

Collapse and Fire Hazards at the Construction Sites and their Economic Impact on the Nation?

Elias B. Sayah, F. ASCE, *Civil Engineering Scholar, College of Engineering, Pune, 411005, India; also, Consulting Engineer, SECBMENA, Abu Dhabi, UAE; ebsayah@secbmena.com; and, Dr. M. S. Ranadive, Professor of Civil Engineering, College of Engineering, Pune, 411005, India; msr@civil.coep.org.in*

Introduction:

Official efforts to prevent dangerous phenomenon

The Saudi Economy is losing annually Millions of Saudi Currency and that due to ignorance of the safety requirements.

Abdullah Mubarak: capital is a coward and accidents are closely linked to the investment movement in the country.

Muhammad Abdullah: some construction companies ignore safety requirements with to save money

Engineer Ahmad Ghali: A tough control should be done to construction works. Some entrepreneurs have no idea about the conditions of security and safety.

Magdy Tawfiq engineer: Safety requirements must be compulsorily applied to all establishments and construction companies and an information centre about all companies, accidents and construction sites

Fawzi Al-buheiri Advisor: current laws are sufficient to deter offenders and required to be activated firmly. Attainment Written by: Ahmed Abdullatif achieved: providing security and safety for commercial and industrial installations of the most important challenges facing the national economy as not only a victim of accidents and fires which result in heavy material losses, but to the security and safety relationship to attract new investment and create a safe climate for investment...

These challenges, which began with the construction boom and the business for years and was one of the most important manifestations of major expansions in construction projects that require necessarily implemented strong security fence and safety.

Since the beginning of the year 2003 started increasing incidents of collapses and fires strikingly at the same time, concern over the ability of the national economy in a balance between the desire to grow and expand and provide protection to the cowardly capital in nature and always seeker areas

Before this challenge, there was a formal recognition of the seriousness of the phenomenon on the national economy in the new legislation and decisions that will activate the role of the safety devices in economic activities through civil defense and municipal organizations.

Perhaps the most notable official efforts in this domain awareness events advisory offices and construction companies in the new rules for security and safety after the adoption of the new USA code.

But these efforts remains limited in the absence of a collective awareness of the seriousness of the problem to the national economy and its negative impact on the stability of capital as well as in the absence of a scientific study of the causes of this phenomenon and the causes and sources and ways to cope.

Al- Raya in this investigation is trying to find the real reasons for the phenomenon of accidents and fires in the business and to learn about the official efforts to combat the problem? The size of the results of these efforts? And then the impact of this phenomenon on the national economy and how to reduce them

To monitor incidents of collapses and fires will be noted clearly that it has seen remarkable growth in the past three years. The beginning of fire in popular markets such as Wagef, and Alharajs, and Thursday and Friday markets. As well as burning of number of malls such as Dubai Centre, and landmark recently. In detail: in April of 2004 burned 30 shops in the market in Alharaj market for manufacturing furniture and curtains and lounge room covers and accessories and shop owners evaluated their losses at more than five million riyals, comprehensive burning and shop fittings goods and construction, while there is no comprehensive insurance on these stores and employs about 500 workers.

In the details also fires occur in malls but spread to corporate stores in July of last year 2006 fire gutted a warehouse for food street 36 industrial zone owned by Qatar national import & export company and resulted in a combustion of goods valued at millions of rials

After one year of combustion of 30 shops in the HARAJ another 24 HARAJ shops burned work mostly in wood, furniture, steel works and, the initial losses were estimated at more than one million.

At the same time in 2005, the region witnessed a fire broke out in an industrial timber companies and furniture near the street 33 and resulted in the burning of large quantities of timber and chemicals used in wood coatings and initial inspection revealed cases of neglect and anarchy in place as well as housing for workers next to the factory.

In October of 2006 a large furniture store was burned at Najma region resulted in the burning of its contents in full firefighting operations continued for more than three hours. The fire also spread to shopping malls where in Dubai shopping centre was burned by the fire devoured full goods estimated at millions of rials and found out that the fire spread from the ground floor of the shopping complex because of welding works .

At the end of last year fire broke out at the famous landmark mall stores, which resulted in the burning of large quantities of goods as result of the negligence of one of the labors and he was not complying with security and safety procedures. (As per Interior Ministry announcement).

The fire spread to the residential towers as AL Naser towers burned out twice in less than a year, as well as combustion of Dana Tower facing the City Center complex

Losses resulting from fires and accidents in construction material damage has spread to human losses also. In detail we read.

