



An analysis of U.S-Indian civilian nuclear cooperation: A special reference to U.S-India's shifting of balance of power in South Asia

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Abstract

Indo-US Nuclear deal is one of the most controversial deals, in recent history. Having its foundations in strong belief over the idea of "Atoms for Peace", this deal has drawn wide attention and criticism within the party-states as well as outside. The deal, no doubt has extremely broad dynamics. It has been apparently motivated by the India's growing energy needs as well as the US desire to forge into a new strategic alliance with India. But there is none the less much more to it behind the scenes and that is all what makes it more controversial. Premise of this study states, "Indo-US nuclear deal promoted under the guise of civil nuclear cooperation is likely to cause unsettle strategic positioning and shift in balance of power in South Asia.

Keywords: U.S.A, India, Nuclear co-operation, balance of power

Introduction

India, which has not signed the Nuclear Non proliferation Treaty and does not have International Atomic Energy Agency safeguards on all of its nuclear material, exploded a "peaceful" nuclear device in 1974, convincing the world of the need for greater restrictions on nuclear trade. The United States created the Nuclear Suppliers Group (NSG) as a direct response to India's test, halted nuclear exports to India a few years later, and worked to convince other states to do the same. India tested nuclear weapons again in 1998. However, President Bush announced July 18, 2005, he would "work to achieve full civil nuclear energy cooperation with India" and would "also seek agreement from Congress to adjust U.S. laws and policies," in the context of a broader partnership with India. U.S. nuclear cooperation with other countries is governed by the Atomic Energy Act (AEA) of 1954 (P.L. 95-242). However, P.L. 109-401, which President Bush signed into law on December 18, 2006, allows the President to waive several provisions of the AEA. On September 10, 2008, President Bush submitted to Congress, in addition to other required documents, a written determination that P.L. 109-401's requirements for U.S. nuclear cooperation with India to proceed had been met. President Bush signed P.L. 110-369, which approved the agreement, into law October 8, 2008. Then-Secretary of State Condoleezza Rice and India's then-External Affairs Minister Shri Pranab Mukherjee signed the agreement two days later, and it entered into force December 6, 2008. Additionally, the United States and India signed a subsequent arrangement in July 2010 which governs "arrangements and procedures under which" India may reprocess U.S.- origin nuclear fuel in two new national reprocessing facilities, which New Delhi has not yet constructed. The NSG, at the behest of the Bush Administration, agreed in September 2008 to exempt India from some of its export guidelines. That decision has effectively left decisions regarding nuclear commerce with India almost entirely up to individual governments. Since the NSG decision, India has concluded numerous nuclear cooperation agreements with foreign suppliers. However, U.S. companies have not yet started nuclear trade with India

and may be reluctant to do so if New Delhi does not resolve concerns regarding its policies on liability for nuclear reactor operators and suppliers. Taking a step to resolve such concerns, India signed the Convention on Supplementary Compensation for Nuclear Damage, which has not yet entered into force, October 27, 2010. However, many observers have argued that Indian nuclear liability legislation adopted in August 2010 is inconsistent with the Convention. The Obama Administration has continued with the Bush Administration's policy regarding civil nuclear cooperation with India. According to a November 8, 2010, White House fact sheet, the United States "intends to support India's full membership" in the NSG, as well as other multilateral export control regimes.^[1] Premise of this study states, "Indo-US nuclear deal promoted under the guise of civil nuclear cooperation is likely to cause unsettle strategic positioning and shift in balance of power in South Asia.

Objectives

1. To Study the importance of Civilian Nuclear Cooperation among U.S.A and India
2. To examine the U.S.A and -India's Balance of Power in South Asia.

