

CHAPTER III PERFORMANCE AUDIT

SOCIAL WELFARE DEPARTMENT

3.1 Integrated Child Development Services

Highlights

The Integrated Child Development Services Scheme launched in 1975 aims at holistic development of children up to six years of age, adolescent girls and pregnant and lactating mothers by providing a package of services. The review revealed serious irregularities like failure to avail Central assistance, diversion of funds, mismanagement, disregard of Central guidelines, improper maintenance of various registers at AWCs, etc., thereby defeating the basic objectives of the scheme. The amount received for General ICDS Project was far in excess of the financial norms fixed by GOI. The entire funds received for the Nutrition Component of Pradhan Manthri Gramodaya Yojana were either diverted or remained unutilised. Medicine kits and pre-school kits were not supplied to AWCs every year as prescribed by GOI.

- **Failure to set up 72 ICDS projects in urban areas on the basis of GOI norms and population figures of 2001 Census resulted in non-availing of annual Central assistance of Rs 22.14 crore.**

(Paragraph 3.1.6.1)

- **Though 6,722 additional AWCs were sanctioned by GOI in November 2005 and February 2007, only 2,745 AWCs were made operational as of March 2007.**

(Paragraph 3.1.6.2)

- **During 2002-07 State Government received Rs 103.17 crore in excess of norms fixed by GOI towards Central assistance for General ICDS Projects.**

(Paragraph 3.1.7.4)

- **Nearly 63 per cent (Rs 78.45 crore) of funds released by GOI during 2002-07 for various ICDS programmes remained unutilised.**

(Paragraph 3.1.7.5)

- **More than half the number of AWCs functioning did not have basic minimum facilities like own buildings, toilets, drinking water and weighing scales. For construction of AWC buildings State Government did not avail World Bank assistance of Rs 15 crore.**

(Paragraphs 3.1.8.1 and 3.1.8.2)

- **The food items chosen for Supplementary Nutrition did not have stipulated nutritive value and also did not take care of the micro nutrient needs of the beneficiaries.**

(Paragraph 3.1.9.4)

- **Internal Audit Wing was not constituted in the Directorate of Social Welfare as of April 2007.**

(Paragraph 3.1.11.5)

3.1.1 Introduction

The Integrated Child Development Services Scheme (ICDS) launched in 1975 aims at holistic development of children up to six years of age, adolescent girls and pregnant and lactating mothers. It provides a package of services comprising supplementary nutrition, immunisation, health check up, referral services, non-formal pre-school education and health and nutrition education. This is a Centrally Sponsored Scheme (CSS) wherein Government of India (GOI) is responsible for the programme planning and infrastructure funding and the State Government for programme implementation and supplementary nutrition. GOI also provides assistance for implementation of Kishori Shakti Yojana (KSY), Nutrition Programme for Adolescent Girls (NPAG), Pradhan Mantri Gramodaya Yojana (PMGY) which are implemented through ICDS.

3.1.2 Organisational set up

The Secretary to Government, Department of Social Welfare is responsible for the overall administration of the scheme in the State. The Director of Social Welfare is the implementing officer and there are ICDS Cells at the State level and the district level. The district level ICDS Cells are headed by Programme Officers and at the Project level by the Child Development Project Officers (CDPOs) with the help of Supervisors. The ICDS packages of services are delivered through Anganwadi Centres (AWCs) by engaging Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs) on honorarium basis.

3.1.3 Audit objectives

The objectives of the Performance Audit were to examine whether:

- Entire eligible population has been covered by the scheme
- Funds were adequate and were optimally used for achieving the objectives of the scheme
- Infrastructural facilities were adequate for effective delivery of the services under the scheme
- Packages of services under the scheme were delivered effectively to the beneficiaries
- Staff deployment were as per requirement
- The system of monitoring and evaluation was in place and effective

3.1.4 Audit criteria

The criteria adopted to achieve the audit objectives were as follows:

- Census data and directions issued by GOI and Supreme Court on universalisation of ICDS services
- Government of India orders releasing funds, monthly progress reports of expenditure, etc
- Guidelines and instructions issued for provision of infrastructure
- Guidelines and instructions issued by GOI for delivering of different services
- Prescribed norms for staffing
- Monitoring mechanism instituted by the Government

3.1.5 Scope of Audit and Audit Methodology

A review on ICDS covering the period 1992-93 to 1998-99 was conducted and included in the Report of the Comptroller and Auditor General of India for the year ended 31 March 1999 (Civil). The Report was discussed by the Committee on Public Accounts and their recommendations were presented to the Legislature in January 2003. The Performance Audit of ICDS covering the period 2002-03 to 2006-07 was conducted between January-May 2007.

Four* districts out of the total 14 districts (25 per cent) were selected for audit using simple random sampling method. Three projects in each selected district and 10 AWCs within each project were also selected for audit using simple random sampling method.

An entry conference was held on 14 February 2007 with the Secretary, Social Welfare Department. Audit scrutinised records maintained in Social Welfare Department in Government Secretariat, Directorate of Social Welfare, ICDS Project Directorate, Four District ICDS Cells, 12 Child Development Project Offices, 120 AWCs and three training centres.

Audit findings

3.1.6 Coverage of population

3.1.6.1 Shortage in the number of ICDS Projects

According to the prescribed norms the Community Development Block in a State should be the unit for sanction of an ICDS project in rural/tribal areas irrespective of the number of villages/ population in it, whereas in urban areas, there should be a project for every one lakh population. Kerala had a population of 318.4 lakh (urban 82.7 lakh and rural 235.7 lakh) as per 2001 Census. There are 152 Community Development Blocks in the State. Based on the norms there should be at least 235 ICDS projects in Kerala against 163 functioning.

Failure of State Government to set up required number of ICDS Projects resulted in non-availing of Central assistance

* Thiruvananthapuram, Kollam, Kottayam and Palakkad

As per GOI norms, Central assistance of Rs 30.75 lakh per annum was available for each project. Failure of the State Government to set up 72 ICDS projects resulted in non-availing of annual Central assistance of Rs 22.14 crore.

3.1.6.2 Sanctioned AWCs not made operational

Only 2,745 AWCs were made operational against 6,722 additional AWCs sanctioned by GOI

GOI directed (July 2005) the State to conduct a micro level survey of habitations, and to send proposals for location specific additional AWCs. No such survey was conducted. Instead the department assessed the total requirement of AWCs in the State based on the 2001 Census figures as 32,115 and reported (October 2005) to GOI to sanction 6,722 additional AWCs in the State. GOI sanctioned (November 2005) 3,258 additional AWCs for the State in the first phase of expansion. Though GOI directed to make the additional AWCs operational by 30 June 2006, State Government issued orders for setting up of 3,132 (out of 3,258) AWCs only in October 2006. At the end of March 2007 only 2,745 AWCs were made operational. The Department stated (July 2007) that 2,884 AWCs had already been started and the delay in setting up remaining AWCs was due to non-identification of land/buildings. During the second phase of expansion, GOI sanctioned (February 2007) 3,464 AWCs. These are yet to be made operational (May 2007). As of March 2007, only 28,138 AWCs were functioning against the 32,115 AWCs sanctioned.

3.1.6.3 Survey Registers defective and incomplete

Anganwadi Survey Registers were not maintained properly

The AWW was required to conduct a household survey of the area, obtain the details of each household and enter it in the AWC Survey Register. This register was to be updated every month based on information collected by the AWW. An intensive revision of the register had to be carried out by conducting a door-to-door survey once in five years.

Audit scrutiny of the Survey Register maintained at the AWCs test checked showed that:

- The register was not maintained properly in any of the AWCs test checked.
- The details gathered at the baseline survey conducted at the starting of the project were not updated regularly.
- Even in the absence of updated data the population figures were reported to the CDPO every month in their Monthly Progress Reports rendering the data reported unreliable. The reports were not consolidated at the District/ State level.
- No door-to-door survey conducted once in five years as prescribed.
- Most of the vital details were not entered in the register in the relevant columns in any of the AWCs test checked. The monthly summary for the entire area was also not seen written.

Thus the basic data essential for proper implementation of the scheme were not available with the Department.

3.1.7 Availability of funds

3.1.7.1 Planning

Wide variation in the statistical data compiled by the Health and Family Welfare Department and Social welfare Department

The State Government was responsible for implementation of different packages under ICDS scheme. Basic data for the scheme were to be available in the registers required to be maintained at AWCs like, AWC Survey Register, Services for Pregnant and Lactating Mothers Register and Mortality Register.

As the registers were found to be defective and incomplete, statistical information on child population, live birth, still birth, infant mortality, maternal mortality, etc., available with the department was unreliable. This is confirmed by the wide variation in the statistical data compiled by Health and Family Welfare and Social Welfare departments as indicated below:-

Particulars	Social Welfare Department		Health Department	
	2004-05	2005-06	2004-05	2005-06
Number of live births	2.85 lakh	2.81 lakh	5.55 lakh	5.70 lakh
Number of still birth	1,811	1,684	3,586	3,435
Infant Mortality Rate/1000 live birth	9	10	12*	14*
Number of Maternal death	95	101	140	172

* Sample Registration System 2004 & 2005

The requirements of funds for each year were not being assessed and no proposals submitted to GOI in any of the years covered by audit. No Annual Action Plan was prepared for implementation of the scheme. Provision for the scheme was made in the budget on adhoc basis leading to excess over provision during the period covered by Audit. Obviously a realistic assessment of requirement of funds was impossible in the absence of authentic reliable data.

3.1.7.2. Pattern of funding

The scheme was financed by GOI and the World Bank except the supplementary nutrition component which was financed out of State funds. There were 163 ICDS projects operating in the State as of March 2007. During 1999-2006, 120 projects were funded by GOI (General ICDS projects) and 43 projects were funded by the World Bank. From 2006-07, all the projects are funded by GOI. Apart from assistance for operational expenses, GOI also provided funds for the following programmes:

- Project 'UDISHA' for training.
- 'KSY' to enhance the nutritional and health status of adolescent girls.
- 'Pradhan Mantri Gramodaya Yojana' (PMGY) to meet enhanced nutritional requirement of children below three years of age belonging to BPL families.

- ‘Nutrition Programme for Adolescent Girls’ (NPAG) to enrich the nutritional status of under-nourished adolescent girls in two districts (Palakkad and Malappuram).
- The Supplementary Nutrition Programme (SNP) to the targeted beneficiaries to be met by the State was transferred to the Local Self Government Institutions (LSGI) from April 1998 to be funded out of their own Plan funds. But from 2005-06, GOI provided assistance for this also to the extent of 50 per cent of financial norms or 50 per cent of expenditure actually incurred.

Thus during the period covered by audit the scheme was implemented with funds from GOI, World Bank, State Government and LSGIs.

3.1.7.3 Central assistance received for ICDS scheme and expenditure incurred

During the five year period 2002-07, State Government received Rs 461.85 crore from GOI towards operational cost of ICDS and KSY Projects, training of ICDS functionaries and Central share of expenditure on SNP.

In the case of General ICDS projects, World Bank assisted projects and training component, the expenditure during 2002-2007 exceeded the assistance received from GOI whereas in the case of KSY and SNP, the expenditure fell short of the Central assistance. The year-wise details of funds received and expenditure incurred are given in **Appendix XXX**.

Unspent balance of Rs 5.07 crore not refunded to GOI

World Bank assisted Phase III project which was operational during 1999-2006 originally envisaged assistance of Rs 152.45 crore. As a result of delay in starting implementation and also considering the trend of expenditure, the assistance was scaled down to Rs 131.16 crore. However, GOI released Rs 136.23 crore during 1999-2006 for the scheme. In September 2006, GOI asked the State Government to refund the unspent balance of Rs 5.07 crore. The refund has not been made as of April 2007.

3.1.7.4 Excess receipt of funds by State Government for General ICDS projects

Excess receipt of Central funds of Rs 103.17 crore with reference to norms

GOI prescribed (April 2002) that annual funds were admissible @ Rs 30.75 lakh per operational ICDS project and @ Rs 1.10 lakh per operational KSY project. GOI also requested (April 2003) all the states to ensure the expenditure ceiling of Rs 11.84 lakh per annum for State Cell and Rs 10 lakh per annum for each District Cell in the light of the Expenditure Finance Committee’s stipulations to impose such a ceiling on expenditure on District cell and State cell during the Tenth Plan Period (2002-2007). Based on this norm, there was excess receipt of Rs 103.17 crore by State Government during 2002-03 to 2006-07 as indicated in the page that follows:

(Rupees in crore)

Year	Central assistance received	Number of				Maximum amount admissible as per norms of GOI	Excess receipt of funds with reference to norms
		General ICDS projects	KSY projects	District Cells	State Cell		
2002-03	58.95	120	13	12	1	38.36	20.59
2003-04	55.27	120	13	12	1	38.36	16.91
2004-05	55.47	120	13	12	1	38.36	17.11
2005-06	57.26	120	-	12	1	38.22	19.04
2006-07	81.16	163	-	14	1	51.64	29.52
Total	308.11	643	39	62	5	204.94	103.17

It was found in audit that the actual expenditure was far in excess of the financial norms fixed by GOI. During 2002-03 to 2006-07, in the 12 CDPOs, test checked, expenditure per project ranged between Rs 39 lakh and Rs 93 lakh except in Attapady project (Rs 26 lakh) during 2002-03, whereas in the State cell the expenditure ranged between Rupees three crore and Rupees one crore during the same period. The State Government did not limit the expenditure to the upper financial ceiling prescribed by GOI while reporting the expenditure to GOI during these years resulting in excess release of Central Funds. The department stated that the enhancement in expenditure was mainly due to increase in the number of AWWs and AWHs and Supervisors proportionate to the opening of new AWCs under a project and enhancement of salary as a result of Pay Revision. However, it was seen that the Department did not take up this matter with GOI for revision of norms.

3.1.7.5 Retention of Central funds by State Government

Nearly 63 per cent of funds released by GOI remained unutilised in the Consolidated Fund of the State Government

Though GOI had released Rs 123.79 crore during 2002-2007 for various programmes meant for children, adolescent girls, pregnant women, etc., nearly 63 per cent (Rs 78.45 crore) of funds remained with the State Government in their Consolidated Fund without utilisation as detailed below:

Kishori Shakti Yojana: Though GOI provided assistance for the scheme from 2002-03 onwards administrative sanction was issued only in August 2006. Consequently the scheme was not implemented during 2002-03 to 2005-06. As of March 2007, only Rs 1.63 crore was spent out of Rs 3.41 crore including Rs 0.72 crore pertaining to the period 2000-01 to 2004-05 received by Government up to 2006-07 and the balance of Rs 1.78 crore remained unutilised with State Government.

Supplementary Nutrition Programme: During 2005-06 and 2006-07, Rs 54.04 crore was received from GOI towards Central share of supplementary nutrition. Out of this only Rs 14.53 crore was transferred to the Local bodies who were meeting the cost of supplementary nutrition and the balance of Rs 39.51 crore was retained by the State Government.

Pradhan Mantri Gramodaya Yojana: During 2000-01 to 2004-05, GOI provided Rs 56.47 crore under PMGY for providing additional nutritional requirements to all BPL children in the age group 0-3 years. Though the scheme was to be implemented by LSGIs, State Government did not transfer the amount to them. Instead, it diverted Rs 27.20 crore during 2002-2005 for

a State scheme 'a cup of milk and handshake' and retained the balance amount of Rs 29.27 crore.

Nutrition Programme for Adolescent Girls: Under the scheme GOI released Rs 9.87 crore during 2002-03 to 2006-07 for supply of free foodgrains to under-nourished adolescent girls. Of this, State Government spent only Rs 1.98 crore and retained the balance of Rs 7.89 crore.

Thus, release of funds by GOI helped the State Government to bolster its finance to the detriment of beneficiaries.

3.1.7.6 Diversion of Central funds

There was an unspent balance of Rs 5.83 crore as of March 2006 with the State Government out of funds released by GOI for 'Nutrition Programme for Adolescent Girls'. State Government formulated (November 2006) a scheme 'NPAG' under State Plan to be implemented in all the 25393 AWCs functioning as of March 2006 at a cost of Rs 5.84 crore. The State scheme targeted Adolescent Girls between 11 and 19 years (against 11 to 18 years under Central Scheme) was identical in name to the Central scheme 'NPAG' being implemented in two districts and aimed to enhance their nutritional and health status. The State scheme provided for distribution of 100 gram of Ragi powder and 20 gram of Jaggery per day to each of the five selected adolescent girls in each AWC. Apparently the State scheme was started in order to utilize the unspent central funds and amounted to diversion of central funds. The expenditure incurred during 2006-07 was Rs 5.45 crore.

3.1.8 Adequacy of infrastructural facilities

3.1.8.1 Deficiencies in infrastructure in AWCs

Each AWC is intended to accommodate 40^a children (3-6 years) during day time for pre-school education for 300 days in a year. For the effective functioning, AWCs require proper space for moving, playing, sleeping, feeding, storage of materials, cooking, etc. Besides provision of drinking water and toilet facilities were also necessary. According to the information furnished by the department, out of 28,138 AWCs functioning in the State, 13,360 (47 per cent) had no building of their own. 16,277 (57 per cent) had no toilet facilities, 23,584 (83 per cent) had no drinking water facilities of their own and 21,573 (76 per cent) had no weighing scales.

3.1.8.2 Failure to fully utilise World Bank allocation

World Bank had allocated Rs 30 crore towards 75 per cent of cost of construction of 3,200 AWCs at a cost of Rs 1.25 lakh per building during 1999-2006. Due to difficulty expressed by the State Government in selecting sites for construction, the target was subsequently (October 2000) reduced to 1,600 AWCs. Government entrusted (June 2000) the construction to LSGIs and Rs 15 crore was transferred to LSGIs. As of March 2007 construction of

^a Indicative norms of GOI

1,560 AWCs was completed. Works on 22 AWCs were in progress and sites were not identified for the remaining 18 AWCs. Despite the fact that nearly half of the AWCs did not have own buildings, the State failed to avail the full allocation of World Bank funds.

3.1.8.3 Slow Progress in construction of AWCs

State Government sanctioned (March 2005) construction of buildings through LSGIs for 1,472 AWCs under State Plan at a cost of Rupees three lakh per building to be shared between State Government and LSGIs in the ratio 75:25. Though Rs 8.97 crore was released to LSGIs up to March 2006, construction of only 461 AWCs had been completed as of March 2007.

World Bank approved (March 2005) construction of 40 AWC buildings, in lieu of the AWCs totally destroyed by tsunami in December 2004, at a cost of Rs 1.25 lakh per building to be shared by World Bank and State Government in the ratio 75:25 and released Rs 30 lakh (80 *per cent* of World Bank share of Rs 37.50 lakh) in March 2005. The construction of these buildings was entrusted to LSGIs and the entire amount released to them. Though GOI directed to complete these buildings by December 2005, only 10 buildings had been completed even as of March 2007.

3.1.9 Package of Services

ICDS provides integrated services comprising (1) supplementary nutrition, (2) immunization, (3) health check-up, (4) referral services, (5) non-formal pre-school education and (6) nutrition and health education. Besides, other schemes like KSY, NPAG and PMGY were also implemented through ICDS network for which separate assistance was made available by GOI.

Supplementary Nutrition

3.1.9.1 Shortfall in coverage of beneficiaries

According to the ICDS scheme, all children in the age group six months to six years, pregnant women, lactating mothers and adolescent girls should be provided with supplementary nutrition. In Kerala, Pre-school children in the age group three to six years attending the AWCs are provided with Noon-feeding and General feeding (at three pm) and other target groups not attending the AWCs were provided with General feeding in the evening. 'Kanji' containing rice and green gram was provided during noon-feeding and 'Uppuma' containing rava/broken wheat and oil was provided during General feeding. The beneficiaries enrolled during 2002-07 ranged between 20 *per cent* and 23 *per cent* of the total population and of the enrolled beneficiaries only 48 to 57 *per cent* received SNP for 15 days or more during the period as indicated in the page that follows:

Year	Total population (children 6 months to 6 years, pregnant women, lactating mothers & adolescent girls)	Total beneficiaries enrolled (in lakh)	Number of beneficiaries who received SNP for 15 days or more (in lakh)	Percentage of beneficiaries enrolled to total population	Percentage of beneficiaries who received SNP to the total beneficiaries enrolled
	(Population in lakh)				
2002-03	102.79	20.60	11.62	20.00	56.41
2003-04	105.34	24.35	13.89	23.12	57.04
2004-05	108.19	24.92	11.88	23.03	47.67
2005-06	109.84	23.03	12.58	20.97	54.62
2006-07	111.01	24.56	13.81	22.12	56.23

According to the indicative norms fixed by GOI (1982) each AWC was supposed to cater to an average of 100 beneficiaries*. A test check of 120 AWCs revealed that none of the AWCs except one had the required number of beneficiaries. The number of beneficiaries was less than 50 in 87 AWCs of which 17 AWCs had less than 30 beneficiaries. The Department claimed that the shortfall in attendance was mainly due to distance of AWCs and strict implementation of spot feeding. But audit scrutiny revealed that most of the AWCs lacked sufficient infrastructure facilities to attract the beneficiaries.

3.1.9.2 Coverage of different categories of beneficiaries

The details of coverage of different categories of beneficiaries under SNP during 2006-07 as furnished by the department were as under:-

Type of beneficiary	Total number (in lakh)	Total eligible (in lakh)	Total enrolled (in lakh)	Number of beneficiaries provided with SNP for more than 15 days in a month (in lakh)	Percentage of beneficiaries received SNP for more than 15 days in a month to the total eligible	Percentage of beneficiaries received SNP for more than 15 days in a month to the total enrolled
Children 6m – 3 years	18.45	7.25	6.58	4.17	57.52	63.37
Children 3-6 years	17.24	6.89	6.54	5.83	84.62	89.14
Nursing mothers & Pregnant women	7.96	2.65	2.50	1.68	63.39	67.20
Adolescent Girls	67.36	12.98	8.94	2.13	16.41	23.83
Total	111.01	29.77	24.56	13.81	46.39	56.23

All eligible beneficiaries were not enrolled and SNP provided only to 46 per cent of the eligible population

Only 27 per cent of the targeted population was identified as eligible for SNP and the SNP was provided to 46 per cent of the eligible population. It was also found that all the eligible beneficiaries were not enrolled, defeating the purpose of universalisation of the scheme.

* Children 6 months to 3 years:40, Children 3 years to 6 years: 40, Pregnant and Lactating women: 20

3.1.9.3 Shortage in the number of feeding days

During 2002-03 to 2006-07, the number of feeding days reported by the department ranged from 288 to 293 days as against the stipulated norm of 300 days by GOI. However, in the test checked AWCs[@], the number of feeding days during 2002-07 was less than 200 days in 18 AWCs, 201 to 250 days in 86 AWCs, 251 to 275 days in 234 AWCs and 276 to 293 days in 262 AWCs.

