# CHAPTER V COMPLIANCE AUDIT

# **AUDIT OF SELECTED TOPICS**

#### HOME AND VIGILANCE DEPARTMENT

# 5.1 Enforcement of fire safety provisions in respect of buildings by the Kerala Fire and Rescue Services Department

#### 5.1.1 Introduction

The Kerala Fire and Rescue Services Department (Fire and Rescue Department) with five Divisional Offices<sup>64</sup>, 14 District Offices and 121 fire stations is entrusted with the responsibilities of fire fighting operations/salvaging or rescue of life and property during fire accidents/hazards. While a Motor Transport wing under the Fire and Rescue Department is responsible for the maintenance of the vehicles of the Department, the Kerala Fire and Rescue Services Academy caters to the training of personnel. The Fire and Rescue Department is governed by the Kerala Fire Force Act, 1962 (Fire Force Act). While the Home and Vigilance Department is in overall control of the Fire and Rescue Department at the Government level, the administrative powers are vested with the Director General of Fire and Rescue, Home Guard and Civil Defence (DG).

#### **5.1.2** Scope and coverage of Audit

We had conducted the Performance Audit of Prevention and Control of Fire which had appeared in the Audit Report of Comptroller and Auditor General of India for the year ended March 2003. The Report was discussed by the Accounts Committee (PAC) of Kerala Legislature recommendations were made (March 2008) to Government of Kerala (GOK). PAC discussed (December 2011) the Action Taken Report furnished by GOK on these recommendations and called for additional details on some of the recommendations. The recommendations included establishment of adequate number of fire stations, framing of Rules pending from 1962, periodic inspection of high rise buildings<sup>65</sup>, ensuring availability of vehicles for fire fighting in high rise buildings, etc. During the present audit, we examined the compliance to the provisions of the Fire Force Act, Rules and Regulations issued by the Fire and Rescue Department and assessed how far these Rules/Regulations were able to fulfil the objectives of the Department.

Audit methodology included scrutiny of records pertaining to the period 2011-12 to 2015-16 at Government Secretariat (Home and Vigilance Department), Office of the DG and three Divisional<sup>66</sup> offices out of five and five District offices out of 14 *viz.*, Thiruvananthapuram, Ernakulam, Kollam, Thrissur and

66 Thiruvananthapuram, Ernakulam and Kozhikode

<sup>&</sup>lt;sup>64</sup> Ernakulam, Kottayam, Kozhikode, Palakkad and Thiruvananthapuram

<sup>&</sup>lt;sup>65</sup> Buildings with four or more floors or with a height of 15 metres or more from ground level

Kozhikode. Fifteen<sup>67</sup> fire stations located in the selected districts were also covered. Relevant records of one of the Local Self Government Institutions<sup>68</sup> (LSGI) coming under the jurisdiction of each selected fire station were also scrutinised as a part of audit. We conducted joint verification of 105 buildings in the selected districts along with officials of the Fire and Rescue Department to assess the status of fire fighting infrastructure in these buildings. Entry Conference was held on 16 June 2016 with the DG in charge of the Fire and Rescue Department, during which the audit objectives and audit criteria were explained to the Department. An Exit conference was conducted on 01 November 2016 with the Additional Chief Secretary, Home and Vigilance Department and Director General, Fire and Rescue Department, during which the audit findings were discussed in detail.

#### **Audit Observations**

#### **5.1.3** Formulation of Act and Rules

#### 5.1.3.1 Failure to enact the Kerala Fire Force Act

The National Disaster Management Authority (NDMA) established under the provisions of the Disaster Management Act 2005, issued Guidelines (April 2012), which recommended all States to enact Fire Force Act for providing fire safety norms in respect of all high rise buildings, residential clusters, colonies, business centres, malls, etc. The Guidelines also required that the Fire Force Act should provide for legal and penal action against fire safety defaulters, if they fail to fulfil the fire safety requirements like proper fire safety equipment, escape/evacuation routes, parking locations, etc. All State Governments and local bodies were required to comply with these Guidelines in a planned and focussed manner.

In order to frame a central legislation on Fire safety in the country, Government of India (GOI) forwarded (July 2014) a draft Fire Safety Bill to GOK for getting its views. GOK advised (August 2014) Director General (DG) to submit a draft Fire Safety Bill by September 2014 incorporating the provisions of the draft Fire Safety Bill of GOI. The DG submitted (April 2015) the draft Kerala Fire Prevention and Life Safety Measures Bill to GOK, which he later withdrew (December 2015) stating deficiencies in the draft Bill. Subsequently, a committee was constituted (April 2016) by the then DG which submitted (May 2016) both the Act and Rules to the DG which was yet to be submitted to GOK (December 2016).

Non-enactment of new Fire Force Act in line with the NDMA Guidelines (April 2012), lowered the operational efficiency of the Fire and Rescue Department in ensuring adequacy of fire safety norms in the high risk/vulnerable buildings as discussed in the subsequent paragraphs.

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<sup>&</sup>lt;sup>67</sup> Thiruvananthapuram, Chacka, Chamakkada, Kadappakkada, Gandhi Nagar, Club Road, Thrikkakara, Eloor, Thrissur, Pudukkad, Guruvayur, Kozhikode Beach, Meenchantha, Vellimadukunnu and Mukkam

<sup>&</sup>lt;sup>68</sup> Thiruvananthapuram Corporation, Kollam Corporation, Kochi Corporation, Thrikkakara Municipality, Thrissur Corporation, Pudukkad Grama Panchayath, Guruvayur Municipality, Kozhikode Corporation, Mukkam Municipality, Olavanna Grama Panchayath

#### 5.1.3.2 Failure to frame Rules

As per Section 35 of the Fire Force Act 1962, the Government may frame Rules for implementation of provisions of the Act. Non-framing of Rules for implementing the Act was pointed out in the Audit Report of C&AG for the year ended March 2003. PAC while discussing the Report recommended (March 2008) that Rules under the Act should be framed without further delay. We noticed that though the Subject Committee of the State Legislature had initially approved (03 January 2012) the Kerala Fire and Rescue Services Rules 2011, it was later decided (24 January 2012) by the Committee not to proceed with Rules approved by them, as they proposed to formulate a new Fire Force Act in lieu of the Act of 1962. Thus, as of January 2017, the Department could not frame and approve Rules to supplement the Fire Force Act, 1962 which also required suitable amendment. In the absence of Rules, the activities of the Department were regulated by Standing Orders issued by the DG which did not have statutory backing. We noticed instances of Orders issued by the DG being challenged in Courts as pointed out in succeeding paragraphs. Thus, absence of Rules has adversely impacted the efficient functioning of the Fire and Rescue Department.

#### 5.1.3.3 Non-issue of notification by Government

As part of preventive measures, Section 13 of the Fire Force Act 1962 provided that GOK could, by issue of notification, require owner/occupiers of buildings to take such preventive measures as may be specified. Where such notifications were issued, the Fire Force Act empowered (Section 30) the DG to enter these places for the purpose of determining whether precautions against fire, required to be taken in such places had actually been taken care of.