U.S.-Indian Civilian Nuclear Cooperation

The analysis thus far clearly indicates that New Delhi faces no deficit of natural uranium feedstock in at least the two most realistic scenarios of relevance to India: (1) when India uses all its PHWRs to produce electricity, with the two research reactors dedicated solely to producing weapons-grade plutonium; and (2) when India uses its eight unsafeguarded PHWRs to produce weapons-grade plutonium using one-fourth of the core, in addition to the two research reactors dedicated solely for that purpose, with the ten remaining PHWRs used entirely for the production of electricity. In both these scenarios, India can produce a much larger number of nuclear weapons than it is currently accumulating fissile materials for, while still remaining well within the most conservative estimates regarding its natural

uranium reserves. If other analytical excursions were undertaken, such as postulating that only two unsafeguarded 220 MWe PHWRs were dedicated full core to the production of weapons-grade materials, notwithstanding the technical problems involved, (in effect, supplementing the two research reactors used for this purpose), with all other reactors used for producing electricity, the same result would obtain: India could produce a much, much larger stockpile of nuclear weapons than it does currently and still 40 Atoms for War? U.S.-Indian Civilian Nuclear Cooperation and India's Nuclear Arsenal sustain all the existing and prospective reactors over the duration of their notional lives entirely through its extant reserves of assured uranium. Given these conclusions, does India face a shortage of natural uranium at all and, if it does not, why is India interested in nuclear cooperation with the United States to begin with? Both these are reasonable queries and must be addressed if the nature of the true constraints in the Indian nuclear program is to be properly appreciated. As a first approximation, it is accurate to say that India possesses a limited quantity of natural uranium. Like all physical resources found anywhere in the world, New Delhi's terrestrial deposits of uranium are finite; these limits, accordingly, define a certain "production possibility frontier" that shapes the total amount of nuclear electricity that can be produced on an inter-generational basis over the long term. In other words, at some point in the very distant future, India's currently known uranium reserves will be exhausted if exploration fails to reveal new deposits: depending both on the rate at which India commissions new PHWRs and its access to international nuclear commerce, this exhaustion point would not arrive before many decades elapse and may even be postponed further, depending on the march of technology in the interim. This issue, which is much discussed within India and elsewhere, acquires special relevance from the fact that India—for the size of its landmass—has much smaller quantities of uranium ore than that possessed by some other countries of comparable size such as Australia or Canada. Thus, for example, in contrast to the 112,369 tons of uranium, which constitute India's total reserves without any assigned cost ranges, Australia possesses some 689,000 tons of uranium that are recoverable at less than U.S. \$40 per kilogram. At price levels of less than U.S. \$130 per kilogram, Australia's reasonably assured resources alone are estimated at some 735,000 tons. If the Category I—Estimated Additional Resources are thrown into the mix, the size of Australia's natural uranium reserve increases by an additional 276,000–323,000 tons at cost ranges of less than U.S. \$40 and less than U.S. \$130 per kilogram respectively. Although Canada's uranium deposits are smaller than Australia's in some categories, the overall size of the Canadian reserve nonetheless is considerably larger than India's by some eleven times, when the total endowments are accounted for across all reporting categories. Where the size of deposits is concerned, therefore, India shares greater similarities with its larger northern neighbor, China, which is assessed as having an even smaller reserve of some 85,000 tons of uranium. Given such comparisons, it becomes obvious that India's known reserves of uranium are simply not so abundant as to support the largest possible expansion of nuclear power as might be necessary for a country of India's size and population over the secular period. The Indian

