in other divisions in the State.

2.2.8.5 Slow progress in boundary survey works

The Government instructed (February 2007) the EEs of MI divisions to arrange for survey of completed MI tanks in order to identify encroachments and arrange for their eviction. The Government had directed completion of the survey work before onset of the monsoon in 2007. However, 1,323 tanks only had been surveyed as of June 2010 against the requirement of 2,264 MI tanks. The survey identified encroachment of 3,402 ha in 715 tank beds. Of this, encroachments of only 1,064 ha had been cleared in respect of 226 tanks. The Government in their reply (October 2010) stated that the slow progress was due to paucity of funds for survey and shortage of surveyors in the Revenue Department. Non-completion of survey was fraught with the risk of further encroachments, thereby reducing the storage capacity of tanks and the irrigated area. Concerted action to clear the tank beds of encroachments was, therefore, necessary.

2.2.8.6 Payment of bills without checking measurements

As per the Departmental Code, EE has to check-measure the final measurements of works costing more than ₹ 25,000 to the extent of 25 *per cent* of the total value of the work done, before payment of bills.

Records of three[16] out of eight divisions test-checked revealed that 23 out of 246 first and final bills for ₹ 42.52 lakh were paid by EEs without conducting check measurements. The Government attributed (October 2010) the lapses to rush of work and also stated that the EEs had been instructed strictly to take action as per codal provisions. Payment of bills without check measurement was fraught with the risk of the works not having been actually executed or not being in accordance with the prescribed specifications.

2.2.9 Quality Control

As per the guidelines of Quality Control (QC) in MI, each QC division is to receive monthly progress report of various items of works from the construction divisions so as to ensure that tests conducted at site are adequate and untested materials are not used on the works. The QC division at Bangalore had not received monthly progress reports from the construction divisions to ensure use of tested material on the work. Against 658 works inspected by the two QC divisions, compliances to QC inspection reports in respect of 234 works were not submitted by 16 MI divisions and the delay in submission ranged from one to five years as of March 2010. The Government in their reply (October 2010) stated that the EEs were instructed not to pay the bills for the works until rectification of defects, if any.

[16] Bangalore, Hassan and Shimoga

2.2.10 Monitoring and evaluation

Although implementation of MI works was monitored by the CEs through monthly review meetings, these do not seem to have produced the desired results. The increasing number of spill-over works year after year, continued investment on non-performing projects, non-transfer of MI projects to project authorities/ZPs and persistent slippages in implementation of schemes due to commencement of works without acquiring the requisite land indicated deficient/ineffective monitoring. Besides, the monitoring systems failed to initiate any remedial measures for improving the system of implementation of schemes and consequently, the lessons learnt over a period of time in implementing the schemes failed to bring about any systemic changes.

The department also did not evaluate the performance of the schemes to ensure that the irrigation potential created was utilised fully.

2.2.11 Conclusion

The budget preparation exercise in the department was not directed towards optimal resource utilisation and the scarce plan resources were distributed thinly on many works, hampering their timely completion. As there was a mismatch between budget provision under Plan and the requirement as per contractual obligations, the pending bills of contractors kept increasing and this affected resource availability for infrastructure creation. The project implementation by the department was tardy, as many works with huge investment remained incomplete over a period of time and a large number of works witnessed time and cost overruns for a variety of reasons such as non-acquisition of lands, inadequate financial resources, *etc*. Despite substantial investment over the years on MI projects, only 13 to 17 *per cent* of the irrigation potential created under these projects was utilised and the number of non-performing projects increased. Planning and monitoring of the MI projects was deficient as it failed to improve the system of project formulation, implementation and delivery for realising the intended objectives.

2.2.12 Recommendations

It is recommended that

- all on-going MI projects should be thoroughly reviewed to assess their viability, and wherever it is found that some of these are not going to achieve the stated objective due to non availability of water, *etc.,* these should be considered for closure,
- an action plan should be drawn up to complete the spill over works in a time bound manner to avoid cost escalation, and
- reasons for poor performance of MI projects should be analysed for taking appropriate remedial measures.

Chapter 3

Audit of Transactions

Audit of transactions of the Government departments, their field formations as well as that of the autonomous bodies brought out several instances of lapses in management of resources and failures in the observance of the norms of regularity, propriety and economy. These have been presented in the succeeding paragraphs under broad objective heads.

3.1 Non-compliance with the rules

For sound financial administration and financial control, it is essential that expenditure conforms to financial rules, regulations and orders issued by the competent authority. This not only prevents irregularities, misappropriation and frauds, but helps in maintaining good financial discipline. Some of the audit findings on non-compliance with rules and regulations are as under:

URBAN DEVELOPMENT DEPARTMENT

3.1.1 Faulty estimate and defective Bill of Quantity facilitating inadmissible payments to a construction company

The Bangalore Development Authority prepared estimate for construction of a part of the Outer Ring Road in contravention of specifications prescribed by the Ministry of Road Transport and Highways. This led to preparation of a faulty Bill of Quantity, resulting in an inadmissible payment of ₹ 2.66 crore to a construction company.

Bangalore Development Authority (BDA) entrusted (June 2008) construction of Outer Ring Road (ORR) with approaches to road under bridge (RuB) between Mysore Road and Magadi Road to a construction company at a cost of ₹ 79.84 crore for completion by June 2009.

The work consisted of construction of a RuB with suitable sloping approach roads on either side to facilitate unhindered traffic movement under the bridge. The approaches were to be formed by excavating the natural ground on either side of the bridge to varying depths. Retaining walls on either side of the approaches were to be built to prevent the slipping of earth from the cut faces of the sides. Audit of the records of Executive Engineer, Megacity Division, Bangalore revealed (September 2009):

Inadmissible payment for backfilling

According to the estimate and technical specifications forming part of the agreement, the company was to carry out the work as per the specifications for Roads and Bridges issued by the Government of India, Ministry of Road Transport and Highways. Ministry's specifications (Clause 304) governed the excavation for the foundations of RuBs and the retaining walls. The rate quoted by the company, in terms of this clause, included, *inter alia,* the cost of

backfilling the space between the foundation masonry/concrete and the sides of excavation with approved material, including its compaction. Thus, the company's quoted rate for excavation included the cost of backfilling behind the retaining walls. BDA, however, had shown this backfilling as a separate item in the Bill of Quantity (BOQ) and the company received a payment of ₹ 85.29 lakh (June 2010) for this item of work. Payment for backfilling separately to the company was not warranted as the rate quoted by the company for excavation for foundation included this item of work. The payment of ₹ 85.29 lakh was, thus, extra contractual and amounted to extending financial benefit to the contractor.

Classification of roadway excavation as excavation for foundation of structures

According to the Ministry's specifications, excavation for roadway was to be done as prescribed under Clause 301. However, BDA included the roadway excavation for approaches on either side of the RuB in the BOQ under Clause 304 meant for excavation for foundation of structures. The operations covered by both these clauses as spelt out by the Ministry's specifications are as under:

Operations covered by Clause 301	Operations covered by Clause 304
• Excavation • Transporting the excavated material and depositing it with all lifts and lead up to one Km • Trimming bottoms and slopes of excavation • Dewatering	• Excavation • Construction of coffer dams, cribs, sheeting, shoring, bracing and their subsequent removal • Foundation sealing • Dewatering • Backfilling and disposal of surplus material with all lifts and lead up to one Km

Thus, the company's quoted rate for excavation for approaches, by virtue of its classification under Clause 304, covered the cost of all the operations listed above under Clause 304, whereas the actual work done consisted of only the operations listed under Clause 301 above. Wrong classification of excavation for roadway as excavation for foundation enabled the company to load the cost of unwanted operations in their quoted rate and receive payment for work not done. In the case of backfilling alone, which the company did not carry out with the excavated material from roadway excavation, the company benefitted by ₹ 1.81 crore. The benefit to the company due to other unwarranted operations was not verifiable in the absence of comparable rates in the BOQ.

The Executive Engineer, Megacity Division, Bangalore stated (September 2009) that the sloping excavation executed in the stretch for the RuB was not for roadway and it was one full structural component of the RuB, executed as per the sanctioned estimate and the agreement. It was further stated that as the ORR was constructed with an acquisition width of only Right of Way, there was no scope for benching or stepped excavation in the deep cut portion. The reply was not tenable as construction of the RuB and the approaches were two dissimilar and distinct works and were to be executed according to the Ministry's appropriate specifications, which had been evidently disregarded at the time of preparing the estimate and the BOQ. Regarding non-availability of

sufficient space for stepped excavation, it may be pointed out that the box-width of the RuB was 32 metres and beyond this box-width, land to a width of 9.75 metres was available on either side for service roads. Sufficient space was, therefore, available for stepped/sloped excavation.

Thus, preparation of the sanctioned estimate and BOQ in disregard of the Ministry's specifications facilitated an inadmissible payment of ₹ 2.66 crore to the company.

The matter was referred to Government in June 2010; reply had not been received (December 2010).

3.1.2 Selective use of Schedule of Rates for extending benefit to a company

BDA disregarded contractual provisions and chose different Schedule of Rates for different items of work, leading to excess payment of ₹ 1.64 crore to a company.

The Bangalore Development Authority (BDA) entrusted (December 2005) construction of six lane outer ring road with two lane service road on both sides, connecting Mysore Road and Magadi Road from Km 51.88 to Km 56.70, to a construction company at a cost of ₹ 53.54 crore for completion by June 2007.

In terms of the contract agreement, any additional quantity exceeding 125 *per cent* of the tendered quantity executed in respect of an item of work was to be paid at the rate mentioned in the prevalent Schedule of Rates (SR) for National Highways, Bangalore Circle (NH), plus or minus the overall tender percentage. During execution, quantities exceeded 125 *per cent* of the tendered quantities in respect of a number of items. BDA determined the rates for the additional quantities of 18 items on the basis of SR of NH for 2006-07 as per the agreement. It, however, followed the SR of Public Works Department, Bangalore Circle (PWD) to workout the rates of three other items, though the rates for these items were available in the SR of NH. The rates payable for these three items as per the SR of NH and those paid were as follows:

Item of work	Tendered Quantity (cum)	Executed Quantity (cum)	Excess quantity paid at higher rate (cum)	Rate paid for quantities exceeding 125 *per cent* as per SR of PWD	Rate payable for quantities exceeding 125 *per cent* as per SR of NH	Excess payment (₹ in lakh)
				(In ₹)		
Excavation for roadway in soft rock	23,275	55,337	26,293	312.22	42.61	70.89
Excavation for foundation in soils	42,368	90,379	37,227	113.95	47.85	24.61
Excavation for foundation in soft rock without blasting	5,296	23,016	16,263	492.26	68.37	68.94
Total						**164.44**

In terms of the agreement, application of rate based on SR of NH for the quantity in excess of 125 *per cent* of the tender quantity was mandatory. The BDA, by adopting higher rates of SR of PWD, extended undue benefit of ₹ 1.64 crore to the company.

The Executive Engineer, Megacity Division, Bangalore stated (September 2009) that the specification as per the SR of NH was applicable for mechanical means, which was not possible as the road was running through built-up areas. The reply was not tenable as 125 *per cent* of the tendered quantity had been excavated using mechanical means and there was no reason as to why the remaining quantity could not be executed by mechanical means. Besides, construction of a six lane carriageway with a two lane service road on either side, itself indicated availability of sufficient space for excavation by mechanical means.

Thus, BDA was selective in following the SR beneficial to the company for regulating payments for excess quantities under the three items of work. This selective approach, in violation of the contractual provisions, extended an undue benefit of ₹ 1.64 crore to the company.

The matter was referred to Government in June 2010; reply had not been received (December 2010).

WATER RESOURCES DEPARTMENT -TUNGABHADRA PROJECT

3.1.3 Suspected fraudulent payments on maintenance works

Suspected fraudulent payments of ₹ 2.98 crore to contractors during 2006-09 for maintenance of canals and distributaries.

Karnataka Government's Public Works Departmental Code provides for taking up of maintenance works costing less than ₹ 3,000 through contractors on task work basis either at departmental schedule of rates or quoted rate of the contractors, whichever is less and payments are generally made within a week[1] from the date of recording of measurements. The Codal provisions stipulate that the pages containing detailed measurements must be invariably crossed by putting diagonal lines in the Measurement Book (MB) on preparation of the bills and referenced with the bill number. After payment, the voucher details along with the month of payment are to be noted so that double payments are avoided. The Superintending Engineer (SE) is required[2] to ensure that MBs are kept carefully and measurements recorded properly during annual inspection. The Executive Engineer, Canal Division No. 5, Yermarus (EE) paid ₹ 6.46 crore during the period 2006-09 to contractors

[1] Para 165 (a) (vi) of Karnataka Public Works Departmental (KPWD) Code
[2] Para 301of KPWD Code

towards task works relating to annual maintenance of canals and distributaries carried out during the period 1997-2009[3].

Scrutiny of records (February 2010 to April 2010) of the Division revealed cases of double payment, payment of bills by giving fictitious reference to measurement book details/ bills belonging to other divisions, *etc,* leading to suspected fraudulent payment of ₹ 2.98 crore as discussed in the succeeding paragraphs:

- **Verification of MB numbers and page numbers as recorded on the vouchers with those in the MBs revealed that ₹ 32.01 lakh were paid again through 993 vouchers during 2006-09 even though these works had already been paid for. It was also noticed that the entries of measurements were not cancelled as required and details of bill number, voucher number and month of payment were not recorded in the MBs even when double payments were made.**
- **In respect of 2,831 vouchers amounting to ₹ 87.12 lakh, the bills appeared to be fictitious as the name of the work and the contractor recorded on the vouchers did not tally with the details recorded in the MBs. Further, in respect of payment of ₹ 12.42 lakh (out of ₹ 87.12 lakh) made with reference to recordings in MB 2380 and 2396, it was noticed that these MBs were issued in May 2005 and December 2005 to the sub-division after the date of recording of measurements (November 2003 and March 2005). Thus, the *bona fides* of the above payments were doubtful.**
- **In respect of 1,929 vouchers involving payment of ₹ 95.30 lakh to the contractors, details of reference to MB number and page number were not recorded on the bills. Out of these, 1,119 vouchers bore reference to MB number only without mentioning their page numbers to enable verification that the payment of these works had not been already made. Moreover, the relevant MBs (268 numbers) relating to these payments were not produced to audit.**
- **The Task Works Agreements (TWAs) are concluded by EE with contractors for taking up maintenance works for a year and the total number of task work bills should not exceed the total number of TWAs concluded. The task work bills are petty bills and normally paid as first and final payment within a week from the date of measurement. As per TWAs Register for 2004-05, 896 TWAs (₹ 21.92 lakh) were concluded by EE in respect of No.2, Sub-division, Yermarus. Further, as per the bill register of the division, no task work bill was pending as on 01 April 2006 and hence, no payment for task work bills of 2004-05 should have arisen during 2006-09. However, an amount of ₹ 67.64 lakh on 2,227 task work vouchers relating to 2004-05 of the above sub-division was paid during 2006-09. The task work bills with the TWA 897 and onwards pertaining to 2004-05 appeared fictitious as these exceeded the number of TWAs**

[3] 1997-98- ₹ 0.20 lakh, 1998-99- ₹ 0.53 lakh, 1999-2000- ₹ 0.36 lakh, 2000-01- ₹ 3.09 lakh, 2001-02- ₹ 5.13 lakh, 2002-03- ₹ 33.24 lakh, 2003-04- ₹ 39.83 lakh, 2004-05- ₹ 3.03 crore, 2006-07- ₹ 28.40 lakh, 2007-08- ₹ 2.28 crore, 2008-09- ₹ 4.42 lakh

concluded during that year *i.e.* 896. Thus, the *bona-fides* of the payment of ₹ 67.64 lakh, considering the fictitious reference to TWAs and delay of more than three years against the stipulated period of one week, appear doubtful.

- **As a rule, claims relating to the works coming under the jurisdiction of a division should be paid only by that division. However, the EE, while holding additional charge of Canal Division No.4, Sirwar, paid (December 2006) ₹ 15.90 lakh in respect of 311 bills belonging to Canal Division No.4, Sirwar, out of the funds of No.5 Canal Division, Yermarus. On verification, it was noticed that an amount of ₹ 4.34 lakh had already been paid in respect of the above bills by Sirwar Division during December 2006. Thus, payment of bills of a different division by the EE was not only irregular but also resulted in double payment of ₹ 4.34 lakh.**
- **The other discrepancies noticed included bills not signed by the Engineer in-charge of the work, the concerned Assistant Executive Engineers not certifying the correctness of measurements, absence of signatures of contractors in token of acceptance of the measurements, bills not being subjected to pre-audit of the Divisional Accountant, cheques issued in favour of third persons other than the contractors mentioned in the agreements *etc*.**
- **Annual inspection of the Division by the SE was in arrears from 2006-07 and the reasons for omission were not on record.**

The various irregularities brought out above indicated that fictitious bills were wilfully paid for, resulting in suspected fraudulent payment of ₹ 2.98 crore. The matter requires further investigation by the Government for fixing responsibility and recovering the Government money.

On the matter being referred (June 2010), the Government in their reply (September 2010) stated that it had ordered investigation by the Vigilance Cell of the department and initiated criminal proceedings against two officials by placing them under suspension.

3.2 Audit against propriety/Expenditure without justification

Authorisation of expenditure from public funds is to be guided by the principles of propriety and efficiency of public expenditure. Authorities empowered to incur expenditure are expected to enforce the same vigilance as a person of ordinary prudence would exercise in respect of his own money and should enforce financial order and strict economy at every step. Audit has detected instances of impropriety and extra expenditure, some of which are hereunder.

HIGHER EDUCATION DEPARTMENT

3.2.1 Irregularities in procurement of IT products and services

Visveswaraiah Technological University spent ₹ 1.40 crore for providing on-line learning platform which was not utilised by the students. The University also made an unproductive investment of ₹ 70.33 lakh on other IT products and services.

Visveswaraiah Technological University, Belgaum (VTU) made investments on Information Systems without adequate need analysis before their procurement, resulting in wasteful and unproductive expenditure of ₹ 2.10 crore as discussed below:

3.2.1.1 Subscription to an on-line learning platform not used by students

VTU entered into an agreement (October 2006) with a private company for providing online learning platform to students in the affiliated colleges. The proposal of the company had been examined (August 2006) by the Technical Expert Committee which recommended that the product was a unique one and available from a single source. The company, which had designed the online learning platform on "Gyan-X" was to provide unique key codes to each of the affiliated colleges. These key codes were tied to specific content libraries within Gyan-X. Students were to visit the designated website and create user names of their choice using the key codes allotted. The agreement which incorporated the approximate number of students for each year envisaged that VTU was to pay the company a subscription fee of ₹ 100 per student per academic year at the beginning of each academic year, based on the approximate number of students. This payment was subject to future adjustment based on the actual number of students enrolled during that academic year. The agreement was effective for two years. The expenditure was to be met out of the e-learning fees collected from the students.

Audit observed that before executing the agreement with the company, VTU did not ascertain from its affiliated colleges the number of students interested in using the on-line courseware. In the absence of consultation with the stakeholders, VTU faltered in assessing that all the students enrolled in an academic year would be using the on-line learning platform. Instead of agreeing to payment for the actual number of students using the facility, VTU unjustifiably agreed for advance payment to the company at the beginning of the academic year for all the students studying in the affiliated colleges. Thus, the contract was not need driven but product driven.

VTU paid the company ₹ 1.40 crore (₹ 51 lakh for the first year and ₹ 89 lakh for the second year) based on the number of students as per the agreement. However, VTU did not create any awareness among the students about the on-line learning platform and also failed to monitor its usage by the students. It was seen from the feedback furnished to VTU by the affiliated colleges during April 2008 that the students were mostly unaware of the on-line platform and did not, therefore, utilise the facility. A Committee constituted by

VTU to evaluate the performance of the company also confirmed (September 2009) that the programme awareness among the students was almost Nil. VTU did not renew the agreement after the initial period of two years as it found that the programme had no relevance or use to the students.

The Registrar stated (September 2010) that awareness had been created among the students about the on-line learning platform by issuing circular instructions to the affiliated colleges and the students had been making use of the platform. The reply was not tenable as the Registrar himself had informed (June 2008) the company that the programme had no relevance or use to the students.

Thus, the action of the VTU in signing the agreement with the company without consulting the stakeholders and its subsequent failure to monitor regularly the usage of the platform by the students resulted in frittering away ₹ 1.40 crore of e-learning fees collected from the students.

3.2.1.2 Software procured excessively without consulting the affiliated colleges

VTU introduced "Micro Electronic Mechanical System" (MEMS) as one of the elective subjects in V to VII Semesters for the BE-Electrical and Electronics Engineering Courses from the academic year 2006-07. During December 2006, the Registrar of VTU informed the affiliated engineering colleges that VTU had entered into an agreement with a firm for supply of Intel suite MEMS design software (software) and requested them to send their requirement. Though the affiliated colleges did not furnish any requirement, VTU procured (April 2007) 500 licences for the software (including 250 supplied free of cost) from a firm at a cost of ₹ 64.69 lakh. VTU justified the bulk purchase on grounds of the number of free licences offered by the firm. The software was to help the students and faculty members enhance their knowledge of MEMS.

Out of 87 affiliated colleges offering MEMS as an elective subject, only 30 purchased 160 licences from VTU at a cost of ₹ 20.61 lakh between June 2007 and December 2008. The remaining licences costing ₹ 44.08 lakh continued to remain in stock. As it was the responsibility of the affiliated colleges offering MEMS to decide upon the need for purchase of the software based on students' response, purchase of the software, *suo motu,* by VTU was unjustified. Out of these 87 affiliated colleges, only one college had 29 students studying MEMS as an elective subject. It was further seen that the MEMS software had also undergone version change already. While the version purchased was 8.1, the version currently available was 8.5. In view of the outmoded version of the software and very few number of students opting for the elective subject of MEMS, the possibility of utilising the software held in stock was remote. The Registrar replied (September 2010) that many colleges had come forward to introduce MEMS as an elective subject. These colleges would procure the remaining licences which would be updated by the firm during installation. The reply is not acceptable as purchase of huge number of licences for the software without ascertaining the requirement from the affiliated colleges was unjustified and resulted in an idle investment of ₹ 44.08 lakh on software vulnerable to obsolescence.

3.2.1.3 Campus Automation Software not functional despite huge investment

VTU signed (January 2007) an agreement with another company for supply, installation and maintenance of Campus Automation Software (Inspro Plus) at a cost of ₹ 26.25 lakh. Installation of the software was to facilitate a two-way communication between the University and its affiliated colleges including transfer of data such as staff details, students' attendance details, students' marks, financial reconciliation, *etc*. The company, besides imparting training to the project coordinators of affiliated colleges every three months and providing any kind of support required by them, was required to take care of maintenance for one year. The company was to complete the work within three months.

At the time of inviting bids, the payment terms envisaged payment of (i) 50 *per cent* of the contract price after successful installation of software, (ii) 40 *per cent* on installation, testing, commissioning, certification and handing over to the University and respective colleges and (iii) the balance 10 *per cent* on expiry of the observation period of 12 months. Any tenderer stipulating different payment terms would render his tender invalid. Although the tender submitted by the company modified the payment terms and insisted on VTU opening an irrecoverable Letter of Credit (LC) for the entire contract amount against *pro-forma* invoice, VTU, instead of rejecting the tender, accepted the modified terms of payment. Accordingly, VTU opened the LC in February 2007 and the company drew ₹ 26.25 lakh on delivery of the software. Although the scope of the contract was supply and installation of the software, the faulty agreemental provision regarding opening of LC enabled the company to draw the entire contract amount of ₹ 26.25 lakh immediately on delivery of the software without its installation.

Status report furnished by 52 affiliated colleges to VTU during September 2007 showed that while 38 *per cent* of these colleges expressed unsatisfactory installation of the software, 85 *per cent* of them did not utilise the software. Further, most of these colleges, besides expressing a variety of problems in the functioning of the software, were not satisfied with the training, service and support. As the company failed to rectify the defects, the automation software remained non-functional for over three years despite investment of ₹ 26.25 lakh.

The Registrar of VTU stated (November 2009) that the company had come forward (August 2009) to rectify the irregularities noticed in installation and implementation of the automation software. The reply was not acceptable as the company failed to install the software properly in the affiliated colleges for over three years and did not rectify the shortcomings. Further, the terms of payment in the agreement were not designed to safeguard the interests of VTU against non-performance or slippages in performance after supply of the software. The company exploited these lapses and unjustifiably received ₹ 26.25 lakh immediately after delivering the software. Thus, connectivity among VTU and its affiliated colleges failed to materialise for more than three years, despite investment of ₹ 26.25 lakh.

The matter was referred to Government in July 2010; reply had not been received (December 2010).

PUBLIC WORKS, PORTS AND INLAND WATER TRANSPORT DEPARTMENT (COMMUNICATION AND BUILDINGS)

3.2.2 Undue benefit to contractors due to inflated estimates

Allowing of five *per cent* additional weightage, contrary to schedule of rates, in the estimates of 538 works executed in Kadur taluk resulted in undue benefit of ₹ 1.37 crore to contractors on account of inflated estimates.

Paragraph 128 of Karnataka Public Works Departmental Code (KPWD Code) provides that rates for estimate of works should generally agree with the approved schedule of rates (SR). Based on extraordinary conditions[4] where a work is executed, additional weightage is allowed in the estimate of work at the rates prescribed in the SR. The SR of Public Works, Ports and Inland Water Transport Department (PWP&IWTD), Hassan Circle for 2002-03, which was continued up to 2004-05, provided for area weightage of five *per cent* on the basic rates for works executed in Bayalunadu area. Kadur taluk was one of the taluks classified under Bayalunadu area as per the SR for 2002-03. However, the area weightage for Bayalunadu area was discontinued after revision of the SR applicable from 2006-07.

Scrutiny of records (December 2009) in the Office of the Executive Engineer, PWP&IWTD, Chickmagalur revealed that estimates for 538 civil works sanctioned during 2006-09 for execution in Kadur taluk were provided with five *per cent* additional weightage, though not admissible as per SR for 2006-07 and onwards. Inclusion of inadmissible additional weightage in the estimates resulted in undue benefit of ₹ 1.37 crore to contractors on account of inflated estimates and extra expenditure to the Government. This comprised ₹ 45.19 lakh relating to 505 piece works[5] directly entrusted to registered contractors without calling for tenders and ₹ 91.33 lakh pertaining to 33 tendered works[6].

After this being pointed out (February 2010), the Government stated (March 2010) that the Superintending Engineer (SE) had issued (March 2010) a corrigendum by classifying Kadur taluk under semi-malnad area with retrospective effect from SR 2006-07 onwards and omission of Bayalunadu area was either due to a mistake or due to considering Kadur taluk as a part of semi-malnad area.

The fact remains that the corrigendum was issued by the SE only in March 2010 while these works had already been executed during 2006-09 and payment had been made for the same. Besides, codal provisions also do not envisage corrigendum to SR with retrospective effect.

