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During the month, the VIF Pakistan Study Group discussed critical issues shaping Pakistan’s current landscape. Among the key topics deliberated were the post-election political dynamics, judiciary crisis, status of political figures Nawaz Sharif and Imran Khan, terrorism escalation in Khyber Pakhtunkhwa and Balochistan, Shehbaz Sharif’s Saudi Arabia visit, and Afghanistan-Pakistan relations. Following February’s parliamentary elections, tensions surged among major parties, leading to disqualification of PTI-backed SIC by the Election Commission. Despite concerns, Senate operations continued, resulting in PPP’s Yusuf Raza Gilani elected chairman. Meanwhile, a crisis unfolded in Pakistan’s judiciary, with judges urging investigation into ISI interference and receiving toxic letters, possibly part of a larger destabilisation agenda. Speculation surrounds the future of Imran Khan and Nawaz Sharif, with protests and political manoeuvring indicative of shifting dynamics. Notably, Sharif’s active involvement aims to rejuvenate PML (N)’s standing post-election. In security, targeted attacks on Chinese interests signal a concerning trend, while Shehbaz Sharif’s Saudi trip yielded pledges but echoes previous promises. Afghanistan-Pakistan relations remain strained over cross-border terrorism, complicating normalization efforts. The study group meeting highlighted ongoing shifts in Pakistan’s political, security, and diplomatic spheres, underscoring the nation’s complex and evolving landscape.

The US Experts Group hosted Amb Eric Garcetti, the US Ambassador to India, for a discussion titled “Advancing Trust and Understanding in India-US Strategic and Global Relations”. Ambassador Garcetti’s address and ensuing discussions centred on the mutual benefits and global implications of India-US relations, emphasising the significance and potential of
their partnership. The dialogue highlighted the deep-seated trust and interconnectedness between the two nations, emphasising their shared democratic values and the need to transcend superficial differences. Key topics included the historical evolution of India-US relations, recent trends showcasing enhanced collaboration, and the transformative potential of their partnership on the global stage. Various collaborative initiatives spanning diplomacy, healthcare, developmental assistance, defence, technology, and trade were discussed, underscoring the multifaceted nature of their relationship. The interaction underscored the vital role of India and the US as natural partners in promoting a rules-based global order, particularly amidst rapid geopolitical changes and challenges such as disruptions in the global supply chain, China’s ascendancy, and security concerns in the Indo-Pacific region. The positive outcomes of their collaboration extend far beyond their own interests, benefitting the entire international community.

The Geo-Strategic Experts Group hosted a discussion by V Adm AN Pramod, DGNO, titled “Operation Sankalp- Indian Navy’s recent activities in the Western Indian Ocean Region.” The interaction highlighted Indian Navy’s (IN) engagement in WIOR since December 2023 due to increased threats like drone attacks and piracy, expanded Op Sankalp’s scope to include the east coast of Somalia and South WIOR, deployment of 12 warships, marine commandos, and special teams for over 125 days, IN’s proactive efforts included firefighting, medical aid, and narcotics operations and its role in rescuing hijacked crew members and apprehending drug smugglers. The efforts of IN have received international recognition and it remains committed to safeguarding trade and seafarers, aligning with the Prime Minister’s SAGAR vision.

The Geo-Strategic Experts Group hosted another Talk by Vice Admiral G Ashok Kumar (Retd.), India’s first national Maritime Security Coordinator (NMSC), on April 18th, titled “Maritime Security of India”. Vice Admiral Tarun Sobti, Deputy Chief of the Naval Staff (DCNS) was also in attendance.
Admiral Ashok Kumar provided insights into India’s maritime significance and the establishment of NMSC to address India’s maritime challenges. NMSC aims to address numerous issues in the maritime domain, requiring a holistic approach involving coordination among various agencies and adherence to international maritime laws. Addressing challenges like illegal fishing activities and extra-regional presence necessitates comprehensive strategies and diplomatic engagement. Recognising maritime security as a multi-faceted challenge, NMSC stressed the need for concerted efforts from various agencies and comprehensive training in maritime laws and boundaries.

On April 18th, the Science and Technology Experts Group in collaboration with the Indian Institute of Technology (IIT) Madras, convened a Roundtable Discussion on “Establishing Defence Manufacturing Ecosystem in India.” Participants underscored the criticality of cultivating a robust defence manufacturing ecosystem in India, emphasising the pivotal role of a robust scientific and technological framework for national security. They highlighted the imperative for strategic investment in high-tech industries and stressed the significance of collaboration among academia, industry, and the armed forces to foster innovation and address evolving job requirements.

Chaired by VIF Director Dr. Arvind Gupta, the discussion featured inputs from industry representatives, senior government officials, and members of the strategic community, alongside expert group members from VIF. Four Professors from IIT Madras presented their insights, which led to in-depth discussions on various aspects of defence manufacturing in India. Key takeaways and recommendations from the discussion included the necessity of direct funding for deep technology projects in academia, quality control in manufacturing processes, increased orders to fortify domestic industries, and closer collaboration among academia, industry, and the armed forces. Suggestions were also made to address challenges such as skill mapping, human resource development, and investment in
advanced technical education to meet the demands of the defence industry effectively.

