

CHAPTER FIVE

INDIA'S MILITARY CAPABILITIES

5.1 Most of the publicly stated concerns about Indian defence policy have been reactions to Indian acquisition of new defence equipment. The Indian acquisition, on lease, of a Soviet nuclear submarine for training purposes stimulated a number of press articles raising concerns about 'Indian expansionism'. India's acquisition of this submarine has been, for some, symbolic of a worrying general expansion program.

5.2 It has been the rapid growth in size of the Armed Forces, and of the Navy in particular, that has caused the main concern. In his evidence, Dr Michael McKinley emphasised this concern when he said:

Any country that spends over \$US20 billion on defence equipment over a six year period is inevitably going to improve its military capabilities to a marked degree. When that country's Gross National Product places it within the world's leading 10 economies, and when it regularly spends in excess of 3.5 per cent of Gross Domestic Product and devotes nearly 20 per cent of government outlays to defence, the results can be impressive indeed. For India they certainly are.¹

5.3 There seems to be a concern that India spends too much money on defence — that its capabilities exceed the requirements suggested by its stated strategic aims. For example the Department of Defence expressed the view that:

There appears as yet to be no clearly articulated or agreed strategic purpose behind India's maritime expansion.²

5.4 The Australia Defence Association took a similar view of India's military policy in general:

It is possible to argue that India's general approach to security relations with the outside world is both obscure and confusing.³

5.5 India now possesses the third largest standing army in the world, well-supported by arms and services such as armour, artillery and aviation. The Air Force is the fifth largest air force in the world.⁴ The Navy is the seventh largest in the world in terms of combat tonnage and number of submarines;

¹ *Evidence*, p.100

² *ibid.*, p.222

³ *ibid.*, p.181

⁴ *ibid.*, p.100

eighth largest in manpower; and ninth largest in numbers of principal surface combatants.⁵ In addition, India has para-military forces numbering 672,000, including 100 battalions of border security forces (some 90,000 personnel).⁶

5.6 Some submissions, for example, the Melbourne South Asian Studies Group, did not see anything particularly unusual about the level of Indian military activity:

...by the standards of nation-states in the 1980s, India's defence activity is unexceptional.⁷

5.7 The submission went on to say that:

In 1989, the Indian navy is no more threatening than the far larger navies of China or Japan.⁸

5.8 The view that the Committee takes is similar to that of the Melbourne South Asian Studies Group, although with some qualifications. For example, the Committee notes that China and Japan do not have aircraft carriers and therefore depend on land-bases. Moreover, an important fact from Australia's point of view is that India has military facilities (naval and air) on the edge of Australia's area of primary strategic interest, in the Andaman islands, some 800 km west of the Thailand/Burma border.

5.9 The Committee feels that the reason some organisations, such as the Australia Defence Association or the Department of Defence, could not find 'clearly articulated or agreed strategic purpose' behind various aspects of Indian military policy is that they had concentrated more on military and technical aspects using an arbitrary concept of how much military capability is sufficient for India, rather than looking at broader social and cultural influences to see what Indian planners do regard as sufficient.

5.10 This chapter analyses in some detail the extent of India's current and projected military capability. After reviewing India's defence effort in general, three specific issues are addressed: power projection capability; nuclear weapons proliferation; and the security of sea lanes.

India's Defence Effort

5.11 In terms of the number of people in the armed forces in proportion to the population as a whole, India certainly appears to be one of the less militarised nations, as the following table shows:⁹

⁵ Total regular armed forces in the Army, Navy and Air Force number 1.2 million personnel.

⁶ International Institute for Strategic Studies, *The Military Balance 1989-1990*. Appendix 3 below shows the Order of Battle for the Indian Armed Forces.

⁷ *Evidence*, p.335

⁸ *ibid.*

⁹ Calculations are based on information in IISS, *The Military Balance 1988-1989*

Country	Ratio – Total Population: Military Personnel
Israel	32
Vietnam	50
USSR	56
South Korea	68
United States	113
France	121
United Kingdom	178
Australia	236
China	335
India	429
Japan	498

5.12 The ratio for India may be distorted by the high absolute size of the population, but the comparison with China, which has a comparably large population, is quite reliable.

5.13 A similar picture emerges when the share of 1986 GDP/GNP allocated to military activity is compared:¹⁰

Country	Percentage Share of GDP/GNP
Iraq	31.7
Iran	30.4
Saudi Arabia	22.4
Israel	18.9
Jordan	15.5
Syria	14.5
Sri Lanka	8.9
United States	6.7
Singapore	6.6
Pakistan	6.5
Taiwan	5.8
South Korea	5.2
United Kingdom	4.9
Thailand	3.7
India	3.5
Australia	2.7
China	2.6

5.14 India's officially announced defence expenditure as a percentage of GDP has remained within a relatively low range between 1965 and 1985 varying from a little under 3 per cent to just over 4 per cent.¹¹

¹⁰ IISS, *The Military Balance 1988-1989*, pp.224-226

¹¹ IISS, *The Military Balance 1987-1988*, p.220

5.15 According to the Department of Defence, in 1988-89 the share of India's GDP taken by defence expenditure was about 4.2 per cent.¹² However, according to the Department of Defence, 'there is some doubt as to whether the trend will continue to be upward...'.¹³ The Department of Foreign Affairs and Trade estimated the decline in the 1989-90 defence budget to be 'a decline in real terms over the 1988-89 budget of about 11 per cent', with the possibility that there could be 'some cuts and an overall reduction in the rate of growth of defence expenditure'.¹⁴

5.16 The Department of Defence stated that India's defence expenditure had more than doubled since 1983.¹⁵ However, with 1983 expenditure estimated by the London-based International Institute of Strategic Studies at 58.6 billion rupees and the 1988 figure at 125 billion rupees, the doubling is in current year prices only, not in inflation adjusted prices ('real terms').¹⁶

5.17 The Committee accepts the views of some Indian commentators that the official Defence Budget may not include all defence related expenditure. However, the Committee was not in a position to assess the volume of expenditure outside the budget. No information was provided to the Committee on just how such an assessment could be made.