[4] Remote areas facing scarcity of labour *etc*.
[5] Estimated cost ₹ 9.49 crore
[6] Estimated cost ₹ 18.59 crore

3.2.3 Undue benefit to a contractor

Payment of interest free mobilisation advance of ₹ 33.38 crore to the agency, in violation of tender conditions, vitiated the tender process and resulted in financial gain of ₹ 1.97 crore to the agency.

The work of construction of Rajiv Gandhi University of Health Sciences (RGUHS) comprising administrative block, medical college, hospital and allied buildings was awarded (June 2007) by the Government to a construction company for completion in 18 months. An amount of ₹ 33.38 crore at 10 *per cent* of the bid amount was paid (September 2007) to the agency as interest free mobilisation advance (MA) against the bank guarantee as per the agreement. The agency could not commence work due to disruption by several land owners who had filed writ petitions in the High Court. The RGUHS syndicate in its Governing Council meeting passed (September 2007) a resolution not to take possession of the land as a portion of the land allotted to it was under litigation and also the memorandum of understanding (MoU) was pending approval at the Government level. The work could not commence and the interest free MA of ₹ 33.38 crore paid (September 2007) to the agency was recovered after a period of nine months by encashing the bank guarantee.

Records of the Executive Engineer, Public Works, Ports and Inland Water Transport Division, Ramanagara revealed violations in acceptance of tender as detailed below:

- Three bidders who participated in the tender process had requested (May 2007) the department to include MA clause in the tender documents. While two bidders had specifically requested for interest free MA of 15 *per cent*, the successful bidder had not requested for interest free MA.

- Though requested by the bidders, the MA clause was not included in the tender documents issued (May 2007) to the bidders. The Government, however, in its acceptance order (June 2007) provided for payment of interest free MA of ₹ 33.38 crore to the successful bidder. Hence, the Government's acceptance order not only vitiated the tender process but also resulted in undue benefit to the agency.

- The release of interest free MA of ₹ 33.38 crore to the agency was not justified as the Government was aware that RGUHS had not taken possession of land allotted to it and the revised MoU submitted by the RGUHS had not been approved (March 2010). As issues relating to project implementation were not finalised, the payment of MA for execution of work was not justified.

The above irregularities not only vitiated the tender process but also resulted in financial gain to the agency by payment of an interest free MA of

₹ 33.38 crore and its retention for more than nine months, with the interest cost of ₹ 1.97 crore[7] to the Government.

On this being pointed out, Government stated (April 2010) that it had ordered (July 2008) an enquiry against the officers responsible for release of MA and pending enquiry, the Chief Engineer, South Zone had been suspended. The enquiry officer appointed in December 2008 was to submit the report in three months. The enquiry was stated to be in progress (March 2010). It was further stated that bidders had sought interest free MA and normally pre-bid meeting was held before the tendering date and its deliberations would form part of the special conditions of the contract. The Government also stated (August 2010) that the new standard bid document form (KW-4) introduced (August 2005) provided for payment of advance without charging interest and accordingly the Government had issued the tender acceptance order.

The reply was not acceptable as no pre-bid meeting was held. Also, the successful bidder had not sought interest free MA. Further, tenders in this case were invited as per bidding form PWG 65 and not as per new bidding form KW-4. Form KW-4 was introduced (August 2005) on trial basis and was valid only for six months. Hence, the Government order for grant of interest free MA issued as per provision of form KW-4 was irregular and in violation of tender conditions, resulting in undue benefit of ₹ 1.97 crore to the agency.

3.2.4 Overpayment to contractors

The bill of quantities in building contracts for 'concrete for roof slab item' includes plastering with cement mortar. Despite the specification, a separate item for 'plastering to ceiling' item was included in the bill of quantities, resulting in overpayment of ₹ 2.61 crore to the contractors.

Karnataka Buildings Specifications (KBS) (Section 4.6) stipulate that in respect of RCC work, the exposed surface shall be plastered with 1:3 cement mortar of thickness not exceeding 6 mm to give smooth and even surface true to line and form. For this purpose, any RCC surface which remains permanently exposed to view in the completed structure shall be considered as exposed surface. KBS are followed for preparation of Schedules of Rates for each year from 2006-07.

Scrutiny (September 2009 to March 2010) of the records of five[8] Public Works, Ports and Inland Water Transport Divisions (PWP&IWTD) revealed that in 23 building works executed between 2003-04 and 2009-10, the item of "concrete roof slab with plastering in 1:3 cement mortar as contained in KBS" was included in the bill of quantities (BOQ). In addition, a separate item of "providing plastering to ceiling with cement mortar 1:3 up to 12 mm thickness" was also included in the BOQ. As the item of providing roof slab concrete was a finished item which included plastering, inclusion of a separate item in BOQ towards plastering of ceiling in 1:3 cement mortar resulted in

[7] Calculated at 7.60 *per cent* interest at the average Government borrowing rate of 2007-08 for 284 days on ₹ 33.38 crore

[8] Bangalore, Hassan, Mandya, Mangalore and Shimoga

additional payment to the contractors for the work of plastering of ceiling. The overpayment in respect of 23 building contracts worked out to ₹ 2.61 crore as detailed in **Appendix-3.1**.

On the matter being pointed out (April 2010/May 2010), the Government recovered ₹ 55.13 lakh from contractors of four works and stopped further payments to them by withdrawing this item from the contracts. No recovery had, however, been effected in respect of the remaining 19 similar works. Further instructions for regulating payments in all other similar works had not been issued by the Government.

URBAN DEVELOPMENT DEPARTMENT

3.2.5 Goods vulnerable to price fluctuations procured without a price variation clause

The Bangalore Water Supply and Sewerage Board procured galvanised heavy duty mild steel pipes under a contract without a price variation clause, although pig iron, the raw material for the pipes, was vulnerable to price fluctuations. As a result, the Board lost ₹ 1.15 crore due to non-availing of the benefit of the declining price of pig iron in the market.

The Bangalore Water Supply & Sewerage Board (Board) entered into agreements during August 2008 and September 2008 with the following suppliers for procurement of different types of pipes for use in water supply schemes.

Sl. No.	Name of the Supplier	Details of pipes	Date of agreement	Cost of supplies (₹ in crore)
1.	Company 'A'	Galvanised Heavy Duty Mild Steel Pipe of 50 mm dia	5 August 2008	12.09
2.	Company 'B'	DI Pipes of different dia	6 September 2008	6.71
3.	Company 'C'	DI Pipes of different dia	6 September 2008	10.46

The delivery period was 180 days in all these cases.

Although pig iron is the main raw material for iron and steel pipes and is vulnerable to price fluctuations, the Board included a price variation clause (PV clause) only in two agreements concluded in September 2008 and the supply order placed a month earlier on Company 'A' did not have the PV clause. The PV clause provided that the quoted rate for pipes would go up or come down by 0.65 *per cent* for every one *per cent* variation in the foundry pig iron price. The variation was to be determined based on the difference between the Wholesale Price Index of Foundry Pig Iron (WPI) prevailing during the week in which the tender had been submitted and the WPI prevailing one calendar month prior to the delivery of pipes.

The WPI declined sharply from 442 points in August 2008 to 269.3 points in February 2009, necessitating downward revision of the quoted rates for supplies covered by the two agreements containing the PV clause. As no PV

clause had been included in the third agreement, there was no scope for downward revision of the rates and the Board lost ₹ 1.15 crore.

The Executive Engineer, Central Stores Division, Bangalore stated (January 2010) that the PV clause was not included in the supply order of August 2008 as the order issued by the Finance Department in November 2004 prohibited its inclusion in the contract for procurement of goods and equipment. The reply was not tenable as Government Order of November 2004 empowered the Board to include the PV clause in the agreements for purchase of goods, where the raw material component was subject to price variation and only by virtue of these enabling provisions, the Board included the PV clause in the two other agreements concluded in September 2008.

Thus, by not providing the PV clause in the agreement with one of the three suppliers, the Board failed to take advantage of the declining prices of pig iron in the market and lost ₹ 1.15 crore in the process.

The matter was referred to Government in June 2010; reply had not been received (December 2010).

WATER RESOURCES DEPARTMENT (MINOR IRRIGATION)

3.2.6 Unfruitful expenditure

Commencement of work without acquisition of land resulted in non-completion of the second stage of a Lift Irrigation Scheme, rendering an expenditure of ₹ 1.25 crore unfruitful.

Paragraph 209 of Karnataka Public Works Departmental (KPWD) Code lays down that work should not be commenced by the department unless land for the execution of the work is duly acquired from the responsible civil officers. When land is still to be acquired, the time required for the acquisition of the land should be ascertained from the Deputy Commissioner concerned before issuing the work order. Further, Paragraph 107 of the KPWD Code stipulates that revised administrative approval should be obtained when the cost of the work exceeds 15 *per cent* of the sanctioned estimate.

The construction of Lift Irrigation Scheme (LIS) at Uttur-Jalliber to provide irrigation to 787.20 hectares (ha) of land in Mudhol taluk was completed (1978) at a cost of ₹ 5.59 lakh. The LIS could not be put to use as a major portion of the irrigable area had already been covered by a major irrigation project. With a view to utilise the LIS constructed, second stage LIS to provide irrigation to 526 hectare (ha) land in Mudhol taluk was administratively approved (1993-94) by the Government for ₹ 55 lakh and technically sanctioned (1994-95) by the Chief Engineer, Minor Irrigation (North) for ₹ 44.96 lakh. It comprised construction of a rising main for a length of 1,100 metres, delivery chamber, canals, erection of pumping machinery and also involved acquisition of 6 *acres* and 17 *guntas* of land. The civil work portion of the LIS was awarded (November 1995) to a contractor for ₹ 21.71 lakh which could not be completed due to land acquisition problems, incurring an expenditure of ₹ 15.75 lakh. The balance

work including supply and erection of machinery *etc*., was approved (November 2001) for execution with NABARD assistance at a revised cost of ₹ 1.36 crore. Though the cost of work exceeded the approved cost (₹ 55 lakh), revised administrative approval of Government was not obtained. The balance work was entrusted (April 2004) to another agency for ₹ 92.45 lakh for completion in 12 months. The rising main was laid up to 250 metres against 1,100 metres before the work was stopped (April 2005) due to non-availability of land. The up-to-date expenditure incurred on the second stage LIS was ₹ 1.19 crore, which included electricity charges of ₹ 16.67 lakh and ₹ 13.76 lakh on repairs to old pumping machineries. As revised administrative approval was not obtained, the expenditure of ₹ 60.75 lakh incurred exceeding 15 *per cent* of the administrative sanction (₹ 55 lakh) was unauthorised.

Audit scrutiny further revealed that land acquisition proceedings initiated in 2001 relating to canals were dropped by the Revenue Department (RD) due to non-payment of deposit amount by the Executive Engineer. The proceedings initiated again in October 2005 were partially completed as discrepancies were noticed during joint measurement with RD and fresh proposals were initiated in March 2010. Also, one of the land owners had obtained injunction (August 2008) against acquisition of his land required for the rising main which is yet to be got vacated by the Department. Therefore, construction of the second stage LIS could not be completed. Unless the second stage is completed, the LIS will not be functional and the amount spent on the first stage cannot result in any output. Non-completion of the second stage rendered the expenditure of ₹ 1.25 crore unfruitful.

The Chief Engineer stated (August 2010) that the work was commenced before acquisition of land with a view to provide the benefit of irrigation early to farmers and an appeal had been preferred against the injunction. Thus, taking up of the work before acquisition of land in violation of codal provisions only resulted in non-completion of the work, rendering the expenditure of ₹ 1.25 crore unfruitful.

The matter was referred to the Government (May 2010); reply had not been received (December 2010).

3.3 Persistent and pervasive irregularities

An irregularity is considered persistent if it occurs year after year. It becomes pervasive when it is prevailing in the entire system. Recurrence of irregularities, despite being pointed out in earlier audits, is not only indicative of non-seriousness on the part of the Executive but is also an indication of lack of effective monitoring. This, in turn, encourages wilful deviations from observance of rules/regulations and results in weakening of the administrative structure. A case of persistent irregularity reported in audit is discussed below:

FINANCE DEPARTMENT

3.3.1 Excess payment of family pension

Karnataka Government's (Family Pension) Rules, 1964 provide that when a Government servant dies while in service, his/her family is entitled to family pension at double the normal rate or 50 *per cent* of the last pay drawn by the deceased Government servant whichever is less, for a period of seven years from the date following the date of death or till the date on which the Government servant would have attained the age of 65 years had he/she remained alive, whichever is earlier.

During 2009-10, in 857 cases relating to 29 district treasuries, Public Sector Banks made payment of family pension at enhanced rates beyond the period mentioned in the Pension Payment Orders, resulting in excess payment of ₹ 3.19 crore. Though such excess payments of family pension had been pointed out repeatedly in the Reports of the Comptroller and Auditor General (Civil), no effective steps were taken by the Government to guard against the excess payments. The Government did not enforce the provisions of Indemnity Bonds executed by the Public Sector Banks for the recovery of the excess payments made to the pensioners.

The Government stated (October 2010) that recovery of excess payment was being regularly monitored and out of an excess payment of ₹ 11.14 crore pointed out by Audit during 1998 to 2009, an amount of ₹ 2.34 crore only was pending recovery as of October 2010. It further added that steps were being taken to set up a pensioners' database so that such problems could be avoided in future. The reply is not tenable as the steps taken have not resulted in preventing overpayments, which was steadily increasing over the years, from ₹ 39 lakh (264 cases) in 1998-99 to ₹ 1.25 crore (701 cases) in 2003-04 and further to ₹ 3.19 crore (857 cases) in 2009-10 (**Appendix-3.2).**

3.4 Failure of oversight/governance

The Government has an obligation to improve the quality of life of the people for which it works towards fulfilment of certain goals in the area of health, education, development and upgradation of infrastructure and public service *etc*. However, Audit noticed instances where the funds released by Government for creating public assets for the benefit of the community remained unutilised/blocked and/or proved unfruitful/unproductive due to indecisiveness, lack of administrative oversight and concerted action at various levels. A few such cases have been discussed below:

HOUSING DEPARTMENT

3.4.1 Additional financial burden due to administrative delay in acting upon a cheaper offer

The Government failed to act upon the HUDCO's offer of lower interest rate on the outstanding loan in time, resulting in payment of higher rate of interest for four years. This entailed an additional financial burden of ₹ 18.30 crore.

The Karnataka Housing Board (Board) availed of a loan of ₹ 270 crore from Housing and Urban Development Corporation (HUDCO) for construction of 2,534 residential flats for the Fourth National Games in Bangalore during May-June 1997. The loan carried interest at a fixed rate of 14.5 *per cent* per annum and was to be repaid in 15 years by December 2012. In August 2000, the Government of Karnataka took over the repayment liability of the balance amount of ₹ 228.39 crore from the Board and started servicing the loan from their budgetary allocation. The Board was to draw the money released by the Government and pay it in instalments to HUDCO.

In November 2005, the Board requested HUDCO to reduce the interest rate for the outstanding loan, in view of the steep fall in interest rates for housing loans. HUDCO agreed (December 2005) for resetting the interest rate at 8.75 *per cent* per annum with effect from 1 January 2006, subject to the Board paying ₹ 3.59 crore towards reset charges and clearing the dues for the quarter ending December 2005 on or before 31 December 2005. The Board referred (December 2005) the matter to the Housing and Finance Departments of the State Government for an immediate decision. HUDCO reminded (February 2006 & March 2006) the Board for completion of formalities for resetting the interest rate.

While the Board paid HUDCO the dues for the quarter ending December 2005 on 7 January 2006, it did not pay the reset charges of ₹ 3.59 crore, as the Finance Department released funds only on 13 June 2006. When the Board approached (July 2006) HUDCO for completing the resetting formalities, the latter informed (August 2006) that the reset facility had been withdrawn by its Board of Directors in March 2006. As a result, the Board continued to pay HUDCO interest at the higher rate of 14.5 *per cent* per annum on the outstanding loan till December 2009 when the State Government approved swapping of the outstanding loan of ₹ 53.74 crore with a loan obtained by the Board from Vijaya Bank at an interest rate of 8.5 *per cent* per annum. The excess interest paid to HUDCO during the period January 2006 to December 2009 aggregated ₹ 18.30 crore. The Government replied (October 2010) that though the Finance Department had agreed in principle for resetting the interest rate, it released the reset charges only in June 2006. The reply was not tenable as Government responded to HUDCO's offer very late.

Thus, failure to respond timely to HUDCO's offer deprived the Government of the opportunity of availing of lower interest rate, resulting in additional financial burden of ₹ 18.30 crore.

3.4.2 Additional payment due to administrative delay in award of contract

The Karnataka Housing Board/Government took 18 months to award a contract to a construction company after opening of tenders, resulting in payment of compensation of ₹ 1.80 crore to the company for the increase in cost of cement and steel during the period.

The Karnataka Housing Board (Board) invited (January 2007) lump sum tenders for construction of residential apartments and quarters for employees of the Revenue Department at Jakkarehonda in Belgaum district. While the validity period of the tender was six months, the time allowed for completion of the work was 18 months. After tenders were opened (May 2007), the offer of a company at ₹ 27.81 crore was found the lowest. During negotiations (May 2007 and July 2007) by the Tender Scrutiny Committee of the Board, the company reduced the contract price to ₹ 24.96 crore, which worked out to 8.91 *per cent* above the estimated cost based on Schedule of Rates (SR) of 2007-08.

The Board approved the negotiated offer of the company on 6 August 2007 and referred it to Secretary, Housing Department on 14 September 2007 for acceptance by the Government. After a delay of 13 months, the Government accepted the tender of the company on 21 October 2008. Meanwhile, the company demanded (October 2008) revised rates for the work at 8.91 *per cent* above the SR of 2008-09 due to increase in cost of cement and steel during the long period of delay in accepting its tender. The Board concluded the agreement with the company on 24 November 2008. The Government accorded final acceptance to the tender and approved (November 2009) an additional payment of ₹ 1.80 crore to the company to compensate it for the increase in cost of cement and steel required for the work. The Board took 18 months, as much as the time allowed for completion of the work, to award the contract to the company after opening of tenders.

The Government replied (October 2010) that the Housing Department, after referring the tender for cabinet approval, took up revisions on certain basic issues relating to several housing projects and, consequently, delayed the placing of the tender before the cabinet. The reply is not tenable as no revision in scope of this project had been made before acceptance of tender and revision of issues relating to other housing projects had no relevance to this project. The delay at the Board and Government levels was indicative of poor management of award of contract with attendant avoidable additional burden of ₹ 1.80 crore to the Government.

3.4.3 Undue haste in acquiring land at an exorbitant cost

Karnataka Housing Board embarked on acquisition of land without conducting any demand survey or feasibility study. The Board also overlooked other controls, showed undue haste in purchasing 30 acres and 31 ½ guntas of land from two persons at a huge cost of ₹ 50 lakh per acre. The utility of the lands purchased in bits and pieces at a cost of ₹ 16.85 crore was doubtful.

The Karnataka Housing Board Act, 1962 and Rules made thereunder, empower the Board to formulate and implement housing schemes to cater to the housing needs of the State population. Before embarking on a housing scheme, the Board is to conduct a demand survey to ascertain the likely response to the proposed scheme, identify the land required for the purpose after examining the on-site and off-site facilities, prepare a feasibility report and obtain the sanction of the Government to the scheme. The Board is also required to follow Government instructions (February 2006) that where land is acquired by mutual consent, the compensation payable is not to exceed double the average of the guidance value fixed by Government and the average of the registered sale value of the properties in the preceding five years. Thereafter, the Board is to firm up the financial resources for the scheme, include it in the Annual Programme and seek Government's approval to the Annual Programme.

Bypassing these controls, the Board requested the Deputy Commissioner, Chickballapur (DC) on 22 September 2008 to determine the compensation for acquisition, by mutual consent, of 959 acres of land in the villages of Venkatapura, Balavanahalli, Hosapete and Sugutur under Jangamakote Hobli of Shidlaghatta taluk. The request followed an inspection of the lands in these villages on 19 September 2008 by the Housing Commissioner, Executive Engineer and Assistant Executive Engineer of the Board. The Board did not conduct any demand survey or prepare any feasibility report. The District Purchase Committee (DPC) headed by the DC in the meeting held on 3 November 2008 failed to arrive at a consensus in view of the huge mismatch between the price of ₹ 55 lakh per acre demanded by the land holders and the registered land value in these villages ranging from only ₹ 2 lakh to ₹ 3.50 lakh per acre. The DPC, however, fixed a compensation of ₹ 43 lakh per acre in the meeting held on 23 January 2009. The Board on its own enhanced the compensation to ₹ 50 lakh per acre on 16 February 2009 without referring to the DPC on the ground that the land owners were demanding ₹ 51 lakh per acre and that the lands were most needed for implementing the housing scheme. The Board's proposal of 17 February 2009 was approved within a few days on 20 February 2009 by the State Government without raising any objection as to why the Board had subverted the controls prescribed for the formulation and implementation of a housing scheme.

Records also showed that within a few days of Government's sanction on 20 February 2009, KHB hurriedly got registered 17 acres and 38 guntas of land in its favour on 24 February 2009. Another 7 acres and 4½ guntas were got registered on 3 March 2009. These lands in four villages belonged to one

person who had bought these between August 2007 and September 2008 at prices ranging from only ₹ 3.85 lakh to ₹ 5 lakh per acre. KHB again purchased another 5 acres and 29 guntas on 20 March 2009 from another person holding General Power of Attorney (GPA) executed in his favour by seven land owners. These GPAs had been registered in the Sub-Registrar's office on 13 and 16 March 2009, only a few days before the purchase. KHB paid compensation to these two persons at the rate of ₹ 50 lakh per acre by diverting the funds meant for other projects included in the Annual Programme. At the time of registration of land purchased from these two persons, KHB had not obtained the records of the remaining land for verification of title and showed undue haste in purchasing land only from these two persons. Besides, the land purchased was not contiguous and consisted of 25 inaccessible and scattered individual plots ranging from 4 guntas to 3 acres 11 guntas as shown in the **Appendix-3.3** (**Sketch**). KHB did not purchase the remaining land as the State Government stopped (July 2009) further acquisition and ordered an enquiry into the land purchases. Although the enquiry was to be completed within six months, it was still in progress (September 2010).

The Board replied (February 2010) that the registered sale value of ₹ 3.85 lakh to ₹ 5 lakh per acre did not reflect the market price and the compensation of ₹ 50 lakh per acre was justified in view of the proximity of the land (18 km) to the Bangalore International Airport and the price of ₹ 55 lakh paid by the Karnataka Industrial Area Development Board for 300 acres of land acquired by them nearby. Accepting that the acquired land was not in a compact block, the Board stated that it would recover the investment by selling the land. The reply is indicative of lack of planning, transparency, due diligence and overlooking of prescribed controls, which resulted in an unproductive investment of ₹ 16.85 crore[9].

The matter was referred to Government in June 2010; reply had not been received (December 2010).

PUBLIC WORKS, PORTS AND INLAND WATER TRANSPORT DEPARTMENT (COMMUNICATION AND BUILDINGS)

3.4.4 Loss due to collapse of a bridge under construction

Failure to follow statutory provisions in planning, supervision and monitoring of work resulted in collapse of a bridge with attendant loss of human lives and wasteful expenditure of ₹ 5.95 crore.

Mention was made in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2001 (Paragraph 4.11) regarding wasteful expenditure of ₹ 3.75 crore due to construction of a bridge across Tungabhadra river disregarding an existing heritage site, with the result that construction of the bridge had to be stopped (June 2000) before its completion due to the concern expressed by UNESCO. The bridge proposed was a cable

[9] Compensation - ₹ 15.39 crore, Stamp Duty- ₹ 1.30 crore and Registration fee/other expenses- ₹ 0.16 crore

stayed bridge of 160 metres length with RCC deck slab of 66 metres having four spans with RCC pier and pylon foundation.

Based on a request (July 2007) from the Secretary, Kannada & Culture, Information & Tourism Department, the remaining portion of the bridge (24 metres span of the cable stayed bridge and allied structures) was entrusted (December 2008) on turnkey basis to a company at a cost of ₹ 6.62 crore for completion in six months. During laying of kerb concrete, the bridge collapsed (January 2009), killing eight persons and injuring 41 others. Following the incident, the department demanded ₹ 5.95 crore[10] from the contractor towards loss sustained and compensation paid under Workmen Compensation Act, 1923. The Government also ordered (March 2009) departmental action against three engineers responsible for the incident and the enquiry is under progress. The task force report to ascertain the cause for collapse of the bridge is also awaited.

Audit scrutiny of the records (December 2009) revealed the following:

- Conditions of the contract stipulated that the designs shall be proof checked by TOR Steel Research Foundation Institute, and the same submitted for approval of the competent authority before executing the work. However, no designs were submitted by the contractor for scrutiny and approval before commencing the work.
- As the balance work for completion of cable stayed bridge was resumed more than eight years after stoppage of work, the special conditions in the contract stipulated replacement of the existing cables with new cables. Despite this, the contractor laid deck slab concrete for six metres length without replacing the existing cables.
- The Executive Engineer (EE) during inspection (January 2009) had observed that the centering work under progress might lead to complications in future. No follow up action was done on his observation and despite the defective centering work, the contractor was allowed to continue with the work.
- There was no record of the Chief Engineer and the Superintending Engineer having inspected the site during execution of the work.
- It is also to be noted that as per reply to an RTI application (May 2010), the work done certificate submitted by this contractor at the time of submission of tender was later found to be fake. It was observed in audit that before awarding the contract, the EE had on record a confirmation letter (January 2008) from the Executive Engineer, R&B, Kakinada, Andhra Pradesh (EE, Kakinada) who had supposedly issued the work done certificate. However on the basis of the RTI inquiry, when the concerned EE (Kakinada) who supposedly issued the certificate was approached by RTI applicant, the EE, R&B Division, Kakinada, Andhra Pradesh replied that no such certificate was issued by them.

This resulted in a specialised nature of work being awarded to a non-qualified contractor on the basis of a fake work done (experience) certificate and consequent loss of human lives and public funds.

[10] After adjusting EMD of ₹ 6.90 lakh

Thus, failure of the departmental officers in observing the Codal provisions and allowing the contractor to execute the work disregarding the terms of agreement and not monitoring the execution of the work contributed to the collapse of bridge, causing loss of eight human lives and injuries to 41 persons, besides wasteful expenditure of ₹ 5.95 crore. In view of its seriousness, this matter requires detailed investigation by the Government covering all aspects.

The matter was referred (May 2010) to the Government; reply had not been received (December 2010).