There was no feeding for 11 days to 25 days in 3 out of 10 AWCs in Pattambi Project and 5 out of 10 AWCs in Attappadi Project.

3.1.9.4 Food items chosen did not provide stipulated nutritional value

Supplementary feeding attempts to address the nutritional deficiency in food served at home. The nutritional norms and cost norms prescribed for supplementary feeding under ICDS scheme were as under:

Type of beneficiary	Calories (K cal)	Protein (g)
Children 0-3 years	300	8-10
Children 3-6 years	300	8-10
Severely malnourished children (on medical advice after health check-up)	Double the above	
Pregnant Women and Lactating Mothers	500	20-25

The food items chosen did not have stipulated nutritive value

The LSGIs were authorized to plan and implement their own items for SNP based on local needs without affecting the nutritive value. Uppuma (50 to 60 gram of Rava/ broken wheat and five gram of oil) was the most widely distributed food in the General feeding attended by all the beneficiaries. Rice and pulse (50 to 60 gram of rice and 15 gram of green gram) was the common item during Noon-feeding attended only by the pre-school children. The nutritive value of foods chosen for Noon-feeding[♦] worked out to 258 calories and 7.4 gram of protein and that chosen for General feeding[♥] worked out to 254 calories and 6.2 gram of protein. Only in the case of pre-school children (3-6 years) who got two feedings, the nutritive value was satisfied to the extent prescribed by GOI.

In order to ensure that Supplementary Nutrition provided through ICDS takes care of the micronutrient needs of the beneficiaries, GOI directed (January 2006) to provide 50 per cent of Recommended Dietary Allowance (RDA) through 80 gram of supplementary food to different target groups with the help of vitamin-mineral premix. It was observed in audit that no action was taken to provide the different micronutrients through 80 gram of ready to eat energy food / raw food material as prescribed by GOI.

[@] 600 AWCs = 120 AWCs x 5 years.

♦ Rice (60 gram) = $346/100 \times 60 = 207.6$ calories and $6.4/100 \times 60 = 3.8$ gram of protein
 Green gram (15 gram) = $334/100 \times 15 = 50.1$ calories and $24/100 \times 15 = 3.6$ gram of protein
257.7 calories 7.4 gram of protein

♥ Broken Wheat/ Rava (60 gram) = $348/100 \times 60 = 208.8$ calories and $10.4/100 \times 60 = 6.2$ gram of protein
 Oil (5 gram) = $900/100 \times 5 = 45.0$ calories
253.8 calories 6.2 gram of protein

Source: Hand book for AWWs and AWHs

Health related activities

3.1.9.5 Non-maintenance of health care records

Immunisation, health check up, referral services and treatment of minor ailments were the health related services of ICDS. The guidelines prescribe that all the children below 6 years of age in the project areas were to be immunised against diphtheria, whooping cough, tetanus, polio, tuberculosis and measles. Audit scrutiny in test checked AWCs revealed -

- Immunisation Register did not exhibit the complete data on number of children in the AWC area, date of birth, dates of vaccination, etc.
- Referral cards were not issued for the malnourished children referred for better treatment.
- Health check-up includes ante-natal care of expectant mothers, post-natal care of nursing mothers and care of the newborn and children under six years of age. No health cards, ante-natal or post-natal cards were maintained or issued to the mothers by the AWCs

3.1.9.6 Deficiencies in Health Care

Health checkups are to be organised at regular intervals by the Medical Officer (MO), Auxiliary Nurse Midwife (ANM), Junior Public Health Nurse (JPHN), etc. It was observed that the number of visits by the Medical Officer to AWCs was very low. During the period 2002-2007 the MO did not visit 28 AWCs out of the 120 AWCs test checked. The ANM and JPHN used to visit the AWC during immunisation only.

Only 6,565 AWCs were provided with baby and adult weighing scales

Growth monitoring activities were hampered by non-availability of weighing machines. Only 6,565 (out of 28,138) AWCs were provided with baby and adult weighing scales by the department. In AWCs under four out of 12 projects test checked, there was no adult weighing scale and in AWCs under one project there was no baby weighing scale. Out of a total 173.72 lakh children in the age group of six months to six years, only 82.24 lakh children (47 per cent) were weighed during 2002-07.

Rs 3.89 crore being the cost of 64,782 medicine kits remained unutilised due to non-supply

ICDS guidelines envisage supply of medicine kits worth Rs 600 to every AWC in every year. Government of India reiterated in March 2000 that the medicine kits should be made available to all AWCs every year. The Central allocation for ICDS included funds for medicine kits also. Audit scrutiny revealed that during the five year period (2002-2007) the department purchased and supplied 12,119 medicine kits to AWCs under General ICDS project. As per the package prescribed by GOI, 64,782 more medicine kits costing Rs 3.89 crore were required to be supplied to the AWCs during the period. But failure of the State Government to supply the kits resulted in non-utilisation of the funds meant for this purpose.

Incidentally, it was noticed in Audit that the paracetamol tablets and absorbent cotton included in the 12,119 medicine kits purchased from a Government company during 2002-03 were of substandard quality. The Department stated (July 2007) that the Company has been asked to replace the substandard items.

3.1.9.7 *Non-formal Pre-school education*

Children between three to six years of age were to be imparted non-formal pre-school education in AWCs so as to develop learning attitudes, values for emotional and mental preparation before primary education is imparted to them in regular schools. As per the data furnished by the department, 35.18 lakh children in the age group of three to six years were enrolled during 2002-2007 in AWCs for pre-school education of which only 27.71 lakh children attended the pre-school during the period. Thus 7.47 lakh children (21 *per cent*) remained out of pre-school education. Absence of trained teachers, lack of uniform curriculum, shortage of learning materials, non availability of playing equipment, etc., were some of the factors responsible for the shortfall in attendance. The Department stated (July 2007) that specific curriculum has been developed for pre-school education and AWWs would be trained in the curriculum.

Rs 2.60 crore being the cost of 51,905 pre-school kits remained unutilised due to non-procurement

During the five year period (2002-2007), the Department purchased and supplied 24,996 pre-school kits to AWCs under General ICDS projects. As per the package of GOI, 51,905 more pre-school kits costing Rs 2.60 crore were to be supplied to the AWCs during the period. Failure of State Government to supply the kits resulted in non-utilisation of funds meant for this purpose.

Other schemes implemented through ICDS

3.1.9.8 *Kishori Shakti Yojana*

GOI launched (2000-01) the ‘Kishori Shakti Yojana’ for improving the nutritional and health status of girls in the age group of 11-18 years and also to promote awareness of health, hygiene, nutrition, family welfare, home management and child care in 13 ICDS blocks which was subsequently extended to all the 163 ICDS blocks from 2005-06. Though the State Government received funds for KSY from GOI regularly from 2002-03 onwards, it allotted funds to CDPOs for this scheme only in September 2006 (Rs 1.19 crore), February 2007 (Rs 0.22 crore) and March 2007 (Rs 0.31 crore); out of which CDPOs spent Rs 1.63 crore.

The GOI’s revised guidelines issued in September 2000 required the State to frame a plan of action and send it to GOI. The State took seven years in framing this plan, which was sent to GOI in February 2007. Even though considerable time was taken in sending the plan, an option adopted by the State (regarding supply of iron, folic acid and de-worming tablets) was not included in the plan.

3.1.9.9 *Pradhan Mantri Gramodaya Yojana*

In July 2004, State Government decided to implement ‘Take Home Ration Strategy’[#] (THRS) as a pilot scheme in two sets of three ICDS blocks – one

[#] A solid food mix packed in powdered dry form to be taken home, preserved and administered to the child by adding boiled milk or water

each in Thiruvananthapuram, Ernakulam and Kozhikode for two months with funds from LSGIs and from PMGY, which was extended to all the 163 ICDS blocks from February 2006. As the Government could not appoint a supplier for the food stuff for over two years, the actual distribution began only in March 2007.

3.1.9.10 Nutrition Programme for Adolescent Girls

The GOI scheme launched in 2002-03 involved supply of six kg of food grains (rice) free of cost to undernourished adolescent girls, pregnant women and lactating mothers for three consecutive months in two selected districts. The scheme was not implemented in 2004-05 by Government of India. But from 2005-06, Government of India continued to implement the scheme by restricting the beneficiaries to Adolescent Girls only.

Audit scrutiny of implementation of the scheme revealed:-

- Though GOI released Rs 24.99 lakh specifically for procurement of adult weighing machines in July 2002 for monitoring weight of beneficiaries, State Government procured it only in 2006-07.
- The rice allotted for January 2003 to March 2003 (2,400 MTs) for the two districts (Palakkad and Malappuram) was not lifted because the implementation of the scheme was started only from 2003-04.
- In Palakkad district out of 670 MT of rice lifted during 2003-04, 43 MT of rice (Cost: Rs 2.46 lakh) was left with authorised wholesale dealers and ration shops without distribution.
- Though funds for 2005-06 were released by GOI in July 2005, administrative sanction was issued only in February 2006 and the declaration of State Assembly Elections resulted in non-implementation of the scheme.
- During 2006-07, State Government reduced the quota of rice per beneficiary to 3.95 kg from six kg due to reduction in allocation by GOI in view of issue of administrative sanction for its implementation by State Government in November 2006 and the distribution was confined only to March 2007.

Thus the implementation of NPAG Scheme was a failure even though funds were made available in advance by Government of India. Due to the administrative lethargy the beneficiaries were deprived of the free food grains they were entitled to receive under Central scheme.

3.1.10 Deployment of staff

3.1.10.1 Kerala AWWs and AWHs Welfare Fund

State Government constituted (April 1992) the Kerala AWWs and AWHs Welfare Fund (Fund) for giving financial assistance to the members of the Fund for medical treatment, construction of houses, education of children, marriage of daughters, etc. All the AWWs and AWHs (except those appointed on temporary basis or those who were already members of any other

Welfare Fund under Central and State Governments or any Semi-Government Institutions) were to be enrolled as members of the Fund. The monthly subscription of each AWW and AWH to the Fund was Rs 20 and Rs 10 respectively which was revised to Rs 30 and Rs 15 respectively from 1 April 2003. The State Government was to contribute to the Fund 10 *per cent* (100 *per cent* from 1 April 2003) of the amount contributed by the members during the year. As of December 2006, against 51,713 AWWs and AWHs in position, 43,261 AWWs and AWHs were enrolled as members of the Fund. It was noticed in audit that:

The administrative expenditure was Rs 2.10 crore whereas benefits to the members amounted to only Rs 38.72 lakh

- Out of a total contribution of Rs 5.14 crore payable by State Government for the period up to 2006-07 only Rs 3.48 crore was paid.
- According to the guidelines, administrative expenditure[#] not exceeding 10 *per cent* of the contribution by members can be incurred from the Fund. During 1993-94 to 2005-06, the administrative expenditure incurred (Rs 2.10 crore) exceeded the prescribed limit by Rs 1.30 crore.
- The entire administrative expenditure was met from the Consolidated Fund of the State though the admissible expenditure of Rs 80.30 lakh was debit to the Fund.
- The benefits paid to members of the Fund during 1993-94 to 2005-06 were only Rs 38.72 lakh for which an administrative expenditure of Rs 2.10 crore was incurred.

3.1.10.2 Over aged AWWs and AWHs

AWCs were managed by AWWs and AWHs who are responsible for delivery of the services at field level. Apart from activities related to supplementary nutrition and pre-school education they had to attend to other ICDS activities such as growth promotion, health and nutrition, home visits, referral services and meetings with the community also. They were selected by a District Level Committee with District Collector as Chairman. Matriculate female candidates in the age group 18-44 years are eligible for selection as AWW. The AWH should have the minimum knowledge to read and write. It was observed that 747 AWWs (out of 25,921) and 1,161 AWHs (out of 25,792) were above the age of 60 years. The one-man commission in its Report submitted to Government in November 2004 recommended, *inter alia*, to fix the retirement age of AWWs and AWHs as 60 years. However, Government has not acted on the recommendations as of July 2007.

As the competency of the AWW is a major factor contributing to the effectiveness of ICDS services it is necessary to prescribe proper educational qualification for them and fix an upper age limit for their services.

3.1.10.3 Non-Implementation of GOI directions

GOI directions issued from time to time have not been implemented in the State in the following cases:-

[#] Cost of separate staff (25 posts) created for the administration of the fund. (Chief Executive Officer:1, Accountants :15, LD Clerk:7, Typist:1 and Peon :1)

- GOI requested (October 2006) the State Government to separate the ICDS cadre and place them under the Department concerned with a view to developing a cadre of professionals in the area of child/ women development welfare and to allow greater control and supervision over the field staff. However, State Government had not created any separate cadre for ICDS (May 2007).
- With a view to improving involvement and ensuring greater interaction between CDPO/ ACDPO and beneficiaries, GOI directed (October 1993) all State Governments that the posts of CDPOs/ACDPOs should be reserved for women candidates on all future appointments. But State Government implemented the orders only in December 2002 after a lapse of nine years. In the meantime, 38 male personnel were appointed as CDPOs despite availability of women candidates.
- Government of India directed (May 1986) the State Governments that the recruitment rules should be framed or revised to provide 75 per cent of the posts of CDPOs by promotion from female ICDS supervisors and the remaining 25 per cent by direct recruitment. The State Government did not implement the directions. Out of the 163 CDPOs working in the State 57 CDPOs were promoted from ministerial cadres of Social Welfare Department, the Department which implement ICDS, 73 were on promotion from supervisors and 33 were direct recruits.

3.1.10.4 Non-closure of State Project Management Unit

GOI sanctioned a State Project Management Unit (SPMU) with staff strength of 38 persons for implementation of World Bank assisted ICDS Project Phase III in the State. As the Project came to a close on 31 March 2006, sanction for continuation of the Unit up to 31 July 2006 was conveyed by GOI (April 2006). However, it was observed that the 23 staff of SPMU was still continuing (March 2007). The expenditure towards pay and allowances of the staff beyond 31 July 2006 was approximately Rs16.23 lakh.

3.1.11 Monitoring and Evaluation

3.1.11.1 MIS developed at a cost of Rs 94.25 lakh not yet put to use

The department developed a Management Information System (MIS) at a cost of Rs 94.25 lakh out of Rs 1.5 crore allocated under World Bank assisted ICDS Phase III project. Hardware and software were procured and supplied to all District and Block level (CDPO) offices during 2002-2006. It was observed in Audit that the system was not put to use in any of the District/ Block offices due to non-availability of telephone/ electricity connections and lack of trained personnel.

3.1.11.2 Shortage of visit of AWCs by Programme Officers/ CDPOs and Supervisors

According to the guidelines issued by State ICDS Cell, the Programme Officer and CDPOs were to visit a minimum of 30 AWCs in a month (360 in a year). The supervisor had to visit all the AWCs and 20 houses under them in a

month. Out of the 120 AWCs test checked by Audit the Programme Officer had never visited 110 AWCs and the CDPOs had never visited 14 AWCs during 2002-2007. Visits by the supervisors during the five year period were below the target of 60 visits in 109 AWCs out of the 120 AWCs test checked.

On this being pointed out it was stated that the Supervisors/ CDPOs were entrusted with the implementation of various programmes aimed at Women and Child Welfare by the LSGIs and their presence at LSGIs on almost all days was necessary. This contributed to the low supervision visits to AWCs, resulting in tardy implementation of various schemes of ICDS.

3.1.11.3 Non-convening of Monitoring Committees

To monitor and review the implementation of ICDS programmes, State Government constituted (September 2000) State/ District/ Block/ Municipal/ Corporation/ Panchayat level co-ordination committees. It was observed that State Level High Power Committee with Chief Secretary as the Chairman had never met during the period covered by audit, though it was required to meet once in every year. Though the District Level Committee with the District Panchayat President as chairman was to meet once in six months, two district committees met only once, six committees twice and the rest thrice during the five year period. The Municipal/ Corporation/ Panchayat level committees were also not meeting as envisaged. The non-convening of these committees resulted in poor monitoring of the ICDS packages.

3.1.11.4 Frequent change of incumbent to the post of Director

The Director of Social Welfare was in charge of implementation of ICDS. It was observed that the incumbent to the post was changed 11 times during 2002-07. The average period that an incumbent discharge the functions of ICDS was six months. The frequent change was undesirable for effective functioning of the scheme.

3.1.11.5 Internal Audit

In order to strengthen Internal Audit System in the State, Government issued (December 2003) circular instructions to all Heads of Departments to constitute Internal Audit Wings within one month in their departments where there was no Internal Audit Wing and to report compliance before 29 February 2004. However, no Internal Audit Wing was constituted in the Directorate of Social Welfare as of April 2007.

3.1.12 Conclusion

The number of ICDS projects functioning in the State was much below the number that could be set up as per GOI norms. Even the sanctioned number of AWCs was not made operational. Funds received by State Government for General ICDS projects were in excess of the amount eligible as per GOI norms. Nearly 63 *per cent* of GOI funds received for various ICDS programmes were retained in the Consolidated Fund without utilisation for the intended purpose. Infrastructure facilities like building, safe drinking water,

toilets, etc., were not adequate in the AWCs. Only 50 per cent of World Bank funds for construction of buildings for AWCs were utilised. Though funds were allocated by GOI for medicine kits and pre-school kits to the AWCs, they were not supplied annually as required which resulted in non-utilisation of funds meant for the purpose. Only 27 per cent of the total population was identified as eligible for enrolment during 2006-07 by the State Government; the actual enrolment was still less. SNP was provided only to 46 per cent of the enrolled. The items chosen for SNP did not have calorific value, protein content and micronutrients as prescribed by GOI. Various registers maintained at AWCs did not contain vital information for proper planning and implementation of the scheme. Matching contribution to the Anganwadi Workers and Helpers Welfare Fund has not been fully met by Government. Instructions issued in 1986 by GOI for creation of a separate cadre for ICDS and framing of recruitment rules for CDPOs were not adhered to. Effective monitoring of the scheme at various levels was absent. Thus the scheme implemented in the State needs strengthening for achieving the objectives of providing basic services in critical areas.

3.1.13 Recommendations

- Administrative delays in implementing ancillary schemes like PMGY, NPAG, KSY, etc., should be avoided and steps taken to utilise the GOI grant in time.
- Medicine kits and pre-school kits should be provided to all the AWCs every year.
- Efforts should be made to provide infrastructure facilities like building, safe drinking water, toilets, etc., in all AWCs to ensure healthy environment to the beneficiaries.
- Action should be taken to ensure that the Registers maintained in AWCs contained all the vital information and are periodically updated.
- Formation of separate cadre for ICDS and framing of recruitment rules as directed by GOI should be considered.
- Effective Internal Audit System should be set up and monitoring at District level and State level should be strengthened.
- Inspection of AWCs by Programme Officers/CDPOs/Supervisors as prescribed should be ensured for effective implementation of the scheme.

The above points were referred to Government in June 2007; reply has not been received (September 2007).

HOME DEPARTMENT
3.2 Management of Prisons***Highlights***

Prisons and Jails in the State were established under the Prisons Act 1894 and the Travancore-Cochin Prisons Act, 1950, and are governed by the Kerala Prison Rules 1958 and the Kerala Sub Jail Rules 1959, framed thereunder. Shortfall in expenditure in the department from 2002-03 onwards was attributed to non-issue/late issue of administrative sanction of plan proposals. Appointment of untrained/temporary warders results in deficient quality of service and compromised jail security. Strength of warder establishment was not in conformity with the authorized capacity of Jails. There was no unified enactment for prison administration in the State. Some of the other important points are noted below:

Poor utilisation of funds under Centrally Sponsored Scheme resulted in non-release of central assistance of Rs 14.75 crore during 2004-05 to 2006-07.

(Paragraph 3.2.6.1)

Prisons/Jails in the State were ill-equipped to detect threats to security as there was lack of gadgets and facilities required for security, surveillance and search. In Central Prison, Thiruvananthapuram, 30 cases of seizure of prohibited articles were registered.

(Paragraph 3.2.7.1)

Prison population far exceeded the authorized capacity.

(Paragraph 3.2.8.1)

Medical facilities provided in the prisons/jails were inadequate.

(Paragraph 3.2.8.3)

There was wastage of cooked food in Prisons/Jails.

(Paragraph 3.2.8.4)

Board of Visitors, envisaged for ensuring proper management of prisons, was not constituted in any of the Prisons/Jails.

(Paragraph 3.2.10.3)

3.2.1 Introduction

Prisons and Jails in the State were established under the Prisons Act, 1894, and the Travancore-Cochin Prisons Act, 1950, and are governed by the Kerala Prison Rules, 1958, and the Kerala Sub Jail Rules, 1959, framed thereunder.

Guidelines for management of prisons are contained in Kerala Prison Manual, 1981 issued by Government of Kerala. Model Prison Manual, 2003, formulated by Bureau of Police Research and Development (BPR&D), under Government of India also contains guidelines for streamlining prison administration and for bringing prison reforms in tune with the current penological and criminological thinking. Apart from providing custodial care to offenders of law and thus isolating them from the community at large, the Prison Department also undertakes programmes aimed at reforming and rehabilitating them as part of social reclamation.

Central Prisons and Women's prison are generally intended for lodging convicts and Open Prison for lodging well behaved male convicts while Jails are intended for the custody of remand/undertrial (UT) prisoners and short term convicts [District Jails (up to six months), Special Sub Jails (up to three months) and Sub Jails (up to one month)].

3.2.2 Organisational set up

The Director General of Police (Prisons) (DGP Prisons) under the Home Department of the State Government heads the Department. He is assisted by an Inspector General of Police (Prisons) (IGP Prisons) and three Zonal Deputy Inspectors General of Prisons (DIGs). Each Prison/Jail is headed by a Superintendent who is assisted by Deputy Superintendents, Head Warders and Warders.

The State has three Central Prisons, one Open Prison, one Women's Prison, three District Jails, five Special Sub Jails and 26 Sub Jails. A Borstal School has been set up for correction, reformation and prevention of crime among adolescent offenders. The Department is in the process of operationalizing two newly constructed Sub Jails at Chittoor (Palakkad District) and Hosdurg (Kasargode District) and an Open Prison at Cheemeni (Kasargode District).

3.2.3 Scope and Methodology of audit

Mention was made in the Report of the Comptroller and Auditor General of India for the year ended 31 March 1995 regarding functioning of the Jail Department. The Report was discussed by the Committee on Public Accounts (2001-04) and their recommendations were issued in 2001.

