The collapse of the Soviet Union and the end of the Cold War created grave problems for India's foreign policy. New Delhi no longer enjoys the protection of the Soviet veto in the U.N. Security Council; the new Russian state no longer willingly acts as the guardian of India's interests in international forums; and Moscow is no longer able to provide soft-currency military equipment deals. This dramatic and rapid shift in the strategic realm provides unprecedented opportunities for India to reassess its international orientation and maneuver itself into a dominant regional position, beyond the narrow geopolitical confines of the old East-West division, so as to realize fully its economic, cultural, and military potential. Thus, with the emergence of a unipolar world, India is less idealistic, moralistic, and doctrinaire than it was in the years when Jawaharlal Nehru dominated Indian foreign policy.

Although fundamentally the character of India's nonalignment policy has not changed, pragmatically the country's policy toward the West is more open and soft as compared to the Cold War period. New Delhi is beginning to come to terms with the new realities of a world in which “non-alignment” has lost meaning. The main challenges for Indian diplomats and policy makers facing the post-Cold War world with its changing security environment are the need to (1) build a strong economic base capable of sustaining the country's military growth and (2) maintain a higher diplomatic profile.

This article evaluates the circumstances under which Indian elites develop national security strategy. Little analysis exists that systematically reviews the interplay of factors formulating Indian strategies and the characteristics of
New Delhi's strategic behavior. Historically, India has not exercised a tradition of independent strategic thinking but rather since Independence has borrowed and adapted different policies in pursuit of its national interests in foreign policy and defense. In this regard, Jawaharlal Nehru, Indira Gandhi, and their successors respectively contributed to formulating or articulating different theories in general terms based on their own perceptions and predictions to various events. Despite economic constraints, India is modernizing its present-day military capabilities, national security apparatus, and defense systems. In the post-Cold War era, New Delhi's acquisitions of advanced conventional weapons, growing nuclear capability, and evolution of its navy into a blue-water force signal, in the view of some analysts, significant progress in the nation's becoming a major military power state.

In this context, New Delhi's self-identity and internal ambition to transform itself into a First World power should be examined. This article will offer a preliminary assessment of India's strategic orientation in shaping its security policy and will explore the constraints that formulate hurdles against the achievement of these aims. In fact, the article will argue that New Delhi's armed forces retain limited capacity to develop an indigenous weapons production capability and are still dependent on external sources and that India will resolve its structural constraints with difficulty and not achieve major power status in the world.

Nehruvian Foreign Policy and India's Quest for a Global Role

After Independence in 1947, India's foreign policy was long plagued by the bitter legacy of partition. The country experienced three wars with Pakistan (in 1947, 1965, and 1971) and one with China (in 1962) in less than a quarter century. As foreign minister, Nehru articulated goals of non-alignment and peaceful coexistence as polestars of Indian policy. He also focused on the problems of world peace, anti-colonialism, and anti-racism and called for an end to Cold War conflicts between the superpowers.

Together with Jamal Abdul Nasser and Marshal Josef Tito, Nehru was one of three leaders who created the Non-Aligned Movement (NAM) in 1961 in order to make it possible for nations to cooperate with each other and offer a broad framework for collective dialogue and collective action against the developed countries. Nehru's non-aligned foreign policy was an attractive model for most developing countries because it was based on the principles of non-involvement in either of the two alliance systems and an active and independent participation in world affairs. Furthermore, Nehru saw non-alignment between the superpowers at the time of the Cold War as a vital precondition to protecting national interest. Thus, his non-alignment strategy
by no means precluded an active stance in Indian self-interest; it became the dominant ethos of India's foreign policy in international affairs.

Nehru promoted the idea of non-alignment to prove that India was an independent country and had a right to play an international role. However, the Sino-Indian war of 1962 was a watershed for Indian defense planners. In the aftermath, India abandoned its cherished non-alignment policy; cast off the Menon defense strategy, which had left the Indian army helpless before the Chinese invasion; and set out a comprehensive program for military modernization with the help of the U.S. and the Soviet Union. New Delhi's military weaknesses had been exposed and in military defeat the country's international prestige declined. Nehru's foreign policy based "on global influence without military power" was shattered and India's position and influence among the new non-aligned nations were also affected.¹ Nehru categorically wrote in April 1963 that India's responses would inevitably be affected by the policies that others adopted toward it. He argued that protection of the country's interest, by force if necessary, was the first charge on its foreign policy, though to the outside world his rhetoric of peaceful coexistence and mutual respect caught the headlines.

Since Independence, the Indian leadership's primary objective has been to enhance and expand India's military might and still is a main preoccupation. The newborn Indian military in 1947 inherited the British army structure; it was not a revolutionary army opposing colonialism. As the founding father of the modern Indian army, Nehru accepted the military status quo and made a plan to upgrade the country's military strength. He also used the military in the early years of Independence to strengthen India's position in Kashmir, Hyderabad, and Goa; later, the 1962 dispute and India's humiliating defeat in it confirmed the necessity of maintaining the country's military organization and a strong military establishment.

New Delhi's security considerations, however, are not confined to its immediate neighbors. They span a wider area, and in this respect India's primary concern is to insulate the subcontinent from external intrusion. Insulation would assure New Delhi the regional preeminence that its policy makers perceive as an essential prerequisite for achieving the major power status that Indian elites seek for their country. In any case, the country's foreign policy guardians also see themselves and India as the successors to the British Raj and, as such, heir to the former empire's historic strategic concerns of South Asia. Nehru articulated these grand ambitions for a preeminent position in the world clearly, perceiving himself as the leader of a "new" Asia and lighting the path for the rest of the world. Indeed, his dream

was to transform India into Akhund Bharat (Greater India) to rule over the world.

India's expressions of self-perceived greatness have played a major part in provoking Pakistan into desperate attempts to bolster its own national defense. Since Independence, Indian planners have reflected an enduring preference for bilateral as opposed to multilateral initiatives, at both global and regional levels. While Europe and Asia have accepted the benefits of multilateralism, India remains chained to the notion that bilateral advantages outweigh any gains that might be derived from dealing with neighbors, particularly Pakistan, multilaterally. Thus, India's attitudes toward multilateralism have been characterized as "thinking unilaterally, pursuing issues bilaterally, and posturing multilaterally."²

New Delhi's emphasis on bilateralism is rooted in historical developments that have made it leery of multilateralism. First, with respect to global multilateralism India's aversion can be traced to its early failure to achieve an Asian leadership role under the NAM. Foreign policy leaders in India saw their country as having a natural claim to that leadership, but such ambitions were countered by China and Pakistan. Second, with respect to regional multilateralism India's attitude can be traced to its perception of itself as a global rather than simply a regional power. For New Delhi, regional politics remain wedded to the notion that India, as a major power, gains more advantage from its relationship with the world as compared to regions. Third, the country's uneasiness about multilateral forums can be traced to its experience that such forums are simply arenas within which regional rivals and global adversaries can criticize Indian policies.³ Thus, a central element to Indian security culture is the belief that, while other states may resist, India is destined to play the dominant role in South Asia and the Indian Ocean region. Indeed, it is one of the core beliefs of the country's leaders that India's manifest destiny is to be not only a regional hegemon but a global power as well. To gain insight into Indian norms or standards in this light, a review of the Indian grand strategy is necessary.