New Delhi                                              Anurag Bisen

May 2024
A meeting of the Pakistan Study Group (PSG) was held in hybrid mode on 11 April 2024. The main items on the agenda were the post-election political scenario in Pakistan, the crisis in Pakistan’s judiciary, the position of Nawaz Sharif and Imran Khan, the surge of terrorism in Khyber Pakhtunkhwa and Balochistan, Shehbaz Sharif’s visit to Saudi Arabia and its impact, and Afghanistan-Pakistan Relations. The meeting was attended by Dr Arvind Gupta (Director, VIF), Gen NC Vij, Amb Satish Chandra, Lt Gen R.K Sawhney (Retd), Sh. Tilak Devasher, Sh. CD Sahay, Dr Shalini Chawla, Sh. Rana Banerjee, Sh. Rahul Bhonsle, Sh. Sushant Sareen, Amb DP Srivastava, Lt Gen Rakesh Sharma, Amb Ajay Bisaria, Amb Venkatesh Verma, Amb. G Parthasarthy and other distinguished fellows and researchers from the VIF.

Post-Election Political Scenario in Pakistan Following Pakistan’s parliamentary elections on February 8, the political landscape became increasingly complex as tensions rose among major political parties. Efforts to prevent Imran Khan and his PTI party from forming a government led the Election Commission of Pakistan (ECP) to disqualify the Pakistan Tehreek-e-Insaf (PTI)-backed Sunni Ittehad Council (SIC) from obtaining reserved seats designated for women and minorities in the National Assembly (NA). The ECP cited legal deficiencies and failure to submit a mandatory party list for reserved seats as reasons for this disqualification. It emphasized the importance of filling these seats rather than leaving them vacant.
Additionally, the absence of 11 representatives from Khyber Pakhtunkhwa (KP) province in the Senate was deemed unlikely to significantly impact its functioning, as experts argued that the Senate could still operate with full representation from other provinces and the federal capital. Furthermore, KP province still maintained representation, as half of its senators elected in 2021 would remain in office until March 2027. Despite protests from PTI lawmakers demanding a postponement of the Senate chairperson and deputy chairperson elections until KP’s representation was restored, these elections proceeded as planned. Ultimately, the Senate elections saw senior Pakistan People’s Party (PPP) leader and former Prime Minister Yusuf Raza Gilani elected unopposed as chairman, with Saidal Khan Nasir of the ruling Pakistan Muslim League-Nawaz (PML-N) elected as deputy chairman.

Hence, it is apparent that the aftermath of the elections showcases the PML (N)’s achievement in securing cabinet positions as intended. Additionally, administrations in various provinces seem steady, albeit with slight concerns about potential instability emerging in the Balochistan Assembly between the PPP and PML (N). However, in terms of PTI’s previous allegations of election irregularities, there appears to be little progress on the petitions contesting the February 8 election outcomes.

Crisis in Pakistan’s Judiciary  Amidst tussle for power between the political parties, Pakistan’s Judiciary seems to be in another crisis after six judges from the Islamabad High Court (IHC) urged the Supreme Judicial Council (SJC) to investigate the allegations against officials belonging to the Inter-Services Intelligence (ISI), of interfering in judicial matters by using tactics such as secret surveillance. This unrest within the Pakistan’s judiciary further expanded after several judges in Pakistan began receiving letters with toxic substances. It has been argued that this whole turmoil in Pakistan’s judicial system is part of some conspiracy theory that aims to destabilize the present government in the country. Moreover, such activities also reflect efforts being made to show the incompetency of
the establishment, as attempts to sabotage their image may yield some political benefit to parties opposed to the present government.

In Pakistan, the military has frequently influenced the judiciary, shaping court decisions on significant matters. Hence, the recent actions of these six judges are unlikely to alter the established dynamic between the judiciary and the military. Nevertheless, it’s important to acknowledge that the efforts of these judges represent a positive stride toward potential change in Pakistan.

**Post Election Future of Nawaz Sharif and Imran Khan** There is widespread speculation regarding the future of two former Prime Ministers of Pakistan, Imran Khan and Nawaz Sharif. Observers note lack of significant developments on the ground concerning nationwide protests led by opposition parties across the country. Despite orchestrating large-scale protests immediately after the 2024 Elections, it remains uncertain whether such demonstrations can impact the current political landscape in Pakistan or influence Imran Khan’s political career. However, the increasing discontent among the populace underscores Imran Khan’s popularity, particularly among the youth. Moreover, there is a possibility of future negotiations between the Pakistani establishment and Imran Khan. Yet, even if dialogue ensues, Imran Khan is unlikely to compromise with the establishment at the expense of his growing support base.