DAE, for example, estimates that its reasonably assured reserves of 78,000 MTU suffice to produce only 420 gigawatt-electric-years (GWeyears) of electricity when used solely in PHWRs. This implies that India could have approximately 3.1 times the current and planned installed capacity in PHWRs (4,460 MWe) before it runs out of its reasonably assured reserves of natural uranium; it would, however, reach the limits of these reserves at that point—likely several decades into the future—after which nuclear energy could play no further role in national development if the country were to be restricted solely to the use of PHWRs and enjoyed no access to natural uranium from international markets. This fact has been known since the time of India's independence and it is precisely the relative poverty of India's uranium reserves, for example, compared with Australia, Canada, Kazakhstan, or South Africa, that inspired the founder of its nuclear program, Homi Bhabha, to devise his famous three-stage plan, which guides the strategy underlying Indian investments in nuclear power to this day. New Delhi's continued pursuit of this three-stage plan implies that, if successful, India's poor natural uranium endowments would have no strategic significance over the very long term: this is because Bhabha's vision ingeniously exploited the technical properties of various fissionable raw materials found within India to create a nuclear power production regime that would in essence function as a postmodern version of medieval alchemy. Described in its simplest form, Bhabha's approach focused on transmuting India's relatively small holdings of natural uranium to produce plutonium in PHWRs in the first stage; this plutonium would then be used to breed uranium-233 in fast neutron reactors in the second stage; the resulting uranium-233 would finally be combined with thorium in advanced heavy water reactors in the third stage, to generate about two-thirds of that reactor's output from thorium itself, an element that India has in vast abundance. Over the very long term, therefore, India's natural uranium constraints would lose much of their salience, if the second and third stage technologies inherent in Bhabha's vision came to maturity. The Indian nuclear establishment is currently in the process of beginning the implementation of its second stage program with the construction of the first of five commercial fast breeder reactors, even as it completes the design validation and safety reviews of the advanced heavy water reactor required for the third stage. Completing this ambitious plan successfully will be neither easy nor inexpensive but India's vast and growing energy needs, coupled with its exclusion from international nuclear commerce since about the 1970s, has strengthened the perception within India that its government has no choice but to support all the investments required by Bhabha's three-stage plan if the country is to stand a chance of realizing its dream of energy security. There is by now sufficient data, however, suggesting that implementing Bhabha's plan in the manner initially envisaged by him will be inordinately expensive and possibly very slow. This is because the fast breeder reactors that are central to the second stage of Bhabha's vision breed plutonium very slowly.^[2] Moreover, the thorium cycle that India plans to develop in the third stage of the plan will be commercially viable only if the price of uranium increases by several orders of magnitude. As the World Nuclear Association therefore concluded somewhat laconically, "much

development 42 Atoms for War? U.S.-Indian Civilian Nuclear Cooperation and India's Nuclear Arsenal work is still required before the thorium fuel cycle can be commercialized, and the effort required seems unlikely while (or where) abundant uranium is available."^[2] Because India is currently excluded, however, from the international nuclear fuel market, its nuclear managers have argued, perhaps with some justification, that they are left with no options but to pursue even technological will-o'-the-wisps if these are seen to offer some promise of advancing energy security.^[3] Given the powerful motivations underlying this effort, and the DAE's remarkable record of achievement in the face of concerted international isolation, it is possible—the devotees would say probable—that India will succeed in implementing its three-stage plan eventually, despite what are likely to be extraordinarily high costs.^[4]

It should be kept in mind that the U.S.-Indian nuclear cooperation agreement proposed by President Bush does not in any way affect the government of India's ability to upgrade its uranium mines and milling facilities to meet its annual requirements for natural uranium fuel. If the U.S. Congress were to reject this initiative—which would be unfortunate—such a rebuff would not by any means impede the Indian activities currently underway to improve its mining and milling facilities and, if anything, would only accelerate them. Furthermore, the technologies used for this purpose are those found routinely in the mining, chemical, and heavy machinery industries, all of which remain entirely within India's domestic competencies. Consequently, New Delhi possesses the wherewithal necessary to correct the problems known to afflict its mining and milling infrastructure, whether or not the U.S.-India civil nuclear cooperation agreement is realized in the manner desired by President Bush and Prime Minister Singh. All this implies that the shortages of uranium fuel experienced by India presently are a near-term aberration caused by constraints in productive capacity due to tragic decisions made by the government of India in the past decade, and not an enduring limitation resulting from the dearth of physical resources, at least in the policy-relevant timeframe. As such, these shortages do not offer a viable basis for Congress to extort any concessions from India regarding its weapons program—for example, by demanding a lasting cap on the production of fissile materials or a permanent moratorium on nuclear testing—as is demanded by many opponents of the U.S.-Indian civil nuclear cooperation initiative. If confronted by such demands, India would simply forego the benefits of international nuclear commerce. Such an outcome would no doubt satisfy the votaries of the “punish India for its nuclear weapons” school of thought, but it should offer no consolation to Congress or to U.S. policy makers more generally, because the United States as a country would lose on multiple counts: if denied the natural uranium required to overcome its transient shortage of nuclear fuel, Indian policy makers will further reduce the operating factors governing the performance of their nuclear power reactors, and compensate for this reduction in nuclear electricity production by simply burning more dirty coal that pollutes the global environment even more consequentially, all while continuing to allocate the same amount of uranium feedstock as before to the production of nuclear weaponry. Because natural uranium can be substituted by coal, oil, hydropower, and biomass as a resource for electricity