5.18 In spite of the fact that India ranks amongst the world's largest economies, sitting somewhere between tenth and sixteenth in size, the economy has to support the second largest population in the world. India's 1986 per capita income stood at only US\$270. This compared with Pakistan's at US\$350 per capita, China at US\$300 per capita, the United States at US\$17,500 per capita and the USSR at US\$8,410 per capita. The low per capita national wealth has been a major cause of criticism of India's defence effort. As one Indian academic put it:

It is immoral and nonsensical that in a country where most people don't even have adequate drinking water, we are spending millions of dollars on rockets... Hundreds of people have been dying of cholera right here in the capital. So how can our leaders boast that they are spending a smaller percentage of the GNP than the Soviet Union or the U.S. on defence? I don't see people dying of cholera in those countries?¹⁷

5.19 At the same time, the proportion of India's economic output coming from manufacturing is still relatively small. India, despite the absolute size of its economy and its impressive growth rates, remains a relatively unindustrialised economy — when related to its population and resultant social and economic

¹² *Evidence*, p.218

¹³ *ibid.*, p.231

¹⁴ *ibid.*, p.808

¹⁵ *ibid.*, p.218

¹⁶ *ibid.*, pp.808, 814

¹⁷ Ross H. Munro, 'Superpower Rising', *Time*, 3 April 1989, p.23, quoting Professor Dhirendra Sharma

needs. Clearly India is taking an inordinately heavy burden on itself by seeking to achieve world status in the military sphere while still having such a low per capita income, low literacy rates and relatively small industrial sector.

5.20 With the official defence budget for 1989-90 sitting at just over 4 per cent of GDP for the second year running, there has been considerable pressure to cut it back. According to Giri Deshingkar, the Director of the Delhi-based Centre for the Study of Developing Societies:

Whenever defence expenditure in a developing country crosses 4 per cent of the GNP, such pressures are felt.¹⁸

5.21 Additional financial problems for India's defence programme have been caused by the cost of India's operations in Sri Lanka and on the Siachen Glacier, as well as reinforcement of the northern border with China. The falling value of the rupee against the Franc, Sterling and the Deutschmark have also made payments to European suppliers a much heavier burden.

5.22 Another problem waiting in the wings is the possible change of policy by the Soviet Union on the financial conditions of arms sales to India. Some Indian military officials have expressed concern that if Soviet arms sales were put on a proper commercial basis then India would be hit with paying more realistic prices. The very favourable conditions under which the Soviet Union has been providing military equipment has been a major reason why India has been able to achieve the levels of defence equipment acquisition that it has. The new foreign policy of the USSR may also involve a change in the favourable Soviet attitude to India's military posture.

5.23 Perhaps more important than the projected drop in defence expenditure in this year's budget is the increasing shortfall between the amount needed to maintain India's defence forces at their current level and the amount needed to fund current development plans. The bigger and more powerful the armed forces, the more money needs to be found to maintain them. As one Indian commentator put it:

After a decade of growth, India's ambitious defence plans have come to a dangerous pass. A resource crunch is seriously hampering modernisation and maintenance, and in desperation, the Government is even planning to export arms... As planners scan armouries and account books to see what went wrong, the stark reality is staring them in the eyes: there is just no money to pay for the plans.¹⁹

5.24 Moreover, if the limited actions in Sri Lanka and on the Siachen glacier already generate financial pressures, more ambitious offensive actions further afield could only be carried out at considerable economic cost.

5.25 As a result of these financial pressures a number of defence plans are reported to have been aborted. For example, the Army 2000 plan that aimed to develop the Army to 45 division level has been put on hold. The proposal to

¹⁸ 'Heading for a Crisis', *India Today*, 28 February 1989, p.43

¹⁹ *ibid.*, pp.42-43

raise an air-mobile division supported by a large new helicopter force has been shelved. A plan to buy an advanced jet trainer is reported as no longer possible. Due to a shortage of tanks, an armoured regiment is no longer built on a 'brick' of 72 tanks, but usually on a 'brick' of 62, and even in some cases, 55 tanks. It is also reported that the Army and Air Force have told the Government that they are extremely short of battlefield electronic counter-measures.²⁰

The Army

5.26 The Indian Army of just over 1.1 million personnel is the third largest standing army in the world. Forty per cent of its strength is deployed opposite Pakistan and thirty per cent is opposite China. Elements of four divisions are involved in a major peacekeeping operation in Sri Lanka. The rest of the army serves as a strategic reserve.²¹ Vietnam's army also has the same number of personnel.

5.27 A large share of the Army's fighting forces are mountain divisions trained and equipped for mountain warfare on India's borders with Pakistan and China. The relative balance of army strengths between India and its major potential adversaries may be gauged in part from the following comparisons:²²

	INDIA	PAKISTAN	CHINA
Personnel	1,100,000	480,000	2,300,000 (all China)
Divisions	33	16	10 (near India) 90 + (all China)
Tanks	3,150	1,750	9,000 (all China)
Artillery (towed)	3,860	510	14,500 (all China)

5.28 Thus, while the Indian Army enjoys a margin of superiority over that of Pakistan, the need for India to consider other contingencies (such as border conflict with China) reduces that margin considerably — especially in the light of the close military relationship between Pakistan and China.