A performance audit was conducted during February 2007 to May 2007, covering the period 2002-03 to 2006-07. The entry conference was held in March 2007 with the Principal Secretary to Government (Home) and his team during which audit objectives and criteria were explained to them. Apart from Home Department, Prison Headquarters, Zonal Offices (two out of three), State Institute of Correctional Administration (SICA) all Prisons/Jail units[#] in

[#]Central Prisons (Thiruvananthapuram and Viiyur), Open Prison, Nettukaltheri, Women's Prison, Neyyattinkara, Special Sub Jails (Kottayam and Viiyur), Sub Jails (Attingal, Meenachil, Ponkunnam, Ernakulam, Aluva, Mattancherry, Chavakkad and Irinjalakuda)

four[@] out of 14 districts selected using statistical sampling methods were also visited in connection with the audit. Audit findings and recommendations were discussed with the Additional Chief Secretary (Home) during exit conference (June 2007).

The audit methodology included scrutiny of records in units visited, collection of information through questionnaires (including units not selected for detailed scrutiny) issue of audit enquiries and discussion with Prison/Jail officials during visit of units.

3.2.4 Audit objectives

The broad audit objectives were to assess the overall effectiveness of Prison Administration with reference to relevant Acts and Rules. The specific audit objectives were to ascertain whether

- Financial resources were adequate and funds were utilised effectively and efficiently
- Custody and detention of the prisoners was done in a safe and secure manner
- Manpower provided for custodial care was adequate and staff properly trained
- Prisoners were provided with the facilities and privileges envisaged in the Rules
- Effective action was taken for reformation and rehabilitation of the prisoners
- Internal control system existing in the department was adequate and functioned effectively

3.2.5 Audit criteria

- Benchmarks/norms prescribed in the Prisons Act, 1894, the Travancore-Cochin Prisons Act, 1950, the Kerala Prison Rules, 1958, the Kerala Sub Jail Rules, 1959 and Kerala Prison Manual 1981
- Model Prison Manual, 2003 circulated by Ministry of Home Affairs, Government of India
- Approved Action Plans for modernization of Prison Administration
- Recommendations of Jail Reforms Committee, Legislature Committee etc.

Audit findings

3.2.6 Financial Management

The year-wise details of budget provision, expenditure of the department and number of prisoners from 2002-03 to 2006-07 are tabulated in the page that follows:

[@] Thiruvananthapuram, Kottayam, Ernakulam and Thrissur

(Rupees in crore)

Year	Budget Provision	Expenditure	Shortfall in expenditure	Number of prisoners
2002-03	26.14	23.73	2.41	6,553
2003-04	38.90	29.34	9.56	7,659
2004-05	40.12	27.59	12.53	6,956
2005-06	34.10	23.91	10.19	6,662
2006-07	39.07	29.48	9.59	6,315
Total	178.33	134.05	44.28	34,145

Under-utilisation of Rs 44.28 crore during 2002-07 period

The total expenditure included Rs 21.30 crore deposited with the PWD for Civil Works which was classified under 'Revenue'. The huge shortfall in expenditure was due to the following reasons:-

- Out of Rs 11 crore provided in the budget under State Plan Scheme for Modernisation of Prisons during 2003-04 to 2005-06, only Rs 2.23 crore was utilized.
- Out of Rs 1.32 crore provided for welfare of prisoners under State Plan Scheme during 2002-03 to 2006-07, only Rs 0.39 crore was utilized.
- Budget provision for 2005-06 and 2006-07 included Rs 6.55 crore for Modernisation of Prison Administration in anticipation of Central assistance which was not released.

The department attributed the shortfall to non-issue/late-issue of administrative sanction of plan proposals. Issue of administrative sanction during the fag end of the financial year prevented the department from implementing the schemes due to lack of time to adhere to prescribed Rules and procedures. Low expenditure on welfare schemes indicated lack of concern for the welfare of prisoners.

3.2.6.1 Non release of central assistance of Rs 14.75 crore

Government of India (GOI) allocated (November 2002) Rs 32.76 crore for Modernisation of Prison Administration in the State for a period of five years from 2002-03 onwards on cost sharing basis in the ratio of 75:25 between Central and State Governments (Central share Rs 24.57 crore and State share Rs 8.19 crore).

Central assistance amounting to Rs 14.75 crore were not released as the amount released in 2002-03 was not fully utilised

Though GOI had approved annual plans for 2002-03 and 2003-04 and released their share of Rs 4.91 crore for each of these years, the State Government delayed issue of administrative sanction. The GOI funds together with state share for 2002-03 (Rs 6.55 crore) and 2003-04 (Rs 6.42 crore) were released to State Public Works Department (PWD) in January-February 2004 and September 2004 respectively. As the implementing agency failed to utilize the amount released for 2002-03 in full, GOI did not approve annual plan for 2004-05 and hence the State Government did not forward the annual plans for 2005-06 and 2006-07 to Government of India. Consequently Central assistance of Rs 14.75 crore for the years 2004-05 to 2006-07 was not released. The delays in issue of administrative sanction, release of funds to PWD and in arranging works by PWD were the main reasons for the non-

utilisation of full amount of plan funds released. Non-release of Central assistance has resulted in slowing down the pace of modernisation.

3.2.6.2 Funds lying idle with Public Works Department

PWD was provided (March 1998 to March 2006) approximately Rs 1.05 crore for 18 works which have not been commenced as of May 2007 as detailed below:

Sl. No.	Name of works	Amount deposited with PWD (Rs in lakh)	Month of deposit
1.	Construction of Kitchen Block at District Jail, Kozhikode	5.55	March 1998
2.	Construction of New Block at District Jail, Kollam	25.00	February 2004
3.	Reconstruction of Compound Wall at Central Prison, Viyur	23.00	January 2004
4.	Construction of upper type quarters at Central Prison, Thiruvananthapuram	12.00	September 2004
5.	Other minor works (14 numbers)	39.40	March 1998 to March 2006
Total		104.95	

Cancellation of works due to non-clearance of trees at site (Sl. No. 3), inadequate deposit amount to cover the contract amount (two items in Sl. No. 5) were the reasons for non-commencement in respect of works in units visited. Reasons in respect of other cases are awaited (September 2007). Further, Rs 12.09 lakh which is the unspent balance remaining after construction of Sub Jail, Hosdurg has not been refunded so far (March 2007) by the PWD. The work was completed in December 2001 and the final bill was paid in June 2003.

3.2.7 Security, Custody and detention of prisoners

Custody being the basic function of prisons, appropriate security arrangements are to be made in accordance with the need in different types of Prisons/Jails. An appraisal of the security procedure in the Prisons/Jails revealed that many of the procedures and practices being followed were out of date and not in tune with the current security and surveillance needs.

3.2.7.1 Lack of modern equipments

Audit scrutiny revealed lack of gadgets and equipments required for security, surveillance and search as given below:

- Facilities for X-ray screening, metal detection, explosive detection, mobile phone jamming etc. were not available even in Central Prisons to help prevent entry of prohibited articles into the prisons. In Central Prison, Thiruvananthapuram, 30 cases of seizure of ganja/opium/cash were registered during 2004-06.

There was lack of gadgets and equipments required for security, surveillance and search in the Prisons/Jails in the State

- Model Prison Manual circulated by the Ministry of Home Affairs envisages installation of closed circuit television system and other electronic gadgets to effectively monitor and to maintain a close watch for any breach of security inside the Prison. These systems have not been established even in Central Prisons.
- Jail Manual prescribes issue of Pistols/Revolver for officers of the rank of Jailor and above and Muskets .410 for Jail Warders with prescribed rounds of ammunition. It was found that the armoury of Central Prisons consisted of antiquated Muskets .410 issued to the Prisons more than 50 years back.
- There was no trained Armourer in the Department to periodically check and confirm the serviceability of weapons.
- Ammunition supplied to Central Prison, Viyyur was taken back by Prison Headquarters for training purpose in SICA. Ammunition supplied to Sub Jails were also taken back even though they were in possession of two Rifles each.

3.2.7.2 Inadequate Watch Tower

Six out of 17 blocks only were covered by the central observation tower in Central prison

Model Prison Manual stipulates construction of Watch Tower in high security prisons and provision of Search light and Binoculars for sentries posted on the tower. Audit scrutiny revealed that the central observation tower at Central Prison, Thiruvananthapuram could cover only six blocks (A to F) around it out of 17 blocks in the Prison. The Search lights on the Tower were not functioning and Binoculars were not supplied to guard staff. Thus the available watch tower did not serve the intended purpose.

3.2.7.3 Insufficient height for prison walls

Field visits by Audit revealed that certain portion of perimeter walls of some of the jails eg. Special Sub Jail, Kottayam, Sub Jails, Ernakulam, Irinjalakuda and Chavakkad did not have the required height of six Metres. In some stretches the height was 2.6 Metres only causing serious threat to the safe custody of Prisoners. Escape of prisoners (one each) from Sub Jail, Irinjalakuda (December 2002) and Sub Jail, Chavakkad (January 2006) could be attributed to lack of adequate height of walls.

3.2.7.4 Proper rooms for meeting visitors not provided

In the Sub jails inspected by audit, separate interview rooms were not provided (except Sub Jails – Ernakulam, Irinjalakuda and Chavakkad) for the prisoners to meet their visitors. Absence of proper interview rooms having screens or wire mesh to physically separate prisoners and visitors can facilitate passage or exchange of prohibited articles between visitors and prisoners. Instances of seizure of prohibited articles were reported by the Superintendents of Special Sub Jail, Alappuzha and Sub Jail, Alathur.

There was lack of modern communication systems in the prisons

3.2.7.5 Inadequate Communication Systems

Telephones are the only means of communication available in the Prisons and Jails in the State. Lack of communication systems in Central Prisons and Open Prison by way of intercom and Walkie-talkies for communicating from Ward to Ward: Ward to Main gate: Ward to Central tower and Control room is a serious handicap to security.

3.2.7.6 Lack of proper record of items entering the Jails

In the test checked Prisons/Jails except Special Sub Jail, Viyyur, Sub Jails – Aluva, Mattancherry and Moovattupuzha, details of diet and other articles passing in and out were not verified and recorded in the Gate Register as required under the Kerala Prison Rules. Non adherence to this procedure is a breach of security and prohibited articles can be smuggled into jails.

3.2.7.7 Lack of fool proof system for identification of prisoners

Kerala Prison Rules (Rule 238) stipulates that the Register Number (Convict Number) of convicts shall be marked on their bedding and clothing, this was not done. The only means of identification of prisoners now in vogue are the personal marks of identification recorded in the Convict/Under Trial Register and the Register Number allotted to each prisoner on admission.

Modern scientific identification methods have not been adopted

Modern scientific identification method like biometric finger identification system has not been adopted for Prisons in the State. In the absence of modern scientific mode of identification, wrong identification or mistaken identity could not be ruled out and recapturing of escaped prisoners would be rendered difficult. In one case of mistaken identity, dead body of one prisoner of Central Prison, Thiruvananthapuram who died while undergoing treatment at Medical College, Thiruvananthapuram, was handed over to the relatives of another prisoner lodged in the Prison at that time (July 2005).

3.2.7.8 Non classification and non segregation of prisoners

The Kerala Prisons Rules and the Kerala Sub Jail Rules provide for classification and segregation of prisoners. In the Prisons and Jails visited by Audit, the prisoners were not strictly classified and segregated as required under the Rules with the result that convicts and undertrials were lodged together in some Blocks and even in Cells. The obvious reason for this lapse was lodging of prisoners far in excess of authorized capacity of Jails.

3.2.7.9 Deficiency in the strength of custodial staff (Warder establishment)

The total sanctioned strength of Warder establishment was 978 (Head Warders – 243 and Warders – 735) of which 60 posts were lying vacant. In the absence of required number of ministerial staff and drivers, 107 warders were engaged in ministerial work and 60 warders were working as drivers of departmental vehicles in all the prisons and jails. Excluding these warders, the total number of men in position for custodial function was 751 only including 110

temporary warders appointed through employment exchange. Against the total authorized male capacity of 4,418, the total prisoners lodged in various Prisons and Jails in the State at the end of each year were 6,553 (2002); 7,659 (2003); 6,956 (2004), 6,662 (2005) and 6,315 (2006). As the prison population far exceeded the authorized capacity, the strength of the warder establishment was below the ideal requirement of one warder for every six prisoner as stipulated by the Model Prison Manual.

3.2.7.10 Engagement of temporary Warders constituted a threat to security

Appointment of untrained/temporary warders results in deficient quality of service and a threat to security

As per the Kerala Prison Manual, persons recruited to the post of Warders should undergo training for nine months before being posted to the field. At present new recruits were straightaway posted to duty on the plea of shortage of staff and training imparted subsequently. As of March 2007, the number of untrained Warders was 179 (including 69 regular warders). Employing untrained Warders for duty would result in deficient quality of service. In addition employing temporary hands is a serious threat to the security of the jails and its inmates.

3.2.7.11 Non separation of executive and ministerial functions

The Kerala Prison Manual provides for one Accounts Officer in each Central Prison and Open Prison, for keeping Manufactory Accounts and General Branch Accounts. Post of clerks are also to be provided. The Kerala Jail Reforms Committee in their report (1993) had reiterated the need for separating executive and ministerial functions in Jails in order to enable the Jail officers to do full justice to their defined functions and responsibilities for achieving the goal of correctional administration. However, these posts have not been sanctioned so far (May 2007), instead 75 Warders are engaged in the ministerial work in three Central Prisons, one Open Prison and three District Jails. The utilization of custodial staff for ministerial work leads to deficiency of custodial service.

3.2.7.12 Variation in the strength of Warder establishment vis-à-vis the capacity of Prisons/Jails

Audit scrutiny revealed that there was no uniformity or relation between the strength of Warder establishment and the capacity of individual Prisons/Jails. A few cases where large variations were noted are given below:

Sl. No.	Name of Prison/Jail	Authorised capacity (Male)	Prison population as on 1.1.07 (Male)	Sanctioned strength of Warder establishment		
				Head Warder	Warder	Total
1.	Open Prison, Nettukaltheri	350	254	6	25	31
2.	District Jail, Kollam	48	141	8	34	42
3.	District Jail, Kozhikode	257	354	8	34	42
4.	Special Sub Jail, Thalassery	25	43	4	10	14
5.	Special Sub Jail, Vyyur	130	155	4	10	14
6.	Sub Jail, Meenachil	24	12	3	8	11
7.	Sub Jail, Kottarakkara	90	121	3	8	11
8.	Sub Jail, Vaithiri	16	50	3	6	9
9.	Sub Jail, Peermade	60	27	3	6	9

Staff strength in the prisons/jails was not in accordance with the authorised capacity of prisons/jails

It is clear from the above that contrary to expectation there is little correlation between the authorised capacity and the strength of warders in Prisons and Jails. This anomaly is also evident from the data of warders sanctioned for new Sub Jails and Open Prison. The new Open Prison, Cheemeni with expected capacity of 50 was sanctioned 60 posts of Warders, while the existing Open Prison, Nettukaltheri with a capacity of 350 had only 31 warders. The new sub jails of Hosdurg and Chittoor were sanctioned 20 posts of warders whereas existing Sub Jails had around nine to 11 warders.

Thus there is no uniformity in the number of warders vis-à-vis capacity. The data on actual occupancy of Jails and authorised capacity also indicates the need to review the strength of warders in the Jails and redistribute them to afford optimum resource utilisation.

Incidentally, in Sub Jail, Mananthavady, which has ceased to function since October 1995, a Superintendent, a head warder and a warder are still deployed despite PAC recommendation against retaining staff in defunct jails. Salary paid* to these employees since October 1995 was infructuous.

3.2.7.13 Video conferencing system in Prison Department

Video conferencing had not been made operational

The Government decided (January 2005) to introduce Video Conferencing System in Central Prison, Thiruvananthapuram and District Jail, Thiruvananthapuram connecting various Courts (19) in Thiruvananthapuram district for facilitating grant of bail, adjournment of cases etc. without actually producing undertrial prisoners before the Court. Meanwhile on a petition filed, the High Court of Kerala directed (March 2005) the State Government to implement the project in Thiruvananthapuram in three months' time and to implement video conferencing at Central Prisons, Viyur and Kannur within six months. The equipment was installed in the Prisons, Jails and the Courts of Thiruvananthapuram district at a cost of Rs 51.47 lakh and trial run was conducted successfully in February 2007. However, the system was not operational as of May 2007 mainly due to non amendment of Code of Criminal Procedure (Cr. PC) enabling virtual production of undertrials by digital means before the Court. Further the problem of lack of picture quality due to voltage fluctuation in Central Prison, Thiruvananthapuram has not so far been addressed. Thus even after a lapse of two years from the deadline fixed by the High Court, the Video conferencing system is yet to take off.

Similar project for Thrissur, Ernakulam and Kottayam Districts have been formulated and Rs 89.26 lakh was given to NIC in March 2007 for supply of equipment.

Had this been operational, the trial proceedings could have been speeded up and the risk involved in the frequent transportation of prisoners to the courts reduced.

* Based on the minimum of the pay scale, total salary paid (August 2007) worked out to Rs 18.52 lakh.

3.2.7.14 Undue detention of undertrial prisoners

There were 328 undertrials detained for more than one year in the Prisons and Jails in the State as on January 2007. One hundred and forty four had been detained for more than two years, two had been detained for more than five years, of these two, one undertrial was under detention for more than 19 years.

Charge sheets have not been filed in 15 cases [more than two years (five), more than one year (10)] in Central Prisons, Thiruvananthapuram and Viyyur. Seventy four undertrials who had been detained in various Jails for more than the maximum period of imprisonment provided for the offence charged under the law, were released in December 2006. The Honourable High Court ordered (January 2007) payment of minimum compensation of Rs 1,000 each to all the persons and Rs 100 for every day of illegal detention for more than a month, within three months from the date of order. Details regarding payment of compensation are awaited from Government (May 2007).

3.2.7.15 Non return from leave and non realization of dues from sureties

Rule 452 BB (v) of the Kerala Prison Rules stipulates that before a convict prisoner is released on leave, he shall execute a bond with two sureties for Rs 10,000 each undertaking to return to Prison on the expiry of leave. In Central Prison, Thiruvananthapuram Rs 1.60 lakh was due from the sureties in eight cases of non-return from leave. No effective action was taken to recover the amount.

3.2.8 Facilities and Privileges of Prisoners

3.2.8.1 Overcrowding in Jails

Rule 205 of Kerala Prison Rules stipulates that every prisoner shall be allowed not less than 3.72 Sq. Metre of ground space and 17 Cu.Metre of breathing space. Against the total authorized capacity of 4,954 in the Prisons/Jails in the State, the total number of prisoners as on 1 January 2007 was 6,504 (Convicts 2,876 and Undertrials 3,628). There was no overcrowding in Women's Prison or Female Blocks in Central Prisons and other Jails. The male blocks were over crowded by 143 *per cent* of their capacity. Details of authorized capacity and the prison population in some of the most overcrowded Prisons and Jails in the State as on January 2007 are given below:

Name of institution	Authorised capacity (Male prisoners)	Prison population as on 1.1.2007 (Male prisoners)	Prison population as percentage of capacity
Central Prison, Thiruvananthapuram	900	1654	184
District Jail, Thiruvananthapuram	70	299	427
District Jail, Kollam	48	141	294
Special Sub Jail, Palakkad	82	128	156
Sub Jail, Vaithiri	16	50	313

Average over-crowding in the male blocks in the state prisons/jails was to the extent of 143 per cent

In five units* the overall effective capacity was actually less than the stated authorized capacity by 66 as some cells were either not usable owing to damage or use for other purposes like store or rest room for staff.

The overcrowding in male Blocks resulted in denial of the required ground space of 3.72 m² as the available ground space for inmates ranged between 2.15 m² to 2.60 m² only during the period under review affecting their physical and mental health. It also puts much pressure on the utilities such as water supply and sewage systems. The workload of custodial staff is also increased thus affecting their ability to control crime and violence within the prison.

3.2.8.2 Unfruitful expenditure on capacity enhancement

Despite the recommendations of Jail Reforms Committee and PAC, no enhancement of capacity of Jails was made in the last two decades

All the Prison and Jail units were established more than 50 years ago. The capacity was not enhanced in the last two decades. The need for putting up new prison buildings and upgrading of some Jails was pointed out by the Jail Reforms Committee (1993). The problem of overcrowding in the Prisons/Jails in the State was highlighted in the Report of the Comptroller and Auditor General of India for the year ended 31 March 1995. Thereupon, the department decided to establish one Open Prison at Cheemeni, one Women's Prison at Kannur and eight new Sub Jails in addition to construction of new buildings in some existing Jails under various schemes. The Public Accounts Committee recommended (2001) construction of 12 new Jails in the State to obviate the problem of overcrowding. The funds for one Open Prison, one Women's Prison, eight new Sub Jails and new blocks in Central Prison, Viyyur and District Jail, Thiruvananthapuram were deposited with the Public Works Department. It was seen in Audit that even though the construction of Open Prison, Cheemeni and Sub Jails, Hosdurg and Chittoor were completed and handed over to the department in July 2001, July 2003 and October 2006 respectively, necessary staff was posted only in March 2007. The remaining Jails were at various stages of construction.

Even though the Department embarked upon a programme of increasing capacity in 1999, it had not succeeded till March 2007 in this endeavour.

3.2.8.3 Medical facilities

The following deficiencies were observed in the medical facilities available in the test checked Prisons and Jails.

- A new building constructed as hospital annexe in Central Prison, Viyyur at a cost of Rs 8.57 lakh and taken over by the department (July 2002) without electrification was lying unutilized (September 2007).
- The Chairman, State Human Rights Commission, during his visit (October 2006) of the Open Prison, Nettukaltheri, had pointed out the need for posting a Medical Officer to the Prison. The posts of Medical

* Central Prison, Viyyur, Special Sub Jail, Viyyur and Sub Jails – Chavakkad, Moovattupuzha and Meenachil

Officer and support staff have not been sanctioned so far (September 2007). In the absence of Resident Medical Officer even cases requiring first aid for accidents and snakebites to prisoners, working in farms and rubber plantation, had to be taken to hospitals five to 10 km away. Incidentally, a hospital building constructed (March 2005) at a cost of Rs 10.63 lakh has not been put to use so far (September 2007).

- No Medical Officer has visited the District Jail, Thiruvananthapuram during 2002-03 to 2006-07. The patients in the Jail, where average prisoner population was above 250, had to be sent to Government Hospitals for getting medical treatment causing much inconvenience to Jail staff and Police personnel.
- As per Rule 59 of KPR, the District Medical Officer (DMO) of the district in which the Central Prison is situated shall visit that Prison at least twice a month, see every prisoner and hear and enquire into any complaint of sickness. The DMO has not visited the Central Prisons, Viyur and Kannur during 2002-07, while he visited the Central Prison, Thiruvananthapuram only once during the period.

As per Rules 29 and 30 of the Kerala Sub Jails Rules, a Senior Medical Officer of the station in which the Sub Jail is situated shall be the Medical Officer of the Jail and he shall visit the Sub Jail twice in a week and daily when any prisoner is sick.

