Coastal Security Arrangement:
A Case Study of
Gujarat and Maharashtra Coasts

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Introduction

India's coastal security was breached on November 26, 2008, when 10 trained terrorists from Pakistan landed in Mumbai and carried out a well-coordinated attack killing 170 people. In order to enter Indian waters undetected, the terrorists hijacked an Indian fishing boat, 'Kuber', and sailed towards Mumbai. After successfully evading both the Indian Navy and Coast Guard patrols, they entered Indian territorial waters, where they abandoned the fishing vessel and used rubber dinghies to reach the Mumbai shore. Here again, they were successful in eluding the Maharashtra coastal police. The scale and intensity of the attack galvanised the Indian government into announcing several measures to revamp the coastal security mechanism.

This paper critically evaluates the coastal security arrangement in Gujarat and Maharashtra. The first section identifies issues that pose a challenge to coastal security, the second deals with the evolution of the coastal security mechanism while section three evaluates the deficiencies, inadequacies and shortcomings in this mechanism. A preliminary assessment of the additional measures that have been announced by the central and state governments in response to the Mumbai attack is provided in the fourth part.

Gujarat and Maharashtra Coast
(Coastal Districts)

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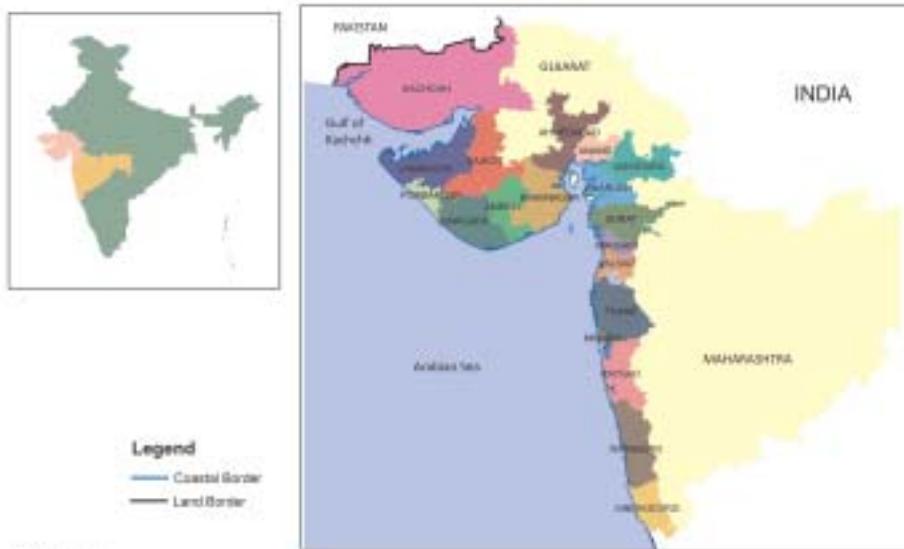
Coastal Security Arrangement:

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Challenges to Coastal Security

India's coasts have always been vulnerable to anti-national elements, especially in Gujarat and Maharashtra. Numerous cases of smuggling of goods, gold, narcotics, explosives and arms and ammunition through these coasts have been reported over the years. In fact, it has been established that the explosives used in the 1993 serial blasts in Mumbai had been smuggled through the Raigad coast in Maharashtra. The susceptibility of the Gujarat and Maharashtra coasts is primarily because of their topography and location. Added to this is the issue of straying of Indian fishermen into Pakistani territorial waters. The existence of vital strategic installations along these coasts further compounds the problem.

Topography and Location

Maharashtra and Gujarat together have a 2320-km-long (Maharashtra-720 km and Gujarat-1600 km) coastline. This coastline is characterised by numerous creeks, small bays and rivulets. Since the creeks and rivulets run deep inside and remain poorly guarded, they have become ideal for clandestine landing of contraband and infiltrators. Boats can easily land and disappear in stealth and avoid detection by satellite imagery taking advantage of the topography.

For example, the northern Gujarat coast has several large creeks,[1] some of which lie astride the international border with Pakistan. These creeks are

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[1]   Some of the prominent creeks in this area are Godia, Kharo, Chukh, Kori, Padala, Pir Sanai, Pabewari and Sir.

all inter-connected by smaller water bodies and together they create an intricate maze of shallow and deep channels. Interconnectivity of the creeks has made the border porous for infiltrators, smugglers and militants, who have been using these routes to sneak into India. Mangroves and sand bars in the creeks also provide refuge during low tide. The situation is made worse by the non-availability of any approach channels from the Indian side to many of these smaller channels. For instance, the so called *Hamari Nala*, which originates from India and enters Pakistan at pillar 29 and re-enters India near post 1174, has become a preferred route for infiltrators and smugglers. Several Pakistani and Bangladeshi infiltrators, with arms, ammunition and explosives, have been apprehended in this area by the security forces.[2]

Similarly, the islands and sandbars, which dot the coast, provide perfect hideaways for infiltrators and contraband. Frequent reports of seizure of consignments of fake Indian currency notes, arms, ammunition and explosives underline this fact.[3]

The physical proximity of the coast to Pakistan and the Gulf countries further adds to its vulnerability. With the land borders completely fenced, terrorists and smugglers, operating from Pakistan are increasingly using the sea to sneak into India. Also, *dhows* operating between India and Persian Gulf have at times been used to smuggle contraband, including precious metals, arms and explosives, into India.

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[2] Author's interview with Commander BSF 48 Bn, at Lakhpat, September 17, 2008. Also see "Infiltration in Sir Creek region, claims state police: BSF denies, *The Indian Express*, September 8, 2008, available at http://www.expressindia.com/latest-news/infiltration-in-sir-creek-region-claim-state-police-bsf-denies/358077/ (accessed November 14, 2008).

[3] "ISI module busted", *The Hindu*, July 14, 2007, available at http://www.thehindu.com/2007/07/14/stories/2007071454651400.htm (accessed July 29, 2008). Also see, "Terror finds fertile ground in Gujarat", *The Times of India*, September 29, 2002, available at http://timesofindia.indiatimes.com/articleshow/msid-23610028,prtpage-1.cms (accessed July 29, 2008); "Police smash ISI base in Surat, arrest three HUJI activists", *The Indian Express*, February 16, 2002, available at http://www.expressindia.com/news/fullstory.php?newsid=7556 (accessed November 15, 2008).

Straying of Fishermen

The straying of both Indian and Pakistani fishermen into each other's territorial waters has been a recurrent source of concern.[4] This problem is primarily concentrated along the Gujarat coast. The arrest of Indian fishermen along with their boats remains a serious security problem. It is important to note that more Indian fishermen stray into Pakistani waters and are arrested than their Pakistani counterparts.

There is the general notion that fishermen trespass into each other's waters since the maritime boundaries between the two countries are yet to be demarcated. While this may be true to an extent, it has been observed that fishermen know that they are trespassing. The lure of a good catch along the normally unexploited Indus estuaries[5] is the main reason for the fishermen to congregate around this area and this often results in trespassing. Coupled with this, the compensatory allowance provided by the Gujarat government to families of arrested Indian fishermen and the low fine (Rs 1,000 per vessel) imposed on vessels found violating the international maritime boundary appears to have blunted the fears of Indian fishermen on being arrested by Pakistani authorities.

