

Emergency Preparedness of The New Generation Retail Outlets of Kerala

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Abstract

The aim of this research study is to analyze the preparedness of the new generation retail outlets of Kerala to face an unexpected emergency situation. Kerala is a small south Indian state with 580km of its western boundary as a coastal line to the Arabian sea. With a population density of 860 people per square kilometer and a human development index of 0.79 which is the highest in the country, the state is multi hazard prone, though it ranks high in education health, and purchasing power. The last decade has seen a tremendous increase in the number of organized retail outlets in the state. With 14.5% of the state prone to floods, 14.4% of the area prone to landslides and with an average of 70 people dying of lightning every year this consumer state has to be more conscious about the safety measures existing in the new generation sales outlets. This study was focused on discovering the awareness, the presence, the maintenance and the usage of emergency management systems in the new generation retail outlets. The data was collected using interview schedule and observation. The result of the study shows an alarming nature of general negligence to even the simplest precautions that could be taken.

Key word: Emergency, Generation Retail Outlets, Kerala

1. Introduction

Kerala, one of the tropical states in India is situated 1107 km to the North of the equator. While the land share of Kerala in India is 1.18%, the state holds a long coastal line of 580km with the Arabian Sea. Marked by a slender long strip of land in the south western tip of the Indian peninsula, it is bordered by Karnataka and Tamil Nadu in the North and East respectively. Apart from its long coastal line the state has 44 rivers and a population density of 860 people per kilometer square.

Kerala has been phrased as a multi hazard prone state. The state has a Human Development Index (HDI) of 0.79 which is the highest in the country. HDI presents a composite index showing the education, health, consumption rate / purchasing power, etc., and is an element indicating the socio-economic vulnerability of the population. The higher the index, greater is the coping capacity, but on the other hand higher will be the cumulative loss potential and so higher will be the hazard risk. Hence with a high population density, long coastal line and a high Human Development Index, Kerala has a higher degree of risks with respect to natural as well as manmade disasters as compared to the rest of the country.

The Disaster Management Act of 2005 (Central Act 53 of 2005) of India, section 2(d), defines a disaster as 'a catastrophe, mishap, calamity or grave occurrence affecting any area from natural and manmade causes or by accident or negligence, which results in substantial loss of life or human suffering or damage to and destruction of property or damage to and degradation of environment and is of such a nature and magnitude as to be beyond the capacity of the community of the affected areas.'

On an average 464 disasters occur each year all over the world, other than draught, famine and war. Of these, about 197 take place in Asia, 111 in the Americas, 77 in Europe, 61 in Africa and 18 in Oceania. As a result almost 50,000 people are killed annually; about 74,000 are seriously injured 5 million displaced from their homes and 80 million affected in a peripheral way.

A disaster gives rise to a situation of high caution-in other words an emergency. Some of the commonly known disasters affecting our country include

1. Man made
 - a. Nuclear disasters
 - b. Chemical disasters
 - c. Biological disasters
 - d. Terrorism
 - e. Civil disorder
 - f. War
2. Natural
 - a. Includes floods hurricanes, earthquakes, hurricanes, landslides, fires, tsunamis and volcanic eruptions that have immediate impact on the human health.

A systematic process based on the key management principles of planning, organizing, leading co-coordinating and controlling during an emergency is called emergency management. It has to be very, very proactive in order to be effective.

2. The Socio-economic transformation

Kerala is frequently ravaged by the disastrous effects of numerous hazards. The natural hazards are part of the evolutionary process of life on earth which turned to disasters when the human life system started interacting unjustly with the environmental balance system. Kerala is prone to high incidence of lightning especially

during the months of April, May, October and November. Apart from this there are frequent floods in the mountain regions accompanied by several landslides during the monsoon season. The 580km coastal line of Kerala is prone to coastal erosions, storm surges and sea level rise. The population pressure along the coastal belt has forced some of the marginalized sections of the community to migrate to the relatively rough and inhospitable locations in the Western Ghats. (George and Chattopadhyay, 2001). A study conducted on migration has suggested that in the

last 80 years the growth of the coastal population has been 306% while that of the highlands, foothills and uplands together has been 1342% (Nair et al., 1997). This huge population with a density of 860 people/km² (Census of India 2011) is more or less widely distributed across the state making it multi hazard prone. The figure below shows the hazard profile of the state as released by KSDMA (Kerala State Disaster Management Authority) in 2016.