Factors Influencing India's Grand Strategy

In the post-Cold War era, Indian policy makers have sought a more prominent standing in the international community and aim to make their country one of the great powers of the world. The Indian political elite sees India as a past and future great power—one destined to play a major role not only on

³. For detailed discussion about India's aversion to multilateralism, see Arthur Rubinoff, "The Multilateral Imperative in India's Foreign Policy," Round Table (1991), pp. 313–14.
the subcontinent but ultimately in the Indian Ocean and on the world stage as well. Put simply, New Delhi's leaders are frustrated that they cannot articulate the goal better and that their country is not accepted as a peer by the other great powers. Furthermore, they feel that India's self-conception is of broad international interest, not just because of its great size, wealth, and superior logistics systems but also because of its growing military and nuclear capability. All observers agree that India's future strategic role and power potential are indeed of both regional and global import.

For India, South Asia is a strategic entity; its outer boundary forms India's own natural defense perimeters. As a prominent power there, New Delhi sees the South Asian region as its sphere of influence. Historically, India has been independent only for about 50 years, having been ruled for the previous 200 years by the British, who decided defense policy and strategy without Indian involvement. Principal figures in the Indian nationalist movement worked hard to create a concept of a modern nation-state. Except for basic perceptions of threat and hegemonic ambitions, however, a modern tradition of strategic thinking in India has not resulted. In order to understand the complexity of Indian coercive diplomacy and the characteristics of its strategic behavior, four vital factors must be recognized.

Geography controls the political environment of a country and may propel its foreign policy and national interests. The Himalayan mountains to the north, the Arabian Sea to the west, the Indian Ocean to the south, and the Bay of Bengal to the east have created a largely enclosed, natural geographical unit often referred to as the Indian Subcontinent. The mountains and seas have long been perceived as protective barriers and have given India's people a sense of security. Many analysts consider South Asia, stretching from the Himalayas to the adjoining zones of the Indian Ocean, as India's natural security zone. Its image as a global colossus is derived in large measure from its size and location on the globe.

History and culture have equally contributed toward shaping Indian strategic thinking. Historically, India foresees a possible revival of ancient power as the nation becomes a superpower in its own right. For instance, the affirmation of greatness in Indian civilization and nationalism is connected with *Hindutva* (Hinduness), meaning a great Hindu state. However, fear also exists in the minds of the Hindu leadership and it forces them to build up their military strength for a greater India. The basis of this vision of Indian culture has thus been defined by the upper-caste Hindu culture of the Hindi belt, under its concept of *Ram Rajya*, a term denoting a revivalism that seeks to bring back the values of the past.

Moreover, the caste-dominated and hierarchical nature of Indian society tends to contribute to a conservative view of life, inherently creating a defensive mentality, and accounts for its traditionally slow pace of social change. The Indians' view of society as a hierarchy also is projected onto their view of the world. India believes in a hierarchy of nations based on wealth and power with itself placed in the top ranks of the world's summit; it is essentially a Brahmin perception of the world.

A third factor that has influenced Indian strategic thinking is the rediscovery of Indian history in the late 19th century. At the time, Indian nationalists searched for examples of Indian unity but found only limited periods of unification. The period of the empires, particularly during the reign of the first three Mauryan kings (Chander Gupta, Bindusara, and Asoka), was an era of Indian unity, strength, and glory. Thus, India sees itself as both an ancient civilization and a contemporary great power deserving of “parity of esteem” with other ancient civilizations and great powers (such as the People's Republic of China).

A final factor to consider is the legacy of colonial rule by the British. The British were the first to think explicitly about the strategic defense of South Asia as a whole. At first, they developed an “offensive defense” by attacking India's neighbors, Burma and Afghanistan, in order to create buffers between British India, Russia, and China. The Indian army, largely commanded by conservative British officers, became a strictly defensive force as Britain was constrained into a more and more passive posture. Indians were, however, quite aware of the great British empire and their role in protecting it. Most Indians felt at Independence that they had inherited the mantle of the British Raj, with the responsibility not only for the defense of the subcontinent but also, perhaps, for inserting an even more ambitious role in the Indian Ocean and abroad.

**Current Challenges to India's Regional Dominance**

The states of South Asia–Bangladesh, Bhutan, Maldives, Nepal, Pakistan, and Sri Lanka–face no common threat perception. As a consequence, their security policies toward each other and great powers outside South Asia are quite different. This lack of a security consensus has been shaped by competing symbols of group identity among the region's one billion people; disparity in size, population, and wealth between India and its neighbors; and geographical locations of each of the region's states.

India forms the core country of South Asia. The defense and security factors with which it must cope are extensive. Among the region's nations, India has by far the most advanced industrial and technological base, including an indigenous armament industry that is the largest among Third World states
in value, volume, diversity of manufacture, and research and development facilities. Moreover, India has a large public and private basic industrial sector that serves as a foundation for economic development. The country currently retains the world's 10th largest industrial economy, although per capita income is low, standing at $245 in 1996–97 and rising 5% to $280 in 1998–99. The economy grew 6.8% in 1998–99, belying fears of a slower growth because of an industrial slowdown. In the same way, the agriculture sector grew impressively by 7.6% that fiscal year, while manufacturing recorded a modest growth rate of 3.6%.

After the end of the Cold War, economic liberalization vastly broadened the scope of the activities of private investors, now free from the fear of nationalization and protected by the state from foreign competition. The government provided legal protection to investors and took a variety of steps to encourage foreign investment in India. The primary effect of these policy changes was to increase the rate of capital formation. For instance, during 1998–99 India had positive net capital inflows approaching 180 billion rupees. This rise led Finance Minister Yashwant Sinha to predict that “India will receive $10 billion in foreign direct investment each year, more than triple the annual average of the past decade.”

India was a great ally of the Soviet Union; until the communist empire's end in the early 1990s, its military and economic aid enabled New Delhi to pursue its vision of itself as a Great Power—the equal of the other great powers in the U.N. Security Council; the predominant nation on the Indian Ocean; and the unchallenged hegemon of South Asia itself. India's strategic posture is based on the idea of an “offensive defense.” It is using all possible sources to acquire superior weapons to protect the national security. As a consequence, New Delhi's strategic perceptions have also been influenced by the strategies of the great powers, especially those related to intervention in the Third World and the employment of military force for the purpose of coercive diplomacy. For this reason, the country's leaders have felt that India must gain its proper place in the world community.

In the early 1980s, Sen Gupta, a foreign policy analyst who argued that no South Asian government should ask for extensive military assistance with an anti-Indian bias, gave the clearest formulation of an Indian “Monroe doctrine” for the region. The concept of such a doctrine first emerged after the dismemberment of Pakistan. Indian strategic planners at the time viewed their country as the undisputed power of the region and Pakistan, in the

words of Banerjee, as a “fish in India's troubled waters.” Further impetus for India's development came from a second incident involving Sri Lanka's 1983 ethnic crisis across the Palk Strait from the Indian state of Tamil Nadu. At this time, New Delhi declared that “if a South Asian country genuinely needs to deal with a serious internal conflict, it should ask for help from neighboring countries, including India.” The rationale of this position was to become abundantly clear in 1987 when India claimed the right, as the “regional policeman,” to assist Sri Lanka in place of non-regional powers. Indian officials strongly opposed the foreign powers' presence and their intervention in the domestic affairs of a South Asian nation. Warning neighboring countries that they should avoid enlisting external support in order to strengthen their position against India, the officials argued that in the case of intra-regional conflicts India's neighbors should seek assistance from India.