production, but cannot be replaced in any comparable way as a raw material for producing nuclear weapons, the United States might find itself—in the absence of nuclear cooperation with India—in a situation where it facilitated New Delhi's accelerated decimation of the global environment, even as India continued to maintain, and perhaps even to expand, its nuclear weapons program. A Congressional rejection of the president's proposal for renewed nuclear cooperation with India—as advocated by its many detractors—therefore fails to advance some of the very nonproliferation goals upheld by these same critics; moreover, it would contribute toward a further deterioration of the planet's environment, while simultaneously dealing a potential death blow to the continuing transformation of the U.S.-Indian relationship.^[5]

All these justifications are accurate and noteworthy, but they do not address the critical reasons why the government of India has judged implementing the U.S.- Indian civil nuclear agreement to be of vital importance to India's energy security, even though it is fully aware of—and appears committed to—the DAE's own efforts to bring Bhabha's three-stage plan to fruition. If distracting asides, such as the desire to secure India's status as a nuclear weapon state or the Indian leadership's distrust of its atomic energy managers to deliver on their promises, are disregarded, it is possible to discern seven distinct reasons why consummating the U.S.-Indian civilian nuclear cooperation agreement is important for the success of the DAE's own contributions in regards to ensuring India's energy security.

- First, the agreement promises to provide India regularized access to imported natural uranium fuel which, if nothing else, helps the country tide over the transient difficulties caused by the bottlenecks in its mining and milling infrastructure, while the DAE continues to bring new mines and new ore processing plants into operation and prosecutes its longer-term three-stage plan designed to overcome whatever limitations in here in India's finite natural uranium reserves.
- Second, it permits the National Power Corporation of India, the DAE's commercial operating arm, to simply import higher unit output reactors than can be constructed by simply scaling up India's original 220 MWe CANDU designs. The high capital costs of constructing nuclear power plants implies that it is simply more economical to build high unit output designs (1000 MWe or higher) of the kind constructed elsewhere in the world rather than the low unit output (approximately 220 MWe) facilities traditionally built in India.
- Third, the ability to legally import new high output reactors built by the United States, France, Russia, and others brings with it the prospect of foreign financing, which in turn reduces the burdens of raising domestic resources for underwriting the vast new investments required in nuclear power.
- Fourth, the opportunity to import new nuclear reactors from abroad provides new benefits in terms of modern safety technologies, which have improved dramatically since the original CANDU and BWR designs were first introduced into India in the early 1970s. A large-scale expansion of nuclear electricity of the kind contemplated by the DAE in the future makes it imperative, both from an economic and a political point of view, that every reactor operating in India be equipped with the latest safety technology if nuclear energy is to remain a viable source of power over the long term.
- Fifth, the access to new reactor technology from

