

Non-Proliferation Strategies for India and Pakistan in the Aftermath of the May 1998 Tests

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The world faces a crisis of nuclear weapons proliferation much different from that which we experienced in the context of the Cold War. Although the tensions of the Cold War highlighted the dangers of an escalating nuclear arms race and promoted the implementation of a policy regime that made the acquisition and development of nuclear weapons both more technically challenging and less politically acceptable, it has not led to a total elimination of nuclear weapons technology. As a consequence, we find ourselves today in a new and more complex environment in which the danger is greater and ill-defined, such as the threat of rogue states or even non-state actors such as Al Qaeda acquiring nuclear weapons capability.

In early 2003, director of CIA George Tenet gave a bleak assessment of the world situation in regards to proliferation of weapons of mass destruction (WMD). He noted that the international nonproliferation consensus has weakened, the desire of small states for nuclear weapons has increased, and it is now growing increasingly difficult to prevent WMD technology and equipment from spreading both to and from non-state actors. Worse is the markedly increased threat of today's nuclear technology importers from becoming exporters in the upcoming years (1). Pakistan and India sit squarely in the center of this assessment. In spite of the nuclear non-proliferation treaty (NPT) of 1968, both India and Pakistan have developed their nuclear weapons programs with relative diplomatic impunity and the threat of destabilization they now pose to the hemisphere or even the world as a whole can not be dismissed (2).

Section I: Background

On the afternoon of May 11, 1998, India singlehandedly changed its role in world geopolitics with an announcement: earlier that day Indian scientists at the Pokharan site of northwestern Rajasthan had successfully detonated a nuclear device. With a muffled subterranean "whump" India had joined the nuclear club (3 pg. 44). The decision to go nuclear was apparently more political than strategic: the many politicians that made up political opposition to the governing BJP ("Bharatiya Janata Party") speculated that the nuclear endeavor was a carefully-calculated opportunity to rally popular support around the BJP

at the expense of political allies with whom it was in-fighting. Populist or not, the nuclear program was sustained by a groundswell of popular support so strong that even Sonia Gandhi, president of the venerable Indian National Congress was forced to withhold her carefully worded criticism of the national nuclear program, as the media provided image after image of joyful Indian celebrating having crossed the nuclear threshold into superpower status.(3 pg. 45)

Pakistan, predictably, followed suit. On May 27, 1998, Pakistan's intelligence sources indicated India was preparing to launch an armed incursion in Pakistani territory, presumably in the disputed Kashmir region, and subsequently initiated a series of nuclear weapons tests at its Chagai military site (3 pg. 53-54).

Estimates about the number and strength of the nuclear explosions varied, but scientists have come to the consensus that Pakistan detonated 6 nuclear devices (one for each of India's earlier that month plus one additional "for good measure") of at least first-generation fission caliber or greater (boosted-fission or fusion). Adding nuclear capability to India's and Pakistan's already burgeoning weapons arsenals of short-, medium-, and long-range missiles made clear that both states had increased the stakes of the ongoing military and geopolitical competition that has characterized their awkward relationship for decades (3 pg. 53-54). The Arms Control Association estimates the current arsenals of both states as follows: India is presumed to have between 45 and 90 nuclear warheads. The Pentagon extrapolates from known information that India's stockpile of nuclear weapon components is small but that nuclear-capable weapons could be assembled and deployed in less than a week. The Pentagon estimates that Pakistan possesses between 30 and 50 nuclear warheads stored in component form and deployable "fairly quickly."¹ (4). Tests have continued on both sides since the initial explosions, and both nations' weapons arsenals are expected to grow – not shrink – over the next few years. By the end of 2003, India announced its Agni I and II ballistic missiles were ready for deployment and had been placed in control of the army and announced India had a credible second-strike capability, while Pakistan had

1. For the sake of comparison, Israel is presumed to have between 75 and 200 nuclear weapons.

conducted three more ballistic missile tests (5).

Section II: The Current Threat of Nuclear Proliferation

The threat posed by the Pakistani and Indian nuclear arsenals takes two forms. The first danger of nuclear proliferation is that India and Pakistan, in an effort to gain strategic advantage over the other, will escalate their respective nuclear capabilities in an arms race that destabilizes the region. But the development of nuclear arsenals in South Asia poses an additional threat that extends well beyond the Indian-Pakistani nuclear rivalry. That threat is the possibility that non-state actors (or in Pakistan's case, even state actors) will take advantage of shoddy safeguards on existing weaponry or weapon-making components to export nuclear technology and equipment either to other states or to non-states such as the Taliban, Hezbollah, and the like. This very real threat, once nothing more than a hypothetical worry, has now happened (6).