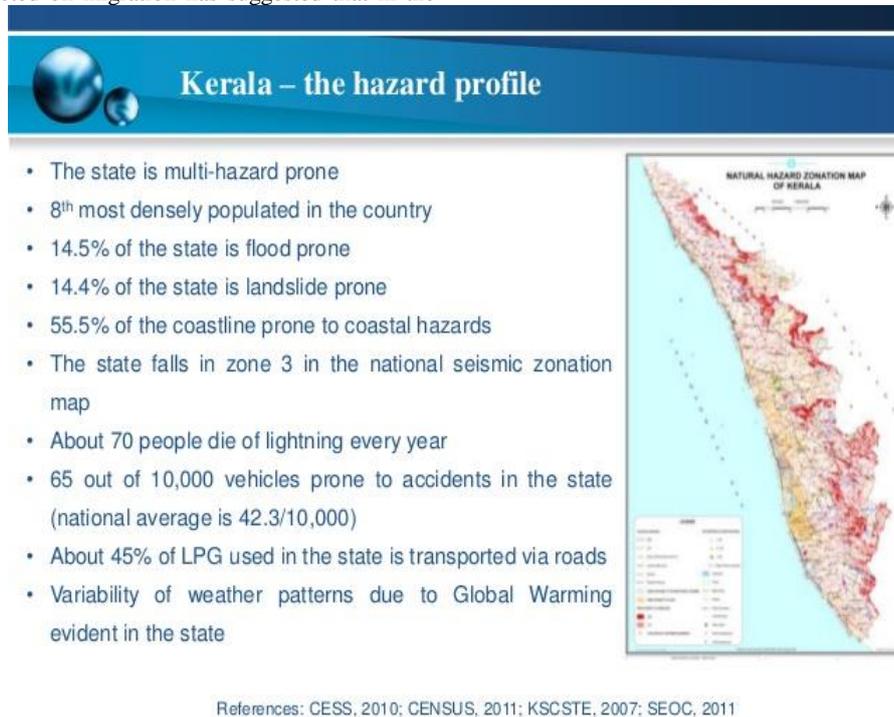


Fig. 2.1: Hazard profile of kerala

Also, it has resulted in many significant transformations in the life style of Kerala. Within a short period of about 80 years the people of Kerala has transformed from an agrarian society to a highly urbanized consumerist society. One of the major indications of this is the growth of the service sector in the state. That is in fact a shift from production to purchase. This shift has resulted in the rapid growth of the retail sector with a tremendous increase in the number of commercial buildings that has come up. The total number of commercial buildings that have come up in the capital city (Thiruvananthapuram) and its nearest neighbor, Kollam in the ten years ranging from 2006 to 2016 are around 24313 and 20697 respectively. (Department of Economics and Statistics, Government of Kerala)

Hazards that can affect a Retail Outlet

- Floods (Urban and flash floods)
- Land slides
- Lightning
- Earthquakes
- Fire
- Terrorism, Riots and Naxal attacks

The present study takes into account the overall readiness of the new generation retail outlets of these two districts to face an unexpected emergency situation.

The different types of retail outlets that has been considered for this study includes:

1. Department Stores: Stores that sell a wide variety of goods. These include readymade apparels and accessories for adults and children, household textiles and wares, furniture, electrical appliances and, often, food. These assortments are divided into divisions and departments supervised by managers and buyers (employees who decide what merchandise has to be

bought and displayed). There are also in-house departments of merchandising, advertising, service, accounting, and budgetary control.

2. Supermarkets: A comparatively large shop selling most types of food and other goods needed for a home.
3. Hypermarkets: A hypermarket is a retail store that combines a department store and a grocery supermarket. It is a very large establishment, offering a wide variety of products such as appliances, clothing and groceries.
4. Speciality Stores: Specialty stores are retail businesses that focus on specific product categories, such as mobile accessories, office supplies, men's or women's clothing, or toys. This store category is determined by the breadth of their product offering.
5. Discount stores: A retail store that sells products at prices lower than those asked by traditional retail outlets. Some discount stores are similar to department stores in that they offer a wide assortment of goods; indeed, some are called discount department stores. (Encyclopedia Britannica)
6. Cooperative Stores: A store that is owned and controlled by a group of members who each have a share in it, for example its employees or customers. (Cambridge English Dictionary)
7. Any Other kind of physical retail outlet including bakers, butchers, fish mongers and any others who buy in bulk and sell in lots.

