

Challenges of Global Terrorism- Strategies, Dimensions and Response: In Search of a Perspective

Chanchal Kumar^{1*}

1. Department of Political Science, Janki Devi Memorial College, University of Delhi, India

*Email- drchanchal17@yahoo.co.in

Abstract

The most important challenge in the 21st century has been posed by the terrorist acts in different parts of the world. Terrorists respect no frontiers or boundaries. Terrorism is a crime against humanity. Terrorism is, in fact, premeditated, politically motivated violence committed against innocent civilians and non-combatants by individuals, groups or state agents. The emergence of global terrorism has marked tectonic shifts in this relativistic approach. As a rule, global terrorists commit individual acts of an intentionally provocative nature, which may include threats of murder or the assassination of state and political figures; the seizure of hostages or potentially hazardous facilities; bombings; or the release of poisons, radioactive substances, or biologically active agents. Terrorist acts at potentially hazardous facilities—enterprises working with chemicals, radioactive materials, or explosives; hydro technical structures; unique tall buildings; subways, surface rail, and air transport facilities—present a great danger to personnel and the public and cause substantial economic damage.

Key Words

Global Terrorism, Globalisation, Al Qaeda, Cyber terrorism, Chemical Terrorism, Radiation Terrorism

1. Introduction

Globalisation has contributed to the growth of terrorism from a regional phenomenon into a global one. Global terrorism has been explained in cultural, economic and religious terms linked to globalisation. Terrorism is characterised, first and foremost, by the use of violence. The idea of “terrorism” is a snare and delusion, a way of diverting the public’s attention from the failings of western governments, the American and British ones especially. “Terrorism” is a semantic technique employed by government, spokespersons to change the subject, a slick way of transforming the victims of injustice into its perpetrators. This tactic of violence takes many forms and often indiscriminately targets non-combatants (Baylis, Smith and Patricia 2008). Till the 1990s, the number of groups and their ability to engage in terrorism was limited. Acts of terrorism itself and their intensity and lethality were also limited in scale.

Terrorism is now in full-bloom around Afghanistan and Pakistan, a strategic centre of the Islamic World. Trained by CIA and ISI, there are now over 100,000 jihadis all over the Islamic world in Kashmir, Albania, Chechnya, Xin-jiung (China), Central Asia and elsewhere. They are sustained by heroin exports and smuggling (Gupta 2004). The number of groups that resort to terrorism now has increased, and their abilities have also been enhanced. Acts of terrorism have become more widespread and their lethality has also increased in terms of the number of civilian and security personnel casualties and the high levels of physical destruction that they can cause. Suicide attacks are non-discriminatory with targets, including the old, the young, the wealthy, and the poor. These attacks impact all sectors of the civilian population and have been carried out in various types of crowded public venues, including transit stations, buses, restaurants, shopping malls, nightclubs, and outdoor markets. This method of attack is adaptable, can maximize casualties, is inexpensive, and is far reaching by instilling fear in the general public. There are several factors that contribute to the effectiveness of this mode of attack: Today when we think about “terrorism” we are more likely to associate it with the activities of private groups and organisations, what

students of international relations frequently describe as “non-state” actors: Al Qaeda, Jemaah Islamiyah (Indonesia), Sendero Luminoso (Peru), People’s Revolutionary Armed forces (Colombia), Al-Aqsa Martyrs Brigades (Palestinian nationalists) PFLP, DFLP, PFLP-GC (Palestinian leftists), Hezbollah (Lebanon), Mujahedeen-e-Khlq (Iranian rebel), Chechnya-based Terrorists (Russia) etc. (Jackson and Sorensen 2008). Terrorism is, “an anxiety-inspiring method of repeated violent action, employed by (semi) clandestine individual, group, or state actors, whereby the direct targets of the violence are not the main targets. The immediate human victims of violence are generally chosen randomly (targets of opportunity) or selectively (representative or symbolic targets) from a target population, and serve as message generators (Laqueur 2003). The emerging trend in the pattern of terrorism since the end of the Cold War has arisen due to certain political, socio-economic, geo-political, and strategic factors.

One terrorist target could be of a nuclear nature. Terrorists might acquire a nuclear weapon or nuclear material to produce an improvised nuclear explosive device (IND) or obtain other radioactive material to produce a radioactive dispersal device (RDD). If used in a city, the consequences of an IND explosion would be devastating in terms of direct human loss, while if an RDD is used in a city, the prevailing damage might not be in human due to relocation of the population, long-term decontamination, and possible long-term health effects. Similar concern relates to the risk of a sabotage of nuclear or other facilities or transport with radioactive material.

Terrorist groups commit specially dramatic or lethal attacks to polarize the situation and compromise settlement between two (or more) contending sides harder to achieve. Buses during rush hour, restaurants during peak dining or social hours, markets at their busiest— all these targets are selected and timed to affect the masses. During the peak period of attacks, certain changes in the behavior of segments of the population were initially noted. People avoided dining out despite an enforced law that restaurants of certain size must have security guards posted at their entrance; parents drove children to school instead of sending them on public city buses; people altered their schedules to avoid being in crowds. However, once the suicide attack became “routine” and the decline in the number of attacks began, the population appeared to return to their regular patterns. People have exhibited a strong resilience to terror attacks and seem to function better by returning to their normal routines as quickly as possible after an attack. As an example, within just 3 to 4 hours after a blast on a city bus, the bus is removed from the scene and people are seen lining up at the location waiting for the next bus. Atrocities may be used to prevent moderate forces from reaching an agreement. Or, an agreement if appears to be in the immediate offing, terrorists may act as “spoilers” by sabotaging peace negotiations and re-inflame a troubled situation. The recent history of the Israeli-Palestinian conflict following the 1993 Oslo Agreement offers particularly good examples, with Hamas and Islamic Jihad playing the spoiler roles.¹