The Air Force

5.29 The Indian Air Force is the largest regional air force and is deployed mostly in the north and west of the country. It has over 110,000 personnel, and 836 aircraft, mostly Soviet, but including fairly advanced Western aircraft such as *MIRAGE 2000* and *JAGUAR*.²³

²⁰ *ibid.*, p.43

²¹ *Evidence*, p.218

²² IISS, *The Military Balance 1989-1990*

²³ *ibid.*, p.160; *Evidence*, p.219

5.30 By comparison, Pakistan's Air Force has 25,000 personnel, and 451 combat aircraft, including about 40 American F-16 fighters, as well as older *MIRAGE* aircraft. China's Air Force has 470,000 personnel and 5,000 combat aircraft.²⁴ Pakistan is purchasing an additional 60 F-16 aircraft.

The Navy

5.31 The Army and Air Force have experienced a relatively stable status since the late 1970s. It is the Indian Navy which has experienced the most visible growth and which has sparked most of the concerns.

5.32 Dr McKinley quotes a defence commentator and specialist on India in his submission to this effect:

...the long standing debates about the virtues of the submarine versus the carrier, and the capital ship versus the escort, were systematically resolved by a decision to procure substantial numbers of each of these classes.²⁵

5.33 The implication of this statement is that India did not resolve conflicts between cost and priorities by denying itself certain capabilities. It chose instead to acquire all of the capabilities and avoid the sorts of trade-offs in capability that many nations have made.

5.34 Prior to 1863, India had a significant and impressive ship-building capacity. This was dismantled by the British colonial government in 1863. The maritime defence of India was then undertaken by the Royal Navy based in Singapore and a newly created Royal Indian Marine whose tasks were confined to coastal policing.²⁶ When India won its independence in 1947, the Indian Navy consisted of four sloops and two frigates, and 25 other minor vessels all of which had belonged to the Royal Indian Marine.²⁷

5.35 India has a 5,600 km coastline and several island territories off both the East and West coasts to defend. It was natural therefore that the newly independent country began a program of building up the Navy. During the first years after independence, the Navy was able to commission 2 cruisers. These were the flagship, the *INS Delhi*, and the *INS Mysore*. In addition, they obtained 6 ex-Royal Navy destroyers, plus some fleet support vessels.²⁸

5.36 In the early 1950s, the Government developed a ten year plan for further major expansion. It intended to build up a strong task force, comprising two light aircraft carriers, three cruisers, nine destroyers, along with necessary support ships. However, the country's financial situation was unable to sustain such a

²⁴ *ibid.*, pp.149, 171

²⁵ *Evidence*, p.100

²⁶ Pushpindar Singh, 'The Indian Navy: Modernisation and Strategy in the 80s', *Asian Defence Journal*, 7/87, p.4

²⁷ Sherrill Whittington, *Indian Security and the Indian Ocean*, Parliamentary Library, Legislative Research Service Background Paper, Canberra, November 1988, p.2

²⁸ Pushpindar Singh, *op. cit.*, p.6

program at that time. With the aid of the United Kingdom, India did undertake a six year naval development program between 1956 and 1961, acquiring with Lord Mountbatten's help a light carrier the *HMS Hercules*.²⁹ India also added eight frigates and four coastal mine-sweepers to its fleet during this period.³⁰

5.37 The *HMS Hercules*, after an extensive refit, was commissioned in the Indian Navy in 1961 as the *INS Vikrant* and remains in service today as one of India's two carriers. It was laid down during World War II.

5.38 In the early 1960s, plans to expand the navy were part of India's overall response to its unresolved conflict with Pakistan and the war with China in 1962. In a visit to the United Kingdom in 1964, the Indian Defence Minister was reported to have been interested in purchasing 3 frigates, 3 destroyers, a submarine, and a couple of minesweepers.³¹ The United States declined to show any interest in Indian inquiries for naval orders, while the USSR was only too happy to offer demonstrations of naval vessels.³²

5.39 Talks with the United Kingdom about naval deals had some results but for a variety of reasons an agreement with the USSR, announced on 6 September 1965, was India's preferred course. The deal involved four submarines, some missile patrol craft and naval infrastructure development.³³

5.40 In the wake of the 1965 war with Pakistan, India announced in mid-1966 a rapid naval expansion programme. Later in 1966, the Government formally announced its plans to establish an indigenous warships-building capacity. India would, from then on, continue to build up its navy with a combination of vessels purchased abroad and built at home. By 1968, the Indian navy was a well established force.

5.41 After the 1971 war with Pakistan, more submarines, missile corvettes and support vessels were ordered. India also decided that every new ship of frigate size and above would take a helicopter. Port Blair in the Andaman Islands was developed further and infantry units were stationed there. The Air Force intensified exercises to ensure better preparedness at its base at nearby Car Nicobar Island.

5.42 The Eastern Fleet was eventually created and was based at Vishakhapatnam, strategically located half-way up the east coast. With the aid of the Soviet Union, Vishakhapatnam had repair and overhaul facilities for Soviet-built ships. A submarine base and training school was also established at Vishakhapatnam. In 1977, a Southern Naval Command was also established, based at Cochin.

