# **Chapter-2**

# Functioning of State Disaster Response and Fire Services Department

**Home (Prisons) Department** 

# 2.1 Overview of the Department

The Fire Services Department was originally formed in 1957 and was renamed as 'Fire and Emergency Services Department' in 2004 and thereafter as 'State Disaster Response and Fire Services Department' in July 2009. The Department has been identified as a multi hazard first responder and also entrusted with the task of safeguarding life and property during fire, floods, cyclones, earthquakes, etc. The main functions of the Department are as follows:

- Prevent loss of life and property and undertake rescue operations when fire breaks;
- Provide fire protective cover during large public gatherings/functions/VVIP visits;
- Impart training in fire fighting operations;
- Prescribe mandatory fire safety measures;
- Create fire safety awareness and sensitise the public about prevention and dealing with fire accidents;
- Enforce fire safety measures stipulated in multi-storied buildings Regulations, 1981; and
- Enforce fire safety measures stipulated in AP Fire Service Act (APFSA) 1999 and AP Fire and Emergency Operations and Levy of Fee Rules (AP F&EO and LFR) 2006.

Standing Fire Advisory Council (SFAC), an apex body at national level under the Union Ministry of Home Affairs, advises the State Government on various issues relating to fire services including administration, legislation, training, equipment, etc.

# 2.1.1 Organisational Set-up

The Department functions under the overall control of the Principal Secretary (Prisons) in Home Department. The Director General of Fire & Emergency Services (DGFS) is the Administrative Head of the Department and is also the Chief Controlling Officer (CCO). DGFS is assisted by the Director of Fire Services (DFS), Additional Director (ADFS), three Regional Fire Officers (RFOs) for the three¹ regions and 23 District Fire Officers (DFOs). There are 253 fire stations² and 19 fire Out Posts (established on outsourcing basis) to cater to fire, emergency and rescue needs in the State. Besides, State Training School (STS) headed by a DFO rank officer, imparts training to the staff in performing departmental functions.

<sup>&</sup>lt;sup>1</sup>Anantapur (Rayalaseema), Hyderabad (Telangana) and Visakhapatnam (coastal)

<sup>&</sup>lt;sup>2</sup> Including one fire station at Gachibowli functioning on Public Private Partnership (PPP) mode

## 2.2 Audit Framework

# 2.2.1 Audit objectives

A comprehensive audit of the Fire Services Department was carried out in 2002-03 and the findings were included in the Comptroller and Auditor General (CAG)'s Report on the Government of Andhra Pradesh for the year ended 31 March 2003. Significant lacunae in the functioning of the Department were highlighted in that Report and various measures were recommended to streamline the procedures. This is a follow up audit to see the extent of improvement in the functioning of the Department during the last ten years and to assess whether,

- the planning process was robust and effective in strengthening the preparedness of the Department to combat emergencies;
- adequate funds were provided to meet the requirement of the Department;
- the Department had adequate and appropriate infrastructure to deliver the services entrusted to it effectively;
- enforcement of fire safety norms for prevention and control of fire incidents was effective;
- manpower management and capacity building were effective and ensured operational efficiency; and
- internal controls and monitoring were adequate and functioned effectively.

#### 2.2.2 Audit criteria

Audit findings were benchmarked against the criteria sourced from the following:

- AP Fire Service Act, 1999 (as amended by Act 21 of 2006) (Act);
- AP Fire & Emergency Operations and Levy of Fee Rules, 2006 (Rules);
- AP Fire Service Manual 1968;
- Norms prescribed by SFAC;
- AP Treasury code, AP Financial Code and AP Budget Manual; and
- Government Orders, sanctions, instructions/circulars of the DGFS issued from time to time.

## 2.2.3 Scope and Methodology of Audit

Audit was carried out during August 2011 to February 2012 and covered the functioning of the Department with respect to Fire Services for the period 2007-12. Audit methodology involved scrutiny of records and analysis of data at the office of the DGFS and the sampled District Fire Offices. Audit objectives, scope, criteria and methodology were discussed with the DGFS in an Entry Conference in July 2011. Discussions were held with various officials of the Department in the field units covered by Audit. Joint physical verification of fire stations and certain hazardous

premises was also conducted along with the Department officials and photographic evidence was taken to substantiate audit findings, where necessary. Audit findings were discussed with the Special Chief Secretary to the Government and other officers of the Department in an Exit Conference in October 2012 and the replies of the Government have been incorporated in the report at appropriate places.

# 2.2.4 Audit sample

There were 26 Drawing and Disbursing Officers<sup>3</sup> (DDOs) under DGFS as of March 2012. ADFO<sup>4</sup> in the Office of District Fire Officer (DFO) is the DDO for all offices of the Department in a district. Records of DGFS and DFOs of seven<sup>5</sup> districts (two districts from each region i.e., Coastal, Rayalaseema and Telangana and the Capital district of Hyderabad) covering 85 fire stations were selected for detailed scrutiny. Audit sample also included the State Training School, Hyderabad.

# **Audit Findings**

# 2.3 Planning

# 2.3.1 Perspective/Annual Plans

A medium to long-term perspective plan provides an organisation with a framework to enunciate its goals, strategies and work plans for implementing targeted programmes, deploying resources, setting performance indicators and monitoring progress vis-à-vis targets/goals.

Audit scrutiny revealed that the Annual Plans of the State Government did not include plans/priorities relating to the Department. The DGFS had also not outlined the infrastructural and other institutional requirements along with a detailed timeframe for fulfilling them through any strategic or perspective plan. There were no annual action plans in any of the seven sampled districts indicating the local level requirements and proposed mode of achieving them. In the absence of a perspective plan/action plan, priorities could not be identified and no specific measures were undertaken in a planned manner to achieve the objectives of the Department.

## 2.3.2 Operational Data

For effective functioning of the Department, it is imperative to have a comprehensive database containing the details relating to area-wise distribution of population, service area villages and houses with category of premises (like hazardous/non-hazardous), fire stations and their location, geographical mapping of distances between places, short/traffic free routes, etc. within the jurisdiction of a fire station along with the water sources in the vicinity.

<sup>&</sup>lt;sup>3</sup> DGFS-1, RFO Central-1,STS-1 and DFOs-23

<sup>&</sup>lt;sup>4</sup> Assistant District Fire Officer

<sup>&</sup>lt;sup>5</sup> Chittoor, Hyderabad, Krishna, Mahbubnagar, Ranga Reddy, Visakhapatnam and YSR (Kadapa) – Of these four districts viz., Chittoor, Hyderabad, Krishna and Visakhapatnam were last covered and the findings included in the CAG's Audit Report 2002-03

Audit scrutiny revealed that such a database was not maintained by the DFOs in any of the sampled districts. Further, the Department had not developed any Standard Operating Procedures for combating fire in high rise buildings, earthquakes and other natural disasters.

#### 2.3.3 Recommendations of Sub-Committee

Recognising the need for strengthening the Department, the State Government constituted (May 2008) a Sub-Committee headed by the Home Minister to suggest measures for restructuring the Department. The Sub-Committee felt that there was a need to strengthen the Fire Services Department at all levels to effectively respond to emergencies and search and rescue calls during disasters, by providing specialised vehicles, equipment and training to all the fire personnel. The Sub-Committee also felt that the existing fire stations in the State were quite inadequate to cope with the requirement and also lacked adequate budgetary support. The recommendations of the Sub-Committee (February 2009) included, *inter alia*,

- ⇒ renaming the Department;
- ⇒ establishing 140 new fire stations, especially in the Assembly constituencies where not a single fire station exists;
- ⇒ formation of 23 search and rescue teams at district level and 93 search and rescue teams at Sub-Divisional Headquarters;
- ⇒ formation of Nuclear, Biological and Chemical (NBC) Search and Rescue Teams at Hyderabad, Visakhapatnam and Vijayawada;
- ⇒ provision of State-wide modern communication system, etc.;
- ⇒ allocation of 20 *per cent* of the Calamity Relief Fund for procurement of specialised equipment; and
- ⇒ allocation of 3 *per cent* of property tax collected by Municipal Authorities towards implementation of modernisation scheme.

