Mitigation and risk reduction

Business, Management



MITIGATION AND RISK REDUCTION

Introduction

Mankind has battled the elements of Nature since time immemorial and devised ways to mitigate the risks of occurrence, frequency and magnitude of those natural risks such as flooding, drought, pestilence (rats, insects, locusts, mites, etc.) with the use of scientific technology. Man-made risks have likewise increased due to Man's activities, inadvertent or not, such as clearing of forests, massive agriculture, big housing projects and over-exploitation of the natural resources. This paper discusses some of the relevant issues connected with mitigation and risk reduction to various natural and man-made calamities or disasters that occur with greater frequency today.

Discussion

There are many factors which put constraints on any successful mitigation efforts such as lack of political will, an uncooperative and apathetic public, denial of the existence of the risk and lack of funding or financial, manpower and other resource constraints that hamper efforts to effectively limit the damage or losses resulting from any type of foreseeable disaster. People may at times refuse to recognize they are at risk or vulnerable and try to beat the odds by sticking out in a particular place, for example, hoping that the government will bail them out anyway. Actions required for mitigation imply recognition of that risk and entails additional expenses which some people are unwilling to bear that imposes a moral hazard on local government units charged with the safety of its citizens (Haddow, Bullock &

Coppola, 2010, p. 83). Some emergency managers have resorted to using the carrot-and-stick approach, by providing incentives for compliance and penalties or fines for failure to act. Laws must be passed also for this (FEMA, 2010, p. 1)

Key Terms and Concepts - mitigation is defined as the elimination or reduction of losses or damages due to careful planning and disaster preparedness with regards to forecasted event or occurrence with regards to its frequency, severity or magnitude. Risk awareness pertains to the recognition of the probability of an adverse occurrence by the general public. Response refers to any public and private efforts to deal with the emergency; recovery means acts taken to facilitate the restoration of normalcy after an adverse event with focus on minimizing losses or damages. An ICS must be put in place in advance of an event or having an incident command system that deals with the chaotic conditions and try to restore order by having someone put in charge of the overall situation. An ICS is part and parcel of the NIMS or the National Incident Management System which had evolved from the original firefighting techniques developed in fighting a large conflagration such as wildfires or forest fires and now used to deal also with man-made disasters such as a terrorist attack. The NIMS is used as sort of a template for an "all-hazards" planning to deal with any type of disaster because it serves as the foundation and integrates all best practices but it has its limitations since each disaster is unique in some way and is a non-linear occurrence with other factors involved such as pure luck, chaotic progression and unpredictable outcomes. Natural disasters are those events caused by the forces of nature, such as typhoon, flood, drought, pestilence, forest fire, earthquake, volcanic eruption and tidal wave or tsunami (Skipper & Kwon, 2007, p. 114). Man-made disasters are the result of actions of man, whether it is any of the accidental, inadvertent or intentional events. Examples would be an industrial explosion, oil spill from the offshore drilling rig, a highway collision or a train derailment involving cargoes of toxic chemicals or a terrorist attack such as the September 11, 2001 twin tower attacks in NYC.

Effective Mitigation Measures – the first step in any successful mitigation efforts is to recognize the existence of a risk and take measures to prevent it or otherwise limit its damage if ever it occurs. This includes an early warning system, moving people away from hazardous areas either willingly or forcibly, building up of response capabilities, planning and preparations. All measures must take into account economic, social, political and environmental factors; examples would be constructing nuclear power plants away from population centers or storing flammable liquefied natural gas (LNG) in offshore storage tanks. Another way is making geographic hazard maps to identify high-risk prone areas such as from floods, earthquake or landslides.

Responsibility for Implementation – it is the local government officials who are the ones responsible for implementation of any risk reduction and mitigation plans in their communities. They are the ones best positioned to do so based on their local knowledge and political authority.

Which commander should assume - in the event of a hurricane or an earthquake, it is a bit better to let the fire chief take command rather than

the police chief. This is because it is civil in nature only and requires a different response such as on triage techniques not usually used on criminal or violent incidents such as a terrorist attack on civilian targets. On the other hand, the county sheriff may take command only whenever there is widespread chaos and there is looting or rioting for scarce supplies and police power is required to control the crowd. Otherwise, it is better to let someone who has detailed local knowledge to take charge of relief efforts. Conclusion

The Incident Commander must be someone who is very familiar with the community and its mitigation plans because rapidity of response is the key to minimizing damage or losses to life and properties. Any delay resulting from untoward confusion can cost lives in several of instances when seconds and minutes count a lot. Additionally, someone already familiar with all the mitigation plans will not waste time studying and reading those plans before taking action. It is a situation where time is of the essence, literally. Seeking additional funding for mitigation is largely dependent on the probability of a re-occurrence. If it was a freak event, then it is unlikely to happen again. However, a long term view must be adopted because mitigation can cost money and funds must be allocated or budgeted for it, especially in vulnerable areas of a locality. All its risk mitigation efforts must be sustainable and doable (Menoni & Margottini, 2010, p. 131).

Reference List

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