²⁹ Whittington, *op. cit.*, p.2

³⁰ Pushpindar Singh, *op. cit.*, p.6

³¹ Ravindra Tomar, *Development of the Indian Navy: An Overstated Case?*, Strategic and Defence Studies Working Paper, No.26, Canberra, 1980, p.2

³² *ibid.*, p.3

³³ *ibid.*, p.5

5.43 In 1987, India obtained its second aircraft carrier, the 26 year old *HMS Hermes*, commissioned now as the *INS Viraat*. Indian designers are also designing a 30,000-40,000 ton carrier, one of which may be produced by early next century, by which time the *INS Vikrant*, India's first carrier, may well be decommissioned. India will probably build the new carrier.

5.44 India also took receipt, on lease, of a Soviet *CHARLIE*-class nuclear powered submarine in January 1988. The Department of Defence believes that India may seek additional such submarines. They are not nuclear armed. The first one, *INS Chakra*, is being used for training.³⁴

5.45 However, India's experience with the Soviet submarine has been an unhappy one and it has been given the telling nickname *CHERNOBYL*-class. The next *CHARLIE*-class submarine, to be delivered to India in 1990, will probably replace the *Chakra*. Prime Minister Gandhi said in February 1989 that there were 'no immediate plans to increase the numbers of nuclear submarines', although the USSR had agreed in principle to supply two or three more.³⁵

5.46 India has a well developed ship-building capacity, with three major shipyards at Bombay, Goa and Calcutta, all of which build various classes of naval vessels. The Bombay yard has built 6,000 tonne frigates and commenced a submarine construction program in 1984.

5.47 The following table based on *The Military Balance 1989-1990* shows comparisons between the Indian Navy and other regional navies:

CATEGORY	INDIA	PAK	CHIN	MAL	INDON
Personnel	47,000	15,000	260,000	12,500	43,000
Carriers	2	0	0	0	0
Destroyers	5	7	19	0	0
Frigates	21	10	37	4	15
Landing Craft	10	0	58	2	15
Submarines ³⁶	17	6	93	0	2

5.48 This table bears out the Department of Defence in its assertion that 'India's naval forces are now larger and more powerful than any conceivable regional naval threat'.³⁷ The Committee sees India's naval power more in terms of a defensive capability rather than as a powerful force for offensive operations beyond South Asia.

³⁴ *Evidence*, p.221

³⁵ *Jane's Fighting Ships 1989-90*, Foreword, p.91

³⁶ Eighty-four of the Chinese submarine fleet are *ROMEO*-class, a Soviet design of the early 1950s considered to be obsolete

³⁷ *Evidence*, p.220

5.49 The picture for the future will probably remain much the same. The following table shows the major elements of Dr McKinley's assessment³⁸ of Indian naval growth since independence and projected naval profile during 2000-2010:

CATEGORY	1947	1965	1971	1986	21st Century
Personnel	11,000	16,000	40,000	47,000	80,000
Carriers	0	1	1	2	3
Cruisers	0	2	2	0	0
Destroyers	0	3	3	4	18-24
Frigates	2	8	9	23	26
Escorts	1	6	9	4	44
Sloops	4	0	0	0	0
Minesweepers	16	6	8	18	24
Landing Craft	0	2	3	12	12
Submarines	0	0	4	10	22-24
TOTAL	23	28	39	73	149-157

5.50 The Committee was not informed as to the assumptions underlying Dr McKinley's projections but there is room to doubt that India will have the money or the strategic justification to double the size of its navy in the next fifteen to twenty years — as it did in the last fifteen to twenty years. It must be noted however that the navy will increase considerably in sophistication in the coming decades as new technologies and new ships replace existing ones.

5.51 The Indian navy has a number of weaknesses. It rarely exercises with other navies. It has an unresponsive stores system. There is no effective airborne early warning. There is also a shortage of skilled technicians. It has not developed a dedicated logistics system to support distant naval operations. The Navy's strengths include a large and well motivated recruit base; a large fleet with modern weapons; and good organisation. The Navy can also rely on Indian merchant shipping to some degree for support in overseas deployments.

Assessment of India's Capabilities

5.52 The Committee believes that the current size and structure of the Armed Forces give India the following capabilities. First, it is probably capable of defending its borders and containing any surprise attack from, say, Pakistan, and any incursions less than full scale attack by China. The Committee notes the Defence Department's assessment that India's army would 'eventually' be able to defeat Pakistan's army in any renewal of full-scale war.³⁹

³⁸ *ibid.*, p.101

³⁹ *ibid.*, p.219

5.53 Second, India has a capability to patrol its Exclusive Economic Zone (EEZ) along both the eastern and western coasts. It could offer a credible defence against the naval forces of any small countries but not against the United States or Soviet navies. India would find it difficult to enforce fully its EEZ against illegal fishing.

5.54 Third, it has the capability to launch small scale rapid deployment operations in the northern Indian Ocean, as the recent action in the Maldives indicates. It has the capability to sustain operations at some distance from its own shores against most navies in the Indian Ocean.

5.55 Fourth, it has the ability to deploy substantial numbers of ground troops overseas in collaboration with host governments, as was shown in Sri Lanka. From Australia's point of view, the possible use of the Andaman or Nicobar Islands by India as a staging point for deployment of Indian military power into Southeast Asia is at least a theoretical possibility which cannot be discounted when looking purely at capability issues. It is precisely that capability, based on the geographical position of the Andaman and Nicobar Islands, that has given rise to concerns in Indonesia, Malaysia and even Burma about India's future intentions.