2. Purposes and Role of Global Terrorism in Present days

Terrorism did not begin in 2001 or in the 1990s for that matter. There is a long history behind the kind of violence that the mass media show us seemingly on a daily basis. The expression ‘Global Terrorism’ came into currency in our language with September 11, 2001. The attack on the twin towers and the Pentagon in USA was the first quaking spectacle of its kind watched on the TV networks. Global terrorism as represented by Al-Qaeda will grow into a large-scale threat to Western societies. While there are a great number of terrorist groups scattered around the world, especially in weak states. Those who think that the terrorist threat is not so serious emphasize how the Al-Qaeda network is specifically connected to marginalized Muslim groups of Mujahedin (fighters for Allah’s cause) who joined together to fight against the Soviet occupation of Afghanistan and were able to use that country as a safe haven (Jackson and Sorensen 2008). The London bomb attacks (2005) demonstrated that Muslims with a relatively ‘normal’ background as citizens of the UK had been recruited for the actions is very large indeed; it is not merely confined to ex-Afghani Mujahidin’s; it also comprises self-selected members of local Muslim societies in the UK and other Western countries. Some Commentators argue that the US-led war in Iraq leads to ‘blowback terrorism’ meaning that the war tends to increase, rather than decrease, the recruitment potential to international terrorism (Mann 2003). There is the danger of global terrorists gaining access to and using

weapons of mass destruction (WMD), that is, chemical, biological and nuclear weapons. It is clear that terrorist groups have incentives to use WMD; they would be able to create massive destruction and fear, and that would possibly elevate the groups to a new power position vis-a-vis their adversaries (Schmid 2005). A recent study by Graham Allison argues that a nuclear attack by terrorist on America is more likely than not in the decade ahead (Allison 2004). If policymakers take immediate countermeasures, such an attack is 'preventable'. If they do not, say Allison, the attack is 'inevitable'.

Global Terrorism is a complex, multifaceted phenomenon that is social in nature and, in some instances, has a political aim. Terrorists attempt to exert political pressure on government leaders, attract world public attention to certain problems, demand the liberation of arrested supporters of extremist groups and the end of persecution of terrorist organizations and their leaders by law enforcement agencies, advance economic demands, and so forth. As a rule, global terrorists commit individual acts of an intentionally provocative nature, which may include threats of murder or the assassination of state and political figures; the seizure of hostages or potentially hazardous facilities; bombings; or the release of poisons, radioactive substances, or biologically active agents. This will lead to deaths among members of the public who happen to be at the site of the attack and will harm the economy and the prestige of the state. Terrorist acts at potentially hazardous facilities—enterprises working with chemicals, radioactive materials, or explosives; hydro technical structures; unique tall buildings; subways, surface rail, and air transport facilities; and places where large numbers of people congregate, such as concert halls, stadiums, apartment buildings, and so forth (hereafter referred to as facilities)—present a great danger to personnel and the public and cause substantial economic damage (Schweitzer 2009). Terrorist acts at enterprises could be carried out by striking (destroying) a tank or pipeline holding catastrophically hazardous chemicals, a nuclear reactor, or a storage vessel containing highly flammable liquid. An explosion at a chemical-hazard facility could cause destruction over an area of up to 30 square kilometres, with the number of injured victims possibly reaching 60,000 and up to 5,000 fatalities. In places where large numbers of people gather, terrorists could use explosives, dangerous chemicals (including poisons), radioactive substances, and biologically active agents. The suddenness of a terrorist act, the rapid spread of the impact factors, the deaths of many people, the ensuing panic, and people's sense of being unprotected create a powerful psychological blow to society. According to U.S. data, more than 10,000 terrorist acts have been committed worldwide in the past three decades. More than 50 countries have experienced the consequences of terrorist acts, including Iraq, India, Indonesia, Colombia, Pakistan, Afghanistan, Russia, Israel, Great Britain, and Egypt. The number of acts carried out by suicide attackers (Shahids) has increased fivefold in the past 3 years. In 2006 alone, more than 15,000 terrorist acts were carried out worldwide, killing or injuring more than 90,000 people. This leads to the creation of a broader infrastructure for terrorist organizations and brings the ethno national factor to bear, which in turn creates a significant degree of uncertainty about potential sources of the terrorist threat and forms and means of operation by terrorists. Primarily this refers to the aim of certain branches of Islam to create individuals who are psychologically prepared to commit violent acts "in the name of Allah" to achieve political goals, such as overthrowing unfavourable secular regimes and establishing a government according to Islamic doctrines.

A decade after the 9/11 attacks, United States officials are saying that victory over Al Qaeda is imminent. Defence Secretary Leon Panetta declared in July, 2011 that the US is "within reach" of "strategically defeating" the jihadi group. But there are reasons to be skeptical of this idea. The weight of evidence suggests the danger may in fact grow in the coming decade. May 1, 2011 will be remembered as a day in world history when Osama bin Laden was silenced for good. His atrocities most notably in 9/11 attacks, killing 3000 innocent people, have made the Americans jubilant. The relations between the United States and Pakistan have suffered after the killing of al-Qaida chief Osama bin Laden, as was evident when the Barack Obama administration unveiled its new anti-terrorism strategy and suspended its military aid of \$800 million to Islamabad. Clinton said the US has made it clear to Pakistan that confronting terrorism in all forms is in Islamabad's interest. The killing of bin Laden has made Washington reduce its anti-terrorism front and prompted a change in US-Pakistan ties. Washington's new anti-terrorism strategy is explicitly aimed at ensuring security within the US and strengthening special operations, rather than traditional military means, against terrorists. This strategic change means Pakistan's role as an anti-terrorism ally is

becoming less important to the US. In more ways than one, bin Laden's killing has been a turning point in the US' anti-terrorism strategy and has created uncertainties for the US-Pakistan anti-terrorism alliance as well as bilateral ties. This will promote peace in the region and eventually help the US achieve its anti-terrorism goal. Or else, it could yield the opposite result.²