abroad promises to give India's nuclear engineers exposure to new advanced designs that maximize efficiency, output, and safety and which could in principle be applicable to future designs developed by India's own indigenous nuclear industry over time. • Sixth, India's integration into the global nuclear industry's research and development network would enhance the efforts of the country's own domestic research and development community through information flows over the relevant backward linkages, thereby maximizing the DAE's own ability to contribute toward the new global initiatives already underway in the areas of fusion research, waste management, and advanced and unconventional reactor designs. • Seventh, finally and perhaps most importantly, the U.S.-Indian civil nuclear cooperation agreement provides India with a structural hedge in case Bhabha's three-stage program runs into either irresolvable technical problems—which are possible (the critics would say likely)—or serious implementation delays, unacceptable price overruns, economic infeasibility, or higher than anticipated startup troubles, some of which are almost certain to occur when a nation sets out upon such a risky and challenging path not trod by others. The U.S.-Indian civil nuclear cooperation agreement would, in this context, provide India with the option of simply staying with the first phase of its three-stage plan indefinitely or, more interestingly, open the door for India to access advanced new technologies, such as the high-temperature gas-cooled reactor, the molten salt reactor, and various accelerator driven systems, all of which exploit thorium for the production of electricity, but without the need for any intermediate-stage fast neutron reactors, which are technologically risky and probably uneconomical. On balance, therefore, Manmohan Singh's desire for nuclear cooperation with the United States in particular and with the international community more generally has less to do with the immediate challenges of overcoming a transient scarcity of natural uranium caused by bottlenecks in his country's nuclear fuel production infrastructure. Overcoming these impediments, the prime minister well knows, is important, but he also realizes that they can be surmounted—if not immediately, certainly well within the decade—by relatively small changes in India's domestic resource allocation decisions. Even the larger problem of circumventing India's limited natural uranium endowments can be arguably resolved in theory through Bhabha's three-stage plan, albeit at horrendous cost and at substantial technical risk, although there is no evidence whatsoever that the size of these endowments per se has in any way constrained either India's nuclear weapons program or its PHWR-based firststage of nuclear power production. What Manmohan Singh, therefore, appears to be after is looking for some means of assuring India's energy security on the grandest scale imaginable so that, regardless of what happens in global energy markets over time, India and its teeming millions will always have access to the only practically inexhaustible source of clean energy now known to man—and, given the vagaries of Asian geopolitics, will have reliable access to this technology and others in partnership with the most powerful entity heretofore seen in the international system, namely the United States. Such opportunities to forge a critical geopolitical relationship do not come often in a lifetime. It would indeed be unfortunate, therefore, if the prospect now confronting Washington regarding a new

global partnership with New Delhi were to be sacrificed because of some petty canard regarding the effect of imported natural uranium on India's nuclear weapons program.^[6]

Shifting Balance of Power

Changes in geo-strategic positioning and inter-state tensions are the most consistent of all trends in international politics. Strategic positions alter due to a wide range of internal and external factors, mainly because of politico-economic interests, alongside foreign policy objectives. There exists, almost consistently, an unsettled phase that lies in between the actual shifts. Or in other words, there are incremental stages that warrant salient mention because they maneuver transitions, albeit gradually, towards forming alliances or confrontations. Indo-US nuclear deal along with the growing Indo-US nexus offers one such set of events that has begun to illustrate unsettled and stressed inter-state relations, causing changes in strategic positioning as well as shifting balance of power. Though, this region has witnessed major shifts in the regional political scenario since 9/11, beginning with the War against Afghanistan, succeeded by one against Iraq, now an increasing partnership between India and the US, followed by a controversial nuclear deal is unfolding new realities. A whole new picture has emerged resulting in a new set of policy arrangements for all states within the region. Immediately after 9/11, Pakistan's position for the US enhanced magnificently. Pakistan's much needed support was sought by waiving all sanctions and pouring in huge amount of material support by the US. Status of major Non NATO Ally was also conferred to Pakistan. Pakistan's concerns were well-heard and weighted in many quarters of Washington. Many speculate that the end to Indo-Pak military standoff (2001-02) and the initiation of peace-process between India and Pakistan has also to do much with the growing Pak-US relations at that time. Moreover, US mild reaction in the immediate aftermath of the disclosure of A.Q.Khan Saga is thought to be a consequence of the same reason. These developments were much to the unease of India. India kept playing her cards. The idea of diverting US attention to bring Pakistan into the ambit of "states sponsoring terrorism" failed to materialize in the early years. India worked out on active lobbying to expand her bilateral ties with Washington. Moreover, Northern Alliance's coming into power in Afghanistan went to India's advantage. Pakistan, despite welcoming the regime, was never trusted by Karzai's regime. Initially some cosmetic steps were taken to generate goodwill, the memories of Pakistan's opposition to Northern Alliance and support for Taliban pre-9/11, however remained fresh in the minds of Northern Alliance's leadership. This helped India get closer to Afghanistan thereby increasing her influence tremendously. A growing partnership with the US made the job easier. On the other hand, presence of US forces in Central Asia raised serious concerns in Russia and China. Both these states began their own efforts to minimize the influence of the US in the region – that made a big part of their area of interest. Both these states got actively engaged in diplomatic maneuvering in South, Central and West Asia. As far as the case of Iran is concerned, the war in Iraq was taken seriously in Iran's strategic circles. The threat by the US was escalating and Iran had to build her defences. Iran, facing pressure on the issue of nuclear proliferation,