Given Pakistan's economic desperation and the loose control the state is capable of exerting over civil society and government workers, Pakistan has become – if it wasn't already – a major link in the distribution of nuclear technologies and apparatus. In fall 2003, when Libya renounced its weapons of mass destruction (WMD) program and fully disclosed its sources of technology and equipment, and when Iran agreed to cooperate with the International Atomic Energy Agency (IAEA), the two nations painted a damning picture of a clandestine nuclear weaponry black market in which Pakistan is a key actor. It is now clear that one Abdul Qadeer Khan, the former head of Pakistan's Khan Research Laboratories, over a 14 year period from 1989–2003 provided nuclear weapons-related technologies, equipment, and knowledge to Iran, North Korea, and Libya, including some blueprints of Chinese origin (this further implicates China for having provided nuclear technology to Pakistan, probably to exacerbate the conflict with India). In addition to centrifuge technology, Khan provided Libya with an actual fission weapon: a 1000 bomb deliverable using aircraft or a ballistic missile. The transfer raises the question of which other countries or non-government actors may also have received technology from Khan.(6)

While the Pakistani government has taken great pains to distance itself from Khan, painting him

as a rogue actor, a megalomaniac acting without state consent for the purpose of personal enrichment and even forcing him to repent publicly for the weapons sales, privately Khan has implicated government accomplices at the highest levels of the Pakistani authority. The accusation came as no surprise, as the complexity and nature of the technology transfers to Libya, North Korea, and Iran preclude Khan from having been able to arrange for the movement of so much equipment without the consent or at least knowledge of many high-level state actors. Khan transferred not only computer software and know-how but computer hardware and equipment as well as larger physical items impossible to covertly pass across state borders. Most independent analysts are skeptical Khan could've circumvented the Pakistani military's tight control over the nuclear weapons program for over two decades without implicit approval or even involvement of the Pakistani government and military (6).

Section III: Nuclear Security Issues

In looking at policy regimes that can help limit the continued development and spread of WMD in South Asia it's important to understand why these nations weaponized in the first place, breaking a three-decade moratorium on weapons development. Dealing with those issues is the first step towards implementing a policy regime – including sanctions or more onerous elements – that attempts to contain the threat.

Jacques E.C. Hymans showed that India's nationalist party made the decision to go nuclear for many of the same reasons that France's Nationalists did in 1958: a potent combination of nationalist pride and the exaggerated need to protect oneself from an external enemy. India's behavior in regard to nuclear weaponry can be characterized in four phases: concern for the negative consequences that building a bomb would incur for the nation from 1964-1972, an intensified effort to weaponize from 1972-1989, a period of true strategic ambiguity from 1989-1998, and finally a clear decision to embrace nuclear technology post 1998.(7, pgs. 139-149)

Prime Minister Vajpayee, upon the rise of his BJP party to power in India, immediately and without consulting either his coalition partners or the civil service, ordered the 1998 nuclear tests. In the

aftermath of the tests, Vajpayee and other top government officials argued a plethora of vapid pretexts for India's nuclear tests, from Chinese encirclement to Western hypocrisy to India's legitimate aspirations for great power status to Pakistan's "covert" bomb. Vajpayee's reasoning was however best elucidated by the following statement: "We have a big bomb now." (quoted in (7, pg. 150)). The decision to go nuclear was emotional, not logical, and centered on Vajpayee's interpretation of Indian-Pakistani relations over the decades. Vajpayee's singular focus on Pakistan was clearly part of the BJP party's post-1984 "rhetorical escalation" against Pakistan and Muslims, and reflected the peculiar "majority complex of inferiority" described by Christophe Jaffrelot (quoted in 7, pg. 150). The implications of such geopolitical reasoning for going nuclear is as follows: because the drive to go nuclear was not based on strategic concerns nor even apparently on any well-thought out reasoning, it will take more than an easing of strategic concerns to convince India to reign in its nuclear weapons.

Pakistan's case is more straightforward. Pakistan's interest in nuclear technology was transformed from pacific to military due to a particular sequence events of that promoted a sense of insecurity among the Pakistani people and government. The 1971 dismemberment of Pakistan showed Pakistanis India was both capable and willing to relieve Pakistan of constituent territories. India's test of a nuclear device in 1974 added to the tension and strengthened Pakistani desire to level the playing field with a nuclear weapon program of its own. The ongoing tension that characterizes relations between Pakistan and India are the single most important determinant of Pakistan's approach to nuclear weapons and related agreements such as the Non-Proliferation Treaty. Pakistan has always insisted it would only sign the NPT only if India signs it as well . Pakistan has proposed a number of regional test ban treaties, none of which India has agreed to participate in, arguing that non-proliferation should be international, encompassing all other nuclear weapons states but particularly China. Thus has the the idea of a regional solution been postponed indefinitely. The threat of nuclear maneuvers by India remain the single most important factor in Pakistan's nuclear defense policy, and India's recent nuclear posturing makes clear that Pakistan will be unlikely to disarm until India does (8 pgs. 89-93). Knowing that, we can now look at treaties and policy frameworks that we may attempt to apply to South Asia to discourage further

arms development or weapons sales to non-nuclear nations.