5.56 Fifth, there seems to be substantial opinion that India has developed a significant deterrent capability, even in relation to the superpowers, should either of them come into conflict with India. The Department of Defence commented on this deterrent capability in relation to external powers in its submission as follows:

The influence flowing from India's possession of significant maritime power could, in the longer term, enable it to resist increases in the presence of external powers in the Indian Ocean or surrounding states and to constrain their involvement in regional conflicts. An enhanced maritime capacity would also lessen the likelihood that India itself could be subjected to 'coercive naval diplomacy'...⁴⁰

5.57 This issue was elaborated on during evidence by Captain Barrie. The capability that India was hoping to achieve was not, according to Captain Barrie, one that would enable India's naval forces to 'take on the might of the United States'. Rather it was aimed at 'making US decision makers think again, or at least making them go through the analysis in more detail, and not acting quite so quickly in future'. The aim was that the United States might be more reluctant to use available military force to exert political pressure and instead choose some other way of attempting to influence events.⁴¹

5.58 Dr McKinley went a lot further in this regard. He argued that Indian naval capabilities, especially its submarine capacity and its bases on the Andaman and Nicobar Islands near the Strait of Malacca, could be used by India to counter the regional deployment of the United States Sixth Fleet from the Mediterranean or the Seventh Fleet from the Pacific. According to Dr McKinley:

⁴⁰ *ibid.*, p.223

⁴¹ *ibid.*, pp.241-242

This is not to claim that the US Navy would inevitably suffer defeat by the Indian fleet in a regional conflict, only that in keeping with the latter's deterrent posture, the uncertainties and costs of it prevailing might necessarily induce discretion in Washington.⁴²

Power Projection

5.59 In discussing power projection capability, the Committee reviewed India's capability to occupy and defend foreign land targets outside South Asia, an operation which would be essentially a maritime one, albeit with ground and air forces involved. The issue of threats to sea lanes is addressed separately in this chapter.

5.60 The overall size of the Indian Armed Forces, their high level of technology, and the recent sustained growth have generated an image of a country set on a long term expansion of its military might. Power projection is one of the major issues of India's military build-up that seems to preoccupy those parts of the community that see danger signs in it for Australia or Southeast Asia. The concern was expressed by the Australia Defence Association:

Of more direct concern to Australia and to other western maritime nations is the power projection capability displayed by India's navy.⁴³

5.61 Even some of those witnesses who have expressed no concern at India's military build-up as far as Australia's interests are concerned, see the actual capabilities of the Indian Navy as continuing to grow. For example, Professor Reeves commented that he did not think that India would stop at building only one additional aircraft carrier.⁴⁴ Both Dr Bruce and Professor Reeves were of the view that India would go on to make further acquisitions to ensure that it could increase its power projection capabilities.⁴⁵

5.62 On the other hand, the Department of Defence, while assuming that India would continue to expand its armed forces, noted that India was not giving emphasis to the acquisition of sophisticated munitions or other war stocks needed to support a protracted conflict.⁴⁶

5.63 An assessment of India's real power projection capabilities must not be based on knee-jerk reactions to the acquisition of this or that particular weapons system. Even a stocktake of the overall size and equipment holdings of the Indian Armed Forces does not give a complete picture of power projection capabilities — particularly since India has been concentrating on equipment procurement and may not have paid sufficient attention to the other equally important aspects of capability (training, maintenance, etc). It is necessary to

⁴² *ibid.*, p.104

⁴³ *ibid.*, p.185

⁴⁴ *ibid.*, p.56

⁴⁵ *ibid.*, p.62

⁴⁶ *ibid.*, p.222-223

look at the full range of factors that influence a nation's military capabilities. These include geography, military doctrines, training and exercise patterns, technological skills of the personnel, logistic features, and resource availability.

5.64 India has not developed new military doctrines to suggest that India is developing capabilities for contingencies other than those that have concerned it in the past — that is, ones associated with South Asian problems and great power intervention in that region. India does not exercise or train for new military tasks. Old manuals are still in use. India does not exercise with any other nation and rarely deploys its forces outside its own EEZ. When it does, these deployments are usually by single ships. The Indian Armed Forces do not have a power projection doctrine that has been developed in any clearly articulated way, except for South Asian contingencies.

5.65 It is the absence of new strategic doctrine, or a revised foreign policy doctrine to go with it, that has disconcerted more experienced military analysts. As a senior United States official put it:

Given India's growing power, it is incumbent on it to articulate a foreign policy that lays out a road map showing exactly how it intends to apply its considerable influence in the future.⁴⁷

5.66 The unspoken assumption — possibly quite groundless — is that India intends to use military force in the future in ways and for purposes quite different from those it has pursued in the past.

5.67 Another concern about the capability is that if it is available — even without a doctrine for its use, political pressures might push India to adventurism. As one commentator put it:

The danger is that for any Indian leader facing such an array of domestic and foreign policy problems, the lure of foreign adventure is going to grow. You cannot yet call India a militaristic country. But it is headed in that direction, and that is where it is putting its resources.⁴⁸

5.68 The existing doctrine of the Indian Armed Forces sees the Indian Army as essentially a continental army, with no need to develop logistics arrangements for operations outside South Asia, and with the vast majority of its forces deployed on existing operational tasks (or in reserve) in northern India. Approximately 70 per cent of India's army formations are based facing either the Chinese or Pakistan border. A similar situation exists as regards India's airforce units, which are located mainly in northern airfields.