reassessed her needs and consequently tried to strengthen her relations with existing partners like China, Russia and India. An agreement on strategic cooperation was also signed between India and Iran in 2003. All these developments were taken seriously in the policy-making quarters of Washington. The US had few priorities in her agenda. These included a continuous presence in Central Asia, growing influence in Indian Ocean, containment of China and isolating Iran. For all these reasons, previous policies were not paying enough. Though, the Indo-US bilateral relations were already growing, there is a possibility that the above discussed calculations added a lot to New Delhi's existing significance for Washington. First of all, the US agenda in Afghanistan was not materializing despite Pakistan's all possible support. Karzai's blame-game added more to spoil the mix for Pakistan. On China's front, Pakistan was essentially not willing to play containment; India having a history of hostility was thought to be an appropriate candidate by the US. India's growing political and economic clout was also perceived as useful to serve interests of the US in Indian Ocean. And finally US needed the support of at least one of Iran's major partners to implement the policies of weakening and isolating Iran. China and Russia were not to side with the US, given their clash of interest in and outside the region. India was possibly considered as relatively flexible. Moreover, IPI gas pipeline also goes against the interest of the US. India being a major party state was therefore thought to be the most relevant state to hurt Iran at financial level. These issues motivated the Neo-Cons to offer India with a lucrative deal. The deal offering India a break away from the decades old nuclear apartheid probably turned out to be the most suitable incentive. The deal though in progress, has already started affecting the strategic positioning across the region and its periphery. The US now closer to India than ever before, has started exerting pressure on Pakistan. Acknowledgement of Pakistan's support in War on Terrorism is fading out. It is replaced with new sets of allegations and accusations. Pakistan is being asked to do more – probably beyond her capacity. Security situation is turning fragile in the region. Pressure on Pakistan is mounting from both Eastern and Western borders. Peace process between India and Pakistan has come to an impasse. India is probably looking for a suitable window of opportunity to enhance her bargaining leverage vis-à-vis Pakistan. There is also a major shift in Pakistan's foreign policy. Pakistan is vigorously pursuing policy of diversification. There are clear evidences of Pakistan building ties with few of those states that the US shares hostility with. Case of growing ties with Uzbekistan, Iran and Cuba are clear manifestation of this fact. Pakistan's relations with China are getting stronger and there is a tremendous growth of her relations with Russia.²⁴¹ Previously hailed Indo-China-Russia Troika is not much on the cards these days and stronger Indo-Iran relations have also been affected badly by the deal. Though the two sides do not acknowledge this fact officially, there are visible signs of strain at both ends. India enthusiastic about the nuclear deal foreseeing a fruitful strategic alliance with the US has shown deviation from previous policies regarding Iran. India's vote in favour of the US stance to send Iran's case to the UNSC is one of the most significant steps taken in this regard. Also, given the fact that the US administration severely opposed and criticized the presence of President Mahmoud Ahmeddinejad in the 10th SCO

