Changing Nuclear Thinking in Pakistan

Pervez Hoodbhoy and Zia Mian

Summary

In the four decades since Pakistan launched its nuclear weapons program, and especially in the fifteen years since the nuclear tests of 1998, a way of thinking and a related set of feelings about the bomb have taken hold among policy makers and the public in Pakistan. These include the ideas that the bomb can ensure Pakistan’s security; resolve in Pakistan’s favour the long-standing dispute with India over Kashmir; help create a new national spirit; establish Pakistan as a leader among Islamic countries; and usher in a new stage in Pakistan’s economic development. None of these hopes has come to pass, and in many ways Pakistan is much worse off than before it went nuclear. Yet the feelings about the bomb remain strong and it is these feelings that will have to be examined critically and set aside if Pakistan is to move towards nuclear restraint and nuclear disarmament. This will require the emergence of a peace movement able to launch a national debate, and that a much higher international priority be accorded to the grave dangers posed by nuclear arms racing in South Asia.

Introduction

1. Pakistan’s leaders and much of its public are committed to maintaining and expanding its nuclear weapons program. What will it take for them to reconsider and to begin to move towards nuclear restraint, arms control and eventual disarmament? Any answer to this must begin with understanding and confronting the way of thinking and structure of feelings that have led much of the Pakistani elite and the public to tie the fate of their country to the bomb.

2. Pakistan’s nuclear arsenal is rapidly expanding, with a growing capacity to make nuclear weapon materials. An array of nuclear delivery systems is under development, including weapons for use on the battlefield. For years now, Pakistan has been said to have the fastest growing nuclear arsenal in the world. This expansion is part of an arms race with India, with which Pakistan has fought four wars and repeatedly been on the brink of fighting more, and which many in Pakistan see as an existential enemy. But it may also have to do with each of Pakistan’s armed services wanting a nuclear role, self-interest on the part of its nuclear establishment, increasing redundancy in its arsenal to make sure some weapons will survive an attack, and wanting to deter the United States from attempting to snatch Pakistan’s weapons.

3. The bomb serves many other roles as well. Many Pakistanis clutch passionately at the

---


bomb as a talisman that wards off danger and can realize hopes, a source of safety and success, a symbol of national achievement and power. The bomb did not conjure these into being. All these ideas and feelings existed before Pakistan got the bomb, but were seen as separate and to be achieved in different ways. The power of the bomb, however, was so overwhelming that many in Pakistan thought that the bomb could solve all their problems. Fifteen years after the nuclear tests of 1998, and despite much evidence and bitter experience, many still cannot let go of these ideas.

4. Pakistan is not the first nuclear-armed state to have gone down this path or learned so slowly. It took America’s leaders almost 20 years to learn the lessons of nuclear weapons. President Harry Truman, who took the decision to bomb Hiroshima and Nagasaki, called the atomic bomb the “greatest thing in history.” In 1962, with America trapped in an expanding arms race with the Soviet Union, President John F. Kennedy described the bomb as having turned the world into a prison in which humanity awaits its execution and called for progress on nuclear disarmament. Despite this, and even though the Cold War ended over 20 years ago, the United States still has thousands of nuclear weapons and is investing heavily in modernizing them.

5. There is dissent even if there is no national nuclear debate in Pakistan. There is a small community of civil society groups, of which the authors are members, that has long been pressing for nuclear restraint and disarmament and peace with India. This nascent movement points out the many dangers and costs of Pakistan’s acquisition of nuclear weapons; dangers and costs that imperil a country already torn by its wars and crises, and struggling with recurring failures of governance now manifest in multiple armed insurgencies, widespread sectarian religious and ethnic violence, and ridden with social and economic inequalities. This perspective has yet to gain currency, however.

6. There is little help from the international community. Ever since the attacks on the United States in September 2001, most of the outside world has seen Pakistan’s army as a vital ally in the war against the Taliban in Afghanistan and a check on radical Islamist militancy. For many leaders, especially in the Western alliance led by the United States, keeping the support of Pakistan’s army and political elite is a higher priority than Pakistan’s nuclear buildup and the nuclear arms race in South Asia.