Officers of the Fire and Rescue Department could not inspect any premises for ensuring fire safety standards unless such premises were specifically notified by Government. We observed that GOK failed to issue notifications and consequently the officers of the Fire and Rescue Department could not conduct inspections legally and discharge their duties effectively. We observed instances in which owners of two buildings in Kollam and Malappuram challenged inspections conducted by Departmental officers. The owners of the buildings pointed out that guidelines issued by Fire and Rescue Department and directions to install fire safety mechanisms envisaged by National Building Code were not enforceable due to the absence of Government Order or statutory backing. Thus, failure to provide legal backing to orders resulted in directions of Fire Force officers being challenged and sometimes not adhered to by owners of building premises.

GOK stated (November 2016) that notifications would be issued at the earliest to enable the Department to proceed legally against violators.

### 5.1.4 Maintenance of database and issue of No Objection Certificate

To ensure compliance to standards of fire prevention and fire protection in buildings, the Kerala Municipal Building Rules, 1999 (KMBR) and the Kerala Panchayath Building Rules, 2011 (KPBR) required building permits to be

issued to multi-storeyed buildings and special buildings<sup>69</sup>, only after obtaining a No Objection Certificate (NOC) on fire protection measures from the Fire and Rescue Department. The Fire and Rescue Department had issued Standing Orders (1997) for issue of NOC at two different stages *viz.*, "Site for construction" after site inspection and scrutiny of plans by the Department and later, a final NOC for "Occupation of Building" after inspecting the building on completion of construction. The authority to issue NOC was delegated (July 2009) to the Assistant Divisional Officers (ADO) (District level), Divisional Officers (DO) (Division level) and DG (State level) of the Fire and Rescue Department, based on the height<sup>70</sup> of the buildings.

The DG ordered (July 2009) that in order to facilitate monitoring of the compliance to fire safety standards, an NOC issue register in the prescribed form was to be maintained by the Fire and Rescue Department at the Station, ADO, DO and Headquarters level. Standing Orders (August 2013) of the DG also required that the NOC Registers maintained by the fire stations were to contain details of all the buildings for which NOC was issued by the Department at different levels.

Test check of the registers for the period 2011-12 to 2015-16 at 15 fire stations in the selected five districts revealed that contrary to the Standing Orders, details of 543 out of 805 final NOCs issued by higher authorities were not recorded in the registers at fire stations. The failure of the Fire and Rescue Department in maintaining a proper database and deficiencies in recording the details of NOCs in the registers at fire stations resulted in their inability to monitor and ensure continued compliance of buildings to fire safety standards.

GOK in reply stated (January 2017) that necessary directions have been issued to officers of Fire and Rescue Department to maintain a comprehensive database in connection with the issue of NOC to various types of buildings according to their occupancy and height and that attempts to digitalise the data and online processing of NOCs were underway.

#### **5.1.5** Non-renewal of No Objection Certificates

Government directed (April 2013) that NOCs issued for buildings were to be renewed every year for an annual fee of ₹2000/- to vouch the fire fighting preparedness of high rise buildings. Accordingly, the DG issued (August 2013) Standing Orders prescribing the procedure for renewal of NOCs and also constituted Scrutiny Committees for inspection of buildings, according to the height of the building. The renewal of NOCs for buildings was to be approved by Station Officer (up to 24 metres of height), ADO (above 24 metres up to 60 metres) and the DO (above 60 metres of height). We analysed the recordings made in the NOC Issue Registers/Renewal Registers

<sup>69</sup> Educational, Medical or Hospital and Office or business occupancies exceeding three floors, assembly occupancy irrespective of their number of floors, Mercantile or commercial occupancy buildings other than parking buildings exceeding two floors from ground level, industrial occupancy buildings, irrespective of their number of floors, storage or warehousing occupancy buildings irrespective of their number of floors and buildings under hazardous occupancy

From July 2009 to August 2012 NOCs for single-storeyed buildings upto 10 metres, multi-storeyed buildings upto 15 metres and multi-storeyed buildings above 15 metres to be issued by ADO (District level), DO (Division level) and DG (State level) respectively. From September 2012, multi-storeyed buildings upto 24 metres and multi-storeyed buildings above 24 metres to be issued by DO (Division level) and DG (State level) respectively.

maintained at 15 selected fire stations and observed that 11 to 92 *per cent* of NOCs issued during 2012-13 to 2013-14 were not seen renewed during 2013-14 to 2014-15 as shown in the following table.

Table 5.1: Non-renewal of NOC

Sl. No.	Name of Fire Station	Number of NOCs issued as per the register	Number of NOCs renewed by Fire Station	Number of NOCs renewed by ADO	Number of NOCs renewed DO	Number of NOCs not renewed	Percentage of non- renewal	
1	Chacka	37	6	0	0	31	84	
2	Thiruvananthapuram	203	7	11	0	185	91	
3	Kadappakkada, Kollam	NOC register and Renewal register not maintained						
4	Chamakkada	70	14	2	0	54	77	
5	Eloor	29	7	2	0	20	69	
6	Gandhi Nagar	579	38	16	0	525	91	
7	Thrikkakara	288	25	21	1	241	84	
8	Club Road, Ernakulam	62	40	15	0	7	11	
9	Thrissur	473	51	3		419	89	
10	Pudukkad	10*	7	0		3	30	
11	Guruvayur	85	7	0		78	92	
12	Kozhikode Beach	269	28	13	0	228	85	
13	Vellimadukunnu	65	4	1	0	60	92	
14	Meenchantha	65	12	11	0	42	65	
15	Mukkam	40	4	0	0	36	90	

\* NOCs issued prior to formation of the station (January 2011) not recorded in the register (Source: Details collected from selected fire stations)

As the NOCs were not renewed in the cases ranging from 11 to 92 *per cent*, the Department was not able to claim fire safety preparedness of the buildings. On being asked, GOK replied (January 2017) that the suggestion of DG to incorporate the provisions for annual renewal of fire safety approval of buildings in the KMBR/KPBR, and disconnection of essential services like water, electricity, etc., in the event of non-renewal would be considered in consultation with Local Self Government Department. The fact, however, remains that in the absence of renewal of NOCs at regular intervals, the buildings in question were not free from fire hazards.

# 5.1.6 Non-adoption of best practices in line with National Building Code

The National Building Code of India, revised in 2005, is a comprehensive Building Code, providing guidelines for regulating the building construction activities across the country. Part IV of the Code covers the requirements of fire prevention and life safety in respect of fire and fire protection of buildings. It specifies construction, occupancy and protection features that are necessary to minimise danger to life and property from fire. In Kerala, provisions of the KMBR govern the design and construction of buildings. It was seen that most of the provisions contained in the Code were not adopted in the KMBR. While all provisions regarding the fire protection activities mentioned in the Code vere specifically adopted and included as Rule 44 in the KMBR, we observed

 $<sup>^{71}</sup>$  National Building Code 1983 and Amendment No. 3 under fire protection in Annexure II

that detailed specifications laid down in the National Building Code regarding prevention and fire safety were not incorporated.