China's Military Buildup and India's Current Strategy

Indian's regional doctrine was formulated as a reaction to local developments, not as a conceptual precaution outlining a security perspective for the future. New Delhi's regional strategy and policy are clear, that no neighboring state can undertake any action in foreign affairs or its defense policy that India deems potentially inimical to its security. Further, India will not permit foreign powers to establish a presence or influence in South Asian states that India views as unfriendly. New Delhi insists that it is not a threat to its neighbors, that it does not want to be, and that it cannot be because its neighbors' security is a part of its own security.

Nevertheless, India strongly believes that China continues to pose a threat to its security. This powerful resonance of threat is the essential part of India's current strategic thinking. In the Ministry of Defense's National Security Report 1996–97, the Indian government for the first time expressed explicit concerns over Pakistan's and China's development of nuclear and ballistic missile capabilities.

Indian leaders believe that China is a real military threat because it has continued to occupy 35,000 square miles of Indian territory and the bulk of its conventional forces remains within what they regard as Indian borders. Most Indian strategists argue that Beijing's vast resources, economic pro-

gress, and military strength are factors that cannot be ignored. An Indian army chief remarked that the lesson learned from the 1962 war was not to fight the Chinese without nuclear weapons and significant conventional strength. Thus, the underlying power rivalry between the two Asian giants and their self-images as natural great powers and centers of civilization and culture persist and will drive them to support different countries and causes in their own interests. India will strive to emerge not only as an independent power center in a multipolar world but as a counterweight to Chinese power and influence. For this reason, some Indian strategists like Jasjit Singh hold that “the appropriate and logical point of reference to define India's strategies would be in relation to Communist China.”

Beijing appears poised to translate its growing economic power into greater military strength and strategic ambition. Indeed, China's ambitions as a global and regional power as well as a Third World standard-bearer bring it into competition with India's. On the other hand, New Delhi's military buildup–especially its naval expansion and development of guided missile and nuclear capabilities–owes much to the dynamics of a growing Sino-Indian rivalry.

India continues to lag behind as compared to China's economic growth and military buildup; it faces enormous challenges domestically and in its economic sector that the central government is ill-equipped to address. Indian armed forces lag behind the Chinese military by some decades. China possesses the world's third largest nuclear arsenal. According to estimates by Samuel Kim, China also maintains the world's largest standing military estimated at three million soldiers, sailors, and airmen–twice the Indian number. Moreover, approximately one million people in the Indian army serve in the ground forces, where their primary responsibilities are to ensure domestic order and protect borders—not to project power. Most of the Indian ground forces are engaged in Kashmir, Punjab, and Assam to counter insurgency movements and maintain internal order. Then, too, the experts estimate that only about 35% of these ground forces are even equipped to move about within India. A still smaller number possesses the trucks, repair facilities, construction and engineering units, and other mobile assets needed to project power abroad.

China's economic power measured in terms of aggregate statistics is impressive as compared to India's. According to the World Bank's purchasing power parity estimates, China, with a 1994 gross domestic product (GDP) of just under $3 trillion, has become the second-largest economy (after the U.S.)

in the world. A Rand study predicted that China's GDP will reach $11.3 trillion by the year 2010 as compared to $10.7 trillion for the U.S., $4.5 trillion for Japan, $3.7 trillion for India, and $2.0 trillion for Korea. Moreover, whatever the size of its economy and resources, it is clear that China's military power in quantitative and qualitative terms is growing.

One of the most remarkable and potentially dangerous developments in the post-Cold War era is the rise of Chinese nationalism, particularly because it is linked with the proposition that military power is the most important component of zonghe guoli (comprehensive national strength). Nationalism with military overtones is viewed as indispensable in Beijing's attempt to regain its status as a leading world power and defend itself against any threats, actual or imagined, to its territorial sovereignty and integrity. Since the reacquisition of Hong Kong and Macao, the Chinese leadership has shown its determination to control Taiwan and other lost territories, including the disputed McMahon Line or Arunachal Pradesh (90,00 square kms) in the eastern sector of India. There are reports that the Chinese have constructed a base on Myanmar territory along the Andaman Sea “within striking distance of the western entrance to the straits.” Such a development would inevitably result in a further degradation of the already explosive situation in eastern India—especially if one also takes into consideration growing signs of China's determination to expand its military power and assert its presence in Southeast Asia.

Chinese national security doctrine, based on forward projection and fighting low-intensity conflicts on its periphery, will inevitably lead to a further augmentation of Chinese military presence in the area. A recent Chinese internal document states that the disputed islands in the South China Sea (south of China's Hainan Province), which are subject to conflicting jurisdictional claims, could provide further living space for the Chinese people. For this purpose, Beijing has apparently accelerated the politics behind moving the Han population into the region to change the demographic balance of the area. Meanwhile, its naval military doctrine has shifted from the coastal defense of the mainland to active defense of maritime economic and strategic interests.

Given these circumstances, Indian defense planners argue that without significant military power, India will not be able to successfully project its national identity as a great power or play a more decisive role in world affairs.

13. Ibid.
India proclaims that its economic growth is speeding up and it is committed in its defense policies to balancing regional and global geopolitics. The country's policy makers claim that India is a strong state with an ability to mobilize its human and material resources in the service of its worldwide and policy objectives. Thus, India has captured the attention of the Western world and proven that it can share global responsibilities.

**Pakistan as a Counterweight**

In the literature of international relations, utilizing a balance-of-power strategy offers three basic benefits to a great power. First, a modest investment of resources can build viable counterweights to would-be regional hegemons. Second, a balancing strategy will enjoy the support of most smaller states, who naturally fear the rise of a preponderant power in their region. Third, smaller states feel more secure when a balancing strategy is pursued in that while a great power, after all, may only visit an area briefly and periodically in support of its immediate interests, a local state is in position to take advantage of the great power's interests in the area.\(^{15}\) Thus, the idea of a balance-of-power suits smaller or weak states, and they can enter into an alliance or partnership with a great power to counter a regional hegemon and maintain local stability, prestige, and military power.

In the Cold War and post-Cold War periods the U.S. has attempted to pursue this option, particularly in regions where it has short- or long-term interests. To be sure, the U.S. cannot create a regional counterweight by itself, but it can support such a player in any region of the world when it perceives a mutuality of interests there. Smaller states thus can resist regional hegemons and protect their security with the military and economic assistance of a great power.

India has always deeply resented U.S. and Chinese efforts to make Pakistan a local counterweight and has greatly expanded and modernized its land, sea, and air forces, and even developed nuclear weapons, in its efforts to thwart a balancing strategy aimed against its position in South Asia. In fact, India sees itself as a regional power on a par with China and is determined to extend its political and military reach beyond South Asia. Some Indian strategists have argued that “India's military expansion is not so much part of a strategic assessment as a view of India's proper place in the world. Pakistan is only one factor in India's political and military calculations and, at least in some public declarations, not the most important factor by far.”\(^ {16}\)

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However, Pakistan views India's aspirations as a direct challenge to its sovereignty and security. The geography of Pakistan, including a concentration of population centers and major military installations near the Indian border and a lack of territorial depth, saddle it with intractable disadvantages. Military planning in Pakistan is almost wholly directed at achieving some kind of parity with India, since Pakistan is unwilling to accept the role of being an Indian satellite and sees military developments in India as potential threats. Thus, the balancing effort has been a direct outcome of India's military superiority and hegemony. Pakistan's defense planners realized their country's economic and military weakness and sought external support in balancing or in order to strengthen its bargaining position vis-à-vis India.