7. This essay sketches out the origin and evolution of the ways of thinking and feeling that mark dominant Pakistani discussion and decision-making about the bomb. It is these ideas and sensibilities that would have to be questioned and set aside by Pakistani elites and most of the public for Pakistan to engage in nuclear disarmament. The essay outlines some of the main hopes invested in the bomb by Pakistan’s elite, suggests why they have not come to pass, and highlights the benefits that could accrue to Pakistan from getting past the bomb. It should be read in conjunction with the companion piece on India.

A Little Bit of History

8. Strange as it may sound today, there was a time when there was little enthusiasm in Pakistan for making the bomb. In the first decade after independence from Britain in 1947, only a small band of scientists and military leaders in Pakistan thought it might ever be necessary or possible for the country to build the bomb. It was not discussed and did not figure large in the national consciousness – except when driven by outside events like nuclear weapons tests by the United States and the Soviet Union, and the idea of the Atoms for Peace program.

---

5 Ramesh Thakur, “What Did India Gain by Getting the Bomb?” *APLN/CNND Policy Brief No. 7* (Canberra: Asia Pacific Leadership Network and Centre for Nuclear Non-Proliferation and Disarmament, November 2013). Both papers were delivered to audiences in New Delhi (Institute for Defence Studies and Analyses) and Islamabad (Jinnah Institute) in October 2013.
9. Some of Pakistan’s elite were hopeful of one day having a nuclear option. They found opportunity to make their case starting in the 1960s in public arguments in India to build a bomb and progress in India’s plutonium separation program. They were turned down by General Ayub Khan, the first Pakistani army chief, who seized power in a military coup in 1958 and ruled for over a decade. Ayub preferred strengthening Pakistan’s conventional military forces and building alliances with the United States and later China.

10. While Ayub Khan was not particularly concerned about India’s possible nuclearization, his young foreign minister, Zulfikar Ali Bhutto, who had been exposed to nuclear ideas in the fearful early years of the Cold War as a student in the United States and then Britain, saw danger and opportunity. A populist, deeply insecure autocrat who built his subsequent career around slogans of Islamic socialism and anti-Indianism, Bhutto argued for the bomb in Pakistan’s cabinet as well as publicly. In 1965, asked about Pakistan’s response to the prospect of India developing nuclear weapons, Bhutto replied “we should have to eat grass and get one, or buy one, of our own.”

11. As India pressed ahead with its nuclear program, even General Ayub Khan began to worry. His diary entry for 14 January 1967 records a visit from Glenn Seaborg, the discoverer of plutonium and then-Chairman of the US Atomic Energy Commission. Responding to Seaborg’s assessment that India might be capable of making sufficient plutonium for a few nuclear weapons a year, Ayub Khan noted grimly “if India was to acquire atomic military capability, we shall have to follow suit and it will just ruin us both.”


   Pakistan’s security and territorial integrity are more important than economic development... All wars of our age have become total wars; all European strategy is based on the concept of total war; and it will have to be assumed that a war waged against Pakistan is capable of becoming a total war. It would be dangerous to plan for less and our plans should, therefore, include the nuclear deterrent... our problem in its essence, is how to obtain such a weapon in time before the crisis begins.\(^9\)

13. Bhutto got his chance in the wake of the 1971 civil war between East and West Pakistan, during which India’s military intervention in support of the pro-independence Bengali forces in East Pakistan tipped the balance and helped establish it as Bangladesh. In January 1972, barely a month after taking office as President of Pakistan, Bhutto called senior scientists and engineers to a meeting in Multan and tasked them to begin building a bomb.

14. The quest for the bomb became a scramble in 1974, following India’s first nuclear test. But India’s test had brought international sanctions and concern about Pakistan following suit. Pakistan took an official position that its suddenly stepped up nuclear program was entirely for peaceful uses. The lie convinced no one. It was an open secret that Pakistan had a bomb program, and before the end of the decade the world came to know about the not-so-secret uranium enrichment plant at Kahuta and its soon-to-be-famous boss, Abdul Qadeer Khan.\(^12\)

15. In the four decades since the meeting in Multan, a set of ideas and feelings about the bomb has taken hold in Pakistan. These feelings have been nurtured by national leaders like Zulfikar Ali Bhutto, and later his daughter and two-time Prime Minister Benazir Bhutto, the current Prime Minister Nawaz Sharif, now in office for the third time, and Generals Zia-ul-Haq and Pervez Musharraf, who ruled the country for almost a decade each. The absence of a strong peace movement, and of determined international calls and action for nuclear restraint and disarmament, allowed political and military elites as well as the bomb-builders