Section IV: Policy Framework to Limit Proliferation

The Non-Proliferation Treaty of 1968

The Nuclear Non-proliferation Treaty of 1968 was signed in Washington, London, and Moscow at the height of the Cold War. Its main articles state in brief that (I) Nuclear weapons states who are a party to the treaty will not transfer nuclear weapons to any other state whatsoever, (II) Non nuclear weapon states who are party to the treaty will neither receive nuclear weapons from other states nor undertake to produce them themselves, and (III) each non-nuclear weapon state party to the treaty will implement safeguards as described by the IAEA to ensure no peaceful nuclear programs are diverted to the production of nuclear weapons, (IV) all parties have the right to develop nuclear energy sources for peaceful purposes and to exchange information for that end, (V) each party will undertake to make available to non-nuclear weapons states the potential benefits of nuclear explosions, and (VI) each nuclear weapons state will endeavor to cease the arms race and disarm its nuclear capacity (9, pgs. 199-202).

The NPT is not a strong tool with which to bring the Pakistani and Indian nuclear arsenals under wraps. Significantly, both nations remained reluctant to sign the NPT in 1995 when diplomatic efforts intensified to ratify the treaty's indefinite extension. India to this day maintains that the NPT is a discriminatory document that divides the world into legitimate and illegitimate states solely on the basis of whether states acquired nuclear technology before or after the original treaty was developed; India resents the fact that China's nuclear tests in 1964 earned China admission to the nuclear "club" as nuclear weapons state (NWS) while India's nuclear test in 1974 earned it pariah status and did not lead to a reassessment of its non-nuclear state (NNWS) status. Pakistan, meanwhile, in a carefully crafted effort to retain nuclear parity with its chief rival, insists it will only sign the NPT if India does (10 pg. 176).

Assuaging India's concerns about the NPT as a discriminatory device will not be easy. To grant India "Nuclear Weapon State" status (NWS) as it wishes would be to reward it for consciously violating

the 30 year international norm against new nuclear weapons states and would likely encourage other states to follow India's lead. Since it is currently, in light of the nuclear tests, impossible for India to join the NPT as a NNWS, the only remaining alternative is for India to remain outside the Treaty. Spurgeon Keeny Jr. recommends that international efforts focus instead on formalizing the pre-test status quo by encouraging both India and Pakistan to join the Comprehensive Test Ban Treaty (CTBT) and by encouraging them to participate in future negotiations of the Conference on Disarmament (CD). This scenario would reinforce the existing norm against proliferation, and show sufficient merit for the US to revoke the economic sanctions it imposed on the two countries. Furthermore, by forcing India and Pakistan to remain outside the NPT both countries would be forced to abide by the same rules as before the nuclear tests and failure to do so could hypothetically lead to further economic sanction (11). Unfortunately, the reality is that the United States is unwilling to press economic sanctions on South Asia – particularly Pakistan – because it is perceived as being too important in the war on terrorism. Because the United States suspects Osama bin Laden is located somewhere in northern Pakistan, they will be unwilling to allow the American-Pakistani relationship to deteriorate at this time; because no economic sanctions are imminent, Pakistan has been given the green light to do what it pleases with its weapons, regardless of the NPT (11).

The NPT is a weak tool with which to combat the proliferation of WMD for other reasons as well. The 1995 conference at which the NPT was extended indefinitely identified several problems with the treaty that needed to be addressed. Foremost among the grievances was that the nuclear weapon states – primarily the United States – have failed to implement their Article VI disarmament obligations. Because other treaties like the CTBT were rejected by the American Congress (more on this below), and the FMCT stalled at the Conference on Disarmament (CD), pressure to lessen the gap between the nuclear haves and the have-nots has intensified, and much of that pressure is being exerted on Article VI of the NPT (12)

The Comprehensive Test Ban Treaty (CTBT)