URBAN DEVELOPMENT DEPARTMENT

3.4.5 Non-availing of the benefit of exemption from payment of Central Excise Duty

Karnataka Urban Water Supply and Drainage Board passed on the benefit of Central Excise Duty exemption of ₹ 6.30 crore to two contractors by irregularly arranging exemption certificates. It had also foregone Central Excise Duty exemption of ₹ 4.01 crore in three other cases due to delay in arranging exemption certificates.

Government of India, Ministry of Finance and Company Affairs granted (September 2002) full exemption of Central Excise Duty (CED) on all items of machinery, equipment and their components required to set up water treatment plants and pipes required to carry water from the source to the treatment plant and from there up to the first storage point in respect of drinking water supply schemes. The benefit of exemption was available subject to production of exemption certificates issued by the jurisdictional Deputy Commissioners (DCs).

Karnataka Urban Water Supply and Drainage Board (Board) awarded (March 2005 to January 2009) separate contracts for execution of water supply works in four[11] districts. The contractors for these works were to procure mild steel (MS) pipes at their quoted rates.

In two of these contracts, the quoted rates were inclusive of CED and Executive Engineers (EEs) of Board's divisions at Mysore and Dharwad were not contractually obliged to arrange exemption certificates from the respective DCs. However, these EEs arranged exemption certificates, against which the two contractors availed of CED exemption of ₹ 6.30 crore in procuring 77,243 metres of MS pipes required for the two works. As the quoted rates for MS pipes were inclusive of CED, the Board ought to have recovered the CED exemption of ₹ 6.30 crore **(Appendix-3.4)** availed of by these two contractors from their bills. The Board neither recovered the amount from these two contractors nor furnished any reason for non-recovery.

[11] Providing Water Supply to Sandur Town, National Mineral Development Corporation and other eight villages en-route in Bellary District
Providing Water Supply scheme to Gurumitkal town and 27 other villages en-route in Gulbarga District
Providing M.S. Transmission main from Aminabhavi to Nrupathunga Betta in Hubli- Dharwad
Remodelling of Water Supply Distribution network in Mysore City

In two other contracts, the quoted rates were exclusive of CED and EEs at Bellary and Gulbarga were to arrange exemption certificates from the respective DCs. However, they failed to arrange the exemption certificates and consequently, the two contractors procured 33,343 metres of MS pipes after payment of CED of ₹ 1.55 crore **(Appendix-3.5),** causing additional financial burden to the Board. The Board did not furnish any reason for not arranging the exemption certificates.

The Board also procured Ductile Iron (DI) pipes for use in various water supply works from another company under a contract awarded in July 2005. The contract was valid up to March 2008 and the concerned EEs were to furnish the exemption certificates to the company to avail of exemption from payment of CED. Although the Board placed orders between August 2007 and March 2008 with the company for delivery of 1,08,629 metres of DI pipes, the EEs approached the jurisdictional DCs for exemption certificates after delays ranging from 6 to 263 days and the DCs issued the exemption certificates only from March 2008 to June 2008. The company cited steep increase in cost of steel during the period of delay in arranging the exemption certificates and demanded (April 2008) an additional 23 *per cent* over the agreed rates which was conceded by the Board during June 2009. The supplier delivered 88,265 metres of DI pipes between February and April 2009 for which the Board paid ₹ 12.82 crore at the enhanced rates, resulting in an additional financial burden of ₹ 2.46 crore **(Appendix-3.6)** to the Board.

Thus, the Board passed on the benefit of Central Excise Duty exemption of ₹ 6.30 crore to two contractors by irregularly arranging exemption certificates. It had also foregone Central Excise Duty exemption of ₹ 4.01 crore in three other cases due to delay in arranging exemption certificates.

The matter was referred to Government in May 2010; reply had not been received (December 2010).

3.4.6 Huge investment on a water supply scheme without a dependable water source

Karnataka Urban Water Supply and Drainage Board took up a scheme for supplying water to Kolar, Bangarapet and Malur towns at a cost of ₹ 239.13 crore, though water availability was doubtful; ₹ 75.21 crore had been spent already on this technically non-feasible scheme.

Karnataka Urban Water Supply and Drainage Board (Board) took up a combined Water Supply Scheme to Kolar City, Bangarapet and Malur towns and 45 villages en-route which comprised two parts:

Part I: Construction of a barrage across Markandeya river near Yargol village in Bangarapet taluk including headworks, approach channel and roads (estimated cost: ₹ 160 crore) and

Part II: Laying of rising main, construction of water treatment plant, feeder mains and overhead tanks (estimated cost: ₹ 79.13 crore).

The estimates for these two parts were approved during November 2008 and February 2007 respectively.

The Scheme required 500 million cubic feet (mcft) of water at the proposed barrage site. In September 2007, the Engineer-in-Chief (EIC), Water Resources Development Organisation (WRDO), Bangalore informed the Secretary, Water Resources Department (WRD) that water required for the Scheme was inadequate at the proposed barrage site. WRDO had assessed (September 2007) that, while availability of water in the entire catchment of the river up to the proposed barrage was 764.04 mcft, the storage capacity of six Minor Irrigation tanks and 241 Zilla Panchayat tanks already existing in the catchment was 766.71 mcft. Thus, no water would be available for the proposed barrage. WRDO also indicated that even if the water availability for the proposed barrage was calculated based on its independent catchment area, it would be only 120.29 mcft against the requirement of 500 mcft.

This position was conveyed to the Secretary, Urban Development Department in October 2007 and April 2008. The Board, however, conducted a survey of siltation in four of the existing tanks and reckoned (August 2008) that the upstream tanks had silted up to the extent of 36 *per cent* and the siltation would facilitate availability of water downstream for the Scheme. EIC, WRDO informed (November 2008) the Board that its assessment of siltation was not accurate and that water would not be available if the existing tanks were desilted. EIC, WRDO also warned the Board that schemes based on incorrect and incomplete data would be unviable.

Although the issue of availability of water without a dependable source remained doubtful, the Board proceeded with the Scheme and awarded (January 2009) Part-II of the scheme to an agency at a cost of ₹ 88.89 crore for completion by July 2010. The total expenditure on the work was ₹ 68.66 crore (November 2010). The Board also entrusted (November 2010) Part-I of the Scheme to a contractor without fully acquiring the land required for submergence, barrage and allied works. An expenditure of ₹ 6.55 crore on survey, investigation and land acquisition had been incurred on Part-II up to November 2010.

The Board stated (August 2010) that the decision to go ahead with the Scheme was taken collectively in a meeting (August 2008) attended by representatives from the concerned departments including WRDO. The Scheme was viable as surplus water overflowing the silted tanks on the upstream of the barrage would be sufficient to meet the requirement. The reply is not acceptable as WRDO had disputed the assessment of water availability in November 2008 and a water supply scheme cannot solely depend on siltation of the upstream tanks for its source of water.

Thus, the Board's decision to make a huge investment on a water supply scheme without there being a dependable water source in disregard of the technical advice given by WRDO was flawed and was fraught with the risk of a huge investment remaining unfruitful. An expenditure of ₹ 75.21 crore had been incurred on this technically unviable project.

The matter was referred to Government in June 2010; reply had not been received (December 2010).

3.4.7 Skewed planning in the implementation of Water Supply and Drainage Schemes

The Karnataka Urban Water Supply and Drainage Board made an unproductive investment of ₹ 23.43 crore by executing three schemes without being in possession of land and clearances from other departments.

The Karnataka Public Works Departmental Code (Code) prescribes the checks and balances for executing public works. The Code, *inter alia*, requires that a work be taken up for execution only after ensuring availability of all requisite inputs such as land, designs and drawings, sanctions, funds *etc*. Further, all the components of a work are to be dovetailed into an integrated programme and their completion synchronised to derive optimal benefits.

Audit scrutiny (February 2010) of the records of the Karnataka Urban Water Supply and Drainage Board (Board) revealed that the Board overlooked these controls and executed the following schemes in parts through contractors, resulting in stoppage of work and unproductive expenditure.

3.4.7.1 Water Supply Scheme to Sandur town and villages en-route

The water supply scheme to Sandur town from Narihalla Reservoir had been functioning since 2002. As water availability in the reservoir during summer declined, the State Government approved (May 2007) a comprehensive scheme at a cost of ₹ 18.92 crore. The scheme envisaged lifting of water from the High Level Canal of Tungabhadra Project (HLC), conveying it over a distance of 11.5 Km through mild steel pipes and storing it in the reservoir for use during summer. The Government approved the proposal for lifting water from the HLC only in July 2008. Meanwhile, the Board invited tenders (July 2007) only for laying the pipeline and fixed an agency in February 2008. Though the alignment for the pipeline was passing through the premises of Jindal Steel Works (JSW) and along State Highway No 40, the Board approached JSW and the Public Works Department (PWD) for permission to lay the pipeline in July 2008 and January 2009 respectively. While JSW expressed (December 2009) reservations about the availability of sufficient space for the pipeline, PWD instructed (February 2009) the Board to lay the pipeline 22 metres away from the centre line of the State Highway, necessitating fresh acquisition of private land. As a result, the Board sought (December 2009) the intervention of Deputy Commissioner, Bellary in the matter. As these problems remained unresolved, the contractor did not complete the work by the stipulated time (June 2009) and demanded (December 2009) higher rates for the balance work. The Board was yet to obtain clearance from JSW and PWD and had also not decided upon commencement of the headworks (June 2010). An expenditure of ₹ 9.19 crore had been incurred on the incomplete pipeline (December 2010).

3.4.7.2 Water Supply Scheme to Yelburga town in Koppal district

The scheme was designed to draw water from the Hirehalla dam by constructing a Jackwell and a pump house near the sluice of the dam. The Board initially sought (February 2007) clearance of the State Water Resources Development Organisation (WRDO) for constructing the headworks at the dam site but followed up the matter with WRDO only between March 2009 and July 2009. As the Board had not received WRDO's clearance, it was not in a position to finalise the designs and drawings for the jackwell, pump house and the pipeline near the headworks (June 2010). However, the Board had awarded (October 2007) the contract for the scheme at a cost of ₹ 10.93 crore for completion by April 2009. Board also delayed the handing over of site for the Water Treatment Plant (WTP) to the contractor till November 2009. As a result, the scheme on which ₹ 9.07 crore had been spent (December 2009), remained incomplete and the contractor's demand (November 2009) for extension of time and higher rates for the balance work was pending with the Board.

3.4.7.3 Underground Drainage Scheme to Gangavathy town in Koppal district

Although the State Government approved (July 2001) a comprehensive estimate for an Underground Drainage System to Gangavathy town at a cost of ₹ 17.02 crore, the Board awarded (April 2003) the contract only for providing manhole chambers and sewer network at a cost of ₹ 4.53 crore for completion by October 2004. The Board approached the Deputy Commissioner, Koppal (DC) in August 2003 for acquiring 21 acres and 28 guntas of land required for the Sewage Treatment Plant and Wet Wells. Though the Board deposited ₹ 1.34 crore with the DC towards land compensation in December 2008, it had not taken possession of the land as Government's approval to the land award was awaited. Meanwhile, the contractor stopped the work in June 2008 and requested (March 2009) for pre-closure of the contract as the quoted rates were no longer relevant. The work on which ₹ 5.17 crore had been spent (October 2009) remained suspended.

Thus, skewed planning in the execution of these three schemes has led to haphazard execution of the various components. Non-availability of land and absence of clearances from other departments hindered completion of even the disintegrated components of works taken up for execution, rendering the outlay of ₹ 23.43 crore unproductive, apart from denial of intended benefits to the people of the concerned towns.

The matter was referred to Government in June 2010; reply had not been received (December 2010).

3.4.8 Avoidable payment of interest on a loan

The Bangalore Development Authority (BDA) unilaterally paid a lower rate of interest on a loan availed of from the Karnataka Urban Infrastructure Development and Finance Corporation. BDA pre-closed the loan by unilaterally fixing the interest at five *per cent* per annum against 15 *per cent* per annum as per the terms of sanction. The outstanding dues were settled after three years by paying an additional interest of ₹ 7.67 crore.

Mention was made in the Report of the Comptroller and Auditor General of India (Civil) for the year ended 31 March 2002 regarding the relocation of the Iron and Steel Market from the City Market area by the Bangalore Development Authority (BDA) without securing the consent of the stakeholders. The Public Accounts Committee in their Report No.5 of 12th Assembly (2006) had recommended that the land acquired for relocation be made use of for the same purpose and its price determined in such a manner that there would be no financial loss to BDA.

Meanwhile, BDA decided (January 2003) to drop the project after incurring an expenditure of ₹ 20.84 crore and clear the outstanding loan obtained from the Karnataka Urban Infrastructure Development and Finance Corporation (Corporation). The loan of ₹ 10.10 crore sanctioned by the Corporation carried interest at 15 *per cent* per annum. In April 1998, BDA requested the Corporation to reduce the interest rate to five *per cent* per annum for reducing the financial burden on the allottees. The Corporation refused (December 1999) to lower the interest rate on the grounds that the project was a commercial one and could not be classified as a non-remunerative service oriented project. However, BDA continued to pay quarterly instalments by paying unilaterally interest at five *per cent* per annum and pre-closed the loan in February 2003. Against the outstanding dues of ₹ 7.81 crore, BDA paid the Corporation only ₹ 4.90 crore at the time of pre-closing the loan. Although the Corporation continued to raise quarterly demands thereafter for payment of the dues calculated at the interest rate of 15 *per cent* per annum, BDA ignored the demands till September 2006, when the State Level Sanctioning Committee (SLSC) which was responsible for monitoring the project insisted on BDA repaying the outstanding dues as per the terms of sanction. As BDA still failed to pay up the dues, SLSC directed (October 2008) BDA to clear the dues in six quarterly instalments, commencing from the quarter ending December 2008. As a result of its unilateral decision to pay interest at five *per cent* on the loan, BDA ended up paying the Corporation interest of ₹ 15.01 crore against ₹ 7.34 crore payable as per the terms of sanction. BDA had since paid up (June 2010) the dues except the last instalment of ₹ 2.52 crore due in September 2010.

Thus, BDA's unilateral decision to pay interest at five *per cent* on the loan without obtaining the Corporation's concurrence resulted in avoidable expenditure of ₹ 7.67 crore on payment of additional interest to the Corporation.

The matter was referred to Government in July 2010, reply had not been received (December 2010).

3.4.9 Ineffective working of a Waste Water Treatment Plant

The Secondary Waste Water Treatment Plant at Kadabesanahalli constructed by the Bangalore Water Supply and Sewerage Board in April 2005 at a cost of ₹ 40.02 crore did not receive sewage water from the planned areas due to incomplete laying of sewer lines. The Board, nevertheless, kept the plant functional at a cost of ₹ 3.04 crore by treating water drawn from a nearby channel and releasing the treated water back into the same channel.

All components of a public work need to be dovetailed into an integrated programme to make optimal utilisation of the infrastructure created and also to guard against unfruitful and wasteful investment. Bangalore Water Supply and Sewerage Board failed to synchronise completion of all the components of a sewage treatment plant and, in the process, incurred a wasteful expenditure of ₹ 3.04 crore as discussed below:

The Board took up (August 2002) the construction of a Secondary Waste Water Treatment Plant (WTP) at Kadabesanahalli to treat 50 MLD of sewage water collected from the areas of Kaggadasapura, Bairasandra and Aswath Nagar. Though the WTP was completed in April 2005 at a cost of ₹ 40.02 crore, the trunk sewer lines were completed only in August 2008 at a cost of ₹ 7.03 crore. Work on the laterals for collecting sewage from the source points commenced in May 2010 and is scheduled for completion only in May 2013.

Though non-completion of the trunk sewer lines and laterals was within the knowledge of the Board, it fixed (December 2006) an agency for operation and maintenance of the WTP for three years commencing from December 2006, at a cost of ₹ 3.12 crore. As sewage water from the intended areas was not available at the plant site due to non-completion of the trunk sewer lines and laterals, the agency merely kept the WTP operational by drawing water from a channel nearby and releasing the treated water back into the channel. This defeated the very purpose for which the operation and maintenance contract was awarded to the agency. Payment of ₹ 1.66 crore had been made (December 2009) to the agency mainly towards cost of (i) manpower from the level of Plant Process Manager to the level of Attendant, (ii) periodical tests, (iii) equipment, (iv) maintenance of office and plant equipment and (v) consumables. The Board spent ₹ 1.38 crore on power supply for the plant.

The Board replied (September 2010) that due to rapid growth of the city, new private layouts had been developed along the original alignment of the trunk sewers which necessitated changes in the alignment and laying of the trunk sewers in some of the most difficult terrains. There was also delay in completion of the trunk sewer lines as the Right of Way issues were not predictable before commencement of the work. The Board further stated that the WTP was kept in good condition by deploying minimum staff and

operating only the essential equipment. The reply was not acceptable as the feasibility of executing the work along the approved alignment ought to have been examined, especially when sufficient time elapsed from the stages of the project formulation to its execution. As laying of trunk sewers had been taken up without examining the ground reality, its completion was delayed and this affected the completion of laterals also. As a result, the WTP, which had been completed earlier, needed to be kept operational by treating water from a channel instead of sewage water from the intended areas. The expenditure of ₹ 3.04 crore on operation and maintenance of the WTP, therefore, was avoidable. Non-utilisation of the WTP for the intended purpose, despite a capital investment of ₹ 47.05 crore, defeated the very objective of keeping the environment clean.

The matter was referred to Government in June 2010; reply had not been received (December 2010).

Chapter 4

Functioning of Government Department(s)

Animal Husbandry and Fisheries Department

4.1 Department of Animal Husbandry and Veterinary Services

Executive summary

The Department of Animal Husbandry and Veterinary Services is responsible for improving the productivity of livestock through scientific breeding and providing healthcare to protect them from disease. An audit of the department covering the period 2005-10 was conducted between April 2010 and June 2010 to examine the economy, efficiency and effectiveness of its significant activities keeping in view its mandate.

The audit of the department showed the following shortcomings:

- ➔ Large number of vacancies and irrational distribution of veterinary institutions across the State handicapped the department in effective implementation of its programmes and delivery of healthcare.
- ➔ The department's management of its vast tracts of farmland in several districts was ineffective as deployment of watch and ward was inadequate and irrational. Large areas of farmland had been encroached upon and some of the encroachments were regularised illegally.
- ➔ Conservation of indigenous breeds of cattle was not given priority and, consequently, the population of a few indigenous breeds showed a negative growth as per the 2007 census.
- ➔ The implementation of the Centrally sponsored schemes was tardy as the achievements were far below the targets fixed.
- ➔ Fodder and fodder seed production were not given priority by the department, despite availability of land.
- ➔ As there was no monitoring of the implementation of various schemes and activities, the department failed to identify shortcomings and initiate corrective action.

4.1.1 Introduction

Karnataka has a livestock population of 3.28 crore and poultry population of 4.24 crore as per the provisional figures of 2007 census. The State produces annually 48.21 lakh tonnes of milk, 1.19 lakh tonnes of meat and 290.84 crore eggs.

The Department of Animal Husbandry and Veterinary Services (department) was bifurcated from the Department of Agriculture in 1945 with the following main objectives:

- To provide healthcare to domestic animals and poultry in the State and to protect them from disease,

- To improve productivity of livestock and poultry through scientific breeding, feeding and management,
- To provide extension services and practical training facilities to the farmers in advanced animal husbandry practices, and
- To conduct livestock census once in five years, besides annual integrated sample survey for estimating the production of major livestock products *viz.,* milk, meat, wool and eggs and by-products.

There are eleven[1] Livestock Farms, three[2] Frozen Semen Production and Distribution Centres, five[3] Pig Breeding Stations (PBSs), three[4] Poultry Farms functioning in the State Sector. There are 362 Veterinary Hospitals, 1,941 Veterinary Dispensaries, 1,181 Primary Veterinary Centres, 230 Artificial Insemination Centres, 138 Key Village Scheme Sub-centres, 174 Mobile Veterinary Centres and three Regional Laboratories functioning in the District Sector.

4.1.2 Organisational set-up

At the State level, the department is headed by a Commissioner functioning under the overall control of Principal Secretary, Animal Husbandry and Fisheries. The Commissioner is assisted by a Director, two Additional Directors, five Joint Directors (JDs), two Deputy Directors (DDs) and two Assistant Directors (ADs) in the Commissionerate. There are 41 Drawing and Disbursing Officers[5] (DDOs) implementing the State Sector programmes. Each of the Livestock Farms is headed by a DD, while the PBS is headed either by a Veterinary Officer or an AD. The poultry farms are headed by DDs.

At the district level, the administrative control of all the departmental institutions in the district vests with the Chief Executive Officer (CEO) of the Zilla Panchayat (ZP). Each district is headed by a DD who is assisted by ADs. Each taluk is headed by an AD assisted by Veterinary Officers, Veterinary Supervisors and Veterinary Inspectors.

4.1.3 Audit objectives

The objectives of the audit were to obtain assurance as to whether

(i) institutional capacity was adequate to achieve the desired objectives and the institutional mechanisms functioned optimally;
(ii) the department complied with the relevant rules, laws and regulations while discharging its mandated functions; and
(iii) schemes and activities undertaken by the department delivered the results expected of them efficiently and effectively.

[1] Two at Hesaraghatta, one each at Ajjampura, Bankapura, Dharwad, Kodagu, Kunigal, Kunikarahalli, Kudige, Munirabad and Tegur.
[2] State Livestock Breeding and Training Centre-Hesaraghatta, Livestock Breeding Farm-Hesaraghatta and Livestock Breeding &Training Centre-Dharwad
[3] PBSs at Bangarapet, Hesaraghatta, Kalasa, Koila, and Kudige
[4] State Poultry Farm at Hesaraghatta and Regional Poultry Farms at Malavalli and Gangavathi
[5] 19 DDs, 13 ADs and Nine Veterinary Officers

4.1.4 Audit sample, scope and methodology

The audit covered the transactions of the department for the period 2005-10. Out of 1,311 DDOs in the State and District sectors, 18 DDOs under the State Sector and 45 DDOs under the District sector were selected for test-check. The State Sector sample covered the Directorate, six out of 11 Livestock Farms, one out of three Poultry Farms, three out of five Pig Breeding Stations, all the three Frozen Semen Production and Distribution Centres, one Joint Director (Statistics) and one Veterinary Medical Store. The sample for the District Sector covered six out of 29 DDs, 11 out of 362 Veterinary Hospitals, 20 out of 1,941 Veterinary Dispensaries and eight out of 174 Mobile Veterinary Centres.

The audit commenced with an entry conference with the Principal Secretary, Animal Husbandry and Fisheries in April 2010, wherein the scope, audit objectives and criteria for the audit were explained. Field audit of the selected offices/units was conducted between April 2010 and June 2010. The audit comprised examination of records as well as interaction with the concerned officials of the department. The audit findings were discussed with the Principal Secretary, Animal Husbandry and Fisheries in the exit conference held on 9 September 2010.

Audit findings

4.1.5 Institutional weaknesses

Every organisation needs to have a sound infrastructure to manage and achieve its mandate and policies. This would ensure soundness and appropriateness of the internal systems and controls in its key areas of activities and drive the organisation towards the objectives in an economical, efficient and effective manner. Some of the areas, where infrastructural deficiencies were observed are discussed in the succeeding paragraphs.

4.1.5.1 Shortage of manpower

Significant vacancies in the posts of Veterinary Officers and support staff

The department had a sanctioned strength of 17,429 posts, of which 5,282 remained vacant as of May 2010. Of these vacancies, 979 were in the cadre of Veterinary Officers (VOs) and 3,410 in the cadre of support staff consisting of Veterinary Supervisors (VSs), Veterinary Inspectors (VIs) and Veterinary Assistants (VAs) as shown in **Table-4.1.**

Table-4.1: Vacancy position

Name of the post	Sanctioned strength	Working strength	Vacancy	Percentage of vacancy
Assistant Director	488	457	31	6
Veterinary Officers	2,392	1,413	979	41
Veterinary Supervisors	309	258	51	17
Senior Veterinary Inspectors	2,102	1,609	493	23
Veterinary Inspectors	1,816	1,301	515	28
Veterinary Assistants	7,271	4,920	2,351	32

Source: Information furnished by the department

Regarding the acute shortage of VOs, the Commissioner stated (October 2010) that Government had framed Special Recruitment Rules and given (April 2010) permission for appointment of 487 VOs in a phased manner. Applications were invited for filling up of 287 posts in the first phase and the draft selection list for 213 eligible candidates was also finalised. However, these 213 posts could not be filled up due to a stay issued (May 2010) by the Karnataka Administrative Tribunal on publication of the final list of appointees. While assuring that action would be taken to announce the final list soon after the stay was vacated, the Commissioner informed that 86 retired VOs engaged on contract basis continued to work in the department.

After filling up 213 posts of VOs, the number of vacancies in the cadre of VOs would still be 766 (32 *per cent*). Besides, no action had been taken to fill up the vacancies in the cadres of support staff. Non-filling up of these vacancies handicapped the department in effective delivery of adequate healthcare to the livestock population. While majority of the veterinary institutions across the State faced acute shortage of staff, the staff deployed on Rinderpest Eradication Scheme (RES) remained idle for over six years after the closure of the scheme as discussed below:

Idle manpower

The Organisation of International Epizootis (OIE), Rome declared India free from rinderpest disease with effect from 27 May 2004. However, the existing 68 posts sanctioned for RES were not abolished or transferred to the needy units. The Government approved (May 2009) transfer of 11 posts from the State Sector to the District Sector during May 2009. The details of staff-in-position against the remaining 57 posts as of March 2010 are shown in **Table-4.2.**

Table-4.2 : Idle staff on RES

Cadre	Non-plan		Plan	
	Sanctioned	Staff in position	Sanctioned	Staff in position
Group A	8	7	1	1
Group B	6	6	-	-
Group C	20	20	-	-
Group D	16	8	6	2
Total	**50**	**41**	**7**	**3**

Source: Information furnished by the department

The department had not redeployed the staff and utilised their services fruitfully. The Commissioner replied (October 2010) that action had been initiated to shift these posts to the needy institutions.

Thus, continuation of these posts even after closure of RES resulted in 44 staff members remaining idle for over five years, rendering the expenditure of ₹ 4.15 crore on their pay and allowances unproductive.

4.1.5.2 Non-deployment of personnel with requisite qualification

Manpower in Frozen Semen Stations did not conform to prescribed qualification

The Ministry of Agriculture, Government of India (GOI) had prescribed (April 2005) Minimum Standards for Preservation (MSP) of frozen semen to ensure production of good quality semen. MSP prescribed the manpower structure for production of semen depending on the dosages of semen produced annually. As per MSP norms, each of the three Semen Production

and Distribution Centres under the control of the department was to have four officers of different ranks trained in semen protection with the qualification of M.V.Sc in Animal Production/Livestock Protection, besides three Laboratory Technicians and other supporting staff.

