3.1.7 System to detect and prevent errors/omissions

The errors/omissions pointed out are on the basis of a test audit. The Department/Government may, therefore, undertake a thorough review of all units to check whether similar errors/omissions have taken place elsewhere, and if so, to rectify them; and to put a system in place that would prevent such errors/omissions.

3.1.8 Conclusion

The short supply of protected water through the "Hogenakkal Water Supply and Fluorosis Mitigation Project", coupled with mixing of ground water with the river water resulted in non-achievement of the objective of supplying safe and potable drinking water. The Project did not adequately address the impact already caused by Fluorosis because of underperformance and deficiencies in household survey, inadequate micronutrient supply and corrective dental and orthopedic surgeries. Fluorosis mitigation activities require active co-ordination with the Public Health Department. Issues in execution of civil works resulted in avoidable expenditure of ₹ 2.51 crore and the widening gap between O&M expenditure and revenue posed threat to proper maintenance of the project and its financial viability.

3.2 Avoidable/Unfruitful expenditure

HEALTH AND FAMILY WELFARE DEPARTMENT

3.2.1 Irregular procurement and idling of medical equipment

Irregular procurement resulted in an avoidable expenditure of ₹ 4.29 crore in respect of medical kits supplied to the seven sampled Medical College Hospitals as the equipment procured were neither required nor put to use. This raised a question on the entire procurement at a cost of ₹ 10.60 crore.

Director of Medical Education (DME) annually incurs an expenditure of about ₹ 78 crore on procurement of machineries and equipment. Audits conducted at the DME and seven out of 21 Medical College Hospitals (MCHs) during 2017-18 brought out the following in respect of purchase of machineries and equipment.

With a view to provide effective and preventive treatments during infectious seasons of dengue, H1N1 and Ebola, the DME procured and supplied (February 2015) 5 types of portable diagnostic kits to 19 MCHs in the State at a cost of ₹ 10.60 crore.

As per delegation of powers (October 1994), the DME was vested with financial powers of not more than ₹ 10 lakh for procurement of medical equipment and machinery on each occasion. Procurements costing above ₹ 10 lakh, but not exceeding ₹ 50 lakh were within the powers of Central Purchase Committee/High Power Committee and those costing above ₹ 50 lakh were to be sanctioned by GoTN. The usual practice followed by DME in procurement of equipment and medicines was to call for requirements from MCHs before deciding the procurement quantity.

In November 2014, Tamil Nadu Medical Services Corporation[11] (TNMSC) entered in to a rate contract with a Hyderabad based importer of Swedish make rapid test equipment *viz.,* (a) Blood Glucose analyser, (b) HbA1c analyser, (c) Urine Albumin analyser, (d) Hemoglobinometer and (e) WBC analyser. Following this, DME addressed (January 2015) all MCHs to procure these medical equipment as per need, within the funds available and simultaneously cautioned that MCHs having auto/semi auto analysers (**Exhibit 3.4**) should place further orders only on need basis.

Exhibit 3.4: Diagnostic equipment for clinical biochemistry (Illustration)

Rapid test kits are portable equipment for faster bio-chemical test results with higher operational cost. Separate equipment is needed for each type of test.

Fully automated/ Semi automated analysers are lab mounted equipment which can perform multiple bio-chemical tests simultaneously. They combine higher volume with lower operational cost. Medical Council of India has made it mandatory for biochemical laboratories in all MCHs.

