



# VISION

VISIONARY INSIGHTS INTO THE STRATEGIC INQUESTS OF NATIONS

## SVI FORESIGHT

VOLUME 7, NUMBER 9

SEPTEMBER 2021

Compiled & Edited by:  
Zafar Iqbal Yousafzai

**Strategic Vision Institute**  
**Islamabad**

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**Strategic Vision Institute (SVI)**

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## **Strategic Vision Institute (SVI)**

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SVI aims to project strategic foresight on issues of national and international import through dispassionate, impartial, and independent research, analyses, and studies. The current spotlight of the SVI is on national security, regional and international peace and stability, strategic studies, nuclear non-proliferation, arms control, and strategic stability, nuclear safety, and security and energy studies.

## **SVI Foresight**

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*SVI Foresight* is a monthly electronic journal. It has a multi-disciplinary perspective highlighting contemporary strategic and security studies. The Journal is envisioned to be a collection of policy-oriented articles written by its Research Associates, Visiting Faculty, and professional experts. The objective is to provide the readership with a concise all-around and real-time policy-oriented discourse on contemporary strategic regional and international developments, highlighting their relevance to Pakistan.



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## Editor's Note

In the last couple of months, we have witnessed a number of terrorists attacks on our security forces in Balochistan, ex-FATA, and in some areas of KP. This deteriorating situation is quite worrisome and some analysts connect it with the changing situation in Afghanistan and some make a connection with activities our eastern neighbor conduct. Hence, there are a number of reasons why terrorism is not dying down in Pakistan. The first article of this Foresight discusses this subject in detail.

Moreover, since the fall of Kabul in mid-August, there is uncertainty about the future political set up on one hand and challenges of recognition on the other to the Taliban. Though the Taliban are constantly assuring the world about human and women rights, freedom of the press and a stable political setup yet the world is skeptical about the future in Afghanistan. Pakistan is one of the foremost concerned countries about the Afghanistan situation because of any instability in Afghanistan; Pakistan suffers being the next door neighbor. Pakistan and China are urging the world to engage with the Taliban for the sake of stability of Afghanistan and the region.

Another challenge Pakistan is facing is energy crisis. Hence, Pakistan has been making vital use of nuclear technology for the socio-economic development of the country and plans to further utilize it in order to attain the 'Sustainable Development Goals' (SDG's) of the United Nations. Keeping in view the Pakistan's commitment to its mandate "Atom for Peace and Development" and its efforts in promoting the peaceful use of nuclear technology, Pakistan has been elected as the member of Board of Governor of 'IAEA' for the year 2021-23. Likewise, nuclear safety and security is a national responsibility, hence it should religiously be adhered by all nuclear weapon states for maintaining international security. According to the 2020 Nuclear Index Report, India stands 20 out of 22 in maintaining the security of nuclear material, whereas Pakistan has been ranked in the report as the most improved country in maintaining the security of nuclear materials. Thus, Pakistan is committed to maintaining its nuclear security, in accordance with global security norms. The world should, therefore, focus on India's case for securing nuclear materials from reaching the non-state actors, or other potential states in building up their nuclear weapons.



In month of August, Indian authorities reported seizure of radioactive element californium. This is the third event of theft, smuggling and illicit sale of nuclear and radiological material in India in ongoing year. These developments are concerning because they not only indicate the existence of black-market in India but also shows the regressing nuclear security culture in India. Nuclear security culture is an important mechanism, which ensures the security of nuclear and radioactive materials. Nuclear security is not the job of single individual or institution but rather whole national regime is involved in the process, which includes the range of activities and processes including legislation, regulation, assessments, administrative tasks, intelligence gathering and response systems and capabilities.

The incidents of seizure reported in India this year are not the first time; previously such incidents have been reported in year 2003, 2008, 2009, 2013, 2016 and 2019. Moreover, to stop the Indian vertical nuclear proliferation, it is necessary that international community force India to put its unsafeguarded nuclear facilities under IAEA nuclear safeguard as it was supposed to do in response to get waiver by the NSG. It is reported that it is these unsafeguarded nuclear facilities in India are involved in the procurement of nuclear material and goods from other countries. The international silence on such incidents raise the question on the effectiveness of measures like nuclear security and safety and categorizes the issue as of realpolitik than of the rule and norm based activity.

Nuclear technology is a two edged sword, that present one of the greatest threat to human kinds and at the same time also promises great benefits. Therefore, it is necessary that state's right to utilize nuclear technology for peaceful purposes be facilitated by the international community. Pakistan is a developing country and despite being its limited resources it has acquired a nuclear program both for security and peaceful purposes. Today Pakistan is running an effective civilian nuclear program, with stringent nuclear safety and security regime for the safety and security of its nuclear and radiological materials and facilities. Pakistan is actively pursuing nuclear technology for the peaceful purposes in field of nuclear energy, health, agriculture bioscience, disease control and industrial uses. These all activities in Pakistan are carried with its commitment towards the goal of nuclear non-proliferation. For ensuring the safety and security of its nuclear program (civilian and military) Pakistan has established PNRA, 2001, it has ratified the Conventional on Physical Protection of Nuclear Material and Facilities

(CPPNM), is also following the NSAP in collaboration with IAEA, is a member of convention on early notification of nuclear accident, following resolution 1540, and adapting guidelines on Nuclear Security Summits. These, measures are enabling peaceful uses of nuclear energy in Pakistan which is return are facilitating the socio-economic development in Pakistan.

This volume of the *SVI Foresight* provides a very thought-provoking insight on diverse topics: Afghanistan's changing situation and its implications for the region and Pakistan, nuclear technology uses by Pakistan, safeguard mechanisms Pakistan follow, fifth generation warfare against Pakistan, and Nuclear black market and security culture in India.

It is hoped that readers will find a good blend of articles focusing on various aspects of the contemporary security discourse in South Asia. The *SVI Foresight* team invites and highly encourages contributions from the security and strategic community in the form of opinion-based short commentaries on contemporary political, security, and strategic issues. Any suggestions for further improvements are welcome at our [contact address](#). Please see [here](#) the copy of the *SVI Foresight* electronic journal. You can find us on [Facebook](#) and [Twitter](#) and can also access the SVI [website](#).