Considering that there were several high rise buildings with height ranging between 60 and 100 metres in Kerala and the limited infrastructure capability (road width, traffic density, road gradient, reach of equipment, availability of sufficient water, etc.) of the State in Fire and Rescue operations, the DG ordered (June 2015) that more emphasis should be placed on preventive aspects and in situ capability development such as full compliance to National Building Code, adoption of best practices in assuring life safety in building design, etc. The members of the Building Approval Committee were directed to inspect the sites/buildings in the State with a view to ensure that all the provisions of the Code like access to fire appliances/vehicles, width of main and alternate staircases, location and size of fire lifts, vehicular parking spaces, refuge area, details of fire alarm system network, built in fire protection arrangements, static water storage tank and pump, etc., were complied with before issuing NOC.

However, GOK modified (December 2015) the conditions for grant of approval adopted by the DG and ordered that provisions of National Building Code were applicable only if corresponding enabling provisions existed in the KMBR and stated that National Building Code was only a guideline. Further, Government also clarified (February 2016) that adherence to National Building Code was not mandatory except in so far as it was incorporated in the KMBR. In the case of rescue and fire safety, Government stated that the provisions contained in Rule 39 to 43 of KMBR in respect of staircases, ramps, corridors, verandahs and passage ways, fire escape staircases, travel distance to emergency staircase, etc., shall apply and that the Code would not apply. As the provisions contained in the Code were more comprehensive and necessary to minimise casualty, GOK may initiate steps to strengthen the KMBR by addition of these provisions.

GOK, during the Exit Conference (November 2016) agreed that the KMBR needed to be strengthened since it catered to single and two-storeyed buildings only and that with the increasing number of high rise buildings in the State, utmost importance was to be given to fire prevention activities. GOK stated in reply (January 2017) that the DG had recommended that it was very necessary to include more fire safety measures as per National Building Code 2005 in the existing KMBR/KPBR and that this aspect would be looked into in detail by GOK.

#### 5.1.7 Absence of minimum fire safety standards in buildings

The DG had issued Minimum Fire Safety Guidelines for residential buildings, educational buildings, institutional/hospital buildings, business occupancies, mercantile buildings and storage buildings. These Guidelines prescribed minimum fire safety standards, like adequate number of fire extinguishers, hydrant valves and delivery hoses, hose reel hose and nozzle, manually operated fire alarm systems, sprinklers, fire detectors, fire pumps, water tanks, emergency lighting systems, suitable exits, width of access, open spaces around the area of the building, etc., according to the occupancy and height of the buildings.

A joint verification (June-July 2016) of fire safety standards available in 105 buildings<sup>72</sup> with respect to checklists issued for its officers by the Fire and Rescue Department revealed that 32 of these buildings suffered from major deficiencies like 'Nil' fire extinguishers/fire pumps/alternate source of power, blockage of fire escape staircase, etc., as shown in **Appendix 5.1**. The Fire and Rescue Department failed in ensuring minimum fire safety standards prescribed, thereby exposing the buildings to grave threat of fire accidents. GOK stated (January 2017) that action would be taken to amend the Fire Force Act by introducing a new legislation for ensuring the installation of minimum fire safety standards in buildings.

# 5.1.7.1 Inability of Fire and Rescue Department to enforce minimum fire safety standards

The DG issued Orders (January 2016) to all DOs to verify minimum fire safety standards in buildings inhabited or visited by people in large numbers like theatres, marriage halls, hospitals, educational institutions, large public offices, large corporate offices, malls, multiplexes, etc. The NDMA guidelines required that the Fire Force Act should provide for legal and penal action against fire safety defaulters if they did not fulfil the fire safety requirements like proper fire safety equipment, escape/evacuation routes, parking locations, etc. The Fire and Rescue Department identified 1589 functional buildings of various occupancies<sup>73</sup> in the State without having minimum fire safety standards and issued notices (January-February 2016) to the owners of these buildings. With regard to the status of compliance to minimum fire safety standards in buildings as stipulated by the DG, GOK stated (January 2017) that though Departmental orders existed for ensuring fire safety standards in buildings, lack of support of law hindered enforcement of these standards.

Joint verification (June-July 2016) of four of the 16 buildings in Ernakulam district<sup>74</sup>, in which, Fire Safety Audit was conducted (January-February 2016) by DO, revealed that none of the deficiencies identified earlier had been rectified. Thus, the buildings continued to operate without functional fire safety installations. Failure to amend the Fire Force Act in line with NDMA guidelines resulted in inability of the Fire and Rescue Department to initiate follow up action by enforcing legal and penal provisions to ensure minimum safety standards in buildings.

GOK replied (January 2017) that action was being taken to ensure support of law in enforcing minimum fire safety standards by amending the Fire Force Act.

#### 5.1.7.2 Licensing of agencies

To prevent and protect people from fire accidents in buildings, engaging of qualified persons/agencies in ensuring installation of fire fighting equipment is a good practice as is insisted by the State of Maharashtra. The DG had

<sup>&</sup>lt;sup>72</sup> 16 Hospital, 34 Residential, 23 Commercial, Nine Educational, Nine Assembly, 11 Office and Three Storage

Residential, Educational, Institutional, Assembly, Business, Mercantile, Industrial, Storage, Hazardous

No records in support of conduct of Fire Safety Audit were available with DOs in Kozhikode and Thiruvananthapuram

requested (September 2014) GOK to implement categorisation of contractors based on their experience, competency and qualification in installation of fire fighting equipment in buildings for issue of NOC. But the proposal was not accepted by GOK citing absence of provision for licensing agencies in the Fire Force Act and opined that introduction of licensing system would lead to litigation by affected parties. As such, the present system did not ensure competency and qualification of the agencies/contractors installing fire fighting system in the buildings. Thus, GOK failed in ensuring quality in installation of fire fighting equipment in buildings, thereby putting the life of people at risk.

GOK replied (January 2017) that the aspect of making sufficient provision for licensing of agencies would be examined while formulating the new Fire Force Act.

# **5.1.8** Status of manpower and equipment to effectively contain fire in buildings

Adequacy of manpower and availability of adequate vehicles and equipment are a pre-requisite to effectively contain fire occurring in buildings with minimal loss to life and property. We assessed the status of these components and the findings are brought out below.

# 5.1.8.1 Adequacy of manpower

A One-man Commission (Commission) appointed by GOK (March 2013) to study the modernisation of the Fire and Rescue Department identified lack of adequate staff in the Fire and Rescue Headquarters and officers at the level of DOs and ADOs as reasons for failure to ensure the adequacy of fire fighting arrangements in the high rise buildings, cinema houses, schools, hospitals, shopping complexes (malls) and small scale industrial units.

