

Iranian Nuclear Programme and Pakistan: Implications of the Linkages

Rajesh Kumar Mishra

Abstract

Against all odds, Iran is pressing hard to prove its nuclear innocence and keeping its promises under the provisions of the Nuclear Non-Proliferation Treaty (NPT). The US is refusing to go along with Iran's denials on violation of the NPT commitments. At the same time, the Bush Administration seems determined to stop the spread of nuclear weapons beyond Pakistan to other Muslim states. However, the facts emerging out of the probe into the A.Q. Khan episode and the international grey nuclear market indicate significant patterns of concealment and duplicity even by the NPT signatory states. This paper is an effort to analyse the implications of Pakistan's linkages with the Iranian nuclear programme.

— * —

Introduction

Changing security paradigms have long influenced the discourse on deterrence. With several remnants of bipolar rivalry still intact, the political decision on acquisition or use of nuclear weapons has become highly complex. Apart from efforts to work towards the complete elimination of nuclear weapons, there is concern over its acquisition by states and terrorist outfits.

In this context, the A.Q. Khan episode assumes enormous significance. A.Q. Khan's signed confession in January 2004, detailing the nuclear trade with Iran, North Korea and Libya did not come as a 'surprise'¹. However, the way in which Pakistan's President Pervez Musharraf discounted the complicity of state agencies in these illegal nuclear transfers and pardoned Khan have 'astonished' many.² The query is: "Could Quadeer and his cohorts have moved such large pieces of equipment and travelled extensively outside Pakistan, without the knowledge of the military?"³ Pakistan's military chiefs deny such allegations. "As improbable as it may seem though, President Musharraf may, for once, be telling the truth. But

the fact that this rogue operation could have been mostly unknown to the government and its army should trouble the world even more and propel Washington into rethinking its policies toward Pakistan.”⁴ Another commentator says “It remains doubtful whether a determined proliferator such as Pakistan could be stopped, especially when its services were badly needed in other areas (of interest) by the Americans.”⁵

In February 2003, it was reported that the US intelligence showed Pakistani officials satellite images of Iran’s large centrifuge complex whose existence was disclosed by Iranian dissidents.⁶ The purpose may have been to pressurise Musharraf to investigate further on possible Pakistani linkages. Even if the evidence was murky, “United States suspected Pakistan was helping Iran in the late 1980s, in part because Pakistan had cooperated with Iran on nuclear matters before Iran’s 1979 Islamic revolution.”⁷ But pre-1979 Iranian relations with Pakistan on nuclear matters were known more for the cooperation that might have taken off since 1980s than for uranium enrichment.

A.Q. Khan’s confession and disclosures of the international nuclear black market have posed new challenges to the orthodox non-proliferation regimes and their advocates. It also opened up a new debate over the lack of sincerity in the NPT regime members who have given precedence to national security interests over non-proliferation commitments. Successive US Administrations as well as the present Republican Administration’s approach towards the existing proliferation regime is unfair and biased.⁸

For years, Iran has been viewed as a non-proliferation concern in the US. While the nuclear policies of the Arab states and Iran have often been propelled by their mutual concerns regarding each other’s defence capabilities, their publicly stated threat perceptions have focused inevitably on Israel.⁹ Both the Bush and the Blair administrations have made significant efforts in the past to convince major West Asian states to abandon their nuclear, chemical and biological weapons programmes. However, the Iranian and Arab politicians have perceived American and British persuasion as a move to weaken their position vis-à-vis Israel which has not been approached by these powers to roll back its nuclear weapons programmes.¹⁰ The immense strategic value of nuclear power is not lost on states like Iran. For Iran, possessing nuclear weapons means “gaining leverage over Israel, the US, Turkey, and Saudi Arabia in a potential military confrontation or diplomatic crisis.”¹¹

Given the existential value that nuclear power can confer on Iran, especially when the US doctrine of pre-emption has brought its army to next-door Iraq, nuclear blandishments fall on deaf ears. At present, “Washington does have a policy of denial and delay, attempting to prevent Iran from importing and developing nuclear capabilities and to delay Tehran’s progress in obtaining such weapons until the day when the current regime is tossed out of power and a new regime may decide not to pursue nuclear weapons to threaten the United States and its allies”.¹²

Iran has been insisting that its nuclear programme is exclusively peaceful, claiming “there is no evidence of diversion today; there will not be such evidence tomorrow, nor will there ever be such evidence or indication of diversion in the future.”¹³ On the contrary, John R. Bolton, Under Secretary for Arms Control and International Security, Department of State, says of Iran: “They’ve told the EU three [Britain, France and Germany] that they could produce, and enrich enough uranium for a nuclear weapon within a year and they could produce nuclear weapons within the range of our own assessment. . . .”¹⁴ This paper attempts to identify the nature and scope of nuclear assistance from Pakistan to Iran and its implications for the spread of nuclear weapons.