5.69 The Indian Navy has expanded remarkably in the last two decades but its doctrine remains oriented towards meeting the kind of demands it has been faced with in the past. The concept of a two carrier navy is meant to allow India to have a carrier battle group to patrol both the long eastern and western coasts. The 1971 India-Pakistan war indicated the importance of being able to handle

⁴⁷ Ross H. Munro, 'Superpower Rising', *Time*, 3 April 1989, p.23, quoting Richard Armitage

⁴⁸ *ibid.*, quoting an unnamed 'Western diplomat in New Delhi'

the situation in the west off the Pakistani coast and in the east in the Bay of Bengal. Although the establishment of Bangladesh has removed the Pakistani threat in the east, the Indian Government considers there are still important operational requirements for the Eastern Fleet, especially in the protection of the Andaman and Nicobar Islands and the protection of seaborne trade.⁴⁹

5.70 It should also be noted that while Pakistan's navy is considerably smaller than the Indian Navy, it is equipped with six submarines. Pakistan remains India's major military concern and India's naval deployments are designed so that India can dominate the naval theatre. Thus, the availability of Indian naval forces for activities outside home waters is significantly reduced.

5.71 India's doctrine also aims to counter any coercive naval diplomacy of external powers, and therefore the two carrier battle groups are needed for the eastern and western coasts.

5.72 The Defence Department has said:

India will be able to project significant naval and naval air power into most of the northern Indian Ocean in an arc from the east coast of Africa to the west coast of Indonesia.⁵⁰

5.73 This is, however, an assessment of India's capability simply to put forces into a particular area. It is not an assessment of India's ability to prosecute a military campaign against opposing forces.

5.74 In view of the following factors, the Defence Department has probably overstated the case. The Indian Armed Forces face a number of technical limitations.

5.75 First, India does not have the sea-support or logistical capability to carry out long distance offensive operations. As the Department of Defence itself noted, the overall operational effectiveness of the Indian Navy is constrained by limited at-sea logistic support at any distance from Indian ports.⁵¹

5.76 When the geography of the Indian Ocean is considered, it is obvious that both at-sea logistical support and massive air capability would be essential for Indian operations outside South Asia. This would especially be the case for any operations in the Southeast Asian region or in the vicinity of north-west Australia. The distances involved are considerable and lines of communication would be very exposed. Besides requiring larger numbers of attack aircraft, such a force would need an air-to-air refuelling capability (which India does not have), and a larger naval replenishment fleet than India presently has. The Committee is unaware of any plans for expansion in these support capabilities but notes that India made effective use of its flag merchant vessels during the Sri Lankan landing operation.

⁴⁹ Tomar, *op. cit.*, p.18

⁵⁰ *Evidence*, p.229

⁵¹ *ibid.*, p.220

5.77 Second, the Committee agrees with the statement by the Australian Department of Defence in its submission that India's overall strategic preoccupation and the rationale for its major force development remains the security of its borders with both China and Pakistan. The Committee also agrees that India is not, and will not in the foreseeable future, be in a position from the point of view of forces available to turn its back on those potential threats to undertake a major military campaign elsewhere.⁵²

5.78 Third, any long-distance combat operation has the risk of turning into a protracted involvement, just as the short distance Sri Lanka operation did. There are few prospective 'targets' for hypothetical Indian aggression in the Indian Ocean which would not be defended. This would impose on India the necessity to be able to replace lost equipment over an extended period of time. While it is true that India has substantial domestic defence production capability, it is also dependent on both major military blocs for resupply.

5.79 All submissions to this inquiry have emphasised that India is not a military ally or a client of the USSR. This is an important question for analysing power projection capabilities because of the assumption that is sometimes made that aggressive or expansionist intent by India may be backed by the USSR. This was noted in evidence given by the Department of Defence at public hearings:

In our view, India does not threaten Australia. Force projection requires a balanced and large capability with large and secure logistic support. On capability grounds alone, concepts of a threat being posed to Australia are fanciful, and they are driven largely by a misunderstanding, in our view, of India's relations with the Soviet Union...⁵³

5.80 The very fact that India is not part of an operating alliance system means that any offensive operation must be taken on India's own initiative and without any guarantee of support from any ally. Just as India has equipped itself to defend its borders with Pakistan and China and to counter 'coercive naval diplomacy' without needing to seek assistance from any third party, its foreign policy emphasis on independence suggests that even if it were to contemplate aggressive activity, it would probably not do so if it needed to depend on recourse to a third party such as the USSR. (The USSR has of course changed its own policies on foreign military adventures in the last year or so under President Gorbachev.)

5.81 One specific scenario of Indian power projection that has been suggested to the Committee is an Indian occupation of Cocos Island. Mr Michael O'Connor, Executive Director of the Australia Defence Association, argued that India did have the capability to occupy Cocos Island. He also argued that Australia needed to increase the defence of the island, in particular, with the establishment of a rapidly deployable amphibious unit.⁵⁴

⁵² *ibid.*, p.222

⁵³ *ibid.*, pp.233-234

⁵⁴ *ibid.*, pp.189, 192-193

5.82 There is little doubt that India would have the capability to occupy Cocos Island. Indeed, as Cocos Island is currently undefended in so far as there are no military forces deployed in its vicinity on a regular basis, many other countries would have the same capability to occupy the island. Large forces are not needed to occupy a small undefended territory.