Government accepted (July 2009) the recommendations of the Sub-Committee. However, no time frame was fixed for implementing them. Audit scrutiny revealed that despite a lapse of over three years (November 2012), none of the recommendations have been implemented except renaming (July 2009) the Department and formation of search and rescue teams in the twin cities of Hyderabad and Secunderabad (as against the requirement of 23 such rescue teams).

DGFS accepted (November 2012) the audit finding and attributed inaction in this regard to non-allocation of funds by the Government.

# 2.4 Inadequate Budgetary Support

Details of budget allocation and expenditure of the Department during the period 2007-12 are given below.

**Table 2.1** 

(₹ in crore)

Year	Budget sought by DGFS	Budget provided (per cent)	Expenditure	Funds unutilised (-)/ Excess (+)
2007-08	186	69 (37)	64	(-) 5.00
2008-09	159	79 (50)	79	0.00
2009-10	243	89 (37)	83	(-) 6.00
2010-11	358	121 (34)	107	(-) 14.00
2011-12	334	145 (43)	150	(+) 5.00
Total	1280	503	483*	

<sup>\*</sup> Plan: ₹25 crore; non-plan: ₹458 crore

Source: Appropriation Accounts of Government of Andhra Pradesh for the relevant years and data furnished by DGFS

As can be seen from the above table, allocations by the Government constituted only 34 to 50 *per cent* of the requirement sought by the Department in all the years during 2007-12. In compliance to the audit findings that featured in CAG's Audit Report 2002-03, DGFS had been submitting proposals every year in the budgets during 2007-08 to 2011-12 for construction of permanent buildings for fire stations, static water tanks, bore wells and purchase of fire tenders, portable pumps and electric motors. Further, the Department had also been submitting their requirements in Budget Estimates since 2008-09 for establishment of new fire stations in 89 Assembly constituencies. However, requisite funds were not provided by the Government in any of the budgets during the review period.

Even the funds allocated in the budgets were not made available to the Department due to freezing of budget/non-issue of budget release orders (BROs), as reported by the DGFS while adducing reasons for non-utilisation of the budgeted funds in the years 2007-08 to 2010-11. Due to non-release of the budgeted funds in full especially during 2010-11 (where the saving reported was ₹13.76 crore), the Department could not go ahead with construction of permanent buildings for the existing fire stations (30), purchase of fire tenders, provision for water source, etc. and setting up new fire stations. Operational expenditure<sup>6</sup> of the Department constituted 12 to 27 *per cent* of the total expenditure during the years 2007-08 to 2011-12, while the remaining expenditure was on establishment and staff salaries.

DGFS accepted the Audit observations and stated (November 2012) that, during the financial year 2012-13 funds amounting to ₹25 crore were sanctioned by the Government for construction of Office/fire station buildings.

#### 2.4.1 Short release of CRF funds

With a view to strengthening the Fire Services Department in the States, GoI permitted (September 2006) the State Governments to utilise 10 *per cent* of the allocation from Calamity Relief Fund (CRF<sup>7</sup>) towards procurement of modern equipment for Search and Rescue operations including Communication equipment.

<sup>&</sup>lt;sup>6</sup> 2007-08: ₹12 crore (18 per cent), 2008-09: ₹18 crore (23 per cent), 2009-10: ₹11 crore (13 per cent), 2010-11: ₹13 crore (12 per cent) and 2011-12: ₹40 crore (27 per cent)

<sup>&</sup>lt;sup>7</sup> now State Disaster Response Fund (SDRF)

GoI released ₹1,579.25 crore towards its share (75 *per cent*) during the period 2007-12, in addition to the State share of ₹559.76 crore towards CRF as detailed below.

**Table 2.2** 

(₹ in crore)

Year	Amount of CRF (75% Central share and 25% State share)	Entitled share of 10% to Fire Services	Actually released to Fire Services by State Government		
2007-08	379.35	37.94	0.50		
2008-09	398.31	39.83	1.33		
2009-10	418.23	41.82	0.00		
2010-11	508.84	50.88	0.00		
2011-12	434.28	43.43	0.00		
Total	2139.01	213.90	1.83		

Source: Data furnished by Revenue (DM-III) Department

State Government released less than one *per cent* (₹1.83 crore) from CRF instead of 10 *per cent* (₹213.90 crore<sup>8</sup>) as permitted by the GoI for procurement of modern equipment during the period 2007-12. Although the DGFS had been corresponding regularly with the Government for release of funds under CRF, funds were not released by the Government as of November 2012.

Due to non-release of funds by the Government, the process of modernisation could not be undertaken and the proposal of 2006 to constitute Search and Rescue Teams at Vijayawada, Visakhapatnam and Tirupati was not acted upon.

#### 2.4.2 Non-collection of Fire Tax

As per the provisions of AP Fire Service Act 1999 and the APF&EO and Levy of fee Rules 2006, fire tax should be levied (in the form of surcharge) at one *per cent* of the amount of property tax on lands and buildings on which property tax is levied and it is to be recovered as if it were arrears of land revenue.

Although the Act and the Rules came into force in 2001 and 2006 respectively, Government did not issue orders for collection of fire tax by the local bodies. As a consequence, Government lost possible revenue amounting to ₹49.11 crore<sup>9</sup> being fire tax during the period April 2007 to March 2012, which could have been utilised for improvement of fire and emergency services.

# 2.5 Infrastructure and Fire Management

## 2.5.1 Infrastructure

2.5.1.1 Establishment of fire stations

SFAC recommended a scale of one fire station for 10 sq km radius for towns and one for 50 sq km radius in rural/open areas. As per this norm, the requirement of fire stations in Andhra Pradesh would work out to 5,502.

<sup>&</sup>lt;sup>8</sup> 10 per cent of (GoI's release (75%): ₹1,579.25 crore + State's share (25%): ₹559.76 crore)

<sup>&</sup>lt;sup>9</sup> 1% of ₹4,911 crore being the Property Tax collected by the urban local bodies during 2007-12

#### Audit scrutiny revealed the following:

- (i) There were only 253 fire stations (shortfall: 95 *per cent*) in the State to cover an area of 2.75 lakh sq km<sup>10</sup>. Not a single fire station was set up during the period 2007-12. While the Government issued administrative sanction for six new fire stations (including one in AP Legislative Assembly) in May 2011, as of November 2012, these have not been set up due to non-provision of funds/ non-allotment of land.
- (ii) Each fire station covers 16 to 144 sq km in urban areas against the norm of 10 sq km, and 144 to 1,480 sq km in rural areas against the norm of 50 sq km.
- (iii) One fire station covers 3 lakh population on an average as against 50,000 population as per the SFAC norms.
- (iv) 875 Mandals (out of 1,128<sup>11</sup>) and 89 (out of 294) Assembly constituencies did not have a fire station (details are given in *Appendix 2.1*) as of November 2012.
- (v) The Department did not accord priority for operating fire stations in crowded/populated areas as discussed below:
  - Government sanctioned (November 2009) 10 dedicated fire stations <sup>12</sup> in marketing yards with Agricultural Marketing Committee (AMC) funds. Seven out of ten AMCs deposited (February September 2010) ₹2.65 crore with the DGFS for this purpose. As of November 2012, chassis for fire tenders were procured at a cost of ₹1.01 crore and fabrication work was in progress. The balance ₹1.43 crore was lying with DGFS and the intended objective was not achieved.
  - The temple town of Tirupati (a pilgrim centre) has a population of 6 lakh and a floating population of about one lakh per day. Heavy congestion in public places like bus terminals and railway stations, etc. and the increasing number of multistoried hotels pose the risk of fire accidents. However, there was only one fire station at Tirupati 13 covering urban, rural and four surrounding mandals, as against the requirement of 12 fire stations as per SFAC norms. Government replied (November 2012) that the Tirumala Tirupati Devasthanam (TTD) was requested (September 2012) for funding the establishment of five new fire stations at Tirupati and Tirumala.

DGFS, while accepting the Audit observation, stated (November 2012) that proposals were sent to the Government for establishment of fire stations in Assembly Constituencies which do not have even a single fire station, in a phased manner from 2012-13 onwards.