Pakistan-Iran Nuclear Connections

According to the IAEA’s report in November 2003, Iran acknowledged that it has been developing a uranium centrifuge enrichment programme for 18 years, a laser enrichment programme for 12 years, produced small amounts of low enriched uranium and that it had failed to report to the IAEA a number of conversion, fabrication and irradiation activities involving nuclear material, including the separation of a small amount of plutonium.¹⁵ Iran also has provided a list, in October 2003, of imported and domestically produced centrifuge components.¹⁶

Western media sources reported that the evidence discovered during the probe into Iran’s secret nuclear programme points overwhelmingly to Pakistan as the source of crucial blueprints, technology and components for centrifuges.¹⁷ B.S.A. Tahir, a Malaysian middleman of Sri Lankan origin, revealed to the Malaysian police that A.Q. Khan sold nuclear enrichment equipment to Iran. He was asked by Khan to supply centrifuges to Iran in 1994 or 1995 and was paid US\$ 3 million by an Iranian.¹⁸ Before the probe began, Iran reportedly conceded to the IAEA that “it received crucial help from Pakistan”.¹⁹ The series of denials coming from Pakistan of any involvement of state agencies in these deals complicates the matter and raises concerns regarding the role of non-state actors or black market operations

in proliferation activities, irrespective of the fact whether they are backed by state entities or operate autonomously.

Imports and associated activities in the uranium enrichment programme involving P-1 and P-2 centrifuges at different locations in Iran have remained major issues of contention between the IAEA and Iran. In fact, P-1 and P-2 are URENCO uranium enrichment centrifuge designs of Almelo-one based on rotors made of aluminium and another based on maraging steel.²⁰

On the origin of P-1 components, Iran did not provide any information to the IAEA. Having reviewed the drawings of P-2, the Agency's experts concluded that the origin of the drawings was the same as that of the drawings provided to Libya.²¹ The Bush Administration and Western experts are believed to have ascertained the fact that Libya had received the blueprints from Pakistan.²² Though not revealing the source, Iran also has indicated that it had received P-2 drawings around 1995.²³

The controversy over the findings on the origin of centrifuge designs and nuclear material in the Natanz cascade point to 'foreign assistance'. Similar concerns of outside assistance have been shown by the IAEA in its analysis of the samples from Kalaye Electric Company and Farayand Technique. The Director General of IAEA in his February 2004 report mentioned: "the timelines of the conversion and centrifuge programmes of Iran and Libya are different, they share several common elements. The basic technology is very similar and was largely obtained from foreign sources."²⁴ Evidences emerging through the Western media indicate that one of the unstated foreign sources was Pakistan. In 2003, scientists at the IAEA laboratory in Seibersdorf (Austria), while analysing dust taken from a cotton swipe from inside facilities in Iran discovered evidence of highly enriched uranium.²⁵ It is still unconfirmed whether it was bomb-grade nuclear material.

As early as 1992, the US officials had indications that Iran was pursuing a laser uranium enrichment programme.²⁶ The US was not certain "whether Iran has obtained a full set of blueprints or just an assembly drawing."²⁷ It, however, felt that "possession of designs, even if incomplete, and a procurement strategy for key materials, know-how, and components could allow Iran to skip many difficult research steps, speeding the ultimate construction and operation of cascades."²⁸

In 1995, a news report mentioned that the US President Bill Clinton told Russian President Boris Yeltsin at a meeting in May 1994 that Iran was pursuing a nuclear weapon acquisition blueprint drawn up at least four years ago with the help of Pakistani officials.²⁹ It is now believed that Iran reached a deal with A.Q.