Statistics reveal that currently there are 434 Indian fishermen and 369 fishing vessels in Pakistani custody.[6] Earlier, as a mark of goodwill, Pakistan

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4   "Pakistan arrests 28 fishermen", the Times of India, November 29, 2002, available at http://timesofindia.indiatimes.com/articleshow/29770963.cms (accessed November 20, 2008); "45 Indian Fishermen get Jail in Pakistan", *Pakistan Times*, October 1, 2004, available at http://pakistantimes.net/2004/10/01/national4.htm (accessed November 20, 2008); "Pakistani coast guards arrest 23 Indian fishermen for alleged illegal entry", *AP World Stream*, April, 23, 2005, available at http://www.highbeam.com/doc/1P1-107772792.html (accessed November 20, 2008); "Pakistan nabs six Indian fishermen, send them to jail", *Thaindia News*, January 19, 2008, available at http://www.thaindian.com/newsportal/south-asia/pakistan-nabs-six-indian-fishermen-send-them-to-jail_10013432.html (accessed November 20, 2008); "14 Indian fishermen arrested in Pakistani waters", *Samachar.in*, March 08, 2008, available at http://www.samachaar.in/International/14_Indian_fishermen_arrested_in_Pakistani_waters_27573/ (accessed November 20, 2008); "Seven Pakistani fishermen arrested near Jakhau coast", *The Indian Express*, November 3, 2008, available at http://www.expressindia.com/latest-news/seven-pakistani-fishermen-arrested-near-jakhau-coast/380687/ (accessed November 20, 2008).

5   According to local fishermen, fish like pomfret and *lalpari* (red snapper), which fetch a good price, are found only near the creeks.

6   "Fishermen captured by Pakistani agency", Q. 2709, *Rajya Sabha*, available at http://meaindia.nic.in/parliament/rs/2008/04/17rs12.htm (accessed November 25, 2008).

used to instantly release many of the arrested fishermen, allowing the Indian Coast Guard to escort them back to Indian waters. But since 2005, Pakistan has discontinued this practice and ordered its security agencies to arrest all Indian fishermen trespassing in Pakistani waters. It has also stopped returning the confiscated boats to India.[7] Many analysts have also expressed apprehensions that some of the arrested fishermen could be recruited by Pakistan's Inter Service Intelligence (ISI) and used as agents against India. They have also warned that the ISI might use the confiscated boats to sneak in arms, explosives and operatives into India. Since these boats have Indian registration, they can easily evade attempts by Indian security agencies to track them.

Another issue of concern is of fishermen going to sea without valid certificates as well as proof of identity. Photo identity cards are issued by the state fisheries department after detailed verification, but the arrest of many Bangladeshi fishermen by the Coast Guard exposes the fact that the process of verification is not foolproof.[8] Also, on many occasions, according to the Coast Guard, it has been found that the photo on an identity card does not match that of the fisherman who carries the card.

In addition, there is the difficulty of keeping a vigil on fishermen who gather in their thousands at small harbours. For instance, Jakhau is a small harbour in the Kutch coast, where tens of thousands of fishermen gather during the fishing season. The place has a small Coast Guard station as well as a Customs station. But the combined strength of the Coast Guard and Customs personnel does not exceed 30, which is grossly inadequate for surveillance, given the sheer number of fishermen and vessels assembled there.[9]

This problem is further compounded at sea. It is estimated that at one time there might be as many as 60,000 fishing vessels in sea.[10] And for the

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[7] Author's interview with Coast Guard official at Jakhau, September 18, 2008, also see "Pakistan decides to get tough with Gujarat fishermen", *The Indian Express*, April 19, 2008, available at http://www.expressindia.com/latest-news/pakistan-decides-to-get-tough-with-gujarats-fishermen/298972/ (accessed October 17, 2008).

[8] Author's interview with senior Coast Guard official at Jakhau during field visit, September 18, 2008.

[9] Author's observation and interview with senior Coast Guard official at Jakhau during field visit, September 18, 2008.

[10] Vice Admiral P.S. Das (Retd.), "Coastal and Maritime Security: two sides of the same coin", *Indian Defence Review*, 24 (1), Jan-Mar 2009, p. 121.

Coast Guard and the Navy to intercept and physically search each one of them in case of any exigency is simply impossible. This fact was reinforced during the two joint maritime operations conducted off the coast of Gujarat and Maharashtra in April and June 2009. The first operation, *Raah Bandh,* was a three-day exercise and it involved the Indian Navy, the Coast Guard, the Customs and the Police. The objective was to prevent unauthorised influx from across the border. Interestingly, despite pooling all their resources, these agencies could check on only 300 fishing boats during the three-day operation.[11] A similar operation, *Raasta Roko,* was conducted in June 2009 along the entire west coast, with the aim of 'tracking all vessels and checking their identities'. This operation was coordinated by the Coast Guard, with the state fisheries departments and state maritime boards**,** Customs and the police. During this joint operation also, the security agencies could check only 1,000 ships and fishing vessels.[12]

Existence of Strategic Installations

Both Gujarat and Maharashtra are highly industrialised states. However, the Kutch and Saurashtra regions of Gujarat, in particular, are fast emerging as an industrial and energy hub. Kutch district, which borders Pakistan, has been witnessing rapid industrialisation in recent years. A series of tax concessions given in the aftermath of the 2001 earthquake and other advantages, such as the availability of manpower and resources (land, coal, limestone), as also access to sea have resulted in flourishing of many industries, chief among them being cement and energy (thermal and wind). A proposal has also been mooted for setting up a nuclear power plant by the Adani group.[13] Apart from the Kandla port, private ports like the Adani Port at Mundra and many private and captive jetties have also come up

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[11] "Major security operation in Maharashtra and Gujarat following terror warning", April 24, 2009, available at http://www.jansamachar.net/ display.php3?id=&num=36073&lang=English (accessed July 16, 2009).

[12] "80 warships cover 3,000 nautical miles and inspect 1000 vessels", June 11, 2009, available at http://mid-day.com/news/2009/jun/110609-Indian-Navy-security-agencies-Coast-Guard-ship-Kutch-Kerala.htm (accessed July 16, 2009).

[13] "Adani group eyes nuclear power generation", *Business Line*, October 6, 2008, available at http://www.thehindubusinessline.com/2008/10/06/stories/2008100651330200.htm (accessed November 15, 2008).

along the Kutch coast.[14] The Kandla SEZ (Special Economic Zone) has added to the industrialisation of the region.

This process of industrialisation has been further boosted by the proximity of the Persian Gulf to the Gulf of Kutch, which has emerged as a major corridor for importing crude oil. Today, nearly 70 per cent of India's crude oil is imported through this corridor. Many ships laden with oil, gas, chemicals and other cargo frequent the ports and jetties in the Gulf of Kutch. Annual maritime traffic in the Gulf of Kutch is estimated to be around 2,800 vessels in recent years.[15] The routing of crude imports has also opened up avenues for the establishment of oil refineries and storage tanks by major oil companies along the Saurashtra coast in Vadinar, Salaya, Sikka and Jamnagar. With reports of Reliance Industries Ltd having struck gas in Kutch offshore (GK-OSJ-1) in the Gulf of Kutch, the Saurashtra-Kutch region is likely to emerge as the next high potential zone for fossil fuel exploration.[16]

Elsewhere in Gujarat, gas and oil has also been discovered in the Gulf of Khambhat. The region around the Gulf of Khambhat has also emerged as a major petroleum and industrial hub, with Hazira becoming a maor industrial zone. New industrial centres have also come up around the Dahej port in Bharuch.