At the military level, regionally only Pakistan has the means to forge a credible deterrent to India. Pakistan has already demonstrated its ability to build short-range ballistic missiles. In February 1998 it successfully tested two indigenously produced surface-to-surface missiles (SSMs)—the Hatf-1 and Hatf-2—both with a payload capacity of 500 kgs and ranges of 100 and 300 kms, respectively. An upgraded model, the Hatf-3, has been flight-tested to 800 kms. Pakistan's military has also stored in forward positions some 30 Chinese-made M-11 (DF-11) missiles, with a range of 300 km. Some defense analysts consider that Pakistani Hatf-3 is actually a copy of Chinese M-9 (DF-15).\(^\text{17}\)

The sophistication of Pakistan's missile hardware has increased dramatically. In April 1998, Pakistan tested an intermediate-range ballistic missile (IRBM) called the Ghauri (also known as the Hatf-5). No single event in the 1990s has had such adverse implications for India's security as the Pakistani acquisition of the Ghauri. With its potential range of 1,500 kms, the Ghauri could strike deep into the Indian heartland. At a stroke, India's real military advantage over Pakistan—its strategic depth—was nullified. Previously, Pakistani missile capabilities were such that they could barely reach the outskirts of Indian industrial centers and defense installations. A system with a range of 372 miles could easily reach the capital and other population centers.

According to Indian defense experts, as part of its strategy to build up Pakistan as a military counterweight to India China quickly equalized the Indian technological advances realized with the Prithvi 1 and 11 missiles by supplying Pakistan with M-11s and M-9s—camouflaged as the indigenous Hatf-2 and -3—in 1990, just two years after India's Prithvi and Agni tests.\(^\text{18}\) Some Indian security strategists claim that China has provided Pakistan with

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all of its missiles and nuclear technology, an effort that included the setting up of the Khushab plutonium-production reactor. For instance, Brahma Chellaney claims that China transferred (and continues to transfer) nuclear-warhead blueprints to Islamabad and since then Pakistan has attained credible deterrence and confidence.\textsuperscript{19}

The U.S. has allowed India to counter China's nuclear superiority. Similarly, it also did not object to the maintenance of the status quo in the regional balance of power when the Chinese provided the necessary assistance to Pakistan to counter Indian superiority. For its part, Pakistan is trying to maintain its role in the regional balance of power. For instance, the Pakistani air force flies the U.S. supplied F-16, the French Mirage III and Mirage V, and a number of obsolescent aircraft (F-6, F-7, and A-5) provided by China. Meanwhile, the Pakistan navy, partially to offset Indian developments, has grown quite dramatically in the last few decades with the addition of more U.S. destroyers and British frigates. It has superiority in submarines over India and has signed a deal with France to acquire Agnosta-class diesel submarines. According to the deal, one submarine out of the three contracted for by France will be built in Pakistan.\textsuperscript{20}

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\textbf{India's Military Strength}
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India has invested considerable amounts of time and money in building up its military, consistent with Nehru's notion of self-reliance in the buildup of its military strength. From the late 1960s onward, India increasingly turned toward the Soviet Union for both weapon imports and technological assistance to create an indigenous arms industry aimed primarily first at China and then increasingly at Pakistan. India has one of the largest standing armies in the world; even excluding a large pool of reserves, it numbers over one million personnel. While the army continues to take the lion's share of the Indian defense budget, both the air force and the navy have been considerably expanded since the mid-1970s.

Currently, Indian arms expenditures are about two and a half times those of all of its South Asian neighbors combined. Indian officials claim that this relatively large defense expenditure is needed because of the regional and extra-regional threats with which the country must cope. The Indian government has consistently spent over 3.3% of its GDP on increasing its armed forces. In 1996–97, the government approved a Rs. 36 billion pay raise for the armed forces, which helped expand the defense budget to Rs. 356 billion ($9.5 billion). Around 25% of the budget was spent on equipment; Rs. 89 billion ($2.5 billion) was allocated to the capital account for equipment and to

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\textsuperscript{19} Brahma Chellaney, “After the Tests,” p. 100. \\
\textsuperscript{20} The News (Rawalpindi), September 6, 1995.
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improve infrastructure.\textsuperscript{21} The 1996–97 Defense Services estimates allocated Rs. 111.28 billion ($3.6 billion) for the army, Rs. 36.18 billion ($1.16 billion) for the air force, and Rs. 13.52 billion ($0.435 billion) for the navy. Capital outlay for the three services combined was Rs. 68.32 billion ($2.1 billion).\textsuperscript{22}

The current coalition government headed by the Bharatiya Janata Party (BJP) has increased its defense budget by 28.2\%. Military expenditures rose to $13.5 billion, the highest ever hike in Indian history.\textsuperscript{23} The government allocation for ground forces was increased by $543 million to $6.7 billion, for the air force by $403 million to $1.83 billion, and for the navy by $163 million to $939 million.\textsuperscript{24} This high growth in military expenditure reflects ambitious plans for modernization and expansion of air, sea, and land forces. This hike is likely to fuel international concerns over escalating tensions between India and Pakistan. According to \textit{Jane's Defence Weekly}, during the last decade India imported $12.2 billion worth of defense equipment as part of a major modernization program.\textsuperscript{25} The U.S. Arms Control and Disarmament Agency published a report in 1997–98 in which it argued that India's military strength had already reached a point where it amounted to 74\% of South Asia's total spending on defense.\textsuperscript{26} This massive military buildup and expenditure reflect the Indian thrust to pursue its vision of itself as a great power. Some analysts have argued that India would be the leading country of Asia by the end of the century, with significant military strength and economic potential.

\textbf{Defense Production}

In the tradition of its doctrine of self-reliance, India has made a concerted effort to develop an indigenous arms industry. India's recent efforts to enhance its vast defense and science and technology infrastructure have come about through a combination of two mutually consistent policies, namely, the pursuit of the indigenous production of equipment, including production under license, and a policy of independent research, pursued through one of the Third World's largest military industrial research complexes.

The defense sector controls over three dozen factories, which produce a variety of defense-oriented equipment ranging from Russian T-72 and British Vijayanta tanks to the indigenous Chetak, later renamed the Arjun. After the

\begin{itemize}
  \item 24. Ibid.
  \item 26. \textit{The Muslim} (Islamabad), October 5, 1980.
\end{itemize}
failure of the Arjun tank project, the Indian government signed an agreement with Russia for 310 T-90 tanks. The $705 million deal includes the outright purchase of 124 tanks, with the remaining 186 to be partly assembled and partly produced in India.\textsuperscript{27} India also has 36 ordnance factories, nine public sector undertakings, and 34 major research and development (R&D) organizations all owned and run by the Defense Ministry. These defense-related institutions are responsible for nearly 15% of India's industrial output and produce military goods worth 25% of the entire defense budget.\textsuperscript{28} India is not only self-sufficient in the production of various small arms and ammunition, but Indian complexes have designed and built supersonic fighters, frigates, and light combat, training, and transport aircraft. India has manufactured surface-to-air missiles (SAMs) and air-to-air missiles. It has also embarked on the design and manufacture of high-powered radar, super computers, and airborne warnings and control systems aircraft.\textsuperscript{29}

Indian defense planners had expected that the army would also benefit from the development of an advanced light helicopter (ALH). Indian technicians have achieved adequate expertise in the design and manufacture of armored personnel carriers and all types of infantry and artillery weapons and munitions. India is building T-27 tanks under license from Russia, to match the 155-mm caliber field howitzers of the Pakistan army, and at the cost of $1.25 billion it has purchased Bofors 155mm howitzers and BMP-2 infantry combat vehicles.