- Regular visits as contemplated in the Rules were not conducted by the Medical Officers in Sub Jails, at Ponkunnam, Meenachil, Special Sub Jails, Palakkad and Kasargod.
- No visit by the doctor was on record in Sub Jail, Mattancherry during April 2004 to February 2007 and Sub Jail, Attingal in 2002 and 2004.
- There was high incidence of scabies in Sub Jail, Attingal due to non availability of facility for sterilising clothes of prisoners.
- As no prison ward was available in District Hospital, Ernakulam, the patients from Sub Jails in Ernakulam and Mattancherry had to be sent to distant Medical Colleges (Kottayam/Thrissur) causing much inconvenience to Jail staff and Police personnel in addition to incurring huge expenditure.

3.2.8.4 Wastage of cooked food

There was wastage of cooked food in prisons/jails

As per the present diet scale, the prisoners are eligible for 450 gms of rice and 200 gms of wheat per day as staple food in addition to the specified quantity of milk, vegetables, other grocery items etc. and also dried fish (70 gms) twice a week and mutton (71 gm) once in a week. A scrutiny of records at Central Prison, Thiruvananthapuram and District Jail, Thiruvananthapuram revealed that huge quantities of rice, wheat and other diet items issued for cooking were taken back to stock periodically as the actual requirement was less than the quantity of items issued as per the prescribed diet scale. The details of quantity of provisions thus taken back to stock during April 2006 to February 2007 in these cases were as follows:

Diet item	Quantity taken back to stock (in Kg)	
	Central Prison, Thiruvananthapuram	District Jail, Thiruvananthapuram
Rice	3,376	3,310
Wheat	1,609	-
Greengram	557	1,027
Chilli	683	192
Coconut oil	60	598
Tea	454	195
Sugar	-	173

In many Jails* the entire quantity of rice issued as per Diet scale was cooked with the result that there was huge excess of cooked food which was thrown away. Incidentally, it was also noticed that weighing apparatus in Sub Jails Mattancherry, Meenachil, Ponkunnam and Special Sub Jail, Kottayam (except platform balance) were not got authenticated from the Legal Metrology Department. This needs attention of the authorities.

3.2.8.5 Delay in reconstitution of Jail Advisory Board

According to Rule 543 of the Kerala Prison Rules, there shall be a standing Advisory Board to investigate and report on the sentences of prisoners confined in each Central Prison, Open Prison and Women's Prison. The Board consisting of official and non official members shall sit at least once in six months to consider the cases of all prisoners who satisfy the conditions prescribed in the Rules and submit recommendations to Government with a view to release as many of prisoners as can be released without injury to the community.

It was observed that the term of the Advisory Board constituted in June 2002 expired in May 2004. The Board was reconstituted only in September 2006 after a lapse of more than two years. As a result, eligible prisoners were denied the opportunity for early release during the period the Board was not in existence.

3.2.9 Reformation, rehabilitation and welfare of prisoners

The Department conducts correctional, educational, vocational, cultural, recreational and religious activities for reformation of prisoners.

3.2.9.1 Lack of modernization of Jail Manufactories

A manufacturing department is functioning in each Central Prison for providing training/labour to the inmates of the Prison. The work programmes now arranged in the Prisons include weaving, carpentry, smithy, tailoring, printing, etc. The Report of the Jail Reforms Committee (1993) had suggested modernisation of training programme by including activities like repair and assembling of television, repair of electric and electronic equipment to improve chances of gainful employment after release. This has not been done

Modern vocational training programmes have not been provided so far

* Central Prison, Viyur, Special Sub Jails, Viyur and Kottayam, Sub Jail Ponkunnam etc.

so far. The facilities available to carry out programmes like weaving and printing are antiquated. Even these had been hampered in Central Prisons of Thiruvananthapuram and Viyyur on account of non-availability of yarn in 2006 and 2007.

Vocational programmes need attention for achieving the objective of rehabilitation of prisoners.

3.2.9.2 Non provision of Recreation Hall and canteen facilities in Sub Jails

Recreation Hall and Canteen facilities were not provided as required under the Rules in any of the Sub Jails visited by Audit except Special Sub Jail, Kottayam where a recreation hall was available

3.2.10 Other points of Interest

3.2.10.1 Lack of unified Prison Act and revision of Prison Manual

A unified legislation covering all aspects of prisons, prisoners and prison administration has not been enacted

The State of Kerala came into existence on 1 November 1956. A unified legislation covering all aspects of Prisons, Prisoners and Prison Administration in the State replacing all the outdated Acts on the subject has not been enacted so far. In the absence of the same, Prisons and Jails in erstwhile Malabar area are governed by the Prisons Act, 1894 and those in the erstwhile Travancore-Cochin area are governed by the Travancore-Cochin Prisons Act, 1950. The Kerala Prison Rules, 1958 (reprinted in 1997) and the Kerala Sub Jail Rules, 1959 (reprinted in 1977) require correction and updation incorporating all the later amendments. The Kerala Prison Manual, 1981 needs thorough revision in the light of subsequent amendments to Rules and also the guidelines contained in the Model Prison Manual, 2003 formulated by the Bureau of Police Research and Development (BPR & D) under Ministry of Home Affairs, Government of India.

3.2.10.2 Shortfall in internal audit

Internal Audit was conducted only to fix the liability of retiring staff

An internal audit wing headed by the Chief Audit Officer is functioning in the Prison Headquarters to conduct inspection of the institutions in the Department. As per the Kerala Sub Jail Rules, yearly inspection of accounts, cash accounts, etc., of the Sub Jails has to be conducted by the wing. A scrutiny of the records revealed that there was heavy shortfall in inspection. During the period under review, five Sub Jails[@] were not inspected at all and nine Sub Jails[#] were inspected only once. The Central Prison, Thiruvananthapuram was inspected only once during the period. It was revealed that internal audit was arranged only to fix the liability of any staff due for retirement. As such there was no annual audit plan for covering all the institutions. The Department has not so far prepared a Manual for Internal Audit.

[@] Sub Jails – Kottarakkara, Devikulam, Moovattupuzha, Thirur and Ponnani

[#] Special Sub Jails – Alappuzha, Palakkad, Thrissur and Sub Jails – Pathanamthitta, Mavelikkara, Mattancherry, Ottappalam, Vadakara and Kasargode

3.2.10.3 Non constitution of Board of visitors

Proper management of prisons could not be ensured due to non-constitution of Board of Visitors

The Kerala Prison Rules require constitution of a Board for each prison comprising officials and non-officials who are appointed by the Government. The members of this board visit the prisons to hear grievances of prisoners and also see whether the prisons are being run as per rules. These boards have not been constituted. In addition, the District Collectors have not visited the Jails as required under Kerala Sub Jail Rules except for two Sub Jails (Peermade & Kottarakkara).

Thus two mechanisms of independent monitoring of prisons are not functioning.

3.2.10.4 Deficiencies in Maintenance of Cash Book

Internal controls for cash management were not followed

Irregularities/omissions were noticed in maintenance of cash books as detailed below:

- In violation of Government order to maintain a single cash book, three Cash Books (Main Cash Book, Prisoners Cash Property Cash Book and Prisoners Canteen Cash Book) were being maintained in Central Prisons, Thiruvananthapuram and Viyyur.
- Receipts of Demand Drafts on account of sale of rubber sheets and their remittances to Treasury were not routed through the Cash Book in Open Prison, Nettukaltheri.
- Cash transactions under “Wages” to prisoners and “Prisoners Cash Property” were not routed through the main Cash Book in Women’s Prison, Neyyattinkara
- Transactions under Prisoners Cash Property ie. cash property found on the person of prisoners at the time of their admission were not routed through the main Cash Book in eight Sub Jails visited[§]
- No Cash Chest was provided to Open Prison, Nettukaltheri, Women’s Prison, Neyyattinkara, District Jail, Thiruvananthapuram, Special Sub Jail, Kottayam and six Sub Jails (Mattancherry, Aluva, Ernakulam, Moovattupuzha, Meenachil and Irinjalakuda). These prisons have large cash balances on some days.

Other points:

- The Department has not set up a proper monitoring mechanism for watching progress of works.
- Eighteen quarters in Central Prison, Viyyur and two quarters at Open Prison, Nettukaltheri constructed at a total cost of Rs 90 lakh are lying vacant for want of electricity since December 2005 and February 2006 respectively.
- No vehicle was provided to eight Sub Jails^{*} with the result that Jail authorities had to depend on private vehicles.

[§] Attingal, Mattancherry, Aluva, Moovattupuzha, Meenachil, Ernakulam, Irinjalakuda and Chavakkad

^{*} Ponkunnam, Irinjalakkuda, Alathur, Ottappalam, Thirur, Ponnani, Vadakara and Koilandy.

- Sixteen and a half acres of land belonging to Open Prison, Nettukaltheri is under illegal occupation for the last four decades. As the prison land is not fully fenced, there are chances of further encroachment. No survey has been conducted so far to assess the present area under possession.

3.2.11 Conclusion

Though adequate funds were available, the expenditure on plan schemes were negligible during 2003-04 to 2005-06. Poor utilization of funds under Centrally Sponsored Scheme resulted in non-release of central assistance of Rs 14.75 crore during 2004-05 to 2006-07. There were deficiencies in security, custody and detention of prisoners. Modern scientific methods were not employed for identification of prisoners, security, surveillance and communication systems were not upgraded, no pre-service training was imparted to warders, hiring of temporary warders represents a serious breach of security and there was no uniformity in the strength of warder establishment in relation to authorized capacity of Jails. The Prisons and Jails were overcrowded and no additional capacity was created during the last two decades. Medical facilities were inadequate. Board of visitors was not constituted in any of the Prisons and Jails. Internal audit was in arrears. Progress of schemes was not properly monitored by Department/Government. There was no unified enactment for prison administration.

3.2.12 Recommendations

- Government should ensure timely utilization of GOI funds by effective co-ordination between the Department of Prisons and PW Department to avoid loss of central assistance.
- Modern scientific methods should be employed for identification of prisoners and security, surveillance and communication systems upgraded.
- Pre service training should be imparted to Warders so as to equip them to deal with prisoners and conditions of prison.
- Temporary warders should be phased out and should not be allowed to perform custodial duties.
- Staff strength should be fixed rationally taking into account the authorized capacity of Jails for effective utilisation of available manpower, transfer of prisoners and staff between jails should be done to optimise utilisation.
- The Department should take co-ordinated action with the Public Works Department for speedy completion of new jails.
- Steps should be taken to avoid wastage of food.
- A unified Prison Act needs to be enacted and Prison Manual updated.

The matter was referred to Government in June 2007; reply has not been received (September 2007).

ENVIRONMENT DEPARTMENT
3.3 Management and Handling of Bio-Medical Waste
Highlights

Bio-medical waste is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining there to or in the production/testing of biologicals. The Bio-Medical Waste (Management and Handling) Rules 1998 (BMW Rules) framed by the Government of India as per the provisions of the Environment (Protection) Act 1986, came into effect on 20 July 1998. Rules require bio-medical waste generating institutions to ensure compliance of the provisions of the Rules within a prescribed time schedule. Kerala State Pollution Control Board (KSPCB) had not prepared a comprehensive list of bio-medical waste generating establishments, though the BMW Rules were notified in 1998. Most of the HCEs in the State were functioning without authorisation from KSPCB, in gross violation of rules. Implementation of BMW Rules in the State was very poor in view of the lack of interest shown by Government and Kerala State Pollution Control Board in enforcing compliance of the Rules. Some of the more important points are indicated below:

- **Delay of two years for commencement of the administration of Bio-medical Waste Rules in the State.**

(Paragraph 3.3.7)

- **There was no system of State level registration of Health Care Establishments (HCEs) and State level listing of HCEs.**

(Paragraph 3.3.8)

- **83 per cent of the identified institutions were functioning without authorization. Out of 1,278 HCEs under Government sector, only 179 (14 per cent) had obtained authorization as of March 2007.**

(Paragraph 3.3.9)

- **Non-issue/belated issue/non-renewal of authorization led to KSPCB foregoing a revenue of Rs 91 lakh.**

(Paragraph 3.3.9.2)

3.3.1 Introduction

Bio-medical waste is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining there to or in the production/testing of biologicals*. This waste is a reservoir

*Biologicals means any preparation made from organisms or micro organisms or product of metabolism and biochemical reactions intended for use in diagnosis/immunisation/treatment

of potentially harmful micro-organisms which can infect hospital patients, health care personnel and general public. Wastes and its by-products can also cause injuries, poisoning and pollution. Bio-medical waste management is an integral part of health care.

Government of India, Ministry of Environment and Forests notified (July 1998) the Bio-Medical Waste (Management and Handling) Rules 1998 under Environment (Protection) Act 1986, to streamline the procedure for handling, collection, transportation and disposal of bio-medical waste with the objective of avoiding any adverse effect on human health and environment. The bio-medical waste generating institutions were required to ensure compliance with the provisions of the Rules within a time schedule between 30 June 2000 and 31 December 2002 depending on the category of institution.

The State has a large number of Health Care Establishments and bio-medical waste generated in the State was 11,000 MT per annum approximately, according to a report published by Kerala State Council for Science, Technology and Environment.

Salient features of the Rules

- ◆ Every occupier/operator of bio-medical waste generating establishment shall have an authorisation to function
- ◆ The State Pollution Control Board is the Prescribed Authority to enforce the Rules
- ◆ The waste generated shall be segregated, packed and treated in compliance with standards prescribed in the Rules
- ◆ Common Bio-medical Waste Treatment and Disposal Facility may be established to treat waste generated in a cluster of hospitals
- ◆ The State Government shall constitute an Advisory Committee to advise Government and Prescribed Authority on matters related to the implementation of the Rules.

3.3.2 Organisational set up

Environment Department is the administrative department at Government level for matters relating to environment. Kerala State Pollution Control Board (KSPCB) is the Prescribed Authority in the State to enforce the provisions of the Rules. The KSPCB has its head office at Thiruvananthapuram, three regional offices and 14 district offices in the State. The occupier/operator of a bio-medical waste generating/handling institution is responsible for the establishment of proper waste treatment and disposal facilities.

3.3.3 Audit objectives

The main objectives of the performance audit were to examine whether

- Action was taken to identify all the waste generating units and issue authorisation

- Adequate funds were provided to Government institutions for waste disposal and utilised effectively
- Bio-medical waste handling and disposal procedures followed were according to prescribed Rules
- Functioning of common bio-medical waste treatment facility was effective
- Monitoring and evaluation mechanisms were effective

3.3.4 Audit criteria

- Provisions under Bio-Medical Waste (Management and Handling) Rules 1998.
- Assessed requirement of funds for waste disposal.
- Central Pollution Control Board (CPCB) guidelines on bio-medical waste handling and disposal.
- Guidelines for installation of Common Bio-medical Waste Treatment Facility issued by CPCB.
- Monitoring standards prescribed.

3.3.5 Audit coverage

Comments on the implementation of the Bio-Medical Waste (Management and Handling) Rules were included in the Review on 'Implementation of Environmental Acts and Rules in regard to Air Pollution and Waste Management' (para 3.1.9(ii)(a) and (b)) of the Report of the Comptroller and Auditor General of India for the year ended 31 March 2001(Civil), Government of Kerala. The Report was discussed by the Committee on Public Accounts in January 2006 and recommendations are awaited (May 2007). The present Review covering the period 2002-03 to 2006-07 was conducted during February-May 2007. The audit coverage was confined to establishments practising allopathic system of medicine since the bio-medical wastes generated in other systems of medicine were not significant.

3.3.6 Audit methodology

An entry conference was held with the Secretary, Environment Department in March 2007. Audit scrutinised records relating to the Health and Family Welfare Department of Secretariat, Head office, Regional office Thiruvananthapuram and four district offices (Thiruvananthapuram, Alappuzha, Thrissur and Palakkad) of the KSPCB, Directorate of Health Services and Directorate of Medical Education. In addition 10 Health Care Establishments (HCEs) under Government/private sector in each of the selected district and the Common Bio-Medical Waste Treatment Facility at Palakkad in the private sector were inspected. The private institutions were inspected in the presence of KSPCB officials. The districts and units were selected by simple random sampling.

Audit findings

3.3.7 Delay in implementation of Bio-Medical Waste Rules

Delay of two years for commencement of the administration of Bio-medical Waste Rules in the State

The Bio-Medical Waste (Management and Handling) Rules 1998 (BMW Rules) framed by the Government of India as per the provisions of the Environment (Protection) Act 1986, came into effect on 20 July 1998. Though the notifications specifying the KSPCB as the Prescribed Authority was issued in October 1999, the order prescribing the authorisation fee for application, under the BMW Rules was issued only in June 2000. This resulted in delay of two years for commencement of the administration of Rules in the State.

The last date for the establishment of treatment and disposal facilities ranged from 30 June 2000 to 31 December 2002 depending on the bed strength of the Institutions.

3.3.8 Identification of Health Care Establishments

There was no system of State level registration of HCEs and State level listing of HCEs

It was mandatory that every occupier/operator of an institution generating, collecting, receiving, storing, disposing and/or handling bio-medical waste except those providing treatment/service to less than 1,000 persons per month to have an authorisation issued by the KSPCB to function. There was no system of state level registration of HCEs and a state level list of HCEs was not available. Though private HCEs were to be registered with Local Self Government Institutions (LSGIs), there existed no procedure of getting clearance from KSPCB prior to such registration/intimating the Board of newly registered HCEs. Based on the details collected from the Director of Health Services, Directorate of Medical Education, Indian Medical Association (Kerala Branch) etc., KSPCB had identified about 2,600 institutions initially. As of March 2007, the number of institutions identified was 5,200. Veterinary hospitals in the State did not meet the criteria prescribed in the Rules and hence were not brought under the provisions of BMW Rules. Shortage of manpower was cited as the reason for not preparing a comprehensive inventory of HCEs in the State. Audit scrutiny revealed that no additional staff were sanctioned for implementation of BMW Rules and the available manpower against the sanctioned strength declined gradually since 2000. Thus even nine years after the Rules were notified, KSPCB did not have the necessary data essential for enforcement of Rules.

Government stated (August 2007) that no separate manpower has been sanctioned for the implementation of the BMW Rules.

3.3.9 Issue of authorisation

Only a small percentage of bio-medical waste generators were given authorisation within the statutory time limit

All the bio-medical waste generating/operating establishments were required to obtain authorisation within a time schedule between 30 June 2000 and 31 December 2002. The KSPCB started issuing authorisation from January 2001 and the total number of authorisations issued till December 2002 was 436 only against 2,600 identified initially. Thus only a small percentage of bio-medical waste generators were given authorisation within the statutory time limit. The Head Office of the KSPCB issued/renewed authorisation to all

BMW generating establishments till June 2005, thereafter the power was delegated to Regional/District office based on the bed strength of establishments.

83 per cent of the identified institutions were functioning without authorisation

Audit scrutiny revealed that majority of the identified 5,200 HCEs had not applied for authorisation. Applications were received from 1,308 HCEs only and 895 authorisations were issued till March 2007. As a result 83 per cent of the identified institutions were functioning without authorisation in gross violation of the Rules. The year-wise details of issue of authorisation were as follows:

Year	Number of hospitals Identified as on 1 st April	Hospitals applied for authorisation during the year	Number of authorisations issued during the year
Upto 2002-03	2,981	1,180	546
2003-04	2,126	85	235
2004-05	93	31	98
2005-06	Nil	12	10
2006-07	Nil	(*)	6
Total	5,200	1,308	895

(*) not available

Government stated (August 2007) that of the 895 HCEs only 328 held valid authorisation as of August 2007.

No new institutions were identified after 2004-05. The number of applicants also declined sharply since 2003-04. This indicated that after an initial effort no effective steps were taken by KSPCB to ensure compliance with the Rules by the bio-medical waste generators.

It was seen in audit that

- Out of the identified HCEs there were 31 hospitals with bed strength 500 or more and 95 hospitals with bed strength between 200 and 500 in the State which had the potential of generating substantial quantities of bio-medical waste. Of these five hospitals with bed strength 500 or more and 24 hospitals with bed strength between 200 and 500 had not been issued authorisation till date (May 2007).
- Out of 1,278 HCEs under Government sector only 179 (14 per cent) had obtained authorisation as of March 2007, indicating failure of Government to ensure that its own institutions were implementing the provisions of the Rules.
- Out of 40 establishments visited by audit in four selected districts 26 had applied for authorisation and 22 obtained authorisation. Ten HCEs had not applied for authorisation so far (May 2007). The remaining four had no in-patient facility/treated less than 1,000 out-patients per month.

Out of 1,278 HCEs under Government sector, only 179 (14 per cent) had obtained authorization as of March 2007

- One HCE^f which was issued authorisation for three years lacked bio-medical waste segregation, treatment and disposal facilities as of March 2007 indicating improper inspection by KSPCB.
- None of the three Government Medical Colleges[∞] test checked had valid authorisation as of March 2007 though Medical College, Alappuzha had provisional authorisation in October 2004. It is to be noted that Medical Colleges are premier health care institutions in the State treating large number of patients and consequently generating large quantities of bio-medical waste.
- Though application for authorisation was to be disposed of by the prescribed authority within a period of 90 days from the date of receipt of application, delay of one to forty five months was noticed in 102 cases out of 162 checked.

The KSPCB attributed inadequate infrastructure facilities to handle bio-medical waste, incomplete applications and non-remittance of required fees as the reasons for the non-issue of authorisations. But the lack of effort on the part of KSPCB to address these issues and take corrective action indicates the low priority assigned to this vital issue.

3.3.9.1 Renewal of authorisation

An authorisation was granted for a period of three years including an initial trial period of one year from the date of issue. All subsequent renewals were to be for a period of three years. A provisional authorisation was granted for the trial period to enable the occupier/operator to demonstrate the capacity of the facility.

Test check of the files relating to the issue of authorisations in 162 out of 362 cases at the Head office and four district offices revealed that

- All authorisations issued were provisional and in three cases the period was beyond 12 months.
- Validity of authorisation (first issued/renewed) except in 15 out of the 162 cases expired as of March 2007.
- The KSPCB had inspected only six of them within the validity period to ascertain the capacity of the facility to regularise or cancel the provisional authorisation. Consequently the provisional authorisations could not be regularised/cancelled and hence lapsed.
- Applications for renewal were received from only 60 establishments and only 14 were renewed by issuing subsequent provisional authorisation indicating non-acquisition of facilities.

Government stated (August 2007) that inadequate facilities for bio-medical waste management and insufficient manpower were the major reasons for non-renewal of authorisations.