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## ***Terrorism in Pakistan not dying down***

***Asif Harron***

### **Surge in terrorism in Pakistan**

The upsurge in acts of terror in Waziristan and interior Baluchistan is not declining in spite of a radically changed environment in Afghanistan and installation of a fence along the western border. The recurring incidents have caused casualties to the security forces. On Aug 18, N/Sub Sonay Zia was martyred in South Waziristan (SW); on Aug 22, Capt Kashif embraced martyrdom after his jeep was hit by an IED; on Aug 27, one terrorist was killed in North Waziristan (NW); same day, one NCO was martyred in Lower Dir; on Aug 31, a Sepoy was martyred in Bajaur by terrorists firing from across the border; on Sept 07, two soldiers were martyred in IED explosion; on Sept 11, one terrorist was killed and 11 arrested in NW; on Aug 14, two terrorists were killed in NW.

In less than ten days four intelligence based operations were launched in SW and NW districts. These undesirable activities have taken place from across the border despite assurances given by the Afghan Taliban that Afghan soil will not be allowed for cross border terrorism. Some ways will have to be devised to avoid casualties of own security forces and to curtail attrition rate.

### **Preventive measures by the ISAF**

The US during its occupation of Afghanistan had taken steps to minimize casualties of ISAF troops. This included discontinuation of boots on ground strategy, introduction of pilotless drones, keeping engaged in peace talks with the Taliban and finally inking the Doha agreement on Feb 29, 2020 by virtue of which the Taliban refrained from striking foreign troops. The occupiers made maximum use of airpower and drones and avoided ground operations, thus saving lives of combatants. While the US commanders succeeded in minimizing war casualties, they failed to defeat their foes and had to pack up and return home.



## **Pakistan's counter terrorism**

In our case, security forces deployed in combat zones since 2003 have launched umpteen number of ground operations whenever actionable intelligence was received. The cordon, search and destroy operations exposed the troops to extreme danger from the faceless enemy hidden within the local population or in high mountains. Paid terrorists had the advantage of safe exit routes into Afghanistan. In the face-to-face firefight, the militants invariably chose their sites judiciously, providing them a good field of observation and a safe exit route. The security forces rushing towards the hideout pointed out by locals or intelligence agencies often got ambushed or their convoy got hit by IEDs planted along the roadside.

There was a time when the phenomenon of sudden night attacks by hundreds of militants encircling the isolated outposts was common. In some cases the surrounded posts didn't receive reinforcement or air support and often ran out of ammunition. Isolated check posts along the main roads were also vulnerable to attacks. Over a period of time, drills and SOPs were perfected to deal with sudden attacks, ambushes, suicide attacks and IEDs.

What is upsetting is that after having broken the back of terrorism and eliminating their safe havens and command structure, the terrorists based in Afghanistan are still drawing blood. In most clashes the ratio of deaths and injuries on both sides is almost equal and in some cases the terrorists have an upper hand. Current firefights are taking place in deeper hilly areas of Waziristan or the treacherous mountains of interior Baluchistan where the terrorists have an advantage of fighting from vantage points.

### **Bitter Realities**

We have to take into account certain bitter realities due to which terrorism is not dying down. These are penned hereunder:

- The people of former FATA were highly patriotic and had taken upon themselves to defend the western border.
- The CIA and FBI were allowed to establish outposts in FATA to net Al-Qaeda operatives, but they availed the opportunity to create space for the anti-Pakistan Tehreek-Taliban-Pakistan (TTP).
- The TTP, Lashkar-Islam, and half a dozen Baloch rebel groups were sponsored by CIA, RAW, NDS. After the incapacitation of these groups by the Pak security forces in 2009-

11 and again in 2014-16, these fractured groups were rejuvenated and regrouped by the sponsors and are still being funded.

- Although the Tehreek-Taliban-Afghanistan (TTA) and TTP had different agendas during the 20-year war, both being blood relatives and pursuing similar Islamic ideology, they are natural allies and not adversaries. Both had fought the Soviets jointly and people of FATA had welcomed the Afghan Taliban after they were ousted from power in 2001.
- While Pakistan had facilitated the capture of Afghanistan by the western forces in 2001, it became part of the US coalition to fight terrorism, took part in war on terror as the frontline state, and provided Shamsi base to CIA for drone attacks inside FATA, and two supply routes to NATO forces throughout the war.
- The tribesmen of FATA revolted only when Pakistan at the behest of the US sent regular troops to SW in violation of the 1948 agreement. Large number of military operations and drone war destroyed FATA and embittered the people.
- Drone attack on a religious seminary at Damodala (Bajaur) in Oct 2006 killing 80 teenaged students, incorrectly owed by Pakistan, followed by botched up operation against Lal Masjid in Islamabad in Jul 2007 triggered suicide attacks in urban centres.
- Peace deals brokered with the TTP leaders were sabotaged by the US.
- While the Afghan Taliban didn't target Pakistan, they looked the other way to the cross border terrorism of TTP launched from Kunar, Nuristan, Nangarhar, Paktia and Khost. All these areas were under the control of the former.
- Afghan refugee camps in Khyber Pakhtunkhwa and Baluchistan have become safe havens for the terrorists and a big security hazard.
- It was after the ghastly attack on a school in Peshawar on Dec 16, 2014 which impelled the policy makers to frame a comprehensive 20-point national action plan (NAP) and establish NACTA for the first time to deal with the menace of terrorism which by then had become an existential threat. Military courts were established to carry out speedy trials of the terrorists.
- 85% rural and urban terrorism died down; the rest didn't since all the terrorist groups from Swat, Bajaur, Mohmand, SW and NW fled to Afghanistan where they were provided safe havens and requisite facilities to regroup and renew acts of terrorism in Pakistan.



- Sleeping cells, facilitators and handlers remained operative in major cities for whom countrywide Operation Raddul Fasaad was launched in 2017. Absconding MQM leaders and rebellious Baloch Sardars were given refuge in the western capitals and patronized.
- Prongs of military-civil administration-judiciary required to stay in step to achieve tangible outcomes remained out of step. Resultantly, the whole burden of holding on to the recaptured areas, providing security to the locals, managing IDP camps and their resettlement, developing war-ravaged tribal belt and trial of hardened terrorists came upon the military.
- NAP has not been implemented in letter and spirit, NACTA has become dysfunctional, since the role of counterterrorism has been assigned to intelligence agencies.
- After recapturing power on Aug 15 this year, the Taliban released the hardened terrorists of TTP as well and have so far not put restrictions upon them and have no intention to hand them over to Pakistan.