\(^12\) A 1979 Washington Post article, for instance, identified the Kahuta site, the enrichment facility there, and its purpose: "Behind an eight-foot-high stone wall near the sleepy town of Kahuta, 40 miles from Pakistan’s capital of Islamabad, a clock is ticking for mankind... Within three to five years by official United States estimate, and sooner in the reckoning of some, the heavily guarded industrial plant under construction there will produce enough highly enriched uranium for Pakistan to explode an atomic bomb." It names A.Q. Khan as the Pakistani scientist who had acquired "blueprints for the plant" from the uranium enrichment centrifuge facility at Almelo, Holland and was now heading Kahuta. Don Oberdorfer, "Pakistan: The Quest for Atomic Bomb," Washington Post, 27 August 1979.
and much of the media, to propagate these ways of thinking. Hence such feelings have taken hold and become regarded as common sense by many in Pakistan.

The Bomb Would Ensure Pakistan’s Security

16. Many Pakistanis believe that India threatens and seeks to destroy their country and only acquiring the bomb has prevented this. This comes from a conviction that the defeat in the 1971 war owed to military weakness and a determination that such a situation should not recur. There is little thought that the Bengalis in East Pakistan, the majority population in the whole country, were justified in their rebellion against the unjust and unequal treatment meted out to them by the ruling elite concentrated in West Pakistan, and deserved independence.

17. Articulating this feeling, A.Q. Khan wrote in 1986: “The deep-rooted Pakistani fears of India, especially after its dismemberment of Pakistan in 1971, puts tremendous pressure on Pakistan to take appropriate measures to avoid a nuclear Munich at India’s hands in the event of an actual conflict, which many Pakistanis think very real.” Over time he has become explicit that he believes the bomb could have saved Pakistan, claiming in 2011 that: “If we had had nuclear capability before 1971, we would not have lost half of our country – present-day Bangladesh – after disgraceful defeat.”

18. At the time of the nuclear tests in May 1998, a leading Urdu newspaper (others carried similar accounts) wrote:

   It has been learnt through reliable sources that Pakistan has started installing “deterrents” on its missiles. The missiles carry a “deterrent” that can foil any enemy attack instantly. In the case of any foreign aggression, these “deterrent”-carrying missiles will be used as the “first option,” not the “last option.” This will foil the evil designs of the enemy.

19. The officially sponsored national celebration on the first anniversary of the nuclear tests, youm-e-takbir (the day of reaffirming faith), was a riotous affair. In spite of the economic pain from sanctions imposed by Western powers, there was mass jubilation. Looking at speeches and articles from around that time, some common themes emerge: Pakistan has become impregnable; it is now strong and no one can threaten us; Indian expansionism has been checkmated; the nation can be proud because we have stood up for ourselves and defied the great powers.

20. These sentiments persist even today. It is believed that India’s willingness and ability to use its superior conventional military capability has been sharply reduced. Indian restraint during the 1999 Kargil war and the subsequent failure of Indian efforts at coercive diplomacy in 2001–02 and the muted reaction to the attacks on Mumbai in 2008 are seen as attesting to the central lesson of the nuclear age – it is not worth going to war against a nuclear-armed adversary on a matter that is of less than national life-or-death importance.

21. That said, there is also widespread desire in Pakistan for better relations with India and diplomatic solutions. A 2012 Pew poll found that more than 60 per cent of people in Pakistan want better relations with India, and a similar fraction support increased bilateral trade, with over two-thirds of Pakistanis supporting peace talks with India. This is far from the idea of India as an “existential” threat that Pakistani bomb advocates have tried so hard to cultivate in the Pakistani people.