We noticed that the recommendation of the Commission (January 2014) for the creation of posts of one DO, one ADO, one Station Officer, one Leading Fireman (LF) and two Fireman Driver cum Pump Operator (FDCPO) in the Fire and Rescue Headquarters in the fire prevention wing on priority basis was not implemented by GOK (June 2016). While admitting the shortage of manpower GOK stated (January 2017) that financial constraint was the major hindrance in addressing the shortfall in manpower.

Further, as per recommendations of the Standing Fire Advisory Committee/Council (SFAC<sup>75</sup>), ADO was to be responsible for command of two to three fire stations. Accordingly, at least 40 ADOs were required for the existing 121 fire stations in the state. However, there were only 15 sanctioned posts of ADOs which were all filled as of August 2016.

We also noticed an overall shortage of 15 per cent across all categories of operational staff with reference to the sanctioned strength (July 2016). There

<sup>&</sup>lt;sup>75</sup> Government of India in 1955 formed a Standing Fire Advisory Committee (SFAC) under the Ministry of Home Affairs (MHA). This committee was renamed as Standing Fire Advisory Council (SFAC) in 1980. This committee/council has representation from each State/UT fire service, as well as representation from MHA, Ministry of Defence (MoD), Ministry of Road Transport and Highways, Ministry of Communication and Information Technology and Bureau of Indian Standards (BIS)

was significant shortfall in posts of Assistant Station Officer, Fireman and FDCPO as shown below.

Table 5.2: Shortfall in men in position as against sanctioned strength

Name of post	<b>Sanctioned Strength</b>	<b>Men in Position</b>	
Station Officer	115	112	
Assistant Station Officer	136	102	
Fire Man	2728	2230	
Leading Fire Man	479	455	
FDCPO	891	770	
Driver Mechanic	123	113	

(Source: Records furnished by Fire and Rescue Headquarters)

GOK needs to address the shortfall in manpower and even revise the sanctioned strength on merits keeping in view the mushrooming of big buildings to enhance the effectiveness of the Department in fire safety and prevention. It was stated (January 2017) by GOK that action was being taken on priority basis to sanction more posts.

#### 5.1.8.2 Status of Vehicles and equipment

One of the key components for combating fire incidents effectively is adequacy and preparedness of fire fighting equipment. To assess the requirements of fire stations in the State, the DG appointed a Committee (December 2015) which submitted a report. We examined the availability of vehicles and equipment in 15 fire stations (eight urban, six semi-urban and one rural) with that of the requirement assessed by the Committee. The audit findings on the availability of equipment and vehicles are given below.

## Adequacy of Vehicles

We noticed shortfall across all nine categories<sup>76</sup> of vehicles in the urban/semiurban/rural fire stations as against the requirement assessed by the Committee, which is shown in **Table 5.3**:

Mini Emergency Vehicle, Water Tender, Mini Water Tender, Ambulance, Recovery Vehicles, Water Bowser, Water Mist Bike, Multi Utility Vehicle and Mini Bus

Table 5.3: Shortage of vehicles

Sl. No.	Item	Required	Available	Shortage	Percentage of shortage			
(a) 1	(a) Urban/Semi-urban fire stations							
1	Mini Water Tender <sup>77</sup>	28	12	16	57			
2	Ambulance	14	7	7	50			
3	Recovery Vehicles	14	4	10	71			
4	Water Bowser <sup>78</sup>	14	0	14	100			
5	Water Mist Bike	22	8	14	64			
6	Multi Utility Vehicle	15	3	12	80			
7	Mini Bus	8	0	8	100			
8	Water Tender	16	15	1	6			
(b) Rural fire station								
1	Mini Emergency Vehicle	1	0	1	100			
2	Water Bowser	1	0	1	100			
3	Water Mist Bike	1	0	1	100			

(Source: Details furnished by test checked fire stations)

Shortfall of vehicles in urban/semi-urban fire stations ranged from six per cent (Water Tenders) to 100 per cent (mini bus/water bowser). The lone<sup>79</sup> test checked rural fire station was not provided with water bowser, water mist bike and mini emergency vehicle though it was eligible for the same.

GOK replied (January 2017) that Administrative Sanction has since been accorded for ₹38.56 crore in 2016-17 for procurement of vehicles and equipment and that tender procedures for purchase of water bowser had already commenced.

#### **Over-aged** vehicles

The Fire and Rescue Department was saddled with fire tenders and other vehicles which had outlived their utility. As per SFAC guidelines, the maximum life span of a fire fighting vehicle is 5000 hours of operation or 10 years whichever is earlier. Out of 655 vehicles in the Department as of March 2016, as many as 286 vehicles (43.66 per cent) were more than 10 years old, which included 122 Mobile Tank Units (MTU), 29 Mini MTU, 11 Emergency Tenders<sup>80</sup>, four Crash Tenders and 21 Water Lorries. Sixty one of these 286 vehicles were more than 20 years old.

GOK stated (January 2017) that condemnation process of over-aged and inefficient vehicles was being done by the Fire and Rescue Department regularly. It was also informed that since the purchase procedure of vehicles takes too much time, condemnation of old vehicles by considering the age of the vehicle alone was not practical. The purchase procedure of vehicles may be expedited to ensure quick procurement of vehicles and resultant enhancement of operational efficiency of Fire and Rescue Department.

<sup>&</sup>lt;sup>77</sup> Mini Water Tenders are primary fire fighting vehicles which can easily ply through narrow roads and reach remote areas of the State.

<sup>&</sup>lt;sup>78</sup> Vehicle fitted with a pump at the rear is capable of carrying up to 16000 litres of water and is suitable for fighting large fires.

<sup>&</sup>lt;sup>79</sup> Mukkom fire station

<sup>80</sup> Emergency tenders are used to attend rescue operations. It consists of different types of rescue equipment like Hydraulic tools, Oxy acetylene cutters, small gears, generators, ladders, rubber dinghies without onboard engine, ropes, chain saws, air lifting bags, breathing apparatus sets, lighting system, etc.

#### Response time of vehicles

We test checked 2362 fire reports of 14 test checked urban/semi-urban fire stations for the year 2015-16. It was seen that while 1880 (80 per cent) calls were attended to within the stipulated seven minutes as fixed by the One-man Commission, 400 calls (17 per cent) were attended to within eight to 15 minutes of reporting of the incidence of fire. While the large percentage of calls were timely attended to by the Department, we observed that efficiency could be increased further, if the recommendation of RMSI<sup>81</sup> to increase the number of fire stations from 121 to 228, which was also accepted by the One-man Commission, was implemented by GOK. GOK stated (January 2017) that it was necessary to increase the number of fire stations to decrease the response time and that action was being taken to identify the locations in which new fire stations were to be set up on priority basis.