Terrorists are creating a system of control with unified leading entities that plan their actions. Terrorist groups that are similar in their ideological, political, nationalistic, religious, and separatist positions are holding councils and meetings, bringing together the leaders of the largest groups. These regions where armed conflicts are prevalent include "Palestine- Israel," Iraq, and Afghanistan. Latin America is gradually becoming a promising source from which the Islamic fighters may augment their ranks. In addition to the Middle East and Western Europe, we should expect increased activity by jihadists in Bosnia, Kosovo, India, Bangladesh, Indonesia, Australia, the Philippines, the Fergana Valley, and the Xinjiang Uighur Autonomous Region of the People's Republic of China. Continuing material and financial support for terrorism today comes from control of the drug trade, racketeering, prostitution, arms trade, contraband, gambling, and so forth. Terrorists are striving to gain access to weapons of mass destruction and their components. We must organize efforts to counter nuclear terrorism, cyber terrorism, eco terrorism, agro terrorism, and radiological terrorism.

Terrorism is increasingly active in the so-called instability belt, which extends from the Philippines and Indonesia through the Indian subcontinent, Central Asia, the Caucasus, and the Middle East up to the Serbian border of Kosovo. The flow of drugs from Afghanistan has become global in nature. It may be stated that the efforts of the international community and the Afghan authorities to counter the production and illegal trade of narcotics are still not having the necessary effect. Success in the struggle against terrorism is unimaginable without a clear and universally accepted international strategy. Governmental and social structures, official networks, and the media must join forces. The foundation for such an endeavour was laid by Resolution 1373 and other decisions by the United Nations Security Council, but additional efforts are currently needed. Washington took the lead after 9/11 to eradicate terrorism from the face of the earth. No matter how good be the ambition and intention if an honest evaluation of the pros and cons of such a campaign is not done it can bring more bad than good.

3. Terrorist Tendencies and Strategies

Trends in terrorism can be defined as changes in incidents, attitudes, and other factors over time. Trends can be important indicators of levels and type of terrorist activity, can help governments formulate responsive counterterrorism strategies, and can assist both policy makers and policy implementers in allocating resources effectively. For example, a trend by terrorist groups to focus on mega terrorist events might result in an overall decrease in casualties from smaller acts of terrorism over an extended period of time. If measures to counter or defend against such mega - events prove effective, the net result is a decrease in casualties. A relevant issue is the degree to which government bureaucratic institutions can work smoothly together and stay ahead of the methods utilized by individual terrorists and terrorist networks. Another pertinent factor is the growth or decline of phenomena perceived by terrorists as directly related to advancing their cause or detracting from it, such as the number of governments that embrace appeasement policies and the amount of media coverage their groups receive. Governments need to collect meaningful trend data, even if the data are unfavourable toward them. As the global economic, political, and technological landscape evolves, and as terrorists seek to surprise and attack the enemy through more fluid organizational structures and new innovative approaches, the nature of the data being collected needs to change. A major challenge facing the global terrorism community is the need to facilitate acquisition and incorporation of new data indicative of trends while maintaining the continuity of earlier findings. Trends in terrorism are often shaped by trends in global terrorism. One trend frequently cited in the media is the decentralization of al Qaeda, which is arguably the result of aggressive U.S. targeting of the organization, its leadership, and its command-and-control capabilities. Hardening U.S. government physical infrastructure overseas or at home might encourage terrorists to shift the focus of attacks to softer non-government targets. Similarly, government implementation of better systems to evaluate the

authenticity and content of travel documents at lawful ports of entry might prompt terrorists to switch from the legal entry tactics employed by the September 11, 2001, hijackers to illegal border crossings at unsecured locations. Familiarity with future U.S. counterterrorism strategy and tactics and the strategies of other nations is therefore essential for predicting and understanding future terrorist responses.³

Al Qaeda enjoyed one such sanctuary on September 11, 2001, in Taliban-controlled Afghanistan. Today Al Qaeda affiliates enjoy four: in Somalia, Yemen, Pakistan, and northern Mali. Nobody has a cognizable strategy to dislodge militants from these areas, a fact that in itself suggests it's far too early to envision Al Qaeda's death. But beyond the threat of a large-scale attack, Al Qaeda's overarching strategy is working fairly well. The group is devoted to undermining its enemies' economy; certainly the collapse of the US's financial sector in September 2008 made it seem mortal. In turn, that produced a strategic adaptation by jihadis, toward what they call the "strategy of a thousand cuts." This strategy emphasizes smaller, more frequent attacks, many of which are designed to drive up security costs. Al Qaeda placed three bombs on passenger planes in the past twenty-two months: Umar Farouk Abdulmutallab's underpants bomb in December, 2009 and two bombs hidden in ink cartridges that were placed on FedEx and United Parcel Service planes in October 2010.

Understanding trends in terrorist activity can assist policy makers in several areas, including (1) better protecting the nation against terrorist attacks, (2) better targeting terrorists and terrorist activity, (3) better prioritizing anti-terror resources, and (4) showing anti-terror progress when it has been achieved. The often asymmetric, nonlinear nature of terrorist operations, frequently characterized by abrupt changes, increases the deadliness of the threat and may necessitate more comprehensive measurements of trends to reflect this additional danger more accurately. A common pitfall of governments seeking to identify or enumerate trends is over reliance on quantitative indicators at the expense of their qualitative significance. One qualitatively creative incident may immediately prove to be a trend by sparking copycat follow-on terror incidents with a resultant change in terrorists' strategy, tactics, and targets.