Khan as early as 1987 for the supply of P-1 centrifuges while deliveries of designs and components began in late 1988 and early 1989.³⁰

The Pakistan connection in Iran's nuclear venture revolves around A.Q. Khan's lead role in nuclear transfers. Pakistan's nuclear cooperation with Iran was intended during the Cold War to counter-balance India.³¹ According to a news report "a number of years ago the Israeli signals-intelligence agency, known as Unit 8200, broke a sophisticated Iranian code and began monitoring communications that included talks between Iran and Pakistan about Iran's burgeoning nuclear-weapons program."³² An investigative report by *The Los Angeles Times* on Iran's ability to build a nuclear bomb stated: "As early as 1989, Pakistani generals offered to sell Iran nuclear weapons technology. Abdul Qadeer Khan, a Pakistani nuclear scientist regarded by the United States as a purveyor of nuclear secrets, has helped Iran for years."³³

Dr Khan is widely known to have stolen from the Dutch Company FDO (Physical Dynamics Research Laboratory) the URENCO design, engineering plans and a list of suppliers for gas centrifuges. Having secured Saudi Arabian financing for Pakistan's programme, Khan began to work less publicly with Pakistan's customers and friends.³⁴ In 1986 Pakistan and Iran signed a nuclear cooperation agreement.³⁵ As far as Iran's uranium enrichment programme is concerned, officials of the Atomic Energy Organization of Iran (AEOI) stated that Iran had received drawings of the centrifuge through a foreign intermediary around 1987.³⁶

Under the 1986 Nuclear Cooperation Agreement, Pakistan offered to train Iranian nuclear scientists in return for financial support for its own nuclear programme.³⁷ According to the Iranian opposition sources, both countries further signed an agreement for joint development of nuclear weapons, under which Iran was to provide funding while Pakistan contributed through its expertise including training of Iran's nuclear physicists at the Pakistan Institute for Nuclear Science and Technology and the Khan Research Laboratories.³⁸

Concerns over the Pakistani connection with Iran's nuclear research aspiration was raised when the centrifuges seen by the IAEA officials at Natanz in February 2003 were found to be based on a Pakistani design, which itself is based on the URENCO design of Almelo. Subsequently, in June, the Director General of IAEA was informed for the first time by Iran of its uranium enrichment programme, including two new facilities located at Natanz. It was learnt that a pilot fuel enrichment plant (PFEP) was nearing completion. Similarly, a large commercial-scale fuel enrichment plant (FEP) was also under construction and scheduled for completion

in 2005. At full capacity, “this facility would produce approximately 400-500 kilograms of weapons-grade material annually, enough for 15-20 nuclear weapons a year.”³⁹ *The Los Angeles Times* reported: “the design and other new evidence point to Pakistan as a bigger supplier of nuclear weapons technology to Iran than initially thought.”⁴⁰

Most of the technology transfers are seen in the light of A.Q. Khan’s role in the operation. The total number of visits by the Pakistani scientist to Iran is not known; this is because Dr Khan used to make foreign trips in disguise.⁴¹ It is unexplained till date whether those disguised visits were really unknown to Pakistan’s government. Yet, it is worth recalling, that in a press conference in November 2001, when asked to comment on reports that A.Q. Khan had visited Iran secretly, the Pakistan foreign office spokesman said: “Dr. A.Q. Khan has never in his life visited Iran, even as a tourist.”⁴² In ironic contrast, at the briefing on Khan’s nuclear transfer account in February 2004, a senior Pakistan government official said that Khan transferred nuclear weapons-related designs, drawings and components to Iran between 1989 and 1991.⁴³

According to a June 2003 IAEA report, the Vice President of Iran had informed that over 100 of the approximately 1,000 planned centrifuges had been installed at the pilot plant and that the remaining centrifuges would be installed by the end of 2003. However, in a report presented by France to the NSG 2003 Plenary Session in Pusan, in May 2003, the Director General noticed the presence of a pilot assembly of 164 centrifuges and 1,000 centrifuges under construction.⁴⁴

The AEOI officials also told the IAEA team in June 2003 that the enrichment factor (Separative Work Unit or SWU) used was theoretical, not experimental. In August 2003, the AEOI gave redrawn diagrams of a 164-machine cascade. The IAEA team assessed the centrifuges at Natanz as being one of an early European design and process testing with uranium hexafluoride would be needed to establish its technology.