<sup>&</sup>lt;sup>10</sup> Rural: 2.71 lakh sq km, Urban: 4,480 sq km as per Census of India, 2011

<sup>&</sup>lt;sup>11</sup> While it is 1,108 as per Panchayat Raj and Rural Development Department, it is 1,128 as per Fire Services Department

Adilabad, Bhainsa, Guntur, Jammikunta, Karimnagar, Khammam, Kurnool, Nizamabad, Suryapet and Warangal

<sup>&</sup>lt;sup>13</sup> another located at Tirumala

## 2.5.1.2 Infrastructure in fire stations

Non-provision of adequate infrastructure facilities in the fire stations located in Chittoor, Hyderabad, Krishna and Visakhapatnam districts was commented upon in the earlier Audit Report. Audit however, observed that there was no perceptible improvement in infrastructure in the fire stations in the sampled districts (including the earlier sampled districts) during the period 2007-12 as detailed below:

#### Land

As per AP F&EO and LF Rules<sup>14</sup>, 2006, every fire station should be provided with land admeasuring two acres with a building and accommodation for safe custody of fire vehicles, appliances and equipment as well as accommodation for staff. Audit scrutiny revealed that only 7 out of the 85 fire stations (8 *per cent*) in the seven sampled districts were provided with two acres of land as per the norm.

Sampled district Total No. of Number of fire stations having land fire stations Two acres Less than one acre Chittoor 15 1 2 8 4 Hyderabad 12 6 6 3 15 Krishna 21 2 1 Mahbubnagar 8 2 2 3 Ranga Reddy 6 2 3 2 8 Visakhapatnam 11 3 YSR (Kadapa) 12 2 7 14

Table 2.3

Source: Records of DFOs

Apart from not obtaining adequate land for its functional use, the Department failed to protect its lands from encroachment by other agencies, as detailed below:

- Fire station land at Narayanpet was encroached upon by private parties due to non-construction of compound wall. Though the DFO, Mahbubnagar instructed (August 2011) SFO, Narayanpet to resurvey the land through revenue authorities, the survey was not yet conducted (June 2012).
- Vacant land belonging to Malakpet (Hyderabad) fire station was occupied by the Prisons department. The matter was not brought to the notice of the higher authorities (June 2012).

DGFS assured (November 2012) that requisite action would be taken to protect the lands of the Department.

#### **Buildings**

As per AP F&EO and LF Rules, 2006, every fire station should be provided with permanent building to house fire vehicles, appliances and equipment under safe custody. Audit scrutiny revealed as follows.

<sup>&</sup>lt;sup>14</sup> Andhra Pradesh Fire & Emergency Operations and Levy of Fee Rules

Out of 253 fire stations in the State, 30 fire stations were functioning without buildings. In the seven sampled districts, 17 out of the 85 fire stations (20 *per cent*) were in a dilapidated condition and in another six fire stations, there was no shelter for fire tenders as can be seen below.





Tandur FS-Fire tenders parked in the open (17 September 2011)

Gadwal-FS building in a dilapidated state (10 November 2011)

• In Chittoor district, four fire stations <sup>15</sup> were established in 2004. However, permanent buildings had not come up as of November 2012. Vehicles and equipment in these fire stations were housed in poor condition and were exposed to the vagaries of weather.

DGFS stated (November 2012) that this problem would be addressed soon since requisite funds were allotted by the Government during 2012-13 for construction of fire stations.

#### **Water Source**

SFAC norms stipulate availability of continuous water supply as a prerequisite for the functioning of a fire station. It is an essential requirement to have a static water tank of 25,000 litres capacity in each fire station with bore well and electric motor for its effective functioning.

Only 9<sup>16</sup> out of the 85 fire stations (11 *per cent*) in the seven sampled districts had water source within their premises. 51 fire stations (60 *per cent*) were drawing water from canals, irrigation channels, etc. which were located more than 2 km away from the fire stations.

DGFS accepted the Audit observation and stated (November 2012) that requisite funds were allotted by the Government during 2012-13 for construction of water tank, borewell, electricity motor, etc. for all the 253 fire stations.

#### **Equipment**

One of the key components for combating fire incidents effectively is adequacy and preparedness of firefighting equipment. SFAC norms prescribe one fire tender for every 50,000 population and one rescue van for 3 lakh population with another rescue van for an additional 10 lakh population.

<sup>&</sup>lt;sup>15</sup> Nagari, Vayalpadu (Now Valmikipuram), Pakala and Mulakalacheruvu

<sup>&</sup>lt;sup>16</sup> Krishna-4, Mahbubnagar-1, Ranga Reddy-1 and YSR (Kadapa)-3

In the 4 most important cities in the sampled districts, only 24 fire tenders were available (shortfall: 85 *per cent*) as against the total requirement of 163 fire tenders and only one rescue van was available against the requirement of ten as shown below.

Table 2.4

City	Population* (in lakh)	]	Fire Tenders	;	Rescue Vans			
	(=== ======)	R	A	S	R	A	S	
Hyderabad	55.34	110	12	98	6	1	5	
Visakhapatnam	13.29	26	5	21	2	-	2	
Vijayawada	10.11	20	5	15	1	-	1	
Tirupati	3.50	7	2	5	1	-	1	
Total		163	24	139	10	1	9	

\*As per Census 2001; R: Required as per SFAC norms; A: Available; S: Shortfall

Source: Records of DFOs

However, in all the fire stations test checked in Audit, adequate number of foam tins, breathing apparatus sets, dragon lights, rescue ropes, etc. were available.

## (a) Fire tenders

- The fire station at Ajitsinghnagar in Vijayawada had no fire tender since 2005 and it was operating with a water lorry working with portable pump for both delivery and filling of water. Operating a fire station without a fire tender in a densely populated area like Vijayawada carries high risk.
- Fire tenders in Mulakalacheruvu (Chittoor district) and Kanchikacherla (Krishna district) were condemned in 2009. These were however, not replaced as of June 2012, and in emergencies, fire tenders were being called for from the fire stations situated beyond 5 km.
- During the period 2007-12 there were major fire accidents in the areas mentioned above, in which property worth ₹7.82 crore (Ajitsinghnagar: ₹7.35 crore, Mulakalacheruvu: ₹0.31 crore and Kanchikacherla: ₹0.15 crore) was damaged. Due to non-availability of fire tenders, the damage could not be minimised.

DGFS replied (November 2012) that funds were allotted during the year 2012-13 by the Government for procurement of fire tenders and the tendering process was in progress.

# (b) Sky lifts

The Department purchased (March 2009) three Bronto Sky lifts<sup>17</sup> at a cost of ₹9.95 crore and placed them at Secunderabad, Visakhapatnam and the State Training School, Hyderabad. These lifts require fire tenders of 14,000 litre capacity with high pressure pump for optimum utilisation of their capacity. The Department however, purchased (July 2009) only one fire tender with high pressure pump.

<sup>&</sup>lt;sup>17</sup> Hydraulic Platform cum Turntable Ladder mounted on Volvo FM 340 6X4 Chassis

APHMHIDC<sup>18</sup>, which was entrusted with procurement of these equipment, returned the funds to the Department in October 2010. While the DGFS initiated the process of procurement in November 2011, as of November 2012 the fire tenders had not been procured.

In reply, DGFS stated (November 2012) that there is no prescribed scale of fire tender to be procured for conducting fire operations with Bronto Sky Lifts. The reply is not acceptable as the requirement of water tender of 14,000 litres capacity was mentioned by the Department itself in the technical bid specifications for fabrication of fire tenders for supplying water to the Bronto Sky lifts (of 54 m height).

#### (c) First aid kits

As fire fighting is a hazardous service, availability of first aid kit along with the fire fighting vehicle is one of the vital requirements. Audit scrutiny revealed that fire tenders were not provided with first aid kits in any of the fire stations test checked in the sampled districts.

DGFS replied (November 2012) that first aid kits would be procured in future, subject to availability of funds.

# **Staff quarters**

SFAC norms prescribe allotment of quarters to all the fire personnel within the premises of fire stations to ensure their availability at all times. As per AP F&EO and LF Rules, members of fire service are entitled for rent free accommodation.

There were no staff quarters in the fire stations in the seven sampled districts, except in Vikarabad (Ranga Reddy district), and Wanaparthy (Mahbubnagar district). Quarters in these two stations were also in a dilapidated condition and hence were not in use.