3. Methodology

3.1. Scope

The research paper is based on the study conducted in the two Southern districts of Kerala. It has covered areas such as the facilities already available in retail outlets, awareness of the employees about possible emergency situations and the preparedness of the outlet in facing such a situation.

The study will be helpful for the outlets as it may bring out the significance of safe shopping. Both secondary and primary data are to be used for the study. Major sources of secondary data include the internet, newspaper, magazines, textbook, brochures, catalogs etc. Primary data was collected from the field using the survey method. Interview schedule was used for this purpose.

The sample study was conducted in ten retail outlets in and around Thiruvananthapuram. The Outlets which are comparatively new and those which use the lift facility were preferred for this purpose. The study was mainly focused on the precautions taken by the retail outlets with respect to the awareness of the employees about the risk involved in any emergency situation that may affect the outlet, the presence of emergency management equipments and how far is the knowledge of the employees regarding their usage.

The hypothesis formulated were strictly based on the assumptions that while the equipments available in the retail outlets are enough to safeguard an emergency situation while the organizations were

not formally prepared to handle an emergency situation. In order to collect data based on this the following information was necessary.

3.2. Data description

1. The type of retail outlet or the generic category in which the outlet belong.
2. The total number of staff including managers.
3. The characteristics of the place where it is located. That is, whether the outlet is in a low lying area, marshy area, hilly/mountainous area, whether it is near to a factory/airport or whether it is near to a river ocean lake.
4. Information was collected as to how many floors do the outlet cover and the age of the building.
5. Details of any overlapping departments, which may become the reason for risks were collected.
6. The data regarding the general condition of the building, the emergency management equipments present, details of any emergency management activities performed and the presence and usage of an emergency management plan was also collected.
7. The data was collected from six outlets in the urban area, three outlets each from two municipalities and two outlets each from two panchayats, the details of which are shown below.

Table 3.1: Number of Retail Outlets

District	Corporation area (No. of Outlets)	Municipalities		Panchayats	
		Name	No. of outlets	Name	No. of outlets
Trivandrum	6	Kattakada	3	Baramapuram	2
		Neyyattinkara	3	Karakulam	2
Kollam	6	Kottarakkara	3	Anchal	2
		Punalur	3	Pathanapuram	2

Table 3.2: The Type of Retail Outlets

	Trivandrum (No. of outlets)	Kollam (No. of outlets)
Department stores	Nil	Nil
Super market	2	13
Hyper market	1	3
Speciality Store	7	Nil
Discount Store	4	Nil
Co-operative Store	2	Nil

4. Analysis of data

4.1. Analysis based on Building condition

One sample T-Test was conducted to perceive if there was any difference of opinion with regard to the statements of Building condition. The result of the analysis is presented below.

Table 4.1

One-Sample Statistics								
Building Condition	Trivandrum (Test Value - 2.2291670)				Kollam (Test Value - 1.916667)			
	Mean	Std. Deviation	T Value	P Value	Mean	Std. Deviation	T Value	P Value
Stack room can bear the weight of all assortments	2.3125	.79320	.420	.680	2.5000	.51640	4.518	.000
Earthquake resistant	2.9375	.57373	4.938	.000	2.3750	.50000	3.667	.002
Walls and doors are fire resistant	2.1875	.65511	-.254	.803	1.8750	.61914	-.269	.791
Multiple emergency exits	2.5000	.89443	1.211	.245	1.8750	.95743	-.174	.864
Assortments are at a safe distance from plumbing, electrical and mechanical installations	2.1875	.65511	-.254	.803	1.8125	.54391	-.766	.456
Guidelines are given to the customers regarding how to use the premises in case of emergency	1.2500	.68313	-5.733	.000	1.0625	.25000	-13.667	.000