5.83 The Australian Department of Defence was, however, very sceptical about the seriousness of such a threat. They could see no reason why India should develop such a desire to invade Cocos. Indeed, they told the Committee that it was unlikely that such a scenario had even been considered in the Department as a hypothetical option.⁵⁵

5.84 The Committee also is sceptical about the likelihood of such an event. As Mr O'Connor himself pointed out, such an offensive by India would have to be preceded by some kind of political campaign around the issue beforehand. Such a campaign would give Australia ample time to take both diplomatic and military action, as required. A surprise attack by India, in the absence of any political campaign, would be seen internationally as an unwarranted act of aggression and would isolate India during any counter-measures by Australia.

Nuclear Weapons

5.85 According to the Department of Defence:

A nuclear arms race on the sub-continent is a worrying possibility. India believes that Pakistan is developing a nuclear weapons capability and is also well aware of China's nuclear capability. India has demonstrated its own nuclear explosive capacity with a 'peaceful' nuclear explosion in 1974.⁵⁶

5.86 India does not possess nuclear weapons and has indicated that it has no intention to acquire them at the moment. On the other hand, India also refuses to sign the Nuclear Non-Proliferation Treaty, arguing that it is discriminatory against non-members of the current club of nuclear weapons states. India has made it plain that while India faces a nuclear equipped China to the north, a nuclear aspiring Pakistan in the west, and a nuclear equipped United States Navy in the Indian Ocean, it will not commit itself to non-proliferation.

5.87 In June 1985, the then Prime Minister Gandhi made a statement that India could manufacture nuclear weapons within a matter of weeks. India's capacity to build nuclear weapons is based upon an extensive program of nuclear energy production. Nuclear research in India began in 1945, even before independence, with the establishment of the Tata Institute of Fundamental Research. After independence, the Government established the Indian Atomic Energy Commission in 1948.

⁵⁵ *ibid.*, p.241

⁵⁶ *ibid.*, p.221

5.88 From the beginning, India's nuclear development program was influenced heavily by the same overall concern for independence of action as characterised its national industrialisation and foreign policies. India developed a capability over the entire nuclear fuel cycle. India has an indigenous capability to produce its own uranium fuel, fabricate the fuel, construct power reactors, produce heavy water to moderate them, and reprocess the spent fuel into plutonium which can be used for weapons. It also has a significant nuclear research and industrial infrastructure.

5.89 Between the foundation of the Atomic Energy Commission in 1948 and the mid-1960s, the nuclear energy programme proceeded very modestly. This situation changed significantly following the Sino-Indian war in 1962 and, especially, the first Chinese atomic test in 1964. These two events changed India's assessment of its strategic situation. China's entry into the nuclear club in 1964 obviously introduced a direct nuclear factor into India's strategic considerations.

5.90 Following China's atomic test a major political debate took place in India over the question of whether India should obtain the bomb. In the end, the Indian Government decided against obtaining nuclear weapons. There was a majority view that India could still rely on either the Soviet Union or the United States providing some kind of nuclear umbrella or countervailing force against China.

5.91 On the other hand, India refused to rule out the acquisition of nuclear weapons. It was at this time that India's policy on this question crystallised as one of maintaining a nuclear weapons option. Under this policy, India did not actually make nuclear weapons but constantly threatened to do so. This policy was aimed at not only discouraging China from directing any of its nuclear arsenal at India. It was also calculated to pressure the major nuclear powers to provide guarantees against China so that India would not actually manufacture weapons.

5.92 India's explosion of an atomic device in 1974 represented an escalation of this same policy. The 'peaceful' atomic explosion was meant to reinforce the international perception that India's policy of maintaining a nuclear weapons option was based on a real capability.

5.93 This escalation was also in response to new international developments and, in particular, the new relationship that emerged between the United States and China, and Pakistan as well. The rapprochement between China and the Nixon Administration occurred almost at the same time as the India-Pakistan war of 1971, which saw the United States show of force in the Bay of Bengal on Pakistan's behalf. In India this raised serious doubts about whether it was a wise policy to rely on the US as any kind of countervailing force against China. A major outcome of this reassessment in the Indian Government was the development of a nuclear weapons capability.

5.94 India's explosion of an atomic device indicated its capability to develop an independent nuclear force in a situation which its defence planners obviously saw as more uncertain than in the past.

5.95 The explosion in 1974 did, however, have one significant unintended consequence. This step by India prompted a renewed effort by Pakistan to acquire a nuclear capability. Pakistan also rejects signing the Nuclear Non-Proliferation Treaty and pursues the same policy of maintaining a nuclear weapons option. Both India and Pakistan have now adopted this policy of developing the capacity, not producing weapons but keeping their options open.

5.96 India's indigenously-built nuclear facilities are — technically speaking — not subject to international restrictions. According to the evidence of Dr McKinley, India has a capacity to produce between 15 and 30 nuclear weapons annually.⁵⁷ Pakistan's indigenously-built nuclear facilities are also outside international supervision. Pakistan has a capacity to manufacture weapons grade uranium. It should be remembered however that the international community takes a dim view of nuclear proliferation and a number of international safeguards and sanctions do operate to dissuade India (and Pakistan) from acquiring nuclear weapons.

5.97 The Department of Defence has assessed that India, like Pakistan, has the potential to develop both nuclear weapons and a delivery system within one year.⁵⁸

5.98 India's possession of modern British, French and Soviet jets gives it a potential weapons delivery capacity (albeit limited in range) within South Asia, north into China, and into Southeast Asia. Like India, Pakistan's main delivery system would be aircraft, namely the United States supplied F-15 and the French supplied MIRAGE V.⁵⁹ However, India and Pakistan have also recently tested ballistic missiles.