22. The real security threat to Pakistan today is the multitude of Islamist militant groups that are waging war on state and society. The army has lost more soldiers to terrorism than in the four wars against India. In 2013, in his final Independence Day address, Chief of Army Staff General Ashfaq Pervez Kayani made clear the magnitude of this threat from within:

   The menace of terrorism and extremism has claimed thousands of lives... it is Pakistan and its valiant people who are a target of this war and are suffering tremendously... Even in the history of the best evolved democratic states, treason or sedition uprisings against the state have never been tolerated and in such struggles their armed forces have had unflinching support of the
masses; questions about the ownership of such wars have never been raised... We sincerely desire that all those who have strayed and have picked up arms against the Nation, return to the national fold. However, this is only possible once they unconditionally submit to the State, its Constitution and the Rule of Law. There is no room for doubts when it comes to dealing with rebellion against the state.17

23. Kayani’s successor, General Raheel Sharif is credited with having helped in shaping this perspective. He is described as believing that the threat to Pakistan from Islamist militants is at least as important as the one the army sees from India.18 This is easy to understand: the army cannot venture into large swathes of the Federally Administered Tribal Areas (FATA), while in areas of the Khyber Pukhtunkhwa province armed militias have set up parallel governments. The bomb has proven no help. In fact, it has become a source of concern, as fears grow of militants seizing nuclear weapons or materials and unleashing nuclear terrorism.19 Militants have launched well-planned attacks on heavily guarded military bases across Pakistan, including the army’s General Headquarters in Rawalpindi, often with insider help. This has led to the creation of a dedicated force of over 20,000 troops to guard nuclear facilities. There is no reason to assume, however, that this force would be immune to the problems of the units guarding regular military facilities.

24. Giving up the bomb would bring tangible benefits. The danger of a nuclear war with India, deliberate or accidental, would be eliminated. Unwanted or accidental war between Pakistan and India is not outside the realm of possibilities. Indeed, soon after the crisis precipitated by India’s Brasstacks exercises along the Pakistani border in 1986, General Zia-ul-Haq is said to have remarked that “Neither India nor Pakistan wanted to go to war but we could have easily gone to war.”20 That such a war could now perhaps lead to a catastrophic nuclear exchange is a fearsome thought.

25. The possibility of unauthorized use of a nuclear weapon by a pilot or missile field commander cannot be ruled out. Either through misunderstanding of instructions, sabotage or ideology, a small group of individuals could initiate nuclear war. Again, the chances for this would be much higher in a preexisting state of tensions, military exercises or during a conventional war.

26. Finally, giving up nuclear weapons would resolve the challenge of defending these weapons against internal enemies as well as other nations. Pakistan has worried about threats to its weapons from India, the United States and Israel.

The Bomb Would Help Resolve Kashmir

27. Many Pakistanis hoped that with the acquisition of nuclear weapons, the resolution of the long-stuck Kashmir dispute could somehow be quickened – of course, in Pakistan’s favour.21

28. Around the time when the first bomb was ready (about 1987) an unannounced doctrine slowly worked its way into the Pakistan Army’s strategic thinking. Nuclear weapons could be an umbrella from under which Pakistan could support militant groups to wage a low-cost war against Indian forces based in Kashmir. The bomb would protect Pakistan against possible Indian cross-border retaliatory raids.

29. The covert war had two goals. The first was to weaken India by raising the human and economic costs of occupation. At some point, Pakistan’s military reasoned, it would become too much trouble for the Indians to hang on to Kashmir. The second objective was to internationalize a local dispute by advertising the risk of nuclear escalation. The hope here was that this would draw in western intermediaries and force India to the bargaining table.

30. The term “nuclear flashpoint” for Kashmir soon became commonplace in the international press. It was feared that border clashes could escalate into nuclear conflagration. Indeed, artillery duels across the Line of Control in Kashmir had become increasingly commonplace and nuclear threats issued by both sides created fearsome possibilities.

18 Mehrzeen Zahr-Malik, “Pakistan Chooses Moderate to Take Over as Army Chief,” Reuters, 27 November 2013.
31. This fear resurfaced in August 2013 as Indian and Pakistan forces exchanged fire across the Line of Control. But contrary to what had been anticipated earlier by Pakistan, global interest in intervening in the Kashmir dispute has shrunk as India has emerged as a major player in the world market for labour, goods and capital and Pakistan is seen as a source of terrorism.

32. At the same time, the Kashmiri independence movement seems to have run out of steam. Kashmir was largely peaceful in 2013. The schools were open, tourists were back and European countries had removed their travel advisories. The bomb has resolved nothing.

33. In a Pakistan without the bomb, jihadist groups, who felt protected by the nuclear shield, would feel strongly constrained and could not expect to freely attack India. This certainly goes to Pakistan’s benefit because a major Pakistan-based attack upon India could bring disaster. An end to hostility with India would also free Pakistan to benefit from Indian trade and investment and its vast reservoir of skills and expertise. The import of electricity from India could reduce the large losses being borne by Pakistani industries currently shut down for want of power, as well as alleviate the suffering of domestic consumers.