Iran had informed the IAEA in August 2003 that the decision to launch a centrifuge enrichment programme had actually been taken in 1985, and that Iran had received drawings of the centrifuge through a foreign intermediary around 1987.⁴⁵ Iranian officials further described the programme as having three phases: the first phase, from 1985 to 1997, mainly at the AEOI premises in Tehran (with laboratory work at the Plasma Physics Laboratories of TNRC); the second phase, between 1997 and 2002, with activities to be relocated and concentrated at the Kalaye Electric Company in Tehran along with local manufacturing of centrifuges

for the Natanz facility; and the third phase, 2002 onwards, at Natanz. On transfers of nuclear materials to Iran, the US State Department and Iranian officials said that China supplied it one tonne of UF₆ (uranium hexafluoride), 400 kg of UF₄ (uranium tetrafluoride), and 400 kg of UO₂ (uranium dioxide) in 1991.⁴⁶ These have been concealed at Jabr Ibn Hayan Multipurpose Laboratories in Tehran.

In its June 2004 resolution,⁴⁷ the IAEA expressed concern that even after two years of partial knowledge of Iran's undeclared programme, a number of questions remain unanswered. In particular, there are two questions that are key to understanding the extent and nature of Iran's enrichment programme: (i) sources of low enriched uranium and high enriched uranium contamination at the Kalaye Electric Company workshop, Natanz and the Farayand Technique; (ii) origin of the P-2 centrifuge design drawings and the work undertaken to produce it on the basis of the P-2. The IAEA has sought cooperation from countries who can offer clarifications on the above mentioned questions. Till date, Iran has disclosed 'Europe' and 'Asia' as the regions from where it has received considerable assistance. However, specifics are missing, especially on Pakistan.

It is unlikely that Pakistan will disclose information, unless pushed to the corner. When asked about reports that Pakistan had supplied North Korea with nuclear know-how and technology to develop missile systems, in February 2003, on the sidelines of the NAM Summit in Kuala Lumpur, General Pervez Musharraf said: "We work on solid fuel and they operate on liquid fuel, we do not need to exchange anything with them" and "We have designs far superior to North Korea."⁴⁸ But the fact remains that Pakistan's Ghauri missiles are widely known as liquid fuelled systems with North Korean trademark. Later, Musharraf practically acknowledged A.Q. Khan's visits to North Korea saying it was connected with the purchase of conventional short-range missiles, not sale of nuclear technology.⁴⁹

Duration of the Pakistani Nuclear Assistance to Iran

Not much is known about the exact duration of Pakistan's assistance to Iran beyond reports based on intelligence sources. The span of cooperation is located between the 1980s and the late 1990s. Quoting IAEA officials familiar with Iran, *The Washington Post* said: "Iran told inspectors it acquired design plans for the centrifuges in 1987, although the transfer of technology appears to have continued for several years."⁵⁰ Pakistan is also reported to have cooperated with Iran in building a nuclear reactor in 1990.⁵¹

Media reports claimed that the period 1986-1989 was one of extensive cooperation.⁵² Ibrahim Marashi, a proliferation expert at the Monterey Institute, says: "The exchanges seemed to cease by 1993 when Pakistan and Iran became rivals over Afghanistan".⁵³ But A.Q. Khan is said to have shipped components and used machines directly from Pakistan during 1994-1995.⁵⁴ The grey market appears to include the second-hand bazaar. The inference may be that nuclear cooperation between Iran and Pakistan continued after 1986, in spite of their differences over Afghanistan, into the late 1990s.

Regional and International Implications

The nuclear links between Pakistan and Iran can be explained from four perspectives which have a strong bearing on international security: international nuclear trade, weakness of the NPT regime, Pakistan as the nerve-centre of proliferation and the future of the much ideologised 'Islamic' bomb. An active clandestine network of nuclear trade of the Khan-net under a derived supervisory role of the government in Pakistan has dismayed promoters of the NPT. But the international community has not effectively black-listed or black-balled Pakistan for irresponsible actions.