Audit observed that each of the two semen production and distribution centres at Hesaraghatta had only one officer with M.V.Sc qualification against four as per MSP. The other centre at Dharwad had doctors only with B.V.Sc qualification. DD, State Livestock Breeding and Training Centre (SLBTC), Hesaraghatta stated (June 2010) that Government did not pay any extra remuneration to officers working in the farm and no officer with higher qualification was, therefore, interested in working in the farm. AD, Dharwad observed (June 2010) that vacancies in the posts of VO, Lab Technician and other supporting staff had been brought to the notice of higher authorities during May 2006 to November 2009. Thus, not having enough qualified manpower can have adverse impact for the success of the breeding programme as a whole.

4.1.5.3 Regional imbalances in establishing veterinary institutions

Establishment of veterinary institutions not driven by livestock population

The Government had constituted (April 2000) a High Power Committee (HPC) to study the regional imbalances and advise it on measures to redress the imbalances. The report submitted (June 2002) by the HPC highlighted significant shortages of veterinary institutions in 13 districts[6] and acute shortage in four[7] of these districts. The report urged the Government to set up 318 additional institutions.

The State had 4,110 veterinary institutions in 29 districts as of March 2010. The livestock population in the State as per March 2007 census (provisional) was 7.52 crore or 1.69 crore translated into cattle units[8]. Thus, there was one veterinary institution on an average for every 4,112 cattle units. On the basis of this average number of cattle units, the number of veterinary institutions in each district was assessed in audit. In North Karnataka, while seven districts had a shortage of 342 veterinary institutions, six had 90 surplus institutions. Similarly, in South Karnataka, 11 districts had 495 surplus institutions while nine districts had a shortage of 70 institutions.

Thus, the establishment of veterinary institutions in the State was not driven by the availability of livestock population. The Commissioner replied (October 2010) that 69 and 169 new dispensaries were started in backward taluks as per Government orders of March 2007 and August 2007 and 51.5 *per cent* of these new dispensaries had been sanctioned for districts facing shortage of veterinary institutions. It was further stated that shifting of the veterinary institutions after their establishment was very difficult due to resistance from the farmers and priority would be given to the districts facing shortage while sanctioning new veterinary institutions. The reply was not

[6] Bangalore (Rural), Bagalkot, Belgaum, Bellary, Bidar, Chamarajanagar, Chitradurga, Hassan, Koppal, Raichur, Shimoga, Tumkur and Udupi

[7] Bangalore (Rural), Belgaum, Bellary and Raichur

[8] One cattle unit comprises (i) cattle, buffalo and equine : 1 number (ii) sheep and goats : 10 numbers (iii) pigs: 5 numbers and (iv) poultry: 100 numbers

acceptable as the shortages and surpluses were assessed by Audit based on veterinary institutions existing as of March 2010 including those created in 2007. The department's inability to shift the surplus institutions to the needy places would only compound the problem of shortage of staff when new veterinary institutions are sanctioned in future.

4.1.5.4 Inefficient watch and ward for farm land

Encroachment of farm land

The departmental farm at Ajjampur was in possession of 55,292 acres of Amruth Mahal Kaval[9] lands at 59 villages in six[10] districts. These lands were to be preserved as grazing lands and used for only fodder production. The remaining ten departmental farms had 5,418.55 acres of land. However, 21,098.05 (38 *per cent*) acres of kaval lands had been encroached upon (August 2009). The department did not have information such as details of encroachers, duration of encroachments, *etc*. Although the Revenue Department reiterated (February 1995 and December 2002) that there was no provision either to regularise the encroachments of kaval lands, or sanction these to farmers, Tahsildar of Channarayapattana taluk and the Committee for regularising the unauthorised occupation illegally regularised 340.07 acres of kaval lands between 1994 and 2003 in three villages. Besides these kaval lands, 233.18 acres out of 1,116.39 acres of farm land in the Livestock Breeding Farm at Koila had also been encroached upon. While the Commissioner requested (April 2007 and February 2009) the Deputy Commissioners (DCs) of the districts concerned to arrange for the survey of the departmental lands and eviction of the encroachers, the details of action taken, if any, by the DCs were not furnished by the department.

Kavalagaras were appointed for watch and ward of these kaval lands. While 113 of them were working in 37 out of 59 villages, there was no watch and ward for 24,919.50 acres (45 *per cent*) of kaval lands in the remaining 22 villages. According to the conditions prescribed (February 2008) by the Government for appointment of Kavalagaras, each Kavalagara was to be appointed for every 400 acres of land and was to be allotted two acres to make a living by growing crops other than commercial crops. Every Kavalagara was to be engaged in fodder production, besides maintenance of the farms. However, it was seen that the distribution of the kaval lands among these Kavalagaras in 37 villages was uneven and as a result, the extent of land entrusted to a Kavalagara ranged from 9.08 acres in Chikkathekkalpatti village to 1,907.28 acres in Hirekere village. As the department failed to implement Government guidelines, 45 *per cent* of the kaval land had no watch and ward. It was also observed that encroachment had taken place even in villages where Kavalgaras were appointed, indicating ineffective watch and ward arrangements and ineffective monitoring by the department.

The Government had leased (September 1988) 740 acres of kaval land in Channarayapattana taluk to Mysore Minerals Limited, Bangalore (MMC)[11] for

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[9] These lands have been reserved as free pasture for raising the indigenous cattle breed, Amruth Mahal, which requires vast grazing areas

[10] Chickmagalur, Chitradurga, Davanagere, Hassan, Mandya and Tumkur

[11] A State Government company

extracting chromite ore. Although the lease had expired in October 1996, the company continued to extract chromite ore from these kaval lands without paying the lease rent of ₹ 5 lakh per annum from November 1996. Joint Director stated (June 2010) that the department had requested Government to cancel the lease and a decision in this regard was pending with Government. It was also stated that MMC would be directed to pay the dues of ₹ 2.57 crore (upto June 2010 including penal interest).

Thus, management of the departmental land was not effective, resulting in encroachments and utilisation of farm land for other than the intended purposes.

4.1.5.5 Institutional weaknesses in the State Implementing Agency

Weak implementing agency for Centrally sponsored schemes

In October 2000, the GOI launched the fully funded Centrally sponsored scheme of National Project for Cattle and Buffalo Breeding (NPCBB). As assistance provided under Centrally sponsored schemes often failed to reach the user agency in time, GOI instructed the Government to designate a State Implementing Agency (SIA) outside the department for receiving funds directly from GOI and implementing the scheme. The breeding infrastructure was also to be transferred by the department to the SIA to enable it to develop into a specialised professional semi-autonomous agency in cattle and buffalo rearing.

In pursuance of this, the State Government established the Karnataka Livestock Development Agency (KLDA) in December 2002. The Government, however, directed KLDA to implement NPCBB through the existing institutions functioning under the administrative control of the department without any autonomy for its functioning. Further, as per the guidelines, KLDA was to be manned by a core group of professionals headed by an animal breeding/reproduction specialist as its Chief Executive Officer. KLDA's staff structure consisted of an Additional Director of the department acting as Ex-officio Project Director, one AD, two VOs and skeleton support staff. Implementation of the special package for providing supplementary avenues of income to the farming population in six suicide-prone districts sanctioned (September 2006) by GOI was also entrusted to KLDA despite its weak institutional mechanism. Government stated (January 2011) that it was not possible to provide autonomy to KLDA due to shortage of staff. The reply was not tenable as creation of KLDA without autonomy was more a reflection of the need to receive funds from GOI than by the department's commitment towards sustainable animal husbandry. This was evidenced by serious slippages in implementation of NPCBB and the special package as discussed separately in the review.

4.1.5.6 Monitoring mechanism and internal audit

Ineffective monitoring mechanism

Monitoring of the implementation of the Centrally sponsored schemes and other departmental activities was ineffective. The Departmental Hand Book prescribes that the officers nominated by the Commissioner are to inspect the accounts and other records of the offices of the department and review the developmental works and the functioning of the veterinary institutions in the

State. These nominated officers are to send their inspection reports to the Commissioner/CEOs of the ZPs. Although the Commissioner appointed (April 2007) the nodal officers, no inspection was conducted by these officers (September 2010) and monitoring of the various activities of the department evidently suffered. Besides, internal audit of the accounts of the DDOs was also not conducted regularly. Internal audit was in arrears for periods ranging from 1 to 4 years in respect of departmental farms, 2 to 5 years in the case of Frozen Semen Production and Distribution Centres and 2 to 5 years in respect of PBSs. Thirteen DDOs were not covered by internal audit during 2005-10. Non-functioning of the monitoring system resulted in persistent shortfall in achievement of targets under the Centrally sponsored schemes, ineffective management of departmental farms, imbalances in availability of veterinary institutions for providing healthcare to livestock, *etc*.

4.1.5.7 Breeding policy not revised

Delay in revision of the breeding policy

The Karnataka State Cattle Breeding Policy was approved by the Government in 1980. Audit observed that the existing cattle breeding policy had not been revised and had become outdated as many aspects of the policy were not relevant. For example, one of the cattle breeds namely Red-Dane recommended for propagation in Raichur, Bellary, Bangalore and Mysore districts was not available in the State. The buffalo breed Murrah which was being promoted by the department did not find a place in the existing cattle breeding policy. The Commissioner replied (October 2010) that workshops were being organised to elicit the opinion of farmers to the revised draft breeding policy finalised in February 2010 and that Government's approval to the revised policy would be obtained. Absence of a clear-cut breeding policy handicapped the department in focusing on realising the objective of productivity of livestock and poultry through scientific breeding, feeding and management.

4.1.6 Compliance issues

The mandated activities of an organisation are to be carried out according to laid down rules and regulations to give reasonable assurance regarding economy, efficiency and effectiveness. Adherence to codes and manuals minimises the risk of errors and irregularities and drives the organisation towards its objectives with optimum use of resources. Some of the areas where Audit observed non-compliance with the laid down rules and regulations are discussed in the succeeding paragraphs.

4.1.6.1 Budget and Financial Reporting

Persistent huge savings under Plan

The activities of the department under the State Sector are financed through the State budget under the heads of account "2403-Animal Husbandry" and "4403-Capital outlay on Animal Husbandry". Besides the Centrally sponsored schemes implemented by KLDA which receives funds directly from GOI, the department implements other Centrally sponsored schemes *viz.,* Animal

Health Statistics and Livestock Census[12], Rashtriya Krishi Vikas Yojana[13] (RKVY), Assistance to Poultry Farms[14] and Assistance to State for Controlling Animal Diseases[15] for which GOI releases funds to the State Government. The Plan budget provision made by the State Government includes its share and anticipated releases from GOI for these Centrally sponsored schemes. The Commissioner allots the Plan and Non-plan resources provided by the Finance Department (FD) among the DDOs under his control.

The State Government releases block grants to the ZPs for the District Sector programmes. The ZPs deposit these grants in ZP funds maintained at the Treasuries. CEOs of the ZPs allot these funds to implementing officers in the district and also exercise overall control and supervision of the schemes. The Chief Accounts Officer (CAO) of the ZP prepares the monthly and annual accounts and submit these to Government in Rural Development and Panchayat Raj Department.

Details of budget provision made for the State Sector and expenditure incurred thereagainst during 2005-10 are shown in **Tables-4.3 and 4.4.**

Table-4.3 : State Sector -Plan

(₹ in crore)

Year	Budget	Releases	Expenditure	Savings	Amount surrendered
2005-06	32.50	24.09	23.35	9.15	8.62
2006-07	63.97	48.45	46.20	17.77	18.09
2007-08	73.35	33.50	32.24	41.11	41.19
2008-09	57.91	72.61	49.90	8.01	11.77
2009-10	86.73	71.69	69.25	17.48	3.25
Total	**314.46**	**250.34**	**220.94**	**93.52**	**82.92**

Table-4.4 : State Sector –Non-plan

(₹ in crore)

Year	Budget	Expenditure	Savings
2005-06	40.30	37.38	2.92
2006-07	37.70	34.85	2.85
2007-08	43.86	39.96	3.90
2008-09	45.71	42.85	2.86
2009-10	49.17	46.14	3.03
Total	**216.74**	**201.18**	**15.56**

Source: Expenditure Statements furnished by the department

Out of the total savings of ₹ 93.52 crore, ₹ 52.92 crore was on account of non-receipt of funds from GOI for four Centrally sponsored schemes although provision for these schemes had been made in the budget in anticipation.

[12] Fully funded by GOI
[13] Fully funded by GOI
[14] Expenditure is shared by GOI and the State in the ratio of 80:20
[15] Expenditure is shared by GOI and the State in the ratio of 75:25 respectively

Savings surrendered belatedly

The Karnataka Budget Manual prescribes that the progress of expenditure month by month is to be watched by the Controlling Officer and all savings anticipated by the Head of the Department and Controlling Officers are to be reported by them to the FD immediately after these are foreseen. The department failed to adhere to these provisions and surrendered the savings aggregating ₹ 82.92 crore on the last day of each financial year during 2005-10. Further, while only ₹ 11.87 crore were surrendered during 2005-06 and 2009-10 against the available savings of ₹ 26.63 crore, the amounts surrendered during 2006-09 **(Appendix-4.1)** were in excess of the amounts available for surrender. This was due to incorrect adoption of budget provision and expenditure figures at the time of preparing the surrender proposals. This was indicative of lack of expenditure control as surrender proposals had not been based on expenditure statements.

District Sector

Details of budget provision under Plan and Non-plan for the District Sector and expenditure incurred during 2005-10 are shown in **Table-4.5**:

Table-4.5: Budget provision and expenditure for the District Sector

(₹ in crore)

Year	Plan		Non-plan	
	Provision	Expenditure	Provision	Expenditure
2005-06	23.37	25.72	97.02	96.67
2006-07	38.09	36.32	97.31	102.95
2007-08	48.86	49.17	122.73	128.13
2008-09	67.80	65.25	141.65	149.77
2009-10	74.28	73.17	143.77	147.31
Total	**252.4**	**249.63**	**602.48**	**624.83**

Source: Expenditure statements furnished by the department

ZPs failed to submit expenditure statements

ZPs had failed to send monthly/annual statements of receipts and expenditure to the Government during 2005-09 and the reasons for the excess/savings were not verifiable. Consequently, this important expenditure control mechanism was not functioning properly in the department.

4.1.6.2 Irregular advance from Contingency Fund

Advance from Contingency Fund irregularly released

An advance from the Contingency Fund was permissible only for incurring unforeseen expenditure of an urgent nature upon some new service, scheme or item not contemplated in the budget. In the budget proposal submitted to Government for 2009-10, the department had sought ₹ 65 lakh for the Centrally sponsored scheme of "Animal Husbandry Livestock Census", which was provided by the Government. The Commissioner submitted subsequently (September 2009) a supplementary estimate for an additional ₹ 3.26 crore for this scheme during 2009-10, against which the Government sanctioned (November 2009) ₹ 31 lakh and approved re-appropriation of another ₹ 99 lakh during January 2010. The balance requirement of ₹ 1.96 crore was released by the Government during February 2010 from the Contingency Fund.

Operation of the Contingency Fund was in violation of rules as the scheme had been included in the budget and the expenditure foreseen through timely submission of the supplementary estimate.

4.1.6.3 Incorrect utilisation certificates

Incorrect reporting of expenditure to GOI

Although KLDA failed to spend the Central assistance under Phase-I of NPCBB fully even as of March 2010 (as discussed in paragraph 4.1.7.1), the utilisation certificates submitted by KLDA to GOI for the period ending 2005-07 showed the assistance as having been fully spent. As against the expenditure of ₹ 5.46 crore incurred by KLDA during this period, the expenditure reported to GOI was ₹ 9.49 crore. Project Director, KLDA stated (June 2010) that committed expenditure on import of bulls, embryos, frozen semen, *etc*., was shown as expenditure. The reply was not tenable as the utilisation certificates were to be submitted based on actual expenditure and KLDA misinformed GOI about the utilisation of funds of NPCBB in the State.

4.1.6.4 Asset registers of land and buildings

Three out of six farms did not maintain asset registers

The farms at Hesaraghatta and Kudige did not maintain any asset register for land and buildings. The asset register maintained at the Ajjampur farm did not incorporate the details of ownership of 11,327.17 acres of kaval land in Hassan district and another 3,379.32 acres of kaval land in Tumkur district.

While the DDs of Hesarghatta and Kudige farms stated (May 2010) that asset register would be maintained, DD of Ajjampur farm replied (May 2010) that land records were incomplete since the beginning and a fresh survey of the lands belonging to the farms was in progress. Non-maintenance of the asset register was fraught with the risk of inadequate control over the departmental assets.

4.1.6.5 Outstanding observations of previous years

As per the Hand Book of Instructions issued by the FD in 2001 for speedy settlement of audit observations, the Heads of the offices and the next higher authorities are required to comply with the observations contained in the Inspection Reports (IRs), rectify the defects and omissions promptly and report their compliance to the Accountant General who forwards a half yearly report of pending IRs to the Secretary of the department to facilitate monitoring of the audit observations.

As of June 2010, 53 IRs containing 69 paragraphs relating to State Sector and 191 IRs containing 438 paragraphs pertaining to District sector were outstanding against the department. Year-wise details of the IRs and paragraphs outstanding are shown in **Appendix-4.2**.

4.1.7 Service delivery

The department aims at improving the productivity of livestock and poultry, providing health and extension services to animal/poultry rearers through implementation of various developmental schemes/programmes. Some of these are discussed in succeeding paragraphs.

4.1.7.1 National Project for Cattle and Buffalo Breeding

Delay in utilisation of GOI funds affecting breeding activities

Spending by KLDA was very poor

The Centrally assisted National Project for Cattle and Buffalo Breeding (NPCBB) was implemented in two phases (Phase-I: 2000-06 and Phase-II: 2007-12). The project cost of Phase-I and Phase-II was ₹ 20.58 crore and ₹ 20.07 crore respectively. The funds received by KLDA from GOI and expenditure incurred thereagainst during 2002-10 were as shown in **Table-4.6.**

Table-4.6 : Spending by KLDA against releases made by GOI

(₹ in crore)

Year	Releases	Expenditure
2002-06	19.59[16]	9.84
2006-07	Nil	2.91
2007-08	Nil	1.37
2008-09	Nil	0.75
2009-10	6.34	0.89
Total	**25.93**	**15.76**

Source: Annual accounts of KLDA

Spending by KLDA was poor under Phase-I and consequently, the State Government lost Central assistance of ₹ 2.92 crore as GOI released only ₹ 17.66 crore for Phase-I against the project cost of ₹ 20.58 crore. The poor progress under Phase-I had an adverse impact on release of funds for Phase-II also as GOI released ₹ 6.34 crore for Phase-II only during 2009-10 although it commenced during 2007-08. The Commissioner replied (October 2010) that the tendering process for import of bulls, procurement of liquid nitrogen *etc*., took a lot of time and the delay in fixing the rate contracts for several items resulted in slowing down the spending by KLDA. The reply is to be viewed in the light of the fact that the delay in spending was persistent. Although Phase-I closed in 2006, the funds received for Phase-I were not utilised fully as of March 2010, even three years after the commencement of Phase-II. Thus, cattle and buffalo breeding did not receive the desired attention, despite availability of funds.

Improvement of indigenous breeds

Field performance recording of indigenous breeds not undertaken

NPCBB envisaged identification of good quality breeding bulls of indigenous breeds through field performance recording programmes and adoption of specific programmes for improvement to specialised draught breeds like Amruth Mahal, Nagore, Khillar, *etc.* GOI made an allocation of ₹ one crore out of funds released during 2005-06 for field performance recording of four important indigenous breeds *viz*., Hallikar, Amruth Mahal, Khillar and Shruthi. A thousand animals of each of the breeds per year were to be identified during 2004-06.

[16] includes ₹ 1.93 crore being the unutilized balance under earlier ongoing Centrally sponsored schemes of Cattle and Buffalo Breeding

KLDA entered (July 2006) into a Memorandum of Understanding (MoU) with Karnataka Milk Federation (KMF) for recording the field performance of two breeds *viz.,* Jersey and Holstein Friesion (HF) in six[17] districts and released ₹ 83.17 lakh during 2006-07 and 2008-09. KMF identified 3,602 elite cows of Jersey and HF and procured more than 189 bulls and calves for breeding during 2005-09.

While the field performance recording as per GOI guidelines was to be directed towards specific indigenous breeds, KMF identified elite Jersey and HF breeds for breeding during 2004-09. Thus, KLDA's action merely funded an on-going activity of KMF which was inconsistent with the programme objective. Project Director, KLDA replied (June 2010) that as KMF had initiated field performance testing in six districts, it was continued under NPCBB. It was further stated that performance recording of indigenous breeds would be carried out soon. KLDA had not commenced this activity even 10 years after the launch of Phase-I, contributing to the drastic reduction in the population of some of the indigenous breeds during 1997-2007 as shown in **Table-4.7**:

Table-4.7: Population of indigenous breeds during 1997-2007

(Numbers in lakh)

Indigenous breeds	Population as per Census		
	1997	2003	2007 (Provisional)
Deoni	1.26	0.36	0.68
Hallikar	34.90	21.08	19.98
M.Gidda	19.18	14.41	12.81
Krishna Valley	0.13	-	0.04

Source: Census figures furnished by the department

Artificial insemination through private technicians

Induction of private AI technicians not successful

NPCBB envisaged induction of private Artificial Insemination (AI) technicians. The department was to train the technicians[18] for six weeks and, thereafter, they were to undergo three months of understudy and practice under the supervision of experienced senior technicians. The technicians were to charge ₹ 60 for every AI, retain ₹ 45 as his income and remit the balance of ₹ 15 to the Government. NPCBB guidelines envisaged induction of 120 private AI technicians under Phase-I and another 200 under Phase-II.

It was seen that only 126 private candidates were trained at two training centres during 2007-08 after spending ₹ 7.58 lakh. Principal Secretary stated (September 2010) in the exit conference that the department stopped using the trained private AI workers as they had started working as veterinary doctors. The department was, therefore, seeking the help of NGOs for artificial insemination.

Thus, induction of private AI technicians failed to provide the desired impetus for artificial insemination.

[17] Bangalore-Urban, Bangalore-Rural, Kolar, Dakshina Kannada, Mysore and Mandya

[18] The private AI technicians should possess a secondary school certificate and be above 18 years of age. They were to invest in vehicles of their choice for mobile AI practice and all the equipment for the practice.

4.1.7.2 Special livestock package for suicide-prone districts

Delay in providing assistance to farmers in distress

GOI sanctioned (September 2006) ₹ 92.71 crore to the State under a special package for providing supplementary avenues of income to the farming population in six suicide-prone districts. The package was to be implemented over a period of three years during 2006-09. Subsequently, GOI extended (May 2009) the package up to September 2011. The package envisaged induction of high yielding milch animals in the districts so that small and marginal farmers vulnerable to economic distress would have an alternate source of income. GOI was to provide a subsidy to an extent of 50 *per cent* of the cost of the animal up to a maximum of ₹ 15,000 per animal and the beneficiary was to provide the balance amount through a bank loan. GOI was also to provide subsidy to the farmers at varying scales for calf rearing, healthcare, feed and fodder, besides bearing the cost of AI services and estrus synchronisation.

The physical and financial targets under various components of the package and achievement thereagainst as of March 2010 are as shown in **Table-4.8**:

Table-4.8: Targets and achievements under special package for suicide-prone districts

Component	Targets fixed by GOI		Targets fixed for releases so far made		Achievements	
	Physical (Nos.)	Financial (₹ in lakh)	Physical (Nos.)	Financial (₹ in lakh)	Physical (Nos.)	Financial (₹ in lakh)
High yielding milch animal	18,000	2,700.00	12,519	1,877.79	6791	1,012.16
Calf rearing	9,000	657.00	6,259	456.92	2300	162.52
Feed and Fodder supplying	18,000	1,642.50	12,519	557.00	4880	428.23
Animal Health care	18,000	54.00	12,519	18.00	4880	15.31
Setting up of Bulk Milk Cooler	10	240.00	10	217.00	15	192.52
Establishment of fodder block making unit	5	212.00	3	55.00	-	-
AI services	12,60,000	1,890.00	10,42,380	1,349.75	36,33,537	981.51
Estrus Synchronisation	37,500	1,875.00	2,82,998	1,208.67	2,44,092	1,198.60
Total		**9,270.50**		**5,740.13**		**3,990.85**

Source: Progress reports of KLDA

Although KLDA was to implement the special package as per GOI guidelines and also received funds from GOI during November 2006, the State Government nominated (January 2007) KMF as the implementing agency for the package. KLDA transferred ₹ 23.13 crore to KMF during March 2007 to March 2008 as per State Government's instructions for implementing the package. The State Government subsequently transferred implementation of the package again to KLDA during February 2009 when KMF refunded the unspent balance of ₹ 1.09 crore to KLDA. Though the package had become operational in 2006-07, KLDA spent only 70 *per cent* of the funds released by GOI as of March 2010. The financial progress in terms of the total package cost of ₹ 92.71 crore was only 43 *per cent* as of March 2010.

The progress in induction of milch animals was slow and was only 38 *per cent* of the target fixed by GOI. The achievement, even in terms of releases so far made by GOI for this component, was only 54 *per cent*. It was also seen that the induction of milch animals slowed down considerably after the implementation of the package was transferred to KLDA in February 2009.

Chickmagalur and Kodagu districts recorded the lowest achievement of 27 and 31 *per cent* respectively as shown in the **Table-4.9:**

Table-4.9: Status of induction of milch animals in suicide-prone districts

(In numbers)

Name of the district	Target	Achievement by KMF	Achievement by KLDA	Total achievement as of March 2010	Percentage of achievement
Belgaum	3000	926	545	1471	49
Shimoga	3000	985	173	1158	39
Chitradurga	3000	984	195	1179	39
Hassan	3000	956	278	1234	41
Chickmagalur	3000	733	77	810	27
Kodagu	3000	793	146	939	31
Total	**18000**	**5377**	**1414**	**6791**	**38**

Source: Progress reports of KLDA

The Government of India included (November 2008) goat rearing, piggery and poultry also under the special package and offered a subsidy of ₹ 51,500, ₹ 45,400 and ₹ 6,500 per farmer respectively. Though KLDA released ₹ 81.77 lakh to the districts for implementing goatery, piggery and poultry, no progress had been achieved as of March 2010. Project Director, KLDA stated (April 2010) that the delay in implementing the special package in the six suicide-prone districts was due to delay in selection of beneficiaries and sanction of bank loans, besides the changes made in the scope of the project. The slippages in induction of milch animals negated the urgency shown by GOI in implementing this special package and denied the farmers in economic distress the opportunity of generating additional income.

4.1.8 Livestock Farms

Eleven Livestock Farms functioning in the State Sector are responsible for breed conservation, fodder development, seed production, *etc.*

4.1.8.1 Shortfall in achievement of target in fodder cultivation

Fodder production by the farms was very meagre

The department is in possession of 55,292 acres of kaval land and 5,418.55 acres of cultivable land at the departmental farms. DDs forward their annual plans for cultivation of fodder to the Commissioner before commencement of a financial year for approval. The Commissioner reduces the targets based on funds provided in the budget and approves the annual plan with restricted targets.