India and Pakistan have similarly fought hard in opposition to the CTBT. In 1995 when intelligence information made clear that India was preparing to test a nuclear device of some sort at the Khetolai military range, the declared nuclear powers stepped up their efforts to implement the Comprehensive Test Ban Treaty. India clamored that the CBTB was nothing more than a tool to further solidify the division between the nuclear and non-nuclear states and promoted instead a firm timetable for total nuclear disarmament. Naturally the five nuclear nations resisted the timetable proposal as being against their national interests. When the CTBT went before the United Nations Conference on Disarmament, India succeeded in blocking its passage in spite of Pakistani support for it. The UN General Assembly proceeded to sign the pact by an overwhelming margin, an essentially vapid act since it lacks support by either India or Pakistan, two of the three nations whose nuclear arsenals the bill sought to limit (the third nation, Israel, signed the pact). India refused to sign the CTBT and Pakistan refused to do so until India does (10 pgs. 176-177)

The Missile Technology Control Regime (MTCR)

The Missile Technology Control Regime (MTCR), (13, 13, 13) was developed as a means of controlling no particular weapon but rather the means of propelling or transporting many kinds of weapons – Ballistic Missiles – and as such was devised to buttress or support the NPT. It has never been a widely accepted treaty in spite of its good intentions and fails as well in the particular case of Pakistan and India. First of all, the MTCR burgeons with references to missiles “intended for WMD use” in order to address a previous shortcoming; this language substitutes objective determinations with subjective judgments in regard to intent. Furthermore, the MTCR deals extensively with controls on exporting the technology but makes no effort to control those who would import the technology. This lopsided approach does not address the demand for missile technology but rather raises the price, allowing the few nations willing to export to do so at great profit. The fact that most missile-bearing states that signed the treaty have made no effort to reduce their own stockpiles in recent years makes

particularly salient the treaty's intent to prevent other countries from obtaining the technology. Even the NPT's clauses that allow non-weapons states to obtain peaceful nuclear technology for energy production in exchange for remaining nuclear-weapon free. This shortfall caused Pakistan to once argue in a UN debate that "the missile capabilities currently existing or emerging in developing countries are of no significance compared to the massive delivery capabilities possessed by the nuclear-weapon states under the NPT." Lastly, this treaty, even if under other circumstances was a powerfully-written and rigidly enforced document, would still fail to address the Pakistan-India issue on the grounds that these two neighboring states could still attack each other using fighter jets or non-missile weapons technologies. And developed nations are unwilling to rewrite the treaty with stronger terms because it could under some circumstances limit their ability to use ballistic technology for other uses, like space flight (14).

Nuclear Weapons-Free Zones (NWFZs)

The United States has encouraged the development of NWFZs wherever possible, and particularly where they would further limit the spread of nuclear weapons without disturbing existing security arrangements, where provisions exist for adequate verification, the initiative for such treaties comes from the member states of the region in question, and all states in the region participate in the NWFZ. One of the most well-established of the NWFZs is Latin America, which serves as a model for similar treaties elsewhere in the world. The Brazilian representative to the United Nations suggested as early as 1962 that Latin America develop a nuclear weapon-free zone. The treaty was endorsed in 1967 by a vote of 82-0 (the US voted in support of the treaty). By 1989 the treaty had been ratified in 23 Latin American countries (15).

The Treaty of Tlatelco, as it came to be known, stipulates that contracting parties prevent the testing, use, manufacture, production, or acquisition of nuclear weapons, that they prevent the receipt, storage, installation, deployment or any other form of possession of nuclear weapons, waive the right to test, manufacture, produce, possess, or control any nuclear weapons whatsoever. The treaty includes extensive clauses that provide for verification and inspection, and establishes an organization whose

purpose is to help ensure compliance with the provisions of the treaty— OPANAL (Agency for the Prohibition of Nuclear Weapons in Latin America). The United States, making some reservations for the transport of nuclear materials within Latin America, signed and ratified the agreement in 1981 (15).

The Central Asian states of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan negotiated a similar agreement in September 2002, after five years of negotiation. The final document followed a 1975 UN General Assembly resolution whose definition of a nuclear weapon free zone as the “statute of a total absence of nuclear weapons to which the zone shall be subject” and calls for “an international system of verification and control... to guarantee compliance” (16).

However, while Nuclear Weapons Free Zones are on paper a logical way to prevent the spread of nuclear weapons before the fact, they are useless once a nation has gone nuclear, as have Pakistan and India, and furthermore, they are only a logical policy alternative in the few cases where all neighboring states of a given region are advocates of a non-nuclear policy. This is clearly not the case in South Asia, where tensions between states ensure a continued proliferation of nuclear weaponry as Pakistan and India eye each other warily, and India remains suspicious, perhaps speciously, of China. NWFZ Treaties present obstacles of their own, as well. The Central Asian states, upon completing their treaty, sought nuclear weapon state assurances from America and Western Europe that the latter would respect the treaty and not use a nuclear weapon against Central Asia. This “negative security assurance” has not yet been granted and may not be easy for them to obtain; in the case of a country like Pakistan, it may be impossible (16).