The current Pakistani leadership has managed to wash its hands off the A.Q. Khan episode by selling the hypothesis that Khan took advantage of the excessive trust the state had reposed on him. The US also, for its strategic reasons, especially when Musharraf is ready to surrender to the Republican administration for survival, has turned a blind eye. This would embolden the network of nuclear black-marketers and Pakistan may continue to remain an attractive destination for bidders. The bidders have included NPT signatories and possibly the non-state actors. The network provides deniability through clandestine shipments of sensitive equipments and materials.

The ineffectiveness of the existing NPT arrangement can be seen from the fact that signatory states themselves have taken advantage of the loopholes and pursued a nuclear weapons programme. Iran, Libya and North Korea are prime examples. According to the NPT regime, the state, as a party to NPT, gives an "undertaking to co-operate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities". Iran has accepted having breached its obligations to these IAEA safeguards. However, according to one European intelligence report: "the [Iranian] committee is making a thorough and systematic examination of all uranium conversion facilities, centrifuge component manufacturing plants and other secret installations to locate poor concealments. It will then order

improved concealment measures with a view to making them hermetic before inspections resume.”⁵⁵

Facts uncovered from Pakistan and associated information on numerous underground European entrepreneurs indicate that the current advocacy for non-proliferation measures is flawed and ineffective. Clandestine supplies of technology, material and machinery by West European firms have been swept under the carpet. Countries like the US have long acquiesced in ‘selective proliferation’ which seems to declare ‘do as we say, not as we do’.

Not surprisingly, the post-9/11 Proliferation Security Initiative (PSI) is viewed with suspicion in many quarters. The PSI is a US-led initiative since May 2003 that works on interdiction of cargos. It lacks universality of norms and acceptance. At a time when many nations are wary about the potential threats of nuclear terrorism and nuclear blackmailing, the challenge is to rectify the omissions of the past and adopt preventive mechanisms that could collectively address the causes of concern.

Pakistan is a state that has acquired nuclear capability through buy-beg-borrow-or-barter process. Pakistan’s next phase needs more attention as it seeks to spread nuclear know-how and material for pecuniary gains. “Whether moved by money or faith, Pakistan’s bomb makers, like the bomb itself, have seriously compromised the country’s international standing and security.”⁵⁶ This type of “Bomb Process Outsourcing (BPO)”⁵⁷ is serious because of the nuclear interest of terrorist groups like Al Qaida. Further, there is a possibility that Pakistan’s nuclear of sensitive technology and material can fall into wrong hands (terrorists) too.

Associates of A.Q. Khan have contradicted the contention of Musharraf that the former had acted in violation of the government’s export policy on nuclear weapons technology. They believe that at least three previous Pakistani Army chiefs, including Musharraf, were aware of these technology transfers.⁵⁸ Musharraf’s frustration was obvious in his remark: “Our Muslim brothers did not ask us before giving our names.”⁵⁹

Only two months before Khan’s confession, the tone and tenor of Pakistan’s denial was radically different. Reacting to *The London Times* report of November 13, 2003 by Bronwen Maddox, a foreign ministry statement had called Pakistan-Iran nuclear connections as “totally baseless” and “anti-Islamic”. The statement was issued in November 2003 after a meeting between the visiting Iranian deputy foreign minister Gholam Ali Khoshru and Pakistan’s Foreign Secretary in Islamabad. The two recalled a press release of the Foreign Ministers of Pakistan and Iran in

August 2003, categorically stating that Pakistan had not assisted Iran's nuclear programme in any way.⁶⁰ By August 2003, Iran had already revealed the details of past concealments to the IAEA and by October, Iran had provided the IAEA with enough information on linkages with Pakistan. The November 2003 meeting of Pakistani and Iranian officials appears to have been a desperate damage-control effort. The manner in which Western news agencies have reported on the details of the IAEA safeguards proceedings has irked Iran. Iranian officials have raised the issue of "breach of confidentiality"⁶¹ with the IAEA.

Musharraf's observation on 'Muslim brothers' goes against the argument that the "Islamic bomb concept has little or no relevance to current Pakistani policy and public thinking on nuclear issues."⁶² From the early 1970s, the Islamic bomb, as envisioned by President Zulfikar Ali Bhutto, has been wedded into the politics of the Islamic world. Bhutto had stated in 1978: "We know that Israel and South Africa have full nuclear capability. The communist powers also possess it. Only the Islamic civilization was without it, but that position was about to change."⁶³ The legacy of the Islamic bomb was carried by his successor General Zia-ul Haq, who in an interview in 1986 said: "It is our right to obtain the technology. And when we acquire this technology, the Islamic world will possess it with us."⁶⁴ A.Q. Khan has often given an Islamic colour to his nuclear tirades.