In the test-checked farms, although 2,489 acres of land were available for fodder cultivation, cultivation was done only on 294 acres (12 *per cent)* as shown in **Appendix-4.3**. The farms achieved only 49 to 54 *per cent* of the reduced targets fixed for fodder cultivation during 2005-10 as detailed in the **Appendix-4.4**.

These farms had also not taken up fodder seed production due to non-allocation of funds in the budget. Seeds were to be distributed to farmers at concessional rates besides being used for in-house production of fodder. Thus, fodder and fodder seed production, which were important for development of

livestock, were not given priority by the department despite availability of land.

The Commissioner replied (October 2010) that fodder production was limited to the extent of funds available. It was further stated that the animals in the farms were not only stall-fed but let out for grazing also. The reply was not acceptable as the potential of the departmental farm land for production of fodder had not been utilised optimally and fodder produced in excess of requirement could always be transferred to the fodder banks for distribution to farmers.

4.1.8.2 Frozen Semen Production and Distribution Centres

These centres maintain breeding bulls from which semen is extracted. After dilution, the semen is filled into straws and frozen. These frozen straws are stored in liquid nitrogen and distributed to the veterinary institutions in the State for artificial insemination.

Achievements in production of frozen semen

Shortfall in production of frozen semen

The target fixed for the three semen production and distribution centres and achievements thereagainst during 2005-10 are shown in **Table-4.10.**

Table 4.10 : Target and Achievement in production of frozen semen

(Semen straws in lakh)

Year	Dharwad		SSCC[19], Hesaraghatta		SLBTC[20], Hesaraghatta	
	Target	Achievement	Target	Achievement	Target	Achievement
2005-06	5	5.52	8	9.09	10	6.8
2006-07	10	7.39	10	11.01	10	6.5
2007-08	10	8.02	10	11.73	10	6.4
2008-09	10	11.00	12	15.08	10	10.19
2009-10	12	11.61	12	16.87	10	10.88

Source: Information furnished by Semen Production Centres

While the achievements of SSCC, Hesaraghatta exceeded the targets during 2005-10, the achievement of the other two centres fell short of the target during 2005-08. Scrutiny of records showed that while SSCC, Hesaraghatta had more breeding bulls during 2005-09, others had less, as shown in **Table-4.11,** affecting semen production.

Table-4.11: Breeding Bulls at the Semen Production and Distribution Centres

Name of the centre	Number of breeding bulls available at the end of			
	2005-06	2006-07	2007-08	2008-09
Dharwad	39	43	54	67
SSCC, Hesaraghatta	44	60	63	63
SLBTC, Hesaraghatta	43	50	44	44

[19] State Semen Collection Centre
[20] State Livestock Breeding and Training Centre

Though GOI provided funds under NPCBB for procurement of breeding bulls for these centres, induction of breeding bulls was delayed. This affected the production of frozen semen by these centres during 2005-09.

Effectiveness of Artificial Insemination

The State level artificial insemination was effective to the extent of 36 to 39 *per cent* in the case of exotic breeds, 34 to 37 *per cent* in the case of indigenous breeds and 31 to 33 *per cent* in respect of buffalos as shown in **Table-4.12**:

Table-4.12: **Effectiveness of artificial insemination at the State level**

(a) Cows

(In numbers)

Year	Total number of AI Done		Total cows found positive		Effective rate of AI (Percentage)	
	Exotic	Indigenous	Exotic	Indigenous	Exotic	Indigenous
2005-06	1407735	432886	508538	148643	36	34
2006-07	1475289	494221	575552	172551	39	35
2007-08	1487361	460545	568728	171731	38	37
2008-09	1676690	479850	643610	174951	38	36

(b) Buffalos

(In numbers)

Year	Total number of AI Done	Total buffalos found positive	Effective rate of AI (Percentage)
2005-06	620911	190778	31
2006-07	647648	215838	33
2007-08	644408	199291	31
2008-09	696933	231297	33

Source: Annual reports of the department

Cattle breeding in all the farms was also done through AI technique. While the effectiveness of the AI at the State level ranged from 31 to 39 *per cent*, it varied from 20 to 73 *per cent* in three test-checked farms during 2005-10 as shown in **Table-4.13.**

Table-4.13 : Effectiveness of AI at the departmental farms

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
State Livestock Breeding and Training Centre, Koila					
Total number of cows and heifers subjected to AI	34	25	29	29	40
Number of calves born	13	16	10	9	13
Percentage of effectiveness	38	64	34	31	33
State Livestock Breeding and Training Centre, Hesaraghatta					
Total number of cows and heifers subjected to AI	56	53	51	45	49
Number of calves born	23	38	10	33	20
Percentage of effectiveness	41	72	20	73	41
Jersey Breeding Farm, Kudige					
Total number of cows and heifers subjected to AI	32	26	15	27	48
Number of calves born	16	11	7	10	19
Percentage of effectiveness	50	42	46	37	39

Source: Information furnished by the department

The effectiveness of AI differed from farm to farm and year to year. These farms did not analyse the reasons for varying degrees of effectiveness of AI. The department also did not analyse the reasons for the inconsistencies in the breeding pattern and had not undertaken any evaluation of the effectiveness of the AI programmes in the State.

4.1.8.3 Pig Breeding Stations

Shortfall in achievement of targets

There are five Pig Breeding Stations (PBSs) functioning in the State with the objective of producing pure breed piglets for distribution to farmers and beneficiaries of various socio-economic programmes and also imparting training to farmers.

PBSs at Bangarapet and Kalasa were established with the Central assistance of ₹ 11.34 lakh and ₹ 22 lakh released during March 1997 and March 1999 respectively. However, PBS at Bangarapet became functional only during 2007-08 after creating additional infrastructure consisting of farmers' training hostel, pig sheds, feed store room, *etc*., at a cost of ₹ 60 lakh provided (December 2008) by GOI under RKVY.

Work on PBS at Kalasa commenced during 1999-2000. Though necessary infrastructure was created by 2007-08 at a cost of ₹ 22 lakh, PBS was not functional due to public protests against establishment of the farm close to a temple located on the banks of a river. The public apprehended that the sewage flow from the PBS would contaminate the river. As a result, PBS remained non-functional, despite investment of ₹ 22 lakh. DD, Chickmagalur stated (May 2010) that the problem of sewage disposal had been overcome by constructing a soak pit and breeding activities would commence from 2010-11.

The performance of the PBSs at Koila, Kudige and Hesaraghatta during 2005-10 is shown in **Table-4.14.**

Table-4.14: Performance of the Pig Breeding Stations

Year	Koila				Kudige				Hesaraghatta			
	No. of boars	No. of sows	Piglets produced	Target	No. of boars	No. of sows	Piglets produced	Target	No. of boars	No. of sows	Piglets produced	Target
2005-06	5	26	154	150	4	30	218	150	4	30	162	125
2006-07	5	21	127	170	4	30	156	150	3	29	89	125
2007-08	5	25	133	140	3	25	137	107	3	22	108	125
2008-09	3	8	50	125	1	15	78	125	4	11	13	125
2009-10	11	49	103	125	10	30	88	125	3	12	99	125

Source: Information furnished by the Pig Breeding Stations

Production of piglets during 2008-10 was far below the target. The DDs of these PBSs attributed (June 2010) the shortfall during 2006-10 to old age and deaths of the foundation stocks of parent pigs. DDs of PBSs at Koila and Kudige also stated (June 2010) that the foundation stocks had been replenished during 2009-10 through new purchases and the targets would be achieved during 2010-11. VO of PBS at Hesaraghatta stated (June 2010) that

parent stock to be acquired out of funds under RKVY would improve production. The reports were indicative of grossly inadequate response of the department to the varying degrees of shortfall in production of piglets at the PBSs.

4.1.8.4 Construction of veterinary dispensaries in districts

Delay in construction of veterinary institutions

National Bank for Agriculture and Rural Development (NABARD) sanctioned (February 2006 and April 2010) a loan of ₹ 56.48 crore for construction of 525 veterinary dispensaries and clinics in all the districts of the State. These 525 buildings, grouped under five separate projects, were to be completed between March 2008 and March 2012. As per the terms of the loan, NABARD was to finance 95 *per cent* of the total project cost aggregating ₹ 59.45 crore and the State Government was to bear the remaining five *per cent*. The State Government was to expend the amount first by making suitable budget provision and seek reimbursement from NABARD by submitting monthly statement of expenditure. The State Government, however, made a budget provision of only ₹ 44.51 crore against ₹ 53.48 crore required for completing these projects as per the time schedule prescribed in the loan agreement. As a result, these five projects witnessed inordinate time over-runs, resulting in non-completion of many buildings (March 2010) as shown in **Table-4.15.**

Table-4.15 : Incomplete projects taken up with NABARD assistance

Name of the Project[21]	Scheduled date of completion	Total number of buildings	Number of completed buildings	Number of buildings dropped	Number of buildings yet to commence	Number of buildings in progress
RIDF XI	March 2008	177	97	9	3	68
RIDF XII	March 2009	150	42	2	4	102
RIDF XIII	March 2010	76	-	2	-	74
RIDF XIV	March 2011	63	-	-	63	-
RIDF XV	March 2012	59	-	-	59	
Total		**525**	**139**	**13**	**129**	**244**

Source: Progress reports furnished by the department

While only 26 *per cent* of the buildings had been completed, work had not commenced in 25 *per cent* of the buildings (March 2010). The Commissioner stated (January 2011) that additional funds required for completing the project would be obtained from Government.

The reply was indicative of lack of adequate response for timely completion of the buildings and delivery of healthcare service for the livestock population.

[21] The projects were designated as Rural Infrastructure Development Fund (RIDF) projects

4.1.9 Conclusion

The animal husbandry sector suffered from weak institutional capacity in terms of manpower resources. It had not succeeded in correcting the imbalances in the establishment of veterinary institutions across the State, ensuring realistic manpower deployment and optimising manpower utilisation. The department's management of its vast tracts of farm land with a weak watch and ward system was ineffective as large areas had been encroached upon. Some of these encroachments had also been regularised illegally. Conservation of indigenous breeds of cattle was not given priority and, consequently, the population of a few indigenous breeds showed a negative growth. The implementation of the Centrally sponsored schemes *viz.*, National Project for Cattle and Buffalo Breeding and Special package for farmers in suicide-prone districts by the SIA was tardy. Fodder production and fodder seed production were not given priority by the department, despite availability of land. The department had not undertaken any evaluation of the effectiveness of the AI programmes in the State. Non-functioning of the monitoring system handicapped the process of identifying shortcomings in the implementation of various schemes and initiating corrective action.

4.1.10 Recommendations

- The manpower resources of the department need to be strengthened by filling up all vacant posts and utilising the manpower appropriately to take up programmes and activities to achieve the objectives.
- The departmental infrastructure consisting of farms with huge tracts of cultivable land, Frozen Semen Production and Distribution Centres and Pig Breeding Stations need to be managed efficiently and effectively to realise the goals.
- Monitoring of various schemes and other developmental activities needs to be strengthened to avoid delays in implementation and to ensure delivery of the intended services.

The matter was referred to Government in August 2010; reply had not been received (December 2010).

Education Department

4.2 Department of State Educational Research and Training

Executive summary

The Department of State Educational Research and Training administers teachers' education in the State and also acts as the nodal agency for providing pre-service and in-service training to teachers in elementary and secondary schools. It is also entrusted with the implementation of schemes financed by both the State and Central Governments to support computer education and computer based education in secondary schools.

An audit of the department undertaken during February 2010 to June 2010 covering the period 2005-10 revealed:

- ➔ The budgetary and expenditure control mechanisms in the department were weak as evidenced by non-preparation of realistic budget estimates necessitating persistent surrender of huge funds year after year, untimely submission or non-submission of monthly expenditure statements by the Drawing and Disbursing Officers, parking of funds in unauthorised bank accounts to avoid lapse of budget grants, improper maintenance of cash books, *etc.*
- ➔ The computer education programmes implemented by the department also witnessed major slippages such as discontinuance of computer education in 238 schools after creating IT assets in these schools. Delayed start of the second phase of Mahithi Sindhu Project disrupted computer education for two years in 1,000 schools. Ineffective contract management resulted in irregular payments to several agencies.
- ➔ The functioning of District Institutes of Education and Training (DIETs) and Colleges of Teachers Education was affected by inadequate funds, large number of vacancies in the teaching and non-teaching cadres and non-utilisation of hostels.
- ➔ Monitoring of the implementation of the computer education programmes by DIETs was deficient. Many deficiencies in implementation of programmes came to light during the joint-inspection of selected schools by Audit and the Principals/faculties of DIETs.

4.2.1 Introduction

The Department of State Educational Research and Training (DSERT) was established in 1964 for providing academic leadership in school education and improving the quality of education in primary and secondary schools in the State. The main objectives of DSERT are to (i) act as a nodal agency for providing in-service and pre-service training for primary and secondary school teachers (ii) promote research to facilitate teacher development

(iii) undertake revision of curriculum and prepare resource books and develop other materials for use of students and teachers (iv) spread information technology through computer education and training in Government High Schools and (v) coordinate the schemes of the State, Central and International agencies. The important activities taken up by DSERT to achieve these objectives comprise (i) management of teacher education at the elementary and secondary education levels by setting up Government teacher training institutions (ii) undertaking academic reforms based on research (iii) preparation and distribution of text books, resource materials, training manuals *etc.,* and (iv) implementing schemes for imparting computer education and computer based education in Government High Schools.

4.2.2 Organisational set-up

At the State level, DSERT is headed by a Director functioning under the administrative control of Principal Secretary (Primary and Secondary Education), Education Department. The Director is assisted by a Joint Director (Administration) and two Deputy Directors in the Directorate. Each district in the State is equipped with a District Institute of Education and Training (DIET). Each of the 28 DIETs is headed by a Principal. There are six Colleges of Teacher Education (CTEs), each headed by a Principal and eleven Teachers' Training Institutions (TTIs), each headed by a Superintendent. The Commissioner of Public Instructions (CPI) is entrusted with the responsibility of inviting tenders and fixing the agencies for imparting computer education under the State and Central programmes in Government High Schools.

4.2.3 Audit objectives

The objectives of the audit were to examine whether:

- DSERT had adequate institutional capacity to achieve the desired objectives;
- DSERT complied with relevant rules, laws and regulations while discharging its mandated functions;
- administration of teachers' education and implementation of various programmes by DSERT was efficient and effective.

4.2.4 Audit scope, selection and audit methodology

Audit of DSERT covered the transactions for the period 2005-10. Twenty eight DIETs, six CTEs and 11 TTIs were stratified on the basis of their functions and, within each stratum, the offices were arranged in the ascending order of expenditure incurred during 2009-10 and random numbers were generated so as to select 25 *per cent* of the total units in each category. Audit sample covered the Directorate, 11 DIETs[22], two[23] CTEs, three[24] TTIs and 48 schools implementing computer education programmes. These 48 schools

[22] Bangalore (Urban), Bangalore (Rural), Bidar, Bellary, Dakshina Kannada, Gadag, Hassan, Kolar, Mysore, Shimoga and Tumkur

[23] Belgaum, Mysore

[24] Gulbarga (Boys), Gulbarga (Girls) and Mysore

were jointly-inspected by Audit with the officers nominated by the DIETs. The offices were selected using Simple Random Sampling without replacement.

The audit commenced with an entry conference with the Director in June 2010 wherein audit methodology, scope, objectives and criteria were explained. Field audit of the records of the selected DIETs, CTEs and TTIs was conducted between 2 February 2010 and 26 June 2010. The audit comprised scrutiny of records, discussion with departmental officials and field visits. The audit findings were discussed with the Principal Secretary in the exit conference held on 20 August 2010.

Audit findings

4.2.5 Institutional weaknesses

Every organisation needs to have in place sound infrastructure to manage and achieve its mandate and policies. This ensures soundness and appropriateness of the internal systems and controls in its key areas of activities and drives the organisation towards the objectives in an economical, efficient and effective manner. Some of the areas, where the management of activities was found weak, are discussed in the succeeding paragraphs.

4.2.5.1 Lack of professional expertise in DIETs

Faculties of DIETs lacked experience of teaching in primary schools

The Karnataka State Education Perspective Plan Committee (Committee) appointed by Government in January 2007, in their report (June 2007) observed that faculty members who were posted to DIETs had no experience of teaching in primary schools and were, therefore, not professionally equipped to give adequate guidance and support to the teachers. Attributing the lack of professional expertise in DIETs to poor quality of training modules, curriculum design and evaluation packages, the Committee recommended that at least 25 *per cent* of the posts in DIETs should be filled up by faculties who had worked as primary school teachers. It was, however, seen that the faculties in all the 11 test-checked DIETs had not worked as primary school teachers and were, therefore, not equipped with necessary skills to train the teachers.

4.2.5.2 DIETs had no hostel facility

Hostels in DIETs were not put to use

As per the guidelines framed by Government of India (GOI) for setting up a DIET, separate hostels for men and women, *inter alia*, should be maintained for helping students joining the Diploma in Education (D.Ed) course. Five[25] out of the 11 test-checked DIETs did not put to use the hostels constructed at a cost of ₹ 1.52 crore due to lack of maintenance grants from the Government and basic necessities such as power supply and water. Audit observed that another four[26] DIETs provided students with only lodging facilities as no

[25] Bangalore (Rural), Bellary, Bidar, Hassan and Mysore
[26] Bangalore (Urban), Kolar, Mangalore and Tumkur

grants had been allotted for maintenance of kitchen. The Director did not monitor the utilisation of the hostels in DIETs.

The Director accepted (July 2010) that no periodical reports from DIETs on utilisation of hostels had been prescribed. Absence of monitoring by the Director resulted in sub-optimal utilisation of the available infrastructure and denial of hostel support to students.

4.2.5.3 DIETs had no funds for research

Funds were not allocated to DIETs for research

Although research and development is one of the mandated functions of DSERT, its annual budgets did not provide any funds for research activities. However, an amount of ₹ 40,000 per year was provided to each DIET under the Sarva Shiksha Abhiyan for research activities. During 2005-10, the following academic reforms were undertaken on the basis of limited research studies taken up by the DIETs:

(i) Changeover from Trimester to Semester system and
(ii) Modifications in the School Development and Management Committee.

Non-provision of adequate funds for research in the annual budget resulted in lack of initiative by DSERT for research activities essential for teacher development.

4.2.5.4 Shortage of teaching and non-teaching staff in DIETs

DIETs had huge shortage of Lecturers

The guidelines issued by GOI for establishing DIETs prescribed the organisational model for functioning, according to which each DIET should have seven Senior Lecturers and 17 Lecturers, besides technical personnel comprising one Physical Education Instructor, one Work Experience Instructor, one Lab Assistant, one Technician and one Statistician. Only five[27] out of 29 DIETs had the working strength as per norms. The vacancies in other DIETs in the posts of Senior Lecturers and Lecturers ranged from 6 *per cent* to 94 *per cent* (**Appendix-4.5)**. While 29 *per cent* of the posts of Senior Lecturers remained vacant in DIETs at Belgaum, Ilkal, Kamalapur and Koppal, more than 50 *per cent* vacancy in the post of Lecturers was noticed in DIETs at Chikkaballapura, Kamalapur, Mangalore, Yermarus and Ramanagara.

In non-technical posts, the vacancies in the posts of Librarian were 66 *per cent*, Technical Assistant 86 *per cent*, Statistician 66 *per cent*, Stenographer 59 *per cent* and Laboratory Assistant 35 *per cent*. Details of vacancies in all the technical posts are given in **Appendix-4.6**.

In CTEs, while the vacancies in the technical posts varied from 14 *per cent* (Mysore) to 35 *per cent* (Mangalore), those in the non-technical posts ranged from 12 to 100 *per cent* (**Appendix-4.7).**

[27] Bangalore (Urban), Bijapur, Gadag, Hassan and Mysore

Large number of vacant posts in the cadres of teaching and supporting staff reflected lack of commitment of the department to training of teachers and capacity building for creating a qualitative resource base to deliver quality education to the students.

4.2.6 Compliance issues

For sound financial administration and financial control, it is essential that expenditure conforms to financial rules, regulations and orders issued by the competent authority. This not only prevents irregularities, misappropriation and frauds, but helps in maintaining good financial discipline. Some of the audit findings on non-compliance with rules and regulations are hereunder:

4.2.6.1 Financial control, budget allotment and expenditure

The mandated activities of DSERT are financed mainly through funds provided in the State budget under the head of account "2202-Secondary Education". Based on budget provisions, the Finance Department (FD) releases funds to the Director who allots these to the 48 Drawing and Disbursing Officers (DDOs) under his control. Principals of CTEs, DIETs, Superintendents of TTIs and one Assistant Director in the Directorate have been authorised to draw money for implementing various programmes.

DSERT implements Centrally sponsored schemes financed by Government of India (GOI) for imparting computer education in Government High Schools. The expenditure on these schemes is shared by the GOI and the State Government in the ratio of 75:25. The State Government makes provision in the budget for these schemes under Plan to the extent of its committed share as well as the share of GOI. GOI releases its share of funds for these schemes to the State Government which, in turn, releases these along with its share to the Director who allots the funds among the DDOs under his control.

Details of budget provision under Plan and Non-plan and expenditure incurred thereagainst during 2005-10 were as shown in **Table 4.16.**

Table 4.16: Details of budget provision

(₹ in crore)

	Plan				Non-plan			
Year	**Budget provision**	**Expendi-ture**	**Savings**	**Percentage of savings**	**Budget Provision**	**Expendi-ture**	**Savings**	**Percentage of savings**
2005-06	72.19	65.54	6.65	9	24.39	15.99	8.40	34
2006-07	69.94	45.87	24.07	34	17.96	11.35	6.61	37
2007-08	54.66	43.99	10.67	20	14.25	12.19	2.06	14
2008-09	97.51	88.59	8.92	9	19.01	14.78	4.23	22
2009-10	121.09	68.77	52.32	43	21.19	15.24	5.95	28
Total	**415.39**	**312.76**	**102.63**	**25**	**96.80**	**69.55**	**27.25**	**28**

Source: Expenditure statements of the Director

The budget provision for plan expenditure varied from ₹ 54.66 crore in 2007-08 to ₹ 121.09 crore during 2009-10. The growth in the Plan provision since 2007-08 was mainly due to various Centrally sponsored schemes for computer education sanctioned for the State. However, huge savings occurred under Plan year after year during 2005-10. Scrutiny of savings under Plan

showed that the bulk of the savings related to the Centrally sponsored schemes as shown in **Table 4.17**.

Table 4.17: Savings under Centrally sponsored schemes

(₹ in crore)

Year	Budget provision for Centrally sponsored schemes	Expenditure	Surrenders (with their percentage to the budget provision)
2005-06	9.64	8.64	1.00 (10)
2006-07	24.00	11.18	12.82 (53)
2007-08	24.00	22.45	1.55 (6)
2008-09	49.73	42.15	7.58 (15)
2009-10	70.00	19.35	50.65 (72)

Source: Expenditure statements submitted by the Director to Government

Huge savings under Plan

Major savings occurred during 2006-07 and 2009-10. The Director stated (July 2010) that the savings during 2005-10 were due to non-receipt of bills from the companies imparting computer education in Government High Schools before the closure of the year. Savings of ₹ 50.65 crore during 2009-10 occurred as a result of non-receipt of bills from the implementing agencies as well as non-implementation of the Centrally sponsored scheme of Information and Communication Technology (ICT) Phase-III, approved by GOI in August 2008, due to delay in identifying the schools and fixing the implementing agency by the CPI.

The budget provision under Non-plan during 2005-10 was inflated to the extent of 14 to 37 *per cent* due to preparation of budget estimates for establishment without considering the vacant posts which resulted in surrender of savings year after year.

Ineffective expenditure control

Non-submission/ untimely submission of expenditure statements

Rule 239 of the Karnataka Budget Manual (KBM) lays down that after the close of each month, each DDO should, after reconciliation with the treasury figures, forward to the Controlling Officer statements of expenditure in respect of the previous month. These statements are to be despatched by the DDO by 10th of the month following that to which the accounts relate. While DIET, Mysore did not submit expenditure statements to the Director from July 2008, CTE, Belgaum delayed its submission for periods ranging from 4 months 18 days to 11 months during 2005-10. In other test-checked DIETs, the delay in submission ranged from 1 to 139 days during 2005-10. Thus, non-submission of monthly expenditure statements to the Director rendered the expenditure control ineffective.

Savings were surrendered belatedly

Under the provisions of the Karnataka Financial Code (KFC) and KBM, the process of likelihood of savings is to engage the attention of the Heads of Departments and the Controlling Officers and all savings anticipated by the Controlling Officers are to be reported by them to the FD with full details immediately after these are foreseen. The Director failed to adhere to these provisions and surrendered the savings under Plan and Non-plan belatedly and even after the closure of the financial year during 2006-07 and 2009-10 as shown in **Table 4.18.**

Table 4.18: Belated surrender of savings

(₹ in crore)

Year	Amount surrendered	Date of surrender
2005-06	15.04	4 April 2006
2006-07	33.57	2 April 2007
2007-08	12.39	15 March 2008
2008-09	9.96	31 March 2009
2009-10	58.25	6 April 2010

Source: Statements of surrenders made by the Director

While the amount surrendered during 2006-07 was ₹ 33.57 crore, the total savings available for surrender were only ₹ 30.68 crore. The amount surrendered during 2008-09 was only ₹ 9.96 crore against the total savings of ₹ 13.15 crore. As the Director did not receive expenditure statements from all the DDOs, the assessment of savings under Plan and Non-Plan and the surrender thereof to the FD evidently suffered and, consequently, the department either did not surrender the savings in full or surrendered funds far in excess of the savings. In the process, Government lost the opportunity of allotting the savings to other needy sectors.

Expenditure in March was 34 to 50 *per cent* of total expenditure

For the financial management to be efficient and effective, the flow of funds from the Government to the implementing agencies is to be regular and evenly spread over through out the year consistent with the Action plan for the year. A review of the monthly expenditure statements of DSERT for the period 2006-10 indicated that 34 to 50 *per cent* of the total expenditure in a year was incurred in the month of March, as shown in **Table 4.19.**

Table 4.19: Rush of expenditure

(₹ in crore)

Year	Total expenditure	Expenditure in March	Percentage of expenditure in March to total expenditure
2006-07	57.22	21.34	37
2007-08	56.18	28.27	50
2008-09	103.37	46.41	45
2009-10	84.01	28.91	34

Source: Monthly expenditure statements prepared by the Director

The Director did not furnish the details of funds released by FD during the last quarter of every year during 2006-10 and audit could not determine whether the rush of expenditure was due to late release of funds by FD or ineffective expenditure control by DSERT.

Uneven spread of expenditure not only affected the programme implementation but facilitated other financial irregularities as discussed below.