The world is also witness to the development of Indo-U.S. military technological ties. The pivotal event in that field has been the granting of U.S. consent to help India develop a light-combat aircraft (LCA) to serve as the mainstay of the Indian Air Force (IAF). It is important to note here that the Indian government's usual policy has been to buy technology, not the weapon itself. This policy has been prompted by the desire to retain independence in this field. However, this has not prevented India from acquiring Mirage 2000 fighters from France.

Indian defense factories have shown significant achievements in the production of naval warfare equipment, while the navy has gone ahead and obtained Sea Harrier fighter/attack aircraft, ship-based missiles, and aircraft carriers from Britain and SSK2500-U submarines from Germany. Furthermore, India has been able to develop the German-designed Howaldswerske type-1500 submarine and Dornier coastal air patrol aircraft; Russian-designed, nuclear-powered submarines and MiG fighter planes; British-de-
signed Leander class frigates; French-designed corvettes; and the GE-LM 2500 marine-adapted gas turbine engine.30

India has undertaken long-term planning in science and technology to promote self-reliance. For this purpose, since 1958 its government has promoted a policy of independent research under the guidance of the Defense Research and Development Organization (DRDO). This overarching organization serves as the focal point for all scientific and technological aspects of national security. Comprising 47 laboratories staffed by over 108,000 scientists, the DRDO provides design and development assistance to the production units. Indian R&D expenditure, at $0.394 billion, ranks after the U.S. ($24.94 billion), France ($3.1 billion), the U.K. ($2.9 billion), and Germany ($0.693 billion).31 The Indian government increased defense R&D expenditure sharply from Rs. 10.8 billion in 1998 to Rs. 23.2 billion in the February 2000 budget.32 This increase in defense spending is a part of the sustained annual rise, which reached 8% last year, and shows the high priority placed on the military. The government has increased the funding for military research by 12.5% and for atomic research by 33%, as well as set aside a special allocation of $660 million for naval fleet expansion over and above the naval budget of $791 million.33 Moreover, with the indigenous share of India's total procurement of Rs. 70 billion at only Rs. 20 billion, there is talk of adjusting expenditures such that the amount of spending with domestic suppliers would be raised to 70% by 2005.34

India's Future Military Plan

In 1975, the Indian government appointed an expert committee consisting of General K. V. Krishna Rao, M. L. Chibber, and K. Sundarji to develop a 20-year prospective plan for the improvement of India's military capabilities and potential to develop into a major power.35 The committee's recommendations, with a few modifications, were carried out in 1987. The committee stated that the primary goal of the army was the prevention of war with as small an investment as possible. It recommended that India's R&D capability be used to minimize the army's dependency on imports. The experts saw Pakistan and China as the main threats to Indian security and recommended that a force structure be developed that would deter both enemies. In operational terms this meant that the Indian army should have a force advantage

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over the Pakistani and Chinese sides of two corps (six divisions), which was considered sufficient to deter any threat. Further, it was suggested that the number of tank regiments in the army be doubled from 27 to 58 and that two mechanized infantry divisions be included in the existing force structure.\textsuperscript{36}

The development of a new force structure was also laid down in army chief of staff General Krishnaswamy Sundarji’s 1987 prospective plan, \textit{Army 2000–2010}. The plan called for the army to build up from the then-current force level of 34 divisions to 45, including four tank divisions, eight mechanized infantry divisions, seven reinforced army plains and mountain divisions, and two air assault divisions. Following up on the Sundarji plan, India is to get the S-300 V theater missile defense (TMD) system. This acquisition is part of India's plans to purchase defense hardware and technologies worth $15 billion from Russia under their new defense agreement. The S-300 V anti-tactical ballistic missile (ATBM) is an advanced air defense system that, according to \textit{Jane's Intelligence Review}, is the world's first operational ATBM system. It comprises two different missiles, the dedicated anti-missile 9M82 (North Atlantic Treaty Organization [NATO] code name: 5A-12b Giant) and the dual-role 9M83 (NATO code name: 5A-12L Gladiator).\textsuperscript{37}

The entire system, which is also mobile, can intercept ballistic missiles with a range of up to 1,000 kms. India would have no trouble integrating the Russian ATBM system, because India's entire air defense system is based on Russian weapons and technology. Samir Sen, a former director of DRDO, has stated that the value of India's TMD system is that "it will effectively neutralize Pakistan's missile capabilities."\textsuperscript{38} Further, under the Indo-Russian agreement, Russia will also provide T-90 tanks, Su-30 MK fighter planes, three frigates, one submarine, and upgrades of MiG-21 fighters.\textsuperscript{39} Indian defense planners have also shown an interest in Israeli technology applicable to missile defense, particularly the Arrow ATBM and Phalcon airborne early warning aircraft. According to the \textit{Hindustan Times}, New Delhi is trying to acquire Arrow technology from Israel covertly in order to provide the Akash with an ATBM capability.\textsuperscript{40}

\textbf{Indian Air Force}

The IAF is unchallengeable in the region. It is both larger and more sophisticated than the air forces of Pakistan and China. In personnel strength, it has almost a 2.5 to 1 advantage over its neighbors. The IAF has a 3-to-1 edge in ground attack fighter squadrons, a better than 1.8-to-1 advantage in jet com-

\begin{itemize}
\item \textsuperscript{37} \textit{Jane's Intelligence Review} (May 1997), pp. 9–13.
\item \textsuperscript{38} See Afzal Mahmood, “Mini-Star Wars.”
\item \textsuperscript{39} Ibid.
\item \textsuperscript{40} See \textit{Hindustan Times}, February 13, 1997.
\end{itemize}
bat aircraft, and over 9-to-1 in transport equipment. The period of 1980–90 was marked by a major military build up and the IAF emerged with one of the most modern fleets in the Third World, featuring Mirage-2000s; MiG-23s, -25s, -27s, and -29s; and the Jaguar ground attack aircraft. It also built up a strategic transport component with the acquisition of the Russian Il-76.

The IAF consists of five regional air commands, controlling 110,000 personnel and 844 combat aircraft organized into 52 fixed-wing combat squadrons, one helicopter attack squadron, three reconnaissance helicopter squadrons, 13 fixed-wing transport squadrons, and 11 transport helicopter squadrons. The IAF basically relies heavily on Soviet built aircraft and domestically produced Ajeets and Maruts. Soviet-made helicopters, such as the Mi-8, Mi-17, and Mi-26, are also in extensive use by the Indian army. Furthermore, the IAF’s fighter planes are armed with Soviet AA-2 Atoll, AA-7 Apex, R-550 Magic, or Matra Super 530-D air-to-air missiles. For air-to-surface attacks they carry French AM-39 Exocets or Sea Eagles, or Soviet AS-7 Kerrys, AS-118 ATGWs, or AS-30s. The IAF also controls some 30 battalions of surface-to-air missile launchers, which use Soviet SA-3s and Divina V7 5SM/VKs. Moreover, 32 of the IAF’s 41 combat squadrons are equipped with Soviet fighters.