Nuclear collaboration between Iran and Pakistan supports the hypothesis that Islamic states may forego divisions based on the mutually incompatible Shia and Sunni cultural ideologies. Iran could not afford a direct confrontation when the Pakistan-supported Taliban had attacked Shia interests in Afghanistan. Likewise, Pakistan overlooked Iran-sponsored Shia movements in its territory. For a while, relations between the two countries soured after 1998 particularly when two Iranian diplomats were killed in Afghanistan. However, in the aftermath of the US intervention in Afghanistan and Iraq, the two appear to harness accommodative policies.

In the wake of current revelations, President George W. Bush stated: "I think the message is getting delivered to them (Iran) that it's intolerable if they develop a nuclear weapon. It would be intolerable to peace and stability in the Middle East if they get a nuclear weapon, particularly since their stated objective is the destruction of Israel."⁶⁵ However, the protective concerns of the US are unlikely to be received well in the region because Israel on its part strongly believes that its military superiority and nuclear weapons are pivotal for its existence. Oil-rich Islamic states view Israel's nuclear stakes as the major hurdle in using the military option to settle the Arab-Israel dispute. Iranian President Khatami stated in 1998: "It is ironic that

those who are concerned about saving humanity from nuclear weapons, fully support Israel which is a nuclear power...these (NPT, IAEA safeguards) are all pretexts for imposing certain policies on Iran and the region and to create panic and mistrust.”⁶⁶

The atmosphere of mistrust and misperception is looming large in the relations between the US and Iran. In such a mutually suspicious environment, conflicting views are bound to exist. As long as the political crisis in West Asia exists, the strategic aspects of nuclear thinking in the region will not change fundamentally.

References/End Notes

- 1 Leonard Weiss who was a staff director on the Senate Committee on Governmental Affairs, USA, believes that “Pakistani assistance to Iran and Libya is nothing new”. See for details Leonard Weiss, Pakistan: It’s déjà vu all over again. *Bulletin of the Atomic Scientists*. May/June 2004, **60** (3) at www.thebulletin.org.
- 2 Hersh, Seymour M., The Deal. *The New Yorker*. March 8, 2004.
- 3 Hoodbhoy, Pervez, “Pakistan: Inside the Nuclear Closet”. March 3, 2004 at www.opendemocracy.net.
- 4 Cohen, Stephen P., Out of the Nuclear Loop. *The New York Times*. February 16, 2004.
- 5 Aronson, Shlomo, The Politics and Strategy of Nuclear Weapons in the Middle East. 1992. State University of New York Press; Albany. p.262.
- 6 Rhode, David, and David E. Sanger, Key Pakistani is Said to Admit Atom Transfers. *The New York Times*. February 2, 2004. p. 01A.
- 7 Stephen P. Cohen was quoted as saying in Matt Kelley, Pakistan Threatened to Give Iran Nukes. Associated Press Newswire Service. February 27, 2004.
- 8 Michael Krepon mentions that, “The Bush team has adopted a different strategy, endorsing norms that constrain others and pushing for enforcement against bad actors, while denigrating treaties and demanding freedom of action for itself”. See Michael Krepon, “A Short-hand Strategy Against Terrorism and Proliferation”. March 10, 2004 at www.stimson.org.
- 9 Feldman, Shai, Nuclear Weapons and Arms Control in the Middle East. 1997. MIT Press; London. p.121.
- 10 Perkovich, George and Avner Cohen, Devaluing Arab WMDs. *The Washington Times*. January 19, 2004.
- 11 Schake, Kori N., and Judith S. Yaphe. The Strategic Implications of a Nuclear-Armed Iran. McNair Paper. May 2001. Institute for National Strategic Studies. National Defense University. Washington, D.C. p.6.
- 12 Shaffer, Brenda, Iran at the Nuclear Threshold. *Arms Control Today*. November 2004, **33** (9) 8.