Maharashtra has an offshore oil field, Bombay High, situated 161 km from the Mumbai coast, which produces 14 per cent of India's oil requirements and accounts for 38 per cent of all domestic production.[17] Some amount of crude oil is also imported through the Mumbai coast. As a result, numerous oil refineries and storage tanks are located around Mumbai and

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14 Author's observation and interview with BSF officials and general population during field visit to Kutch, September 15-17, 2008.

15 "Adani plans bunkering hub in Gulf of Kutch", *The Economics Times*, December 5, 2006, available at http://www.articlearchives.com/trade-development/trade-regulation-policy/ 1781493-1.html (accessed November 15, 2008).

16 Vinod Mathew, "Returning to the top spot", *Frontline*, 20 (6), March 15-28 2003, available at http://www.hinduonnet.com/fline/fl2006/stories/20030328005111400.htm (accessed November 15, 2008).

17 'What is Bombay High', *rediff.com*, available at http://www.rediff.com/money/2005/jul/ 28bspec.htm (accessed July 20, 2009).

its suburbs. Like Gujarat, Maharashtra coast has also witnessed rapid industrialisation, with the establishment of several SEZs in Navi Mumbai, Raigad and Thane. Several important industries like textile, chemicals and steel dot the Maharashtra coast line. In addition, several sensitive installations, such as the Tarapur nuclear power station, the Bhabha Atomic Research Centre, the Western Command Naval Base, the Jawaharlal Nehru Port and Mumbai Port are also located along its coast.

While it is obvious that these installations face a conventional threat from Pakistan in the event of war, there are growing worries about non-conventional threats as well as terrorist attacks, sabotage, etc., which can potentially inflict massive damage. For example, if terrorists were to attack a VLCC (Very Large Crude Carrier) carrying several million barrels of crude oil and seriously damage it leading to a massive oil spill, the environmental and economic impact will be immense. It will not only lead to the destruction of marine life in the affected area but also disrupt maritime traffic. If such an attack were to take place near a port, the damage would be manifold. The 2002 attack on the crude oil tanker, MV Limburg, off the Yemeni coast, which killed a crew and spilled several thousand barrels of oil,[18] bears testimony to the fact that such an attack is not merely an alarmist scenario but a serious possibility.

Evolution of the Coastal Security Mechanism

Awareness about the vulnerability of the country's coasts first arose in the wake of the 1993 Mumbai serial blasts. This led to the launch of Operation Swan, with the aim of preventing the landing of contraband and infiltration along the Maharashtra and Gujarat coasts.[19] Under the plan, while the Indian Navy and the Coast Guard patrolled the high seas, a joint coastal patrolling (JCP) team, comprising of personnel from the state police, Navy and Customs, undertook patrols to enhance surveillance in shallow waters,

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[18] "JTIC briefing: LNG tanker terrorism", August 3, 2007, available at http://www.janes.com/news/security/terrorism/jtic/jtic070803_1_n.shtml (accessed November 15, 2008); also see "Limburg oil tanker attacked", available at http://www.globalsecurity.org/security/profiles/limburg_oil_tanker_attacked.htm (accessed November 15, 2008).

[19] *Annual Report 1994-95*, Ministry of Defence, Government of India, p. 20.

creeks and inlets, which had hitherto remained unmonitored.[20] Operation Swan commenced in September 1993 and is still operational. Though a proposal for establishing a coastal police force was also put forward at that time, it has found few takers.

Further attention to coastal security was given after the Kargil Review Committee's recommendations for a comprehensive reform of the country's security set-up. It came in the form of a Task Force on Border Management, with coastal security being a part and parcel of it. The task force recommended, *inter alia*, the setting up of a "specialised marine police in the form of coastal police stations," augmentation of the strength of the Coast Guard, in terms of personnel and material, the formation of fishermen watch groups and the establishment of "an apex body for management of maritime affairs."[21] On the recommendation of the task force, the government launched the coastal security scheme in 2005-06. The aim was to strengthen infrastructure for patrolling and surveillance of the coastal areas, particularly the shallow areas close to coast.[22] The scheme envisaged, over a period of five years, the establishment of "73 coastal police stations equipped with 204 boats, 153 jeeps and 312 motor cycles for mobility on coast and in close coastal waters" at a cost of Rs 37,161.15 lakh.[23]

The government sanctioned Rs 4,092.60 lakh to Maharashtra for building 12 police stations, 32 check posts and 24 barracks as well as to procure 28 vessels, 25 jeeps, and 57 motor cycles. Similarly, a sum of Rs 5,842.60 lakh was sanctioned for Gujarat to construct 10 coastal police stations along

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[20] *Coastal Security Scheme-Meeting of Apex Coordination Committee*, DIS.9493/34/SPL IV, Home Department (Special), Mantralaya, Bombay, September 3, 1993. The guidelines of the Coastal Security Scheme stated that a single Joint Coastal Patrolling (JCP) team should comprise of "eight personnel including one Police Sub-Inspector, three armed police constables from Maharashtra Police, two Naval personnel and two Customs personnel including a Customs Inspector. The Customs Inspector was to be the over all in-charge of each team." For patrolling purposes, fishing trawlers were to be hired by the Customs or district administration (as the case may be), one light machine gun was to be provided by the Navy, night vision binoculars and wireless sets were to be provided by the Customs and state police, respectively.

[21] "Border Management," *Reforming National Security, Group of Ministers' Report*, Ministry of Home Affairs, Government of India, New Delhi, 2001, pp. 71-75.

[22] *Coastal Security Scheme*, Ministry of Home Affairs, available at http://mha.nic.in/pdfs/Coastalsecurity.pdf (accessed April 28, 2009).

[23] Ibid.

with 25 check posts and 46 outposts as well as to procure 30 vessels, 20 jeeps, 101 motorcycles, At the same time, to strengthen joint patrolling and to enable the Coast Guard's participation, funds were allocated to it for the acquisition of 15 interceptor boats as well as for setting up additional Coast Guard stations at Dahanu and Murud Janjira in Maharashtra and at Veraval in Gujarat. The scheme was scheduled to be competed by 2012. The Coast Guard was also entrusted with the responsibility of guarding the Gujarat coast. [24] With a force strength of approximately 300 personnel, the Coast Guard started operating from 2006 from four stations in Jakhau, Okha, Vadinar and Porbander.

Operation Swan and the Coastal Security Scheme resulted in a multi-layered mechanism involving the Indian Navy, the Coast Guard, the Maharashtra and Gujarat Police, Customs and fishermen groups. In addition, three central ministries – Home Affairs, Shipping, and Agriculture (which covers fisheries) – also played part. The overall responsibility for the security of Maharashtra coast lies with the Indian Navy. How does this mechanism work?

Components of Coastal Security

Sea patrols and aerial reconnaissance by ship-based aircraft maintain vigil over the territorial waters, the exclusive economic zone and the high seas. They also mark the state presence in these waters and help deter, and where possible prevent, the smuggling of arms and ammunition, explosives, drugs and infiltration through the coast. A three-layered patrolling system is operational to secure the Gujarat and Maharashtra coasts. At the outermost layer, the Indian Navy patrols the high seas and carries out aerial reconnaissance with ship-based aircraft. The intermediate layer, comprising of the exclusive economic zone (EEZ) (between 12 and 200 nautical miles) is patrolled by the Coast Guard. And the territorial waters are patrolled by joint coastal patrolling teams, comprising personnel drawn from the Customs, the state police and, till 2006, from the Indian Navy. It is envisioned that the task of patrolling the territorial waters in both the states will be gradually taken over by the 22 coastal police stations (see appendix 1), which became operational in 2007.