By 1986 India was attempting to gain access to Western technology through various licensing agreements with French, Germany, and U.S. companies. Furthermore, the Indian government established the Aeronautical Development Agency, under the auspices of the DRDO, and the agency has a number of projects in hand, including the LCA, a pilotless target aircraft, and the ALH. To be built by Hindustan Aeronautics in Bangalore, the LCA was designed to be a lightweight, single-seat, single-engine fighter whose primary role would be air superiority with a secondary ground-attack capability. It will be equipped with an air-refueling capability enabling it to acquire a force-multiplier dimension and will be able to deploy a payload of over 4,000 kg configured on seven multipurpose store stations.41 As such, it is the obvious choice as a successor to the MiG-21 variants that the IAF currently employs.

Meanwhile, the Indian government has signed agreement with Russia to receive 140 Su-30 Matzinger Keegan, Inc. (MKI) multirole fighters42 to make up for the protracted delay in the ALH project, caused by technical difficulties. Thus, by the time the ALH is ready for production, the Indian army may buy only a token number of aircraft because it will already have spent money on the Su-30 fighters, already has a top-ranking Soviet helicop-

42. Times of India, October 5, 2000.
ter in operation, and is also expected to buy anti-tank helicopters from the West.

**Indian Naval Power**

The Indian Ocean has gradually emerged as a pivotal region in the economic and geopolitical configurations of the world politics. In contrast to Indian designs toward the rest of the world, India's strategy with respect to the Indian Ocean is relatively clear, pragmatic, and effectively applied. The country's peninsular geography and island territories give it a natural extension of land-based cover far out into the ocean and across to the Malacca Strait. As the power of the Indian navy increases, the planners are seeking to carve out a large sphere of Indian influence stretching from the Persian Gulf to the Strait. India can see the Indian Ocean as its third front, after those with Pakistan and China, and a natural area of interest. The Southwest Asia portion of the Indian Ocean region is of particular concern to India as the source of much of its oil, job opportunities for Indians, and, in the Persian Gulf, a zone for much trade. India also feels it must cultivate the Muslim countries of southwestern Asia in order to limit Pakistan's role and influence over them.

India has developed bases in the Andaman and Nicobar Islands. Moreover, it is the only country on the Indian Ocean that has a strategic interest in that body of water's choke points: the Red Sea and the Straits of Hormuz, the Madagascar region to the east of Africa, and the Malacca Strait in Southeast Asia. India has claimed that its strategic area includes all reaches of the Indian Ocean to north of the Tropic of Capricorn. Indian naval experts also argue that the country's maritime interests and defense require a large and powerful navy in any case because a great nation should naturally have a great navy.43

In the late 1980s, the Indian military strategists were alarmed as Chinese naval vessels made port calls in Bangladesh, Sri Lanka, and Pakistan. Because it would have been difficult for the Chinese vessels to call at Bangladeshi and Pakistani ports in one voyage without stopping at Sri Lanka, New Delhi coerced Colombo into giving India a veto over the use of its port facilities.44 Indian naval strategists make no secret of their country's intention to check Chinese naval developments in the Indian Ocean by controlling choke points in the Malacca Strait and through the establishment of a permanent naval base in the Andaman Island, thus putting them on the vital trade routes between Suez and Singapore.45 In Southeast Asia, India has close

43. Tanham, “Indian Strategic Culture,” p. 139.
44. Sri Lanka provided the port facilities to India under the Gandhi-Jayewarden agreement of 1987, which denied the Chinese Navy access to Sri Lankan ports.
political and security ties with China's main adversaries, Vietnam and Indonesia, and a shared geopolitical interest in checking the spread of Chinese influence in the region.

One Indian analyst, Amit Gupta, has argued that “[t]he Indian navy is unmatched in the region and is the most balanced naval force in the Indian Ocean area. It enjoys maritime superiority in that area, with a large submarine fleet, an integral air arm, and a surface fleet of which over half of the ships are armed with missiles.” Thus, Indian defense planners justify its naval buildup in terms of China's naval modernization, especially its sea-launched ballistic missile capability and its alleged desire to move into the Indian Ocean.

Since the 1980s, India has pressed ahead with an ambitious naval modernization program. By 1994, the navy numbered 47,000 personnel, with another 5,000 in its air arm and 1,000 marines. The fleet comprised more than two dozen principal surface vessels, including two aircraft carriers, five destroyers, and 21 frigates. India has been building up its navy quite rapidly, and the development of naval carrier- and land-based aviation, development of the submarine fleet, and induction of ships for protracted endurance cruises into the navy suggest broader aims. The navy also has 15 operational submarines. In February 1988, the Indian flag was hoisted on the nuclear attack submarine *Chakra*, leased from the Soviet Union, which was to be used to train Indian crew. Reports indicated that Russia might sell to India five to seven nuclear submarines of the Victor-3 and Charley-2 (capable of carrying cruise missiles) classes. Furthermore, following on the success of its indigenously produced frigates India announced in 1989 that it planned to construct its own nuclear submarine. Subsequently, it was announced in 1993 that India intended to build its own aircraft carrier fleet.

India's badly needed modernization of its navy is also prompted by the aging of its fleet. The British-built carrier *Vikrant* (formerly the HMS *Glory*) was commissioned in 1951 and a second, the *Viraant* (formerly the HMS *Hermes*), was received from the British in 1988. Each carried British Sea Harrier attack planes and Sea King helicopters armed with Sea Eagle anti-shipping missiles. At the time the *Viraant* went into operation, India's naval authorities were projecting the construction of five more aircraft carriers: two each for the eastern and western marine zones, i.e., in the eastern and western parts of the Indian Ocean, with a fifth one to be under repair or reconstruc-

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47. J. Mohan Malik, “India Copes with the Kremlin's Fall,” *Orbis* (Winter 1993), p. 75.
India later launched its biggest (6,700 tons) and most powerful home-built missile-equipped destroyer in 1998. Called the Delhi-class, this ship is equipped with 16 SSMs with a range of 100 kms; surface-to-air missiles; 100-mm guns, and a locally developed early warning system. Moreover, the construction of the Karwar naval base south of Bombay, believed to be the largest naval facility in Asia between the Middle East and Japan, is already underway.

The Indians have purchased five Soviet Kashin-class guided-missile destroyers; each is equipped with SA-NI Goa and powerful SS-N-26 Styx anti-ship missiles, five torpedo tubes, and a single Ka-25 Hormone or Ka-27 Helix ASW helicopter. The fleet is rounded out by a variety of frigates: three domestically produced Godavari-class patrol frigates, which fire Styx missiles and carry two Sea King helicopters each; six British Leander-class frigates (renamed Nilgiri-class); one ex-British Whitby-class frigate (given the name Talwar, not to be confused with the Talwar-class frigate) fitted with Styx missiles and a Chetak helicopter; eight Kamorta-class patrol corvettes (ex-Soviet Petya-class); indigenous Khukri-class corvettes with Styx missiles; and two British Leopard-class vessels for training.