Other Treaties

Other treaties of which Pakistan and India are both a part may have a greater ability to promote nuclear non-proliferation. Both countries could strengthen the claim that they are responsible nuclear citizens by supporting the Convention on the Physical Protection of Nuclear Materials, to which they are both already a party. The ongoing effort to strengthen this initiative aims to expand its applicability to nuclear material for peaceful purposes in domestic use, storage, or transport, and to prevent the

sabotage of those materials and facilities. One of the greatest threats of the South Asian nuclear arsenals is that Al Qaeda or similar groups will be able to acquire nuclear weapons by stealing them from loosely-guarded facilities in India or Pakistan. India's and Pakistan's overt support for this initiative would ease many analysts' concerns and promote a far safer world in general, if Pakistan and India must remain nuclear (17).

The Fissile Missile Cutoff Treaty (FMCT) places a cap on the production of plutonium and highly enriched uranium for weapons. The draft FMCT considered by the Conference of Disarmament in the mid-1990s grandfathered existing stocks of weapons materials into acceptance by considering only future production of materials. Pakistan objected to the FMCT because its existing stockpile was smaller than India's, freezing Pakistan in a disadvantageous position. Conceivably, provided the United States is able to convince India that becoming a party to the FMCT advances their own security interests, Pakistan could be persuaded to reach nuclear parity with India and then sign as well. This scenario, while not perfect, would at least ensure the nuclear stockpiles are capped at India's existing level. Unfortunately, not even the US is convinced it wants to be party to the FMCT. While the Bush administration has expressed support for an FMCT that advances American security interests, discussion over the treaty has gotten bogged down over a dispute with China over an issue China sees as related: an outer space arms race. Only when the US is able to overcome this obstacle will it be free to continue pressing India and Pakistan to join the treaty (17).

Section V: Other Solutions

The fact that Libya disclosed Pakistan as the source of its nuclear technology and weapons program changed the clandestine world of nuclear technology proliferation permanently. Kampani writes, "Proliferator states, rogue entities, scientists, engineers, manufacturers and suppliers can no longer feel assured that their identities will be protected by client states" (6). The now-obvious Chinese heritage of Pakistan's nuclear technology should be equally sobering for China, who may or may not reappraise its program to continue to support Pakistan's solid-fuel ballistic missile and possibly nuclear programs (6).

Embarrassment from disclosure alone, unfortunately, is not a strong enough deterrent to effectively limit the continued proliferation of nuclear technologies from either China, Pakistan, or other nuclear powers that have developing or developed nuclear capabilities, including Iran and North Korea.

Proliferation under the Logic of Deterrence

The characteristics of Pakistan's known military arsenal precludes its being able to penetrate deep into Indian territory with a nuclear weapon. Limited to several dozen French-supplied Mirage 5s and US-produced F16s, Pakistan has had to develop its own ballistic missile system: these include the short-range Hatf-I and medium-range Hatf-II missiles. India and Pakistan's shared common border and Pakistan's limited ballistic missile capability forces Pakistan to locate much of its arsenal along its western border to increase penetration capability. But the result is a nuclear arsenal whose airborne trajectory is no greater than 5-7 minutes. This precludes the implementation of any early warning system analogous to the complex networks employed over the several-thousand mile gap that separated the United States from the USSR during the Cold War (8 pgs. 93-94).

The strategic depth and military control of Pakistan's nuclear weapons arsenal negatively affects other aspects of the conflict as well, including the amount of time military leaders have with which to determine how to best react. It is not known if Pakistan has implemented well-known security mechanisms such as the two-man rule² or permissive action links (PALS) that block arming mechanisms in the absence of appropriate authorization. It is doubtful the latter has been implemented, due to American export restrictions on the technology. Both India and Pakistan have established formalized chains of command which are the sole organizations authorized to order a nuclear strike (18). In sum, those who would promote further nuclearization of South Asia on the grounds of the logic of deterrence overlook the arsenal of technological and policy mechanisms that were implemented under the Cold War to ensure no nuclear weapon would be used inadvertently and to enable sufficient time to develop an appropriate response to a nuclear attack. Lacking these structures, policies, and military equipment –

2. Two persons must act simultaneously in order to launch the weapons.

satellites, for one – a policy of letting Pakistan and India continue to arm in an escalating arms race is inappropriate: the safeguards that prevented the Soviet-American arms race from leading to an accidental war have not been- and can not be implemented in South Asia (8 pgs. 95-96)

That said, evidence is accumulating that indicates while India and Pakistan are content to escalate their weaponry vis à vis each other, they are reluctant to use nuclear weapons in battle. This was best demonstrated in 1999 during the Kargil War in Kashmir, when units of the Pakistani Northern Light Infantry breached the Line of Control. India's response was measured, and relied on air power to dislodge the Pakistanis from mountain hideouts. At no time did the Indian military cross the Line of Control, and by choosing a cautious horizontal escalation along the border, India showed restraint in not resorting to its newest weapon. Knowing that Pakistan possessed the same weapon may have played a key role in the decision. If so, both Pakistan and India have come to a "sober understanding of their circumstances that has blocked any imminent danger of nuclear escalation" (19). In 2003, then Prime Minister Vajpayee declared outright, "Our nuclear weapons are meant to deter irresponsible military adventurism, not to fight a nuclear war." (5).