The Taliban want Pakistan to emulate their example of forgiving the foes and have conveyed to Islamabad to pardon the fugitive TTP members. It is probably in this context that President Alvi and Foreign Minister Qureshi have hinted at granting general amnesty to them in case they agree to surrender, quit terrorism and their Islamic ideals of converting FATA into Islamic Emirate and join the mainstream.

### **Issues at hand**

- It is still to be seen whether the Taliban regime under Haibatullah Akhundzada which took oath on Sept 11 will fulfill their pledge to rein in the TTP.
- What if terrorism from Afghan soil continues unabated and what will be the options for Pakistan?
- The TTP backed by the Afghan Taliban would be the most dangerous hypothesis for Pakistan
- The idea of granting general amnesty to the TTP members is a touchy subject since the families of victims of TTP terrorism may not accept this magnanimity of the ruling regime. It is also to be seen whether the TTP accepts Pakistan's demand of giving up terrorism and pledging loyalty to the state.
- There are some hawkish elements within the ruling cabal in Kabul which want to settle scores with Pakistan for its betrayals.



- Given the economic crunch and financial and food crises, would the Taliban live up to the expectations of the international community and succeed in restoring semblance of order and much needed stability through better governance?
- Stability in Afghanistan will depend a lot upon the attitude of the USA, which unlike the Taliban has not forgiven the Taliban and is recoiling to take revenge for its humiliation.

### **Changed coercive tactics of the US**

After its narrative of chaos, bloodshed, civil war and refugee exodus backfired since nothing of the sort happened in the areas captured by the Taliban in May-July 2021, and after they took control of Kabul on August 15, emphasis of the US shifted to the formation of a broad-based inclusive government, human and women rights and threat of Daesh-Kurdistan (K). Failing to defeat and subdue the Taliban on the battlefield, the US and its allies are now exerting economic pressure on the fledgling regime in Kabul faced with financial and food crises. War of economics has been launched.

Before departing, vast military equipment in the largest Bagram airbase was destroyed, Kabul airport which remained in the control of the US Marines till Aug 31 was made non-operational. Afghanistan's \$ 9.5 billion in the US banks was frozen, foreign exchange reserves in the central bank in Kabul stolen, and the flow of IMF and World Bank funds suspended. A malicious propaganda campaign has been unleashed to debase the Taliban. Fake stories of rapes, killings and women rights violations are in circulation with a view to undermine the humanitarian program of the Taliban. The world is being fed with the idea that there is no change in the new Taliban and they are as ruthless and irreconcilable as the old Taliban of the 1990s.

Drama of Kabul airport was enacted to create mayhem in Kabul and to show to the world that the Afghans hated uncivilized Taliban. Five Afghans died trying to board the flight.

A suicide bomber of Daesh-K was used to bomb Kabul airport on Aug 25, which took lives of 175 Afghans and 13 US Marines. It provided an excuse to the US to drone two so-called havens of terrorists on Aug 26 and 29 in which innocent civilians died.

The CIA-RAW created Daesh-K has been activated and it has started its terror activities in various cities of Afghanistan. After propagating that Pak Army troops had militarily supported the Taliban offensive, Panjshir has now been made into an issue. The last stronghold which the

Indo-US joined by Tajikistan wanted to exploit was seized by the Taliban on Sept 6. Indo-western media joined by Iran is wrongly blaming Pakistan Army and air force for helping the Taliban in capturing Panjshir. So-called war in Panjshir is being fought in the media only.

The Afghan interim set-up is Taliban heavy with two portfolios given to a Tajik and an Uzbek, both affiliated with the Taliban. It is unacceptable to the US. Although more Tajiks and Uzbeks along with the Hazaras are likely to be inducted for which Pakistan has promised to make an effort, it will not please the US and India. They want people like Hamid Karzai, Dr. Abdullah, Rashid Dostum, Amrullah Saleh and Ahmed Masoud to be given prized appointments. Recognition of the new regime in Kabul and assistance by the international community has been made conditional to acceptance of the US demands.

### **Conclusion**

Terrorism in Af-Pak region will not die down as long as the terrorists receive funds and weapons from intelligence agencies of war mongering countries. Both Afghanistan under the Taliban and Pakistan are likely to remain in the grip of pulls and pressures of Indo-western machinations. Hosting and chairing of a security conference of intelligence chiefs of seven regional countries (Russia, China, Iran, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan) by the DG ISI Lt Gen Faiz Hamid on Sept 11 to take stock of the evolving security threats due to fluid situation in Afghanistan and to take collective measures to counter the emerging threats was thoughtful and a very wise initiative. Space for the spoilers of peace must be shrunk and expanded for the peacemakers by the immediate neighbors of Afghanistan and the regional countries.

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## ***Taliban regime: challenges ahead***

*Zafar Iqbal Yousafzai*

Since the fall of Kabul in mid-August, there is uncertainty about the future political set up on one hand and challenges of recognition on the other to the Taliban. Though the Taliban are constantly assuring the world about human and women rights, freedom of the press and a stable political setup yet the world is skeptical about the future in Afghanistan. The U.S. has frozen Afghanistan's \$ 9.5 billion assets and IMF and European Union halted any kind of financial or humanitarian assistance to the Taliban regime.

Similarly, the Taliban facing recognition issue without which bringing enduring stability to Afghanistan would be quite difficult. Hence, in such a situation, Afghanistan faces two-front challenges: internal and external. If the Taliban regime could not control the situation, there could be instability in Afghanistan and that will definitely affect the region and neighborhood. This article aims to look at the Taliban's internal and external challenges and how it could affect the region and neighboring states especially Pakistan.

The new interim government formed by the Taliban is not inclusive as the world was expecting. The main political leaders of the main political parties and ethnic groups i.e., Karzai, Abdullah Abdullah, Gulbadin Hikmatyar, or any other ethnic group's leader is not included. This situation is quite concerning which could have a negative impact on the future setup. Afghanistan is a multi-ethnic society where a broad-based government is quite essential for a stable system. Likewise, ISKP is another challenge for the Taliban who have twice launched attacks inside Kabul following the Taliban's takeover. It is pertinent to mention ISK has been constantly launching attacks in Afghanistan especially Kabul while targeting civilians and even school children. Though apparently, ISKP cannot challenge the Taliban regime, yet it can create issues on small scale to disturb the new setup.