Field inspection (February 2015) was carried out by the Health Minister, Health Secretary and the DME. Post the field inspection, the DME ordered that "*purchase order may be placed at directorate level to save the delay during the infectious season of Dengue, H1N1 and Ebola".* Audit noticed that even though, no MCHs had sent a requisition for the rapid test equipment, DME recorded (06 February 2015) a note that "*needs were high"* for the rapid test

[11] Tamil Nadu Medical Services Corporation (TNMSC) functions as an agency to procure medicines and equipment for government hospitals in the State.

equipment "*for effective and preventive treatment of patients*". The purchase order was placed on the same date for 235 *HemoCue* rapid test equipment[12] at a total cost of ₹ 10.60 crore. The vendor supplied (February 2015) the equipment to 19 MCHs. Test check in the randomly selected seven of the 19 MCHs *viz.,* (a) Government Kilpauk MCH, Chennai, (b) Government Mohan Kumaramangalam MCH, Salem, (c) Government Rajaji Hospital, Madurai, (d) Government Dharmapuri MCH, (e) Government Theni MCH, (f) Tirunelveli MCH and (g) Government Stanley Hospital, Chennai revealed that the equipment were not put to use even after a lapse of more than three years (June 2018). **Exhibit 3.5** depicts the non-utilisation of the rapid test equipment in Government Mohan Kumaramangalam MCH (GMKMCH), Salem.

Exhibit 3.5: Equipment kept unutilised

Test cartridges not opened at GMKMCH, Salem

(Joint physical verification conducted in May 2018)

Equipment boxes not opened at GMKMCH, Salem

(Joint physical verification conducted in May 2018)

Audit observed that:

(i) The decision on procuring rapid test equipment was a clear departure from the established procedure and DME's own instruction of January 2015. DME circumvented the established system of assessing the requirement by the heads of MCHs concerned and obtaining administrative approval and financial sanction from Government after due consideration of its merits *vis-à-vis* the budgetary position. None of the sampled MCHs had sought for this equipment. Audit noticed that the decision on procurement of rapid test equipment overlooked the availability of auto/semi auto analysers in MCHs. Audit found that all the sampled hospitals had auto/semi auto analysers with much higher capacity to handle everyday needs for blood testing and even to face spikes due to epidemics, which was evident from the data on blood tests conducted in Salem and Dharmapuri Government MCHs (**Appendix 3.5**).

[12] 15 sets each for 9 MCHs and 10 sets each for 10 MCHs at ₹ 4.51 lakh per set comprising equipment for five tests.

(ii) DME violated the delegated financial powers by procuring equipment worth ₹ 10.60 crore although she had been delegated with powers to sanction procurements costing only upto ₹ 10 lakh.

(iii) DME placed the order without following the due process on the pretext of *"avoiding delay during the infectious season of Dengue, H1N1 and Ebola infections"*. These kits were originally proposed (2014) by State Health Society for diagnosis of non-communicable diseases. The Government reply (September 2018) also attested the fact that four of the five types of kits procured were not relevant for diagnosing communicable diseases and the remaining kit also was capable of only screening of infections, as against the tests stipulated in WHO protocols for Dengue, H1N1 and Ebola infections. Thus, the reasoning put forth by DME for the hasty large scale purchase of rapid test equipment, without following, due process was unjustified.

(iv) Another reasoning given by DME for this procurement was *"curtailment of spent on drugs and treatment procedure"*. The Deans of the test-checked hospitals, however, stated (May 2018) that the recurring costs of consumables for conducting the tests with the rapid test equipment were very high when compared with testing using auto/semi auto analysers already available in the hospitals.

(v) Moreover, non-utilisation of the purchased equipment for more than three years in the test-checked hospitals had rendered the three year warranty of the equipment meaningless.

Thus, the decision of the DME to procure rapid test equipment by circumventing the established procedure of assessing requirement, without due diligence and without obtaining Government's sanction resulted in an avoidable expenditure of ₹ 4.29 crore in all the seven sampled MCHs. This raised a question on the entire procurement amount of ₹ 10.60 crore. The government may consider fixing the accountability of the persons concerned for the loss and unjustified purchase after conducting necessary investigation in the matter.