Here it can be seen that majority of the respondents from both Trivandrum (M=2.3, SD = 0.79) and Kollam (M = 2.5, SD = 0.52) indicated that the floor of the stack room can bear the weight of all assortments. Most of the outlets [Trivandrum (M=2.9, SD = 0.57) and Kollam (M = 2.4, SD = 0.5)] felt that they are somewhat

earthquake resistant, though not fully confident. The outlets [Trivandrum (M=2.2, SD = 0.66) and Kollam (M = 1.9, SD = 0.62)] are not confident that their walls and doors are fire resistant. Majority of the outlets [Trivandrum (M=2.5, SD = 0.89) and Kollam (M = 1.9, SD = 0.96)] have multiple emergency exits.

Majority of the outlets [Trivandrum (M=2.19, SD = 0.66) and Kollam (M = 1.8, SD = 0.54)] are not confident to say that their assortments are at a safe distance from electrical, mechanical and plumbing installations. Little information is given to the customers [Trivandrum (M=1.25, SD = 0.68) and Kollam (M = 1.06, SD = 0.25)] regarding how to use the premises in case of an emergency.

4.2. Difference based on the organizations profile and the building condition

To find the significance in the differences the data were tested with one-way ANOVA for the null hypothesis, "the outlets are not formally prepared to handle emergency situations not matter what their profile is." (Departmental Store, Super market, Hyper market, Speciality Store, Discount Store, Co-operative Store)

Ho: Organizations are not formally prepared to handle emergency situations.

Table 4.2

ANOVA											
		Sum of Squares		df		Mean Square		F		P Value	
		TVM	KLM	TVM	KLM	TVM	KLM	TVM	KLM	TVM	KLM
Stack room can bear the weight of all assortments	Between Groups	3.723	1.333	4	1	.931	1.333	1.792	7.000	.201	.019
	Within Groups	5.714	2.667	11	14	.519	.190				
	Total	9.438	4.000	15	15						
Earthquake resistant	Between Groups	1.759	.750	4	1	.440	.750	1.522	3.500	.263	.082
	Within Groups	3.179	3.000	11	14	.289	.214				
	Total	4.938	3.750	15	15						
Walls and doors are fire resistant	Between Groups	1.580	.750	4	1	.395	.750	.895	2.100	.499	.169
	Within Groups	4.857	5.000	11	14	.442	.357				
	Total	6.438	5.750	15	15						
Multiple emergency exits	Between Groups	5.321	.750	4	1	1.330	.750	2.191	.808	.137	.384
	Within Groups	6.679	####	11	14	.607	.929				
	Total	12.000	####	15	15						
Assortments are at a safe distance from plumbing, electrical and mechanical installations	Between Groups	1.188	.188	4	1	.297	.188	.622	.618	.656	.445
	Within Groups	5.250	4.250	11	14	.477	.304				
	Total	6.438	4.438	15	15						
Guidelines are given to the customers regarding how to use the premises in case of emergency	Between Groups	1.286	.021	4	1	.321	.021	.619	.318	.658	.582
	Within Groups	5.714	.917	11	14	.519	.065				
	Total	7.000	.938	15	15						

From the above table it can be seen that the F values for Trivandrum are 1.792 (p = 0.201), 1.522 (p = 0.263), 0.895 (p = 0.499), 2.191 (p = 0.137), 0.622 (p = 0.656) and 0.619 (p = 0.658) respectively. Here the p-value is above the level of significance and so the null hypothesis is accepted with respect to all the attributes of building condition.

The F values for Kollam are 7.0 (p = 0.019), 3.5 (p = 0.082), 2.1 (p = 0.169), 0.808 (p = 0.384), 0.618 (p = 0.445) and 0.318 (p = 0.582) respectively. Here except for the first attribute the p-value of all the rest is above the significance level. So the null hypothesis is rejected for the first attribute and so it can be concluded that in the Kollam district retail outlets are confident that their stack rooms can bear the weight of all the assortments. The rest of the

attributes holds true to the null hypothesis that the organizations are not formally prepared to handle emergency situations.

4.3. Analysis based on the in house disaster management activities performed by the outlet

The best method of emergency management is "prevention". One sample T-Test was conducted to perceive if there was any difference of opinion with regard to the in house disaster management activities done in order to prevent an emergency situation. The result of the analysis is presented below.