Similarly, there is a 'consensus' issue to the Taliban among their ranks. The current issues between mullah Biradar and Mullah Yaqub, the son of Mullah Umar have surfaced. Many were expecting Mullah Biradar, Taliban's co-founder, as the Prime Minister yet he was made deputy. Likewise, for the last few days, his absence from the scene was also questionable for many. Many rumors were there following which he had to issue an audio statement that he was alive. Hence, the division among the ranks of the Taliban could also trigger which can harm their



future plans. Moreover, the economy is one of the biggest challenges to the Taliban. Though some countries are helping them out in form of humanitarian aid it would not work and they would need any permanent solution to the issue. China, Pakistan, Qatar, and UAE have sent humanitarian aid so far. On September 13, the U.S. announced humanitarian aid of \$64 million to Afghanistan that will be delivered through independent organizations, NGOs, and UN agencies.

However, the Taliban and the Afghanistan Central Bank officials want the frozen assets to be released by the U.S. If there is not enough aid to the new regime from the outside world, it would be quite difficult for them to sustain. However, they are looking towards china which can fill the aid gap the U.S. has left. However, that is not certain right now; only indications are there about it. Furthermore, in addition to internal challenges, the Taliban regime is facing external challenges as well. The most crucial challenge is recognition of the Taliban regime for which they have been paving the way since the Doha process. They were constantly engaged with the regional and global powers to ensure they could rule the country and will form a balanced government followed by balanced policies where there could be no threat to any country from Afghanistan. In their previous rule: 1996-2001, only three states had extended recognition to them—Saudi Arabia, Pakistan, and the UAE.

However, the circumstances are quite different now where these three countries would not be able to extend recognition to the Taliban at an earlier stage. On September 13, the U.S. Secretary of State, Antony Blinken issued a statement we are reassessing our relations with Islamabad and Pakistan should deny legitimacy to the Taliban unless they fulfill international demands. “So, Pakistan needs to line up with a broad majority of the international community in working toward those ends and in upholding those expectations,” Blinken added. The western bloc has two major concerns they want the Taliban to fulfill—respect of women and fundamental rights and denying Afghanistan soil to be used by terrorists.

The Taliban are reassuring the world about these concerns; however, some reports keep coming out where journalists have been targeted. If the Taliban make an inclusive and broad-based government and respect the fundamental rights, there could no issue in recognizing them. Even the west would think about their recognition. And in such a situation, they should not be left in the lurch where the Afghan economy is deep down towards collapse. All regional

countries including Pakistan are concerned about Afghanistan. Being the next-door neighbor, Pakistan has been the key stakeholder in Afghanistan. Islamabad has been trying to persuade the world to engage with the Taliban and help them out at this critical juncture. Earlier this month, Pakistani Foreign Minister Shah Mehmood Qureshi told his British counterpart in Islamabad: Taliban is a new reality in Kabul—a statement pushing for engaging with the Taliban. Pakistan fears if there is further instability in Afghanistan, it could have severe implications for Pakistan.

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<http://southasiajournal.net/taliban-regime-challenges-ahead/>

## ***Evolving Situation in Afghanistan: Eliminating Myths about Safety and Security of Pakistan’s Nuclear Weapons***

*Amber Afreen Abid*

Pakistan accords utmost importance to its nuclear safety and security and considers it a national responsibility. The nuclear security demands the cautiousness, constant vigilance, preparedness and continuous improvement against the evolving threats. Thus, the utmost importance is being given to the safety and security of nuclear weapons. However, it still becomes a center of critics by some international entities whenever there is any kind of distress in the regional strategic affairs. In order to keep up with the emerging challenges and threats, the nuclear security regime of Pakistan continually reviews its policy as a national obligation. Over the time, a robust nuclear structure is formed which strengthens the nuclear security regime.

The former NSA of US, John Bolton, in his opinion editorial in Washington Post opined that the inability of Pakistan and its armed forces would result in the abdication of state and thus the nuclear weapons, which is really absurd and should contemptuously be dismissed. It is here to remind him, that it’s the same Pakistan army which has fought successfully against the terrorists and state-sponsored terrorism on its land—thus against all the internal and external threats. The defeat of US in Afghanistan doesn’t mean Taliban or any other such group will take over Pakistan. Pakistan army, keeping in view the threats from India, Afghanistan and internal threats, has carefully designed its security policy.



Bolton has also shown some concerns regarding the command and control of nuclear weapons and some of its part falling into the hands of terrorists. The security of Pakistan's nuclear arsenals has always been admired by the US top officials as well, since decades and they have said it consistently that the nuclear assets of Pakistan are secure and the training and physical protection are sufficient and improving. Pakistan has developed an effective command and control system, which is at par with the international standards and guidelines. There is an extensive legislative and regulatory framework, comprising of numerous institutions underneath, and regulates the security of radioactive substances and nuclear materials, and its associated activities.

Pakistan has also ratified to Convention on Physical Protection of Nuclear Material (CPPNM), Convention on Nuclear Security (CNS) and UN Resolution 1540. Pakistan is proactively fulfilling its obligations under these international instruments. Moreover, Pakistan is also an active member of various IAEA committees, commissions and other related forums. Thus Pakistan excessively contributes and adheres to the global safety and security of nuclear weapons. Pakistan is responsible nuclear weapon state, and is fully capable of responding to the entire spectrum of challenges, whenever encountered with. So, the former NSA John Bolton's illogical argument about Pakistan's nuclear weapons falling into the hands of terrorists is ruled out completely. Even the safety of Pakistan's nuclear weapons is acknowledged by a credible international agency-IAEA.

In Afghanistan's evolving scenario, the US and its other allies should be thankful to Pakistan for the role it has played in the evacuation process. Such illogical comments on a state that is and has always been there in the past against the instability in Afghanistan should be gracefully acknowledged for its efforts. As far as the nuclear safety and security is concerned, that is utterly in the safe hands, and these bizarre voices should pay heed to the Indian side, where Uranium is on 'sale', which shows the effective black market in India, of Uranium sale and purchase. India, has failed to maintain the nuclear security due to poor regulatory and law enforcement structure. The theft of nuclear material has to be essentially reported to the IAEA's incident and trafficking database, for improving the nuclear security standards.