summit last year, neither the President nor the PM of India attended the conference. In the midst of the heads of states of all member and observer states, India's nominal representation was made by its Petroleum Minister.²⁴² IPI gas pipeline negotiations have time and again become a hostage to India's growing rigidity. Finally, India has also endorsed the resolution of UNSC on sanctions against Iran. All these developments clearly indicate the growing rift between Indo-Iran relations actually led by a shift in India's alliance. It is believed that the new convergence of interests between New Delhi and Washington is going to further enhance the gulf between India and Iran. Though this convergence has distanced Iran and India it has made a rippling effect in the region by bringing Iran and Pakistan closer together. This emerging link is clearly reflected in a number of policy decisions taken by both states. For instance, Pakistan abstained from casting its vote over the issue of sending Iran's case to UNSC. Also Pakistan openly condones the idea of "Use of Force" against Iran. Another visible sign of change was observed when Pakistan alongside China, Russia and others welcomed Ahmeddinejad's presence at the SCO summit despite severe opposition of the US. Pakistan's President Pervez Musharraf held a meeting with Ahmeddinejad on the sideline of the summit, to explore possibilities of strengthening Pak-Iranian ties. There seems a rise in diplomatic interactions between the two sides. Finally, Pakistan's commitment to IPI pipeline project also signals growing seriousness in Pakistan's relations with Iran. Correspondingly, Iranian leadership is perhaps more enthusiastic about reshaping her relations with Pakistan. The Iranian first Vice President and Foreign Minister both visited Pakistan within one week last year, clearly reflective of the position Pakistan holds for Iran these days. The Foreign Minister of Iran Moocher Motta during his visit to Pakistan categorically stated that Iran realizes that the gaps between the two states in the previous decades need to be necessarily bridged. For this purpose both states have agreed to cooperate at multiple forums. Though, these steps are more symbolic than substantive, the shifts cannot be ignored. It seems as if there is a clear realization on the part of Tehran as well as Islamabad that both of them share a convergence of interests in certain areas and this might provide them the necessary push to build up a closer relationship. These shifts clearly reflect the severity of situation. Also the deal is potentially strong enough to shift balance of power within this region. For instance, India's growing political stature, military capabilities and nuclear weapons have a direct bearing on Pakistan and China. As far as the case of Pakistan is concerned, India's growing capacities are potentially destabilizing. Pakistan has put a lot of effort to maintain nuclear deterrence in order to offset the pressure of India's conventional superiority. A quantitative and qualitative growth in India's nuclear inventory may make the existing equation of deterrence irrelevant. This will instigate Pakistan to develop her weapons capability causing an arms race. The balance of power so delicately maintained shall upset. As far as the case of China is concerned, the quantitative increase in India's existing arsenal may not make a big difference however, the qualitative up gradation of India's delivery means may upset the balance of power. There is also an indirect effect which is potentially catastrophic. This deal may provoke Iran to quickly pursue a nuclear weapon option, since it enforces in the minds of

many, the old dictum of “might is right”. Given this belief Iran may opt for a speedy acquisition of nukes. Any such development may have far-reaching impacts as already evident by the statement issued by Gulf Cooperation Council (GCC). GCC announced that it will work for the development of nuclear technology. This may have a spiralling effect causing instability and insecurity. All these things need to be taken into account before implementing the deal.^[7]

Conclusion

India states that she is not ready to compromise her foreign policy objectives. Nevertheless there are two possibilities in this case. India may find convergence of interest with the US in her objectives vis-vis China, East Asia and also in Indian Ocean (at least for the time being). Secondly, India may be miscalculating the situation. There is a strong perception in many of the Indian quarters that the US is so willing to get this deal done that India has a good bargaining leverage. India, on this account, may be planning to dodge the US in case of China. It is a matter of fact that so far the US has shown much more flexibility than India. It is also highly likely that India won't need to compromise her nuclear weapons capability (that probably the Bush regime does not even practically intend to). But there could be serious differences over foreign policy objectives and definitions of intricate terminologies. In any such case the situation may not be that easy for any of the contending parties. Here it is important to be noticed that the US is not a highly reliable partner. India may therefore face some difficulties in this regard. Analysis of international politics via the prism of real politic shows that there is no dearth of contradictions in intra and interstate relations. The Indo-US nuclear deal is a manifestation of one such set of contradictions. Endorsed in the foundation of the promotion of not only the US strategic objectives within Asia but also the non proliferation agenda, this deal fails to provide a satisfying mechanism to achieve the latter objective. On contrary, it gives rise to some of the extremely controversial questions, satisfying answers to which are still awaited.

References

1. Paul K. Kerr: U.S. Nuclear Cooperation with India: Issues for Congress, 2012, 2.
2. Rahall Tonga and VS. Arunachalam, “India's Nuclear Breeders: Technology, Viability, and Options,” *Current Science*, 1998:75(6):549–558.
3. World Nuclear Association, “Thorium,” November, 2004, available at www.worldnuclear.org/info/inf62.htm.
4. TS. Subramanian, “A Debate over Breeder Reactors,” *Frontline*, 1998:(1525):5–18.
5. Sarosh Bana, “What Can't We Produce?” *Business India*, 2006, 49.
6. Sarosh Bana, et.al. “What Can't We Produce?”
7. website: <http://www.rcss.org>