DGFS accepted the audit observation and stated (November 2012) that staff quarters could not be constructed due to lack of funds and necessary proposals would be submitted to Government in this regard.

#### Rest rooms and toilets

SFAC norms and AP F&EO and LF Rules stipulate that every fire station should be provided with a rest room with appropriate basic facilities.

Out of the 85 fire stations in the seven sampled districts, 21 fire stations (25 per cent) had no rest rooms; 22 fire stations (25 per cent) had no toilet facilities; and the remaining fire stations, which had rest rooms and toilets, were not in a usable condition, as can be seen from the photographs given below.

<sup>&</sup>lt;sup>18</sup>AP Health, Medical and Housing Infrastructure Development Corporation - renamed (February 2011) as Andhra Pradesh Medical Services and Infrastructure Development Corporation (APMSIDC)





Parigi FS rest room (17 September 2011)

Narsipatnam FS toilet (4 January 2012)

DGFS replied (November 2012) that this problem would be addressed soon since funds were allotted by the Government during the year 2012-13 for construction of fire station buildings with rest rooms and toilets.

## **Communication System**

The efficiency of Fire Services Department depends to a large extent on its ability to reach the fire accident site within the shortest possible time (within 5 minutes in urban and 20 minutes in rural areas as per SFAC norms).

Audit observations in this regard are as follows:

- Global Positioning System (GPS) to identify the exact location of fire premises, was not available with the Department. While confirming this, DGFS stated that it would be procured in future subject to availability of funds.
- Government sanctioned (January/February 2009) ₹4.33 crore for establishment of Very High Frequency (VHF) network with communication system to fit into the overall strategy of Disaster Management. The Department procured (February/March 2009) 10,567 VHF sets and distributed (November 2009 to April 2010) to all the DFOs in the State. Though DGFS replied (November 2012) that the VHF communication system is being used in all the Fire Stations, Audit observed that the VHF sets were not put to use in any of the sampled Fire Stations (except in Vijayawada city) due to non-receipt of licences.

The Department did not ensure receipt of licences before procurement of equipment. As a result, the objective of providing communication network throughout the State remains unachieved besides rendering the entire investment unproductive.

# 2.5.2 Fire Management

#### 2.5.2.1 Response to fire calls

SFAC recommended a maximum response time of 5 minutes for built up urban areas and 20 minutes for non-built up open and rural areas.

Audit scrutiny of the fire reports of the sampled fire stations revealed that the response time was filled in by taking two minutes per kilometer uniformly. The actual time taken in each case, which varies with road conditions, traffic position, etc. was however, not recorded. In the seven sampled districts, the response time in

66 (18 *per cent*) out of 362 major and serious fire incidents <sup>19</sup> in the urban areas reviewed in Audit, was within the prescribed norms (i.e., below 5 minutes) and in the remaining 296 cases, the response time ranged from 6 to 70 minutes (Bahadurguda, Hyderabad). In rural areas, the response time was within the prescribed norms (i.e., below 20 minutes) in 137 (28 *per cent*) out of 492 fire incidents and in the remaining 355 cases, the response time ranged from 28 minutes to 152 minutes (Tatipamula, Pebbair Mandal). The year-wise details of the cases in urban and rural areas are given below.

Table 2.5

#### **Urban Areas**

Year	No. of	Cases within stipulated		Belated res	ponse cases	
	cases test checked	response time (below 5 minutes) (%)	6 – 10 minutes (%)	11 – 20 minutes (%)	21 – 30 minutes (%)	Above 30 minutes (%)
2006	67	8 (12)	27 (40)	24 (36)	5 (7)	3 (4)
2007	75	12 (16)	28 (37)	25 (33)	7 (9)	3 (4)
2008	90	12 (13)	29 (32)	37 (41)	10 (11)	2 (2)
2009	66	18 (27)	19 (29)	18 (27)	4 (6)	7 (11)
2010	48	14 (29)	10 (21)	20 (42)	-	4 (8)
2011	16	2 (13)	5 (31)	4 (25)	4 (25)	1 (6)
Total	362	66 (18)	118 (33)	128 (35)	30 (8)	20 (6)

#### **Rural Areas**

Year	No. of	Cases within stipulated	•						
	cases test checked	response time (below 20 minutes) (%)	21–30 minutes (%)	31 – 60 minutes (%)	Above 60 minutes (%)				
2006	66	20 (30)	14 (21)	23 (35)	9 (14)				
2007	90	16 (18)	26 (29)	28 (31)	20 (22)				
2008	90	18 (20)	21 (23)	36 (40)	15 (17)				
2009	90	27 (30)	32 (36)	24 (27)	7 (8)				
2010	84	24 (29)	22 (26)	32 (38)	6 (7)				
2011	72	32 (44)	18 (25)	19 (26)	3 (4)				
Total	492	137 (28)	133 (27)	162 (33)	60 (12)				

Source: Records of DFOs

DGFS attributed (November 2012) the high response time to (i) increase in work load of the department (ii) attending to standby duties during VVIP visits, fairs, exhibitions, and (iii) inadequacy of fire stations.

#### 2.5.2.2 Implementation of Fire safety norms

One of the key functions of the Department is to enforce fire safety norms and create awareness among the citizens about fire prevention measures, especially in hazard prone premises, so that the risk of fire is minimised. Audit observations in this regard are given below:

#### Sensitisation of public about fire safety

DGFS sets monthly targets for DFOs, ADFOs and SFOs to identify fire hazardous premises for conducting awareness programmes. However, in the test checked

<sup>&</sup>lt;sup>19</sup> Serious fire incidents: property loss of ₹10 lakh to ₹25 lakh (or) human loss irrespective of property loss; *Major fire incidents:* property loss of ₹25 lakh and above

districts except in YSR (Kadapa) district and some cases in Hyderabad district, the Department did not furnish evidence of having conducted awareness programmes for public to sensitise them about fire prevention and safety.

Section 8 of the AP Fire Service Act requires augmenting auxiliary services by enrolment of volunteers from among the public. It is envisaged that, in times of emergency *i.e.*, in the immediate aftermath of casualty, accident, etc. these volunteers would attend to firefighting work and contain loss of life and property before the Departmental personnel come in. Audit observed that auxiliary services have not been constituted in any of the seven sampled districts as of November 2012.

Further, the Act provides for rewards to persons who give timely information regarding occurrence of fire and to those who effectively assist fire services in fire fighting and rescue operations. However, none of the DFOs of the sampled districts have identified such persons and awarded any rewards to the public to encourage the people to feel involved in fire safety and prevention activities.

#### Inspection and issue of licences to hazardous premises

Under Rule 18(2) of AP F&EO and LF Rules, 2006 read with Section 15 of the Act, the owner/resident of a fire risky area should obtain a licence from the authorised officer after payment of a prescribed fee. Further, all hazardous premises are required to be inspected by the Department to ascertain whether required fire safety norms are being followed.

Audit observed the following with regard to inspections and issue of licences to hazardous premises in the seven sampled districts:

 The DFOs did not identify the hazardous premises through any survey or in coordination with other departments such as Medical, Education, Industries and Factories, Revenue, Civil Supplies, etc. for obtaining the details of hazardous premises under their control. In some districts, the hazardous premises were partially identified while in other districts, no effort was made to identify hazard prone establishments, as detailed below:

Hyderabad District	363 educational institutions, 91 hospitals and 69 theatres were identified.
Visakhapatnam District	Shopping malls and departmental stores were not identified.
YSR (Kadapa) District	464 educational institutions, 40 hospitals and 69 theatres were identified.
Chittoor, Krishna, Mahbubnagar and Ranga Reddy Districts	Hazardous premises were not identified.

• The DFOs could inspect only 19,129 (38 *per cent*) hazardous premises out of 50,007 identified in the State. The extent of inspections of the hazardous premises in colleges, schools, hotels, hospitals and nursing homes, industries, showrooms, etc. ranged from 9 to 48 *per cent*. Details are given below.