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[24] *Annual Report 2007-08*, Ministry of Home, Government of India, New Delhi, p. 33.

Agencies engaged in securing the coast receive and generate intelligence about the movement and operations of criminal and terrorist groups at sea and on land. They receive inputs from central intelligence agencies. At the same time, they are also actively engaged in generating their own intelligence through regular interaction with fishermen and villagers, who have been sensitised and organised into vigilant groups like 'Gram Suraksha Dal' and 'Sagar Rakshak Dal'. Gram Suraksha Dal members keep a vigil in their villages and adjoining areas, and serve as sources of information about trade in contraband and criminal and anti-national activities. Sagar Rakshak Dal volunteers keep watch on suspicious movements along the coast and at sea. They also take part in joint coastal patrolling.[25] In Maharashtra, the Indian Navy has been instrumental in training these groups, under the supervision of the state police, since 1999.[26]

Further, photo-identity cards have been issued to fishermen and their boats registered by the customs department. Fishermen are also issued passes permitting them to go to sea during the fishing season. To prevent Indian fishermen from crossing over the notional internal maritime boundary with Pakistan, the state governments have initiated a scheme of installing GPS (global positioning system) and VHF (very high frequency) wireless set in every fishing boat.

Coastal installations like ports and offshore assets are provided protection through the deployment of security forces personnel and the installation of traffic monitoring systems. While, the Central Industrial Security Force (CISF) is deployed in Jawaharlal Nehru Port and Kandla Port, the state police is deployed at Mumbai Port and other smaller public ports in Gujarat. The protection of private ports, such as at Mundra, is however, entrusted to private security guards. All the major ports in both the states, including Mundra Port, are International Ship and Port Facility Security (ISPS) code compliant. As part of ISPS code, vessel traffic management systems (VTMS), automatic identification system (AIS) and ship security alert systems (SSAS) have also been installed in these ports to identify and track the movement of potentially dangerous ships in the vicinity of the coastal

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[25] Author's interview with senior police officials at Mumbai, Nate and Vasai, March 23-31, 2009.

[26] *Annual Report 1999-2000*, Ministry of Defence, Government of India, New Delhi, p. 29.

waters. Following the recommendations of the Group of Ministers, a VTMS is being installed in the Gulf of Kutch. For this, nine radar towers are being constructed, with six on the Kutch coast and three on the Saurashtra coast, with a master control room being at Kandla. A scheme of remote control monitoring of lighthouses is also under implementation. One such lighthouse has already been constructed at Okha.[27] Protection for offshore platforms like Bombay High is provided by Indian Navy personnel. As a rule, the stretch around the oil platform remains sanitised and no boat or persons are allowed to come within 500 meters of it.

Securing the Creek Areas

As stated earlier, northwestern Gujarat is characterised by large creeks. For the security and surveillance of the creeks, two battalions of the water wing of the Border Security Force have been deployed along with six floating BOPs (Border Outposts). Of these, four are deployed in forward areas in Pabewari and Padala creeks while two are kept in reserve. These BOPs maintain vigil over the entire area with the help of patrol boats, which are dispatched frequently for patrolling the creeks. A number of medium craft and interceptor boats also carry out frequent patrolling. In addition, fishing in the Pabewari creek is prohibited in order to prevent any Pakistani operative from sneaking into Indian territory in the guise of a fisherman.[28] Aerial reconnaissance by UAVs (unmanned aerial vehicles) is also undertaken for tracking infiltrators.

Deficiencies in the Mechanism

Mumbai happened despite this multi-layered coastal security mechanism. Lack of 'actionable' intelligence has been widely attributed as the main reason for this failure. But the fact remains that there are certain inherent inadequacies and shortcomings in the coastal security mechanism, making it incapable of preventing infiltration through the coast. These include insufficient manpower, poor training, inadequate infrastructure, lack of adequate resources and certain systemic flaws.

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[27] "Phenomenal Growth of Shipping Sector in Five Years", Press Release, *Ministry of Shipping*, March 21, 2003, available at http://pib.nic.in/archieve/lreleng/lyr2003/rmar2003/21032003/r2103200318.html (accessed November 12, 2008).

[28] Author's interaction with Senior BSF official, Water Wing, at Koteshwar, September 16-17, 2008.

Insufficient Manpower

Shortage of manpower is an all-pervasive problem that afflicts state and central agencies engaged in coastal security. The most affected among these is the marine police. With a low police-population ratio of 1:117 and 1:141[29] in Gujarat and Maharashtra, respectively, the states are grappling with serious shortage of trained police personnel. This problem is even more acute in the marine police. In 2006, when the coastal security scheme was launched, the Maharashtra government sanctioned a mere 530 posts for the coastal police force, 380 for policing and 150 as technical manpower (*see appendix. 2a, b*). Only 312 of the police posts have been filled so far (*see appendix 3*). Not a single technical post has been filled in the last three years since there are no boats in the 12 'operational' coastal police stations.[30] Gujarat had sanctioned 373 posts, of which 233 were for policing and 140 for technical manpower.[31] Following the Mumbai attacks, the Maharashtra government sanctioned 932 new posts (667 policing and 235 technical). Considering the extent of the coast and number of people residing along the coast, which these coastal police stations have to cover, these posts appear inadequate. Since most of the coastal police stations are yet to procure any boats for patrolling, it remains to be seen when any of the technical posts will get filled. Needless to add, inadequate manpower not only restricts the reach of the police stations but also places severe strain on existing personnel, who have to bear additional responsibilities.

Though proposals to recruit retired naval and Coast Guard personnel have been forwarded to overcome manpower deficiency, nothing has been done about it till date. A debate is also continuing on whether the marine police force should be a separate cadre or continue to be a part of the state police. Those opposed to the formation of a separate cadre argue that this will result in "frustration … as promotional avenues would be limited due

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29 "Police-Population ratio", *Status paper on Internal Security*, Ministry of Home Affairs, New Delhi, September 2008.

30 Statistics supplied by Police Headquarters during Author's interview with senior police officials in Mumbai, March 24-25, 2009.

31 "Gujarat's Modi Government suggests national Maritime Security Authority", *deshgujarat*, December 5, 2008, available at http://deshgujarat.com/2008/12/05/gujarats-modi-govt-suggests-national-maritime-security-authority/ (accessed July 22, 2009).

to the small size of the force in each state."[32] Also, it will be difficult to shift non-performing persons to other areas, as happens in a regular police force, thus undermining the effectiveness of such a force. At the same time, being part of the regular state police force also has its own set of drawbacks. Marine police personnel are likely to be shifted regularly for other assignments and areas of responsibility. As a result, their training and the exclusive expertise that they acquire will suffer and not be properly utilised.[33]

The Coast Guard too faces manpower shortage at the force level. At present, it suffers from a deficiency of 20-25 per cent in the officers' cadre, 30 per cent in the ranks of sailors and 20 per cent among civilian staff.[34] Successive governments have been aware of this problem,[35] but have done little to augment force levels. At present, 2,973 personnel are responsible for manning the entire western region covering a 3,300-km-long coastline and roughly a million square kilometres of the EEZ. Even the Indian Navy withdrew from joint patrolling in 2006 citing a manpower crunch.[36]

Poor Training

The absence of trained personnel adept at coastal patrolling and sea combat operations is another factor that affects the marine police and the Customs. The Coast Guard imparts training to the marine police in seamanship, which includes sea patrolling, combat operations, handling of interceptor boats, off-shore vessels and sophisticated weapons. But there are very few volunteers for undergoing this training. Policemen are generally quite reluctant to undertake coastal duties since they think that it is a punishment

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[32] "Indian Marine Police takes off but doubts remain," *India News Online*, October 30, 2006, available at http://news.indiamart.com/news-analysis/indian-marine-police-13862.html (accessed April 27, 2009).