4.2.6.2 Drawal of funds and their deposit in Savings Bank Account to avoid lapse of grant

Funds were drawn and deposited in SB Accounts to avoid lapse of grant

Rule 17 of the Manual of Contingent Expenditure (MCE) lays down that no money is to be drawn from the treasury unless it is required for immediate disbursement and it is not permissible to draw money in anticipation of demands or to prevent lapse of budget grant. Article 76 of KFC prohibits a Government servant from opening an account with a bank in his/her official

capacity to deposit Government money. Government had also instructed (July 2003) the departments not to open Savings Bank Accounts without the permission of the FD.

The Director and DIETs operated 17 Savings Bank (SB) accounts without the permission of the FD for parking funds irregularly drawn from the treasuries to avoid lapse of budget grant. Cases of irregular parking of funds as of May 2010 as disclosed in test-check are given in **Table 4.20.**

Table 4.20: Irregular parking of funds

Officer diverting funds	Funds parked in SB account (₹ in crore)	Period of deposit	Remarks
Principals of 11 DIETs and one CTE[28]	1.26	November 2007 to March 2010	Under the instructions from the Director, the amounts were drawn from the treasuries based on advance payees' receipts obtained from Nirmithi Kendra and Karnataka State Habitat Centre.
Assistant Director in the Directorate	6.37	March 2010	Amounts were drawn on grant-in-aid bills under Government instructions to avoid lapse of grants.
	8.86	April 2010	

Source: Bank statements

As of May 2010, funds aggregating ₹ 16.49 crore, parked in the SB accounts, remained unutilised. The Director also drew two cheques for ₹ 2.19 crore from the treasury on 31 March 2008 in favour of the two companies appointed for implementation of ICT Phase-I. These cheques were drawn on advance payees' receipts obtained from these companies to avoid lapse of grant during 2007-08. These cheques were got revalidated on 22 July 2008 and delivered to the agencies after completion of the work. Such a practice is unhealthy and against the tenets of financial propriety.

There was no mechanism in the Directorate for monitoring these SB accounts. Interest of ₹ 22.41 lakh earned on the balances in these SB accounts was also not credited to the Government. The Director stated (July 2010) that instructions had been issued to DIETs for crediting the interest to the Government account.

4.2.6.3 Funds in non-Government accounts diverted for Government expenditure

Diversion of non-Government funds for Government expenditure

The Government in Education Department revised (May 2007) different fees such as Admission fee, Laboratory fee, Examination fee, Library fee, *etc.,* to be collected by DIETs from students joining the D.Ed course. DIETs were to remit fifty *per cent* of the fees so collected to the Government and spend the remaining amount on developmental activities. DIETs parked their share of fees in SB accounts and used these funds for meeting the expenditure on organising tests, repairs, library books, furniture, *etc.* However, there was no monitoring of the amounts deposited in and utilised from these accounts. It was further seen that the Director had irregularly authorised the DIETs to divert funds from these accounts for meeting the expenditure on maintenance of vehicles, electricity charges, *etc.,* subject to recoupment from the budget. It was seen in the test-checked DIETs that ₹ 1.02 crore from these

[28] DIETs at Bangalore (Rural), Bangalore (Urban), Bellary, Bidar, Gadag, Hassan, Kolar, Mangalore, Mysore, Shimoga, Tumkur and CTE-Belgaum

non-Government accounts had been diverted during 2005-10 and ₹ 18.66 lakh had not been recouped as of May 2010. The delay in recoupment ranged from one to 20 months.

In three out of 11 test-checked DIETs, similar diversion of funds aggregating ₹ 14.88 lakh had been made from the SB accounts operated for implementation of Sarva Shiksha Abhiyan. Of this, only ₹ four lakh had been recouped as of May 2010. The Director stated (July 2010) that DIETs/CTEs had been instructed to take immediate action to set right the issues.

Thus, the overall control environment in DSERT was not conducive to efficient and effective resource management.

4.2.6.4 Irregular payment of telephone and electricity charges

Irregular payment to the company for MSP

CPI entered (March 2007) into agreement with KEONICS for maintaining the IT assets created in 1,000 Government High Schools under the Mahithi Sindhu Project (MSP) and continuing computer education to the students in these schools.

Under the agreement, KEONICS was entitled to telephone and electricity charges at the rates incorporated in the agreement from the date of commencement of computer education. However, KEONICS did not commence work till April 2008 and was, therefore, not entitled to telephone and electricity charges for the period April 2007 to March 2008. KEONICS, nevertheless, claimed these charges aggregating ₹ 1.28 crore and DSERT paid this amount without verification. The Director stated (July 2010) that after the closure of Phase I of MSP, electricity charges and telephone bills were paid by the respective schools till KEONICS took over the maintenance. It was further stated that the electricity and telephone charges had been paid for in the interest of work. The reply is not tenable as the interest of work had not actually been served and KEONICS was not entitled to any payment for services not rendered.

4.2.6.5 Cash books not maintained as per rules

DDOs did not maintain cash books as prescribed

Article 329 of KFC prescribes that every officer receiving money on behalf of the Government should maintain a cash book. All monetary transactions should be entered in the cash book as soon as they occur and attested by the Head of the office in token of check. At the end of each month, the Head of the office should verify the cash balances in the cash book and record a signed and dated certificate to that effect.

Article 6 of KFC lays down that a Government officer receiving money on behalf of the Government must give the payer a receipt in form KFC 1 or 1A. The Head of each department should obtain required number of printed and machine numbered receipt books from the Government Press, distribute them to the subordinate officers and maintain a stock account thereof.

Audit scrutiny in DIETs at Mysore and Kolar and CTE at Mysore showed that receipt books without numbers purchased from open market were used for acknowledging receipt of money aggregating ₹ 38.52 lakh during 2005-10. The cash books for both Government and non-Government transactions in

test-checked units were written on the basis of entries in the passbooks of the SB accounts instead of on the basis of receipts issued and payments made. An investigation by Principal, DIET, Mysore during November 2009 disclosed that a First Division Assistant (FDA) had collected fees from the students without issuing receipts and misappropriated ₹ 5.34 lakh. Although the FDA remitted the misappropriated amount, the department had not even received a reply to the show-cause notice from the erring official (June 2010).

In the case of DIET, Hassan, the closing cash balance as per the cash book for non-government transactions was ₹ 1.29 lakh on 18 December 2000. No cash book was maintained for the period 19 December 2000 to 7 January 2003. The cash book maintained from 8 January 2003 did not incorporate any opening balance. The Principal who had operated one SB account in the local Post Office for non-Government transactions closed it in November 2005 and opened a new SB account with State Bank of India, Hassan. The Principal did not, however, produce the passbook issued by the Post Office to audit. In the absence of the pass book and cash book for the period 19 December 2000 to 7 January 2003, Audit could not ascertain whether proper accounting of transactions was carried out during this period. No action had been taken to write the cash book for the period December 2000 to January 2003 and assess misappropriation of funds, if any. Failure of the Head of the office to maintain the cash book as per the codal rules made the system vulnerable to fraud and other serious irregularities.

4.2.6.6 Outstanding audit observations

Huge pendency in submission of replies to outstanding audit observations

As per the Hand Book of Instructions issued by the FD in 2001 for speedy settlement of Audit observations, the Heads of the offices and the next higher authorities are required to comply with the observations contained in the Inspection Reports (IRs), rectify the defects and omissions promptly and report their compliance to the Accountant General (AG) who forwards a half yearly report of pending IRs to the Secretary of the department to facilitate monitoring of the audit observations.

As of December 2010, 38 IRs containing 115 paragraphs issued by the AG were outstanding against DSERT. Year-wise details of the IRs and Paragraphs outstanding are detailed in **Appendix-4.8.** The category-wise details of the outstanding paragraphs were as at **Table-4.21**.

Table 4.21 : Category-wise details of outstanding IRs

Category	Number of outstanding paragraphs
Cash book related issues	28
Under-utilisation of infrastructure and irregularities in civil works	18
Deficiencies in programme implementation	17
Irregular retention of money	13
Excess and Irregular payments to contractors	11
Service matters	7
Miscellaneous	21
Total	**115**

Source: Outstanding Inspection Reports

In disregard of the extant instructions of the FD, the Heads of offices had not sent even the initial replies to 19 IRs containing 74 paragraphs issued between 1995-96 and 2009-10.

4.2.7 Service delivery

The department aims at providing in-service and pre-service training for primary and secondary school teachers, besides undertaking revision of curriculum and spreading information technology (IT) through computer education and training in Government High Schools. Some of these issues are discussed in the succeeding paragraphs.

4.2.7.1 Training of teachers

Shortfall in achievement of targets for training of teachers

DSERT formulates plans and co-ordinates primary teacher training programmes at the State level. At the district level, DIETs conduct training programmes for primary teachers and students joining D.Ed course offered by them. Six CTEs take care of the training needs of secondary teachers and students studying Bachelor of Education (B.Ed) course offered by them.

These training programmes are intended to provide, *inter alia*, support for the continuous progress and development of teachers, help them use child-centric approaches for improved curricular transaction and play multiple roles effectively and efficiently.

Details of in-service primary and secondary school teachers trained by DIETs and CTEs respectively during the period 2005-10 are given in **Table 4.22**.

Table 4.22: Details of teachers trained

(In numbers)

Year	DIETs		CTEs	
	Target	Achievement	Target	Achievement
2005-06	1,94,000	1,91,834	2,100	1,800
2006-07	1,00,000	91,191	2,000	1,600
2007-08	97,000	83,000	1,800	1,200
2008-09	86,000	73,000	4,000	3,100
2009-10	75,000	68,000	3,500	2,600

Source: Information furnished by the Director

The number of primary school teachers targeted for training and those trained by DIETs showed a declining trend during 2006-10 and the Director did not furnish reasons thereof. Of the 1.71 lakh primary teachers working in Government schools, only 40 to 53 *per cent* received training every year during 2006-10. The coverage of secondary school teachers (27,832) during 2005-10 was a dismal 4 to 11 *per cent* of the working strength. The Director attributed (July 2010) the shortfall in achievement to (i) delay in release of funds by the Government (ii) pressure from the teachers' association for avoiding training during vacation (iii) advisory of the Government to conduct training only during week-ends and (iv) absenteeism of the teachers nominated for training.

The Karnataka State Education Perspective Plan Committee had observed (January 2007) that a huge gap existed in in-service training imparted by DIETs as teachers of un-aided institutions forming a large percentage were invariably left out, leading to gaps in teaching standards in unaided institutions. Support for continuous progress and development of primary and secondary school teachers through training was, therefore, poor. It was seen that in-service training of teachers continued to ignore the teachers in unaided institutions, despite the Committee's findings.

High absenteeism of trainee teachers

Teachers failed to attend the training programmes

During 2006-10, there was no shortfall in achievement of the target in terms of the number of training programmes for primary school teachers. However, a large number of teachers nominated for these programmes either did not attend or attended only partially. The number of man-days of training targeted and the number of mandays achieved in terms of participation are shown in **Table 4.23**.

Table 4.23 : Mandays of training targeted and achieved

Year	Mandays		Percentage of shortfall in achievement
	Target	Achievement	
2006-07	43,15,800	27,61,487	36
2007-08	40,35,900	26,94,924	33
2008-09	36,32,144	23,97,401	34
2009-10	34,33,275	22,01,992	36

Source: Information furnished by the Director to SSA

The huge shortfall in mandays was indicative of lack of interest of teachers in training. The persisting absenteeism showed lack of monitoring of these training programmes by the Director and lack of initiative to address the problem.

4.2.7.2 Computer education initiated under earlier schemes not continued

Computer education was discontinued despite availability of IT assets

DSERT took up various Centrally sponsored schemes for spreading IT through computer education and training in Government High Schools. These included Revised Class Project (RCP) (cost: ₹ 17.21 crore) covering 150 schools and 11th Finance Commission Project (FCP) (cost: ₹ 11.61 crore) covering 88 schools, implemented by the department during 2003-06. These two schemes closed during December 2006. The IT assets consisting of computer hardware, software, peripherals, diesel generators, *etc.,* created under RCP and FCP at a cost of ₹ 15.61 crore for imparting computer education to 1.58 lakh students under RCP and 1.29 lakh students under FCP were not put to use by the department as computer education was discontinued in these 238 schools. The Director stated (July 2010) that after the closure of these two projects in December 2006, instructions were issued to the Headmasters of these schools to continue computer education by making use of the services of the trained teachers available. Further, as the systems in these schools had become old, these schools were to be covered under ICT

Phase III. A joint inspection by Audit and the representatives of DIETs of nine out of 150 schools and six out of 88 schools **(Appendix-4.9)** covered under RCP and FCP respectively showed that the computer systems were non-functional and no computer education was imparted in these 15 schools. Non-continuation of computer education in the schools covered by RCP and FCP, despite availability of infrastructure, deprived 2.87 lakh students of computer education.

4.2.7.3 Implementation of ICT Phase-I and II

DSERT took up the following Centrally sponsored schemes during 2007-10 to provide computer education in Government schools not covered earlier under RCP and FCP.

- ICT Phase-I at a cost of ₹ 38.59 crore, covering 480 schools (2007-12).
- ICT Phase-II at a cost of ₹ 121.53 crore, covering 1,571 schools (2008-13).

Although GOI approved ICT Phase III in August 2008 at a cost of ₹ 426.68 crore, the scheme had not commenced (June 2010) due to delay in identifying 4,396 Government High schools and fixing the implementing agency.

The agencies fixed by CPI for implementing ICT Phase I and Phase II were responsible for providing necessary IT assets in the selected schools, their maintenance and imparting computer education in these schools through technically qualified personnel. ICT Phase-I and II had the same objectives. The responsibilities of the implementing agencies (two companies for ICT Phase-I, one company each for ICT Phase-II) in furtherance of the objectives were as shown in **Table 4.24.**

Table 4.24 : Responsibilities of the implementing agencies

Objectives of the schemes	Responsibilities of the implementing agencies
To enable the students to gain computer education and to understand its applications	To supply hardware and software to the schools and to appoint full time computer faculty or faculties as per the agreement for training the students.
To enhance the learning levels of the students in curricular subjects through computer aided education	To supply computer text books as per the medium of instruction in the selected schools and impart computer education.
To enable the students to understand the basics of computer programming	To supply the requisite furniture, telephone and internet connectivity
To introduce the students to e-mail and internet	To train teachers in the selected schools on computer education.

Computer based education not provided by schools

Students were deprived of computer based education

According to the agreements entered into with the companies for ICT Phase-I & II, computer education consisted of the following components.

- Computer education of two periods per week for students in class VIII and one period per week for students in classes IX and X, to be imparted by the companies through their faculty members using the infrastructure created by them;

- Computer based education in the subjects of Science, Mathematics, Social Science and English to be handled by the trained teachers in schools using the subject CDs to be supplied by DSERT.

Joint inspection by Audit and representatives of DIETS showed that 22 schools (11 each under ICT Phase I and Phase II) had not been supplied with the subject CDs and computer based education was, therefore, not provided in these schools. It was also seen that DSERT did not supply the subject CDs to the 11 test-checked DIETs for distribution to the schools under their jurisdiction. Besides the subject CDs, audio equipment consisting of sound cards and speakers were also essential for imparting computer based education. However, the agreement with the implementing companies did not prescribe supply of sound cards and speakers along with hardware/peripherals. In the absence of subject CDs and audio equipment, the schools covered under ICT Phase-I & II did not evidently impart computer based education. The Director stated (July 2010) that computer based education could not be implemented as the requirement of sound cards and speakers was not identified due to non-availability of technical staff in the department.

Thus, 4.57 lakh students lost the opportunity of enhancing their learning levels through computer based education.

Internet connectivity belatedly provided in schools

Delay in providing internet facility in schools

The companies were required to provide internet service in 480 schools (Phase I) and 1,571 schools (Phase II) by April 2007 and November 2008 respectively. These companies were also to provide internet connectivity to every student for a minimum of two hours besides 100 hours of internet service to the teachers in the schools every year. For this purpose, they were to install telephone and internet connections in the schools.

However, audit scrutiny showed that while the two companies for ICT Phase-I failed to provide telephone and internet connections in 480 schools till August 2007, the company for ICT Phase II delayed this facility to 1,312 schools till June 2009. Joint Inspection of 11 schools each under ICT Phase I and II showed that internet connectivity was not provided in two schools even as of May 2010. Thus, delay in providing internet connectivity under ICT Phase I & II adversely affected the computer education in schools.

Faculties for computer education did not have the requisite qualification

Computer education imparted by faculties without requisite qualification

The agreement for implementation of ICT Phase-I required the two companies to hire one full time faculty for each school with a minimum qualification of B.E or BCA or B.Sc (Computer Science) or a science degree with one year diploma in computer application from a reputed training institute. However, these companies failed to employ faculty members with the prescribed qualification in many schools and the Director, as a measure of penalty, deducted from the bills of the companies five *per cent* of the monthly faculty salary of ₹ 3,500. This was contrary to the contract condition which prohibited payment of faculty salary in such cases. During 2009, the two companies engaged computer faculty without the requisite qualification for

324 quarters in 4 to 117 schools. Instead of disallowing ₹ 34 lakh from the bills, the Director released ₹ 32.30 lakh irregularly to these companies after deducting only ₹ 1.70 lakh towards penalty.

The Director replied (July 2010) that the deduction of penalty from the bills of the companies for ICT Phase I was based on the decision taken (July 2008) by the CPI in a meeting attended by him. The reply was not tenable as the decision of July 2008 was applicable only to MSP. Further, the contract conditions were not to be varied after the agreement was entered into, to the advantage of the companies.

Thus, quality of computer education was compromised under ICT Phase I as a result of failure to enforce the contract condition for faculty appointment which also facilitated an excess payment of ₹ 32.30 lakh to the company.

Lax controls in purchase of UPS

UPS were purchased in disregard of tender specification

The agreement with the company for implementation of ICT Phase I in 216 out of 480 schools stipulated supply of UPS of any of the brands *viz.,* Delta, Uniline, Nunesic, TVSE or Gemini. However, the company supplied UPS of Aargu make which the Technical Advisory Panel of the e-governance Department (TAP) found to be of inferior quality. TAP directed (September 2007) the company to replace the UPS with any of the specified brands, else 25 *per cent* of the agreed cost would be deducted from the bills. This decision was evidently faulty as the company, which had been given a wide range of brands to choose from, was bound to supply the UPS as per the agreement, failing which no payment was admissible for the inferior UPS. However, this decision glossed over the inferior quality of UPS and the company naturally preferred a penalty of 25 *per cent* to the replacement of the inferior UPS. DSERT deducted a penalty of ₹ 29.43 lakh from the bills and accepted the inferior supplies. During the joint inspection (April 2010), the Headmasters of four out of eleven schools covered under ICT Phase-I confirmed that the UPS supplied by the company were not functional and these had not been repaired or replaced by the company. The Director did not furnish information regarding the number of non-functional UPS out of 216 supplied by the company.

Thus, acceptance of inferior UPS at a reduced cost of ₹ 88 lakh against the contract value of ₹ 1.17 crore, compromised the compelling need to have UPS of appropriate quality to ensure uninterrupted computer education in schools in rural areas facing acute and unscheduled power shutdowns.

The company for ICT Phase II, *inter alia*, was to supply to each of the 1,571 schools, UPS of 3 KVA capacity with batteries providing a VAH rating of 19,200 to ensure uninterrupted power supply for four hours. As per the terms of the agreement, payments were to be released to the company after inspection of the equipment.

When the company supplied the UPS during January-April 2009, DSERT nominated 16 engineering colleges for inspection of the UPS supplied. Although the inspection reports (July and August 2009) furnished by these colleges disclosed that the company had supplied UPS with a rating of only 9,600 VAH (eight batteries of 12V with 100 AH capacity each against the requirement of 16 batteries), DSERT irregularly released (February and March 2009) payment of ₹ 11 crore to the company, instead of rejecting the supplies as not conforming to the specifications. The company had not supplied (December 2010) the additional batteries required to give a backup of four hours. As the schools providing computer education were located in remote and outlying rural areas facing acute power shortage, acceptance of UPS with a back up capacity lower than prescribed impacted the computer education adversely. The Director replied (July 2010) that while the contract agreement prescribed payment of 80 *per cent* of the supplies on delivery, he released only 70 *per cent* and the company had been directed (February 2010) to make good the shortfall in supplies. The reply was not tenable as the agreement envisaged payment only for supplies conforming to the specifications and additional batteries were not provided even as of December 2010.

Irregular payment of ₹ 11 crore to the company for supplies not conforming to specifications extended unauthorised financial aid to the company. The lax controls also exposed computer education in 1,571 schools to the vulnerability of disruption due to inadequate backup capacity of UPS.

4.2.7.4 Implementation of extended Mahithi Sindhu Project

Mention was made in Paragraph 3.1 of the Report of the Comptroller and Auditor General of India (Civil) for the year ended 31 March 2004 regarding the implementation of Mahithi – The Millennium Policy for Information Technology and Bio-technology in 1,000 Government High Schools. This State-assisted scheme closed in December 2005. To ensure continuity in computer education in these schools, the State Government approved (November 2005) the extension of the Mahithi Sindhu Project (MSP) in these 1,000 Government High Schools for another three years.

Delayed start of the second phase disrupting computer education

Hold-ups in award of contract delayed the resumption of computer education by two years

The first phase of the MSP financed fully out of State funds was introduced in 1,000 selected schools during 2000-01 to impart computer education for a period of five years. At the time of project closure in December 2005, necessary IT assets consisting of hardware, software peripherals, *etc.,* and other supporting services like faculty support in the form of trained teachers had been provided in these schools and DSERT was to take over these IT assets in good condition from the implementing agency.

The State Government approved (November 2005) extension of the project for another three years to ensure continuity in computer education. CPI invited (November 2005) tenders for providing computer education and annual maintenance of the assets already created. The notice inviting tenders, *inter alia*, prescribed (November 2005) that the tenderers were to possess

experience in providing computer education in schools/training centres in Karnataka, besides having a minimum turnover of ₹ one crore per year and experience of running at least 50 computer centres for a minimum period of two years. Following representations for relaxing these criteria to encourage participation by IT vendors operating in other states, CPI agreed (December 2005) to amend these criteria. However, while amending the criteria, CPI stipulated that the tenderers were to possess experience of running computer centres in 50 Government schools for a minimum period of two years. CPI could not accept the lowest tender received for ₹ 34.86 crore as one of the tenderers filed a writ petition in the High Court of Karnataka challenging the amended criteria which restricted participation. The High Court dismissed (September 2006) the writ petition after CPI cancelled the tender proceedings.

CPI invited (October 2006) fresh tenders without insisting upon the experience of running training centres in Government schools and awarded (March 2007) the contract to the lowest tenderer, KEONICS, for ₹ 37.12 crore. Thus, CPI's modification of the condition for participation in the tendering process evidently restricted participation and resulted in failure to avail of the lowest offer of ₹ 34.86 crore and additional financial burden of ₹ 2.26 crore in entrusting the work to KEONICS. Besides, the delay in award of contract also delayed the resumption of computer education in 1,000 schools.

DSERT did not take over the IT assets created under the first phase immediately on project closure in December 2005. Although KEONICS signed the agreement in March 2007, it did not commence computer education immediately as the agency for the first phase refused to handover the IT assets in working condition on the ground that it was not responsible for the delay of 15 months from project closure, during which the IT assets remained idle without maintenance. CPI approved (February 2007) deduction of ₹ one crore from the bills of the agency for the first phase for not handing over the IT assets in working condition. KEONICS commenced computer education only in April 2008 after repairing the existing assets for which DSERT made an additional payment of ₹ 5.44 crore. Failure to take over the IT assets in working condition in December 2005, besides causing an extra financial burden of ₹ 4.44 crore on repairs, further delayed the resumption of computer education till April 2008. In the process, 3.64 lakh students were denied computer education every year for two years during 2006 and 2007.

The Director replied (July 2010) that the first tendering process had been cancelled to avoid protracted delay due to litigation and that the lowest tenders received in response to the two calls were not comparable as prices varied on a day-to-day basis. The reply was not acceptable as the amended criteria had introduced a fresh condition, restricting participation and the hold-ups in the tendering and award process were avoidable.

Internet facility not provided or inadequately provided

Internet facility partially provided to students

Due to delayed start of the second phase of MSP, KEONICS did not provide any internet facility to teachers or 3.64 lakh students in 1,000 schools during 2007-08. However, during 2008-09, KEONICS provided internet facility for only five lakh hours against the requirement of 7.74 lakh hours. Thus, more than three lakh students were given internet connectivity at the rate of only 1.38 hours per student per year as against the requirement of two hours.

4.2.8 Lax monitoring controls

DIETs are to monitor implementation of the computer education in schools covered under MSP, ICT Phase I and II *etc.* As per the agreements with the companies engaged for ICT Phase-I & II and MSP, the quarterly payment was to be released by DSERT only on countersignature of their bills by the Headmasters of the concerned schools and the Principal of the jurisdictional DIET. Thus, for the purpose of countersigning the bills, DIETs were to inspect the schools every quarter. However, it was seen that DIETs failed to inspect all the schools under their jurisdiction even annually during 2005-10. According to information furnished by the DIETs, the shortfall in annual inspection of schools during 2005-10 ranged from 21 to 88 *per cent* in three districts[29] in respect of MSP, 29 to 91 *per cent* in four districts[30] in respect of ICT Phase I and 13 to 78 *per cent* in 11 districts[31] in respect of ICT Phase-II. Bellary, Bidar, Hassan and Mysore districts implementing MSP, ICT Phase I and II, witnessed persistent shortfall in annual inspections. Evidently, the Principals of DIETs in these four districts countersigned the bills of the implementing companies without verification of the status of computer education. Principals of other test-checked districts also countersigned the bills of the companies without inspection of the schools every quarter. Thirty three schools coming under 11 DIETs (one school each under ICT Phase I and II and MSP) **(Appendix-4.10)** were jointly inspected by audit and the Principals/faculties of the DIETs. The deficiencies noticed during the joint inspection are shown in **Table 4.25**

Table 4.25: Deficiencies in schools

Deficiency noticed	Number of schools covered by		
	MSP	ICT Phase I	ICT Phase II
Electricity was not available during school hours and it affected computer training	1	1	-
UPS was not functional	3	2	-
Schools did not have internet facility	4	3	1
Hardware was not in working condition	2	-	-
Full attendance was marked to computer faculty even during the summer vacation and Dasara holidays	2	1	2
The qualification of the computer faculty was not as prescribed	-	5	-

[29] Bellary, Bidar and Hassan
[30] Bellary, Bidar, Hassan and Mysore
[31] Bangalore (Rural), Bangalore (Urban), Bellary, Bidar, Dakshina Kannada, Gadag, Hassan, Kolar, Mysore, Shimoga and Tumkur

Deficiency noticed	Number of schools covered by		
	MSP	ICT Phase I	ICT Phase II
No training on computer education had been imparted to teachers	-	2	-
UPS supplied under ICT Phase II did not conform to the specifications prescribed	-	-	11
Anti-virus programmes had not been installed in the systems in the schools jointly inspected	9	6	6
Scanners had not been installed	-	-	5
Projector had not been supplied	-	-	1
The computer lab was used as a kitchen	1	-	-
The Reception System for EDUSAT programme was found abandoned	-	-	1
The generator was found in the toilet of the school	1	-	-

Source: Information collected during joint-inspection

Some of the deficiencies noticed during the joint inspection attracted levy of penalty under the agreements with the companies concerned. However, the Headmasters had countersigned the bills of the companies without reflecting the deficiencies in the bills. The Principals of the DIETs also countersigned the bills of the agencies as a matter of routine, without monitoring implementation in the schools. In the case of ICT Phase-II, although the countersignature of the company's bill by both the Headmasters and Principal of the DIET was mandatory as per the agreement, DSERT made payments on the basis of the countersignature of only the Headmasters concerned.