India has also a respectable submarine fleet, including eight Kilo-class diesel submarines equipped with Soviet-era SS-N-7 missiles, eight older Foxtrot-class subs, and two German-built T-209s. In September 1989, India launched the Shakli, its first locally produced submarine, which is still in service. Recently, India has signed a deal with Russia to purchase the aircraft carrier Admiral Gorshkov; the package includes the lease of four Tu-22 Backfire bombers, a maritime reconnaissance aircraft, five Kamov-31 airborne early warning helicopters for the navy, and strike aircraft fitted with a 300 km range air-to-ground missiles. Despite such additions, some Indian defense experts argue that the country's naval buildup is still not commensurate with national requirements in terms meeting those obligations arising out of defending its island territories in the Arabian Sea and the Bay of Bengal. They hold that India's long coastline gives rise to a legitimate demand to build a powerful navy, which would be the only real force in the blue water area.

**Nuclear Deterrence**

India's development of a nuclear weapons capability dates back to 1948, when the government established an Atomic Energy Commission whose mandate was to launch a comprehensive nuclear program. By the time China conducted its first nuclear test in 1964, India had acquired the capability to

49. Ibid., p. 938.
produce weapons-grade plutonium. Reprocessed spent fuel from a test reactor (supplied by Canada and fueled with plutonium donated by the U.S.) provided the plutonium for the nuclear device detonated by India in 1974. By this time, the country had developed a fairly sophisticated nuclear infrastructure, including reprocessing plants, fuel fabrication facilities, callandria vessels, and even a pilot-scale enrichment plant and reactors. With the test’s successful completion, India became the first Third World country to carry out a nuclear explosion and the first new entrant into the nuclear club since China exploded its bomb a decade earlier.

India has a broad-based nuclear program at present, with dozens of research, commercial power, fuel, and reprocessing facilities located across the country. It has nine commercial reactors in operation and has completed an additional eight plants. India also has greatly expanded its nuclear weapon production capabilities, constructing a range of nuclear facilities free from International Atomic Energy Agency safeguards or other non-proliferation controls. New Delhi has a large and growing stockpile of weapons-grade plutonium not open to international inspection. It also has a fledgling uranium-enrichment project linked to its nuclear-powered submarine programs. Its fissile-material production complex has been substantially enlarged and includes a 125-ton-capacity reprocessing plant at Kalpakkam. Moreover, India’s nuclear program is expected to produce thousands of pounds of fissile material in the next decade.

Indian leaders’ rationale for the nuclear program included concerns over the nuclear threat from China, aspirations for regional pre-eminence and international recognition and the desire to maintain a clear edge over Pakistan's growing nuclear potential. Pakistan and several Middle Eastern countries have an array of missiles and warheads and China is pressing on with its military modernization. In the post Cold War era, India’s sense of isolation cut across the entire political spectrum and was compounded by a belief that India was not accorded the respect due to it because of its civilizational and cultural qualities, population, and potential. India also claimed that it deserved a permanent seat in the U.N. Security Council, basing the case upon its intrinsic importance as accounting for “one fifth of the world,” plus its active role in a number of U.N. peacekeeping operations, and important role in U.N.-associated agencies and various arms control and disarmament fora. Indian policy makers saw nuclear weapons as a passport to the recognition and prestige India had been seeking.

All over the world, nuclear weapons remain a currency of power and the threat of their use will be exploited. Consequently, India has no alternative but to exercise its nuclear option. In the post Cold War era, Indian nuclear diplomacy was qualitatively different from that practiced during the preceding epoch. Its diplomacy has been nurtured on the doctrine of NAM and
commitment to disarmament. Thus, its pursuit of non-alignment was a balance of power exercise in a bipolar world in which the two nuclear power blocs could not go to war directly with each other. In the early 1980s, India was generally believed to have developed nuclear weapons as part of its military forces. Its possession of a growing stockpile of weapons-grade material gave it the ability to make such devices rapidly.

India's nuclear program included extensive efforts to enlarge plutonium production capability through clandestine nuclear trade, the domestic production of materials, and the testing of nuclear capable IRBM. India acquired technology from British firms to improve its capacity to build nuclear weapons. This technology made possible the development of a heat-resistant material that, if applied to the tips of long-range ballistic missiles, allows them to carry nuclear warheads to much greater distances. Russia also provided the technology for cryogenic engines that were to be used in a polar-launch vehicle and can also be used for launching intercontinental ballistic missiles (ICBMs). There are also reports that India has acquired sophisticated electronic equipment from the British firm GEC Marconi for its nuclear program, as well as beryllium-based hydrogen bomb technology from a German firm that would enable India to produce a thermonuclear bomb.

In May 11, 1998, the Indian leadership decided to put an end to ambiguity regarding its status as a member of the nuclear club. In Operation Shakti-I, India conducted five nuclear tests at Pokharan in the Rajasthan Desert. These tests involved a 12-kiloton (KT) fission device, a 43-KT thermonuclear device, a 2-KT low-yield device, a 40–45 KT device, and a sub-kiloton device. All were designed and developed with the technical cooperation of Russia and India's Bhabha Atomic Research Center. India has stockpiled enough fissile material to build more than 100 nuclear weapons. It is also worth noting that the Indian atomic energy sector has taken on the production of tritium, an isotope of hydrogen whose main application is in fashioning a hydrogen bomb. Finally, India possesses fixed-winged aircraft, including the Anglo-French Jaguar and the Soviet-supplied MiG-23 and MiG-27, that can be modified to carry nuclear weapons.

Missile Program

In 1980 India became the first developing country and the sixth country in the world—after Russia, the U.S., France, Japan, and China—to put a satellite, Rohini-I, into orbit using its own launch vehicle. The military significance of the development of the SLV-3 launch vehicle was immediately underlined by the country's top space official, who said the rocket could be converted into a
930-mile IRBM. Along with Israel, India leads the industrializing world in manufacturing space-launch vehicles and components.

In the early 1980s, space-related missile efforts were formally integrated into India's national defense planning. In 1983 the government established the Integrated Guided Missile Development Program (IGMDP), which is run under the auspices of the DRDO and includes plans for a series of missile systems to be developed in coming years. The IGMDP's founding marked the government's decision to finally approve military missile development and a conscious effort was made to extend the fruits of civilian space research to the missile development program. A. P. J. Abdul Kalam, the scientist who headed the successful SLV-3 project, became the program chief and established close ties between civilian and military research, setting off alarm bells in Pakistan, China, and the U.S. in the process. According to a recent report, the DRDO operates more than 45 defense-related plants and research facilities of which 19 are engaged specifically in various aspects of missile design.

India's ballistic missile program is already in an advanced state of R&D and perhaps deployment. The country has successfully test-fired the Agni-I, an IRBM with a range of 2,500 kms (1,550 miles); the Agni-II, a solid-fuel IRBM with a range of 5,000 km; the Prithvi, a short-range ballistic missile with a range of 250 kms (155 miles); the Trishul (trident-short range) SAM with a range of nine kms (5.6 miles); the Akash, a medium-range Sky Patriot class SAM with a range of 25 kms (16.8 miles); and the Nag (Cobra), an anti-tank missile. While the Agni provides India with the capability to place all of Pakistan, much of the Indian Ocean, and many cities in southern China within the range of its missiles, the Trishul and Akash—if deployed as ATBMs—could give India the capability of protecting itself from incoming missiles.

