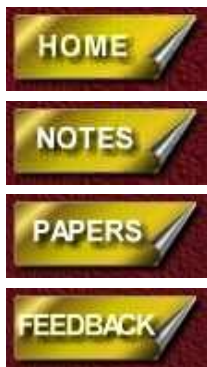




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## **Nuclear Terrorism:** *Potential threats in the post cold war world*

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The terrorist acts describing the use of weapons of mass destruction (WMD) in fiction and Hollywood movies now look near real. Potential threats of nuclear terrorism will continue to remain unpredictable in incidence, asymmetric in nature and multidimensional in scope. Today, different aspects associated with any possible future terrorist nuclear attack need timely attention to concerted fight against this menace.

Defence and deterrence have long been the dominant concern in defining the concepts relating to threat, use or management of force in international security environment. Events, adjunct to cold-war preparations, though noticed, but were ignored of actions or overlooked completely by the then superpowers for the reasons best known to them. Low intensity conflict, proxy war or the abetment to extremist activities by states or sub-national groups were well undertaken to keep the chances of high levels of confrontation to a tolerable low. The then beneficiaries that were nourished for otherwise unlawful operations during the cold war rivalries are now turning to become the most imminent source of threats in the post cold-war world order. The outlawed entities pose dangers not only to those who had turned a blind eye towards them in the cold-war hostile bipolar world era, but they also are increasingly changing the techniques, networking and quality in the nature of terrorist attacks. Over the last two decades the localized terrorist individuals and entities have assumed international character and so, the international connectivity and fallout.

In the meantime, the advent of nuclear empowerment to meet the energy and development needs of the humanity also traveled through several imperative changes. The desire to seek superlative security developments led the nations to acquire and develop nuclear weaponry. The notion of psychological attachment of nuclear capabilities with the concept of 'deterrence', the claimed legitimacy for states through legal means, would also have impacted the thinking of perpetrators of terror in general. Power that could be misutilised in nuclear acquisitions might have encouraged the mentality of the evil doers amongst the non-state actors and suspicious entities.

The post cold-war realities are being sufficiently reflected in the contemporary literature and government documentation on regional and international security. Most dangerous and real threats that commonly inter link in broadening the agenda of national security, are being elucidated from varying trends and scope of terrorism. Its interface with the potential use of nuclear explosions calls for appropriate reasoning, explanation, and resolution by the policymakers and the scholars of international relations.

Following enumeration does reflect the motivation and interest of the foul players that may turn into devastating results in future:

\* In an interview with to Al-Jazeera television channel, while supporting Pakistan's nuclear capability, Osama bin-Laden was quoted endorsing that he was actively looking to collect more nuclear weapons, besides chemical and biological arms.

\* Al-Fadl, in his testimony for the trial of Osama bin Laden and others for August 7, 1998 bomb attacks on US embassies, recollected that he was approached by one of bin Laden's men to help acquire uranium in 1993-94 from Khartoum, Sudan, through Moqadem Salah Abd al-Mobruk, a former lieutenant colonel in Sudanese army and a minister during the presidency of Numeiri (1969-83). Though Al-Fadl did not confirm the final sale of the bag, shown to him two-three feet cylinder containing uranium, he testified that one of the contact persons involved in the operation claimed to have had a machine from Kenya to test the quality of uranium.

\* In May 1998, ISI of Pakistan is said to have helped in establishing a plant at Taliban stronghold, Kandahar, for the production of chemical, biological and possibly radiological weapons. The key acquisitions were imported from Yugoslavia to Afghanistan via Pakistan.

\* By the year 1998 end, bin Laden is believed to have had access and reach to both the "loose" nukes and scientists at different sources in former Soviet Union republics. The acquired number of reported nuclear devices is said to be approximately twenty.

\* Reports reveal that Bosnian leader Radovan Karadzic had intended to obtain nuclear weapons way back in 1995.