But in this case, India might have not reported, as no concern by the international community is shown in this regard, which is actually alarming. Nuclear safety and security is a



national responsibility, hence it should religiously be adhered by all nuclear weapon states for maintaining international security. According to the 2020 Nuclear Index Report, India stands 20 out of 22 in maintaining the security of nuclear material, whereas Pakistan has been ranked in the report as the most improved country in maintaining the security of nuclear materials. Thus, Pakistan is committed to maintaining its nuclear security, in accordance with global security norms. The world should, therefore, focus on India's case for securing nuclear materials from reaching the non-state actors, or other potential states in building up their nuclear weapons.

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<https://thefrontierpost.com/evolving-situation-in-afghanistan-eliminating-myths-about-safety-and-security-of-pakistans-nuclear-weapons/>

## ***India's fifth generation warfare against Pakistan***

*Sher Bano*

5th generation warfare or hybrid warfare could be defined as a new advancement in the modern warfare where cultural war gains or information are considered more important than use of hard power in battle field during 3rd or 4th generation warfare. But India is using 5th generation warfare against Pakistan to germinate seeds of hate and spread false propaganda in order to hamper Pakistan's road towards prosperity. In its attempt to destabilize some domains in Pakistan, India has been using all elements of its national power. As per the statement by DG ISPR, in order to thwart this two pronged conspiracy of Indian state, Pakistan army has been fully prepared.

As its attempt to destabilize Pakistan, India has been targeting certain domains in Pakistan such as information systems, international image, economy and armed forces. Hybrid warfare includes the mix of both kinetic and non-kinetic options to be used against a state in order to attain their strategic interests. Hybrid tactics includes the use of various tools such as disinformation, misinformation and support of proxy militias, cyber-attacks, law fare and propaganda. The report by the EU DisinfoLab last year is the recent example where India's disinformation campaign against Pakistan was exposed. The objective of the campaign was to influence the international bodies such as European Parliament and UNHRC 'United Nations

Human Rights Council' against Pakistan by spreading false information through the fake news media network to real media houses and news channels. It also revealed the employment of nearly 10 ghost NGO's and 15 fake media outlets by the Indian based Srivastav Group. Such revelations by the EU DisinfoLab revealed that India is not completely victorious in its hybrid war against Pakistan.

India has also been making several attempts in order to sabotage the "CPEC" (Pakistan China Economic Corridor) project. India is fully aware that CPEC is going to be the game changer in the region as it offers connectivity to the whole region that will make Pakistan a connectivity hub. Therefore India has been making several attempts such as increased terrorist activities around the CPEC to halt the project. DG ISPR also pointed out various security threats around the project by stating that 'India is trying to target Pakistan's international image by using terrorist activities around the CPEC'. But, due to the timely measures taken by the Pakistan army, India's attempts to retard the project have been in vain. Similarly it was the result of Indian lobbying in the "FATF" (Financial Action Task Force) that Pakistan was added in the grey list. India successfully politicized the FATF by using its bilateral relations and as a result Pakistan was included in grey list even under the caretaker government. The FATF otherwise would have waited for the elections before discussing the roadmap with the new government of Pakistan. This makes it quite evident how India is deftly playing its game against Pakistan from all fronts. Moreover, Pakistan has always tried to resolve the issue of Jammu and Kashmir through bilateral talks but India always comes up with its false narrative of terrorism due to which the talks could not happen.

The best way for Pakistan to counter the disinformation campaign of India is transparency. The best way is to spread the credible information and not to leaving any information void. There is a need to truly understand the nature of hybrid war unleashed against Pakistan by developing integrated organizational structures and foster a synergic and cohesive response. There is a need to adapt offensive and defensive posture vis-à-vis India's hybrid warfare and also make the immune system (social contract between citizens and state) of country resilient and strong. Across the entire political spectrum, there is a need to build a common understanding regarding threat and response. It is necessary that through creative approaches in information and diplomacy the real face of India be continuously revealed to the whole world. Expand the capacity of Pakistani media by providing them considerable resources to counter the



negative propaganda being spread by the India. There is a need to develop credible clusters in the society that could be trusted for credible source of information. More counter-intelligence operations must be conducted in order to expose Indian actions as exposed by EU DisinfoLab.

With the emerging complex and volatile strategic environment within South Asia, specifically India's 5th generation warfare against Pakistan, it has also become necessary for Pakistan to modernize its weapon systems and armed forces. But undoubtedly to project Pakistan's narrative on the both international and national front, the information domain has become very significant. The 5th generation warfare is a double edged sword that needs to be tackled by forming a well calibrated national response that is backed with well-defined foreign policy.

<https://www.eurasiareview.com/17092021-indias-5th-generation-warfare-against-pakistan-oped/>

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## ***Regressing Nuclear Security Culture in India: Increasing Incidents of Nuclear and Radiological Theft***

***Ahyousha Khan***

In month of August, Indian authorities reported seizure of radioactive element californium. This is the third event of theft, smuggling and illicit sale of nuclear and radiological material in India in ongoing year. First event of seizure was reported in month of May, where over 7 kg of uranium was seized from an individual and second such incident was reported in month of June, where over 6 kg of uranium was seized. These developments are concerning because they not only indicate the existence of black-market in India but also shows the regressing nuclear security culture in India.

Nuclear security is not just referred to the security of nuclear weapons and facilities but it also refers to the prevention, detection and response to activities like theft, sabotage, unauthorized access, illegal transfer of nuclear and "other radioactive substances". International organizations like IAEA are only responsible for coordinating with member states to enhance their emergency response and preparedness, and ensuring the adherence of member states to any

relevant international mechanism. It is actually the states on which the responsibility to protect nuclear and radiological materials and facilities befalls. In this regard nuclear security culture is an important mechanism, which ensures the security of nuclear and radioactive materials. Nuclear security is not the job of single individual or institution but rather whole national regime is involved in the process, which includes the range of activities and processes including legislation, regulation, assessments, administrative tasks, intelligence gathering and response systems and capabilities. These all elements come together in formulating a strong nuclear security culture in any country, which in case of India unfortunately is withering.