- 13 Statement on the Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran by Director General for International Political Affairs, Foreign Ministry of the Islamic Republic of Iran, March 13, 2004.
- 14 Linzer, Dafna, Iran a Nuclear Threat, U.S. Says. *The Washington Post*. August 18, 2004. p. A14.
- 15 Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, Report by Director General, IAEA. GOV/2003/75. November 26, 2003. p. 9.
- 16 Ibid.
- 17 Warrick, Joby, Nuclear Program in Iran Tied to Pakistan. *The Washington Post*. December 21, 2003. p. A01; Pakistan's Khan Sold Iran Nuclear Parts, Police Say. Reuters. February 20, 2004; Sonni Efron and Douglas Frantz, Secret Iran Nuclear Plan Discovered. *The Los Angeles Times*. February 13, 2004.
- 18 Sullivan, Rohan, Sources Give Details of Iran Nuke Deal. *The Washington Times*. February 20, 2004.
- 19 Maddox, Browen, Iran Admits Pakistan Gave Key Nuclear Help. *The London Times*. November 13, 2003.
- 20 Barnett, Antony, Revealed: How Pakistan Fuels Nuclear Arms Race. *The Guardian*. January 18, 2004.
- 21 Implementation of the NPT Safeguards Agreements in the Islamic Republic of Iran. Board of Governors Report. GOV/2004/34. June 18, 2004. Annex. p. 6.
- 23 Ibid.
- 24 "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran". Board of Governors. GOV/2004/11. February 24, 2004, p.12
- 25 Barnett, Antony, no.20.
- 26 Albright, David, and Mark Hibbs, "Nuclear Proliferation: Spotlight Shifts to Iran." *Bulletin of the Atomic Scientists*. March 1992 at <http://www.bullatomsci.org/issues/1992/m92/m92.reports.html>
- 27 Albright, David, "An Iranian Bomb?" *Bulletin of the Atomic Scientists*. July/August 1995 at www.thebulletin.org/issues/1995/ja95/ja95.albright.html
- 28 Ibid.
- 29 Hoagland, Jim, Briefing Yeltsin on Iran. *The Washington Post*. May 17, 1995. p. 23.
- 30 Koch, Andrew, Khanfessions of a Proliferator. *Jane's Defence Weekly*. March 2004, **41** (9) 24.
- 31 Ijaz, Mansoor, Pakistan's Nuclear Metastasis: How Widespread is the Cancer? *The Weekly Standard*. February 16, 2004, **9** (22).
- 32 Hersh, Seymour M., no.2.
- 33 Frantz, Douglas, Iran Closes in on Ability to Build a Nuclear Bomb. *The Los Angeles Times*. August 4, 2003.

- 34 Trento, Joe, "Pakistan and Iran's Scary Alliance". Public Education Center, Home of the National Security and Natural Resources News Services. August 15, 2003, at www.publicedcenter.org/stories/trento/2003-08-15
- 35 See, Iqbal Anwar, Father of Pakistan's Bomb in Trouble. *The Washington Times*. January 8, 2003; Yossef Bodansky, "Pakistan's Islamic Bomb". July 1998 at www.freeman.org/m_online/jul1998/bodansky.htm, Also see Maggie Farley and Bob Drogin, Evil Behind the Axis. *The Los Angeles Times*. January 5, 2003.
- 36 Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran. Report by the Director General, Board of Governors. GOV/2003/63. September 12, 2003. p. 6.
- 37 Bodansky, Yossef, no. 35.
- 38 Ritcheson, Philip L., Iranian Military Resurgence: Scope, Motivations, and Implications for Regional Security". *Armed Forces and Society*. Summer 1995, **21** (4); Also quoted in Kenneth R. Timmerman, Weapons of Mass Destruction: The Cases of Iran, Syria, and Libya. A Simon Wiesenthal Center Special Report. August 1992. pp. 41-42; William E. Burrows and Robert Windrem, Critical Mass. 1994. Simon and Schuster; New York. p. 342; Betsy Perabo, A Chronology of Iran's Nuclear Program. Eye On Supply, (Emerging Nuclear Suppliers Project of the Monterey Institute of International Studies [ENSP]. Fall 1992. (7) pp. 53, 59, 64, 70; Leonard S. Spector, Nuclear Ambitions. 1990. Westview Press; Boulder, CO; p. 212.
- 39 Breit, Marshall, Iran's Nuclear Programme. Carnegie Fact Sheet. November 21, 2003.
- 40 Farley, Maggie, and Bob Drogin, no.35.
- 41 Hersh, Seymour M., The Iran Game. *The New Yorker*. December 3, 2001. pp. 43-45.
- 42 Transcript of the Press Conference. Address by the Foreign Office spokesman and the D.G. ISPR. November 28, 2001 at www.forisb.org/briefings/FOS01-77.htm
- 43 Rhode, David and Sanger, David E., no.6, p. 44; Latest Developments in the Nuclear Programme of Iran. Presented by France at NSG 2003 Plenary, Pusan. May 2003.
- 44 Latest Developments in the Nuclear Programme of Iran. Ibid.
- 45 Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, Report by Director General, IAEA. GOV/2003/75. November 26, 2003. p.19
- 46 Kerr, Paul, IAEA Presses Iran to Comply with Nuclear Safeguards. *Arms Control Today*. July/August 2003, 20; Also see, Iran Failed to Comply with Nuclear NPT, IAEA Reports. *Arms Control Today*. July/August 2003, 22.
- 47 Implementation of the NPT Safeguards Agreements in the Islamic Republic of Iran, Resolution adopted by the Board on June 18, 2004. GOV/2004/49
- 48 We Didn't Give North Korea Nuke Knowhow: Pervez. *The Asian Age*. New Delhi. February 25, 2003.
- 49 "Pakistan Insists it Gave No Nuclear Help to Iran". Reuters. November 14, 2003 at www.reuters.com/news/Article.jhtml?type=topNews&storyID=3822558