Feroz Hassan Khan disagrees about the same events, and argues that stability through nuclear weapons as deterrents is dependent upon the United States as an external arbiter in the escalating regional tensions. Khan points out that Pakistan and India have come to the brink of war at least twice since becoming openly nuclear powers and at least three times during their covert nuclear period, and that the last three conflicts only narrowly avoided escalating into a full-scale war because of intense US diplomacy. The independence-dependence paradox explains the particular type of brinkmanship used in South Asia as a calculated method to meet policy objectives: Pakistan uses the tension to press the US to force India to bargain, and India uses coercive diplomacy to force Pakistan to halt support for militant groups. Both nations expect the US to hold them back while simultaneously advancing their own interests, leaving the US in an unenviable intermediary role (20).

Economic Sanctions

Economic sanctions are occasionally proffered as a cheap and effortless way to encourage or demand certain behavior from so-called “rogue states.” Economic sanctions have been a particularly important element of the American government’s policy towards Cuba, and economic sanctions were imposed on Iraq for most of the 1990s. But economic sanctions can hardly be considered an important policy tool for promoting compliance of rogue states and their governments. In the case of Iraq, economic sanctions caused countless human suffering and even widespread death while doing nothing to shake Saddam Hussein’s grip on power. Mueller and Mueller write, “Indeed, it would be illegal for US Air Force officers to comply with an order to conduct an air campaign that would inflict the same sort of damage that has been caused by sweeping trade sanctions” (21pgs. 179-180).

Gaurav Kampani goes one step further, proposing that economic sanctions would promote, not prevent, the continued proliferation of nuclear weapon technology. If economic and national pride concerns were what prompted A.Q. Khan and top military officials to attempt to sell nuclear weapons-making equipment and technologies to Iran and Libya, economic sanctions will only strengthen the incentives to continue in the same vein (6).

Most importantly, the American government has shown itself unwilling to impose the harshest economic sanctions available to it, in spite of legislation that mandates that it do so. Immediately after the nuclear tests, the United States enacted far-reaching sanctions mandated by American law Sec. 102(b) of the Arms Export Control Act, a.k.a. the Glenn Amendment. But within 18 months, the US Congress swung from applauding strict sanctions to urging the president to waive not only the Glenn Amendment but also the Pressler and Symington amendments, which mandated further penalties for states engaged in certain types of nuclear activity. The US Congress had been forced to essentially abandon 25 years of non-proliferation policy in order to reconcile conflicting objectives, some of which were political and the result of strengthening Indian-American and Pakistani-American political constituencies, but also reflected a growing realization the sanctions were more detrimental to American business interests than Indian or

Pakistani (22).

Military Solutions

It is quite clear that military solutions are not feasible as an option for reigning in or controlling the Pakistani and Indian nuclear programs. Kampani writes “If the United States ever made the mistake of degrading or destroying the Pakistani military’s coercive capacity, Pakistan might become a failed state, and the problem of securing its nuclear facilities, fissile materials, scientific personnel, and actual weapons and delivery systems would become a security nightmare” (6). Daryl Kimball opposes preemptive military action in states like Pakistan or India for the same reason, stating “such an approach would forfeit essential nonproliferation tools and provide a false sense of security... In practical terms, military pre-emption is no substitute for a comprehensive and consistent preemptive approach. As the recent US experience in Iraq shows, wars cost lives and money and lead to unintended consequences; nonmilitary solutions should not be undervalued.” (2).

Section VI: Current US Policy

The current national strategy for limiting or preventing nuclear proliferation deviates markedly from those guidelines . In September 2002, President George W. Bush signed National Security Presidential Directive No. 17, from which is derived the six page National Strategy to Combat Weapons of Mass Destruction. The National Strategy relies on three pillars: non-proliferation, counter-proliferation, and WMD consequence management. As part of the counter-proliferation pillar, the United States has made it clear that a strong declaratory policy and effective use of military forces will be essential elements of the American posture, and that the US reserves the right to respond with overwhelming force using all options at its disposal to the use of WMD against the United States, its allies, or its forces abroad (2).