The Bomb Would Help Create a New Pakistani National Spirit

34. Many ruling elites have sought to create or reinforce their power by building a national identity using the power of the state. The goal is to unify under their leadership the disparate peoples within an emerging state, reduce internal conflict and create the conditions for effective governance. Nation-building can involve both propaganda and the creation of symbols such as public buildings, national days, anthems, sports teams, and, of course, the display of military might.

35. Nuclear weapons have been used in various countries as instruments for building or consolidating a national spirit. One need only recall Charles de Gaulle after the first French nuclear test on 13 February 1960, when he exclaimed: “Hurray for France! From this morning she is stronger and prouder.”

36. For elites in Pakistan (and India), the bomb has been even more welcome as an instrument of nation building. Patriotism has been conflated with support for the bomb and bomb makers. Thus The Muslim, considered to be the most liberal newspaper in the years of Zia-ul-Haq’s military dictatorship, berated the few dissenting voices that spoke against it: “Anybody opposed to the Kahuta Enrichment Plant must be treated as a traitor of Pakistan, and the national consensus in favour of Kahuta is irrevocable and irreversible and no referendum is needed to ascertain it.”

37. The nuclear tests of May 1998 led to government-inspired mass celebrations in Pakistan (and in India). Videos and TV programs of that time show Prime Minister Nawaz Sharif congratulating cheering citizens. In the backdrop can be seen the Chagai mountain, now whitened from multiple underground nuclear explosions. The euphoric press compared this historical moment with the birth of Pakistan in 1947, and Pakistan’s bomb makers became national heroes. School children were handed free badges with mushroom clouds, poetry competitions around the bomb were organized and bomb and missile replicas were planted in cities up and down the land.

38. Leaders in Pakistan have looked to nuclear weapons to avoid dealing with class, religious, ethnic and linguistic divisions, which have always been a serious problem. Pakistan has been a nation-state since 1947 but continues to struggle in its effort to discover an identity.

39. Many in Punjab, Pakistan’s most populous province, may still want the bomb. But angry Sindhis want water and jobs and they blame Punjab for taking these away. The Baloch are involved in a full-scale insurrection and say that their mineral riches have been expropriated by the state. They resent the fact that the nuclear test site – now radioactive and out of bounds – is located on Baluchistan’s soil. Many have taken up arms and demand that Punjab’s army get off their backs. The Pathans, trapped in a war between the Taliban and the US-

---


Pakistan armies, principally want protection against suicide bombers, as well as from US drones and the Pakistan Air Force. The surge of bomb-inspired nationalism has subsided everywhere except in the cities of Punjab. The bomb has healed no divisions.

**The Bomb as a Path to Greatness Among Islamic Countries**

40. Pakistan was created in the name of a homeland for India’s Muslims and is now the world’s second most populous Muslim country. Some in Pakistan saw in the bomb an opportunity for a new role as a leader in the Muslim world or ummah. As a nuclear power, Pakistan would stand tall alongside the much older, more established and richer Muslim nations and be their defender.

41. The hope of creating a common defence for the ummah was promoted by numerous Islamist parties in Pakistan, most notably the Jamaat-e-Islami. They cheered the bomb and in street demonstrations claimed it for Islam rather than just Pakistan. Much of the media was enthusiastic about the wider appeal of the bomb: “While Pakistan’s nuclear blasts demolished Israel’s desire to be the sole nuclear power in the Middle East, it gave the Arabs a new resolve and a new fervour.”

42. Some bomb makers embraced this role. In an interview, A.Q. Khan said that a correspondent from an Arab newspaper based in Islamabad had come to him a few days after the tests, “She kissed my hands with tears in her eyes and prayers on her lips. She was trembling while telling me ‘You have made Muslims stand proudly in the world’. Inshallah we are back again on the path of greatness.”

43. There was some truth to this. Many in Muslim nations as diverse as Iran and Saudi Arabia were pleased at Pakistan’s successful nuclear tests. Iranian Foreign Minister Kamal Kharrazi congratulated Pakistan on its achievement, “From all over the world, Muslims are happy that Pakistan has this capability.”