# Insufficient Safety equipment for fire fighters

Equipment like breathing apparatus, fire fighting suits and walkie talkie are essential life-saving equipment for fire fighters. We test checked the status of availability of these equipment in 15 Fire Stations vis-à-vis the norms fixed by the Committee constituted by the DG, Fire and Rescue Department. Significant shortfall of these essential equipment was noticed in test checked fire stations. While in urban and semi-urban fire stations, breathing apparatus was short by 82 per cent, there was shortfall in respect of fire fighting suits and walkie talkie by 91 and 83 per cent respectively. In the rural fire station, the situation was still grave as there was 100 per cent shortfall of fire fighting suits and walkie talkie and 60 per cent shortfall of breathing apparatus. Subsequent to a major fire that occurred in Joy Alukkas showroom<sup>82</sup> at Ernakulam in March 2011, the Fire and Rescue Department had admitted that loss could have been minimised if they were equipped with sky lift, sufficient number of modern breathing apparatus sets and sufficient fire jackets. The Fire and Rescue Department continuing (August 2016) to function without adequate safety equipment exposed the fire fighters to risk to life and also impacted the effectiveness of fire fighting activities.

Laxity of the Fire and Rescue Department in making good the shortfall in equipment is serious when viewed against the fact that out of ₹22.50 crore received (October 2010) as one time grant from GOI for purchase of fire fighting equipment, the Department had spent only ₹13.26 crore as of March 2016. We observed that the under utilisation of funds by the Fire and Rescue Department was due to administrative delay in procurement/tender finalisation. GOK stated (January 2017) that a detailed proposal for procurement of safety equipment with a total project cost of ₹65 crore has been submitted by the Department and that action was being taken to allot Budget provision for the same in the current year itself.

# Inability to fight fires in high rise buildings

The Fire and Rescue Department recognised in April 2010 that it did not possess the capability to gain access to fire and do fire fighting and rescue

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<sup>&</sup>lt;sup>81</sup> Risk Management Solutions Inc. appointed by the Director General, National Disaster Response Force and Civil Defence (Fire), Ministry of Home Affairs, Government of India

<sup>82</sup> Now occupied by 'Athira Gold and Silks'

operations occurring above the fourth floor in high rise buildings. It was, therefore, proposed to procure Sky Lifts (Aerial Platform Ladder) to gain access to fires occurring in high rise buildings where conventional ladders were not able to reach. The RMSI had also recommended one Hydraulic Platform/Aerial Platform Ladder (APL)/Turn Table Ladder (TTL) per district depending upon the presence of high rise buildings (more than 15 metre high).

We noticed that though Administrative Sanction (AS) was issued by GOK in October 2010 and Rupees six crore released specifically for procurement of a Sky Lift, the DG could finalise the technical specifications and issue e-tender only after more than four years in December 2014. However, there was no response to the e-tender. In December 2015, the DG requested GOK to accord sanction to procure a TTL instead of an APL. Despite GOK according (January 2016) revised AS (₹9.24 crore) to purchase a TTL, the DG was yet to initiate procurement procedure. Meanwhile, the DG submitted a fresh proposal (May 2016) to GOK for purchase of five TTL having height of 60 metres for five districts (Ernakulam, Kollam, Kozhikode, Thiruvananthapuram and Thrissur) and two APL having height of 45 metres.

Due to failure of the DG to make timely assessment of requirements and specifications, the Sky Lift/TTL was yet to be procured and the Fire and Rescue Department lacked equipment capable of fighting fires in high rise buildings. We observed that Fire and Rescue Department recognised that the loss of material worth ₹60 crore stocked in a building<sup>83</sup> during a fire incident in 2011 could have been minimised, had it been equipped with Sky Lift. Thus, failure of the Fire and Rescue Department to procure the equipment despite availability of funds has adversely affected its capability to fight fires in high rise buildings.

#### **5.1.9** Monitoring and Inspection

#### 5.1.9.1 Short fall in periodical inspections

Systematic and periodical inspection of fire fighting systems in high rise buildings, educational institutions and assembly buildings is essential to ensure continued proper maintenance of fire safety installations and fire safety standards in the buildings as envisaged in National Building Code/KMBR/KPBR. As per orders of DG (June 2012), the DO and the ADO should inspect four and six buildings respectively in a month (preferably commercial, educational and assembly buildings) and the Station Officers should inspect at least 10 buildings in a month and advise the custodian of the building to get the defects rectified and report to Headquarters with a compliance report.

In the absence of proper records connected with inspection in the test checked units, we issued enquiries to three DOs, five ADOs and 15 fire stations. The details furnished by the officers revealed that inspections as prescribed were not carried out at any level except by Station Officer, Thrissur for two months (August 2012 and September 2012) and by Station Officer, Chamakkada for three months (August, September and October 2012). We also noticed that no monitoring was done at the DG's level in this regard. The short fall in

<sup>83</sup> Joy Alukkas showroom in Ernakulam

conducting inspection was in the range of 93 per cent to 100 per cent in the test checked DOs/ADOs/Fire Stations.

During joint physical verification in six buildings in which major fire accidents occurred during July 2010 to April 2016, we observed that there was no documentary evidence of periodical inspections carried out by the Fire and Rescue Department prior to such incidents. No reports/returns based on periodical inspections were found available at 21 test checked units<sup>84</sup>. The joint verification conducted by us revealed that fire fighting installations in buildings continued to be either absent or defective as detailed in the **Table 5.4**.

Table 5.4: Buildings affected by major fire - Defective fire fighting installations

Sl. No.	Name of building/ fire station	Date of occurrence of fire	Loss (₹ in crore)	Major deficiencies noticed during joint verification		
1	Joy Alukkas Showroom (Presently occupied by Athira Gold and Silks)/Club Road, Ernakulam	26.03.2011	60.00	<ul> <li>Fire Extinguishers were time expired</li> <li>No water in the line pipe</li> <li>Ducts and shafts not easily visible being fixed inside the 'trial room' and 'toilets'</li> <li>Electric connection to fire pumps disconnected and alternate source of power not connected to fire pumps</li> <li>No electric connection for Control panel</li> <li>Fire escape staircase ended at the first floor and was blocked by dumping old articles. Refuge area at the top floor was closed and used as dining hall by the staff</li> </ul>		
2	KRS Godown/ Thiruvananthapuram	21.11.2011	1.45	• Fixed or portable installations including fine extinguishers were not available		
3	Kotak Mahindra Bank, Althara/ Thiruvananthapuram	23.04.2011	0.15	No provisions other than portable extinguishers were available		
4	Big Bazaar/ Thiruvananthapuram	13.11.2015	5.22	<ul> <li>Fire lifts were not available</li> <li>Emergency escape lightings were not available</li> <li>Access to fire ducts and escape staircase blocked</li> </ul>		
5	KRS Godown/ Thrissur	25.07.2010	3.35	• No fixed or portable installations including fire extinguishers		
6	Lulu Gold/ Kozhikode Beach	24.04.2016	1.68	<ul> <li>Escape staircase was locked</li> <li>Emergency lightings, smoke detector and fire alarm panel not installed</li> </ul>		

(Source: Joint verification reports)

In respect of three buildings, there were either no NOCs or NOCs were not renewed. Thus, even buildings in which major fire accidents occurred continued to function without proper fire safety installations.