The tough talk is more damaging to conventional non-proliferation regimes than strengthening to America’s anti-WMD strategy. The Pentagon’s nuclear posturing calls for new nuclear bunker busters that would permit contingency strikes against deeply buried targets, and suggests that the US reserves

the right to use nuclear weapons in preemptive attacks against possible WMD targets. Unfortunately, the nuclear posturing only “undermines ongoing non-proliferation efforts by suggesting to other states that nuclear weapons are legitimate and necessary tools that can achieve military or political objectives” (23). Military force backed with the rule of law and supported by the international community can be a powerful and important option of last resort for when preventive diplomacy and arms control are unable to prevent continued proliferation. But if the US renounces its long-standing pledge not to use nuclear weapons against non-nuclear weapon states in good standing with the NPT, those states will have a powerful incentive to increase their nuclear arsenals, not reduce them (23).

Section VII: Recommendations

Don't Abandon the NPT

Policy analysts agree the security framework provided by the Nuclear Non-Proliferation Treaty is clearly valuable even given current conditions and should not be abandoned. While not perfect, it has led several states to abandon their nuclear programs, and led to an overall limitation of the US-Soviet arms race during the Cold War. The NPT however is inadequate on its own, especially when both India and Pakistan remain outside its reach by refusing to participate in it. Kimball recommends the United States fully support strengthened international monitoring and inspections, which aid US intelligence and provides the basis for collective action against non-compliance. It was just such a regime of inspection while North Korea was bound by the NPT that led to discovery of its illicit nuclear program in 1992. In 2004, Iran’s nuclear programs were uncovered in the same way (2). The NPT would be much strengthened if the United States and the rest of the world were to categorically reject the non-NPT weapons status of Israel, India, and Pakistan. Treaties are strongest when they are accepted universally: universal support raises the cost of noncompliance by making more likely a collective response on the part of the treaty members. By being willing to accept Israel, India, and Pakistan as non-NPT states that have developed nuclear weapons, it bolsters the arguments of those who would claim nuclear proliferation is too hard to contain, and makes irrelevant the promise of peaceful nuclear technology

transfers to those treaty members that desire it (17).

An important element in those inspections regimes should be to ferret out the link between North Korea and Pakistan (and possibly Iran), because analysts now believe Pakistan has transferred centrifuge enrichment technology and perhaps weapon designs to North Korea (24). Even if Pakistan and India reject the NPT, they can still react positively to prevent the unwarranted access of other states to nuclear weapon technology. France did this until 1992, when it finally signed the NPT, by participating in the Nuclear Suppliers Group (NSG) from its inception and endorsing a charter that committed it to responsible distribution of nuclear technology. This permitted France the freedom of an independent posture while still supporting non-proliferation efforts (17).

Consistent US Policy and Behavior

But the United States and other global powers must also be more consistent in addressing nations that are developing nuclear capabilities. The US was too willing to overlook Pakistan's nascent nuclear program when it was convenient to do so, and has indicated again it may be willing to work with Pakistan in order to further the hunt for Osama bin Laden. And it will be necessary in the future to limit access to dangerous nuclear technologies under the guise of "peaceful" development of power sources. At present the NPT guarantees access to peaceful nuclear technology, but the broad diffusion of that technology has enabled states like Iran to acquire uranium enrichment equipment or plutonium production facilities whose use can easily be turned over to the production of weapons materials. Lastly, Kimball recommends the United States play more of a leadership role in the reduction of nuclear stockpiles. At present, the United States is unwilling to reduce its testing and improvement regimes (2).

Export Controls

Just as important as limiting India's and Pakistan's nuclear stockpiles is finding a way to curb proliferation of technology and equipment from Pakistan (and perhaps India as well, in the future). Both country's nuclear arms are at present outside of the reach of the International Atomic Energy Agency (IAEA) safeguards and both countries have until now unilaterally controlled sensitive exports through

broad regulatory powers and unclear state mechanisms such as state-owned enterprises. It has become clear that North Korea and Iran have advanced their nuclear capabilities by applying to major nuclear weapons states for traditional, dual-use equipment, then integrating it with illicit pieces obtained from the new nuclear powers (India, Pakistan, and Israel) (25). While both India and Pakistan have committed themselves to limiting the threat of secondary proliferation, some questions remain, particularly the resources both countries have at their disposal with which to address the problem, their existing record of enforcement (i.e. A.Q. Khan), and in the case of Pakistan, political commitment to self-restraint (25).