[33] Ibid, also Author's interview with senior Police official in Mumbai, March 25, 2009.

[34] Author's interview with senior Coast Guard official at Mumbai, March 23, 2009.

[35] "Fernandes foresees greater role for Coast Guard", *The Hindu*, May 23, 2003, available at http://www.hinduonnet.com/2003/05/24/stories/2003052405150400.htm (accessed April 28, 2009). Also see, "Rising security threats enhance Coast Guard role", *India News Online*, October 30, 2006, available at http://news.indiamart.com/news-analysis/rising-security-thre-13861.html (accessed April 28, 2009); "Antony warns against terror attacks from sea", *rediff news*, March 11, 2008, available at www.rediff.com/news/2008/mar/11sea.htm (accessed April 28, 2009).

[36] Author's interview with Coast Guard official at Mumbai on March 23, 2009.

posting. Personnel who are actually sent by the state police for training are alleged to be otherwise misfit to perform regular duties. As a result, almost all coastal police stations have only a handful of personnel trained in performing coastal policing duties. For example, at the Mora police station, only two out of 25 policemen had attended the training workshop conducted by the Coast Guard. The situation is similar in the other coastal police stations in the State.[37] In Gujarat also, till November 2008, only 30 policemen from the coastal police stations of Pipavav, Delwara and Prabas Patan had received training from the Coast Guard.[38]

Moreover, even those policemen sent for training claim that they do not receive adequate training. As a result, they express lack of confidence in venturing out into the sea for patrolling. According to them, one month of training is too less for them to find their 'sea-legs'. They also lament the fact that the vessels and equipment in which they are trained are more sophisticated than what is available to them in the coastal police stations. Lack of proper training is also manifested in the attitude of the police personnel towards their coastal security duties. As stated earlier, they are extremely reluctant to undertake coastal patrolling. Seasickness coupled with lack of incentives, such as insurance, perks, etc., act as further deterrents. Moreover, most argue that since the police force is a land-based organisation it should not be burdened with the additional responsibility of sea patrolling. In their view, it is not the police but the Coast Guard or the Indian Navy that should shoulder the responsibility of guarding the coast as well as the sea.[39]

Customs personnel who are part of the joint coastal patrolling system are barely imparted any training in handling vessels and weapons, in sea patrolling or in combat operations. They too find it difficult to ward off sea sickness, boredom and a sense of purposelessness while conducting joint patrolling.[40] As a result, they are also unwilling to be part of the joint

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[37]　Observations during Author's field trip to Coastal Police Stations in Maharashtra, March 23-31 2009. Also see "Coastal policing: A single boat which nobody can operate", *expressindia*, Jan 13, 2008, available at http://www.expressindia.com/latest-news/coastal-policing-a-single-boat-which-nobody-can-operate/260892/

[38]　"Gujarat's marine police stations exist only on paper", *The Indian Express*, Rajkot, November 29, 2008.

[39]　Author's interviews with police personnel during the field trip in coastal Maharashtra, March 23-31 March 2009.

[40]　Author's interview with senior Customs officials at Mumbai and Ratnagiri, March 25-28, 2009

coastal patrolling teams. They argue that they are mandated only to ensure that the government does not suffer any loss in revenue due to illegal activities and that they should not be made a part of coastal security.

Inadequate Infrastructure and Equipment

All agencies involved in coastal security in both Gujarat and Maharashtra are greatly constrained by the lack of adequate infrastructure in the form of office buildings, weapons, boats and vessels, etc. The Coast Guard, for instance, is woefully short of patrol boats and aircraft. Presently it has only 15 patrol vessels, nine interceptor boats, eight interceptor craft and two hovercraft to patrol the whole of the Arabian Sea whereas it requires a fleet of 50 ships and 36 aircraft to comfortably guard the coast and the sea. It has also not yet established three stations that were sanctioned in 2005-06 to enhance its presence in both the states.

Most coastal police stations in Maharashtra operate without a proper office building, check posts, watch towers, etc. For instance, the Nate police station in Ratnagiri district operates from a rented three-room hut. The Versova coastal police station actually functions from the premises of the Yellow Gate police station. The Prabas Patan coastal police station in Junagadh district of Gujarat has been operating from a single room allotted by the Somnath Trust.[41] Similarly, the Hazira coastal police station functioned from a rented room.[42] In all, out of 10 only six coastal police stations have been constructed in Gujarat while construction of two more is in progress. In Maharashtra, not a single coastal police station has been constructed so far. As regards, check posts and outposts, Gujarat has yet to start constructing them. Maharashtra has constructed only 18 out of 32 check-posts, of which nine are made operational. It has constructed 17 barracks out of the 24 sanctioned.[43]

In terms of weaponry, equipment and vessels, coastal police stations present a dismal picture. A typical coastal police station armoury is stacked with outdated .303 rifles, a few SLRs (self loading rifles), two or three automatic guns and a small quantity of ammunition. Mora police station, for instance,

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[41]   n. 33.

[42]   "Now Police station for Hazira", available at http://cities.expressindia.com/fullstory.php?newsid=242598 (accessed July 22, 2009).

[43]   *Annual Report 2008-09*, Ministry of Home Affairs, Government of India, p. 173.

has just six weapons, one revolver, one pistol, two .303 rifles and two .410 rifles.[44] Clearly, these weapons are no match for the Kalashnikovs and other sophisticated weapons used by terrorist and criminal groups. Shockingly, the combat worthiness of even these limited numbers of weapons is not known to the policemen since they have never been used.

Equipment like night vision binoculars and modern communication gadgets, which are essential for effective surveillance, have not been made available to Coast Guard personnel or to the policemen patrolling the coast. Also, very few coastal police stations have high speed interceptor boats, which is a must for patrolling and interdicting criminals at sea. For patrolling, the police hire fishing trawlers, which are mostly in a dilapidated condition without any searchlights, siren or wireless equipment. These fishing trawlers are more of a handicap because with a speed of barely 5 knots they cannot even hope to match the speed boats (45 knots) used by criminals.

The Customs also has to grapple with similar problems. It has only a few high speed interceptor boats, which are not adequate for extensive patrolling. The department hires fishing vessels at exorbitant prices (Rs 7,000 per sortie) for conducting joint coastal patrolling and these, because of their slow speed, are not effective for interdicting smugglers. To address the issue of inadequate vessels, in 2007, the Central government approved a plan for the acquisition of 109 marine vessels at a cost of Rs. 358.19 crore. At that time, it was expected that the procurement of these vessels would be completed by 2009.[45] As of December 2008, only 31 vessels have been acquired.[46]

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[44] Observations during Author's field trip to Coastal Police Stations in Maharashtra, March 3-31 2009. Also see "Why you should not believe CM's promise, *Midday*, December 12, 2008, available at http://www.mid-day.com/news/2008/dec/021208-Mumbai-Chief-Minister-Promises-Vilasrao-Deshmukh-Mumbai-terror-attack-Costal-police-stattion.htm (accessed March 5, 2009).

[45] 'Revised sanction for marine vessels buy', *The Hindu*, February 22, 2007, available at http://www.thehindubusinessline.com/bline/2007/02/23/stories/2007022306731000.htm (accessed April 28, 2009).