4.2.9 Radio Programmes

DSERT had entered into Memorandum of Understanding with All India Radio, Bangalore (AIR) for broadcasting from 13 radio stations every year from 2005-06, lessons in three modules (*viz.,* Chinnara Chukki for classes I and II, Chukki Chinna for classes III to V and Keli Kali for classes VI to VIII) to benefit 60 lakh students. The objective of this scheme called Keli Kali was to enable the students to use radio as a medium to learn difficult concepts. The broadcast schedule and the teachers' guide were supplied to schools to help the teachers plan the pre and post broadcast activities effectively. The radio lessons were designed on the basis of the existing curriculum.

During 2008-09, the curriculum for classes I and II was revised, replacing the conventional method of teaching using text-books with an activity based approach requiring the teacher to involve children in a variety of activities like songs, games, outdoor activities, conversation, role play, puzzles, crafts, *etc.,* and thereby initiate them to learning tasks. This methodology called Nali Kali was introduced during 2008-09 in 7,009 schools of 185 blocks in the State covering 2.90 lakh students. It was extended to classes I and II in all Kannada medium Government schools in the State during 2009-10, covering 14.22 lakh students. Nali Kali was extended to class III also during 2010-11.

4.2.9.1 School broadcast not providing the expected value addition

Radio formats not revised despite revision of curriculum

Audit scrutiny revealed that the radio lessons were not redesigned after revision of curriculum during 2008-09 and the broadcasts based on the old curriculum for classes I to III were continued during 2008-10. As the teachers had not prepared the students in classes I to II for the radio formats after the change in curriculum and teaching methodology in 2008, the radio lessons did not help the students comprehend the subjects. A study taken up (July 2008) by AIR to ascertain the student-teacher response to Keli Kali showed that the lessons broadcast for all the subjects were not clear to the students at all, although the teachers opined that they were clear to them. Although the study recommended (July 2008) a suitable structuring of the subjects/radio formats based on a practical pre-test of the lessons planned for broadcast, DSERT did not take any corrective action. However, the Director replied (July 2010) that overall revision would be taken up in due course. Thus, the radio broadcasts during 2008-10 failed to provide the expected value addition and help the students in their learning process.

4.2.9.2 Printing of text books ahead of change in curriculum

Wasteful expenditure on printing of textbooks

The decision to extend Nali Kali to class III from 2010-11 was taken (September 2009) in a meeting held under the Chairmanship of Principal Secretary. DSERT sent the requisite extension proposal to the Government in November 2009 and followed it up through reminders in December 2009 and March 2010. Meanwhile, CPI who was responsible for printing and supply of text books to schools placed (February 2010) orders with the Text Book Society for printing of 6.46 lakh copies of text books based on the existing curriculum for 3rd standard. These text books were also supplied to schools at the beginning of the academic year 2010-11. However, the Government approved extension of Nali Kali to 3rd standard during June 2010, bringing about the change in curriculum for the students of 3rd standard and rendering the text books already supplied to them inappropriate. Printing of text books during the pendency of the extension proposal with Government was indicative of total lack of coordination between the Director and CPI, resulting in a wasteful expenditure of ₹ 2.97 crore. The Commissioner did not furnish a reply to this observation.

4.2.9.3 Printing of learning material delayed

The tender conditions were changed while entering into agreements

After the introduction of Nali Kali in Class I and II, DSERT invited short term tenders for printing of learning material and entrusted the work to four different agencies during the year 2007-10.

The tender notification in all these cases prescribed a period of 15 days for approval of proof and 30 days for supplying the printed material from the date of work order. The contracts were awarded based on these conditions. While entering into agreements with these agencies, the delivery period was changed as 30 days from the date of approval of the proof in respect of three suppliers and 60 days from the date of approval of the proof in respect of one supplier. The details of scheduled date of supply as per the original tender condition,

date of approval of proof and date of supply of the printed material are given in **Appendix-4.11**.

In all these cases, proof was approved only after the scheduled date of supply of the printed material as per the tender notification had expired and actual delivery was further delayed. No penal action was taken for the delay in getting approval of the proof. The Director stated (July 2010) that the delivery period was extended considering the requests of the printers at the time of entering into agreements. Prescribing a shorter delivery period at the time of inviting tenders and increasing it at the time of entering into agreements vitiated the tendering process, limiting competition, and thereby losing competitive rates.

Unauthorised extension of the delivery period facilitated delayed supply of the learning material long after the commencement of the academic year, having the potential to impact adversely the delivery of education. Besides, the agreements in all these cases contained a clause for levy of liquidated damages up to a maximum of 10 *per cent* of the contract price for delay in supplies. Changing the delivery period at the time of agreement rendered the liquidated damages clause inoperative. The agencies, thus, escaped the levy of liquidated damages aggregating ₹ 27.84 lakh though the rates quoted by them were for supply within 30 days from the date of work order. As malpractices at the time of entering into agreements cannot be ruled out, the matter calls for investigation.

4.2.10 EDUSAT Programme

The receiving systems were non-functional in a large number of schools

To bring about quality improvement in classroom transactions and to supplement classroom teaching with audio-visual support, the Government launched a pilot project in collaboration with Indian Space Research Organisation (ISRO) in 885 primary schools of Chamarajanagar district and Kenchanahalli hobli of HD Kote taluk during 2004-05. The objective of the pilot project was to telecast lessons for primary classes by installing Direct Reception System (DRS), consisting of a dish antenna and a television receiver in the schools. The programme was extended to Gulbarga district during 2005-06, covering 885 schools. The cost of these two pilot projects was borne by ISRO.

During December 2007, DSERT entered into a Memorandum of Understanding (MoU) with ISRO for extending the facilities to 833 primary schools of Bangalore (Rural) and Ramanagara districts at a cost of ₹ 11.66 crore. ISRO was to bear the cost of ₹ 5.83 crore towards supply and installation of the receiving systems, including their annual maintenance, till the 4th year. DSERT, besides bearing the balance cost, was responsible for providing necessary infrastructural and other facilities for the project.

It was seen that many of the receiving systems were not functional in these schools as shown in **Table 4.26**.

Table 4.26 : Details of non-functional receiving systems

District	Number of schools in which receiving systems had been installed	Number of schools where systems were not functional	Remarks
Chamarajanagar	885	885	All the systems needed replacement of batteries. Of these, system parts had been stolen in 60 schools.
Gulbarga	885	179	System parts had been stolen in 61 schools.
Bangalore (Rural) and Ramanagara	833	151	In 92 schools, system parts had been stolen.

Source: Information furnished by DSERT

Though DSERT appointed the Block Education Officers, Principals of DIETs and Deputy Directors of Public Instructions for monitoring the implementation of the project, no action had been taken to make the systems functional in the schools. The Director replied (July 2010) that the solar panels mounted on roof tops had been stolen and complaints had been registered with the Police Stations. It was further stated that instructions would be issued to heads of schools to take necessary security measures to avoid the theft of system parts. Large number of non-functional systems and lack of initiative to repair and put them to use, besides indicating poor monitoring, completely defeated the purpose for which the project had been launched in Chamarajanagar district and to a significant extent in Gulbarga, Bangalore (Rural) and Ramanagara districts.

4.2.11 Conclusion

The department's budgetary and expenditure control mechanism were not functioning efficiently as budgets had not been prepared realistically, resulting in surrender of funds year after year. Funds had been drawn to avoid lapse of grants and parked in unauthorised bank accounts. Cash books were not maintained by DIETs as per rules. There was huge shortfall in training of teachers. Functioning of DIETs was affected by inadequate funds, large number of vacancies in the teaching and non-teaching cadres and non-utilisation of hostels. The computer education programme of the department was not effectively implemented as computer education was discontinued in 238 schools after creating necessary IT assets and the implementation of MSP was disrupted for two years in 1,000 schools. Monitoring of the implementation of computer education programmes was also weak.

4.2.12 Recommendations

- The department should comply with the controls prescribed in the Karnataka Budget Manual and Karnataka Financial Code so that accountability issues are not compromised in the interest of spending the funds allotted.
- The department should make optimum use of infrastructure created under various schemes/projects related to computer education.

- Action should be taken to fill up the vacancies in DIETs to achieve the objective of imparting qualitative training to teachers.
- Monitoring of the functioning of DIETs/CTEs and the implementation of computer education, radio and EDUSAT programmes needs to be improved.

The matter was referred to Government in July 2010; reply had not been received (December 2010).

BANGALORE **(D. J. BHADRA)**
THE **Principal Accountant General**
(Civil and Commercial Audit)

COUNTERSIGNED

NEW DELHI **(VINOD RAI)**
THE **Comptroller and Auditor General of India**

Appendix-1.1
(Reference: Paragraph 1.7.1, Page 8)
Year-wise breakup of Outstanding Inspection Reports as on 30 September 2010

Year	Department of Housing		Department of Forest		Department of Minor Irrigation		Total	
	Number of IRs	Number of paras	Number of IRs	Number of paras	Number of IRs	Number of paras	Number of IRs	Number of paras
Upto 2000-01	46	206	27	25	19	30	92	261
2001-02	4	15	3	9	4	6	11	30
2002-03	3	18	12	16	2	4	17	38
2003-04	4	20	21	54	16	61	41	135
2004-05	2	10	11	28	3	5	16	43
2005-06	2	7	38	98	18	97	58	202
2006-07	4	18	14	52	3	14	21	84
2007-08	4	26	57	301	19	136	80	463
2008-09	1	7	23	142	8	105	32	254
2009-10	3	28	9	55	9	118	21	201
Total	**73**	**355**	**215**	**780**	**101**	**576**	**389**	**1,711**

Appendix 1.2

(Reference: Paragraph 1.7.3, Page 8)

Details of Departmental Notes pending as of 18 January 2011

Sl. No.	Department	95-96	96-97	97-98	98-99	1999-2000	2000-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	Total
1.	Animal Husbandry & Veterinary Services	-	-	-	1	-	-	-	-	-	1	-	-	-	-	2
2.	Commerce and Industries	-	-	1	-	-	-	-	-	-	-	-	1	-	1	3
3.	Co-operation	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2
4.	Ecology and Environment	-	-	-	-	-	-	1	-	-	-	-	-	-	1	2
5.	Education	-	-	-	-	-	-	-	-	1	-	-	1	1	3	6
6.	Finance	-	-	-	-	-	1	-	-	-	-	-	1	1	1	4
7.	Forest	-	-	-	-	-	-	-	-	1	-	-	-	1	1	3
8.	Health & Family Welfare	3	-	-	-	2	-	-	-	-	-	-	-	-	1	6
9.	Housing	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
10.	Labour	-	-	-	-	-	-	-	-	-	-	-	1	-	1	2
11.	Legislature Secretariat	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
12.	Planning	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
13.	Public Works	-	-	-	-	-	-	-	-	1	-	-	-	-	3	4
14.	Revenue	-	-	1	-	-	-	-	-	-	-	1	1	-	1	4
15.	Social Welfare	1	-	1	1	-	1	-	-	-	-	-	1	-	-	5
16.	Urban Development	-	-	-	-	-	-	-	-	-	3	1	3	1	1	9
17.	Water Resources (Major & Medium Irrigation)	-	-	-	-	-	-	-	1	-	-	-	-	-	1	2
18.	Water Resources (Minor Irrigation)	-	-	1	-	-	-	-	-	-	2	-	-	-	3	6

Sl. No.	Department	95-96	96-97	97-98	98-99	1999-2000	2000-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	Total
19.	Women and Child Development	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
20.	Youth Services and Sports	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
21.	Forest, Home & Transport	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
22.	Health & Family Welfare and Public Works	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
23.	Forest, Ecology & Environment, Urban Development and Health & Family Welfare	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Total		**5**	**1**	**4**	**2**	**5**	**2**	**1**	**3**	**3**	**6**	**3**	**9**	**6**	**18**	**68**

Appendix 1.3

(Reference: Paragraph 1.7.4, Page: 8)
Paragraphs yet to be discussed by PAC as of 18 January 2011

Sl. No.	Department	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-2000	2000-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	Total
1.	Agriculture	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-	3
2.	Animal Husbandry and Veterinary Services	-	-	-	-	-	3	1	1	2	-	-	-	1	-	-	-	-	8
3.	Commerce and Industries	-	-	-	-	-	3	2	1	-	-	-	-	-	-	1	-	1	8
4.	Co-operation	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	3
5.	Ecology and Environment	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	1	3
6.	Education	2	1	4	5	1	-	1	2	2	1	1	1	-	2	2	1	3	29
7.	Finance	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	1	5
8.	Forest	1	-	1	2	-	-	-	-	1	2	-	1	-	-	-	1	1	10
9.	Health and Family Welfare	3	-	1	4	4	1	2	2	1	-	-	-	-	-	-	-	1	19
10.	Home	-	2	2	-	2	-	-	2	-	2	-	-	-	-	-	-	-	10
11.	Horticulture	-	-	-	-	1	1	-	-	-	-	-	-	-	1	-	-	-	3
12.	Housing	-	-	-	2	-	-	-	-	-	-	-	-	1	1	1	-	-	5
13.	Information, Tourism, Kannada and Culture	-	-	-	-	-	-	3	1	-	-	-	-	1	-	-	-	-	5
14.	Information Technology and Bio-Technology	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	3
15.	Labour	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	-	1	4
16.	Legislature Secretariat	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
17.	Planning	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
18.	Public Works	-	2	2	4	1	-	-	-	-	-	-	1	-	-	-	-	3	13
19.	Revenue	-	-	-	1	1	1	-	1	-	-	-	-	1	1	2	-	1	9
20.	Rural Development & Panchayati Raj	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2
21.	Social Welfare	-	-	-	2	-	3	3	1	1	-	-	1	-	-	2	-	-	13
22.	Transport	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Sl. No.	Department	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-2000	2000-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	Total
23.	Urban Development	-	-	-	-	-	-	-	-	-	-	-	-	6	2	4	1	1	14
24.	Water Resources (Major & Medium Irrigation)	14	7	7	6	8	7	2	2	2	6	2	2	1	-	-	-	1	67
25.	Water Resources (Minor Irrigation)	1	6	3	5	4	3	-	-	-	-	-	2	2	1	-	-	3	30
26.	Women & Child Development	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	2
27.	Youth Services and Sports	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-	-	4
28.	Agriculture, Forest, Home & Transport	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
29.	Health & Family Welfare and Public Works and Rural Development & Public Works	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
30.	Forest, Ecology &Environment, Urban Development and Health & Family Welfare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Total		**22**	**20**	**20**	**31**	**26**	**24**	**14**	**17**	**11**	**14**	**5**	**11**	**14**	**10**	**14**	**7**	**18**	**278**

Appendix-2.1
(Reference: Paragraph 2.1.9.1, Page 22)
Waste water treatment by Sewage Treatment Plants during 2005-10

Name of the STP / TTP	Installed Capacity in MLD	Treated Waste water per year in million litres					Average waste water treated per day (in MLD)	Percentage under-utilization
		2005	2006	2007	2008	2009		
K&C *	**218**	1,504	38,635	32,102	33,759	31,068	**75**	**66**
V Valley	**180**	22,673	24,921	23,007	18,488	24,518	**62**	**66**
K&C Valley TTP	**30**	2,761	2,907	2,807	3,165	3,388	**8**	**73**
Hebbal	**60**	11,205	11,707	9,119	11,627	12,314	**31**	**48**
Madiwala	**4**	861	1,354	1,317	1,384	738	**3**	**25**
Kempambudi	**1**	365	365	365	366	365	**1**	**0**
Yelahanka TTP	**10**	1,956	1,529	937	963	808	**3**	**70**
Kadabisanahalli	**50**	0	7,331	5,003	4,862	7,804	**17**	**66**
Mylasandra	**75**	0	614	11,137	12,487	11,065	**24**	**68**
Nagasandra	**20**	0	82	1,610	1,648	1,886	**4**	**80**
Jakkur	**10**	0	0	738	1,357	1,571	**3**	**70**
K.R.Puram	**20**	0	0	1,026	2,156	1,790	**4**	**80**
Raja Canal	**40**	0	4,440	6,225	6,550	2,930	**14**	**65**
Cubbon Park TTP	**1.5**	28	227	247	251	235	**0.5**	**66**
Lalbagh TTP	**1.5**	394	321	420	492	521	**1.2**	**20**
V Valley TTP	**60**	--	--	--	--	--	--	--
	781	**41,747**	**94,433**	**96,060**	**99,555**	**1,01,001**	**250.7**	

* Consists of two STPs with installed capacity of 163 MLD and 55 MLD respectively

Appendix-2.2
(Reference: Paragraph 2.1.10, Page 25)
Test results of samples drawn from 59 lakes and analysed by Lake Development Authority

Pollutant	Number of non-conforming lakes for each parameter	Prescribed Standard	Minimum Value as per sample	Maximum Value as per sample	Probable Health Hazards
Carbon-di-oxide	22	1.0 mg/l (Max)	1.32 mg/l	5.28 mg/l	Shortness of breath
Lead	01	100 micrograms/l (Max)	15600 micrograms/l	15900 micrograms/l	Infants/Children – delay in physical and mental development Adults-Kidney problem/High Blood Pressure
Phosphate	21	5 mg/l (max)	5.23	23.4	-
Biological Oxygen Demand (BOD)	28	30mg/l	32	320	Excess BOD/COD reduces oxygen level in water, thus, affecting aquatic life
Chemical Oxygen Demand (COD)	3	250mg/l	391	1007	
Total Coliform	44	5000	5200	900000	Dysentery, Diarrhoea, Typhoid fever, poliomyelitis, cramps, nausea, headache etc
Faecal Coliform	42	1500	1600	100000	
Iron	12	0.5mg/l	0.54	183.6	High concentration is toxic to livestock; irritation of respiratory tract
Hardness Calcium	20	200mg/l	202	576	-
Total Hardness	17	300mg/l	301	736	-
Dissolved Oxygen (DO)	28	4mg/l (Min)	<1	3.9	Reduced DO levels will increase the BOD and, in turn, affect the aquatic life
Manganese	4	0.5mg/l	0.54	2.38	Black stains in plumbing, fixtures and textiles / minor irritation to eyes and mucous membranes of respiratory tract
Fluoride	3	2mg/l	2.06	3.4	At higher levels, it causes mottling of teeth & skeletal fluorosis
pH	2	5.5 to 9	9.48	9.6	Gastroenteritis
Sulphide	3	2mg/l	3.16	5.6	-

Appendix-2.3

(Reference: Paragraph 2.1.12.1, Page 27)

Shortfall in obtaining Pollution under Control Certificates for vehicles

Year	Opening balance of vehicles registered in Bangalore	Additions during the year	Closing balance of vehicles registered in Bangalore	Total number of PUCs to be issued	PUCs issued	Shortfall	Percentage shortfall
2006-07	24,84,538	2,77,021	27,61,559	49,69,076	13,72,400	35,96,676	72
2007-08	27,61,559	1,65,520	29,27,079	55,23,118	14,55,400	40,67,718	74
2008-09	29,27,079	3,13,661	32,40,740	58,54,158	15,78,700	42,75,458	73
2009-10	32,40,740	2,49,825	34,90,565	64,81,480	17,28,000	47,53,480	73
Total				**2,28,27,832**	**61,34,500**	**1,66,93,332**	**73**

Appendix-2.4
(Ref: Paragraph 2.2.8.4, Page 44)
Statement showing extra cost recoverable from contractors

(₹ in lakh)

Sl No	Name of the work	Tender cost	Value of work done	Value of balance work	Date/Month of issue of rescinding orders	Cost of work entrusted to 2nd agency	Extra cost recoverable
1	Construction of barrage at Kadkol in Jewargi taluk	211.04	60.97	153.17	January 2009	212.11	58.94
2	Construction of bridge-cum-barrage across Jambral nala in Jewargi taluk	212.61	7.98	204.63	March 2008	302.78	98.15
3	Repairs, renovation and restoration of Doddakere tank in Hoskote	86.99	56.83	30.67	28.06.2008	43.80	13.13
4	Repairs, renovation and restoration of Kodihalli tank in Hoskote	13.88	7.39	6.15	13.03.2008	7.65	1.50
5	Canal lining of Doddalahalli tank in Kanakapura	39.59	--	39.59	NA	54.21	14.62
6	Construction of RCC aqueduct to LBC of YG Gudda Ch 3,330 to 3,400 metres	17.75	7.84	9.36	27.02.2007	18.10	8.74
7	Construction of RCC aqueduct to LBC of YG Gudda Ch 8,622 to 8,650 metres	8.75	--	8.75	27.02.2007	19.67	4.79
8	Earthwork excavation of canal from Ch 8,000 to 9,000 metres of LBC of YG Gudda	6.13	--	6.13	27.02.2007		
9	Construction of RCC aqueduct to LBC of YG Gudda Ch 4,870 to 4,930 metres	21.39	7.53	14.05	27.02.2007	26.13	12.08
Total							**211.95**

Appendix-3.1
(Reference: Paragraph 3.2.4, Page 61)
Details of avoidable expenditure due to incorrect provision towards additional plastering to roof concrete

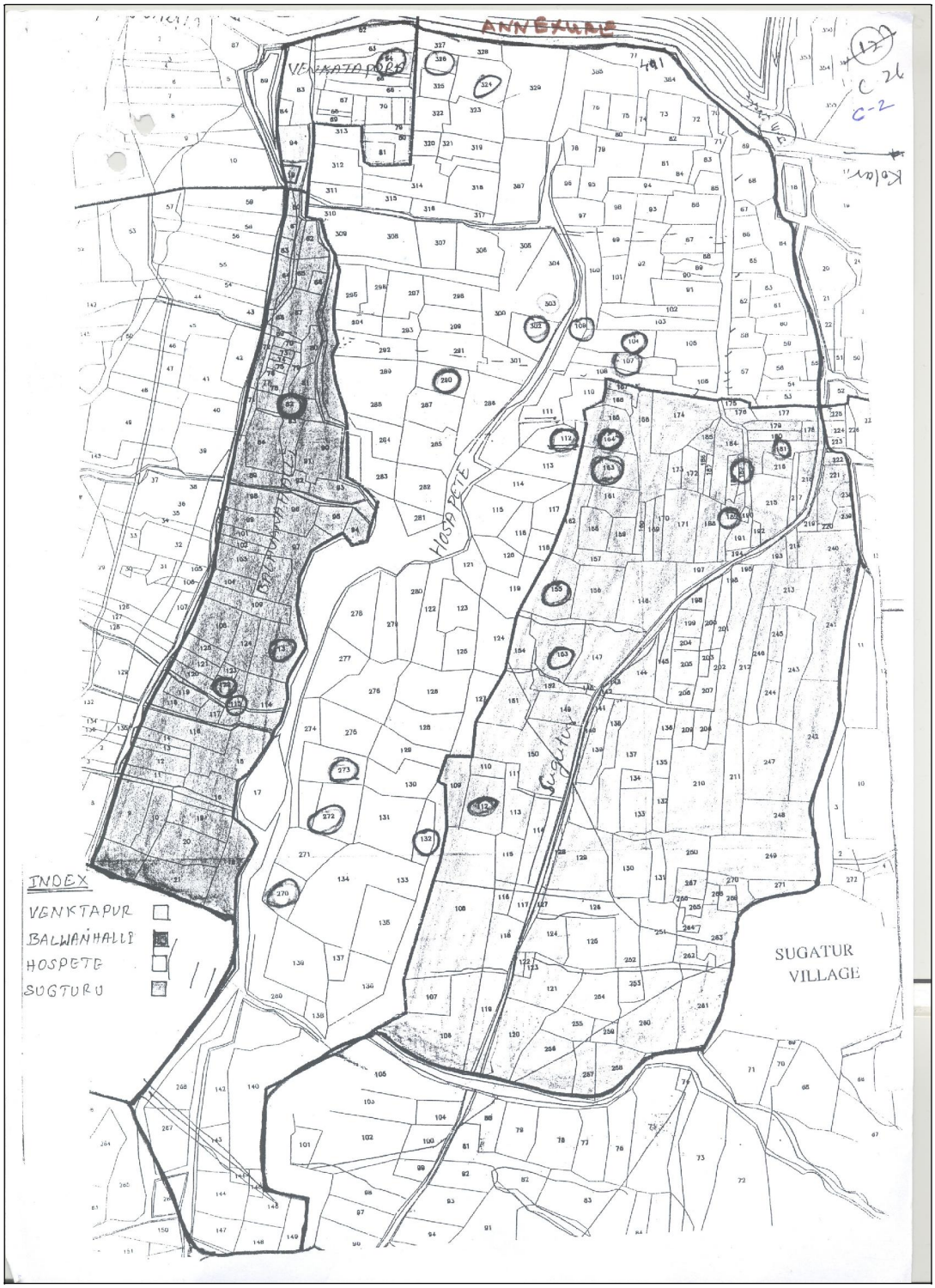
(₹ in lakh)

Sl No	Name of the Division	Name of the work	Amount
1	Executive Engineer, Public Work and Inland Water Transport Division (PWP&IWTD), Special Division , Hassan	Construction of Engineering College at Hassan	35.97
2	-do-	Construction of Mini Vidhana Soudha at Sakaleshpur	2.37
3	-do-	Construction of Agriculture College building at Hassan-Phase-I	11.96
4	-do-	Construction of Agriculture College building at Hassan-Phase-II	4.83
5	Executive Engineer, PWP&IWTD, Mangalore	Construction of District Court Complex III Stage	20.56
6	-do-	Construction of Building Complex for Kukke Subramania Temple	55.12
7	Executive Engineer, PWP&IWTD, Mandya	Construction of Government Medical College at Mandya-Phase-I	16.59
8	-do-	Construction of Government Medical College at Mandya-Phase-II	32.20
9	-do-	Construction of First Grade College for Boys at Mandya	1.14
10	-do-	Construction of ITI at KR Pet	2.76
11	-do-	Construction of Government Junior College at Sommanahalli	0.59
12	-do-	Construction of Stadium at Nagamangala	0.28
13	-do-	Construction of class rooms for PU College at Koppa, Maddur taluk	0.65
14	Executive Engineer, PWP&IWTD, Shimoga	Construction of College building, Boys and Girls Hostel Block and Doctors quarters Block for Government Medical College at Shimoga (Phase I)	13.05
15	-do-	-do- (Phase II)	14.12
16	-do-	Construction of Civil Court Complex at Soraba	3.73
17	Executive Engineer, No.2 PWP&IWTD, Bangalore	Construction of Commercial Tax Office building at Koramangala	7.90
18	-do-	Construction of new OPD block at Victoria Hospital	4.77
19	-do-	Construction of two tower block over existing master plan building at Victoria Hospital	8.02
20	-do-	Construction of casualty, trauma, OPD and emergency block at Victoria Hospital (KPTCL Block), Bangalore	9.78
21	-do-	Construction of four floor building at City Civil Court Complex at Bangalore	8.99
22	-do-	Construction of three floor Annexe building (II Phase) at CMM court premises at Bangalore	3.59
23	-do-	Extension of Public Work Department Annexe building of the CE, C&B (S) Bangalore	1.60
TOTAL			**260.57**