^f Taluk Headquarters Hospital, Neyyattinkara

[∞] Thiruvananthapuram, Alappuzha, Thrissur

3.3.9.2 Potential loss of revenue due to non-issue of authorisation

Non-issue/belated issue/non-renewal of authorization resulted in potential revenue loss of Rs 91 lakh to KSPCB

From January 2003 all bio-medical waste generators were to function only with authorisation issued by KSPCB. An authorisation once issued was to be renewed after three years. The applicants are required to remit fees ranging from Rs 500 to Rs 10,000 depending on the bed strength/number of out-patients till June 2006. An integrated clearance system was adopted from July 2006 for the clearance under Water Act, Air Act and Bio-Medical Waste Rules in the case of HCEs and the fees collected based on capital investment. The application fees received by KSPCB up to 2006-07 were from 1,308 institutions only and amounted Rs 59.55 lakh. Had all the identified institutions (5,200) been issued authorisation and it was renewed as required under the Rules, the KSPCB would have received fee of Rs 1.51 crore approximately. Thus, due to non-issue/renewal of authorisation to all the identified institutions as required under the Rules, KSPCB suffered a potential loss of Rs 91 lakh.

3.3.9.3 Penalty

According to the provisions in the Environment (Protection) Act 1986, violation/non-compliance of Rules shall attract a penalty up to Rupees One lakh and/or imprisonment up to five years. However, the KSPCB had not used the statutory powers available to enforce implementation of Rules by invoking the penal provisions in the Act. According to Government (August 2007), invoking penal provisions was not productive and persuasion/issue of closure notice was more beneficial.

3.3.10 Funding to Government Institutions

3.3.10.1 Allotment and utilisation of funds

Regular funds were not provided in the State annual budget for bio-medical waste treatment and disposal activities. However, funds were provided in the budget for establishment of infrastructure facilities and activities like installation of incinerator, water treatment plant, management, training to the health and non health workers in Government hospitals under the control of Director of Medical Education (DME) and Director of Health Services (DHS) from 2003-04 onwards. The budget provision and expenditure during the period 2003-04 to 2006-07 were as follows:

(Rupees in lakh)

Year	Budget provision			Expenditure		
	DHS	DME	Total	DHS	DME	Total
2003-04	Nil	10.00	10.00	Nil	9.01	9.01
2004-05	25.00	Nil	25.00	11.36	Nil	11.36
2005-06	50.00	106.00	156.00	0.00	80.00	80.00
2006-07	20.00	50.00	70.00	7.00	40.00	47.00
Total	95.00	166.00	261.00	18.36	129.01	147.37

Audit scrutiny revealed that

- Rupees Eighty lakh was deposited by DME with Public Works Department (PWD) in March 2006 for establishment of incinerator,

water treatment plant and related civil works at Medical College, Kozhikode in 2005-06. However, in June 2006 it was decided to entrust the work to Kerala Water Authority (KWA) and sanction of Government for re-transfer of the amount deposited is awaited (May 2007). This resulted in idling of Rs 80 lakh deposited in March 2006 for establishment of infrastructure facilities.

Only 19 per cent of the budget allocation was utilized by DHS during the period from 2003-04 to 2006-07

- Only 18 lakh (19 per cent) of Rs 95 lakh allocated to DHS for the period 2003-04 to 2006-07 was utilised by the department. Out of the balance Rs 74 lakh was surrendered due to non-establishment of infrastructure facilities and Rupees three lakh lapsed.

Despite the absence of facilities for disposal of Bio-Medical Waste, the Departments did not take effective action to utilise the funds provided in the budget, specifically for erecting waste treatment and disposal facilities.

3.3.10.2 Short utilisation of Government of India grant

Short-utilisation of GOI grant to the extent of Rs 81 lakh provided for establishment of infrastructure facilities

Government of India provided Rs 85 lakh in March 2005 to Medical College, Thiruvananthapuram for establishment of infrastructure facilities like incinerator, autoclave, shredder, training to staff, etc., for bio-medical waste management and disposal. Out of this Rs 3.97 lakh was expended in June 2006 for training, purchase of plastic bags and wheel barrows. The balance amount remained unutilised as of March 2007.

3.3.10.3 Sanction to meet expenditure from HDS/HDC funds

Absence of regular financial support resulted in non-implementation of bio-medical waste treatment and disposal as stipulated in the Rules

Funds collected by the Hospital Development Committee/Society are authorised to be used for the purchase of medicines, bandages, establishment charges etc. In addition, Government in March 2004 granted one time special sanction to Government hospitals to utilise not more than 10 per cent of their collection in the Hospital Development Society (HDS)/Hospital Development Committee (HDC)* for putting in place a bio-medical waste segregation and disposal mechanism. However, no expenses were incurred in the test checked HCEs for this purpose.

In June 2005 sanction was accorded by Government to hospitals with bed strength of 100 or more to engage Indian Medical Association Goes Eco-friendly (IMAGE), a body of Indian Medical Association (IMA), Kerala Branch for the transportation and disposal of waste in their plant at Palakkad at the rate of Rs 2.75 per bed per day, utilising funds from HDC/HDS. The number of beds for payment was reckoned as 80 per cent of the sanctioned bed strength of HCE. Government extended this sanction to all HCEs from December 2006. Utilisation from the fund could not be considered as regular financial support since HDS/HDC fund represent the fee receivable from parking of vehicles, charges of passes issued to visitors, service charges etc., and vary from time to time and from institution to institution. Absence of regular financial support resulted in non-implementation of bio-medical waste treatment and disposal as stipulated in the Rules.

* HDS constituted in Medical Colleges/District level hospitals and HDC in other hospitals

3.3.11 Segregation and storage of bio-medical waste

Segregation is the most important step in the entire process of Bio-medical waste management. Improper segregation of waste results in mixing of general waste with bio-medical waste rendering the general waste also toxic and hazardous. As only about 15 *per cent* of hospital waste is hazardous proper segregation could considerably reduce the quantity of waste as well as cost of treatment and disposal. The BMW Rules provide that the waste shall be segregated at the point of generation and collected into appropriate colour coded bags at the point of generation as indicated in the table below:

Colour code	Type of waste
1. Yellow	Potentially infectious non-plastic waste
2. Red	Potentially infectious plastic waste
3. Blue/white	Waste sharps
4. Black	Discarded medicines, chemical waste, incineration ash

Test check of the records relating to bio-medical waste in the 40 HCEs in the selected districts revealed that the segregation of waste as stipulated was not carried out in 18 HCEs till date. In three Medical Colleges and one General Hospital with bed strength ranging between 747 to 1,600 and generating substantial quantities of waste, segregation was started between February 2004 and November 2005 only against the prescribed date of June 2000.

State Government have no mechanism to monitor proper segregation of waste generated by the units

In the absence of State level inventory of HCEs and non-possession of authorisation by 83 *per cent* of the identified HCEs, the prescribed authority/State Government have no mechanism to monitor the proper segregation of waste generated.

3.3.12 Treatment and disposal

Bio-medical waste is categorised into ten types according to the nature of waste. The treatment/disposal options are incinerator/deep burial, autoclaving, shredding, etc., depending on the type of waste.

The position of treatment and disposal facilities in the 40 test checked hospitals are detailed in the succeeding paragraphs.

3.3.12.1 Incineration

Human anatomical waste, animal waste and soiled waste are incinerated. Incineration system uses high temperature combustion under controlled conditions to convert wastes containing infectious and pathological material into mineral residue and gases. As per the guidelines issued by the Central Pollution Control Board, the incinerator should be double chambered with burners for each chamber so that the temperature of the primary and secondary chambers should be $800\pm 50^{\circ}\text{C}$ and $1050\pm 50^{\circ}\text{C}$ respectively. The incinerator shall be equipped with high pressure Venturi Scrubber System Air Pollution Control Device so that the temperature of the flue gas at the venturi scrubber outlet shall be approximately $70\text{-}80^{\circ}\text{C}$ to ensure saturation of the flue gas. The waste shall be charged into the primary chamber in bags through an automatic

feeding device at recommended intervals ensuring no direct exposure of furnace atmosphere to the operator.

Incinerators were used for short periods or as a place for burning the waste

Incinerators (two donated and four costing Rs 41 lakh) were installed between November 1999 and August 2005 in six out of 25 Government HCEs test checked. But none of the installed incinerators satisfied the norms prescribed in the Rules and were either used for short periods only or used as a place for burning the waste, resulting in unproductive expenditure of Rs 41 lakh. Inadequate incineration can result in release of toxic pollutants into the air. It was also found that the operators engaged were not qualified technicians.

Government stated (August 2007) that CPCB had instructed to discourage installation of individual incinerators and hence individual HCEs were not being asked to install incinerators.

3.3.12.2 Deep burial

Burial pits in the institutions test checked were not authorized by KSPCB

Deep burial of category one and two^φ waste is also an option in towns with population less than five lakh and in rural areas. Under the Rules the location of the deep burial site shall be authorised by the prescribed authority and the area should be relatively impermeable and should not be prone to flooding or erosion. None of the burial pits in the test checked institutions were authorised by the State Pollution Control Board. General Hospital, Thiruvananthapuram located in the city, deep buried the waste when the incinerator was not working though deep burial was not permissible as the population of the city was more than five lakh. Medical College Hospital and Women & Children Hospital in Alappuzha which have no incinerator resorted to deep burial. As most areas in Alappuzha district are water logged and flood prone, deep burial was liable to cause contamination to the surrounding areas.

The practice of deep burial adopted by the HCEs were without the prescribed safeguards and was therefore fraught with the risk of causing contamination of soil and underground water sources.

3.3.12.3 Autoclaving

Autoclaving is prescribed for disinfecting and treating Micro-biology and Bio-technology waste, waste sharps and soiled waste. Autoclaving (steam sterilisation) is a low heat thermal process and is designed to bring steam into direct contact with the waste in a controlled manner and for sufficient duration to disinfect the waste. Autoclave for bio-medical waste disposal was not installed in any of the test checked hospitals except in the pre-clinical and para-clinical departments of Medical College, Thrissur.

3.3.12.4 Shredding

From amongst all categories of wastes the 'sharps' which include syringes, needles, guide wires, scalpel, blades, broken glasswares pose high risk of

^φ Human anatomical waste and animal waste

injury and direct transmission potential due to the puncture or cut injury. So its management and disposal require utmost care.

Shredding/mutilation other disinfection was the procedure prescribed in the rules for waste sharps. Audit scrutiny revealed that shredding was done for syringes and needles alone by using needle cutters/burners in the test checked hospitals. Non-shredding of other items was fraught with the risk of reuse of the materials and injury to general public.

3.3.13 Treatment of liquid waste

For liquid waste generated in the HCEs disinfection by chemical treatment was mandatory before discharge to public drain. However the liquid waste generated in 15 out of 40 inspected HCEs was discharged without proper disinfection. This can lead to pollution of surrounding water bodies.

3.3.14 Lifting of waste by Municipal Bodies

The Municipal bodies shall pick up the segregated non-bio-medical solid waste generated as well as the duly treated bio-medical waste for disposal at the Municipal dumpsite. However, out of the 40 test checked HCEs, the Municipal bodies lifted the waste only in 10 HCEs. As a result the other HCEs deep buried/burned the general waste also.

Director of Health Services allotted (between June 2002 to June 2006) Carcass carriers (each costing Rs 13.23 lakh) to four municipal bodies through the HDCs of hospitals at Neyyattinkara, Nedumangad, Cherthala and Kayamkulam for lifting waste from these hospitals and dead bodies of animals from the concerned municipal areas. However, Kayamkulam Municipality alone lifted the waste from the hospital premises. As a result the expenditure of Rs 39.69 lakh (cost of three vehicles) failed to serve the intended purpose and the three hospitals continued to dispose of general waste by burning/burial.

**Municipal bodies
lifted the waste only
in 10 HCEs out of 40
HCEs test checked**

3.3.15 Maintenance of Records

Every occupier of a BMW generating establishment is required to maintain records related to the generation, collection, reception, storage, transportation, treatment and disposal of waste. This is necessary for periodical inspection and verification by the Prescribed Authority and for submitting annual reports. It was found in audit that only two out of the 40 test checked institution maintained such records. As a result the hospitals could not quantify the waste generated.

3.3.16 Common Bio-medical Waste Treatment and disposal Facility (CBWTF)

A Common Bio-medical Waste Treatment and disposal Facility(CBWTF) is a set up that can be used to treat the bio-medical waste generated in a number of health care facilities. BMW Rules stipulate that the Municipal Corporations, Municipal Bodies or Urban Local Bodies, as the case may be, shall be

responsible for providing suitable common disposal/incineration sites for the bio-medical wastes generated in the areas under their jurisdiction. In areas outside the jurisdiction of any municipal body, it shall be the responsibility of the occupier generating bio-medical waste/operator of a bio-medical waste treatment facility to arrange for suitable sites individually or in association, so as to comply with the provisions of these Rules. A CBWTF shall be allowed to cater upto 10,000 beds situated within a radius of 150 Km. However, in an area where 10,000 beds were not available within a radius of 150 Km, another CBWTF may be allowed to cater the HCEs situated outside the said 150 Km. The system shall have the treatment facilities like incinerator, autoclave/microwave/hydroclave/shredder.

Government stated (August 2007) that common facility for 10,000 beds and for 150 Km are general guidelines and are not mandatory.

3.3.16.1 CBWTF in Government sector

CBWTF yet to be established in Government Sector

Majority of HCEs in the State failed to provide adequate facilities for the disposal of bio-medical waste. Government in February 2004 approved the establishment of three common bio-medical treatment and disposal facilities in Kannur, Thrissur and Alappuzha districts. The facilities are to be established at the identified centres on Built-Operate-Transfer (BOT) basis. However, these facilities are yet to be established (May 2007).

3.3.16.2 CBWTF in private sector

Indian Medical Association Goes Eco-friendly (IMAGE), erected a CBWTF at Kanjikode in Palakkad District. This Facility with a waste treatment capacity of three MT per day was established in December 2003 at a cost of Rs 1.50 crore, on the land owned by IMA. The results of a visit to the Facility are detailed in the succeeding paragraphs.

3.3.16.3 Operational Capacity

The capacity of CBWTF is fixed on the basis of number of beds catered and collection area. As per the guidelines of CPCB 10,000 beds is the maximum operational capacity within a radius of 150 Km. However, the Facility was collecting (March 2007) bio-medical waste from 27,893 beds of 841 HCEs covering all the 14 districts. This was 279 per cent above the recommended capacity. The increase in the number of beds increased the quantity of waste collected. The waste collected in March 2007 averaged four MT per day which exceeded the capacity of three MT resulting in overloading. The operator tried to establish two more Facilities in Kollam district and Idukki district. But the Facilities could not be established due to political and public issues. As a result the whole waste is treated and disposed of in one centre.

3.3.16.4 Incinerator

There is no automatic feeding device in the facility and the bags were fed manually, the quantity fed depended on the quantity of waste collected per day. As per the computer controlled temperature data sheet for March 2007

primary chamber attained temperature up to 1,225°C and secondary chamber attained temperature up to 1,415°C. Loading of excess waste is the reason for the increase in temperature though the burner was programmed for automatic cut off at 900°C in the primary chamber and 1,100°C in the secondary chamber. The scrubber of outlet temperature never attained the recommended level of 70-80°C and the maximum temperature attained was 37°C. The high temperature of primary chamber may result in excessive stack emission and lower scrubber outlet temperature indicates unsaturated flue gas. Non-compliance of the operational standards prescribed in the BMW Rules may adversely affect human health and environment.

3.3.16.5 Autoclave

Bio-medical waste other than that sent for incineration is autoclaved for disinfection before disposal. The vaccum autoclave at the facility shall be operated at one of the following conditions:

Alternative	Minimum Temperature °C	Minimum pressure Kg/cm ²	Minimum residence time minute
1	121	1.1	45
2	135	2.2	30

The computer data sheet of the autoclave showed a residence time of 12 minutes only against 45 minutes required, at temperature 121°C. As the operating parameter was not met, the sterilisation carried out was not proper. No spores testing of the autoclaved waste was conducted to ensure complete killing of Bacillus Stearotherophilus spores.

3.3.17 Monitoring and Evaluation

The State Government has to constitute an Advisory Committee to advise the Government and the Prescribed Authority about matters relating to the implementation of the Rules. An advisory committee with Chairman, KSPCB as Chairman was constituted in July 1999. As of March 2007 only two meetings were conducted (1999, 2002). Though it was decided in the second meeting to convene the meeting once in three months, it was not convened thereafter.

The KSPCB had not fixed any specific norms for inspecting HCEs.

The HCEs were to constitute Waste Management Committees to monitor, review and analyse the waste management practices. However, only nine out of the 40 checked HCEs constituted such committees.

3.3.18 Annual reporting

Every occupier/operator shall submit an annual report indicating the categories and quantities of bio-medical waste handled during the previous year, to the Prescribed Authority by 31 January every year. The Prescribed Authority shall forward a consolidated report to the Central Pollution Control Board by 31 March every year.

Advisory Committee convened only two meetings since its constitution in July 1999

HCEs did not forward annual reports to KSPCB and KSPCB did not report to CPCB

The prescribed authority had forwarded two annual reports for 2001 and 2005 in October 2002 and August 2006 respectively. Annual report for 2006 is being compiled (May 2007).

The poor performance of the HCEs in submission of annual report is the reason for the delay in forwarding the annual report to CPCB. None of the 40 test checked establishments' forwarded annual report regularly to the KSPCB.

3.3.19 Conclusion

Though KSPCB was notified as statutory authority responsible to enforce the implementation of the BMW Rules, it did not prepare a comprehensive list of bio-medical waste generating institutions and take effective steps to enforce BMW Rules in all the identified HCEs. As of March 2007, only 17 *per cent* of the identified institutions were brought under the purview of the Rules. Even for HCEs which had been issued authorisation, timely renewal had not been made. KSPCB also did not take follow-up action after issue of provisional authorisation in most of the cases. As a result most of the HCEs were functioning without authorisation, in gross violation of the Rules. Only 14 *per cent* of Government HCEs had obtained authorisation as of March 2007 and regular funds were not allotted to these HCEs for proper management of bio-medical waste. It was found that even the funds allotted for creating infrastructure facilities for waste disposal were not utilised. Audit test check revealed that waste treatment and disposal facilities were either non-existent or inadequate in most of the HCEs.

Only one Common Bio-medical Waste Treatment Facility existed against the four required and it was handling waste in excess of its stated capacity leading to improper disposal of waste. Proper monitoring and evaluation mechanism did not exist at Government/Prescribed Authority/Operator level. Thus the implementation of BMW Rules in the State was very poor, as a result of the low priority assigned by Government/KSPCB in enforcing compliance with the Rules. As most of the 11,000 MTs of bio-medical waste estimated to be generated in the State annually is being disposed without proper segregation and treatment there could be disastrous consequences to the health of the people due to possible contamination of the environment by toxic and infectious waste.

3.3.20 Recommendations

- KSPCB should take urgent action to prepare an inventory of all bio-medical waste generating institutions and bring them under the purview of the Rules.
- Introducing a system of production of authorisation of KSPCB under BMW Rules by HCEs while applying for registration/renewal of registration with LSGIs should be considered by Government so as to bring all private HCEs under the Rules.

- Government should ensure availability of funds for infrastructure facility and recurring expenditure in Government sector.
- KSPCB should invoke penal provisions under Environment (Protection) Act, 1986 to ensure compliance of Rules by bio-medical waste generators.
- Sufficient number of CBWTF should be established in accordance with the guidelines issued by Central Pollution Control Board.
- Norms for inspection should be fixed to ensure regular compliance of Rules by the bio-medical waste generators.

SCHEDULED CASTES/SCHEDULED TRIBES DEVELOPMENT DEPARTMENT

3.4 Educational Development of Scheduled Castes/Scheduled Tribes

Highlights

Union/State Governments have been implementing various schemes for enabling the scheduled castes/scheduled tribes to upgrade their educational standards and skills to generate self-confidence and self-reliance among them. A review of the major schemes viz., scheme for financial assistance to SC/ST students, financial support to selected talented SC/ST students, coaching classes for candidates writing competitive examinations, establishing residential schools and hostels, etc., revealed various shortcomings such as delay in availing of central assistance, delay in utilising funds provided by Central/State Governments, delay in disbursement of assistance to beneficiaries and lack of monitoring and evaluation. Some of the more important points are given below:

Huge shortfall (Rs 78.20 crore) in utilisation of budget provision during 2002-03 to 2006-07 in respect of seven schemes. Assistance aggregating Rs 76.77 lakh was released to the beneficiary students during the succeeding academic years.

(Paragraphs 3.4.8 and 3.4.8.1)

Assistance of Rs 13.22 crore for improving hostel facilities for SC/ST students, implementing “Guaranteeing Quality Education Scheme” and for starting para medical courses remained unutilised

(Paragraph 3.4.8.2)

Central assistance of Rs 28.41 crore for Post Matric Scholarship Scheme was yet to be reimbursed by GOI and Rs 5.54 crore was pending payment to students as of March 2007.

(Paragraph 3.4.9.2)

Implementation of schemes like upgradation of merit, Sree Ayyankali Memorial Talent Search and Development Scheme, etc. was flawed and not according to the guidelines.

(Paragraph 3.4.9.3)

No effective action was taken to obtain central assistance of Rs 2.41 crore for construction of Ashram schools and to utilise Rs 2.50 crore received for construction of residential school for tribal students.

(Paragraph 3.4.9.4)

Central assistance of Rs 3.10 crore for construction of hostels was not availed of and Rs 1.45 crore received had not been fully utilised. Four hostels completed at a cost of Rs 1.05 crore had not been put to use even when 79 hostels were accommodated in rented buildings and the hostels were over crowded.

(Paragraph 3.4.9.5)

No effective monitoring and evaluation system to assess the implementation of the schemes had been evolved by the Department.

(Paragraph 3.4.10)

3.4.1 Introduction

State has a constitutional responsibility of promoting the education and economic interests of weaker sections of the society and in particular of the Scheduled Castes (SCs) and Scheduled Tribes (STs). As per the 2001 Census, SCs and STs constituted 9.81 *per cent* and 1.14 *per cent* respectively of the total population in the State. The literacy rate of SCs and STs was 82.66 and 64.35 *per cent* respectively as against the overall State literacy rate of 90.86 *per cent*.

Union and State Governments are implementing various schemes for enabling the SCs/STs to upgrade their educational levels and skills to generate self confidence and self reliance. These include schemes for giving financial assistance to SC/ST students, additional financial support to selected talented SC/ST students, coaching for appearing in competitive examinations, establishing residential schools including sports school, etc. These schemes also aim to increase enrolment and retention of SCs/STs in educational institutions, to reduce drop out rates and to increase their representation in higher educational/ professional institutions and in jobs.