Each year, United State produces an annual report on terrorism that is considered by many to be one of the best analyses of global terrorist activity.

Three trends are identified by this report as follows:

Micro actors are a new phenomenon. This development is spurred by perceived U.S. and allied successes in isolating and killing much of Al- Qaeda's centralized leadership, thereby reducing its centralized command-and-control capability. The result is an Al-Qaeda that is assuming more of an ideological and propaganda role rather than an operational role, with the operational component of the movement increasingly being assumed by small autonomous cells and individuals, often home-grown. Such operatives are likely to be technologically savvy, and because they are new to the terrorism landscape, their decentralized actions can be extremely difficult to detect or counter. A logical outcome from such a development is likely to be a growing number of micro actor's in future terrorist attacks, particularly those involving conventional bombs and bullets. These Micro actors are relatively unseasoned and unskilled in terrorism tradecraft.

Sophistication is the second trend. Increasingly, terrorists are exploiting the global interchange of information, finance, and ideas to their benefit. They are also improving their technological sophistication across many areas of operational planning, communications, targeting, and propaganda. The effective worldwide orchestration of a campaign against publication by a Danish newspaper of cartoons degrading the Prophet Mohammed is an example of such sophistication.

Overlap with international crime is a third trend reflected in the report. Such a trend, to the extent that terrorists do indeed use the same networks used by criminal groups, creates a major vulnerability. The more terrorists engage in non-terror forms of criminal activity, the more likely they are to show up on the law enforcement radar screen. Also cited in the report is an increase in suicide bombings⁴, as well as a strong connection between Iraq and the broader war on terrorism. Terror incidents in Iraq, according to the report, accounted for almost one-third of all terror incidents in 2005 and more than one-half of all terror-related deaths worldwide. Moreover, there is concern among many that Iraq will become an exporter of seasoned

terrorists, weapons, and tactics, especially the use of improvised explosive devices (IEDs), with “spill over” not only into the neighbouring Gulf region but also into Europe and other regions. Such a trend, according to the report, could mean that the immediate future will bring “a larger number of smaller attacks, less meticulously planned, and local rather than transnational in scope”.

Generally, the use of terrorism as a tactic is becoming more frequent, more geographically widespread, and more deadly. Statistical data provided by the National Counterterrorism Centre (NCTC)⁵ indicate steady annual increases in the number of terrorist incidents in a growing number of locations. At the same time, NCTC data indicate that a smaller number of incidents are resulting in a higher number of persons killed or injured. Terrorism is becoming more indiscriminate in its choice of victims. Casualties include not just combatants, Westerners, and non-Muslims. Targeting is less directed to specific individuals. Muslims are increasingly becoming victims of jihadist terrorism. This tendency will increase as Muslim versus Muslim conflict spills over into Europe. Terrorism is becoming more focused on economic targets and causing economic damage. The energy infrastructure will increasingly become a target, and the financial infrastructure may well follow. If our economic system cannot deliver concrete benefits to the world’s masses, the pool of angry and dissatisfied masses will grow, and terrorists will continue to hijack this dissatisfaction and channel and manipulate it for their causes. Jihadist terrorism is increasingly becoming an equal opportunity movement. Groups are actively recruiting non-Muslims, women, and youth. Terrorism is becoming more multidimensional. Groups like Hamas and Hezbollah have long had political, social, and religious, as well as military, components. Such groups fill important social service vacuums, obtaining popular support. Increasingly, we see a blurring between terrorism and organized crime. This means the emergence of more hybrid organizations. Terrorist groups will increasingly rely on each other for logistical support. This phenomenon has become more widespread in India. Explosive devices will likely be used as dispersion mechanisms for chemical agents to be spread beyond Israel to Iraq, Europe, and elsewhere. Currently, groups such as Hezbollah and Hamas add rat poison, a powerful anticoagulant, to conventional explosives for the purpose of increasing casualties. It will likely not be long before other groups “piggyback” on this innovative tactic with other, perhaps more lethal, forms of chemical agents.

Included here are more multiple attacks, attacks on first responders, and more attacks on urban centers. Increasingly, urban centers are viewed by terrorist groups as a system. Terrorists seek to disrupt the functioning of the system to the maximum extent possible. Terrorism will prove to be increasing costly to societies, in both the economic costs of added security and the trade-offs of civil liberties for enhanced security. It is estimated that the increased global macroeconomic costs of added security in the wake of the September 11, 2001, attacks exceed \$1 trillion. Moreover, many suggest that the greatest threat posed to societies by terrorism is the threat to the continued existence of democracies with their wide range of freedoms as we now know them. On the other hand, as use of terrorism as a tactic grows and evolves, so does our recognition and understanding of the threat and its basic tendencies. Our experience in containing terrorism without overreacting is growing as well.

Based on an analysis of likely threats that could lead to emergency situations, individualized security systems must be developed for industrial enterprises, unique tall buildings, facilities where large numbers of people gather, and subway stations. Such systems should take into account natural, technological, biological, social, and terrorist factors that could cause emergency situations. Such security systems include both organizational and technical measures. Organizational measures provide plans for the actions of personnel, residents, and facility visitors both in regular day-to-day activities and during emergencies, threats of terrorist acts, and such acts themselves. They are laid out in the appropriate regulatory technical documents. Plans for rescuing and evacuating people and eliminating the source of the emergency should be developed in a timely fashion through training exercises and courses.