According to a report of the Commission to Assess the Ballistic Missile, India's IGMDP missile program is in its final stages. However, decisions regarding future missile development and deployment, especially of ICBMs and submarine-launched ballistic missiles (SLBMs), are still a high priority. India has developed an assortment of ballistic missiles, running from short-range to intercontinental-class devices, along with SLBMs and a short-range, surface ship-launched system. It is aggressively seeking technology from other states, particularly Russia, the U.S., Germany, and other Western European countries, for its missile program. Technology and expertise acquired

from other states, particularly from Russia, are helping India to accelerate the development and increase the sophistication of its missile systems. Many Indian nationals are educated and work in the U.S., around Europe, and in other advanced countries; some of the knowledge they acquired returns to the Indian missile program. While India continues to benefit from foreign technology and expertise, its programs and industrial base are now sufficiently advanced that supplier control regimes can affect only the rate of acceleration in India's programs.

### Economic Impact of Defense Policy

Since the 1960s when India started military modernization, the major portion of the country's budget has been allocated to defense. India is the second most populated country in the world after China. Its gross national product is limited and per capita income is also less than in the rest of South Asia. Its seemingly permanent tension and hostility with China and Pakistan will further lead to poverty and backwardness.

India's defense posture is as unstructured and anarchic as it is profligate. New Delhi has much less defense capability than it desires and its massive investment programs suggest. It is more than 60% dependent on the former Soviet Union for imports and spare parts for the production of a wide range of ordnance. Increasingly, the major factor affecting India's various modernization programs is unreliability of delivery. Most of the new weapons have been imported and produced under license from a considerable array of suppliers. This dependency has been creating a logistical nightmare with respect to spare parts, maintenance, and training.\(^5^3\)

Moreover, in some case there have been production and collaboration difficulties with respect to some of the licensing agreements. For example, the LCA design assumed the incorporation of the General Electric's F-404 engine produced in the U.S., because the Indian-produced engines could not meet the IAF's specifications. The plane also included imported radar and missile guidance systems. Production costs escalated when the air force reduced the size of its order, especially following the MIG-29 deal. By the time the IAF deployed the LCA, the technology it contained was in some respects redundant. A similar problem occurred with the domestically produced battle tank, whose India-manufactured engine has so far proved inadequate for the army.

Furthermore, Indo-Pakistan enmity is no longer tied to the geostrategic concepts of the former superpowers, the U.S. and the Soviet Union. Thus, the previous approach toward international crisis management of the Indo-Pakis-

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tani conflict in which the global partners of the South Asian antagonists re-
strained the two from open military confrontation, is no longer applicable. 
Pakistan has consistently denounced India's defense spending and the evolu-
tion of Indian military doctrine as parts of a plan to undermine Pakistan's 
sovereignty and undo partition. These denunciations have continued because 
of the present and continuing impasse over Kashmir, which remains the most 
likely cause of any future conflict between India and Pakistan. The Kashmir 
problem has the potential to grow into a bigger confrontation as a reflection 
of the global phenomenon of increasing demands by ethnic and national mi-
norities for self-determination and the influence that pressures from such con-
tenders would have on Indian domestic politics. The growing antagonism 
between Hindus and Muslims, communal clashes, and ethnic separatism in 
India are major reasons for increasing the defense budget. India still views 
military might as a more effective security guarantee than diplomacy, a pol-
icy that can be seen to have both external and internal dimensions.

For India, the uneasy external relations with Pakistan and China justify an 
armament policy aimed at modernization. Furthermore, the end of the Cold 
War and the collapse of the Soviet Union have encouraged India to revive its 
previous security policy of getting itself recognized by the world community 
as the preeminent power in the region. Many Indians believe that the present 
transformation of the international system is likely to work in its favor. Some 
Indian strategists believe that the U.S. may allow India to play a role as a 
relatively autonomous regional power in the Pacific Rim and South Asia be-
cause, since the Afghanistan crisis, the U.S. has given low priority to the 
South Asian region. The U.S. might reduce its military strength in the Pacific 
area and delegate partial responsibility to India to control the Indian Ocean. 
Indian defense planners are hopeful that the U.S. will also offer India appro-
priate weapons systems and technological know-how.\textsuperscript{54} Thus, the trend has 
prevailed toward armaments modernization rather than disarmament, and In-
dia has sought to purchase as much Western technology as financial con-
straints permit.\textsuperscript{55} In this regard, India's ambitious nuclear and missile 
program is obviously aimed at regional predominance. India seeks to rise as 
an international actor with the help of military strength and economic power, 
the essential status symbols for the country's foreign and security policy.

\textbf{Conclusion}

The Indian and Pakistani nuclear tests of May 1998 together represent one of 
the most important events in the post-Cold War era. Both countries have

\textsuperscript{54} Citha D. Maass and George Bautzmann, “India's Post Cold War Armaments Policy: An 

abandoned ambiguity about their nuclear status and are determined not to roll
back or turn back any more than will the five established nuclear powers
abolish their own nuclear arsenals. Both are nuclear powers in a de facto
sense because the world hegemonic system and established nuclear powers
have hesitated to accept the existence of two new members to the club who
are and will remain outside of the otherwise near-universal, non-proliferation
regime. Thus, under the present circumstances, nuclear India has had diffi-
culty adjusting to the international system because its nuclear status has not
yet been accepted by the big five on the one hand nor is it a non-nuclear
weapons state on the other. Some observers are of the opinion that India is
not clear about its future role and its leadership, diplomats, and industrialists
have yet to evolve a consciousness about their place in a unipolar world.

India's rise to prominence has not simply been a consequence of the coun-
try's growing strength. The rise has also been spurred by its concurrence
with a broader reordering of the global balance of power. Indeed, India has
emerged as South Asia's bully and acquired unprecedented opportunities for
autonomous action in the region and beyond. Most Indians planners are con-
fident that the time has now come for the region's smaller countries to learn
to not only live with India's aspirations but also cooperate with it on a
subordinate basis. But the cumulative effect of this stance has been to lead
Pakistan to replenish and modernize its own arms and armor to the extent that
it is once again able to challenge India. Further, the conditions prevailing in
South Asia make the risk of actual nuclear war between the emerging nuclear
neighbors uncomfortably high. This risk has been fully acknowledged and
there are countries in the region that wish that the extra-regional powers
would resist or limit the role of India. The U.S. and China are the primary
extraregional actors capable of actively challenging such an emerging hegem-
ony. They could do so by shoring up Pakistani capabilities in the conven-
tional and nuclear fields and have it continue to play the role of balancer
against India. Some observers believe that the U.S. could counter China
through an involvement with India. On the other hand, China has also been
playing a role of regional balancer in South Asia by providing Pakistan with
aid aimed at expanding and modernizing its land, sea, and air power capabil-
ity.

Thus, at present India can pursue only modest goals. Instead of overesti-
mating its capabilities, New Delhi should realize that the acquisition of nu-
clear weapons cannot guarantee it an independent role in global politics.
Nuclear capability is a necessary but not sufficient condition for playing such
a part. India won't attain such status until its economic and technological
power are unchallenged. Moreover, an over-ambitious strategy defense can
only injure Indian interests. On the other hand, a strategy that does not seek
to deal with the country's security challenges in a realistic, pragmatic way also cannot secure India's future.