\* Chechen Mafiosi and terrorist groups are said to have claim and access to "loose nukes" in the former Soviet regions. In exchange of money and drugs, involvement of Chechens in transfer of "suitcase bombs" remains suspected.

Till recent past, both the defence literature and intelligence have accounted numerous threatening propositions worldwide from terrorist outfits of using nuclear explosive devices or to blow nuclear facilities and power plants at regular intervals.

Despite big claims by terrorists themselves or unconfirmed alarming media and intelligence reports, the possible interest in and existence of nuclear capability with terrorist entities or non-state actors remain to be explored yet. Following threat scenarios can be discussed for the potential dimensions of nuclear terrorism:

\* The most apparent and preferred terrorist attacks may be of explosions at nuclear facilities and complexes. Contemplating the emerging patterns with variance of suicidal terrorist attacks, the outcome could be unthinkable in terms of loss of lives and property. The fuel-laden planes or explosives laden vehicles crashing into nuclear installations may result in a nuclear disaster. The objective of such attacks may not only be restricted to demolition of nuclear facilities, it may also be aimed for massive casualties as an aftermath of radioactive particles emitting from the affected site.

\* Even an ordinary suicide attack or a strong car-bomb explosion against the nuclear materials storage facility would translate into a devastating radiological dispersion weapon. The same kind of attacks could cause explosion at the transporting facilities of nuclear materials or equipment. Vulnerability due to such attacks at the nuclear power plants or facilities may expose the innocent population to unthinkable radiation hazards.

\* One other kind of threat that is extensively being related to expedient weapons like "dirty bomb" may have a paralysing effect due to radiation that poison the atmosphere. Such threats are credible in nature.

\* Illicit acquisition of radioactive waste materials is the main source of danger that may be used as 'dirty bombs'. Such bombs are prepared with conventional explosives and one of radioactive by-products as Cesium-137 (Ce-137). Ce-137 and exploded to spread hazardous gamma-ray radiations.

\* Pilferage of “suitcase bombs”, as suspected, from the arsenals of former Soviet Union remains a serious source of threat of nuclear terrorism. To detonate “suitcase bombs”, it requires certain scientific know-how of the configurations involved with the system. Unauthorised possessors may have such equipment but the capability to operationalise them may, at present and in future too, remain quite low.

\* Assuming the reported existence of nuclear explosive devices with the networks like Al-Qaida, plausible attacks could only be aircraft based. This by itself is only a remote possibility.

\* Development of either crude or sophisticated nuclear weapon requires necessary infrastructural facilities like technology, components and scientists. Non- state actors or terrorist entities could hardly have such facilities available. The probability remains low of having such tools and techniques available to possible wrong users unless supported by nuclear capable state or agency.

\* Ready-made nuclear warheads may possibly be whisked away by wrong hands during the transportation of equipment from the place of production to storage to deployment sites. Even the thieves or saboteurs can try to have access or to attack the nuclear components during their transportation.

### **The Challenges Ahead :**

Conceivable imminence of nuclear terrorism reminds the famous adage that one ounce of precaution is better than million tons of cure. The challenge, today, before the governments is how to prevent and resist the potential nuclear attacks. The major task ahead is to ensure the safety of state owned nuclear capabilities and to safeguard the nuclear materials. The physical safety of nuclear facilities should remain pivotal to nuclear development programmes of the country. The onus lies on the policymakers to adopt and devise essential mechanisms to reduce the risk of possible nuclear attacks. Policy prescriptions related to campaign against international terrorism must appropriately address to the issues that contain the perpetrators of potential nuclear terrorism.

Safety and security of nuclear power states including command and control are normally classified. Similar is the case with the movements of warheads and radioactive substances from one place to another inside the country. Therefore, to prevent the possible theft or sabotage of nuclear components, the state itself is primarily responsible to take suitable measures. In failing so, the particular government will not only increase vulnerability to insecurity of its own but will endanger others too.

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