The incidents of seizure reported in India this year are not the first time; previously such incidents have been reported in year 2003, 2008, 2009, 2013, 2016 and 2019. Moreover, from year 1995-1998, Indian authorities reported 147 nuclear security related mishaps out of which 28 were of major consequences. Other than the incidents of nuclear theft and smuggling, Indian state and its private contractors are also involved in the illicit procurement of the nuclear materials for its unsafeguarded nuclear facilities. Beside the issues of theft, smuggling and illicit procurement of nuclear materials by India for its nuclear weapon program another concerning issue regarding Indian nuclear safety and security is the poor regulatory measures which allows the construction of sub-standards nuclear plants and exposure to radioactive materials. Many studies in India on the poor regulatory and safety measures regarding nuclear and radioactive materials have been conducted. However, rather than improving its security cultures all these claims are buried by India and local population in suffering the hazardous effects of this criminal negligence.

These developments reflect that Indian nuclear security culture as whole is regressing and withering. Recently, amid the ongoing wave of smuggling of nuclear and radiological materials, India has decided to install the radiation detection equipment at its eight integrated check posts. Although, this is good initiative in an overall attempt to stop proliferation but the focus should have been more on improving the entire security culture of the India, which could include the more stringent security and regulatory measures around its nuclear and radiological facilities and materials. In short, if one is to go by the definition of nuclear security it can be said that these incidents show that India failed in prevention and detection of theft and illicit transfer of nuclear and radiological materials.



Moreover, to stop the Indian vertical nuclear proliferation, it is necessary that international community force India to put its unsafeguarded nuclear facilities under IAEA nuclear safeguard as it was supposed to do in response to get waiver by the NSG. It is reported that it is these unsafeguarded nuclear facilities in India are involved in the procurement of nuclear material and goods from other countries. Though, international community, especially US and its allies consider the India as an important piece against China, but it is important that such incidents should not be ignored for the sake of transparency in international non-proliferation regime. As the international silence on such incidents raise the question on the effectiveness of measures like nuclear security and safety and categorizes the issue as of realpolitik than of the rule and norm based activity. Moreover, such casual attitude towards India's lack of adherence will encourage other actors to consider the possibility of illicit procurement.

Takeaway from this situation is that India is failing in adopting international mechanisms and practices for the security of its nuclear and radioactive materials and facilities. Due to the presence of natural reserves in India, illicit procurement, smuggling and black-market is exponentially growing in India. Last but not the least international community is criminally silent on this depleting condition of nuclear security culture in India, where its individuals, mechanisms and institutions are continuously failing in effectively adopting the nuclear safety and security measures.

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<https://www.eurasiareview.com/17092021-regressing-nuclear-security-culture-in-india-increasing-incidents-of-nuclear-and-radiological-theft-oped/> .

## ***Uses of peaceful nuclear technology: China-Pakistan collaboration***

*Zafar Iqbal Yousafzai*

The Pakistan is facing an immense energy crisis for quite a long-time. According to a World Bank report, electricity shortage is a bigger obstacle to business as compared to corruption. To fulfill or at least shorten its energy shortage, Pakistan and China are collaborating closely. Some states like India have been questioning Pakistan's nuclear cooperation for peaceful

purposes however; all the business related to nuclear is according to the IAEA regulations and safety mechanism. This article looks at China-Pakistan's cooperation in the peaceful nuclear energy sector and how they taking care of the obligations of the IAEA and other nuclear regulatory agencies.

Peaceful use of nuclear technology has significantly increased in modern times where other sources are expensive as well as environmental pollution. Nuclear technology is significant in a number of fields: agriculture, energy production, medical, pharmaceuticals, scientific research, and industries. Nuclear technology is not only economic but environment friendly as well. Hence, Pakistan has been looking to seek collaboration in the nuclear energy sector under the non-proliferation regulations. Being a close ally, Pakistan is actively engaged with China for collaboration in the nuclear energy sector for peaceful uses. China has been assisting Pakistan in developing nuclear power plants to provide for Pakistan's nuclear energy requirements in addition to improvements in a number of sectors i.e., food processing and agriculture.

However, Pakistan's supply and demand gaps are a serious issue at the moment which is on the top priority of the bilateral cooperation to overcome. The nuclear cooperation demonstrates strong progressive ties between Beijing and Islamabad. On September 8, 2021, China and Pakistan inked a nuclear deal aiming at nuclear energy cooperation. The agreement valid for ten years was signed between Pakistan Atomic Energy Commission and China Zhongyuan Engineering Cooperation. Moreover, the agreement includes Uranium processing, nuclear fuel supply, transfer of nuclear technology and establishing reactors. The main aim of the agreement is comprehensive nuclear cooperation to construct and maintain nuclear power projects in Pakistan.

Earlier, China has constructed a number of nuclear projects in Pakistan. A brief detail of Chashma Nuclear Power Complex (CHASHMA) and Karachi Nuclear Power Complex (KANUPP) is given below: CHASHMA I was the second unit constructed by China in Pakistan in 2000 under the complete guidelines of the International Atomic Energy Agency (IAEA) protocols. . Its capacity is 300 megawatts. The life of the plant is forty years. Later on, with the Chinese funding, Pakistan upgraded CHASHMA I in 2005 and named it CHASHMA II. This project too was under the guidelines of the IAEA. Likewise, the government of Pakistan in



March 2010 agreed with the Chinese company for CHASHMA units 3 and 4. China provided 82 percent of the whole cost of the project. This plant life is also forty years.

Moreover, the PAEC (Pakistan Atomic Energy Commission) in February 2013 entered into an agreement with the CNNC (Chinese National Nuclear Corporation) in November 2010. The Chinese Government constructed and developed the fifth power plant of the CHASHMA nuclear complex. The power capability of this unit is 1000 MW. Similarly, Karachi Nuclear power Complex was another nuclear cooperation between Beijing and Islamabad. KANUPP-1 and KANUPP-2, 3, and 4 are the civilian nuclear power plants that produce 1,000 MW of electricity in Karachi, Sindh. This nuclear complex is under the protection and inspection of the IAEA. The construction plant was under the PAEC, and it was funded by the International Atomic Energy Agency, China National Nuclear Corporation, the China Atomic Energy Authority, and China's Guangdong Nuclear Power Group.

Hence, China-Pakistan's nuclear cooperation for decades is a sign of their deep friendship and trust. It is pertinent to mention all the agreements between both the countries and projects are according to the IAEA protocols and principles. Pakistan needs further nuclear agreements for the peaceful production of energy to cater the growing needs of the energy sector in the country.