Technical measures are developed with the aim of supporting the normal functioning of a facility under its regular daily operating regime, during threats, and during actual emergencies. These measures are implemented using engineering and technical means: design and structural elements; barriers; blocking devices and mechanisms; security, fire alarm, and warning systems; systems for monitoring and management of facility security and critical operations; loudspeakers and other means of notification; video

observation systems; means and systems for facility access control and management; environmental monitoring equipment; and so forth. All facilities must be prepared for an emergency. To achieve this, measures are taken to improve the facility's level of protection. The list of measures could be augmented and revised depending on the facility's function. Critically important points are identified in the design stage. When the facility is in operation, access to these points is limited and they are constantly monitored. Such points include structural elements that, if destroyed, would lead to destruction of the entire facility, as well as technological systems and equipment that, if affected by an accident, could lead to an emergency situation. Physical protection boundaries are organized and equipped with monitoring rooms, alarm systems, controlled access points, and inspection points for vehicles and individuals. The necessary badges or access cards are distributed to staff. An accounting is made of residents and visitors. Regulatory technical documents on actions to be taken in an emergency and systems for communications with supervisory agencies and fire and rescue personnel are developed and forwarded to those responsible for implementation.

4. Characteristics of Global Terrorism Scenarios and Impact Factors

The primary impact factors of such global terrorist acts initiate secondary catastrophic processes with a significantly higher (tens and hundreds of times) level of secondary impact factors that affect the targets of the attack, their personnel, the public, and the environment. The scope and intensity of the impact factors of terrorist actions against a given system define the level of the terrorist threat to that system. The scenario for a global terrorist attack entails a means of exerting the initiating effect on the system that is based on the use of appropriate technical devices, technologies, and materials and is characterized by the terrorists' deliberate selection of the place and time of the attack. The following characteristics must be taken into account in analysing global terrorism scenarios and impact factors.⁶

4.1 High level of dynamism

Terrorist attack scenarios and impact factors are more dynamic in nature than scenarios and impact factors for natural and technogenic⁷ disasters to which the system is subject. Of course, emergency management and evacuation capabilities are relevant to both. A change in the spectrum and intensity of possible terrorism-related extreme effects on the system is significantly more powerful than a natural or technogenic threat. This is due to the terrorists' capacity for constantly expanding their arsenal of mechanisms for initiating emergency situations using modern means of attack, reacting to changes in protection systems, and drawing lessons from mistakes made during previous attacks on the system or others like it.

In modelling terrorist scenarios and impact factors, we encounter a higher level of uncertainty (Schweitzer 2009). In addition to the undefined factors inherent in threats of a natural or technogenic nature, terrorist threats entail new factors of uncertainty resulting from the complexity of evaluating terrorists' value system and behavioural logic as well as their organizational-technical potential and the resources at their disposal. Terrorists are capable of analysing the vulnerability matrix and damage structure for various types of actions against a system and selecting the attack scenario that maximizes the harm to society (taking secondary and cascade damages into account).

4.2 Complex nature of the terrorist threat

The presence of a terrorist organization in a region may give rise to the possibility of a broad spectrum of attack scenarios, including the time, place, and character of the attack. Thus, to global terrorist threats and terrorist mechanisms for initiating emergency situations to an even greater degree than for natural and technogenic risks, a complex systems approach is needed for ensuring security and developing an optimal strategy for global terrorism force and resource deployment. (Schweitzer 2009) Inasmuch as concentrating resources on protecting one system element (or protecting a target from one type of terrorist action) could prove useless because, after evaluating the situation, the terrorists could either redirect the attack against

another element of the target or could switch to a different type of attack. In this case, global terrorism efforts will not lead to reducing risk and increasing the target's level of protection. In addressing traditional tasks of ensuring security against natural and organic disasters, the prevailing types of impact factors could be highlighted for the system being studied, such as threats from seismic activity, flooding, chemical contamination, and so forth. In protecting the system from these impact factors, it is possible to achieve the desired result. However, in protecting a given system from manifestations of terrorism, the spectrum of potential threats is significantly wider. Here, terrorists are capable of analysing the level of protection of the system for various types of impact factors, identifying impact factors against which the target is least protected, and concentrating their efforts on carrying out an attack that will bring these very factors to bear.

4.3 Global nature of terrorist threats

The challenges posed by Al-Qaeda and other groups engaged in what some leaders regard as the first war of the 21st century. (Schweitzer 2009) We consider terrorists quest for and use of chemical, biological, radiological and at least potentially, nuclear weapons and the dangers of their use to inflict mass casualties on the civilian population of the Western democracies. The phenomenon of suicide bombing as carried out by such groups as Hezbollah, Hamas, the Liberation Tigers of Tamil Elam, and groups active in Kashmir and Chechnya. As a rule, the geographic distribution of sources of natural and technogenic threats is limited to regions where hazardous facilities are located or zones subject to natural hazards (river valleys for floods, seismic fault zones for earthquakes, tsunamis, and so forth). On the contrary, terrorist threats, especially those coming from international terrorist networks, are characterized by significantly more widespread distribution of the locations where a possible attack might occur. In contrast to natural and technogenic disasters, which may often be viewed as chains of Poisson events, after a major terrorist act the condition of the system defined as "terrorist organization—protected object—protection system" is substantially changed. On the one hand, the terrorist organization achieves its goals to one or another degree and expends a significant part of its resources, while, on the other hand, law enforcement agencies intensify the protection regime. Therefore, after a major terrorist act the situation fundamentally changes and the likelihood of a subsequent attack is significantly altered as well (generally, it is reduced). Therefore, the sequence of terrorist attacks could be described with the help of a Markov chain model. For the purpose of this model, the activities of antiterrorist forces aimed at countering the terrorist threat are understood as under control. The Markov process model makes it possible to describe the dynamics of cycles of terrorist activity. Because terrorists are capable of analysing the results of previous attacks and drawing conclusions from them, their experience in "successful" and "unsuccessful" attacks can have a noticeable effect on the selection of a scenario for the next attack.