The death and injury of 6 workers in the collapse of a wall under construction in the project of ground positions, Dafna area killing two workers and injuring four others. 6 workers killed of Arab nationality in Dana tower due to bad storage of building materials, luggage and equipment while five Asian workers were killed during the implementation of the sewage project in Mamura Area. As civil defence forces managed to extract the bodies of two workers from the rubble of a building in the area and four workers were killed.

This grim picture reveals the seriousness of such accidents and fires on the national economy which is witnessing an unprecedented growth in the region and reflect the seriousness of the expected losses at the same time while each State employ energies to move forward on the road to revival and development.

But questions remain about the impact of these accidents and fires on the national economy and how traders and capitalists to this phenomenon? And how they affect them.

Initially, says Abdullah Mubarak merchant fires and collapses occurring in commercial sites, complexes, and construction sites of course inflict a negative impact on the economy and the impact on its reputation and to investors and tourism .

He adds losses are beyond the economic aspect which affects the merchants and capitalists to influence market reputation and internal trade and marketing all these accidents have a close association with the movement we all know that investment capital is cowardly and do well calculation and doesn't like risk especially if we learned that most of the shops in the souks are not insured as insurance companies reject the argument of the lack of security and safety conditions in the shops and this increases the seriousness of the situation and increased the fears of investors. And, of course, affects the ability of the economy to attract more capital.

The important question remains about the causes of these accidents and fires in markets and commercial complexes and construction sites

Mohammed Bahaa El Din says: the main reason for Collapses and accidents to a lack of safety factor which is one of the most important factors currently required in the implementation of projects, unfortunately some contractors see safety factors as a minor issue ,but actually this is wrong point of view if providing security and safety to the project is expensive operation, ignoring it will be more expensive and dangerous.

He adds: the problem appears more in private projects so the responsibility will be of the investment firm offices in compliance with security and safety during the allocation of work to contractors as well as the role of the Department of labour inspection of construction sites and ensure the application of measures to enhance security and safety.

Muhammad Abdullah says: it was noted in the past that some of the construction companies do not comply with the conditions of security and safety also occurs in some other State sectors such as the oil sector companies have technical presentations include security and safety specifications during implementation and does not allow for anyone to work with in the case of neglect of safety requirements that have become important international standards during project implementation

He added: the lack of commitment of some companies in providing security and safety back is the desire of these companies to reduce costs and here lies the danger, as the non-compliance with safety rules costs more and destroys everything in the burning tower and proved that the company was using thermal insulation materials do not conform to the technical specifications which led to the disaster. As well as resorting to cheap labor and untrained in execution that requires high skilled labor during implementation.

Strong reasons behind many accidents and collapses in structural employment problem sites the untrained and cheap labors, in this context, Mr. Abdullah Saeed Ali, Chairman of one of the contracting companies the problem of collapses and accidents at work are basically due to untrained workers that used by contractors in the implementation of the construction where recruitment Committee impose on labor contracting companies of certain nationalities and the untrained and engaging them in this work and they will fall in major errors during implementation. They are not eligible and don't know the rules and regulations established in modern construction companies.

Adds: All these problems we sometimes hire staff from leasing companies that exaggerate the employment rate and of course this affects the implementation costs as well as the fact that these workers are not sponsored by the company itself so they could leave at any moment and this causes losses to companies.

In the growth of these problems remains the question about the reaction of the State representative in the executive organs in the face of such problems. Official movements will monitor detects the size of the official interest in this phenomenon, beginning with the Council of Ministers who feel the seriousness of these incidents and decided in February last year set up a Committee headed by the Ministry of the Interior to study the phenomenon of collapses and accidents in construction sites.

The Ministry of the Interior in turn granted the problem much attention in the Civil Defense Department has taken a number of important actions and steps to curb this phenomenon..

During the month of January 2005 under the guidance of his Highness Sheikh Tamim bin Hamad Al Thani, the civil defense Department launched a national campaign to fight the fire, which lasted more than 6 months and said it aims to reduce fires and prevent the continued risk identification and hazards, their causes and ways to avoid them, deepen and develop security awareness and preventive and enrich the culture of citizens and residents to the fire and disaster prevention and explain their role in assisting the organs concerned and activating the role of the State organs, bodies, institutions, companies and civil society organizations to counter Phenomenon over the past 6 months, the campaign has organized a number of events to raise awareness of fire hazards as well as to make surprise visits to institutions, companies and markets and shops to make sure safety requirements.^[1]

After the expiration of the deadline set by the Civil Defense Department started the Civil Defense Act No. 13 of 1997, which contains material deterrent to violators of the terms of the security and safety of these procedures include the application of fines and edit the records of offenders..