3.4.2 Organisational set up

The Scheduled Castes/Scheduled Tribes Development Department is headed by the Principal Secretary. The Director of Scheduled Castes Development and the Director of Scheduled Tribes Development look after the matters relating to SCs and STs respectively. They are assisted by Regional Deputy Directors, District Development Officers, SC Development Officers in the former department and Project officers/Tribal Development Officers and Tribal Extension Officers in the latter.

3.4.3 Audit objectives

The performance audit was conducted with a view to ascertain whether -

- planning for implementation of various schemes launched for the educational development of SCs/STs was efficacious and based on reliable and acceptable data.

- the allocation, release and utilization of funds earmarked for various schemes were judicious, adequate and effective.
- the efforts of Government resulted in improving the educational indicators, i.e, gross enrolment ratio, gross drop out rate etc., and in upgrading the skills and standard of education of SC/ST students.
- the monitoring system at various levels was functioning effectively.

3.4.4 Audit Criteria

The following criteria were adopted for assessing the performance:

- Census data for the State.
- Prescribed guidelines/directions/instructions issued by the concerned Ministries/Directorates
- Prescribed norms of funding of each scheme
- Prescribed norms for implementation of the schemes
- Prescribed eligibility criteria fixed for various categories of beneficiaries.

3.4.5 Scope of Audit

The Performance Audit covered implementation of selected schemes meant for the educational development of SCs/STs implemented by the State and Central Governments during the period from 2002-03 to 2006-07. These include the Post Matric Scholarship Scheme and Pre Matriculation studies, Scheme for assisting brilliant and talented SC/ST students, Model Residential Schools and Sports Schools, Coaching Centres, hostels for boys and girls, financial support to parents of ST students, etc.

3.4.6 Audit methodology

Details on implementation of various schemes were collected through scrutiny of records, data and information in the Directorate of Scheduled Castes Development and the Directorate of Scheduled Tribes Development. Five districts (Thiruvananthapuram, Ernakulam, Thrissur, Palakkad and Malappuram) were selected for detailed scrutiny by PPSWR*. Within the selected districts, one Regional Deputy Directorate for Scheduled Castes, five District Development Offices for Scheduled Castes, three Integrated Tribal Development Project Offices, three Tribal Development Offices, twenty one Scheduled Caste Development Offices, six Tribal Extension Offices, three Universities, thirty four Colleges, forty Schools, ten Hostels, five Model Residential Schools, a Centre of Excellence, a Residential Sports School and two Para Medical Institutes were selected by Simple Random Sampling . Details were also collected by issuing questionnaires to various institutions. An entry conference was held with the Principal Secretary, Scheduled Castes and Scheduled Tribes Development Department in July 2006.

* Probability Proportional to Size With Replacement.

3.4.7 Educational indicators during 2002-03 to 2006-07

In the State, financial assistance was given to all the SC/ST students from first standard to post graduate level including professional courses. Besides, there were schemes to improve the educational standards and the competency of the students. Educational indicators are a measure of the impact of the schemes. Audit scrutiny revealed that:

- The gross enrolment ratio in classes I-VIII (Age six to below 14 years) of SC and ST students was fairly high during the period 2002-03 to 2006-07, the percentage of which ranged between 91.43 and 106.91[#] in SC sector and 82.76 and 108.99[#] in ST sector.
- The percentage of drop out is an indicator of socio-economic and educational backwardness. In the case of Scheduled Tribes students the drop out ranged from 3.47 to 5.26 *per cent*. Drop out among the SC students was 0.42 to 2.40 *per cent* during 2002-03 to 2004-05.
- Even though the performance of SC/ST students in the SSLC examination was not at par with that of the State as a whole, the pass percentage showed steady increase from 39.32 *per cent* in 2002-03 to 65.03 in 2006-07 in the case of SC students and 37.72 *per cent* in 2003-04 to 60.28 *per cent* in 2006-07 in respect of ST students.
- The literacy rate of SCs and STs increased from 79.66 to 82.66 and 57.22 to 64.35 *per cent* respectively from 1991 census to 2001 census as against the overall increase in literacy rate from 89.81 to 90.86 *per cent*.
- These would indicate that the various schemes had benefited the SC/ST students to a large extent despite the laxity of the department in timely utilising the Central/State funds.

Audit findings

3.4.8 Funding pattern

Funds for implementing various Central and State schemes are provided in the State Budget and allotted to District SC/ST offices from the concerned Directorate based on requirements. It was seen that the annual budget was prepared without considering the actual number of beneficiaries under each scheme. Budget provision and expenditure for the selected Central and State schemes from 2002-03 to 2006-07 are given in **Appendix XXXI**.

Major shortfall (Rs 78.20 crore) in spending was noticed in respect of the following schemes.

Shortfall in expenditure of Rs 78.20 crore in respect of seven schemes

[#] Including overaged students admitted in classes I to VIII

(Rupees in crore)

Name of scheme	Budget provision	Expenditure	Savings
Improving facilities in Hostels	23.09	6.22	16.87
Model Residential School (Article 275 (1))	19.51	13.48	6.03
Model Residential School	88.77	69.72	19.05
Hostels (50 per cent CSS)	19.41	9.91	9.50
Centre of Excellence	7.5	1.59	5.91
Para medical studies	21.00	5.45	15.55
Tutorial grant	8.05	2.76	5.29

According to the Department of SC and ST Development, savings was mainly due to delay in getting administrative sanction for works connected with the institutions.

3.4.8.1 Delay in release of funds

Assistance of Rs 76.77 lakh was disbursed only in the next academic year

Timely release of assistance is necessary to ensure that students are not put to financial hardship. Audit scrutiny revealed long delays in disbursement of assistance under various schemes. Assistance amounting to Rs 76.77 lakh in respect of the Central schemes Post Matric Scholarship (Rs 33.05 lakh), Book Bank (Rs 19.93 lakh), upgradation of merit (Rs 1.50 lakh), and State scheme of incentive to parents of Tribal Students (Rs 6.77 lakh) and special incentive to brilliant ST Students (Rs 15.52 lakh) was disbursed only during the next academic years and delay of four to nine months occurred in the disbursement of assistance of Rs 57.50 lakh under Sree Ayyankali Memorial Talent Search and Development Scheme during the years 2002-03 to 2006-07.

Government stated (August 2007) that constraints of funds and delay in getting details from the institutions were the main reason for delay in release of funds for disbursement of assistance.

3.4.8.2 Non-utilisation/delayed utilisation of funds

Abnormal delays in utilisation of GOI/State funds released for specific schemes were noticed, as detailed below:

Funds aggregating Rs 13.22 crore remained unutilised

- Out of Rs 13 crore released by the GOI for improving/providing facilities in the SC/ST hostels during 2004-05 and 2005-06, Rs 6.62 crore remained unutilized as of 31 March 2007.
- Under the 'Guaranteeing Quality Education' scheme meant for tribal students GOI had released Rupees five crore in 2003-04. The State Government accorded sanction (March 2004) to implement the scheme selecting KIRTADS[†] as the nodal agency. As of May 2007, only Rupees one crore was released (February 2007) to KIRTADS and the balance Rupees four crore was retained by the State Government.
- State Government released Rs 2.70 crore in January 2004 for starting two year Para Medical Diploma Courses for SC/ST students in three Medical Colleges. According to Government

[†] Kerala Institute of Research, Training and Development for Scheduled Castes and Scheduled Tribes

orders three courses were to be started in each Medical College, admitting twenty students for each course. Only an amount of Rs 0.10 crore had been utilised for purchase of books and lab equipment and the balance Rs 2.60 crore remained unspent as of May 2007.

Government stated (August 2007) that delay in utilisation of funds was on account of delay in issue of administrative sanction, non-availability of land, delay in arrangement of works, etc.

3.4.8.3. Excess release of Central assistance

Department availed excess Central assistance of Rs 1.24 crore

Under the Centrally Sponsored Scheme “Post Matric Scholarship Scheme” cent *per cent* assistance over and above the committed liability of the State was to be received. The total committed expenditure for the four years 2002-03 to 2005-06 was Rs 3.42 crore. As against the expenditure figures of Rs 7.27 crore booked in the Appropriation Accounts, the expenditure reported by the Department to GOI was Rs 8.51 crore. The Ministry of Tribal Affairs released funds based on these proposals. This resulted in excess release of Rs 1.24 crore under the scheme during 2002-03 to 2005-06.

Government stated (August 2007) that payment of post matric scholarship was met from both plan and non-plan funds and there were chances of non-plan expenditure being included under Plan expenditure resulting in excess claiming of Central assistance. Government added that this would be avoided in future

3.4.9 Implementation

3.4.9.1. Planning and identification of beneficiaries

The departments of Scheduled Castes and Scheduled Tribes has been implementing a number of schemes for the educational development of SCs/STs. But the department has not conducted any survey to assess the targeted population under any of the schemes. Proper planning and identification of beneficiaries is essential for the implementation of the schemes. Scrutiny of the records revealed that the system of identifying the beneficiaries is deficient resulting in the benefits not reaching the targeted population or overlapping of benefits as described in the succeeding paragraphs.

Government stated (August 2007) that though a survey to identify the targeted group had not been conducted the department could extend the benefits to the targeted population as educational concessions were extended to all ST students irrespective of income.

3.4.9.2 Schemes for providing financial assistance for education

Central assistance of Rs 28.41 crore has not been reimbursed

Financial assistance is provided in the form of scholarship and lump sum grant to all SC/ST students under two schemes ‘Post Matric Scholarship Scheme’ and ‘Pre Matriculation Studies’ scheme. Contrary to GOI guidelines

prescribing income limit of Rupees one lakh for granting financial assistance under Post Matric Scholarship Scheme, the scheme was implemented without any income limit in the State. As a result, expenditure in excess of Central norms required for Post Matric Scholarship Scheme was met from State funds. Rupees 2.68 crore and Rs 2.86 crore were pending payment to SC and ST students respectively under Post Matric Scholarship Scheme as on 31 March 2007.

Government stated (August 2007) that the pending payment would be cleared during 2007-08.

The Central Government had not reimbursed Rs 28.41 crore as on 31 March 2007 in SC sector.

Government stated (August 2007) that arrears of Central assistance to be received was reported to GOI along with the proposal for 2007-08.

3.4.9.3 Schemes for improving the academic standard of SC/ST students

Audit scrutiny of three schemes intended for the academic improvement of selected SC/ST students revealed the following:

Upgradation of merit of SC and ST students

A scheme for upgrading the merit of SC/ST students by providing them remedial and special coaching in Classes IX to XII, to help them clear competitive examinations for admission to professional courses like engineering and medicine was being implemented in the State from period prior to 1997-98 for SC students and from 2000-01 for ST students. It envisaged a package grant of Rs 15,000 per student per year, of which Rs 5,000 was for meeting boarding expenses and Rs 3000 for pocket money and books to be given to 10 new students annually and Rs 7,000 to Principal, teachers, etc., as honorarium for taking classes.

Audit revealed that:

- For the Scheduled Castes only students in Model Residential Schools who were already entitled to free board were selected. The boarding charges to be paid to students were utilised for meeting the general expenditure of the schools. Selection of students who were already enjoying free board indicated that the selection process was flawed.
- No honorarium was paid to Principal, teachers, etc., in SC sector except during 2004-05 and 2006-07.
- No fresh ST students were selected in 2006-07.
- Students once selected in Standard IX were to be paid assistance for the next three years till they complete Standard XII. During 2002-03 to 2006-07, 24 ST students were removed before completing three years defeating the very objective of the scheme.

There was no monitoring at the Directorate level to ascertain whether students who were provided assistance under the scheme had secured admission for professional courses. As such impact of the scheme could not be assessed.

Government stated (August 2007) that steps would be taken to ascertain whether students were getting admission to professional courses.

Sree Ayyankali Memorial Talent Search and Development Scheme

Benefits envisaged under the scheme were not fully extended to SC/ST students

This scheme seeks to provide assistance to brilliant SC/ST students in classes V to X. The beneficiaries are to be selected from Government/aided schools through a competitive examination. Each year the SC beneficiaries are required to obtain five *per cent* more marks than they had in the previous annual examination, in order to remain eligible.

The assistance includes grant for books (Rs 750 per month), special tuition fees for English, Mathematics and Science (Rs 225 per month for SC's, and Rs 240 per month for STs), a monthly stipend (Rs 150 per month), furniture for study (Rs 2,000 for SC students whose annual income is below Rs 12,000 and Rs 750 for ST students upto 2004-05 and Rs 1,000 from 2005-06) and nutritional support (Rs 100 per month for SC students whose annual income is below Rs 12,000).

Audit scrutiny revealed the following:

- 1,100 students belonging to scheduled castes were selected during 2002-03. But no new students were selected during 2003-04 to 2006-07, thus depriving the benefits to SC students. The department stated that this was due to some practical difficulties in implementation like attaining of five *per cent* more marks in subsequent years, conducting of competitive examination for selection, etc. However, a proposal to amend the scheme was sent only in July 2007. It was seen that ST students were selected under the scheme by conducting competitive examination every year.
- All the eligible students (Scheduled Castes or Scheduled Tribes) were not paid the full entitlements. Details are given in **Appendix XXXII**.
- SC students were selected based on marks in the class examination instead of competitive examination as prescribed.
- An unrealistic criterion of securing five *per cent* marks more than those obtained in the previous annual examination was fixed for making students eligible for getting continued assistance in Scheduled Castes sector. In respect of students who had initially got high marks this was unreachable. As a result, 353* students out of 590 were denied assistance under the scheme during 2003-04 to 2006-07 in the test checked districts.
- As per guidelines a seminar was to be held with the participation of selected students, parents, Scheduled Caste and Scheduled Tribe promoters etc., after initial selection of students to create awareness among them. No such seminar was conducted in four

* 2003-04:32, 2004-05: 96, 2005-06: 176 and 2006-07: 49

out of five districts selected in Scheduled Castes sector and in two out of five districts in Scheduled Tribes sector.

- A review meeting was to be held each year after the second terminal examination to ascertain the performance of the students. No such meetings were held in the five test checked districts.
- SC students with annual family income below Rs 12,000 were eligible for assistance under nutritional support at the rate of Rs 100 per month. Though 128 students were recommended for such support in two test checked districts by the Scheduled Caste Development Officers the assistance was not paid to any of them.

Due to flaws in selection of students and implementation, and in the absence of any evaluation by the Department the impact of the scheme in raising the standards of the students could not be assessed.

Government stated (August 2007) that non-payment of entitlements under the scheme from 2002-03 to 2006-07 was being examined and whole components would be implemented in future.

Tutorial grant

The scheme formulated (December 2003) for betterment of ST students provides for starting special coaching centres for giving intensive residential coaching to SSLC and Plus Two students for preparing them for the examination and to increase the pass percentage in those examinations. The parents who do not wish to send their children to the residential coaching centres owing to special reasons were also to be provided assistance.

But this assistance (Rs 300 and Rs 400 monthly for three months and TA of Rs 200 and Rs 300 to parents of SSLC and Plus Two students respectively) was not paid to any student under the scheme during 2003-04 to 2006-07. No specific reasons were reported by the department for non-implementation of the scheme which led to denial of benefits to ST students.

3.4.9.4 Establishment of Residential Schools for SCs and STs

Central and State Governments have formulated schemes for starting Model Residential Schools for the SC and ST students for imparting quality education and providing better accommodation. In the State there are four categories of such schools:

1. Ashram schools for tribal students (Centrally sponsored scheme)
2. Residential schools funded under Article 275 (1) of the Constitution (Central scheme)
3. Model Residential Schools for SC/ST students (State scheme)
4. Residential Sports School for SC/ST students (State scheme)

Ashram schools

No effective action was taken to obtain Central share of Rs 2.41 crore

The objective of the scheme was to promote and extend educational facilities in tribal areas in the pattern of the old Gurukul type of education. Fifty *per cent* of the expenditure for construction of school buildings (the land was to be provided by the State Government) from the primary stage to the senior secondary stage and for upgradation of the existing primary Ashram schools was to be borne by GOI. There were four Ashram schools in the State. Out of these, land had been transferred only for two (Ashram schools at Noolpuzha and Manjeri). Though Rs 3.31 crore was to be received as central share for these schools, only Rs 0.90 crore was received and no amount was received from 2000-01 due to sending of defective proposals. No effective action was taken by the department to get the balance central share of Rs 2.41 crore. As no land was provided for the other two schools the State was not eligible for the central assistance.

Government stated (August 2007) that action was being taken for getting the central share admissible.

Residential schools

Central assistance of Rs 2.50 crore remained unutilised

There were three schools[‡] in the State under the central scheme of providing residential schools for tribal students under Article 275 (1) of the Constitution with classes from Standards VI to XII. Each school was provided with a central grant of Rs 2.50 crore for construction and Rs 0.30 crore for non-recurring expenditure. Scrutiny of records revealed that:

- The school at Njaraneeli provided residential accommodation to students in classes from standard I, though the scheme was applicable to schools having classes from standards VI to XII.
- Rs 2.50 crore was released (Rupees one crore in 1997-98 and Rs 1.50 crore in 2002-03) for construction of school at Pookot in Wayanad District. However, no expenditure was incurred as of May 2007. It was stated that the land identified was not suitable and hence construction could not be started.

Government stated (August 2007) that alternate land had been identified and construction had since started.

3.4.9.5 Hostels for SC/ST students

Under the scheme formulated by GOI to provide hostel facilities for SC/ST students around the educational centres, GOI would reimburse 50 *per cent* of the estimated cost of construction provided land was made available free of cost by the State Government. There were 105 hostels in SC sector and 111 hostels in ST sector, of which 79 were in rented buildings. Scrutiny in audit revealed that:

[‡] Ekalavya Model Residential School ,Pookot(Wayand), Ekalavya Model Residential School, Munnar (Idukki), and CBSE school, Njaraneeli (Thiruvananthapuram).

For ST students

Department failed to forward proposals/ provide land for construction of hostels resulting in non-availing of Central assistance of Rs 1.84 crore

- Construction of seven hostels for which Central assistance at the rate of Rs 7.35 lakh each was received for the period from 1997-98 to 2001-02 had not been started as of May 2007 and for four of these hostels even the land to be provided by the State Government was not made available.
- Though an amount of Rs 14.70 lakh was sanctioned by GOI during 2001-02 for the construction of two girls' hostels (Marayur in Idukki and Padiyur in Kannur) the amount released was only Rs 0.59 lakh, as the Department did not furnish information to GOI on whether sufficient provision was made in the State budget for the construction of the above hostels.
- Up to 2001-02, GOI had been releasing assistance at the rate of Rs 7.35 lakh per hostel for the construction of five hostels each year. For the years 2002-03 and 2004-05 to 2006-07, the Department did not forward any proposals to GOI and during 2003-04, a proposal had been forwarded without transferring land for the construction of the hostels. As 43 hostels were functioning in rented buildings the State should have sent necessary proposals to GOI. Inaction by State resulted in non-availing of Central assistance of Rs 1.84 crore.
- Large overcrowding was noticed in the hostels. In Palakkad district twenty one hostels were overcrowded to the extent of 105 to 258 *per cent* of their capacity.
- Though four* pre-matric hostels for ST students were completed at a cost of Rs 1.05 crore during 1995-2001 they could not be utilized due to lack of drinking water, electricity, and defects in construction. The students were therefore accommodated in rented buildings.

Government stated (August 2007) that steps were being taken for submission of proposals to GOI on regular basis. Government also stated that of the four completed hostels one hostel at Pookkottupadam had since started functioning and two others at Blanthode and Mampad would be put to use shortly.

For SC students

- Construction of three hostels, for which Central assistance of Rs 92.50 lakh was received during 2002-03 and 2004-05 two[§] were incomplete and the third[§] had not been started as of May 2007. It was seen that even the required land was not made available to the department in the latter case.

* Prematric hostels at Blanthode (Kasargode), Odakkayam, Mampad and Pookkottupadam (Malappuram)

§ Hostels at Nattakom (Kottayam) and Pazhayangadi (Kannur)

§ Hostel at Kayamkulam (Alappuzha)

- Government accorded administrative sanction (January 2003) for the construction of pre-matric hostel for boys at Pazhayangadi, Kannur at a cost of Rs 48 lakh. It was seen that the Director, Scheduled Castes Development had deposited Rs 72 lakh with Public Works Department. Even after the excess deposit was pointed out by Audit, no action was taken by the department to get the excess amount refunded (May 2007).

While confirming the facts, Government stated (August 2007) that PWD had informed that the estimate had to be revised to Rs 59 lakh but the revised estimate had not been furnished. Government added that PWD had been directed to furnish the actual estimate amount and expenditure incurred so far.

- Central assistance of Rs 3.10 crore was to be received for the construction of five hostels in Model Residential Schools for SC students. However, the department sent proposals (Rs 1.84 crore) only for two hostels (Punnapra and Thrithala) and GOI released Rs 1.28 crore for the hostel at Punnapra. Reason for not sending proposals for the remaining three hostels for which an amount of Rs 1.26 crore were to be received from GOI were not on record.

Government stated (August 2007) that proposals for Central assistance was not forwarded as there was a confusion as to whether construction of hostels for students of Model Residential Schools could also be included and new proposals were being forwarded timely.

- Pre matric hostel in Veliyathunad, (Ernakulam) was utilised for running Model residential school, Keezhumadu, (Ernakulam) till 2004-05 and Post matric hostel in Manjeri (Malappuram) was utilised for running Ashram school, Nilambur (Malappuram) till 2005-06. After the shifting of the schools to their premises the hostel buildings remained unoccupied till date (May 2007).

Even when 79 hostels were accommodated in rented buildings the Departments had not taken necessary action for availing of the eligible Central assistance or utilising fully the Central assistance received and to complete the construction of long delayed hostel buildings.

3.4.9.6 Schemes for specific purposes

Book Bank Scheme

The Book Bank Scheme, a Centrally assisted scheme, aims to set up Book Banks in all Medical, Engineering, Agriculture and Veterinary colleges, Polytechnics and Institutes imparting instruction in Chartered Accountancy, MBA, Law and Bio-Sciences. Under the Scheme, prescribed text books were to be provided to SC/ST students to reduce the drop out from the above mentioned courses.

Central assistance for Book Bank scheme not availed

Audit scrutiny revealed that:

- The Book Bank Scheme had not been implemented in the ST Sector. Though a proposal for Rs 3.42 lakh was sent during 2003-04, no follow up action thereon was taken to get the Central assistance. No proposals for the years 2004-05 to 2006-07 were sent to GOI.
- The State Expert Committee (the Committee) constituted to prescribe text books to be procured did not include representatives from all the Universities leading to purchase of books which were not useful/out-dated in the areas covered by Universities which were not represented.
- The Committee did not meet in 2004-05 to 2006-07 to prescribe books. Instead the Heads of Institutions were authorized to purchase books of their preference.
- During 2002-03 and 2003-04, many of the experts nominated did not attend the meeting, instead they deputed librarians/clerical staff.