- 50 Warrick, Joby, Iran Admits Foreign Help on Nuclear Facility. *The Washington Post*. August 27, 2003. p. A17.
- 51 Ahrari, Ehsan, "Pakistan as Proliferator: A View from Washington". *Asia Times Online*. January 14, 2003 at www.atimes.com/atimes/South_Asia/EA14Df03.html
- 52 Frantz, Douglas, no.33; Also see Maggie Farley and Bob Drogin, no.35.
- 53 Farley, Maggie, and Bob Drogin, no.35.
- 54 Koch, Andrew, no.30.
- 55 As quoted in Ehsan Ahrari, "Iran's Nuclear Hide and Seek." *Asia Times Online*. April 23, 2004 at http://www.atimes.com/atimes/Middle_East/FD23Ak01.html
- 56 Hoodbhoy, Pervez, The Nuclear Noose Around Pakistan's Neck. *Washington Post*. February 2, 2004
- 57 Santhanam, K., Reducing Nuclear Dangers After the AQ Khanspiracy. *Strategic Analysis*. January-March 2004, **28** (1) 193-204.
- 58 Lancaster, John, and Kamran Khan, Musharraf Named in Nuclear Probe. *Washington Post*. February 3, 2004. p. A13.
- 59 Hoodbhoy, Pervez, no.3.
- 60 Pakistan, Iran Debunk N-help Allegation. *Dawn*. November 14, 2003.
- 61 Statement on the Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran by Director General for International Political Affairs, Foreign Ministry of the Islamic Republic of Iran, Amir H. Zamaninia, March 13, 2004.
- 62 Hussain, Zahid, Deliberate Nuclear Ambiguity. In Samina Ahmed and David Cortright (Eds), *Pakistan and the Bomb*. 1998. University of Notre Dame Press; Indiana. p. 33.
- 63 Bhutto, Zulfikar Ali, *If I Am Assassinated*. 1979. Vikas; New Delhi. p. 138.
- 64 "Pakistan Nuclear Weapons: A Chronology" at www.globalsecurity.org/wmd/world/pakistan/nuke-chron.htm
- 65 President Outlines Path for Lasting Prosperity in Wednesday Speech. Remarks by the President at the Newspaper Association of America Annual Convention. Omni Shoreham Hotel, Washington, D.C. White House Press Release. April 21, 2004.
- 66 Transcript of interview with Iranian President Mohammad Khatami. CNN. January 7, 1998 at www.cnn.com

Dr Rajesh Kumar Mishra is an Associate Fellow at IDSA. He has a PhD from Jawaharlal Nehru University. His areas of research include Nuclear Security in South Asia and Disarmament.