The Government replied (September 2018) that there was error in judgment on the part of the DME in assessing the requirement of rapid test kits and that steps were taken to relocate them to needy areas within the hospitals and/or to other district hospitals apart from utilising them in medical camps and field and mobile medical units. However, it has contended that (i) Point of Care Testing (POCT) is a fast growing technology with advantages in providing care at patient level, (ii) the equipment procured are of good quality and (iii) the DME was not required to get permission from the Government to procure the equipment as the rate contract was already fixed by TNMSC.

The contentions of the government are not acceptable as (i) the technology adopted or the quality of equipment procured was not questioned by Audit and only the manner of assessment for procuring the equipment and instructions issued *viz.,* that institutions having full/semi auto analysers should procure only on need basis, have been overlooked was pointed out and (ii) DME's monetary power for procurement is ₹ 10 lakh and Government's sanction should have

been obtained as the value of the procurement is more than ₹ 10 crore. It was noticed that in other procurements where the value exceeded DME's powers, the sanction of the Government was obtained.

Moreover, the non-utilisation of the medical equipment procured points to the lack of necessity of such equipment and the action of the Government in relocating the procured rapid test kits to needy areas is only an afterthought and reinforces the Audit observation.

HIGHER EDUCATION DEPARTMENT

3.2.2 Unfruitful expenditure due to poor planning

Failure of the University of Madras to assess the demand for new hostel facility resulted in non-utilisation of newly constructed hostel building for more than three years and consequent unfruitful expenditure of ₹ 10.10 crore.

Thirteen Government universities are functioning under the control of the Higher Education Department of GoTN. During 2016-18, six universities were audited. Scrutiny of records relating to the period 2010-17 in the University of Madras and the Higher Education Department during February to March 2018 disclosed the following lapses of the University which resulted in unfruitful expenditure:

In October 2010, the University of Madras (University) planned to construct an International students hostel (Hostel) with 193 rooms in its Taramani Campus, Chennai for foreign students enrolled in all the four campuses[13] of the University. The University's Building Committee and its Syndicate approved the project in February 2011. The University, through tender process, awarded the work to a contractor in April 2012. The Hostel building was completed in April 2015, at a total cost of ₹ 10.10 crore[14], but not put into use (April 2018) due to lack of demand from foreign students for campus accommodation.

(i) During the three academic years (i.e. 2007-08 to 2009-10) preceding the proposal to construct the Hostel, the number of international students enrolled in the University ranged from 31 to 46. In the succeeding academic years, 2010-11 to 2014-15, the enrolment ranged from 47 to 82. During this period, the number of students availing hostel facilities ranged from 4 to 14 only. But the University, failed to factor in the number of international students and the trend of negligible number of international students seeking hostel accommodation. It was further observed that all the international students were not enrolled in courses conducted in the Taramani Campus as the University

[13] Chepauk, Guindy, Marina and Taramani.

[14] Civil Works: ₹ 8,24,74,319; Water supply and sanitary works: ₹ 86,46,500; Electrical works: ₹ 98,71,708.

Appendix 3.5

(Reference: Paragraph 3.2.1 (i); Page 153)

Details of blood samples tested using existing auto/ semi auto analysers in two sampled hospitals (Illustrative)

Sl. No.	Name of the hospital	Name of the equipment	Number of blood samples that can be tested in the equipment		Year	Maximum number of blood samples tested per day during the last 3 years	Capacity utilisation of the equipment during the last 3 years (in *per cent*)
			Per hour	Per day (2 shifts/ 16 hours) (Col. 4 x 16 hours)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Government Dharmapuri Medical College Hospital	Auto analyser	480	8,160	2015-16	1,530	*18.75*
		Semi auto analyser	30		2016-17	1,382	*16.94*
					2017-18	1,956	*23.97*
2	Government Mohan Kumaramangalam Medical College Hospital, Salem	Auto analyser (2 numbers)	300 (+) 150	8,000	2015-16	2,436	*30.45*
		Semi auto analyser	50		2016-17	2,548	*31.85*
					2017-18	3,352	*41.90*