Table 4.3

One-Sample Statistics									
Inhouse Disaster Management Activities performed by the outlet	Trivandrum (Test Value - 3.073529)				Kollam (Test Value - 3.488971)				
	Mean	Std. Deviation	T Value	P Value	Mean	Std. Deviation	T Value	P Value	
	Checking the maintenance of fire extinguishers	2.1875	1.47054	-2.410	.029	2.2500	.68313	-7.255	.000
Checking the maintenance of alarm systems	4.0000	.89443	4.143	.001	3.5625	1.54785	.190	.852	
Checking the maintenance of electrical equipment	2.6875	.87321	-1.768	.097	2.2500	.68313	-7.255	.000	
IT backup and security procedures	3.1250	1.08781	.189	.852	4.0625	.85391	2.687	.017	
Proper building maintenance	2.3750	.95743	-2.918	.011	1.8125	.98107	-6.835	.000	
Review of security measures	3.6250	.88506	2.492	.025	3.7500	.68313	1.528	.147	
Obtaining police and fire service advice	3.5000	.81650	2.089	.054	3.5000	.81650	.054	.958	
Day-to-day hazard and safety checks	4.0000	.00000 ^a			3.6250	.61914	.879	.393	

Conducting structural audits	3.7500	.68313	3.961	.001	3.7500	.57735	1.808	.091
Review of insurance cover	1.7500	1.34164	-3.946	.001	2.7500	1.34164	-2.203	.044
Updating and making floor plan available	3.4375	1.09354	1.331	.203	4.6250	.71880	6.322	.000
Display of instructions in case of emergency	4.0000	.00000 ^a			4.5000	1.03280	3.916	.001
Provision of emergency response equipments and materials	4.0000	.00000 ^a			4.5000	1.03280	3.916	.001
Maintenance of up-to-date list of specialized suppliers or services	2.0625	1.23659	-3.270	.005	3.0000	.73030	-2.678	.017
Exits and aisles are kept unobstructed	2.1250	.80623	-4.706	.000	4.5000	.51640	7.831	.000
Termite /mould/fungus /other reptiles checking and control	3.6250	.88506	2.492	.025	3.7500	.93095	1.122	.280
Storage of rubbish /trash is not left to accumulate and is cleared daily.	2.0000	.63246	-6.790	.000	3.1250	1.45488	-1.001	.333
a. t cannot be computed because the standard deviation is 0.								

Here it can be seen that majority of the respondents from both Trivandrum (M=2.2, SD = 1.5) and Kollam (M = 2.25, SD = 0.68) indicated that they check and do the maintenance of the fire extinguishers at least once in a while. Most of the outlets [Trivandrum (M=4, SD = 0.89) and Kollam (M = 3.56, SD = 1.55)] do not have or they do not check the maintenance of the alarm systems. The outlets [Trivandrum (M=2.69, SD = 0.87) and Kollam (M = 2.25, SD = 0.68)] regularly check the maintenance of the electrical equipments. Majority of the outlets [Trivandrum (M=3.13, SD = 1.09) and Kollam (M = 4.06, SD = 0.85)] do not have any IT backup and security procedures. Majority of the outlets [Trivandrum (M=2.38, SD = 0.96) and Kollam (M = 1.81, SD = 0.98)] are confident to say that proper building maintenance is done. Review of security measures is not done in most of the outlets [Trivandrum (M=3.63, SD = 0.89) and Kollam (M = 3.8, SD = 0.68)]. Most of the outlets [Trivandrum (M=3.5, SD = 0.82) and Kollam (M = 3.5, SD = 0.82)] do not obtain police and fire service advice. Day to day hazard and safety checks are not done in any of the organizations in Trivandrum (M=4, SD=0.00). The same is not done in most of the organizations in Kollam (M=3.6,SD=0.62). There is no structural audits in majority of the outlets [Trivandrum (M=3.8, SD = 0.68) and Kollam (M = 3.8, SD = 0.58)]. Insurance cover is reviewed regularly in most of the outlets [Trivandrum (M=1.75, SD = 1.34) and Kollam (M = 2.75, SD = 1.34)]. Most of the outlets [Trivandrum (M=3.4, SD = 1.09) and Kollam (M = 4.6, SD = 0.72)] do not update and make the