5. Factors for Terrorist Actions

Based on an analysis of the growing number and expanding spectrum of terrorist actions, I may conclude that scientific-technical progress presents terrorists with new opportunities for carrying out various types of terrorist acts. Successes in the development of advanced technologies and means of communication, high rates of urbanization, and the concentration of potentially hazardous production facilities create favourable conditions for the appearance of new types of global terrorism with especially dangerous consequences for the public and government institutions. On the other hand, scientific-technical progress also makes it possible to protect the public and objects in the global sphere from terrorist actions.

5.1 Electromagnetic Terrorism Scenarios

Modern critically important facilities (ground- and space-based communications systems, telecommunications systems, computer networks, power plants, transport control systems, nuclear industry facilities, and so forth) are vulnerable to the impact of powerful electromagnetic irradiation and penetrating high-voltage electrical pulses in electricity supply and grounding networks. This circumstance has led in recent years to the appearance of a real danger that scenarios for terrorist attacks based on the application of

electromagnetic effects may in fact be realized.⁸ The foundations for the rise of the threat of global terrorism were laid, on the one hand, by the sharp reduction in signal levels in electronic systems and, on the other hand, the sharp growth in achievements in creating pulse flow generators and, on their basis, electromagnetic wave emitters. The widespread introduction of electronic systems in all spheres of societal activity and the accessibility of devices used to create disruptions have given rise to the very real threat that global terrorism scenarios may be implemented.

5.2 Cyber terrorism Scenarios

The development of computer networks and information systems based on packet commutation technology has created a new communications and information environment that is vulnerable to global terrorist acts.⁹ Attacks by computer terrorists could be aimed at specific elements of the information infrastructure itself, possibly by means of computer networks, or at other targets present in one way or another in this environment. The network infrastructure as such could be of enormous value to terrorists, in as much as it provides a cheap and effective means of interaction and communication and serves as a source from which information may be obtained. Thus, in addition to the multitude of positive aspects, the development of cyberspace significantly expands terrorists' arsenal of tools and capabilities. (Schweitzer 2009) The possibilities offered by global network technologies allow terrorists to work in practically any country against targets located in any other country. In modern industrially developed society, information technologies may be viewed by terrorists as both a target of attack and a means of attack. Not only telecommunications and information networks but also all other components of any vitally important (critical) infrastructure whose successful functioning depends on computer control, data processing, and digital communications could become targets for cyber-attacks.

5.3 Biological Terrorism Scenarios

The impact factors of biological terrorism can cause massive disease outbreaks and panic among people, animals, and plants.¹⁰ These impact factors include micro-organisms and some of their products (toxins), as well as certain types of insects, both plant pests and disease vectors. In means of application, bioterrorist acts differ from other types of terrorist acts in that they can be both overt, announced, demonstrative acts as well as covert acts masked as natural outbreaks. The world is currently witnessing the rapid development of the biological sciences, biotechnology, medicine, and pharmacology. Increasing numbers of people are employed in these fields and have the necessary knowledge and qualifications to develop and manufacture bio-weapons. Manufacturing biological weapons is relatively simple and inexpensive. Bio-weapons are effective in very small doses. Biological weapons make it possible to carry out both individual terrorist acts and massive strikes against people, animals, and plants. At present, there are practically no technologies for protecting against bio- weapons or detecting and identifying a pathogenic microorganism or toxin before it begins to take effect. Therefore, a case of bioterrorism can be discovered only after the outbreak begins and is identified, which can take a fairly long time after large numbers of people, animals, or plants have already been infected. Thus, the relative ease of producing biological weapons, the practical invulnerability of the perpetrators, and the possibility of damages on a huge scale make biological attack scenarios attractive to terrorists.

5.4 Chemical Terrorism Scenarios

Dangerous chemicals are found everywhere in modern industrial society and, consequently, may be accessible to terrorists.¹¹ Terrorists may realize their intentions of acquiring chemical weapons in two ways: (1) by buying (stealing) them from existing national stockpiles or (2) by producing them at their own underground enterprises. In as much as synthesizing military chemical substances requires overcoming complex technical barriers and entails great risk, it is more likely that terrorists will acquire highly toxic industrial chemicals. Military chemical substances are poisonous, artificially created gases, liquids, or powders that upon entering the body through the lungs or skin cause disability or death among people and

animals. Most chemical substances fall into one of five broad categories: (1) skin-blistering agents, (2) paralyzing nerve agents, (3) asphyxiating gases, (4) bleeding agents, and (5) disabling agents. Unstable substances are dispersed in the air for several hours and mainly present a threat if they are inhaled, while persistent substances remain dangerous for a month if they are scattered on the soil, vegetation, or objects and, as a rule, represent a hazard if they make contact with skin. Chemical substances with skin-blistering effects, such as yperite (mustard gas) or lewisite, are liquids that cause chemical burns. Nerve-paralyzing substances like sarin and VX are the most powerful chemical poisons known. They disrupt the human nervous system and kill their victims within a few minutes. Given the extreme danger associated with handling or storing nerve-paralyzing agents, terrorists might attempt to develop a binary weapon that would be safer to produce, store, and transport. A binary system presumes the separate storage of two relatively nontoxic ingredients and their mixture immediately before use to create a lethal substance. Sarin, for example, could be produced in a binary system through the chemical reaction of isopropanol with methylphosphoryldi fluoride (DF). However, synthesizing DF is complicated and difficult. Furthermore, terrorists would have to either mix the components manually before use, which is an extremely dangerous operation, or try to develop a remote-controlled device to handle the mixing and dispersal, which in turn would require a high degree of technical skill. Therefore, in addition to countering attack scenarios using military poisonous substances, it is recommended that significant attention be devoted to attack scenarios involving sabotage at facilities producing, using, or transporting hazardous chemicals.