[46] 'Indian Customs commissions advanced patrol vessels to boost coastal surveillance', *Press Information Bureau*, December 13, 2008, available at http://pibmumbai.gov.in/scripts/detail.asp?releaseId=E2008PR1002 (accessed May 2, 2009). Also see, 'Speedboats to guard Maharashtra coast', *The Hindu*, December 15, 2008, available at http://www.hindu.com/2008/12/15/stories/2008121555840300.htm (accessed May 2, 2009).

Insufficient Resources

Insufficient resources have always been an impediment in formulating suitable schemes and their implementation. In 2005, the Gujarat government had formulated an ambitious plan for coastal security and submitted it to the Central government for approval. It envisioned setting up of 51 coastal police stations along with 50 outposts and sophisticated gadgets and speedboats to guard its 1,600-km-long coastline. The entire plan was to cost Rs 327 crore. The Central government, however, rejected the plan and under the coastal security scheme sanctioned only Rs. 58.42 crore for 10 coastal police stations and 46 outposts.

The Maharashtra government has so far spent Rs. 5.79 crore on the Coastal Security Scheme. This amount has been used for constructing a few police stations, check-posts, and barracks as well as for acquiring equipment, vehicles, furniture, etc.[47] But, this has clearly been inadequate to construct all 12 sanctioned coastal police stations and provide them with the full complement of necessary equipment. The state government has recently submitted a revised budget of Rs 4.15 crore for building police stations and related infrastructure. And post-Mumbai, it has also sanctioned Rs 49 crore for the purchase of new speed boats and required equipment.[48] Release of sanctioned amounts is a long-drawn process and till the time the funds eventually reach, the police stations are likely to remain in their present dismal state. Similarly, successive plans for augmenting the Coast Guard's manpower and material capabilities have gone unrealised because the central government has failed to allocate sufficient funds.[49]

Systemic Flaws

Finally, a few systemic flaws hinder the smooth functioning of the coastal security mechanism. These include inter- and intra-agency confusion about areas of operational jurisdiction and lack of coordination, laws and

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[47] Data acquired from Maharashtra Police Headquarters, Mumbai.

[48] Ibid.

[49] "Force modernisation getting delayed: Pranab," *The Tribune*, Chandigarh, July 31, 2004 available at http://www.tribuneindia.com/2004/20040731/nation.htm#6 (accessed March 6, 2009). Also see, "Fernandes for more Coast Guard Stations", *The Tribune*, Chandigarh, November 10, 2000, available at http://www.tribuneindia.com/2000/20001110/nation.htm#3 (accessed March 6, 2009).

procedures, and governmental apathy. Confusion over areas of operational jurisdiction is most apparent in the coastal police stations. The stated area of responsibility for the coastal police is the coastal waters, i.e., up to 10 km from the coast.[50] But, at the same time, the area of responsibility of previously established police stations along the coast (which also look after coastal security) extends till the territorial waters, i.e., 12 nautical miles (approximately 24 km) from the coast.[51] It is not clear whether the coastal police are responsible for security till the 10 or the 24-km mark. Adding to this confusion is lack of clarity about the areas of responsibility of existing police stations and the new coastal police stations.[52]

Lack of coordination among various agencies involved in coastal security makes joint efforts difficult to implement. This fact is quite evident in the case of joint coastal patrolling, which takes place at fixed times every day precisely because of the inability to co-ordinate at short notice. Three patrols are conducted from Vasai police station with regularity. The first patrol starts at 8 a.m. and returns at 4 p.m; the timing of the second patrol is 12 noon to 10 p.m.; and that of the third is 10 p.m. to 8 a.m. Similarly, at Ratnagiri, four patrols are sent out at regular intervals. Patrols at pre-fixed times take away the element of surprise given that everyone in the locality has prior knowledge about the exact time and route taken by the patrolling vessels.

Some government laws and regulations also hinder the implementation of various coastal security schemes. For instance, the Coastal Regulation Zone (CRZ) notification of 1991 forbids, among other things, the construction of any structure that does not require any waterfront.[53] This impedes the construction of police stations and chowkies along the coast

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[50]   "Plans to set up marine police stations may prove to be a non-starter", *The Times of India*, Thiruvanantpuram, December 2, 2008. Also see, "41 marine police stations set up in coastal states", *Samachaar.in*, New Delhi, January 31, 2008, available at http://samachaar.in/Delhi/41_Marine_Police_stations_set_up_in_coastal_states_22579/ (accessed March 5, 2009). Also author's interview with few coastal police station in-charges in Maharashtra, March 23-31, 2009.

[51]   "Raising marine police wing in coastal states", question no.333, Rajya Sabha, February, 18, 2009, available at http://164.100.24.167:8080/members/Website/quest.asp?qref=140720 (accessed March 5, 2009).

[52]   Interview with station in-charge of various police stations in Vasai, Mumbai and Ratnagiri, March 23-31, 2009.

[53]   "The Coastal Regulation Zone Notification", available at http://www.sanctuaryasia.com/resources/environlaw/crz.doc (accessed April 21, 2009).

since prior clearance from the Ministry of Environment and Forest has to be sought separately each time a coastal police station is to be constructed. In several cases, such clearance was either difficult to get or not given at all. The Versova coastal police station is an example in this regard.

Complicated procedures are yet another systemic flaw. Because of the delays they introduce, funds allocated for coastal security purposes do not get utilised on time. For example, funds sanctioned for the procurement of vessels under the Coastal Security Scheme during 2007-08 had to be returned because of delays caused by prolonged price negotiations between the Ministry of Home Affairs and the manufacturers (Goa Shipyard Ltd and Garden Reach Workshop & Engineers Ltd, Kolkata). This is not the only such incident in this regard. Under Operation Swan, money was to be released to the Ministry of Defence for the purchase of 15 interceptor boats for the Coast Guard and for setting up three Coast Guard stations in Maharashtra and Gujarat. Since the ministry reportedly did not finalise the deal with Goa Shipyard Ltd. and the proposal identifying the locations for setting up of stations was not forwarded to the Coast Guard, the money remained unused.[54]

Finally, the state governments have consistently not shown much interest towards coastal security. This is particularly true for Maharashtra. Despite the 1993 experience, the Maharashtra government did not accord any priority to coastal security, a fact noted by the October 2008 Report of the Comptroller and Auditor General (CAG) on the Coastal Security Scheme. Fifteen years after the launch of 'Operation Swan', the state was able to induct only 17 vessels, most of which are in a bad condition. The CAG report also noted that Maharashtra has generally been indifferent to the Coastal Security Scheme. It has refused to procure patrol boats and communication equipment, claiming that it cannot bear the cost of maintenance and operation of the boats. Though it has established 12 costal police stations, it has not deployed adequate personnel to man them. And it has hardly utilised the Rs 41 crore sanctioned by the Centre for modernisation and upgradation of these police stations.[55]

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[54] "Security upgrade? 90% of budget yet to be spent", *The Indian Express*, New Delhi, December 21, 2008, available at http://www.indianexpress.com/news/security-upgrade-90-of-budget-yet-to-be-spent/400999/0 (accessed May 2, 2009).

[55] "Maharashtra callous towards maritime security: CAG report", *The Times of India*, New Delhi, December 2, 2008.

Thus, lack of 'actionable' intelligence is not the only factor that led to the breach of India's coastal security in November 2008. As noted above, the mechanism suffers from various inadequacies and deficiencies, and systemic flaws. Any attempt to beef up the mechanism has to address these issues.