floor plan available. Display of instructions in case of emergency is hardly done in any of the outlets [Trivandrum (M=4, SD = 0.00) and Kollam (M = 4.5, SD = 1.03)]. Provision of emergency response equipments and materials is not there in most of the outlets [Trivandrum (M=4, SD = 0.00) and Kollam (M = 4.5, SD = 1.03)]. Majority of the outlets do maintain an up to date list of specialized suppliers and services [Trivandrum (M=2.06, SD = 1.24) and Kollam (M = 3, SD = 0.73)]. Most of the retailers in Trivandrum (M=2.13, SD = 0.8) claim that their aisles and exits are kept unobstructed while in Kollam it is not so (M=4.5, SD = 0.52). Termite /mould/fungus /other reptiles are not checked and controlled in most of the outlets [Trivandrum (M=3.63, SD = 0.89) and Kollam (M = 3.8, SD = 0.93)]. Majority of the outlets [Trivandrum (M=2, SD = 0.63) and Kollam (M = 3.13, SD = 1.45)] claim that storage of rubbish /trash is not left to accumulate and is cleared daily.

4.4.Years of existence and in house emergency management activities performed

Kruskal-Wallis test was conducted to perceive if there was any difference with respect to the age of the building in which the outlet is functioning and the in house security measurements undertaken. The result of the analysis is presented below.
Ho: Organizations are not formally prepared to handle emergency situations.

Table 4.4: Kruskal-Wallis Test for Trivandrum

Inhouse disaster management activities performed by the outlet	Tenure of the building					Chi-square value	P Value
	1-5 years	6-10 years	11-15 years	16-20 years	>20 years		
Checking the maintenance of fire extinguishers	13.50	6.00	10.00	4.50	11.25	7.326	.120
Checking the maintenance of alarm systems	7.50	10.17	7.50	7.50	7.50	2.051	.726
Checking the maintenance of electrical equipment	4.50	4.92	10.50	10.50	11.75	8.337	.080
IT backup and security procedures	4.00	5.33	4.00	12.00	12.00	11.037	.026
Proper building maintenance	1.50	7.00	12.50	7.00	11.00	6.525	.163
Review of security measures	2.00	7.33	10.00	10.00	10.00	6.709	.152
Obtaining police and fire service advice	4.50	5.42	11.00	11.00	11.00	8.525	.074
Day-to-day hazard and safety checks	8.50	8.50	8.50	8.50	8.50	0.000	1.000
Conducting structural audits	1.50	8.17	9.50	9.50	9.50	7.857	.097
Review of insurance cover	6.50	7.83	6.50	6.50	10.50	3.333	.504
Updating and making floor plan available	3.00	7.92	10.50	10.50	9.00	3.496	.479
Display of instructions in case of emergency	8.50	8.50	8.50	8.50	8.50	0.000	1.000
Provision of emergency response equipments and materials	8.50	8.50	8.50	8.50	8.50	0.000	1.000
Maintenance of up-to-date list of specialized suppliers or services	10.00	8.50	4.00	4.00	10.50	4.394	.355
Exits and aisles are kept unobstructed	8.50	6.17	8.50	8.50	10.83	5.000	.287
Termite /mould/fungus /other reptiles checking and control	10.00	7.17	10.00	10.00	8.83	1.930	.749
Storage of rubbish /trash is not left to accumulate and is cleared daily.	2.00	8.50	8.50	8.50	9.58	2.917	.572

(Level of significance is 1%)

Inference: In can be seen that in all these circumstances the p value is above the significant level. So the null hypothesis is accepted.