44. But the relationship has been a double-edged sword. Large gifts from Saudi princes and religious institutions have contributed to the mushrooming and radicalization of Islamic groups and institutions in Pakistani society. The Pakistani madrasa system, seen as training centres for Islamic militants, is partially funded by Saudi and other Gulf State donors. Pakistani jihadists and fighters from elsewhere trained in Pakistan are seen as a threat by a growing number of countries.

45. Whatever it has gained in its standing in some Muslim nations by going nuclear, Pakistan’s present international image is terrible. It is seen as a praetorian state run by an unaccountable army; a country at war with itself, overrun by terrorists and a source of potential nuclear terrorism; a people trapped in misery, without security, health or education; a nation with conflicts with all its neighbours except China; and dangerous for foreigners to visit. In 2013, a poll conducted by the BBC in 24 countries ranked Pakistan the second most unpopular country in the world: the bottom five on the list were Iran, Pakistan, North Korea, Israel, and Russia.

46. Giving up the bomb would not remove all these problems, but it would mean Pakistan might be viewed much more positively internationally. Demonstrating a willingness to put people first rather than the bomb could be a first step to dealing with Pakistan’s other security crises, all of which might prove easier to manage once the world sees that Pakistan’s highest national priority is not preparing for a final war with India or defending the ummah.

**The Bomb Would Usher in a New Age in Pakistan’s Development**

47. Announcing the nuclear tests in May 1998, Prime Minister Sharif declared it to be an “auspicious day... an historic event for us.” The tests would bring international sanctions and to endure them would need national sacrifice and self-reliance. He declared that:

---


27 A mythology around the bomb was created by Pakistan’s religious-political parties and groups. Right-wing Urdu magazines like Zindagi wrote about the “wondrous miracles of Chagai.”


29 *Daily Jasarat*, special supplement, 1 June 1999.


Without sacrifices, no nation can either stand on its feet or can become strong and worthy of respect... I wish this day had come earlier so that we could have managed our demands according to our resources... The time itself has given us a golden chance to stand on our own feet by giving up the path of borrowing... Hard and difficult times will come. Hardships will increase. But if you keep your morale high and accept the challenge boldly, there is no reason that we will not be successful in this test. This is a chance to show your capabilities. Do not let this chance go to waste.32

48. Fifteen years later, Pakistan remains a poor, underdeveloped economy dependent on foreign aid and assistance. In December 2013, Pakistan received $554 million from the International Monetary Fund (IMF) as part of a three-year $6.6 billion bailout to stabilize the economy.33 Explaining the loan, the head of the IMF’s mission to Pakistan said:

Pakistan is in a difficult economic situation right now... To avoid a full-blown crisis and a collapse of the currency, the government decided to seek financial assistance from the IMF. In addition, the World Bank, the Asian Development Bank and other partners have offered significant financial support...34

49. The World Bank currently gives Pakistan over $1.2 billion per year in economic assistance, observing that the country is “trapped in a low growth equilibrium, lower than other South Asian countries... due to macroeconomic instability, low investment and savings, a business-unfriendly environment, and low productivity.”35 The Asian Development Bank provides Pakistan about $1.5 billion per year on average; it has provided loans totalling more than $22.6 billion since the Bank was founded in 1966.36 Even more generous has been support from the United States, which since 2002 alone has provided Pakistan with over $26 billion in economic and military aid.37

50. The bomb clearly did not reduce Pakistan’s massive dependence on foreign aid and borrowing. If anything, aid dependence has increased since the nuclear tests of 1998. In its first 15 years the nuclear state has failed its people, just as Pakistan did in the five decades before it tested nuclear weapons.

51. Today, Pakistan’s people are poor and for many people there is still no reliable provision of shelter, water, food, healthcare, education, electricity or even law and order. The most recent Government of Pakistan National Nutrition Survey, carried out in 2011, found that over 58 per cent of the population was food insecure and over 45 per cent of the heads of households were illiterate — data which showed very little had changed since the previous survey a decade earlier in 2001 which had reported “a dire malnutrition situation in Pakistan.”38 In some cases, the data showed that in the period 2001–11 the nutritional and health situation had worsened for the most vulnerable.