Indeed the Civil Defence Department launched a number of campaigns resulted in the closure of a number of workshops and commercial and industrial installations which do not comply with the safety requirements. A Workshop has been closed in industrial area where they repair oil tankers, for non-compliance with safety measures. The civil defense monitored during the inspection campaigns, a number of irregularities such as poor storage of cargo and overloading of electricity and the absence of fire extinguishers.

The Department also closed the industrial printing company for three months for violating safety requirements as well as the closure of two warehouses in the industry for the same reason

as the role of the Civil Defence Department at the construction site inspection campaigns but also to organize several seminars to raise awareness of the risks. Including a symposium on accidents and occupational injuries in the construction sector in cooperation with the National Center for occupational health and safety services in the Kingdom of Bahrain during which the review of risks to workers in the construction sector and the actions required to achieve occupational safety and economic returns for the application of safety system and its impact on the development process.

As other seminar entitled fire in buildings, attended by many officials of international and local companies specialized in the areas of construction and production of construction materials in the construction industry to spread the culture of protection and a deeper awareness of the seriousness of the fires.

Civil Defense Department also organized a symposium entitled also the development and organization of safety requirements in installations and attended by officials of the contracting companies and consultancy offices and authorities and other relevant government bodies.

As well as organizing a symposium entitled comprehensive development requires prevention and safety officials participated in the General Authority for standardization and the municipality of Doha and Qatar Chamber of Commerce and industry and the Qatar General electricity and water Corporation.

Last month, the Department organized civil defense an important symposium of consultancy offices operating in the State with a view to familiarizing them with the new procedures and rules for the security and safety requirements that must be followed during the implementation of construction projects and was attended by more than 250 engineers consultant as well as a number of foreign experts working in prevention with civil defense.

Said , Abdulla Fakhro, Director of prevention with the General Directorate of civil defense "in the symposium aimed at narrowing the gap between civil defense and advisory offices with a view to the application of the rules of safety and security from the USA code after we noticed that there was a failure of some consultants in the implementation of administrative requirements during implementation that affect the effort and money that paid the national economy.

He also said that there is an emphasis on the implementation of security and safety conditions strictly, especially after the incidents that occurred in some construction sites during the past period such as fire and landslides due to non-compliance with the safety requirements of companies resulting from these incidents which directly affect the economy and tourism and investment.

What is the solution? Then the question remains, what is the solution? How we succeed in reducing these incidents? How pure our national loss of these incidents

Says consultant engineer Ahmad Ghali: Contractors should follow the engineering drawings and diagrams of safety procedures and some contractors have no clue about safety procedures and how to provide as well as the lack of awareness by contractors and even some consultants where there are clear rules and conditions for dealing with the safety measures to be stepped up seminars and training courses to educate engineers and consultants.

He adds: the role of contractors in providing safety and security depends on the existence of special technicians to ensure that the building has to be compliance with required specifications and the Civil Defense Department tighten controls and reviewing construction and at each stage of construction to ensure safety procedures, as well as the need to use international experience and provide trained technical manpower. Eng Magdy Tawfik says: application of safety standards is mandatory, as in all the world and not optionally, as the need to force these companies to staff safety and the appointment of supervisors in these sites their responsibility to supervise the application of these procedures is firm and there should be a unified information center for companies implementing the projects and the monitoring of incidents that occur in these projects, as well as supervisors and regulators broad powers in the event of non-compliance with safety requirements And how to apply the law and to organize training courses for them as well as the importance of the inspection of safety supervisors in companies and make sure they are qualified and are able to impose security and safety for all workers.

Mr. Abdullah Saeed Al-Ali: cooperation with construction companies on the issue of labor and labor rights where the capacity to implement projects and do not impose specific nationalities companies especially those nationalities may be unqualified and untrained and cause accidents.

Fawzi Al-buheiri Adviser, Legal Adviser to Qatar technical inspection co., believes that the current legislation is sufficient to counter such phenomena but required evaluation well so do not start construction procedures only after civil defense engineer and preview jobs and municipal and the need to pursue the work until it is completed and validated materials used in construction so as to reduce accidents and landslides in construction sites in the State.