Table 2.6

Nature of Establishments	Number of hazardous premises				
	Identified	Inspected by DFOs (percentage)			
Colleges	11875	2377 (20)			
Schools	9716	4629 (48)			
Hotels	1674	772 (46)			
Hospitals and Nursing homes (below 15 mtrs)	2712	1006 (37)			
Small scale industries	5048	1408 (28)			
Medium and large scale industries	1887	335 (18)			
Pharmaceutical industries	130	22 (17)			
Jute mills	69	25 (36)			
Commercial showrooms	689	124 (18)			
Timber deports/saw mills	2093	784 (37)			
Wholesale shops	2286	215 (9)			
Function halls	1486	606 (41)			

Source: Records of DGFS

 Licence fee was collected from the owners/residents of hazardous premises who came forward voluntarily for grant of licence. The DFOs did not maintain Demand, Collection and Balance (DCB) Registers for collection and renewal of licence fee.

DGFS stated (November 2012) that continuous efforts were being made to inspect the hazardous premises, issue notices for rectification of deficiencies in fire safety measures and also to initiate prosecution against fire safety violators. It was further stated (November 2012) that instructions were issued to the concerned DFOs to identify the hazardous buildings in the districts in coordination with other Departments and to maintain the DCB register.

# Issue of No Objection Certificates (NOC) to high-rise buildings

The AP F&EO and LF Rules 2006 stipulate that any person proposing to construct a high-rise building of more than 15 metres height for commercial purpose and 18 metres and above height for residential purpose and buildings of public congregations like cinema halls, which are more than 500 sq. m in plot area and 6 metres above in height, should obtain a No Objection Certificate (NOC) from the Department. The Department has to inspect the site within 60 days from the date of receipt of application and issue provisional NOC with one year validity. The occupancy certificate for the building is to be issued after installation of fire safety equipment and making structural changes suggested by the Department. Watch registers are to be maintained in the Department to facilitate monitoring for ensuring compliance with law.

Audit scrutiny revealed the following:

 The Department did not maintain watch registers relating to NOCs issued, their renewal, bank guarantee and DCB except in Mahbubnagar district. Audit could not therefore, ascertain the number of NOCs issued, renewed and those yet to be renewed.

- DFOs in the test checked districts had no knowledge of the multi-storied buildings that were issued NOCs in their jurisdiction, as those were issued directly by the DGFS.
- DGFS did not maintain any register to watch currency of the Bank Guarantees (BG) obtained from the persons proposing to construct high rise buildings to ensure fire safety installations and fire protection measures. During the period 2007-12, 14 BGs (worth ₹4.28 crore) were time-barred. Though occupancy certificates were yet to be issued to these buildings, BGs were not revalidated as of June 2012.
- Based on the report of Regional Vigilance & Enforcement Officer, Visakhapatnam, DGFS issued instructions in November 2007 to the DFO, Visakhapatnam to take up the inspection of 145 residential multi-storied buildings (MSBs) over a height of 18 metres and above. DFO reported (December 2007) that 125 MSBs had not obtained NOCs and they had not followed fire safety measures as required under National Building Code (NBC). It was further reported that, an amount of ₹44.58 lakh²⁰ towards Fire Precaution Fee was not collected. DGFS did not, however, initiate any action on the report of DFO as of November 2012.

DGFS replied (November 2012) that inspection of all the premises for which provisional NOCs were issued would be undertaken during the current year (2012-13).

Audit noticed the following deficiencies in establishing and operating two multi-storied complexes in Hyderabad city:

(i) Provisional NOC was issued (November 2005) by DGFS for an MSB/Shopping complex in Hyderabad with multiplex theatres. Subsequently in May 2006, it was cancelled due to non-fulfillment of the prescribed conditions by the builder. However, in June 2007 GHMC<sup>21</sup> issued Occupancy Certificate (OC) to the builder without considering the fact of cancelling the NOC by the Fire Services Department and the Home Department granted (March 2008) permission to M/s ADLABs Pvt Limited for operation of three screens (2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup>) on the 4<sup>th</sup> floor of the building with a condition that licence in respect of 1<sup>st</sup> screen would be issued subject to further review. Accordingly the Commissioner of Police and Licensing Authority (CP/LA) issued licence (May 2008) for three screens. However, the DGFS noticed the deficient fire safety arrangements and suggested (June 2011) to the Government to consider withdrawing the OC to the building temporarily. The OC is however, yet to be withdrawn by the Government (June 2012). No action was taken for ensuring compliance with fire safety requirements in the MSB including collection of Fire Precaution Fee and penal interest at 24 per cent per annum from the date of construction till such

<sup>&</sup>lt;sup>20</sup> @ ₹10/- per sq. metre of the built up areas under Rule 15(C) of APF&EO and LF Rules, 2006

<sup>&</sup>lt;sup>21</sup> Greater Hyderabad Municipal Corporation

- NOC is obtained from the Fire Services Department. When pointed out in Audit, the DGFS assured compliance in this regard.
- (ii) Home Department directed <sup>22</sup> (November 2005) DGFS to issue NOC to Hyderabad Central, a multi-storied shopping Mall Complex with 4 multiplex theatres subject to fulfillment of certain conditions by the builder. The Fire Services Department however, issued NOC without incorporating the conditions prescribed by the Government. Government replied that NOC was issued for three screens (1, 2 and 5) only and screens 3 and 4 are not functioning. The reply is not acceptable as the building in question is not a stand-alone cinema theatre and it is an eight floor multi-storied building, with five theaters on top floor. NOC to such huge structures is required to be issued as per the prescribed standards of National Building Code 1990 (NBC). In the instant case, without following the prescribed standards, NOC was issued under the AP Cinemas (Regulation) Rules, 1970 which is not applicable in this case. Relaxation of rules and exemptions from compliance with fire safety norms endangers public safety in a densely populated area like Punjagutta in Hyderabad.

# **Implementation of High Power Committee recommendations**

In pursuance of the recommendations (December 2006) of the High Power Committee<sup>23</sup>, Government decided (March 2007) to issue notices to the owners/occupiers of the existing MSBs/complexes (other than those covered under Section 13 of the APFS Act) if they fail to comply with fire safety norms. Accordingly, Government created <sup>24</sup> (February 2009) fire prevention wings in five Municipal Corporations *viz.*, Hyderabad, Visakhapatnam, Vijayawada, Tirupati and Warangal to scrutinise the plans of all non-high rise buildings and issue NOCs.

No action was however, taken to create fire prevention wings in respect of other Municipal Corporations and fire safety norms were not being enforced in the non-high rise buildings within the jurisdiction of the other Municipal Corporations.

DGFS replied (November 2012) that proposals for creation of fire prevention wing in respect of 12 Municipal Corporations <sup>25</sup> were submitted (September 2012) to Government and that, approval was awaited with regard to the other recommendations also.

# Fire safety installations

During 2007-12 the DGFS issued instructions to all DFOs to inspect and verify the fire safety installations in public places *viz.*, cinema halls, hospitals, function halls, hotels and educational institutions.

<sup>&</sup>lt;sup>22</sup> GO Ms No 239 Home (Gen. A) Dept Government of Andhra Pradesh dated 9 November 2005

<sup>&</sup>lt;sup>23</sup> under the Chairmanship of Secretary, Municipal Administration and Urban Development with DGFS, Vice-Chairman, Hyderabad Metropolitan Development Authority, Commissioner, Greater Hyderabad Municipal Corporation, representative from Jawaharlal Nehru Technological University, etc. as members

<sup>&</sup>lt;sup>24</sup> GO No. 174 (February 2009) of Municipal Administration and Urban Development

<sup>&</sup>lt;sup>25</sup>Guntur, Kakinada, Rajahmundry, Kurnool, Nellore, Ongole, Kadapa, Eluru, Karimnagar, Nizamabad, Anantapur and Ramagundam

Inspections were conducted (2006-11) by DFOs (Chittoor, Hyderabad, Krishna, Mahbubnagar, Ranga Reddy, Visakhapatnam and YSR (Kadapa) districts) and the deficiencies noticed are as follows:

**Table 2.7** 

Violation of fire safety norms/ precautions	Hospitals	Theatres	Educational Institutions	Hotels, Petrol Bunks, Gas godowns, Factories, Function halls
	Nun	iber of units t	hat violated the	norm (per cent)
Number of units inspected by DFOs	911	651	932	681
Fire tender could not be operated at least 3 sides of building freely	857 (94)	464 (71)	928 (100)	681 (100)
Water storage not provided as per NBC norms	820 (90)	651 (100)	932 (100)	681 (100)
Means of escape not provided as per NBC norms	830 (91)	383 (59)	923 (99)	681 (100)
Smoke management and ventilators not provided	911 (100)	404 (62)	918 (99)	681 (100)
Fire fighting systems not provided as per NBC Norms (Extinguisher/buckets/ hose pipes/sprinklers, etc.)	873 (96)	407 (63)	913 (98)	681 (100)
Emergency battery backup lighting/ auto glow not provided in exits/ corridors/staircase	898 (99)	488 (75)	932 (100)	681 (100)
Trained staff security not provided	899 (99)	651 (100)	932 (100)	669 (98)
Openable windows not in landings	843 (93)	651 (100)	932 (100)	681 (100)
Public address system not provided	911 (100)	651 (100)	932 (100)	681 (100)
NOC Details not available	909 (100)	646 (99)	489 (52)	681 (100)

Source: Records of DGFS and DFOs

It can be seen from the above Table that 93 to 100 *per cent* of hospitals (911), 59 to 100 *per cent* of theatres (651), 52 to 100 *per cent* of educational institutions (932) and almost 100 *per cent* of hotels, petrol bunks, gas godowns, factories and function halls inspected by DFOs, violated specific fire safety norms and did not take any fire precautionary measures.

Rule 15 of AP Fire & Emergency Operations and Levy of Fee Rules require that, with regard to violators of fire safety measures in places of public congregation, DGFS or a person authorised by him should issue instructions to DFOs to initiate penal measures.

The DFOs have not taken any penal measures against the management of the above institutions on the ground that specific directions were awaited in all these cases from the DGFS. DGFS did not offer (November 2012) any specific reply in this regard. In the absence of immediate stringent action/penalties, the purpose of inspections was defeated and public safety is being compromised.

Audit carried out a joint physical verification (November 2012) along with the departmental officers, of some of the important public buildings to see if the Department has taken corrective action pursuant to the inspections carried out during

2006-11. However, it was observed that one and a half years later, no action was taken to ensure that adequate fire safety measures were in place, even in respect of some of the most sensitive places like AP Secretariat, Legislative Assembly, etc. as detailed below:

# **Government Buildings**

**AP Secretariat, Hyderabad** - Though a major fire incident took (May 2009) place in 'D' Block of AP Secretariat, Government had not ensured adequate fire safety measures in the Secretariat even as of November 2012. Audit noticed that:

- Hydrant systems and smoke detectors in 'D' Block were not in working condition and fire extinguishers had passed their expiry date in February 2011 itself. These were not yet refilled as of November 2012.
- Firefighting equipment and Hydrant systems were not available in B, C and L Blocks and the corridors in these blocks were also blocked with almirahs endangering public safety in case of fire or other exigencies.



Fire incident in 'D' block of AP Secretariat

DGFS replied (November 2012) that Multi Storied Building Inspection Committee (MSBIC) <sup>26</sup> made certain recommendations for fire precautionary measures to be adopted in each block in the AP Secretariat and instructions in this regard would be issued to the concerned to ensure fire and life safety.

**Ravindra Bharathi**, a prestigious National theatre of Arts was constructed by the Government of Andhra Pradesh in Hyderabad to serve the cultural needs of the State. It is a non-high rise building consisting of a main theatre, mini theatre and conference hall with the capacity of 1100, 120 and 200 seats respectively. Audit noticed that:

- NOC was not obtained from the Fire Services Department for this building.
- Hydrant system, smoke detectors and alarm system were not available as of June 2012.
- Fire extinguishers were available only in the main hall and fire safety equipment was not available in mini theatre and conference hall.
- There was no proper egress from  $2^{nd}$  and  $3^{rd}$  floor in case of fire incident.

DGFS stated (November 2012) that the Commissioner, GHMC had been requested to take immediate necessary action to ensure fire and life safety in all non-high rise buildings in the jurisdiction of the GHMC.

<sup>&</sup>lt;sup>26</sup>constituted for inspecting fire safety measures provided in the premises of AP Secretariat

Jubilee Hall at AP Legislative Assembly, Hyderabad is a royal palace which is considered one of the architectural masterpieces of Hyderabad.

Audit noticed that:

- NOC was not obtained for this building from Fire Services Department.
- Water storage tank was damaged; therefore water facility would not be available immediately within the vicinity in case of emergency.
- Fire extinguishers and Hydrant system were not available.



Fire incident at Jubilee Hall (Inset: burnt AC plant)

It is pertinent to mention that there was a fire accident on 1 July 2012 in the Jubilee Hall 15 minutes after conclusion of an important meeting which was attended by high dignitaries.

DGFS replied (November 2012) that the MSBIC inspected (July 2012) the Jubilee Hall and made certain recommendations for provision of fire safety measures

in the building as per NBC, 2005 and the Secretary, AP Legislative Assembly was requested to ensure provision of required fire safety measures.

*Gagan Vihar, Hyderabad* is a 14-storied MSB which accommodates Government Offices having about 2,000 employees. Audit noticed that:

- NOC was not obtained from Fire Services Department.
- Hydrant system, water sump, motor were defunct for the past 20 years.
- Fire extinguishers had passed their expiry date and were not refilled.





Defunct Hydrant system in Gagan Vihar (12 July 2012)

DGFS replied (November 2012) that the Gagan Vihar MSB was inspected (September 2012) by the Department and several deficiencies were noticed in fire safety measures. He further stated that the Vice-Chairman and Commissioner, AP Housing Board was requested to provide fire safety measures and to ensure compliance of required fire precautionary measures.

## **Hospitals**

Audit scrutiny of 9 hospitals<sup>27</sup> in the sampled districts revealed the following:

- Five hospitals did not have the space to move fire tender on three sides;
- Fire extinguishers were not available in six hospitals;
- Water source was not available in five hospitals in RangaReddy district.
- Modern equipment like fire alarm system, hydrant, sprinklers and public address system were not available in seven hospitals.
- Emergency fire exit was locked and blocked in Yashoda Hospital, Secunderabad.
- In Nizam's Institute of Medical Sciences, Hyderabad (NIMS), fire extinguishers were yet to be refilled after their date of expiry in April 2011.
- Ramp for evacuating patients during emergency was not constructed in KIMS Hospital, Secunderabad.
- Required number of fire extinguishers were not available and stair case was narrow in Image hospitals.

DGFS stated (November 2012) that the Fire Services Department and GHMC found deficiencies in 296 hospitals and that, the District Medical and Health Officers were requested to issue notices to owners of these hospitals for rectifying the deficiencies within 60 days and to insist on fire clearance before issue of licence/renewal to the hospitals.

#### **Educational Institutions**

Audit scrutiny of 7 educational institutions<sup>28</sup> in the sampled districts revealed the following:

- Firefighting equipment was not available in six educational institutions.
- Fire tenders could not move on three sides of the Shadan College (Hyderabad) building, consisting of two blocks of 10 and 11 floors where about 5,500 pharmacy/engineering/junior college students were studying. Firefighting equipment was not installed in the 11 storied junior college building and staircase was also small.
- In Annamacharya Institute of Technology & Sciences, Rajampet (YSR (Kadapa) district) which has seven laboratories, fire-fighting equipment was not in accordance with NBC norms.

<sup>&</sup>lt;sup>27</sup>Elite Hospital (Tirupati), Ravi Neuro Hospital (Tirupati) in Chittoor district, NIMS, KIMS, Image Hospitals (Hyderabad), Yashoda Hospital (Secunderabad) in Hyderabad district, Nagarjuna Hospital (Vijayawada) in Krishna district and Balaji Hospital (Kompalli), SHK Hospital (Uppal) in Ranga Reddy district

<sup>&</sup>lt;sup>28</sup>Sri Chaitanya School (Chittoor), City College (Hyderabad), Gitanjali School (Hyderabad), Shadan Junior and Degree College (Hyderabad), Shadan Engineering and Pharmacy College (Hyderabad), Annamacharya Institute of Technology & Sciences (Rajampet – YSR (Kadapa) district) and Chaitanya Bharathi Institute of Technology (Proddutur)

 City college, Hyderabad, a three storied MSB has capacity to accommodate about 3,000 students, teachers and administrative staff. It has a library with good collection of books. However, only 10 portable fire extinguishers were installed in the entire MSB and Hydrant system, fire alarms, smoke detectors were not available.