<http://southasiajournal.net/use-of-peaceful-nuclear-technology-china-pakistan-collaboration/>

## ***Pakistan's Peaceful Uses of Nuclear Technology and Commitment towards Non-Proliferation***

***Ahyousah Khan***

Nuclear technology is a two edged sword, that present one of the greatest threat to human kinds and at the same time also promises great benefits. Therefore, it is necessary that state's right to utilize nuclear technology for peaceful purposes be facilitated by the international community. As, peaceful utilization of nuclear technology can help addressing many challenges, such as food security, health, environmental protection, climate change and need for sustainable source of energy. International bodies such as IAEA were established with an aim to facilitate the peaceful use of nuclear technology.

To support the objective of non-proliferation, IAEA also ensures the setting and application of standard verification procedure require for the use and transfer of nuclear technology only for peaceful purposes. Despite many benefits of nuclear technology, the technology is secretly guarded commodity by the developed world on the basis of fear of its spread to obtain nuclear weapons and also mainly because of the reason of real-politick. Pakistan is a developing country and despite being its limited resources it has acquired a nuclear program both for security and peaceful purposes.

Pakistan initiated its nuclear program for harvesting nuclear technology for the peaceful purposes, but after the imminent security threat and wars with India, in response to India's nuclear program, to maintain its security Pakistan acquired nuclear weapons for the purpose of nuclear deterrence vis-à-vis India. Today, Pakistan is actively pursuing nuclear technology for the peaceful purposes in field of nuclear energy, health, agriculture and environment. But unfortunately, the focus always remains on Pakistan's nuclear program for military purposes. However, today Pakistan is running an effective civilian nuclear program, with stringent nuclear safety and security regime for the safety and security of its nuclear and radiological materials and facilities. Today in field of bioscience, disease control, industrial uses, medicine and energy the program is utilized in Pakistan exponentially.

In 1952 Pakistan established Pakistan Atomic Energy Commission for peaceful uses of nuclear technology in country. Pakistan is a country that previously heavily relies on thermal sources of energy production, which lack sustainability put Pakistan in severe energy crisis for many years. But today, Pakistan is rapidly adopting the sustainable sources of energy production and nuclear technology is one of them. Pakistan current capacity of energy production through nuclear technology is 2332 MWe, moreover, 1100 MWe are under construction. This makes contribution of nuclear energy in Pakistan's total energy mix at 6% which will increase up to 12 % after the operationalization of its K-3 Nuclear power plant. Considering its growing need for energy PAEC is working on 20 years plan where it is expected that Pakistan nuclear energy target will of 8800 MWe by 2030 and 40,000 MWe by 2040.

To achieve the UN sustainable development goal (SDG) of elimination of hunger and malnutrition, Pakistan is utilizing irradiation technique to enhance the shelf life and quality of foods. PAEC is also working on techniques of food fortification, which will help in maintain



nutritional value in food, in this regard 115 new varieties of crops which have better resistance and yield are created. In field of medicine, for the treatment and diagnosis of cancer Pakistan has established 19 hospitals which are utilizing nuclear technology. Pakistan is also actively engaged with IAEA for adapting the measures, procedures and regulations that enable the safe and secure use of nuclear technology. Therefore, Pakistan due to its credentials and commitment towards the goals of “Atom for peace” Pakistan has also been elected as the member of IAEA BoG for the year 2021-23. It is not the first time that Pakistan has been elected on this post previously Pakistan has been elected as member of BoG for almost 20 times.

These all activities in Pakistan are carried with its commitment towards the goal of nuclear non-proliferation. Pakistan’s non-proliferation activities are over-arching and not only cover its military program but also civilian program. In all these years where Pakistan was many threats not a single incident of nuclear theft or sabotage has been reported in a country. Pakistan is commitment towards the goal of responsibility and restraint with regards to its nuclear civilian and military program. For ensuring the safety and security of its nuclear program (civilian and military) Pakistan has established PNRA, 2001, it has ratified the Convention on Physical Protection of Nuclear Material and Facilities (CPPNM), is also following the NSAP in collaboration with IAEA, is a member of convention on early notification of nuclear accident, following resolution 1540, and adapting guidelines on Nuclear Security Summits. These all guidelines have ensured the safe and secure activities related utilization of nuclear material for not only military but also peaceful purposes in Pakistan. Furthermore, the measures are enabling peaceful uses of nuclear energy in Pakistan which is return are facilitating the socio-economic development in Pakistan.

<http://southasiajournal.net/pakistans-peaceful-uses-of-nuclear-technology-and-commitment-towards-non-proliferation/>

## ***Pakistan’s peaceful application of nuclear technology***

***Sher Bano***

Pakistan has been making vital use of nuclear technology for the socio-economic development of the country and plans to further utilize it in order to attain the ‘Sustainable Development Goals’ (SDG’s) of the United Nations. Nuclear Technology is being utilized in various areas such as health, hydrology, agriculture, industry, electricity generation, basic

sciences and environment. Pakistan also stands ready to increase its cooperation with other countries and help develop their capacity in peaceful utilization of nuclear technology.

In the recent visit of Pakistan's delegation to the 65th General Conference of the International Atomic Energy Commission "IAEA", Chairman PAEC Mr. Muhammad Naeem apprised the Director General about Pakistan's recent accomplishments in using nuclear technology for peaceful purposes in diverse fields of health, agriculture, and industry and power generation. Pakistan could not have achieved this without its mutual beneficial cooperation with IAEA in the past years. Director General Grossi also lauded the financial support provided by the Pakistan to ReNuAL 2 project of the Agency for modernization of IAEA's nuclear application laboratories located in Seibersdorf, Austria. He also suggested the collaboration between "PCEANS" (Pakistan's Centre of Excellence in Nuclear Security) and IAEA's planned Nuclear Security Training and Demonstration Centre at Seibersdorf. Director General Grossi and Chairman PAEC both agreed that this impeccable collaboration should continue to grow.

Keeping in view the Pakistan's commitment to its mandate "Atom for Peace and Development" and its efforts in promoting the peaceful use of nuclear technology, Pakistan has been elected as the member of Board of Governor of 'IAEA' for the year 2021-23. In past Pakistan has been elected 20 times as member of Board of Governors and has been playing an important role in formation of programs and policies of the agency. In the year 2017 under the set out of the UN 195 states agreed to achieve SDGs by the year 2030. In order to achieve these goals, Pakistan has made vital use of its nuclear technology. Pakistan realized that by using innovative technologies and by involving scientific communities, the SDGs can be achieved more easily. Pakistan having expertise in utilizing nuclear energy for peaceful purposes has achieved 9 out of total 17 SDGs given by the UN which includes provision of good food, eradicating malnutrition and hunger, sanitation facilities, access to clean water, providing clean energy resources, mitigation of climate change, improve industry infrastructure, sustaining life on land and below water and to increase cooperation with other countries to achieve SDGs.