Appendix 3.2
(Reference: Paragraph 3.3.1, Page 64)
Excess payment of family pension

SI No	District	Number of cases	Amount (In ₹)	Period
1	Bagalkot	20	9,10,680	04/04 to 08/09
2	Bangalore (Rural)	10	1,92,317	04/07 to 07/09
3	Belgaum	85	33,84,392	03/00 to 02/09
4	Bellary	57	15,04,989	10/04 to 06/09
5	Bidar	6	1,32,004	08/08 to 09/09
6	Bijapur	15	6,16,288	07/05 to 08/09
7	Chamarajanagar	17	1,75,558	05/07 to 03/09
8	Chickballapura	25	6,59,850	02/01 to 04/09
9	Chikmagalur	35	14,17,672	01/06 to 11/09
10	Chitradurga	50	14,87,162	01/06 to 05/09
11	Dakshina Kannada	11	5,79,294	08/05 to 11/09
12	Davangere	53	16,76,447	07/05 to 08/09
13	Dharwad	4	1,06,090	08/08 to 11/09
14	Gadag	11	6,19,705	05/04 to 08/09
15	Gulburga	110	47,09,299	09/02 to 11/09
16	Hassan	17	5,68,202	08/07 to 12/09
17	Haveri	18	2,42,302	05/08 to 08/09
18	Hubli	4	4,90,398	01/05 to 09/09
19	Karwar	38	15,38,056	02/03 to 12/09
20	Kolar	19	7,37,495	10/04 to 03/09
21	Koppal	2	90,120	12/08 to 12/09
22	Madikeri	20	3,46,098	02/03 to 12/09
23	Mandya	19	5,49,240	10/05 to 05/09
24	Mysore	14	2,70,312	08/08 to 07/09
25	Pension Payment Treasury, Bangalore	76	53,54,243	05/00 to 08/09
26	Raichur	42	14,73,999	09/00 to 12/09
27	Shimoga	25	5,06,229	09/05 to 06/09
28	Tumkur	38	12,45,066	06/07 to 10/09
29	Udupi	16	2,99,634	10/08 to 11/09
	TOTAL	**857**	**3,18,83,141**	

Appendix-3.3
(Reference: Paragraph 3.4.3, Page 68)
Inaccessible plots of land acquired by KHB (Sketch)



Appendix -3.4
(Reference: Paragraph 3.4.5, Page 70)
Statement of Central Excise Duty not recovered

Sl.No.	Name of the Division	Name of the Water Supply Scheme	Quantity of MS pipes procured (In rmt)	Total cost of pipes (₹ in crore)	Whether exemption certificate issued or not	Whether rates quoted were inclusive or exclusive of Central Excise Duty	Prevailing rates of CED including Cess	Total amount of CED forgone/ not recovered (₹ in crore)
1	Dharwad	Providing MS Transmission main from Aminabhavi to Nrupatunga Betta in Hubli-Dharwad under KUWASIP	23,008	15.55	Yes	Inclusive	16.22%	2.520
2	Mysore (JNNURM)	Remodelling of Water Supply Distribution Network to Mysore City	54,235	26.20	Yes	Inclusive	14.42%	3.778
		TOTAL	**77,243**					**6.298**

Appendix - 3.5
(Reference: Paragraph 3.4.5, Page 71)
Statement of Central Excise Duty foregone

Sl.No.	Name of the Division	Name of the Water Supply Scheme	Quantity of MS Pipes procured (In rmt)	Total cost of pipes (₹ in crore)	Whether exemption certificate issued or not	Whether rates quoted were inclusive or exclusive of Central Excise Duty	Prevailing rates of CED including Cess	Total amount of CED forgone/ not recovered (₹ in crore)
1	Bellary	Water Supply Scheme to Sandur, NMDC and other villages enroute in Bellary District	11,340	7.00	No	Exclusive	14.42%	1.092
2	Gulbarga	Water Supply Scheme to Gurumitkal Town in Gulbarga District	22,003	4.59	No	Exclusive	10.03%	0.460
		TOTAL	**33,343**					**1.552**

Appendix-3.6
(Reference: Paragraph 3.4.5, Page 71)
Excess expenditure incurred on purchase of DI pipes

Sl. No.	Supply Order No/Date	Invoice No & Date	Date of supply	Class of DI pipe and its diameter	Quantity supplied (rmtrs)	Rate as per agreement (without CED) (In ₹)	Rate paid (In ₹)	Difference (Col 8-Col 7) (In ₹)	Extra expenditure (Col 6 x Col 9)	Total amount paid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	**1557/22.8.07**	21119/6.02.09	23.03.09	K-9 200	423.5	1065.55	1310.63	245.08	103791	555051
2	**1557/22.8.07**	20587/19.1.09	23.03.09	K-9 200	418	1065.55	1310.63	245.08	102443	547843
3	**1557/22.8.07**	21596/12.2.09	23.03.09	K-9 200	246	1065.55	1310.63	245.08	60289	322414
4	**1557/22.8.07**	21425/10.2.09	23.03.09	K-9 200	412.5	1065.55	1310.63	245.08	101095	540634
5	**1683/6.9.07**	2729/19.4.09	2.5.09	K-7 350	120	2020.85	2485.65	464.8	55776	298278
6	**1683/6.9.07**	2677/12.4.09	25.4.09	K-7 200	400	937.35	1152.94	215.59	86236	461176
7	**1683/6.9.07**	2677/12.4.09	25.4.09	K-7 250	3360	1263	1553.5	290.5	976080	5219760
8	**2106/22.10.07**	2211/10.3.09	31.3.09	K-7 200	1800	937.35	1152.94	215.59	388062	2075292
9	**2106/22.10.08**	2211/10.3.10	31.3.09	K-7 300	2438.5	1627.8	2002.19	374.39	912950	4882340
10	**2106/22.10.07**	2164/5.3.09	31.3.09	K-7 300	291.5	1627.8	2002.19	374.39	109134	583638
11	**3432/14.02.08**	2158/38.02.09	2.3.09	K-9 300	2955	1769.35	2176.3	406.95	1202537	6430966
12	**3432/14.02.08**	1954/10.02.09	14.2.09	K-9 300	1595	1769.35	2176.3	406.95	649085	3471198
14	**3432/14.02.08**	2171/5.03.09	5.3.09	K-7 300	2034	1627.8	2002.19	374.39	761509	4072454
15	**3432/14.02.08**	2218/10.03.09	7.3.09	K-7 300	3865	1627.8	2002.19	374.39	1447017	7738464
16	**3432/14.2.08**	2177/5.3.09	5.3.09	K-9 300	3144	1769.35	2176.3	406.95	1279450	6842287
17	**3432/14.2.08**	1995/15.2.09	15.2.09	K-9 300	533.5	1769.35	2176.3	406.95	217107	1161056
18	**3432/14.2.08**	2049/20.2.09	20.2.09	K-9 300	4038	1769.35	2176.3	406.95	1643264	8787899
19	**3432/14.2.08**	2082/25.2.09	28.2.09	K-9 300	4050	1769.35	2176.3	406.95	1648147	8814015
20	**3433/14.02.08**	2206/10.03.09	13.3.09	K-7 200	1357.5	937.35	1152.93	215.58	292649	1565102
21	**3577/25.2.08**	2629/8.4.09	25.4.09	K-7 200	7744	937.35	1152.94	215.59	1669528	8928367
23	**3577/25.2.08**	2678/12.4.09	25.4.09	K-7 200	6095.5	937.35	1152.94	215.59	1314128	7027745
24	**3578/25.2.08**	21559/12.2.09	26.3.09	K-7 300	192.5	1627.8	2002.19	374.39	72070	385421
25	**3578/25.2.08**	21679/13.2.09	23.3.09	K-7 300	192.5	1627.8	2002.19	374.39	72070	385421
26	**3578/25.2.08**	21678/13.2.09	23.3.09	K-7 300	192.5	1627.8	2002.19	374.39	72070	385421
27	**3578/25.2.08**	21691/13.2.09	23.3.09	K-7 150	329.5	682.9	839.97	157.07	51754	276770

Sl. No.	Supply Order No/Date	Invoice No & Date	Date of supply	Class of DI pipe and its diameter	Quantity supplied (rmtrs)	Rate as per agreement (without CED) (In ₹)	Rate paid (In ₹)	Difference (Col 8-Col 7) (In ₹)	Extra expenditure (Col 6 x Col 9)	Total amount paid
28	**3578/25.2.08**	21691/13.2.10	23.3.09	K-7 200	275	937.35	1152.94	215.59	59287	317058
29	**3578/25.2.08**	21690/13.2.09	23.3.09	K-7 300	192.5	1627.8	2002.19	374.39	72070	385421
30	**3578/25.2.08**	21655/13.2.09	26.3.09	K-7 150	665	682.9	839.97	157.07	104451	558580
31	**3578/25.2.08**	21653/13.2.09	26.3.09	K-7 300	197.5	1627.8	2002.19	374.39	73942	395432
32	**3578/25.2.08**	21644/13.2.09	26.3.09	K-7 150	625.5	682.9	839.97	157.07	98247	525401
33	**3578/25.2.08**	21558/12.2.09	26.3.09	K-7 300	192	1627.8	2002.19	374.39	71882	384420
34	**3578/25.2.08**	21564/12.2.09	26.3.09	K-7 300	192.5	1627.8	2002.19	374.39	72070	385421
35	**3578/25.2.08**	21574/12.2.09	26.3.09	K-7 300	192.5	1627.8	2002.19	374.39	72070	385421
36	**3578/25.2.08**	21601/12/2.09	26.3.09	K-7 150	605	682.9	839.97	157.07	95027	508181
37	**3578/25.2.08**	21824/15.2.09	26.3.09	K-7 300	155.5	1627.8	2002.19	374.39	58217	311340
38	**3579/25.02.08**	2434/24.03.09	29.3.09	K-9 250	2584	1397.5	1718.93	321.43	830575	4441715
39	**3579/25.2.08**	2501/ 25.2.09	31.3.09	K-9 250	3567.5	1397.5	1718.93	321.43	1146701	6132282
40	**3579/25.2.08**	2461/26.3.09	28.3.09	K-9 250	2303	1397.5	1718.93	321.43	740253	3958695
41	**3579/25.2.08**	2547/31.3.09	1.4.09	K-9 250	334.5	1397.5	1718.93	321.43	107518	574982
42	**3579/25.2.08**	2627/8.4.09	4.4.09	K-9 250	2705.5	1397.5	1718.93	321.43	869628	4650565
43	**3579/25.2.08**	2732/19.4.09	4.4.09	K-9 250	256.5	1397.5	1718.93	321.43	82446	440905
44	**3579/25.2.08**	2548/31.03.09	2.4.09	K-9 100	879	553	680.19	127.19	111800	597887
45	**3579/25.2.08**	2588/4.04.09	3.4.09	K-9 100	871	553	680.19	127.19	110782	592445
46	**3579/25.2.08**	2628/8.04.09	8.4.09	k-9 100	500	553	680.19	127.19	63595	340095
47	**3579/25.2.08**	2681/12.04.09	17.4.09	K-9 100	1810	553	680.19	127.19	230213	1231143
48	**3579/25.2.08**	702/15.04.09	17.4.09	k-9 100	3576.5	553	680.19	127.19	454895	2432699
49	**3579/25.2.08**	2733/19.04.09	20.4.09	K9 100	4000	553	680.19	127.19	508760	2720760
50	**3579/25.2.08**	2680/12.4.09	15.4.09	K-9 250	1317.5	937.35	1718.93	781.58	1029731	2264690
51	**3580/25.2.08**	2703/15.4.09	25.4.09	K-7 200	7111.5	937.35	1152.94	215.59	1533168	8199132
52	**3789/13.3.08**	91002203/10.3.09	15.4.09	K-7 150	3182	682.9	839.97	157.07	499796	2672784
53	**3789/13.3.08**	91002204/10.3.09	15.4.09	K-7 100	806.5	471.7	580.19	108.49	87497	467923
54	**3789/13.3.08**	91002170/5.3.09	15.4.09	K-7 100	938.5	471.7	580.19	108.49	101817	544508
		TOTAL			**88,265**				**2,45,74,679**	**12,81,78,897**

Appendix-4.1
(Reference: Paragraph 4.1.6.1, Page 90)
Statement showing the variations between Expenditure Statements and Surrender Proposals

(₹ in lakh)

Head of Account	Budget			As per the surrender proposal		
	Provision	Expenditure	Difference	Provision	Expenditure	Surrendered Amount
2006-07						
Animal Statistics	50.00	8.76	41.24	59.35	8.76	50.59
ASCAD	970.00	611.72	358.28	970.00	589.64	380.36
Milk,Egg & Meat	90.00	83.92	6.08	124.68	83.77	40.91
Assistance to Poultry Farm	85.00	84.91	0.09	92.53	84.90	7.63
Civil Works	50.00	39.64	10.36	50.00	49.64	0.36
Veterinary Development & Training	37.34	36.10	1.24	37.34	36.17	1.17
Suvarna Karnataka Assistance	270.00	169.34	100.66	250.00	169.34	80.66
SCP	38.00	37.64	0.36	38.00	36.65	1.35
	1,590.34	**1,072.03**	**518.31**	**1621.90**	**1,058.87**	**563.03**
2007-08						
Eradication of Rinderpest	63.45	27.55	35.90	63.45	28.36	35.09
ASCAD	791.85	328.23	463.62	791.85	327.97	463.88
Milk,Egg & Meat	88.09	83.35	4.74	88.09	83.37	4.72
Civil Works	80.00	71.65	8.35	80.00	72.60	7.40
Livestock Training Centre	60.00	48.71	11.29	60.00	48.85	11.15
Veterinary Training Centre	50.00	47.09	2.91	50.00	47.40	2.60
Lasik Producing Society	50.00		50.00	50.00		50.00
Prime Minister Special Package				3,300.00		3,300.00
	1,183.39	**606.58**	**576.81**	**4,483.39**	**608.55**	**3,874.84**
2008-09						
Eradication of Rinderpest	22.30	22.17	0.13	22.30	22.00	0.30
Statistics	1,000.00	426.27	573.73	1,000.00	258.83	741.17
ASCAD	800.00	728.90	71.10	800.00	728.22	71.78
Milk,Egg & Meat	101.23	86.34	14.89	101.23	44.27	56.96
Assitance to Poultry Farms	125.00	52.54	72.46	125.00	40.00	85.00
RKVY	1,746.00	1,721.44	24.56	1,746.00	1,721.55	24.45
Livestock Training Centre	110.00	94.07	15.93	110.00	95.28	14.72
Sheep and sheep growers	200.00	177.96	22.04	200.00	150.00	50.00
Institute	600.00	512.50	87.50	600.00	512.50	87.50
	4,704.53	**3,822.19**	**882.34**	**4,704.53**	**3,572.65**	**1,131.88**

Appendix-4.2
(Reference: Paragraph 4.1.6.5, Page 91)
Year-wise details of Inspection Reports and Paragraphs outstanding as of March 2010

Year	Number of Inspection Reports	Number of Paragraphs
State Sector		
Upto 2000-2001	34	27
2001-02	2	7
2002-03	2	2
2003-04	1	2
2004-05	3	1
2005-06	1	1
2006-07	2	1
2007-08	4	7
2008-09	4	21
Total	**53**	**69**
District Sector		
Upto 1999-2000	75	195
2000-2001	05	12
2001-02	02	03
2002-03	09	22
2003-04	11	21
2004-05	09	13
2005-06	06	15
2006-07	12	28
2007-08	31	54
2008-09	31	75
Total	**191**	**438**

Appendix-4.3
(Reference: Paragraph 4.1.8.1, Page 95)
Details of land available for cultivation and land cultivated at Farms

(in acres)

Farm	Total Extent of Land	Extent of Land available for cultivation	Extent of Land Cultivated
DD, Jersey Breeding Farm, Kudige	140	90	20
DD, State Livestock Breeding and Training Centre, Hesaraghatta	994	944	105
DD, Amruth Mahal, Ajjampura	794.28	37	37
DD, Livestock Breeding and Training Centre, Koila	818	768	14
DD, Livestock Breeding and Training Centre, Hesaraghatta	1,000	600	68
DD, Livestock Breeding and Training Centre, Dharwad	63	50	50
Total	**3,809.28**	**2,489**	**294**

Appendix-4.4
(Reference: Paragraph 4.1.8.1, Page 95)
Details of Fodder Cultivation, Targets and Achievements at Farms

(in tonnes)

Year	2005-06		2006-07		2007-08		2008-09		2009-10	
	Target	Achie-vement	Target	Achie-vement	Target	Achie-vement	Target	Achie-vement	Target	Achie-vement
DD, Jersey Breeding Farm, Kudige	1,200	406	1,200	330	1,200	359	1,200	332	1,200	409
DD, State Livestock Breeding and Training Centre, Hesaraghatta	3,330	1,679.2	3,563	1,622.29	3,640	1,510.68	3,427	1,357.94	2485.5	1,232
DD, Amruth Mahal, Ajjampura	55	64	46	--	50	81	21	21	51	51
DD, Livestock Breeding and Training Centre, Koila	550	250	550	250	550	250	550	250	550	250
DD, Livestock Breeding and Training Centre, Hesaraghatta	1,294	558.11	1,163	569.08	1,239	764.47	748	811	2,155	780.24
DD, Livestock Breeding and Training Centre, Dharwad	768	740	723	780	1,114	962	1,330	1,072	1,321	1,448
Total	**7,197**	**3,697.31**	**7,245**	**3,551.37**	**7,793**	**3,927.15**	**7,276**	**3,843.94**	**7,762.5**	**4,170.24**
Percentage of achievement	**51**		**49**		**50**		**53**		**54**	

Appendix-4.5
(Reference: Paragraph 4.2.5.4, Page 104)
Details of vacancies in technical posts in DIETs

Sl. No.	Name of the DIET	Post of Senior Lecturer			Post of Lecturer		
		Sanctioned	Vacant	Percentage of vacancy	Sanctioned	Vacant	Percentage of vacancy
1.	Bangalore (U)	7	0	0	17	0	0
2.	Bangalore (R)	7	0	0	17	3	18
3.	Belgaum	7	2	29	17	4	24
4.	Bellary	7	0	0	17	4	24
5.	Bidar	7	3	43	17	2	12
6.	Chickmagalur	7	0	0	17	6	35
7.	Davanagere	7	0	0	17	4	24
8.	Dharwad	7	0	0	17	1	6
9.	Hassan	7	0	0	17	0	0
10.	Ilkal	7	2	29	17	6	35
11.	Kamalapur	7	2	29	17	9	53
12.	Kolar	7	0	0	17	7	41
13.	Kodagu	7	1	14	17	2	12
14.	Kumta	7	0	0	17	7	41
15.	Mandya	7	0	0	17	1	6
16.	Mangalore	7	0	0	17	14	82
17.	Mysore	7	0	0	17	0	0
18.	Shimoga	7	1	14	17	2	12
19.	Yermarus	7	1	14	17	10	59
20.	Tumkur	7	0	0	17	2	12
21.	Haveri	7	1	14	17	2	12
22.	Bijapur	7	0	0	17	0	0
23.	Gadag	7	0	0	17	0	0
24.	Chamarajanagar	7	0	0	17	2	12
25.	Koppal	7	2	29	17	6	35
26.	Chitradurga	7	0	0	17	2	12
27.	Udupi	7	0	0	17	6	35
28.	Ramanagara	7	0	0	17	16	94
29.	Chikkaballapur	7	1	14	17	12	71
	Total	**203**	**16**	**8**	**493**	**130**	**26**

Appendix-4.6
(Reference: Paragraph 4.2.5.4, Page 104)
Details of vacancies in non-technical posts in DIETs

Sl. No.	Name of the Post	Sanctioned	Vacant	Percentage of vacancy
1.	Physical Education Instructor	29	7	24
2.	Superintendent	29	8	28
3.	Stenographer	29	17	59
4.	Technical Assistant	29	25	86
5.	Statistician	29	19	66
6.	FDA/SDA	261	26	10
7.	Group D	174	35	20
8.	Laboratory Assistant	29	10	35
9	Work Experience Teacher	29	8	28
10.	Librarian	29	19	66

Appendix-4.7
(Reference: Paragraph 4.2.5.4, Page 104)
(a) Details of vacancies in technical posts in CTEs

Sl. No.	Name of the CTE	Post of Reader			Post of Lecturer			Post of Instructor			Total vacancy	Total percentage
		Sanctioned	Vacant	Percentage of vacancy	Sanctioned	Vacant	Percentage of vacancy	Sanctioned	Vacant	Percentage of vacancy		
1.	Chitradurga	3	0	0	13	3	23	6	1	17	4	18
2.	Jamakhandi	3	1	33	13	2	15	5	1	20	4	19
3.	Mysore	3	0	0	13	0	0	5	3	60	3	14
4.	Gulbarga	3	1	33	13	2	15	3	1	33	4	21
5.	Mangalore	3	0	0	13	3	23	4	4	100	7	35
6.	Belgaum	3	0	0	13	1	8	5	1	20	2	10

(b) Details of vacancies in non-technical posts in CTEs

Sl. No.	Name of the Post	Sanctioned	Vacant	Percentage of vacancy
1.	Librarian	4	3	75
2.	Computer instructor	2	2	100
3.	Technician	2	2	100
4.	Film operator	1	1	100
5.	Stenographer	5	5	100
6.	FDA/SDA/CCT	33	4	12
7.	Lab Assistant	6	3	50
8.	Group D	78	35	45

Appendix-4.8
(Reference: Paragraph 4.2.6.6, Page 110)
Year-wise outstanding Inspection Reports and Paragraphs

Year	Inspection Reports issued	Outstanding Paragraphs
Upto 2005-06	13	27
2006-07	Nil	Nil
2007-08	5	7
2008-09	4	11
2009-10	16	70
Total	**38**	**115**

Appendix-4.9
(Reference: Paragraph 4.2.7.2, Page 112)
List of schools under RCP and FCP jointly inspected

RCP	FCP
GHS, Halhalik, Bhalki	GHS, Kadavada, Bidar
GHS, Banpurs, Bellary East	PS, GHS, Sogi, Bellary
GHS, Bhokkapatta, Mangalore, Dakshin Kannada	GHS, Halli Mysore, Holenarasipura, Hassan
GHS, Shingatalur, Mundargi, Gadag	GHS(Girls), Naragunda, Gadag
GHS, Kodagalli, T. Narasipura, Mysore	GHS, Devalapura, Mysore Rural, Mysore
GHS, Balemaranahalli, Shimoga	GHS, Hebbal, Bangalore(Urban)
GHS, Byatha, Tumkur	
GHS, Kengeri, Bangalore(Urban)	
GHS, Jalige, Devanahalli, Bangalore(Rural)	

Appendix 4.10
(Reference: Paragraph 4.2.8, Page 118)
List of Government High Schools under ICT-I, II and MSP jointly inspected

ICT-I	ICT-II	MSP
GHS, Mutangi, Humnabad, Bidar	GHS, Gadlegaon, Basavakalyan, Bidar	GHS, Bidar
GHS, Alaburu, HB Halli, Bellary	GHS, 16 ward, Srirampura Colony, Bellary East	GHS (Boys), C.J. Halli, Kudligi, Bellary
GHS, Manila, Bantwal, Dakshina Kannada	GHS, Polali, Bantwal, Dakshina Kannada	GHS, Padangadi, Belthangadi, Dakshina Kannada
GHS, Didga, Channarayanapatna, Hassan.	GHS, Anekambadi, Holenarasipura, Hassan	GHS, Belagode, Sakleshpur, Hassan
GHS, Beglihosahalli, Kolar	GHS, Balamande, Bangarpet, Kolar	GHS, Shivaripatna, Malur, Kolar
GHS, Konganur, Shirahatti, Gadag	GHS, Putgoa badni, Shirahatti, Gadag	GHS, Gogeri, Ron, Gadag
GHS, Banekuppe, Hunsur, Mysore	GHS, Thademalangi, T.Narasipura, Mysore	GHS, Antharasanthe, H.D.Kote
GHS, Maruthipur, Hosanagara,Shimoga	GHS, Arakere, Bhadravathi, Shimoga	GHS, Kerehalli, Sorab, Shomoga
GHS, Hulikal, Turuvekere, Tumkur	GHS, Guleharive, Tumkur	GHS, Hoddamma Durai, Kunigal, Tumkur
GHS, Hombegowdanagar, Bangalore(Urban)	GHS, Marenahalli, Bangalore(Urban)	GHS, Palace Guttahalli, Bangalore(Urban)
GHS, Ramanagara, Bangalore(Rural)	GHS, Channapatna, Bangalore(Rural)	GHS, Devanahalli, Bangalore(Rural)

Appendix-4.11
(Reference: Paragraph 4.2.9.3, Page 121)
Details of scheduled date of supply, date of approval of proof and date of supply of printing material

Year	Name of the agency	Value of the order (₹ in crore)	Delivery period as per agreement	Scheduled date of supply as per tender	Date of approval of proof	Actual date of supply
2007-08	Supplier 'A'	2.06	30 days from approval of proof	3.8.2007	8.8.2007	12.8.2007 to 20.8.2007
2008-09	Supplier 'B'	0.93	60 days from approval of proof	4.7.2008	8.8.2008	30.10.2008
	Supplier 'B'	1.01	60 days from approval of proof	15.4.2008	28.8.2008	30.10.2008
	Supplier 'A'	0.31	30 days from approval of proof	15.4.2008	30.6.2008	19.8.2008
	Supplier 'B'	0.17	30 days from approval of proof	16.3.2009	7.4.2009	15.5.2009
	Supplier 'C'	0.01	30 days from approval of proof	14.3.2009	28.3.2009	6.5.2009
2009-10	Supplier 'D'	0.55	30 days from approval of proof	5.7.2009	6.7.2009	14.8.2009