Special incentive to meritorious SC and ST students.

Under this scheme a one time incentive to meritorious SC and ST students ranging from Rs 750 to Rs 4,000 and Rs 1,500 to Rs 6,000 respectively is paid.

It was seen in audit that though the Government enhanced (October 2005) the rate of incentive to ST students who passed SSLC to PG level examination, the enhanced rates were not paid to 427 students in the five test checked districts.

Government stated (August 2007) that action was being taken for providing sufficient funds for payment of incentive at enhanced rate

Incentive to parents of tribal students

Shortfall in payment of incentive to parents of tribal students

The scheme was intended to give assistance to parents of tribal students who had regularly sent their children to schools. Those who had attendance of 75 *per cent* or more in an academic year were eligible for assistance of Rs 100 per annum up to 2003-04 and Rs 500 per annum thereafter based on a certificate from the Head of the Institution. Audit scrutiny revealed the following:

- As no additional funds were provided in the budgets for enhancement of assistance from the academic year 2004-05, funds amounting to Rs 3.64 crore required by the district officers were not provided during 2004-05 to 2006-07.

- In the test checked districts assistance amounting to Rs 32.24 lakh was not paid to 7,573 beneficiaries during 2004-05 to 2006-07 due to paucity of funds.
- During 2006-07, in Palakkad district, the incentive was paid to 339 beneficiaries of Muduga and Kurumba communities without collecting certificate of attendance from the school authorities.

Government stated (August 2007) that steps would be taken for providing required funds to clear the pendency.

3.4.10 Monitoring and evaluation

Both the Directorates had Internal Audit Wings under the Finance Officer with a staff strength of ten for SC and two for ST Department. Scrutiny of records showed that the internal audit was in arrears in the range of 50 to 79 *per cent* and 63 to 81 *per cent* in SC and ST Departments respectively during 2002-07. Department attributed the shortfall in internal audit to shortage of staff.

It was seen in audit that the Departments have not so far evolved a system for monitoring the implementation of various Central and State schemes. The funds received from the Central/State Governments were distributed to the field offices and the expenditure statements are collected and compiled by the Directorates. Apart from this the efficiency or effectiveness of the implementation of the schemes were not monitored by the Government/Departments. In February 2004 the SC/ST Development Department constituted four Inspection Teams for inspection of the subordinate Offices under the administrative control of the Department. The details of inspections conducted by these teams had not been furnished (May 2007).

3.4.11 Conclusion

The Department was implementing various Central and State schemes for the educational development of SC/ST students up to postgraduate level including professional courses. However, the Department had not conducted any survey so far to determine the targeted population for each scheme to be covered in each year. The improvement in educational indicators showed that the schemes had beneficial impacts. But, it was noticed that in many schemes like ‘Post matric Scholarship Scheme’, ‘Book Bank Scheme’, ‘Scheme for Upgradation of merit of SC/ST students’, ‘Incentive to parents of tribal students’, etc., the payment was not made to all the beneficiaries during the academic year itself, though the funds required for the implementation of the schemes were provided in the budget, Rs 10.62 crore received from GOI for implementation of schemes like ‘Improving hostel facilities’, ‘Guaranteeing Quality Education’ etc. had not been utilized. Non submission of proposals to GOI had resulted in non-availing of Central assistance of Rs 3.10 crore for construction of hostels. Laxity in implementation of the schemes like ‘Upgradation of merit’, ‘Sree Ayyankali Memorial Talent Search and Development Scheme’, ‘Special incentive to students and parents of tribal students’, ‘Construction of Hostels’ etc. resulted in non achievement of

objectives intended of the schemes. Even when 79 hostels are accommodated in rented buildings four completed hostel buildings remained unoccupied and Central assistance of Rs 1.45 crore received for construction of hostels was not utilized fully. The Department has not evolved an effective monitoring system to ascertain the effective implementation of the schemes.

3.4.12. Recommendations

- The Department should conduct an initial survey to identify the targeted population under various schemes.
- Delay in payment of assistance to the beneficiaries should be avoided so that the intended benefits reach them in time.
- The Departments should evolve a system for timely utilisation of Central assistance received for implementation of various schemes and securing Central assistance for all eligible schemes.
- Instances of denial of eligible benefits due to administrative laxity should be viewed seriously by Government and corrective steps taken to avoid such instances.
- A system of monitoring progress of students assisted or trained for improving standards or skills should be put in place so as to assess the effectiveness of the efforts put in and take remedial steps.
- A monitoring system at Government level should be set up with a view to ensure that proper proposals are sent to GOI for securing eligible Central assistance, oversee implementation of various schemes, assess the impact of schemes and for effective coordination with other departments.

INFORMATION TECHNOLOGY/FINANCE DEPARTMENT
3.5 Integrated Payroll and Personnel Management System
Highlights

Under the Integrated Payroll and Personnel Management System (IPPMS), a centralized database of over 5.25 lakh employees working in the Kerala State Government Service in more than 100 Government departments is to be created by computerizing the entire payroll and personnel information related activities. Though as per the implementation plan, IPPMS was to be rolled out in all departments by April 2007 only 5,997 out of 5.25 lakh employees were brought into the payroll system as of May 2007. Audit of IPPMS revealed various shortfall/deficiencies, viz., absence of specific action plan for digitization of service records of 5.25 lakh employees, absence of network connectivity for linking offices to access the system, discrepancies in employee data due to inadequate validation checks, etc. Some of the important points are given below:

The system was not implemented completely as the intra-state connectivity was lacking and complete data had not been captured.

(Paragraph 3.5.5.1)

Digitisation of employees was not achieved within target period due to poor planning of Government.

(Paragraph 3.5.5.2)

There was no backup policy. Backup of server data, information crucial to employees, was not stored off-site.

(Paragraph 3.5.5.3)

Although Government decided (November 2005) to extend SPARK to other departments, testing and acceptance of the successful completion of the SPARK was not ensured before replication to other departments.

(Paragraph 3.5.5.4)

In the absence of any security policy the system was exposed to the risk of external threats.

(Paragraph 3.5.6)

Deficiencies in the system allowed the possibility of re-processing of passed bills before encashment leading to the risk of double payment.

(Paragraph 3.5.7.1)

Inadequate validation controls in the system affected the reliability of the database and its usefulness for MIS.

(Paragraph 3.5.8)

Salary bills of Self Drawing Officers were not generated through the system.

(Paragraph 3.5.9.3)

Manual processing of part salary bills and arrear bills without updating the system involved the risk of overpayment.

(Paragraph 3.5.9.4)

3.5.1 Introduction

Implementation of the Integrated Payroll and Personnel Management System (IPPMS), subsequently renamed as Services and Payroll Administrative Repository for Kerala (SPARK) was one of the 93 projects approved (November 2003) under the Modernizing Government Programme (MGP) of the Government of Kerala. As per the Detailed Implementation Plan (DIP) for MGP, the project was to be rolled out in all departments by April 2007. SPARK development visualized repositories of Government employee details including service matters, salary accounts and payroll. The database resides in a central server at State Data Centre and individual departments/offices are to access the server through intranet wherever available or else through the Internet. The project is implemented in various departments jointly by the Information Technology Department and the Finance Department through the Kerala State IT Mission (KSITM) with the technical assistance from National Informatics Centre (NIC). The system has SQL Server as back end and ASP.net as front end

3.5.2 Objective of computerisation

The objective is to create an IT enabled, comprehensive and logically centralized Government employee information system to ensure:

- (i) the availability of the required information to the authorities concerned in a pre-defined manner;
- (ii) transparency with respect to employee matters, better and planned utilization of human resources, better and prompt services to the employees;
- (iii) accurate and automatic payroll processing;
- (iv) that the rules and regulations are uniformly applied to all employees thereby avoiding complaints and achieving better employee relations.

3.5.3 Scope, objectives and methodology of audit

Records relating to pilot locations viz., Finance and General Administration departments in Government Secretariat and the Commercial Taxes department; and one[#] out of two schools and one[@] out of five Collectorates were examined by using Computer Assisted Audit Technique (CAAT). Adequacy of general IT controls and application controls and effectiveness of

[#] Model High School, Thiruvananthapuram

[@] District Collectorate, Thrissur

the system with reference to defined objectives of computerisation was assessed.

3.5.4 Audit criteria

- Project Implementation Plan,
- User Manuals,
- Relevant provisions of Kerala Service Rules and Treasury Rules.

Audit findings

3.5.5 Implementation

The project IPPMS formulated in 2003 was to be operationalised in December 2004, but development of software started with the sanction of funds only in July 2004. Implementation at the selected departments started in March 2005 and Government decided to implement the project in all other departments in November 2005.

Audit observed the following:

3.5.5.1 The system was not implemented completely as the intra-state connectivity was lacking and complete data had not been captured. The facility of online transfer of salary bills to Treasuries for encashment was also not made operational for want of connectivity with treasuries.

Though the digitization of service records was to be completed within one year, only 11 per cent of data capture could be completed

3.5.5.2 The project had envisaged complete digitisation of the service records of all 5.25 lakh employees within one year. However, KSITM could arrange to capture data only in respect of 59,489 employees (11 per cent) by May 2007, after spending Rs 36.35 lakh (April 2007) which was in excess of the admissible amount as per the norms fixed in project plan by Rs 22.35 lakh.

Salary bills of only 5,997 employees out of 5.25 lakh targeted are generated

Though data had been captured in respect of 59,489 employees by May 2007, salary bills were being generated for only 5,997 employees through the system (May 2007).

Government stated (August 2007) that a rescheduling of target period of March 2007 was considered necessary as (i) data entry of 5.25 lakh employee details was a time consuming process, (ii) connectivity and networking was to be processed in more than 30,000 offices and (iii) it was very difficult to keep a successful schedule of implementation for 30,000 offices. Government also stated that the first phase of KSWAN would be completed by December 2007 and the Departments have been requested to prepare a time-bound implementation plan and a further period of three years would be required to complete the project. This was an indicative of poor planning of the Government.

3.5.5.3 *Business Continuity Planning*

Business Continuity Planning (BCP) is essential to ensure that the organization can prevent disruption of business and resume processing in the event of a total or partial disruption in the information availability.

The user departments do not maintain data backup

There was no backup policy specifying the steps to be followed in the event of a disaster or system failure. It was also observed that online backup of server data was also stored in the same premises. Employee information is a critical data which requires extensive backup and recovery strategies.

Government stated (August 2007) that additional backup in tape and off-site storage at KSITM was also planned and a recovery management plan would be drawn up.

3.5.5.4 *Documentation*

Testing and acceptance of application software, necessary for successful running of system was also envisaged in the Project. Although Government decided (November 2005) to extend SPARK to other departments, testing and acceptance of the successful completion of SPARK was not ensured before replication to other departments. Moreover, failure in testing successful completion of the SPARK was also evident from the fact that features like online acceptance of authorization data from Accountant General's office and the facility to transfer salary bills to treasury in electronic format to facilitate electronic payment were not operationalised pending network connectivity. During March 2007, KSITM decided to conduct black box testing and system audit of SPARK. However, translation of decision into execution was wanting.

Though the Government stated (August 2007) that action had already been taken to conduct the functionality test, operational test, load testing etc and also the facility for data transfer to treasury, the same were not done till October 2007.

3.5.5.5 *Failure to carry out Business Process Re-engineering (BPR)*

An IT project should not only replace a manual system but also bring about increase in efficiency through a process improvement. Government Order (November 2005) stipulated introduction of innovative methods of salary disbursement using facilities of modern techniques. However, no action had been initiated in this regard for want of a comprehensive study.

Government stated (August 2007) that the strategy was to aid manual system, first by automating it to the extent possible and take up BPR later in a phased manner. Audit is of the opinion that such process change should have been considered before implementation and the system designed accordingly.

3.5.6 *IT security*

In the absence of any defined IT security policy in connection with the implementation of SPARK, the users were not aware of their roles and responsibilities in relation to IT security.

No password policy was framed for the implementation of SPARK

Though access to SPARK was mainly through the Internet, no password policy had been framed for implementation of SPARK. Although it was stated in the user manual (login procedures) that the initial password would confidentially be communicated to each user, it was found that the initial password allotted was encrypted only when the users changed their passwords. As the majority of users had not changed their initial passwords, the passwords were in unencrypted form and thus exposed the system to the external threats. Details of users' access to the System (login time and exit time) were also not stored appropriately.

3.5.7 System deficiencies

3.5.7.1 Failure to protect the bills generated

Bills passed for payment are not marked as final

SPARK was designed to lock the bills automatically on passing the same by the Treasury Officer so as to prevent further changes and to restrict the double payment. In the absence of treasury connectivity, the bills were to be generated under *draft* mode. Once the payment was made by the treasury, these were to be marked as final by DDOs. During comparison of details as per Treasury records and bills available in the System it was found that the bills passed for payment were not marked as final and as a result those bills were cancelled and reprocessed after presentation to treasuries. Such reprocessing could lead to overpayment/short payment. During data analysis by audit, a case was noticed where a bill for Rs 3,90,620 (gross) and Rs 3,07,526 (net) presented to treasury by M Section of GAD on 22 March 2007 (cashied on 30 March 2007) was cancelled and reprocessed on 27 March 2007. As a result the bill particulars in the database stood changed as Rs 4,06,922 (gross) and Rs 3,23,145 (net) which did not reflect the amount cashied at treasury.

Government stated (August 2007) that the concept of draft and final bill had been done away with and the generated bills would be locked on entering the encashment details. This would not solve the problem, as the cancellation might take place even after presentation of the bill to treasury but before encashment. Unless there was a provision to lock the bills on passing the bills by the DDO, such serious lapse would recur.

3.5.7.2 Mismatch of figures in system data & treasury bill book

Net amounts in database did not tally with Treasury bill book in 24 cases

GAD started generating pay bills through SPARK from June 2005. A comparison of the figures in database with treasury bill book revealed that in 24 bills (for February and March 2007), the gross amount as per system did not tally with treasury bill book. The mistake was attributed to the reflection of recovery of festival advance as a deduction in system while in the bill generated it was shown as deduct-expenditure. The purpose of database is defeated as the gross amount of the bill did not reflect the correct position of disbursement. As Sections were not maintaining copy of bills, reasons for variation could not be ascertained.

3.5.7.3 *Inadequacies in the system*

No provision to limit salary claim to the sanctioned strength

The system could not generate the following need based information:

- i. The number of staff for whom salary was drawn in each bill cannot be verified from the System.
- ii. The System lacked control to ensure that salaries for all employees are drawn every month unless withheld.
- iii. There was no provision to limit salary claim to the sanctioned strength

Government stated (August 2007) that necessary provision would be included in the next version.

3.5.8 **Input controls/ Data validations**

The objective of Input control is to ensure that the procedures and controls reasonably guarantee that (i) the data received for processing are genuine, complete, not previously processed, accurate and properly authorised and (ii) data are entered accurately and without duplication. Data validation is a process for checking transaction data for any errors or omissions and to ensure the completeness and correctness of input.

Data analysis revealed that there was no input control and the officers concerned failed to validate data leading to large scale deficiencies in the system affecting its utility as MIS as brought out in the succeeding paragraphs.

Failure to note PEN in SB led to creation of three records in respect of one employee

3.5.8.1 Permanent Employee Number (PEN), a system generated unique identification number, is allotted to an employee. PEN should invariably be noted in the respective SB on completion of data entry of each employee. A cross check of 277 employee data sheets with the Service Books (SBs) concerned revealed that, in 34 cases* the PEN was not found noted in the SBs. It was also seen that three records for an employee were created. In six out of 203 data sheets cross checked in GAD, two PENs each were noted in the SBs of employees. The database included at least 373 duplicate records, which made the database unreliable.

Government stated (August 2007) that strict instructions have been given to user Departments to avoid creation of duplicate records.

The duplicate records made the database unreliable

3.5.8.2 Department Management User had the right for editing/deletion of the prime fields of any record. However, the editing of data was done frequently by the users and thus made the data unreliable. Names of father, mother and PEN as per Service Book were different from those as per the database. It was also seen from database that the name against PEN 1,01,757 has been replaced by "ABC" with all other details as that of PEN 1,01,106. Though the SPARK System was designed with provision to disable such

* Nine out of 203 cases in GAD, nine out of 43 in Finance department, 13 out of 13 in Thrissur Collectorate, one out of nine in Model HS and two out of nine in Commercial Taxes department

editing on generation of first pay bill through the System, in the absence of certification of correctness of data entry, further editing of employee data had not been frozen.

Government stated (August 2007) that it is not advisable to stop editing completely as there may be cases where some data has to be changed.

**Uncontrolled editing
of data affected
integrity of the
database**

3.5.8.3 Under SPARK, employees were grouped by department code, office code and bill code for the generation of pay bills. As the addition of new offices and office codes were not controlled centrally, there were 52 offices with multiple office codes within the same department. Similarly instances had also been noticed, where office codes were wrongly assigned. Government agreed to eliminate multiple/wrong entries (August 2007).

3.5.8.4 Some more inaccuracies in database were noticed in the absence of adequate input controls in the system

- Employee names were entered with upper case, lower case and also started with initials in some cases and end with initials in other cases. Moreover, there were mistakes in data entry in the crucial field of name of employee.
- ‘Father’s Name’ is a crucial field for identifying an employee. But in 10 cases in GAD, three cases in Finance and two cases in Collectorate, Thrissur, father’s name was incorrectly entered.
- Date of birth in 10 cases was noted wrongly (2 January 1900 in five cases).
- The database contained 11 records in Collectorate, Thrissur, where date of joining was recorded as 2 January 1900. In 14 records in GAD, five in Finance, two in Model HS and one in Commercial Taxes department, the field ‘date of joining service/department’ had also been captured incorrectly.

Government (August 2007) issued necessary instructions to the user Departments for careful verification of data.

3.5.8.5 One of the objectives of SPARK is to serve as a service repository for Government of Kerala. This would require that every piece of information relating to each employee of the Government should be available in the database. However, audit scrutiny revealed that there were several mistakes in data entry in the fields relating to service particulars as shown below:

- The database contained 5,140 designations in various departments, which included 58 duplicate designations in the same department.
- Mistakes were noticed in data entry relating to past services of the employees (five cases in GAD and three cases in Finance department), leave particulars (25 cases in GAD and seven cases in Finance

departments) and surrender of leave (53 cases in GAD and 18 cases in Finance departments).

- Similarly, data relating to Leave Without Allowances (LWA), a crucial information for calculation of pay and allowances and qualifying service for pensionary benefits was also found wrong in GAD.

Age on the date of joining was less than 18 years in 177 records

3.5.8.6 The database included 177 records, where age on the date of joining was less than 18 years. The age on the date of joining varied between 107 and 56 in 16 cases. In 84 cases date of joining was the same as date of birth. Hence the System could not be relied upon for calculation of qualifying service.

As the System was designed to calculate the date of superannuation (DOS) assuming the age of retirement as 55 and the field *DOS* was made editable, many mistakes in the date of superannuation crept in as under:

Date of birth & date of superannuation were same in 32 cases

In three cases date of superannuation was prior to date of birth

- (i) In the case of PEN 1,24,712, whose date of birth is 1 February 1972, DOS is entered in SPARK as 28 February 2027, as against 31 January 2027
- (ii) In 32 cases, date of birth was same as date of superannuation
- (iii) In three cases date of superannuation was prior to date of birth
- (iv) Age on date of superannuation as per the System exceeded 55 in 293 cases, of which 177 employees did not belong to the service category eligible for enhanced age of retirement of 60/70.

Government stated (August 2007) that the required controls would be incorporated in the next version.

3.5.8.7 'Stop salary' option was provided in the System to prevent generation of salary bill through SPARK, in case an employee is transferred to another office, where SPARK was yet to be introduced. 'Retire' option was used to prevent further processing of salary, when an employee retires from service. LWA option was used to restrict salary to duty pay as admissible. It was, however, seen that the users in different departments were using these provision differently as under:

Persons, who are not due to retire are included in the stop salary table

- (i) *Stop salary* table contains 1,329 records, where the reasons for stopping salary are recorded as 'transfer', 'inter-dept transfer', 'LPC issued', 'deputation', 'promotion', 'promotion as SO', 'Leave without allowance', 'suspension', 'superannuation' etc. No reasons were recorded in 66 cases.
- (ii) *Retirement* table contains only 15 records, though the database included 3,556 employees who had crossed the age of 55.
- (iii) A scrutiny of the cases of stop salary due to superannuation revealed that the persons, who were not due to retire were also

included in the stop salary table. For example, PEN 1,03,447 whose date of birth was recorded as 25 May 1975.

Similarly as per *Bill control* table 8,150 out of 10,008 bills generated were cancelled for reprocessing of bills to rectify mistakes. As GAD, which started generating bills through SPARK during June 2005, had cancelled 431 bills for preparing 34 bills during March 2007, it is evident that 81 *per cent* bill cancellation is due to inadequate training.

Government stated (August 2007) that additional training was being planned to address the operational problems.

3.5.8.8 Database contained 47 records of bills with gross amount as zero, while the net amounts were not zero. In four cases gross, deduction and net were zero. Moreover there was no validation control to ensure that gross minus deduction tallies with the net.

Government stated (August 2007) that the record with error was not removed from the system automatically on cancellation. However, the fact remains that the bills were not cancelled bills and the bills for the net amount were seen encashed though the gross amounts were shown as zero.

3.5.9 Other points of interest

3.5.9.1 Updation of service books (SBs)

Sanction orders of increments are not noted in the SBs

On commencement of online processing of bills through SPARK, further changes in basic pay by granting of increment were updated by the system automatically on sanction. Though the training manual stipulated simultaneous updating of Service Books (SBs), a cross-check of data sheet with SBs in GAD revealed that the sanction orders of increments were not noted in the SBs. Discontinuance of the manual system without rectifying the mistakes of data entry and without integration of the whole system by testing and acceptance of all modules, involved the risk of rendering the SBs unreliable.

3.5.9.2 Failure to update pay bill register

Gross and net amounts of SPARK generated bills did not tally with the figures in pay bill register

A comparison of computer generated bill for the month of April 2007 and pay bill registers revealed that gross and net amounts as per SPARK generated bill did not tally with the corresponding figures in the pay bill register in respect of some of the employees in Collectorate, Thrissur. This showed that the manual bill register also did not indicate the correct amount of bill drawn through SPARK.

3.5.9.3 Failure to process salary bills of Self Drawing Officers (SDO)

Only five out of 729 SDOs in GAD are using SPARK for generation of salary bills

SPARK envisaged online updating of employee data relating to SDOs based on authorization issued by Accountant General (AG). SPARK has provision for processing of bills by SDOs by inputting the figures from the pay slip issued by AG. Processing of bills of all SDOs along with establishment bills would mean that Government would be able to monitor the expenditure

incurred by each and every office. However, the number of SDOs processing their bills was found to be negligible. Though there are 729 SDOs in GAD, only five SDOs were using SPARK for generation of salary bill.