Post-Mumbai Measures on Coastal Security

Following the Mumbai attacks, the central government announced a slew of measures to tackle these inadequacies and shortcomings in the coastal security mechanism. [56] These include:

1. Entrusting the Coast Guard with the task of guarding the coast right from the shoreline (high tide line).

2. The Indian Navy to be responsible for overall maritime security.

3. Coastal states and Union territories to expedite the implementation of the Coastal Security Scheme, including the construction of coastal police stations, check posts, outposts and barracks as well as recruitment and training of executive and technical manpower.

4. Coastal states and Union territories to immediately start patrolling by locally hired fishing boats/trawlers. The Ministry of Home Affairs will reimburse the costs incurred.

5. Coastal states and Union territories to carry out vulnerability/gap analysis of their coasts in consultation with the Coast Guard.

6. Ministry of Shipping, Road Transport and Highways to streamline the process of registration of all types of vessels and ensure that these boats are fitted with navigational and communication equipment.

7. Ministry of Agriculture, Department of Animal Husbandry, Dairies and Fisheries to issue identity cards to all fishermen. The Registrar General of India to issue identity cards under the multi-purpose national identity card scheme to all the people in coastal villages.

Deployment of interceptor boats is vital for the mobility of police forces in the coastal waters and therefore, the Centre had given the procurement of boats utmost priority. Since, none of the designated shipyards has any design/blueprint to construct interceptor boats, the Government has

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[56] "Plan to beef up coastal security following Mumbai Attack", *Press Information Bureau*, February 18, 2009, available at http://pib.nic.in/release/release.asp?relid=47646 (accessed March 3, 2009).

purchased an interceptor boat from Greece as a prototype and asked the shipyards to construct boats based on it. This was done to save time and ensure speedy delivery of the boats. The delivery of the first batch of 24 interceptor boats commenced from April 2009, while that of the next batch of 64 boats will start from October 2009. The entire process is expected to be completed by September 2010.[57] Of the total 204 interceptor boats, 30 will be supplied to Gujarat and 28 to Maharashtra.

The Central government is also planning to set up 72 additional coastal police stations along the entire coastline, based on vulnerability gap analysis by the states and Union territories in consultations with the Coast Guard. This will be part of the second phase of the Coastal Security Scheme and will commence from April 2010.[58]

The Defence Minister also announced that a number of measures have been taken to strengthen both the Navy and the Coast Guard by increasing their manpower as well as assets like ships, boasts, helicopters, aircrafts, etc. The Navy will be provided with a specialised force, "Sagar Prahari Bal", comprising 1,000 personnel for protecting naval assets and bases on both the east and west coasts. Also 80 interceptor crafts will be procured by Navy for sea patrolling. He also announced that the Coast Guard will be responsible for overall coordination between central and state agencies in matters related to coastal security. Further, nine additional Coast Guard stations will be established to integrate with the coastal police stations. Veraval in Gujarat and Ratnagiri in Maharashtra will be part of one such Coast Guard station.[59] The Ministry of Defence also signed a contract in March 2009 to procure 15 interceptor boats for the Coast Guard.[60] The Coast Guard has also proposed to set up a separate unit at Gandhinagar to control operations in Gujarat state along with a new coastal command along the Saurashtra coast.[61]

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[57] n. 44, p. 33.

[58] Ibid. p. 35, also see, "Government to set up 72 more coastal police stations", *Hindustan Times*, New Delhi, June 14, 2009.

[59] "Anthony announces comprehensive plan to tackle threat from sea", *Press Information Bureau*, Government of India, February 28, 2009, available at http://pib.nic.in/release/release.asp?relid=48167&kwd= (accessed March 17, 2009).

[60] n. 44, p. 35.

[61] "New unit to set up in Gandhinagar to oversee Coast Guard operations", *Indian Express*, Gandhinagar, April 1, 2009.
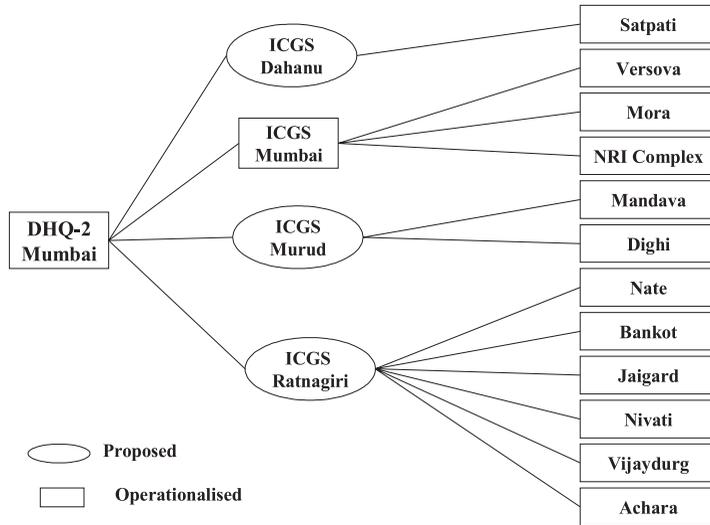
Links between Indian Coast Guard Stations and Coastal Police Stations in Maharashtra

To bring the entire coastline under seamless radar coverage, the Centre has also approved a proposal 'for setting up a static coastal radar chain and a comprehensive automated identification system stations along the entire coast as well as island territories'.[62] The AIS will consist of 'two coastal control centres at Mumbai and Visakhapatnam, four regional control centres at Jamnagar, Cochin, Chennai and Kolkata, 85 shore stations at various lighthouses and one National Data Centre at Mumbai'.[63]

Admitting that there has been serious lapse on its part, the Maharashtra government has also announced various remedial measures. Important among these are sanctioning of Rs 49 crore for acquiring speed boats, immediate hiring of boats for patrolling the coasts, and formation of a state-of-the-art cyber monitoring unit for intelligence gathering.[64] The state

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[62] n. 61.

[63] "Automated Identification System", *Press Information Bureau*, available at ttp://www.pib.nic.in/release/release.asp?relid=51398 (accessed August 19, 2009).

[64] "Maharashtra seeks funds to modernize police force", *rediff.com*, January 07, 2009, available at http://www.rediff.com/news/2009/jan/07mumterror-maharashtra-for-central-coastal-security-agency.htm (accessed February 18, 2009).

decided to ease the coastal regulation zone norms for setting up of coastal police stations.[65] The state also demanded the constitution of a central coastal security authority for seamless coordination between the various security agencies involved in guarding the coasts and territorial waters and high seas.

No doubt, these measures will go a long way in ensuring a better functioning of the coastal security mechanism. For instance, issuance of biometric multi-purpose national identity cards, also known as smart cards, to all fishermen and villagers residing along the coast will help keep track of all people. Also, the implementation of a new uniform licensing system for fishing boats is a welcome step. At present, each coastal state has its own system of registration for fishing boats and trawlers, which creates difficulties in checking fishing vessels at sea. A uniform format for registration and colour coding for boats will help establish the origin and identity of fishing vessels. Similarly, the mandatory installation of transponders on boats and trawlers will help in easy identification and tracking, especially of smaller boats. Developed by the Indian Space Research Organisation (ISRO), these transponders will be installed in vessels below 300 tonnes as well.

But, it appears that the implementation of some of these measures is likely to be fraught with hurdles and delays. For instance, issuance of MNICs can be a long drawn-out process. Firstly, the enumeration of the people living in coastal villages, which might take a year or two, has to be completed.[66] Secondly, the fact that most persons presently engaged in fishing migrant labourers is likely to further add to the delay. To keep track of these migrants and send their identity papers to their home states for police verification is in itself a laborious process.