5.5 Radiation Terrorism

Scenarios for terrorist acts using radiation sources may be divided into three groups: (1) detonation of a nuclear explosive device, (2) sabotage at nuclear facilities, and (3) radiological terrorism. (Weinberg 2009)

1. This group relate to a more dangerous type of terrorism from the standpoint of the scope of the consequences. Such scenarios entail the theft of a nuclear explosive device from a storage arsenal or the creation of a homemade nuclear bomb using highly enriched uranium or plutonium. Realization of these scenarios is complicated by the circumstances that the key components necessary for manufacturing nuclear weapons systems—that is, fissile materials (plutonium or highly enriched uranium)—are difficult to obtain, and the capabilities and equipment needed to produce them also have their specific characteristics. The most difficult part of manufacturing such a nuclear device is acquiring the necessary quantity (on the order of several kilograms) of highly enriched uranium or plutonium. Therefore, preventing nuclear weapons and weapons materials from falling into the hands of terrorists is a top priority.
2. Scenarios in this nuclear terrorism category entail setting off an explosion at a facility such as a nuclear power plant, research reactor, spent fuel reprocessing plant, radioactive waste repository, or similar site. Numerous nuclear facilities present very attractive targets for terrorists. The potential destruction and damage that could be caused by a terrorist act at a nuclear reactor depend on the design characteristics of the given reactor and the protective measures in place, which in turn vary widely at the different types of facilities.
3. This type of terrorism involves detonating a conventional explosive device containing radioactive isotopes with the aim of subsequently dispersing them over a significant area. This category also includes attack scenarios in which radioactive substances are dissolved in water sources.

Because the goal of any terrorist act is to create maximum resonance in society with minimal costs and minimal risk, the use of explosives for terrorist purposes has become widespread. Potential targets of terrorist attacks could include critically important facilities of undoubted interest from the standpoint of inflicting damage and creating significant societal impact. (Hoffman 1998) From the standpoint of the likelihood of technological terrorist attacks, such acts at enterprises using large volumes of flammable substances in their technological processes (gas stations, compressed gas facilities, oil refineries, chemical plants, and so forth) represent a serious potential danger.

6. Terrorist Threats and Attack Strategies

The decisions made by the terrorists are based on the mini max principle, which consists of a striving to inflict maximum damage on society while expending the minimum resources and with minimal risk that the organization will be detected and eliminated (that is, a striving to ensure maximum effectiveness for the attack). Here, terrorists are capable of reacting to the actions of antiterrorist forces, drawing lessons from the experience of previous attacks, and using them to correct their actions. Additional difficulties that must be faced in evaluating the likelihood that various terrorist attack scenarios will be carried out are associated with the value system of terrorists (that is, their usefulness function) differing notably from the traditional value system. Their system of motivating principles often is not fully comprehensible even to specialists. Furthermore, the following characteristics are typical of the issues faced in evaluating terrorist attack threats (impact factors) and strategies:

High level of uncertainty due to lack of knowledge of terrorists' intentions, intellectual potential, and organizational-technical resources, the goals they are pursuing, and the value system by which they are guided. Fragmentary and (often) secret nature of data of various types obtained from various sources, such as statistical information, expert assessments, and operational information obtained from intelligence services. The model must facilitate assessments and decision making for situations involving a very high level of uncertainty. The model must be multidimensional; that is, it must consider a situation from the standpoint of both terrorists and antiterrorist forces. It must provide for a description of the dynamic interaction of these two sides, each of which is guided by its own strategy and is capable of reacting to its opponent's actions. That is, it must include the two-way linkages between the vulnerability of the system to the given attack scenario and the likelihood that this attack scenario will be selected by terrorists.¹² The part of the model that characterizes terrorists' situational analysis and decision making must assess terrorists' goals, value system, resources, and intellectual and organizational-technical potential; identify basic scenarios for terrorist attacks against a given target; and must assess the probability that various terrorist attack scenarios will be carried out based on their usefulness function, by which (in the opinion of antiterrorist analysts) terrorists must be guided.

Conclusion

Terrorism is a menace to the society that has threatened every fabric of it throughout history. "One man's terrorist is another man's freedom fighter," (Kulwant 2005) is not only a cliché but also one of the most difficult obstacle in coping with terrorism. This global threat has all but not a global solution as some countries are trying to present it. With regards to terrorism the globe can share many things including intelligence, trafficking of money and information etc. but to deal with it can mostly be local. As a "language of communication" calls for attention to certain grievances and is thus not a goal in itself but a means. "Think Globally and Act Locally" (Kulwant 2005) would be an honest approach to deal with the menace of terrorism. There is no one accepted definition and there is no one solution to the problem. Sweeping generalization and stereotyping brings in more resentment. An environment within the state and among the states needs to be created that do not breed terrorism. As terrorism is a global phenomenon, a major challenge facing policymakers is how to maximize international cooperation and support without unduly compromising important U.S. national security interests and potions. Other significant policy challenges include: 1) how to minimize the economic and civil liberties costs of an entranced / tightened security environment and 2) how to combat incitement to terrorism, especially in instances where such activity is state sponsored or countenanced.(Edward 2007) The International community should not tolerate states or entities that support or protect terrorists. The states should put terrorists on trial or extradite them to countries which would put them on trial. All States should prevent and suppress the financial of terrorism, as well as criminalize the wilful provision or collection of funds for such acts. The funds, financial assets and economic resources of those who commit or attempt to commit terrorist acts or participate in or facilitate the commission of terrorist act and of persons and entities acting on behalf of terrorists should be frozen without delay(Gupta 2004).