Government stated (August 2007) that large number of login ids could be allotted for processing SDO bills only after enhancement of capacity and load testing.

3.5.9.4 Manual processing of part bills & arrear bills

While processing arrear bills manually, none of the users update the relevant fields in SPARK

SPARK has enabled provision for processing of arrear bills, if the amount drawn relating to the period in question is available in the System; otherwise arrear bills are to be prepared manually and the relevant fields in SPARK in respect of the employees concerned are to be updated. It was seen that part salary bills were also prepared manually due to absence of provision to prepare salary in respect of the persons transferred from or joining the office during the middle of a month as one of the office is not online under SPARK. This might lead to overpayment of arrears. 107 Bills in February 2007 and 181 Bills in March 2007, included in treasury bill book of GAD, were not included in the *bill control* table of SPARK. These were stated to be part bills and surrender bills. But none of the users updated the relevant fields in SPARK for want of follow up instructions.

Government stated (August 2007) that necessary remedial measures would be incorporated in the BPR already commenced.

3.5.10 Conclusion

Though the project is under implementation for over three years it cannot yet be termed as reliable.

Government stated (August 2007) that the implementation plan and system development were being fine tuned to ensure complete coverage of SPARK by December 2010.

3.5.11 Recommendations

The IT department should

- select one or two departments, which have computerised all their offices and connected through WAN and bring all employees including SDOs of the selected departments under SPARK.
- take up further replication of the software in other departments only after testing and acceptance of all modules of the System, by adopting approved system methodology and introduction of digital signature for DDOs and SDOs.
- consider appropriate BPR to restrict the bill processing through the System upto block level.

- amend relevant rules and orders in the Codes and Manuals to facilitate computerized billing and discontinue manual registers other than SB.

Government agreed to adopt the recommendations and stated that the personnel management modules would be tested in two or three departments before State wide roll out and a comprehensive BPR would be proposed based on test experience.

**PUBLIC WORKS, WATER RESOURCES AND HARBOUR
ENGINEERING DEPARTMENTS**

3.6 Irregularities in execution of Government works

3.6.1 Introduction

Execution of Civil works of Government departments are undertaken under the provisions of Kerala Public Works Accounts Code, Public Works Department Code, Public Works Department Manual and also rules and procedures prescribed in Kerala Financial Code, Budget Manual etc. and the orders issued by Government from time to time. The main departments carrying out Government works are Public Works, Water Resources, Harbour Engineering etc.

Public Works Department (PWD) is responsible for planning, design, construction and maintenance of residential and non-residential buildings and strengthening and widening of roads. Principal Secretary, PWD heads the Administrative Department of the Government. Water Resources Department (WRD) implements various irrigation projects/schemes to meet the irrigation requirements of farmers. The Department is also engaged in coastal protection works and flood control works in the State. Principal Secretary, WRD is the head of the Administrative Department. Harbour Engineering Department (HED) is responsible for execution of construction works under Fisheries and Ports Departments. Secretary, Fisheries and Ports is the head of the Administrative Department.

Scrutiny of the records for the period 2003-04 to 2006-07 was carried out through a test check of records maintained in Government Secretariat, Offices of Chief Engineers, 11 Roads Divisions, 13 Building and Local Works Divisions and 21 Water Resources Divisions. Audit scrutiny conducted during October 2006 to January 2007 has revealed gross violation of prescribed rules and procedures as well as orders issued by Government in arranging and execution of works as brought out in the succeeding paragraphs.

3.6.2 Lack of Budgetary Control

Monitoring of expenditure through budgetary controls is an effective tool for financial management. Works expenditure forms a significant component of state expenditure. Irregularities noticed in enforcing budgetary controls are given below:

3.6.2.1 Increase in quantum of pending bills

The Departments have been arranging works disregarding the availability of budgetary support causing huge financial liability to Government by way of unpaid bills of contractors. As on 31 March 2007, the amount of arrears of Public Works, Water Resources and Harbour Engineering Departments in respect of bills pending payment was Rs 1,190.64 crore, against Rs 879.75 crore at the end of 2005-06. Though the arrears have shown an increase, there

was no attempt to restrict the expenditure so as to contain and liquidate the arrears.

3.6.2.2 *Budgetary regulations rendered ineffective*

Budget provision is used substantially for clearance of pending bills

As per the system prescribed by Finance Department, in compliance with the orders dated 11 April 2001 of the Honourable High Court, every Division is required to send a list of bills passed for payment to the Finance Department along with all relevant details. The payments would be made on the basis of a state-wide seniority list maintained in the Finance Department by means of Letters of Credit issued to the Divisions. Consequently budget provision is used substantially for clearance of pending bills and not for payment on works included in the budget documents. As of March 2007, the Roads and Bridges Wing of PWD and Water Resources Department cleared pending bills up to February 2005 and July 2005 respectively. This has vitiated the budgetary control of expenditure and amounts to diversion of funds voted by the Legislature.

3.6.2.3 *Inadequate budget provision*

A test check of selected works in four major heads¹ revealed that provisions of funds were meagre and there was serious mismatch between actual requirements and available resources as shown under:

Year	No. of works	Estimated cost	Budget provision	Percentage of budget provision to estimated cost
		(Rs in crore)		
2003-04	221	447.15	28.71	6.42
2004-05	285	431.69	21.48	4.98
2005-06	328	477.57	16.20	3.39
2006-07	356	605.88	8.09	1.34

Percentage of budget provision to estimated cost ranged between 1.34 and 6.42 during 2003-04 to 2006-07.

3.6.2.4 *Arrangement of works without budget provision/in excess of budget provision*

According to provisions of para 15.2.2 of KPWD Manual, before inviting tender for a work, besides Administrative Sanction there should be ample provision of funds in the budget. Government further instructed that a work shall be put to tender only if there is a provision of 20 per cent of the estimated cost in the budget. Government directed (5 February 2001), that executing officers and officers authorised for passing bills would be held responsible for taking up any work without ensuring the above requirements.

¹ 4059-01-051-93-16, 4059-60-051-98-16, 5054-03-101-99, 5054-03-337-98-16

However these instructions were not followed while according sanctions for taking up the works. Audit scrutiny revealed that:

- Six Roads Divisions took up 120 works estimated to cost Rs 187.44 crore during 2003-04 to 2006-07 though no budget provision was available.
- In Palakappandy Diversion Scheme, works costing Rs 7.95 crore were taken up during 2005-06 when there was no budget provision.
- Three Roads Divisions took up 32 works during 2003-04 to 2006-07 estimated to cost Rs 38.90 crore though budget provisions were meagre.
- Fourteen Roads Divisions created extra liability of Rs 100.31 crore by taking up non-plan works in excess of sanction during 2003-04 to 2006-07.
- In Idamalayar Irrigation Project against a budget provision of Rs 9.18 crore during 2003-04, cost of works taken up and executed was Rs 91.11 crore.

3.6.2.5 *Establishment functioning without budget provision*

In Water Resources Department, four Investigation projects, viz. Attappady Valley Irrigation Project (Rs 0.96 crore), Meenachil River Valley Project (Rs 2.36 crore), Vamanapuram Irrigation Project (Rs 2.22 crore) and Chaliyar River Valley Project (Rs 1.60 crore), incurred expenditure of Rs 7.14 crore during 2003-04 to 2006-07 for meeting establishment expenses, though no funds were provided for these projects in the State budget.

3.6.2.6 *Under-utilisation of Letters of Credit*

It was noticed in Audit that there was underutilisation of Letters of Credit (LCs) for a total amount of Rs 133.49 crore during 2003-04 to 2006-07 out of which Rs 124.65 crore related to PWD. According to instructions issued (September 2001) by Finance Department, all Divisions have to maintain a register for recording full details of bills passed for payment and these details are to be sent to Finance Department for issuing LCs. The fact that there was under-utilisation of LCs indicates that the amount payable in respect of each bill was not correctly reported.

A test check of records of three divisions revealed that there was over reporting of bill amount resulting in underutilisation of letter of credit as shown in the page that follows:

Under-utilisation of letters of credit for Rs 133.49 crore during 2003-04 to 2006-07

(Rupees in lakh)

Name of Division	Month of LC	Amount required	Amount reported	Excess amount reported
Roads Division., Manjeri	November 2006	272.75	373.23	100.48
Roads Division, Kozhikode	March 2006	693.14	759.00	65.86
	November 2006	428.52	434.65	6.13
Roads Division, Palakkad	March 2006	197.79	357.15	159.36
	November 2006	143.18	147.76	4.58

It was further instructed by Finance Department that Letter of Credit should not be diverted for any other purpose. However, unauthorized diversions were noticed amounting to Rs 99.24 lakh in the above Roads Divisions. Unutilized Letter of Credit was used for making contractors' payment overlooking their seniority and for meeting other office expenses.

3.6.3 Execution of works

3.6.3.1 Arrangement of works by circumventing open tender system

As per para 15.8.1 of Kerala Public Works Department (KPWD) Manual, all works to be awarded on contract should be settled on the basis of competitive tenders, so as to fetch competitive rates. However in exceptional circumstances such as repeated tender calls evoking no response or in case of extreme urgency, arrangement of works by waiving open tender calls is permissible.

Seventy-eight plan works costing Rs 211.99 crore were arranged by waiving open tender calls

It was found in Audit that 78 plan works costing Rs 211.99 crore were arranged by waiving open tender calls in eight Roads Divisions and one National Highway Division* during 2003-04 to 2006-07. Out of these, works costing Rs 198.60 crore were sanctioned in the year 2005-06 only. 6,345 Non-Plan works costing Rs 100.31 crore were arranged by waiving open tender calls.

In all these cases sanctions were issued by Public Works Department. Though excess over estimates up to 25 per cent were sanctioned, explanation for allowing higher rates was not specified in the Government orders as required in Para 15.8.1 of KPWD manual. In two Divisions viz. Roads Divisions Idukki and Kollam, works costing Rs 5.91 crore were arranged by Executive Engineers and Assistant Executive Engineers beyond their delegated powers and without obtaining sanction from competent authority. The cost of tender

* Thiruvananthapuram (Rs 27.87 crore), Ernakulam (Rs 32.00 crore), Thrissur (Rs 12.30 crore), Palakkad (Rs 2.91 crore), Manjeri (Rs 94.78 crore), Wayanad (Rs 4.34 crore), Kozhikode (Rs 16.20 crore), Kannur (Rs 2.48 crore), N.H Division, Kozhikode (Rs 19.11 crore)

schedules issued to contractors was not levied in respect of works arranged without tender calls resulting in a minimum loss of revenue of Rs 30 lakh.

Out of the 78 plan works, 29 works costing Rs 163 crore required prequalification bids. For prequalification works, contractors are required to furnish a Bank Guarantee of 10 *per cent* of the contract amount at the time of executing agreement. As the works were arranged on quotation basis, the contractors were absolved from furnishing Bank Guarantee of Rs 16.30 crore in these cases. In four divisions (Roads Divisions, Ernakulam, Alappuzha, Idukki and Kollam) 1,821 non-plan works costing Rs 40.14 crore were executed without any agreement and hence the contractors were not bound to deposit the security amounting to a minimum of Rs 3.64 crore.

While issuing sanctions relating to plan works for departmental execution, the percentage of excess over the estimate for arranging these works was also specified by Government and consequently the rate to be quoted was known to the contractors before submitting quotations. Thus there was total lack of competition in the process. A comparison of works arranged by open tenders with those under waiving tender calls showed that the sanctioned rate in the latter was excessive. An analysis of plan works (Rs 112.86 crore) and non-plan works (Rs 28.30 crore) revealed an estimated extra burden of Rs 19.61 crore on this account.

Audit scrutiny of Government files in the Public Works Department relating to 15 Government orders issued during June 2005-February 2006 sanctioning waiver of tender calls/departmental execution for 16 works involving estimated expenditure of Rs 101.54 crore revealed that:

- Government orders/files did not contain the reasons for deviating from the normal procedure of calling for tenders/the exceptional circumstances necessitating the waiver of tender calls.
- Finance Department issued orders (June 2005) discouraging departmental execution of works and where departmental execution of works is resorted to in exceptional circumstances, concurrence of Finance Department is to be obtained. However, concurrence of Finance Department was obtained only for two bridge works in Attingal.
- In five cases where the waiver of tender calls was ordered though Secretary of the Department had suggested calling for tenders/consulting Finance Department/taking up the proposal next year as funds were not available.
- In all the cases the orders specified the excess over the estimate ranging from 10 *per cent* to 25 *per cent* up to which works could be arranged. No justification was given for allowing such excess even in the absence of tender calls. This enabled the contractors to know in advance the allowable excess and quote accordingly.
- In three cases works were started after four months from the date of sanction even though the tender condition was waived due to urgency.

- Sanction was issued, even when it was recorded that there was no budget provision, assuming that savings would be available in future.

3.6.3.2 *Splitting up of estimates to avoid sanction of higher authorities resulted in extra burden*

Between July 2002 and February 2003, Executive Engineer Idamalar Irrigation Project Division No.II, Chalakudy took up and executed eleven contracts for the modification of 2,680 metres of Right Bank Canal of the Project. The estimates were split up to limit the cost within the powers of Executive Engineer. The tender premium quoted by the successful contractors was between 33.33 *per cent* and 35 *per cent*. During the same period Superintending Engineer took up and executed five contract works for the modification of 4,175 metres of the same canal in nearby reaches. The tender premium quoted by the successful contractors in these cases was between 4.89 *per cent* and 14.2 *per cent* of the estimated cost. The extra burden on the Government, reckoning the highest tender premium of 14.2 *per cent* obtained when Superintending Engineers had taken up and executed the work, amounted to Rs 32 lakh.

3.6.3.3 *Awarding tender excess in violation of delegation of powers*

Government revised (March 2006) the delegation of financial powers of the officers of PWD, WRD and HED. CEs were made competent to sanction tender excess up to 25 *per cent* for works the estimated cost of which was Rs 15 lakh or less. It was further clarified by Government that no CE or Committee of CEs is competent to sanction tender excess beyond 25 *per cent*. However Chief Engineers' Tender Committee in the meeting held on 30 September 2006 and 6 November 2006 approved tender excess for 626 road works ranging from 27 *per cent* to 43 *per cent* the estimated cost of which was Rs 40 crore.

Tender excess beyond the delegated powers of Tender Committee was sanctioned for works amounting to Rs 40 crore

3.6.3.4 *Extra expenditure due to change in design*

The design of engineering structures costing more than Rs 30 lakh requires approval from CE of Design Wing (CE, DRIQ Board for PWD and CE, IDR for Water Resources Department). Instances have come to the notice of Audit where works were taken up without obtaining approval and changes made in the approved design without obtaining sanction from Chief Engineer. In 10 works reviewed, extra liability created on this account worked out to Rs 13.68 crore.

3.6.3.5 *Post- contractual changes*

According to Para 10.3.1 of Kerala Public Works Department Manual, proper care should be taken in the preparation of detailed estimates so that it reflects as faithfully as possible the cost of work as can be foreseen at that time. Moreover Para 16.12.1 enjoins that officer in charge of supervision of work should be very careful to adhere to the estimate as far as possible and not carry

out excess quantities. Audit scrutiny of six works in four Roads Divisions and one Irrigation Division¹ revealed extra liability of Rs 7.24 crore.

3.6.3.6 Extra expenditure due to sanctioning enhancement in rates

Enhancement in rates resulted in extra liability of Rs 34.37 crore

According to clause 47 of Notice inviting Tenders which forms part of the agreement, the rate quoted by the contractors shall not be varied on any account. Instances came to the notice of Audit wherein, enhancement in rates was allowed by Government resulting in extra liability of Rs 11.55 crore.* In Harbour Engineering Department, in all the breakwater works, enhancement in rates were allowed leading to cost escalation by Rs 22.82 crore.

3.6.3.7 Extra expenditure on protection works

Government in August 1998 ordered that prior sanction was required to execute items like drains, protection walls, culverts etc., as it had contributed to the increase in the quantum of pending bills. A scrutiny of four plan works of Idukki, Manjeri and Kozhikode roads divisions revealed gross violation of this order creating additional liability of Rs 3.39 crore by executing extra protection works.

3.6.3.8 Time and cost over run of Water Resources and Harbour Engineering Projects

Enormous time and cost over run of project works executed by WRD and HED were noticed. In WRD in the case of five projects[‡] the time over run varied from 25 years to 45 years whereas the cost increased from Rs 63.24 crore to Rs 2,292 crore. The time over run in respect of five projects in the Harbour Engineering Department varied from five years to 15 years and the cost increased from Rs 50.91 crore to Rs 125.16 crore.

3.6.3.9 Loss of Central assistance

For centrally sponsored schemes, Government of India normally does not reconsider its quantum of assistance on account of cost escalation and the extra expenditure is a liability of State Government. Audit scrutiny revealed:-

- Loss of Central assistance of Rs 18.39 crore on five Fishing Harbour Projects as GOI did not approve the revised estimate due to cost escalation.
- Short- realisation of central assistance of Rs 1.57 crore in three schemes of WRD. There was a further loss of Rs 3.07 crore due to escalation in cost.

¹ Roads Divisions, Kannur, Kozhikode, Thiruvananthapuram, Ernakulam (two works) and Idamalayar Irrigation Project Division I, Angamaly

* Kayamkulam Fishery Harbour Project – Rs 5.58 crore, Ponnani Fishery Harbour – Construction of breakwater – Rs 3.41 crore, Construction of High Court Complex at Ernakulam – Rs 2.56 crore

[‡] Kallada, Muvattupuzha, Kanhirapuzha, Idamalayar and Karappuzha

- Excess liability of Rs 10.98 crore on eight Central Road Fund (CRF) works due to cost escalation beyond the 10 *per cent* allowed by GOI.
- In National Highway Wing the total amount withheld by PAO was Rs 60.77 crore. Out of this, Rs 52.19 crore was on account of cost escalation for which sanction for revised estimates was due from Ministry of Shipping, Road Transport and Highways.

3.6.3.10 *Non Recovery of Risk and Cost Liability*

Risk and cost liability amounting to Rs 7.67 crore is pending recovery

As per Government Order, when a contract is terminated at the risk and cost of the contractor, the liability on re-arrangement of balance work is to be determined and the amount of liability recovered from the original contractor within one year from the termination of contract. According to information gathered from 18 Divisions, risk and cost liability in respect of 41 terminated works amounting to Rs 7.67 crore is pending recovery from contractors. In 16 cases, the risk and cost liability was not assessed so far.

3.6.3.11 *Incurring expenditure in excess of sanction*

According to para 10.2.2.7 of KPWD Manual if the cost of work exceeds 15 *per cent* of Administrative Sanction (AS), fresh AS should be obtained. It was found in audit that in the case of 10 major works/projects test checked, expenditure had exceeded by Rs 149 crore and the percentage excess in each case varied from 19 *per cent* to 161 *per cent*, revised sanctions were not obtained. Works for which sanction received as early as in 1987 were still continuing without obtaining revised sanction.

3.6.4 **Lack of financial discipline in Engineering Departments**

Internal controls are essential pre-requisite for the efficient discharge of an organization's functions. Audit scrutiny revealed that:

- Proper mechanism for watching compliance of departmental orders and instructions to enforce financial discipline was absent.
- Files relating to financial matters were not routed through the Finance Officer in PWD and WRD.
- There was no independent Internal Audit Wing in any of the departments.
- There was no departmental inspection by the Chief Engineer in PWD during the period covered by the review.
- In WRD, 18 vigilance cases involving Rs 4.21 crore were pending against 73 officers out of whom 26 have already retired. Cases registered from 1996 onwards are pending finalisation. In PWD, eight vigilance cases involving Rs 32 lakh were pending against 59 officers, out of whom 49 have already retired. Cases registered from 1996 onwards are pending finalization.

No independent Internal Audit wing in any of the departments

- In WRD the post of Vigilance Officer remained vacant from October 2003 onwards.
- Finance Management System to automate all finance related transactions existed only in the office of the Chief Engineer (R&B).

Irregularities reported to Department/Government through Inspection Reports and Audit Reports provide an opportunity to take corrective action to prevent further occurrence of such cases. Government had issued orders in January 2001 on setting up of Audit Monitoring Committees in each Administrative Department and Audit Committees in each Department for regular review of audit objections, inspection reports, audit paras etc.

Though Audit Committee chaired by the Head of the Department was to meet once in two months, no Audit Committee meeting at the level of Chief Engineer was held in these departments. Audit Monitoring Committee headed by the Secretary was required to meet at least quarterly as per the orders of the Finance Department issued in March 2005. But no meeting of the Committee was held in these Departments in 2005-06. Only one meeting was held during 2006-07.

Thus the control mechanism intended for reviewing and rectifying irregularities in the execution of the works, repeatedly reported by audit failed due to official indifference.

3.6.5 Other Points

3.6.5.1 Revision of Schedule of Rates

PWD Schedule of Rates should be revised once in a year so that fluctuations in market rates are taken care of. This instruction was seldom followed as seen from the fact that revisions were done in 1992, 1996, 1999, 2004 and 2007 only.

3.6.5.2 Revision of Standard Data Book

The requirement of labour and material for each item of estimate is derived from standard data book. In the standard data book compiled in 1965, the specification for various items provided in the data book are more labour oriented whereas a lot of mechanisation has already taken place in the construction sector. It is necessary to revise standard data book based on current practices prevailing in this sector.

3.6.6 Conclusion

The arrears payable to contractors for work done has grown substantially causing serious distortion in the budget process and procedures relating to works expenditure. The arrangement of works without adequate budget provision, allowing tender excess far higher than the sanctioned estimate and post-contractual cost increases due to extra item and enhancing of quoted rates are the factors that have contributed towards this. Execution of works without

tender calls, splitting of estimates to avoid sanction of higher authorities are wide spread, causing extra burden to Government. Failure to revise the Standard Data Book tend to make the departmental estimates unrealistic.

3.6.7 Recommendations

- Government should take special steps to liquidate the arrears in contractors' bills in a phased manner by providing specific funds in the annual budget to be used exclusively for clearance of arrears.
- Arrangement of work without adequate budget provision to meet the anticipated annual expenditure should require specific concurrence/sanction of Finance Department to ensure availability of funds.
- In cases of sanctions issued by Government or Departments for waiving of tender calls specific reasons for such waiver should be recorded in the sanction itself.
- An independent Internal Audit Wing should be set up in each Department, directly reporting to the Head of the Department, to conduct periodic inspection of Divisions and Circles. The functioning of the Internal Audit Wing should be monitored by Finance Department.
- Standard data book should be revised so that modern engineering practices and advances in technology could be adopted while preparing estimates.

The matter was referred to Government in June 2007; reply has not been received (September 2007).