In the Agriculture sector there are three institutes that are working under PAEC for the production of better high-yielding crop varieties. With the use of nuclear technology they have produced 115 new varieties of cash crops through radiation mutation. In order to meet the future requirements, Pakistan is also producing the mutant varieties that are rich in zinc and iron micronutrients. In order to further increase the perishable food items shelf life, the commercial irradiation facility is working at Lahore. Similarly health sector is also an important part of



SDGs. Pakistan has been using nuclear techniques for the treatment of disease such as cancer by using radiation oncology, nuclear medicines and radiation treatment. There are 30 facilities currently working in Pakistan for the treatment of cancer and 10 among these are either treatment facilities or diagnostic centers. Pakistan aims to double the number of these nuclear facilities in the near future. Currently these facilities are catering nearly 1,450,000 patients yearly.

Nuclear technology is also being used for the diagnosis of tuberculosis, cardiovascular disease and other fatal diseases. Thirdly production of the sufficient energy at low cost without the emission of greenhouse gases is very significant part of SDG. Nuclear energy being the clean and uninterrupted source of energy has played a vital role in meeting the increasing energy demand. Pakistan has ended its decade long energy crisis by planting various nuclear power plants. Currently 6% of the energy mix of Pakistan is being produced by 5 nuclear power plants that are expected to increase to 12 % this year after the operationalization of K-3 in Karachi. Moreover Pakistan Atomic Energy has presented a 40 year plan to the government of Pakistan to achieve the target of 8800 MW by the 2030 and 40,000 MW by 2048. Nuclear technology is also being used in order to increase and sustain industrial growth. As indicated by the SDGs nuclear technology is using X-ray technique that is non-destructive for the quality test of various products.

Pakistan has successfully utilized the nuclear technology for the achievement of these sustainable development goals. Pakistan through its cooperation with IAEA aims to continue making progress at these fronts to achieve its SDGs by the year 2030.

<https://www.eurasiareview.com/30092021-pakistans-peaceful-application-of-nuclear-technology-oped/>

## ***Achieving Socio-Economic Development through Peaceful Uses of Nuclear Technology***

***Amber Afreen Abid***

The civil nuclear program comprised the major part of the nuclear program of Pakistan. Pakistan has always been cognizant of the use and benefits of nuclear technology in civil sector. The use of nuclear technology for civil purposes entails the use in medicine, utilization in

energy, agriculture or dealing with the climate change. It is contributing in various aspects, for the welfare of people, and ultimately in achieving the sustainable development goals.

Pakistan Atomic Energy Commission (PAEC) was established in 1956, with the primary aim to utilize peaceful uses of nuclear energy in various civil sectors of Pakistan. In 1970s, the first ever nuclear power plant was established by PAEC in Karachi- named as KANNUP, with the generation capacity of 135 MWe; it was also the first nuclear power plant in the underdeveloped or developing world. It was further followed by KANNU-II, and KANNUP-III, besides four nuclear power plants Chashma- CHASNUPP-I, CHASNUPP-II, CHASNUPP-III, and CHASNUPP-IV. Other power plants at Chashma and Muzaffargarh are under consideration to be built by PAEC. PAEC has the target of achieving the nuclear energy generation of about 8800 MW, by 2030. This plan was given under the Energy Security Plan of 2005. The completion of the K-2 and K-3 projects will bring Pakistan closer to achieving its stated target.

The changing Climatic condition of the world can also be somehow controlled by the use of nuclear energy, and is thus one of the major drivers towards pursuance and utilization of peaceful nuclear energy by Pakistan. The nuclear energy is the comparative environmental friendly and clean alternative, and thus its utilization would be a great step towards the attainment of energy requirements of Pakistan.

In the field of Agriculture, Pakistan has made remarkable improvement, utilizing the nuclear energy, and working extensively on Biotechnology. PAEC is working efficiently to utilize nuclear technology in agriculture sector, by introducing a variety of pest control technologies, plant nutrition, with the collaboration of IAEA numerous institutes have been developed by PAEC, which includes National Institute of Biotechnology and Genetic Engineering (NIBGE), Nuclear Institute of Agriculture and Biotechnology (NIAB), Nuclear Institute for Agriculture (NIA), Nuclear Institute for Food and Agriculture (NIFA); these institutes are continuously working to enhance the productivity of the agriculture sector in Pakistan. PAEC and its agriculture center also organize “Farmer’s Days” to create awareness among farmers, to educate them about effectiveness of newly developed varieties of the crops and how cultivation of such crops can benefit them and country.

But this is not the only focus of the PAEC; it is also working in the field of nuclear and chemical sciences with special focus on their application for peaceful uses of nuclear technology.



The major research and development institute of PAEC is PINSTECH which is ensuring the well balanced research in the field of peaceful uses of nuclear technology to facilitate the needs of the future. PINSTECH is effectively contributing for years towards achieving the goal of socio-economic development of the country, in various fields. The Pakistan Research Reactor- PARR-I and PARR-II- has enabled Pakistan to attain a higher degree of self-sufficiency.

Pakistan is successfully operating nuclear power plants, for over 04 years. It has a clean record of security and safety of nuclear materials. Pakistan has ratified and adheres to the Physical Protection of Nuclear Material (CPPNM) and UN Resolution 1540; IAEA and other global nuclear watchdogs have admired the safety and security of nuclear materials of Pakistan for years. Recently, Pakistan has also presented its achievements in the peaceful uses of nuclear technology in front of the international community at the IAEA headquarters, Vienna, for the first time ever. The exhibition stands to vitrine Pakistan's achievements in the peaceful aspects of nuclear technology in various grounds such as health, power generation, industry, agriculture and environmental protection. The remarkable and successful track record of Pakistan's safety and security of nuclear energy shows Pakistan's commitment to the national responsibility of the protection of such materials and plays its part in achieving global peace and security.

<https://strategic-times.com/blog/2021/09/30/achieving-socio-economic-development-through-peaceful-use-of-nuclear-technology/>.