GOK replied (January 2017) that the absence of provision for periodic inspections in KMBR/KPBR, inadequacy of manpower in officer cadre and

<sup>&</sup>lt;sup>84</sup> 21 out of 23 test checked, except Thrissur and Chamakkada Fire Stations

absence of Fire Prevention wing in the Department had delayed implementation of instructions issued during inspections.

#### 5.1.10 Conclusion

As the new Kerala Fire Force Act was not enacted as per NDMA guidelines, there were no enabling provisions empowering the Fire and Rescue Department to proceed legally and impose penalty on perpetrators of fire safety violations. In the absence of Rules, the activities of the Fire and Rescue Department were regulated by standing orders issued by the DG which did not possess statutory backing.

GOK did not issue appropriate notifications resulting in inability of officers of the Fire and Rescue Department to conduct inspections legally, to discharge their duties effectively and to ensure the availability of fire safety arrangements. Joint verification by us revealed deficiencies in compliance to fire safety standards, thereby exposing the buildings to grave threat of fire accidents. Failure of GOK to adopt good practices as prescribed in National Building Code led to non-inclusion of such provisions in the KMBR, to ensure safety of life and property of people.

Fire fighters were also exposed to risk due to shortage of safety equipment like breathing apparatus, fire fighting suits and walkie talkies. In the absence of equipment like APL and TTL, the Fire and Rescue Department was not capable of conducting rescue operations beyond the fourth floor of high rise buildings in the State.

The failure of GOK in ensuring the above aspects of fire protection and prevention has put the life and property of people at risk.

## FAILURE OF OVERSIGHT/ADMINISTRATIVE CONTROLS

#### HEALTH AND FAMILY WELFARE DEPARTMENT

# 5.2 Misappropriation of funds in Government TD Medical College, Alappuzha

Failure of supervisory authorities to exercise stipulated checks and laxity of the Drawing and Disbursing Officer in complying with the codal provisions relating to maintenance of Cash Book resulted in misappropriation of ₹17.20 lakh in Government TD Medical College, Alappuzha.

Rule 92 (a) (ii) of Kerala Treasury Code (KTC) Volume I stipulates that all monetary transactions should be entered in the Cash Book as soon as they occur and attested by the Head of the Office in token of check. While Rule 92 (a) (iv) of the KTC requires the Head of the Office to verify the Cash Book at the end of each month and record a signed and dated certificate to that effect, Rule 131 (a) also stipulates that the contents of cash chest shall be counted by the Head of the Office or under his orders by the subordinate Gazetted Officer at the close of business on each working day and verified with book balance. A memorandum of

verification shall be signed and dated by the Government servant who counted the cash and abstracts of cash balances with denominations recorded. The Director of Medical Education (DME) being the Head of the Department, was bound to follow the directions (June 2005) issued by the Government of Kerala (GOK) for ensuring that the internal audit wing functioned systematically, effectively and promptly.

In the Government Tirumala Devaswom Medical College, Alappuzha (TD Medical College), while the Principal was the Head of the Office, the Senior Administrative Officer was the Drawing and Disbursing Officer (DDO). Besides other responsibilities, the DDO was also entrusted with the responsibility to verify and attest the entries in the Cash Book, subsidiary registers, acquittance rolls, contingent registers, vouchers, etc., including verification of cash.

During the course of audit (November 2015), it was noticed that the total of the entries in the payments side of the Cash Book was overstated on 10 June 2015 by ₹1000 and the cash balance was short accounted to that extent and carried forward. It was also noticed that the Senior Clerk, Junior Superintendent and the DDO had certified in the Cash Book that the balance in the cash chest as on the day, agreed with the balance as per the Cash Book, leaving no excess cash. A detailed examination of the entries made in the Cash Book for the period April 2014 to October 2015, revealed the following lapses.

- entries in the Cash Book were erased/scored off and rewritten entries were not attested by the DDO with dated initials;
- entries were originally made and daily totals and cash balance recorded and subsequently, entries were scored off thereby causing mismatch between recorded daily totals and actual totals;
- cash balances were certified by the DDO without ensuring correctness of individual daily entries with supporting original vouchers, which resulted in failure to detect the misappropriation;
- variations in receipt and payment totals ranging from ₹200 to ₹56,049 were noticed during the period from April 2014 to October 2015;
- though individual transactions were entered correctly, the receipt and payment totals respectively were understated or overstated and the deficit amount was not available in the cash chest in order to tally with the incorrect cash balance as recorded in the cash book. While the total figures on the receipts side were understated on six occasions, expenditure totals were overstated on 16 occasions thereby reducing the progressive cash balance by ₹1.79 lakh (Appendix 5.2);
- a joint physical verification of cash conducted on 23 November 2015 confirmed no surplus cash in the cash chest, establishing the misappropriation of ₹1.79 lakh;

• Internal Audit of DME conducted in May 2015 failed to notice the misappropriation.

After the matter was pointed out during audit, the Principal of the TD Medical College suspended (November 2015) the Junior Superintendent and Senior Clerk dealing with cash. Besides, the DME ordered (December 2015) a departmental inquiry into the alleged misappropriation of Government money. The inquiry, covering the period from March 2012 to November 2015, revealed misappropriation of ₹17.20 lakh. We, however, observed that no action was initiated against the DDO despite his failure to discharge his mandated supervisory responsibilities.

Thus, non-observance of codal provisions and supervisory lapses in ensuring periodical checks and controls resulted in misappropriation of ₹17.20 lakh in TD Medical College. Had the DDO ensured the correctness of individual entries by cross verifying them with the vouchers of daily receipts and payments and checked arithmetical accuracy of cash balance by totalling of daily entries, the misappropriation could have been avoided.

GOK, while responding (November 2016) to the audit observations stated that it had directed DME to reassess the loss sustained by the Department on account of the misappropriation and that further action would be taken on receipt of the report of DME. GOK also informed that the suspended officers had admitted to inadvertent omission in entering certain amounts in the cash book.

The response of the GOK was not tenable as the misappropriation of Government funds has taken place due to systematic and intentional efforts of the officials at fault which cannot be termed as inadvertent. Moreover, the GOK's reply has also failed to explain the delay of more than one year in taking appropriate action against the delinquent officials. As such, we recommend the GOK to take disciplinary action against all the defaulting officials including the DDO, as per relevant conduct rules governing their service, for their failure to perform their assigned duties. Further, the GOK may also ensure that the system and procedures are followed strictly to guard against the occurrence of such happenings in future.

# HIGHER EDUCATION DEPARTMENT

#### 5.3 Fraudulent drawal of remuneration for valuation

Violation of prescribed procedure by the Finance Officer, Mahatma Gandhi University in payment of remuneration to examiners for valuation of answer scripts led to a fraudulent drawal of ₹11.26 lakh.

Examiners of the Mahatma Gandhi University (MGU) were paid remuneration for valuation of answer scripts done by them. As per MGU Circular (July 2013), the Camp Officers of valuation camps had to submit claims of examiners along with their State Bank of Travancore (SBT)

account numbers for effecting direct payment of remuneration to the examiners.