52. Resources have been found however for a massive investment in nuclear weapons, with an entire industrial complex created for the production of nuclear weapons and delivery systems.39 Each such weapon is a highly complex piece of equipment. Much of the metallization and weapon fabrication work is done in and around the Heavy Mechanical Complex in Taxila and the adjoining military city of Wah.40 The technologies involved are typical of those used in medium-tech industries.

53. In Pakistan’s case one does not reliably know what the bomb costs. Pakistan releases no information on its nuclear weapons budget. There are only a few hints here and there. In 2001, retired Major-General Mahmud Ali Dur-

---

34 “Pakistan Gets $6.6 Billion Loan from IMF,” IMF Survey, 4 September 2013.
40 “The Heavy Mechanical Complex (HMC), together with the Heavy Forge Factory is the biggest undertaking of its type in Pakistan and was established in 1979 with Chinese assistance. HMC has computer-aided design facilities and also manufactures equipment for hydroelectric and thermal power plants, chemical plants, etc.
rani suggested that Pakistan’s annual expenditure on “nuclear weapons and allied programs” was about $300–400 million and that Pakistan “will now need to spend enormous amounts of money for the following activities: a) a second strike capability; b) a reliable early warning system; c) refinement and development of delivery systems; d) command and control systems.”

54. This appears to have come to pass. In 2004, General Musharraf claimed that during the previous three to four years the government had spent more on the nuclear weapons program than in the previous 30 years. This would be consistent with the large expansion in fissile material production capabilities and new missile system development after 2000. More spending is in the pipeline. In March 2009, Chief of Air Staff Air Chief Marshal Tanvir Mehmood Ahmed announced that $9 billion would be spent on upgrading its “nuclear status.” Independent estimates are that Pakistan may currently spend on the order of $2-3 billion per year on its nuclear weapons program.

55. There are occasional signs that some Pakistani leaders see high military spending as a tragic drain on resources that could be used to meet social needs. In a speech at the United Nations General Assembly in New York in October 2013, Prime Minister Sharif said: “Our two countries have wasted massive resources in an arms race. We could have used those resources for the economic well-being of our people.” There are no indications, however, that the nuclear program has slowed since Sharif took office in June 2013. Construction continues on Pakistan’s fourth plutonium production reactor and testing continues on new nuclear weapon delivery systems.

56. Ending the nuclear build-up would be the first step to beginning nuclear disarmament. The economic benefit would go much beyond the estimated $2-3 billion spent yearly on nuclear weapons. Giving up the bomb would allow for a more realistic and historically informed assessment of the threat from India’s larger conventional military forces and the scope of any possible future conflict between Pakistan and India. Pakistan lived with massive Indian military superiority for the better part of four decades and was neither invaded by India nor coerced in any significant way. Their wars in 1947, 1965 and 1971 were limited, with no efforts to indiscriminately attack the other’s civilian populations or capture the other’s national territory. The wars ended not with occupation and subjugation but cease-fires and peace talks leading to agreements to resolve disputes. Any remaining Pakistani fears of being overwhelmed by India should have been put to rest by the US failure, despite all its military and economic strength, to occupy and remake Iraq and Afghanistan.

57. By giving up the idea of a massive all-out conventional war with India, Pakistan would have no need to keep buying ever more tanks and artillery and expensive jet fighters, and submarines and warships, or maintain such a large standing army. This could lead to a cut in Pakistan’s conventional military budget, which for 2013–14 was about $6 billion, not including the cost of military pensions and debt payments associated with earlier loans to purchase military equipment. Dollarization of this peace dividend is difficult to estimate, but its effect would be felt across the board. More important would be the sense across society that the entitlements and needs of people would come first.

Conclusion

58. Following the 1998 nuclear tests, Pakistan’s military and political leaders saw in the bomb a way to push past all their failures and realize all their hopes. Overwhelmed by the power of the bomb, they saw it as magical; a panacea for solving Pakistan’s multiple problems. They told themselves and their people that the bomb would bring national security, allow Pakistan to liberate Kashmir from India, bind the nation

44 Mian, "Pakistan."
together and make its people proud of their country and its leaders, break the country free from reliance on aid and loans, and lay the base for the long frustrated goal of economic development. Driven by this dream, Pakistan has been rapidly expanding its nuclear arsenal.