While India's export-control system is fairly-well developed by international standards, a case in 2003 in which a private engineering company exported some dual-use items and precursors to Iraq via shell companies in Jordan and Dubai showed the legal framework and enforcement system contains some serious gaps. While recent initiatives have promoted streamlining the export process to stimulate trade, India will have to find a balance that prevents proliferation of dangerous equipment. Pakistan has loopholes of its own which need to be closed to prevent further transfer of technology and equipment. Several state agencies are exempt from controls such as the requirement to register with the Export Promotion Bureau prior to submitting license applications. Analysts believe the Pakistani government lacks the appropriate number of checks and balances, a civilian oversight over military decisions, and has provided far too little information in regard to its enforcement record on export controls. It is therefore imperative that the government exemptions on exports be revoked, that the ruling elite firm up their commitment to the non-proliferation process, and that the Pakistani government introduce explicit prohibitions against the transfer of technology and know-how (25).

Pakistan itself has made considerable advances in its efforts to limit the spread of nuclear technology from Pakistan to other nations, though A.Q. Khan's tight links to the Pakistani government mean Pakistan's current efforts should be subject to verification before they are accepted at face value. On September 18, 2004, Pakistan's senate approved export control legislation intended to prevent continued proliferation of WMD. The Pakistani legislation mandates sentences of up to 14 years in prison and up to \$85,000 in fines for anyone convicted of proliferating materials related to biological weapons,

missile delivery systems, or nuclear weapons. The bill was met with some opposition at several levels of the government but eventually passed and as of October 2004 it is expected to be signed by President Musharraf. This represents progress in one aspect of limiting the proliferation of WMD (26).

Engage

At the very least, to reduce tensions in South Asia the US should engage both Pakistan and India now instead of waiting for the next crisis to emerge and hope for Indian and Pakistani sensibilities to reduce the tensions and avoid a conflict that all too easily could turn nuclear. Khan recommends the US appoint a high-level ambassador and a team of experts to the region as did president Kennedy with Harriman in 1962, and focus on preparing a road map that takes into consideration South Asia as a whole – including Afghanistan.(20)

Given the unlikelihood of either Pakistan or India joining the NPT, it is clear that no significant progress will be made to curb the proliferation of nuclear weapons and technology in South Asia if the United States is unwilling to engage these two states, as well as Israel, in other ways. The US perception that Israel's, India's, and Pakistan's nuclear arsenals are to be "managed" rather than reversed undermines the non-proliferation world status quo.

India and Pakistan must be encouraged to responsibly manage their nuclear arsenals. In late July-August 2004, Indian Foreign Minister K. Natwar Singh and Pakistani President Gen. Pervez Musharraf met at Musharraf's official Army House residence in Islamabad to develop a formal system for early notification of missile tests. The high-level diplomacy is an important step towards normalizing relations between the two estranged South Asian neighbors, but its only likely effect will be a lessening of tensions, not a reduction in either state's nuclear capacity. Rather, India's military budget for the fiscal year 2005 represents a 27 percent increase (27). At around the same time, India and Pakistan agreed to implement a two year bilateral moratorium on further nuclear tests and establish a secured communications link (a.k.a. "hotline") to prevent misunderstandings and reduce risks. The initiative came to pass at the urging of Prime Minister of India Manmohan Singh, who succeeded Prime Minister

Vajpayee in late 2004. Singh and his UPA³ government have stated they will give the highest priority to maintaining a credible nuclear weapons program while simultaneously committing itself to demonstrable and verifiable confidence-building measures with its nuclear neighbors (28).

It is quite clear that our existing policy regimes are too antiquated, too rife with exceptions, and too haphazardly-applied to be of much benefit to us in attempting to limit the proliferation of nuclear weapons within South Asian states as well as their export elsewhere. This is not to imply that they should be discarded, as they have all to one extent or another aided in the 40 years that we've been trying to curtail the use of nuclear weapon technology. Diplomats at the higher levels ought to make a concerted effort to bring South Asia into the spirit, if not the letter, of the non-proliferation consensus, and work through adamant and exacting regimes of inspection and disclosure to trace the sources of the underground business in weapons sales and transfers. No one policy on its own can possibly provide the geopolitical assurances necessary to assuage the fears of India and Pakistan. But clever diplomacy, perhaps with a redress of geopolitical power dynamics and clever international development aid policy, can lead us well down the road to a safer future.

3. United Progressive Alliance

Section VIII: Glossary of Acronyms

BJP	Bharatiya Janata Party
CD	Conference on Disarmament
CTBT	Comprehensive Test Ban Treaty
FMCT	Fissile Missile Cutoff Treaty
IAEA	International Atomic Energy Agency
MTCR	Missile Technology Control Regime
NNWS	Non-Nuclear Weapon State
NPT	Non-Proliferation Treaty
NSG	Nuclear Suppliers Group
NWFZ	Nuclear Weapon Free Zone
NWS	Nuclear Weapon State
UPA	United Progressive Alliance
WMD	Weapons of Mass Destruction

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