DGFS replied (November 2012) that the Department found deficiencies in 3,544 educational institutions located in upper floors in the State and the Principal Secretary, Higher Education and the Commissioner and Director of School Education were requested to issue notices to the Colleges and Schools respectively for provision of required fire and life safety measures. It was further stated that, licensing authorities were directed to insist on obtaining NOC from Fire Services authorities before according permission/renewal to the educational institutions.

#### **Function Halls**

Audit scrutiny of 12 function halls<sup>29</sup> in the sampled districts revealed the following:

- Fire tenders could not run on three sides of the buildings in eight function halls which would make the rescue operations and fire extinguishing critical during fire accidents.
- Fire equipment was not available in 11 function halls.
- Staircases were not sufficient to move up and down freely in eight halls. The function hall at Preetham Residency, Rayachoti (YSR (Kadapa) district) had an independent staircase which is not interconnected with staircases of 1<sup>st</sup> and 2<sup>nd</sup> floors; therefore 3<sup>rd</sup> floor has no means of escape in case of fire/emergency.

DGFS replied (November 2012) that proposals were submitted (October 2012) to the Government for conducting joint inspection by the Fire Services and Factories & Industries Departments to ensure provision of fire and life safety measures in all hazardous premises.

#### **Theatres**

Audit scrutiny of 19 theatres<sup>30</sup> in the sampled districts revealed the following:

- Seven theatres had no provision to move the vehicle on three sides of the theatres
- Eleven theatres were not equipped with adequate firefighting equipment such as Hydrants, fire alarm and sprinklers etc.
- Six theatres were not equipped with fire extinguishers/ buckets (sand/water).

Though equipped with firefighting equipment such as Hydrant System, necessary hose pipes/nozzles were not available at the Hose Box in M/s Prasad Multiplex theatre at Hyderabad. Emergency exits were locked and not in 'ready to use' mode in an emergency situation.

<sup>&</sup>lt;sup>29</sup> Chittoor (3), Hyderabad (4), Krishna (1), Ranga Reddy (2) and YSR (Kadapa) (2)

<sup>&</sup>lt;sup>30</sup> Chittoor (9), Hyderabad (4), Mahbubnagar (1), Ranga Reddy (3) and YSR (Kadapa) (2)

DGFS stated (November 2012) that the Department found deficiencies in 2,158 cinema theatres in the State and those were treated as unsafe. He also stated that Government instructions were awaited regarding fire and life safety measures required to be provided in the existing theatres. He further stated that the Commissioner of Police/Joint Collector (licensing authorities) were requested to insist on NOC from Fire Service authorities and to ensure fire safety in cinema theatres while renewing the licences.

# 2.5.3 Fire Outposts

There were 19 Fire Outposts<sup>31</sup> (FOPs) working on contract basis/outsourcing in the State to attend to firefighting activities in emergencies. Five of these are in the test checked districts<sup>32</sup>. While the two outposts in Visakhapatnam district are functioning properly, in respect of Krishna District, the relevant records were not produced to Audit. Scrutiny of the functioning of the two FOPs in Mahbubnagar district revealed the following:

- There was a delay of four to five years in completion<sup>33</sup> of three FOPs<sup>34</sup> despite depositing funds with APSPHC<sup>35</sup>, way back in March September 2005.
- Even though the conditions of the agreement stipulate that the service provider has to commence activities within 100 days (May 2009) from the date of concluding the agreement (January 2009), the DFO/RFO had neither ensured the commencement of service by the service provider in time nor forfeited the security deposit of ₹1 lakh. The services commenced with a delay of one year and seven months (Shadnagar February 2010) and two years (Amrabad August 2010). The services were not commenced even as of June 2012 at Kalwakurthy.
- The FOPs at Shadnagar and Amrabad were operating with untrained fire personnel. Out of 32 fire personnel in the two FOPs, only 18 were trained. As per the agreement, one leading fireman has to be sent on deputation for 6 months to each FOP to give training in performing firefighting duties. However, no LFM was sent to FOP, Amrabad.
- Details such as number of fire calls/rescue calls attended by the FOP Shadnagar and Amrabad were not included in the monthly reports submitted to the DGFS.

DGFS assured (November 2012) that a detailed review would be undertaken to ensure that fire outposts function effectively.

<sup>&</sup>lt;sup>31</sup> Guntur (1), Karimnagar (3) Khammam (1), Krishna (1), Mahbubnagar (2), Medak (3), Nalgonda (1), Nizamabad (2), Srikakulam (2) Visakhapatnam (2) and Warangal (1)

<sup>&</sup>lt;sup>32</sup> Mahbubnagar (2), Krishna (1), Visakhapatnam (2)

<sup>&</sup>lt;sup>33</sup> in June 2008 (Kalwakurthy FOP), April 2009 (Amrabad FOP) and June 2009 (Shamshabad FOP)

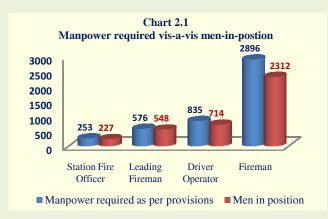
<sup>34</sup> Kalwakurthy, Amrabad and Shadnagar

<sup>&</sup>lt;sup>35</sup> AP State Police Housing Corporation

# 2.6 Human Resource Management

# 2.6.1 Shortfall of manpower

Rule 5 of APF&EO and LF Rules 2006 stipulates that a fire station with single unit should have a minimum manpower consisting of one Station Fire Officer (SFO), two Leading Firemen (LFM), three Driver Operators (DO) and ten Firemen (FM). Similarly, Fire Station with double unit should have one SFO, 4 LFM, 5 DO and 20 FM. Fire station with multiple units should have one SFO, six LFM, ten DO and 20 FM. There were 220 single units, 31 double units and 2 multi unit fire stations in the State.



The Department was beset with vacancies in key posts such as fireman (20 per cent) and driver operator (15 per cent) as detailed in Chart-2.1, which affected its operational efficiency adversely. The posts of DFOs, Vizianagaram and Nalgonda were vacant since May 2011 and June 2012 respectively.

Source: Records of DGFS

As can be seen from the chart, the vacancies ranged from 5 *per cent* in the cadre of Leading Fireman to about 20 *per cent* in Fireman category.

DGFS accepted (November 2012) the audit observation.

# 2.6.2 Riding strength

As per Para 536(1) of AP Fire Service Manual, the riding strength of Fire Tender Units should be one Leading Fireman, One Driver Operator and three Firemen along with Station Fire Officer concerned.

Audit scrutiny of fire reports of 293 major/serious fire accidents in the seven sampled districts revealed that firefighting operations were carried out without the full complement of Staff required to quell the fire. Out of 293 test checked cases, in 70 cases, there were only one fireman and in 133 cases, two firemen accompanied as against three required. In four cases, no fireman accompanied and only Driver-cum-Operator and leading Firemen had to douse the Fire.

DGFS accepted (November 2012) the audit observation.

## 2.6.3 Training of Fire Service Staff

# 2.6.3.1 Lack of Action Plans

The State Training School (STS) imparts training to in-service personnel and direct-recruit trainees of the cadre of DFO, SFO, FM and DOs as per the Annual Action plan approved by the DGFS. As per SFAC recommendations, lower ranked fire fighting

staff should be trained continuously to prepare them for any eventuality and ensure that they are ever ready.

The STS did not prepare any action plan for imparting training during the period 2007-12. Personnel trained during the period 2007-12 (upto December 2012) are shown below.