We observed from the scrutiny of records that, the Camp Officer of School of Technology and Applied Science (STAS), Pathanamthitta, requested (October 2015) the Finance Officer of the MGU to issue him a cheque for payment of remuneration to the examiners, on the plea that most of the examiners did not have bank accounts with the SBT. The Finance Officer agreed (October 2015) to the request of the Camp Officer and issued cheque for ₹22.17 lakh in favour of the Camp Officer for further disbursement to the examiners.

After disbursement, the Camp Officer submitted Contingent bills claiming that 1,54,323 answer scripts were examined at the camp and a payment of ₹22.17 lakh was made to the examiners.

As a result of cross check of the claim contained in the Contingent bills with the stock/bundle register<sup>85</sup> maintained at the camp, we observed that only 1,01,974 answer scripts and not 1,54,323 answer scripts were evaluated at the camp.

We observed that the Camp Officer had inflated the number of answer scripts by 52,349 numbers in the Contingent bills submitted by him and made an additional claim of ₹11.26 lakh which was not disbursed to the examiners.

Consequent to our audit finding (June 2016), the MGU placed the Camp Officer and a Section Officer (currently Assistant Registrar (Exams)) under suspension (July 2016) who were responsible for submission and passing of the claim respectively. The Vice Chancellor, MGU stated (December 2016) that in addition to the Departmental inquiry being conducted by MGU, the matter had been reported to the State Vigilance and Anti-Corruption Bureau which had registered a case in this regard.

We, however, observed that no action had been initiated against the Finance Officer, who was primarily responsible for violating the orders of the MGU, by agreeing to the request of the Camp Officer for payment through cheque, which enabled the Camp Officer to defraud ₹11.26 lakh.

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<sup>&</sup>lt;sup>85</sup> Bundle register is a register containing number of answer scripts in each answer book bundle with question paper code

### GENERAL ADMINISTRATION DEPARTMENT

# 5.4 Loss of rent due to defective lease agreement

A portion of Travancore House in New Delhi was leased out to State Bank of Travancore on the basis of 'carpet area' instead of 'plinth area' resulting in loss of ₹3.68 crore to GOK.

As per the instructions<sup>86</sup> issued by Public Works and Transport Department, Government of Kerala (GOK), the plinth area of a building is to be taken into account while calculating the rent.

The Travancore House, New Delhi, is a property of GOK. GOK accorded sanction (August 1994) to let out a portion of the Travancore House to the State Bank of Travancore (SBT) for setting up its Branch. Subsequently, in February 1995, GOK, through its Special Representative entered into an agreement with the SBT to let out an area of 3370 Sq.ft 'carpet area<sup>87</sup>' for a period of three years from 01 September 1994 at a mutually agreed rate of ₹50 per Sq.ft per month.

We noticed that during the period between 1994 (first year of lease) and 2015 (year of termination of lease), the Resident Commissioner, Kerala House, New Delhi (RC), who was in charge of the Travancore House, had executed agreement with SBT only twice, in February 1995 (covering the period from 01 September 1994 to 30 September 1997) and June 2008 (covering the period from 01 October 2005 to 30 September 2011) specifying carpet area as the basis for calculation of rent. As there was no agreement in place during the intervening period, rates of rent<sup>88</sup> were fixed vide Government Orders on the basis of mutual consensus between GOK and SBT. There were disputes between GOK and SBT on the extent of area actually occupied by SBT and the rate of rent to be levied. However, SBT continued to operate from the premises of Travancore House till its vacation on 31 October 2015, as negotiations with GOK were going on for determining the extent of area occupied and rate of rent payable by them.

With a view to confirm the area in actual possession of SBT, a joint measurement was conducted (August 2013) by a team comprising the technical staff of Kerala House, New Delhi and SBT which determined that the plinth area occupied by SBT was 4808.47 Sq.ft. Consequently GOK refixed (September 2014) the area occupied by SBT as 4808.47 Sq.ft and

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<sup>&</sup>lt;sup>86</sup> GO (Ms) No. 16/95/PW&T dated 09 March 1995

The lease agreement between GOK and SBT specified 'floor area' of 3370 Sq.ft as the basis for reckoning of rent which corresponded to 'carpet area' as per joint measurement undertaken (September 1994) by the Assistant Engineer, Kerala House and the Deputy Manager (Engineering), SBT

<sup>88</sup> Rent rates mutually agreed upon between GOK and SBT from time to time: ₹62.50 per Sq.ft from 01/10/1997 to 30/09/2000; ₹75 per Sq.ft from 01/10/2000 to 30/09/2005; ₹93.75 per Sq.ft for 3562 Sq.ft of carpet area from 01/10/2005 to 30/09/2008; ₹117.18 per Sq.ft for 4074.26 Sq.ft area from 01/10/2008 to 30/09/2011; Rate of ₹150 per Sq.ft on plinth area of 4808.47 Sq.ft claimed by GOK from 1/10/2011 till date of vacation was not accepted by SBT

calculated rent on the basis of plinth area at the revised rate of ₹150 per Sq.ft<sup>89</sup> (₹7,21,330<sup>90</sup> per month) from 01 October 2011<sup>91</sup>.

It was further noticed that the GOK requested SBT (November 2015) to remit the short payment of rent on the basis of plinth area, for the entire period of occupation from 01 September 1994 till the date of vacation of the premises by the SBT i.e. upto 31 October 2015. The SBT informed RC (April 2016) that payment of lease rent was made by the bank in compliance with the terms specified in the agreements executed with GOK and that it had already paid the entire rent in accordance with the agreements. Further, the SBT contested the Government Order (September 2014) which reckoned the plinth area as 4808.47 Sq.ft instead of earlier carpet area for fixing of rent. The decision of GOK to fix the rent based on carpet area instead of plinth area resulted in a loss of ₹3.68 crore as shown in **Table 5.5**.

Table 5.5: Loss of rent

Period	Carpet area reckoned for assessing rent (in Sq.ft)	Rent calculated by reckoning carpet area (in ₹)	Plinth area to be reckoned for assessing rent (in Sq.ft)	Rent calculated by reckoning plinth area (in ₹)	Amount of loss (in ₹)
September 1994 to March 1995	3370.00	11,79,500	4808.47	16,82,964	5,03,464
April 1995 to September 1997	3370.00	50,55,000	4808.47	72,12,705	21,57,705
October 1997 to September 2000	3370.00	75,82,500	4808.47	1,08,19,057	32,36,557
October 2000 to September 2005	3370.00	1,51,65,000	4808.47	2,16,38,115	64,73,115
October 2005 to September 2008	3562.00	1,20,21,750	4808.47	1,62,28,586	42,06,836
October 2008 to September 2011	4074.26	1,71,87,184	4808.47	2,02,84,435	30,97,251
October 2011 to October 2015	4074.26	1,81,60,800	4808.47	3,53,42,254	1,71,81,454
Loss to GOK					

(Source: Lease agreements/letters of correspondence between SBT and GOK)

We observed as under from the scrutiny of records:

- though the rent was to be fixed based on plinth area as per PWD instruction (March 1995), the measurement was made based on the wrong advice of the Assistant Engineer, Kerala House to reckon 'carpet area' during the first joint measurement (February 1994);
- the General Administration Department (GAD), while referring the original draft agreement to the Law and Finance Departments, failed to seek the opinion of the Public Works Department (PWD) which was the authority to determine the plinth area and fix rent.