References

- 1) Note, however, that although the total number of suicide bombings increased in 2005, it is not fully clear that the ratio of suicide bombings to other forms of attacks has increased concomitantly. See www.state.gov/s/ct/rls/crt/c17689.htm. Note that "The Country Reports on Terrorism version for 2007", which will cover 2006, is not expected to deviate markedly from its characterization of the terrorist threat for 2005.
- 2) Hindustan Times (2011) New Delhi (INDIA) September 11, 2011 p.17
- 3) Frolov, K., and G. Baecher. (2006). Protection of the Civilian Infrastructure from Acts of Terrorism. Dordrecht, The Netherlands: Springer, 252 pp. Pate-Cornell, E. 2002. Probabilistic modelling of terrorist threats: A systems analysis approach to setting priorities among countermeasures. Military Operations Research 7(4):5-20. Woo, G. 2004. Quantitative terrorism risk assessment. Available online at www.rms.com/NewsPress/Quantitative_Terrorism_Risk_Assessment.pdf. Accessed April 11, 2008.
- 4) Technogenic is used to refer to phenomena arising as a result of the development or deployment of technology.
- 5) Makhutov, N. A., and D. O. Reznikov. (2007). Use of Bayesian networks to assess terrorist risks and select an optimal strategy for countering the terrorist threat. Problems of Security and Extreme Situations 5:43-63. Pate-Cornell. Probabilistic modelling of terrorist threats.
- 6) Fortov, V. E. (2004). Study of electromagnetic impacts in terrorist and antiterrorist actions. Pp. 228-238 in Proceedings of a Scientific-Practical Conference. Moscow: Kombitell.
- 7) Barsukov, V. (2000). Protecting computer systems from powerful destructive effects. Jet Info Information Bulletin 2(81):8-17. Available online at www.jetinfo.ru/2000 (in Russian). Vasenin, V. A., and A. V. Galatenko. 2002. Computer terrorism and Internet security problems. Pp. 211-225 in High-Impact Terrorism: Proceedings of a Russian-American Workshop. Kirov, Russia: Vyatka. [Pp. 183-197 in the original English version by the same title, published in 2002, Washington, D.C.: The National Academies Press.]. Branscomb, L. 2003. Cyber-attacks as an amplifier in terrorist strategy. Pp. 93-96 in Terrorism: Reducing Vulnerabilities and Improving Responses: U.S.-Russian Workshop Proceedings. Washington, D.C.: The National Academies Press.
- 8) Morenkov, O. S. (2002). Bioterrorism: A view from the side. Pp. 131-141 in High-Impact Terrorism: Proceedings of a Russian-American Workshop. Kirov, Russia: Vyatka. [Pp. 106-113 in the original English version by the same title, published in 2002, Washington, D.C.: The National Academies Press.]. McGeorge, J. 2001. An analysis of 404 non-military incidents involving either chemical or biological agents. P. 53 in Abstract Book of the World Congress on Chemical and Biological Terrorism, Dubrovnik, Croatia, April 22-27, 2001.
- 9) Ibid.
- 10) Aratyunyan, R. V., V. Belikov, et al. (1999). Models for the spread of radioactive contamination in the environment. RAS Power Engineering News 1:61-96. Hecker, S. 2002. Nuclear terrorism. Pp. 176-184 in High-Impact Terrorism: Proceedings of a Russian-American Workshop. Kirov, Russia: Vyatka. [Pp. 149-155 in the original English version by the same title, published in 2002, Washington, D.C.: The National Academies Press.]

- 11) Komarov, A. A. (2004). Questions of protecting the urban infrastructure and the public from explosive technological terrorism and catastrophic explosions. Pp. 79-89 in Proceedings of a Scientific- Practical Conference. Moscow: Kombitell. Simmons, R. 2002. Terrorism: Explosives threat. Pp. 199-211 in High-Impact Terrorism: Proceedings of a Russian-American Workshop. Kirov, Russia: Vyatka. [Pp. 171-179 in the original English version by the same title, published in 2002, Washington, D.C.: The National Academies Press.

- 12) The use of two-sided models describing the terrorist and antiterrorist sides of a conflict is described in detail in Pate-Cornell, Probabilistic modelling of terrorist threats.

Chanchal Kumar (AF-01, Ph. D. - 06)

Chanchal Kumar is working as an Assistant Professor (AF) since 2001 in Department of Political Science, Janki Devi Memorial College, University of Delhi, India. She finished her Doctor of Philosophy (Ph.D.) in 2006 on “Indira Gandhi and Congress Socialism”. Her main research interests concern Global Politics, Indian Politic, South Asia, International Terrorism, Human Rights. She has written numerous chapters in books as well as articles in journals such as, “Manu on Social Law”, “Role of United Nations in Disarmament and Arms Control”, “Asian powers-China and India-Challenges, Issues, Policies in the 21st Century” (Published in IPPC, school of Public Policy, University College London, UK in 2010) “Terrorism: A threat to Regional Security in South Asia”(published in “SAARC-Building Bridges in the South Asian Region”, Foundation for Peace and Sustainable Development, New Delhi 2011), United Nations and Collective Security, “UN and Refugee Problem”.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. **Prospective authors of IISTE journals can find the submission instruction on the following page:**

<http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a fast manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