Table 2.8

Year	Number	DI	FO	SF	O	LF	M	D	О	F	M	Tot	tal
	of courses	D	О	D	O	D	0	D	О	D	О	D	О
2007-08	11	0	-	56	8	106	-	135	5	121	61	418	74
2008-09	11	0	-	18	-	0	-	256	5	77	109	351	114
2009-10	9	0	-	0	-	0	-	-	140	212	101	212	241
2010-11	8	9	-	235	-	0	-	-	-	74	7	318	7
2011-12	5	0	-	145	-	0	-	13	-	349	9	507	9
Total	44	9	-	454	8	106	-	404	150	833	287	1806	445

D: Department personnel; O: Personnel from other organizations

Source: Records of State Training School

Audit observed that, during the period 2007-12, training was imparted to 9 DFOs (out of 15), 454 SFOs, 106 LFM (out of 548), 404 DO (out of 714), 833 FMs (out 2,312) in 44 courses in all, in the State.

DGFS did not offer specific remarks with regard to the action plan for imparting training to the in-service personnel and direct recruit trainees.

#### 2.6.3.2 Lack of training in firefighting for Home Guards

Rule 33 of APF&EO and LF, Rules 2006 provides for training the fire station staff to attend to fire call and avoid damage of property and casualty. Audit scrutiny revealed the following:

- 811 Home Guards were drawn from the Home Department and were deputed in the vacant posts of Firemen and Driver operators during the period 2007-12. None of them was however, trained in firefighting at the STS. Though the DGFS stated (March 2012) that the Home Guards were imparted practical training in their allotted fire stations at the time of their joining, the DFOs in the sampled districts confirmed that no training was imparted to Home Guards on fire fighting.
- 97 Home Guards who were appointed as firemen (77) and Driver Operators (20) during 2010-11 in the Model Fire Station at Gachibowli (Ranga Reddy district), were also not trained in firefighting.

DGFS admitted (November 2012) that no specific training was imparted to Home Guards.

# 2.6.4 Commercial complex and swimming pool kept idle

A commercial shopping complex and a swimming pool were constructed in June 2009 at a cost of ₹1.19 crore in the premises of the State Training School to cater to the needs of trainees, by letting out to retired persons. Audit observed that neither shopping complex nor the swimming pool was put to use as of June 2012, thereby defeating the objective of setting these up.

# 2.7 Internal Controls and Monitoring

# 2.7.1 Lack of expenditure control mechanism

AP Budget Manual stipulates that the CCO should ensure that expenditure under each unit of appropriation is kept within the appropriation and progress of expenditure should be constantly watched.

The CCO however, did not maintain an Expenditure Control Register and there was no mechanism to watch timely receipt of Monthly Expenditure Statements from the DFOs.

# 2.7.2 Non-reconciliation of Receipts and Expenditure

As per the provisions of AP Budget Manual, every Drawing Officer and CCO should reconcile the monthly departmental figures of receipts and expenditure with the figures booked in the Treasury and Office of the Principal Accountant General (PAG) (A&E) respectively, in order to detect misclassifications, misappropriations, fraudulent drawal, etc.

The Department was in receipt of money collected (₹53.83 crore during the period 2007-12) on account of non-refundable fire precaution fee, fee for issue/renewal of licence, user charges, etc. However, none of the sampled DDOs reconciled the departmental receipts with the treasury figures. Considering that individuals directly remit the money into treasury, the possibility of leakage of revenue cannot be ruled out in the absence of regular reconciliation of figures.

Similarly, the CCO had neither consolidated the expenditure figures of the DDOs nor reconciled the departmental expenditure with the figures booked by the Office of the PAG (A&E) during the period 2007-12. There were discrepancies between the expenditure figures reported by the DGFS and those booked by the Office of the PAG (A&E) in all the years during 2007-12 ranging from rupees one crore to 14 crore.

DGFS replied (November 2012) that suitable instructions were issued to all the DDOs to reconcile the receipt figures regularly.

# 2.7.3 Departmental Inspections

Periodical inspections are important in assessing the performance of the department, identifying and rectifying the defects if any, attend to grievances of the departmental staff, and improving firefighting preparedness.

According to the Government instructions<sup>36</sup>, the Head of the Department is required to inspect the District Offices and other subordinate offices periodically and furnish inspection reports. Further, DGFS instructed (March 2003) the RFOs to conduct inspection of every fire station once in two years so as to cover all the fire stations in the State over a period. Audit observed that, neither departmental inspections nor RFO inspections were conducted in any of the seven sampled districts during the period 2007-12.

DGFS replied (November 2012) that necessary instructions have been issued to all the Regional/District Fire Officers in August 2012 for conducting inspection of the Fire Stations in their jurisdiction.

#### 2.7.4 Internal Audit

Internal Audit examines and evaluates the level of compliance with the departmental rules and procedures and provides reasonable assurance to the management on the adequacy and functioning of internal controls. As per the orders<sup>37</sup> of the Government, it is the responsibility of the Head of the Accounts branch of the Department to conduct Internal Audit of the Regional Offices, District Offices, Unit Offices, etc. at least once in a year and furnish the report.

Audit scrutiny revealed that Internal audit of the district offices (DFOs) (except Visakhapatnam district) was not conducted during the period 2007-12 in the sampled districts.

DGFS assured (November 2012) that action would be taken to conduct Internal Audit of the district offices.

## 2.8 Conclusion

As brought out in the foregoing paragraphs, the Department has not complied with the norms of SFAC with regard to infrastructure and was ill equipped to handle the fire related exigencies in the State. Lack of comprehensive functional data resulted in the Department not being able to identify/analyse the hazard prone areas and take necessary preventive measures with regard to fire safety aspects.

No new fire stations have come up during the period 2007-12 despite the specific recommendation earlier by Audit and the Sub-Committee constituted by the State Government. The shortfall in this regard stood at 95 per cent. Infrastructure facilities in the existing fire stations were inadequate and 20 per cent of the fire stations in the sampled districts were in a dilapidated condition. Housing requirements of staff were not met and an outdated communication system adversely affected the preparedness of the Department in dealing with emergencies. There was a huge gap between the requirement and availability of equipment like

<sup>&</sup>lt;sup>36</sup> GO Ms No. 247 GAD dated 8 February 1962 and Memo Circular No. 42050/AR.111/97-7, GAD dated 26 July 1997

<sup>&</sup>lt;sup>37</sup> GOMs No.34, dated 23 January 1989 and GO Rt. No. 1416, Finance & Planning Department dated 1 July 1997

fire tenders, rescue vans, etc. and the Department did not utilise the equipment already procured such as Very High Frequency radio sets, etc.

Awareness programmes were not conducted in the sampled districts (except YSR (Kadapa) district and some cases in Hyderabad district) to sensitise the public about fire safety and prevention. Auxiliary services have not been constituted in any of the seven sampled districts. Hazard prone premises were only partially identified to enforce fire safety code/norms and action was not initiated against the defaulters for violation of fire safety norms and non-implementation of precautionary measures. There was considerable shortfall in key posts such as fireman and driver operator, which impacted the efficiency of firefighting operations. Training and skill development programmes were not given adequate thrust and budgetary allocations did not reflect the requirement of the Department. Besides, non-release of funds from Calamity Relief Fund as prescribed by GoI also hampered the modernisation process in the Department. Expenditure controls were weak and departmental inspections were not carried out at regular intervals and internal audit of the district offices (except Visakhapatnam district) was not conducted during the entire audit review period of 2007-12.

## 2.9 Recommendations

- ➤ Government should take appropriate steps to formulate a long term perspective plan and annual action plans to ensure that the functioning of the Department is streamlined and modernised to deliver the envisaged services to public.
- ➤ The Department should chalk out a strategy to survey the hazard prone areas that need specific fire safety measures and an action plan to cover the other areas. Fire preventive inspections should be carried out at prescribed intervals and prompt action should be taken to address the deviations and violations.
- Recommendations/norms of SFAC should be complied with scrupulously with regard to setting up fire stations, response time, infrastructure, equipment, etc.
- ➤ Vacancies in all the key areas should be filled and skills of fire service personnel should be upgraded with appropriate trainings at regular intervals.
- ➤ Government should allocate adequate funds to meet the requirements of the Fire Services Department. Funds should also be released from Calamity Relief Fund as prescribed by GoI to augment the search and rescue operations and equip the Department with modern gadgets required for effective firefighting services.

Government accepted the audit findings and recommendations, and assured (November 2012) that, action would be taken to explore the possibilities of enhancing budgetary allocation to the Fire Services Department in the next financial year to meet its long pending needs.