The issue of additional cost involved in some of these measures can also delay their implementation. For instance, some in the Maharashtra

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[65] "Government to review aspects of operation on coastal security", *zeenews.com*, New Delhi, December 28, 2008, available at http://www.zeenews.com/nation/2008-12-28/494342news.html (accessed February 18, 2009).

[66] The government has instructed the Registrar General of India to complete the enumeration of people residing along the coastal villages of the nine States and four Union Territories by 2009-10.

government find the concept of smart card an expensive proposition and an unnecessary addition to the already existing system of identity cards issued to fishermen by the state fisheries department. For their part, small fishermen in particular are unenthusiastic about installing transponders on their boats claiming that the price of the transponders is high. This is despite the fact that these are being offered at subsidised rates.

The involvement of the Indian Navy in coastal security is also a debatable issue. It has been argued that the navy's primary role is the defence of the country and that it should be geared for fighting wars. Engaging it in routine law enforcement and other activities will detract it from its main operational role and moreover interfere with its training. Further, sophisticated warships and manpower are trained to operate at high seas and their continuous deployment for patrolling purposes in territorial waters will not be cost effective.[67]

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[67] Prabhakaran Paleri, *Role of the Coast Guard in the Maritime Security of India*, Knowledge World, New Delhi, 2004, p. 37.

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Conclusion and Recommendations

The fundamental shortcoming in Maharashtra and Gujarat's coastal security arrangement is the slow pace at which the marine police are being developed. Though all 22 coastal police stations envisaged have been operationalised on paper, in reality, they are greatly constrained by poor infrastructure, lack of patrol vessels and inadequately trained manpower. Until coastal police stations are strengthened and enabled to fully perform the functions assigned to them, the coastal security mechanism in the states will remain dysfunctional. It is time that the state governments woke up to their responsibility in this regard. Also, while beefing up the coastal police, the state governments should keep the following in mind:

- Manpower shortage for the marine police can be addressed by recruiting retired Coast Guard and Navy personnel. If the retired personnel are not considered fit enough, the government can depute competent personnel from the Indian Navy, Coast Guard and the BSF water wing to the marine police force. The government can also sanction marine police vacancies to the coast guard, navy, and BSF and direct them to provide personnel on rotational basis.

- People from coastal villages can be enlisted in the marine police force. Their seafaring experience is likely to be an asset.

- To overcome the reluctance of police personnel to carry out coastal patrolling, incentives such as special allowances and insurance can be considered.

- Extensive and specialised training needs to be imparted to the marine police personnel to change their indifferent attitude towards coastal security.

On its part, the Central government has to make determined efforts to enhance the capabilities of the Coast Guard and the Navy with respect to coastal security. It is to be noted that some measures have already been announced in this regard. At the same time, it also needs to ensure that the

coastal security mechanism is able to function unhampered by confusion over overlapping jurisdictions or the lack of legal sanctions for interdiction at sea, or the inability of various agencies to coordinate. Towards this end, the Central government needs to:

- Clearly spell out the areas of jurisdiction and responsibilities of different agencies involved in coastal security. Educate all agencies on their roles under the specific acts and their jurisdiction.

- Establish effective command and control system specific to such activities.

- Streamline processes and procedures of procurement to cut bureaucratic delays.

- Ensure the Navy and the Coast Guard perform their tasks at sea under appropriate legislative powers authorities.

Table 1: Coastal Police Stations in Maharashtra

Sl. No.	Name	District/Commissionerate
1.	Satpati	Thane Rural
2.	Mandava	Raigad
3.	Dighi	Raigad
4.	Jaigad	Ratnagiri
5.	Bankot	Ratnagiri
6.	Nate	Ratnagiri
7.	Nivti	Sindhudurg
8.	Vijaydurg	Sindhudurg
9.	Achara	Sindhudurg
10.	Mora	Navi Mumbai
11	NRI Complex	Navi Mumbai
12.	Versova/Yellow Gate	Mumbai City

Source: Maharashtra Police Headquarters, Mumbai

Table 2: Coastal Police Stations in Gujarat

Sl. No.	Name	District/Commissionerate
1.	Bhadreshwar	Bhuj
2.	Bhatiya	Jamnagar
3.	Harshadmata	Jamnagar
4.	Bedi	Jamnagar
5.	Nawabandar	Jamnagar
6.	Bhavnagar	Bhavnagar
7.	Somnath	Junagadh
8.	Pipavav	Amreli
9.	Porbandar	Porbandar
10.	Hazira	Surat

Table 2a: Coastal Police Stations* (Sanctioned Manpower)

Districts	Coastal Police Stations	PI	API	PSI	ASI	HC	PN	PC	Total
Thane (Rural)	Satpati	—	—	8	—	14	—	42	68
Raigad	Mandava	—	—	8	—	11	—	31	50
	Dighi	—	—	8	—	11	—	30	49
Ratnagiri	Nate	—	—	5	—	7	—	20	32
	Jaigad	—	—	6	—	8	—	21	35
	Bankot	—	—	5	—	7	—	20	32
Sindhudurg	Vijaydurg	—	—	4	—	5	—	14	23
	Achara	—	—	3	—	4	—	11	18
	Nivti	—	—	3	—	4	—	11	18
Navi Mumbai	Mora	—	—	5	—	6	—	18	29
	NRI Complex	—	—	5	—	7	—	18	30
Total		—	—	60	—	84	—	236	380

Source: Maharashtra Police Headquarters, Mumbai

* Statistics for Versova/Yellow Gate Coastal Police Station is not available.

PI- Police Inspector, API- Assistant Police Inspector, PSI- Police Sub-Inspector, ASI- Assistant Sub-Inspector, HC- Head Constable, PN- Police Naik, PC- Police Constable

Table 2b: Coastal Police Stations* (Sanctioned Technical Manpower)

Districts	Coastal	Sarang Police Stations	Engine Driver	Khalashi	Total
Thane (Rural)	Satpati	2	2	4	8
Raigad	Mandava	6	6	11	23
	Dighi	5	5	11	21
Ratnagiri	Nate	4	4	7	15
	Jaigad	4	4	8	16
	Bankot	3	3	7	13
Sindhudurg	Vijaydurg	3	3	5	11
	Achara	2	2	4	8
	Nivti	2	2	4	8
Navi Mumbai	Mora	4	4	7	15
	NRI Complex	3	3	6	12
Total		38	38	74	150

Source: Maharashtra Police Headquarters, Mumbai

* Statistics for Versova/Yellow Gate Coastal Police Station are not available.

Table 3: Coastal Police Station* (Available Manpower at Present)

Districts	Coastal Police Stations	PI	API	PSI	ASI	HC	PN	PC	Total
Thane (Rural)	Satpati		02			14			29
Raigad	Mandava	—	01	02	05	08	02	21	39
	Dighi	01	—	03	03	07	07	26	47
Ratnagiri	Nate	—	01	01			22		24
	Jaigad		02			21			23
	Bankot		02			19			21
Sindhudurg	Vijaydurg	—	—	01	—	09	—	10+1	21
	Achara	—	—	02	—	08	—	5+1	16
	Nivti	01	—	01	—	12	—	8+1	23
Navi Mumbai	NRI Complex	01	—	02	—	02	07	24+2	40
	Mora	01	—	02		23+3			29
Total									312

Source: Maharashtra Police Headquarters, Mumbai

* Statistics for Yellow Gate Coastal Police Station are not available.