5.99 In May 1989, India test fired its new surface-to-surface medium range ballistic missile, *Agni*. The 75 tonne missile is reported to be capable of carrying a payload of 1,000 kilograms and to have a 2,500 km range. It was developed as part of a \$333 million Integrated Guided Missile Development Program. The missile was assembled and test-fired by the Indian Defence Research and Development Organisation, which employs approximately 25,000 scientists and engineers. In February 1989, India also tested a short range missile with a range of 300 km, which could have an estimated potential payload of 1,000 kilograms.

5.100 Indian officials claim that the *Agni* program was intended as a demonstration of its technological capabilities and that it had no plans to mass produce the missile. It would take India up to five years to develop a usable ballistic missile delivery system for nuclear weapons if it chose to do so.⁶⁰

⁵⁷ *Evidence*, p.105

⁵⁸ *Letter to the Committee*, 8 January 1990

⁵⁹ *Evidence*, p.107

⁶⁰ Assessment of the Department of Defence, *Letter to the Committee*, 8 January 1990

5.101 As in the case of India's nuclear capability, Indian missile developments have spurred the Pakistanis into their own program. In February 1989, the Army Chief-of-Staff announced that Pakistan had test-fired missiles with ranges of 30 km and 120 km.⁶¹

5.102 The Committee shares the concern of the Australian Government about the potential of both India and Pakistan to develop nuclear weapons. While India remains a threshold nuclear weapons state, it will be important for the major nuclear weapons powers to develop policies which reduce India's security concerns and thereby reduce the incentive for India to develop nuclear weapons. The United States, China and the USSR have the most significant potential influence in this area.

Security of Sea Lanes

5.103 A potential Indian threat to shipping in the Indian Ocean is a common theme in press reports about the Indian Armed Forces and figured in the comments of Mr O'Connor to the Committee:

I would be more concerned, I must say, about the security of merchant shipping of all nations passing through the Indian Ocean.⁶²

5.104 The Committee viewed such a possibility as almost incomprehensible for a number of political reasons referred to in Chapter Four. The Committee accepts that a limited Indian blockade of shipping going to Pakistan, Sri Lanka, or Bangladesh is possible, but that an Indian campaign against shipping in the Indian Ocean in general is barely credible.

5.105 India certainly has weapons platforms which can threaten, damage or sink commercial shipping. Indeed, India could for demonstration purposes attack the seaborne trade of any major Western nation. India could, for a short period, and if there was no military opposition, put a submarine barrier or lay mines across the Strait of Hormuz or the Malacca Strait. As the Iran/Iraq conflict showed, a country does not need much capability to have a significant effect on international shipping in a confined waterway.

5.106 However, India simply does not have the number of platforms with sufficient patrolling range and frequency to make any appreciable lasting impact on the volume of shipping using the Indian Ocean. In financial year 1984-85, Australia alone had over 5,000 shipping movements through the Indian Ocean.⁶³

5.107 None of the submissions made to the Committee attempted to demonstrate in practical terms exactly how India might interdict seaborne trade: whether carrier battle groups would be used; whether land-based aircraft operating in conjunction with submarines would be used; in what areas would attacks most likely be conducted; what the frequency and range of patrols would

⁶¹ Ross H. Munro, 'Superpower Rising', *Time*, 3 April 1989, p.23

⁶² *Evidence*, p.204

⁶³ *ibid.*, p.82

be; and what operational goals the Indian Armed Forces could hope to achieve (for example, ten ships sunk per day); or what response India would make to the simple tactic of rerouting traffic outside the range of Indian military forces.

5.108 For example, there was no discussion in the submissions of India's mine-laying capacity. Yet, it is partly an implicit mining threat combined with India's proximity to the Malacca Strait (through the Andaman and Nicobar Island bases) or the Persian Gulf that might offer at least some possibility of a credible Indian threat to significant sections of Indian Ocean shipping in general. While it is relatively easy to lay mines without dedicated mine warfare platforms, such activity does not figure highly in Indian naval doctrines or exercise patterns.

5.109 The Committee accepted as theoretically accurate the Defence Department's assessment:

India's enhanced maritime capabilities do give it some potential to threaten shipping on international trade routes across the Indian Ocean.⁶⁴

5.110 Notwithstanding the Department's view that political constraints (the reactions of other powers) would dissuade India from considering such an option, the Committee was surprised that the theoretical possibility could not have been more roundly discredited by an analysis of just how little India could, in hard military terms, achieve in the way of interdiction of shipping at any distance from its shores.

5.111 In fact, the focus in most submissions that addressed the security of sea lanes was to discuss India as a possible threat. The neglect of the view that India shared with Australia an interest in contributing to the security of sea lanes, particularly Western oil traffic, was, in the Committee's view, typical of the superficial analysis in most submissions of India's military build-up.

Conclusion

5.112 In general terms, the Committee found that India's military build-up is far less threatening for the foreseeable future outside the South Asian region than some views suggest. Some suggestions that were raised seriously in the submissions, such as direct Indian military intervention in support of the Indian population of Fiji, can only be regarded as hypothetical at best.

5.113 At the same time, India is already the predominant military power in South Asia. Its capability is already very powerful. The continued expansion of that capability over the next decade will probably reduce not only the security of India's South Asian neighbours but also that of India itself as its neighbours respond to the military build-up.

⁶⁴ *ibid.*, p.225

5.114 There are grounds for concern about India's views of its role as regional policeman and the degree to which coercion enters into its calculations of enforcement. India's slow but determined progress to nuclear weapons capability is also a cause of strong concern.