59. The past fifteen years have shown that this was a fool’s dream. Pakistan needs an informed and reasoned national debate about the bomb. Without this, there can be no reconsideration of the whole constellation of ideas, fears and hopes that have been linked to the bomb. The goal of this essay has been to chart out some of the ground that this debate would need to cover and to put down some markers for arguments that might offer a path forward.

60. The conditions for a national nuclear debate in Pakistan are not hard to identify. The country is on the edge of failure as a state, economy and society. On a day-to-day basis, the bomb no longer figures as an answer to anything seen as important. It cannot protect Pakistan from those who kill soldiers and civilians across the country. It offers no path to peace with India or at home, nor does it aid the economy or help meet basic human needs. Nonetheless, it is hard to see civil society in Pakistan alone being able to overcome the political forces that foster nuclear nationalism in the country and the entrenched power of the nuclear weapons complex.

61. If there is to be breakthrough in Pakistan that does not involve another fearful nuclear crisis to focus attention on the nuclear danger, it will take action by the international community to confront Pakistan over its nuclear weapons program. This will require dealing with the actually existing danger posed by nuclear weapons in Pakistan and giving this greater priority than the low-level war against the Taliban in Afghanistan and the potential threat of radical Islamist attacks on the West. Realistically, it also will mean dealing with India’s nuclear weapons, and those of all the other nuclear weapon states, who will have to finally accept their long-evaded obligation to nuclear disarmament. The single biggest thing that could change nuclear thinking in Pakistan would be a clear sign that the great powers are finally ready to abandon the idea of nuclear weapons as a basis for national security.

The Authors

PERVEZ HOODBHOY has taught at the Department of Physics at Quaid-e-Azam University since 1973, and now also teaches in the Departments of Physics and Mathematics at Forman Christian College in Lahore. He is the author of Islam and Science: Religious Orthodoxy and the Battle for Rationality (Zed Books, 1991) and editor of Education and the State: Fifty Years of Pakistan (Oxford University Press, 1998) and Confronting the Bomb – Pakistani and Indian Scientists Speak Out (Oxford University Press, 2013). As producer and presenter, he has made several documentary series on popular science for Pakistan Television. He also has made two documentary films on nuclear dangers in South Asia with Zia Mian. He is a member of the Asia Pacific Leadership Network for Nuclear Non-Proliferation and Disarmament (APLN).

ZIA MIAN, a physicist, directs the Project on Peace and Security in South Asia at Princeton University’s Program on Science and Global Security and teaches at the Woodrow Wilson School of Public and International Affairs. His research and teaching focus on nuclear weapons and nuclear energy policy, especially in Pakistan and India.
The Asia Pacific Leadership Network (APLN) comprises some forty senior political, diplomatic and military and other opinion leaders from fourteen countries around the region, including nuclear-weapons possessing states China, India and Pakistan. The objective of the group, convened by former Australian Foreign Minister and President Emeritus of the International Crisis Group Gareth Evans, is to inform and energize public opinion, and especially high-level policy-makers, to take seriously the very real threats posed by nuclear weapons, and do everything possible to achieve a world in which they are contained, diminished and ultimately eliminated. See further http://apln.anu.edu.au.

The Centre for Nuclear Non-Proliferation and Disarmament (CNND) contributes to worldwide efforts to minimize the risk of nuclear-weapons use, stop their spread and ultimately achieve their complete elimination. It works in partnership with the Geneva Centre for Security Policy (GCSP) and the Stockholm International Peace Research Institute (SIPRI), and acts as the Secretariat for APLN. The director of the Centre is Professor Ramesh Thakur, former UN Assistant Secretary-General, and it is assisted by a distinguished International Advisory Board chaired by Professor Gareth Evans. See further http://cnnd.anu.edu.au.

These express the views of the authors, and do not necessarily reflect the views of APLN members or the CNND, or other organizations with which the authors may be associated. They are published to encourage debate on topics of policy interest and relevance regarding the existence and role of nuclear weapons.

APLN and CNND gratefully acknowledge the generous support of The Australian National University; the Government of Australia, in particular the Department of Defence and the Department of Foreign Affairs and Trade; the Nuclear Threat Initiative; and The Simons Foundation of Vancouver, Canada.

Centre for Nuclear Non-Proliferation and Disarmament
Crawford School of Public Policy
The Australian National University
Canberra ACT 0200 AUSTRALIA
Email: cnnd@anu.edu.au
Telephone: +61 2 6125 0912