Thus, GOK had sustained a loss of ₹3.68 crore due to faulty execution of the agreement with SBT on the basis of the carpet area instead of plinth area, in violation of stipulated PWD norms.

 $^{90}$  RC arrived at the figure by wrongly reckoning plinth area as 4808.87 Sq.ft instead of 4808.47 Sq.ft (4808.87 x 150 = 721330.50)

<sup>&</sup>lt;sup>89</sup> The then existing rate of New Delhi Municipal Corporation (NDMC)

Date from which a new lease period was to commence on the expiry of the earlier lease period on 30 September 2011

The GOK replied (December 2016) that a meeting was held with the SBT and RC on 21 December 2016, which failed to resolve the issue. We observed that wrong action taken at various levels had resulted in loss of ₹3.68 crore to GOK which needs fixing of responsibility.

## HIGHER EDUCATION DEPARTMENT

## 5.5 Unfruitful expenditure on a recording theatre

A recording theatre constructed and fully equipped at a cost of ₹1.48 crore remained idle since August 2011 due to failure of Government of Kerala to engage technical and administrative staff.

The Government of Kerala (GOK), as a part of revamping of music colleges of Kerala, accorded Administrative Sanction (March 2009) for setting up of a recording theatre in Sri Swathi Thirunal College of Music, Thiruvananthapuram (SSTMC) under the Directorate of Collegiate Education, at a cost of Rupees one crore which was revised to ₹1.31 crore (August 2009). It was envisaged that students of performing arts could learn the techniques of eminent artists and record the programmes for their future reference. The work was executed through the Public Works Department (PWD) and completed (August 2011) at a total cost of ₹1.48 crore.

We observed that though the recording theatre was fully equipped with video-audio recording facilities and editing machines, the theatre could not be put to use due to failure of the Higher Education Department to engage skilled personnel like sound engineer, engineering assistant and cameraman besides office and administrative staff. We also noticed that even though the theatre work was completed in August 2011, proposal for manpower was submitted to GOK by the Principal, SSTMC only after a lapse of more than one year (December 2012). Though the Principal, SSTMC reminded (January 2015 and January 2016) the GOK to provide manpower, the GOK was yet to respond (January 2017). In the meantime, the warranty period of one year of the electronic equipment had expired and the Principal, SSTMC reported (January 2016) to the Director, Collegiate Education that the costly electronic equipment was getting damaged in the absence of trained personnel to operate it.

Thus, the failure of GOK to engage technical and administrative personnel led to the recording studio costing ₹1.48 crore remaining idle for a period of four years besides denial of facility to the students of the college. SSTMC also incurred an expenditure of ₹1.64 lakh on the non-functional studio towards minimum fixed electricity charges payable to the Kerala State Electricity Board during the period May 2015 to June 2016.

While accepting audit observation, GOK stated (September 2016) that the proposal to create posts to manage the equipment was under its consideration.

#### WATER RESOURCES DEPARTMENT

# 5.6 Unproductive expenditure on work due to non-availability of adequate land

Contrary to the directions of Kerala Water Authority, tenders were invited for a water supply scheme without ensuring physical possession of adequate land, resulting in unproductive expenditure of  $\stackrel{>}{\sim}4.18$  crore, besides denial of potable water to the targeted population.

The Kerala Water Authority (Powers of Employees) Regulations, 1999 provided unlimited powers to the Superintending Engineer (SE) who is responsible for inviting tenders and execution of agreements. The Kerala Water Authority (KWA) directed its officers (July 2001 and reiterated in September 2008) not to tender any work unless the entire land required for completion of the scheme was in complete physical possession of KWA. Land for Water Supply Schemes was to be made available to KWA by the respective Grama Panchayaths (GP) free of cost.

Government of Kerala (GOK) accorded Administrative Sanction (December 1995) for 'Accelerated Rural Water Supply Scheme (ARWSS) to Veliyannoor and adjoining villages — Phase-II' for ₹6.50 crore which was subsequently revised to ₹9.50 crore in April 2003. The project was intended to supply water to Njeezhoor, Kuravilangad and parts of Kaduthuruthy villages. Package-I included laying of pipelines for supply of water to the Sump and connectivity from the Sump to Overhead Service Reservoir (OHSR) at Oleekkamala while Package-II work included construction of 74,000 litre capacity Sump cum Pump house at Thottuva and construction of five lakh litre capacity OHSR at Oleekkamala.

Tenders for Package-I and Package-II were invited by SE in January and March 2009 respectively. Package-I work was awarded (July 2009) for ₹4.06 crore and the work was completed (except for some gap bridging work) at a cost of ₹4.18 crore (April 2013). The work on Package-II was awarded (July 2009) for ₹4.11 crore for completion within nine months from the date of work order.

We, however, observed that the Package-II work was yet to be completed due to failure of KWA to ensure physical possession of adequate suitable land as shown below:

- Against a minimum 400 m<sup>2</sup> land required for construction of a five lakh litre capacity OHSR, the Kuravilangad GP handed over to KWA only 304 m<sup>2</sup> of land atop a hill with no approach.
- Land measuring 20 m<sup>2</sup> handed over to the KWA by the Kuravilangad GP for construction of Sump cum Pump house at Thottuva, was occupied by its own pump house for another scheme which needed to be relocated.

As the required land could not be handed over to the contractor even after 33 months of completion of pipe laying works, the SE ordered (March 2013) to

terminate the contract exempting the contractor from carrying out construction of OHSR and Sump.

The action of the SE in executing the work of laying pipelines at a cost of ₹4.18 crore under Package-I and his failure in not taking up work on the construction of the Sump and OHSR under Package-II due to inadequacy of land resulted in non-completion of the water supply scheme and depriving the beneficiaries of potable water.

GOK confirmed (September 2016) that after taking possession of 304 m² land for overhead tank, rubber plantation was grown in adjoining lands which resulted in lack of motorable access to the land. Also, an existing pump house in the 20 m² land handed over to KWA was not relocated by the GP resulting in inability to proceed with the construction of the sump. GOK further stated that based on the proposal of KWA, a project for undertaking the incomplete work has since been approved (February 2016) for ₹5.13 crore by the State Level Scheme Sanctioning Council.

Reply of GOK was not acceptable in view of the fact that KWA, instead of learning from past mistakes, continued to seek and obtain approval from GOK and proposed work without ensuring physical possession of adequate suitable land.

(C. GOPINATHAN)

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Thiruvananthapuram, The

Countersigned

New Delhi, The (SHASHI KANT SHARMA) Comptroller and Auditor General of India