Table 4.5: Kruskal-Wallis Test for Kollam

Inhouse disaster management activities performed by the outlet	Tenure of the building					Chi-square value	P Value
	1-5 years	6-10 years	11-15 years	16-20 years	>20 years		
Checking the maintenance of fire extinguishers	7.50	7.50	9.79	7.50	0.00	2.755	.431
Checking the maintenance of alarm systems	13.00	4.50	8.79	13.00	0.00	7.856	.049
Checking the maintenance of electrical equipment	7.50	7.50	9.79	7.50	0.00	2.755	.431
IT backup and security procedures	8.00	7.20	10.43	5.50	0.00	2.627	.453
Proper building maintenance	11.00	8.20	9.29	4.00	0.00	3.057	.383
Review of security measures	10.50	4.90	9.93	10.50	0.00	5.094	.165
Obtaining police and fire service advice	6.00	6.00	10.43	10.50	0.00	5.129	.163
Day-to-day hazard and safety checks	11.00	8.00	7.43	11.00	0.00	2.286	.515
Conducting structural audits	10.00	10.00	6.57	10.00	0.00	4.408	.221
Review of insurance cover	6.50	9.70	8.79	6.50	0.00	1.857	.603
Updating and making floor plan available	10.50	10.50	5.93	10.50	0.00	6.297	.098
Display of instructions in case of emergency	10.50	6.90	8.50	10.50	0.00	2.204	.531
Provision of emergency response equipments and materials	10.50	6.90	8.50	10.50	0.00	2.204	.531
Maintenance of up-to-date list of specialized suppliers or services	2.50	6.10	11.93	8.50	0.00	9.536	.023
Exits and aisles are kept unobstructed	4.50	9.30	7.93	12.50	0.00	4.071	.254
Termite /mould/fungus /other reptiles checking and control	4.50	9.60	10.00	4.50	0.00	4.185	.242
Storage of rubbish /trash is not left to accumulate and is cleared daily.	5.00	11.40	8.43	5.00	0.00	4.243	.236

(Level of significance is 1%)

Inference: From the above table it can be seen that in all these circumstances the p value is above the significant level. So the null hypothesis is accepted.

5. Interpretation of the results

- Majority of the respondents from both Trivandrum and Kollam are confident that the floor of the stack room can bear the weight of all assortments. The results of One Way ANOVA suggest that only the outlets of Kollam District hold true to this claim.
- Most of the outlets felt that they are somewhat earthquake resistant, though not fully confident.
- The outlets cannot fully agree that their walls and doors are fire resistant.
- They claim to have multiple emergency exits though this claim is rejected by the results of one way ANOVA.
- Majority of the outlets are not confident to say that their assortments are at a safe distance from electrical, mechanical and plumbing installations.
- Little information is given to the customers regarding how to use the premises in case of an emergency.
- Majority of the respondents from both Trivandrum and Kollam indicated that they check and do the maintenance of the fire extinguishers at least once in a while.
- Most of the outlets do not have or they do not check the maintenance of the alarm systems.
- The outlets regularly check the maintenance of the electrical equipments.
- Majority of the outlets do not have any IT backup and security procedures.
- The outlets are confident to say that proper building maintenance is done.
- Review of security measures is not done in most of the outlets.
- Most of the outlets do not obtain police and fire service advice.
- Day to day hazard and safety checks is not done in any of the organizations in Trivandrum. The same is not done in most of the organizations in Kollam
- There are no structural audits in majority of the outlets.
- Insurance cover is reviewed regularly in most of the outlets.

- Most of the outlets do not update and make the floor plan available.
- Display of instructions in case of emergency is hardly done in any of the outlet.
- Provision of emergency response equipments and materials is not there in most of the outlets.
- Majority of the outlets do maintain an up to date list of specialized suppliers and services.
- Most of the retailers in Trivandrum claim that their aisles and exits are kept unobstructed while in Kollam it is not so.
- Termite/mould/fungus/other reptiles are not checked and controlled in most of the outlets.
- Majority of the outlets claim that storage of rubbish /trash is not left to accumulate and is cleared daily.

6. Conclusion

Though Kerala, with its highest population density and history of hazards have been claimed as a high risk multi hazard prone state, little preparations are in store with the retailers to give a safe shopping experience to their customers. The results of Kruskal Wallis test proves that certain claims made by the retailers outlets with respect of in house disaster management activities, though affirmative are actually dissenting. This proves that the null hypothesis right. Organizations are not formally prepared to handle emergency situations. Standardization with respect to emergency management equipments and building architectural designs has to be initiated so that the customers can follow a well understood pattern of defense in case of an emergency.

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