On the other hand, the position of Nawaz Sharif who has not held officially any political position since the elections in Pakistan, is seen actively participating in rallies alongside his daughter Mariam Nawaz Sharif, who is currently the Chief Minister of Punjab. It is being assumed that his participation is a clear indication of how PML (N), after its mediocre performance in the Punjab’s provincial elections wants to recapture its declining popularity. Further, Nawaz Sharif after the elections appears more engaged in establishing a political base for Mariam in the Punjab province and across the country.
Surge of terrorism in Khyber Pakhtunkhwa and Balochistan In recent years, there has been a significant deterioration in the security situation in Khyber Pakhtunkhwa and Balochistan, with the March 2024 attack on Chinese nationals highlighting a shift in targets for various non-state actors in the region. Three successive attacks in recent months have focused on Chinese interests in Pakistan. The initial attack targeted Pakistan’s Gwadar port in Balochistan, a project supported by China. Subsequently, an armed group assaulted one of Pakistan’s major naval bases in Balochistan, followed by an attack on Chinese engineers working on a Chinese-funded hydropower project near Besham city in the north of the country. These attacks indicate a deliberate targeting of projects under the China-Pakistan Economic Corridor (CPEC).

This new trend in assaults within Pakistan has raised concerns within the country’s security establishment. They view these attacks as part of a broader strategy aimed at undermining the economic interests of both China and Pakistan, as well as disrupting their bilateral relations. Despite the increase in targeted attacks against Chinese nationals in Pakistan, which has elicited a strong response from Beijing, it is unlikely to significantly impact China-Pakistan relations in the long term. Chinese officials have indicated in media briefings that these recent attacks are not expected to undermine their bilateral ties with Pakistan.

Shehbaz Sharif’s visit to Saudi Arabia Shehbaz Sharif’s trip to Saudi Arabia was anticipated, as it is customary for Pakistani leaders to visit the country after assuming office, highlighting the strong bilateral relations between the two nations. Following Shehbaz Sharif’s visit, it has been reported that Riyadh pledged to expedite the initial phase of a $5 billion investment package for Pakistan. However, similar commitments have been made by Saudi Arabia in the past, with little tangible progress seen in Pakistan’s investment sector. Furthermore, in their joint statement after the visit, Pakistan and Saudi Arabia called for the resolution of all outstanding issues between India and Pakistan, including the Kashmir dispute. Such
official statements from Saudi Arabia indicate a continuity in the country’s longstanding foreign policy priorities regarding its relationship with Pakistan.

**Afghanistan-Pakistan Relations** The escalating tensions between Pakistan and Afghanistan once again became apparent, triggered by Pakistan’s Ambassador to the UN, Munir Akram, urging the United Nations Security Council (UNSC) to press the Taliban leadership in Afghanistan to sever ties with the Tehreek-i-Taliban Pakistan (TTP). Pakistan remains steadfast in its assertion that cross-border attacks and infiltration by the TTP and other non-state actors into Pakistani territory have resulted in an increase in the fatalities of security personnel. Consequently, it is evident that Pakistan’s relationship with Afghanistan since August 2021 has soured, as evidenced by a surge in terrorist attacks within Pakistan, predominantly attributed to the TTP. Moreover, given the Taliban’s continued reluctance to exert control over the TTP, the prospect of normalizing relations poses a significant challenge for both Islamabad and Kabul.
Interaction with US Ambassador to India

Prepared by Dr. Sweta Kumari

VIF hosted Amb. Eric Michael Garcetti, the US Ambassador to India, for an interaction on “New Level of Trust and Understanding in the India-US Strategic and Global Relations” on April 09, 2024. The Ambassador was accompanied by Mr. James Plasman, Political Officer; Mr. Dane Robbins, Political Officer; Mr. Ajay Dayal, Political Specialist; Ms. Maris O’Connor, Public Diplomacy Specialist; and Ms. Sudha Gandhi, Public Diplomacy Specialist from the US Embassy.


Amb. Garcetti’s remarks and the prolonged discussions that followed, focused on the importance of the India-U.S. partnership, its potential, and
its current status. The relationship built on deep affinity and trust between the leaders of both countries as well as strong people-to-people connect has strategic significance for both countries. Some of the key points of discussion are highlighted below.

**Evolution of India-US Relations** India and the United States boast one of the most expansive diplomatic partnerships globally. India’s remarkable evolution in terms of infrastructure and economic advancement positions it as a pivotal player on the world stage. The historical ties between the two nations are significant, with the US establishing its second consulate post-independence in Kolkata in 1792 and offering support during India’s struggle for independence. Swami Vivekananda’s visit to Chicago in 1893 further cemented the bond between India and the US. Despite some missteps in US foreign policy during the late 20th century that strained relations, the India-US nuclear deal played a crucial role in fostering trust between the governments. This landmark agreement opened avenues for increased collaboration, particularly in the defence sector, facilitating joint efforts in designing, developing, and manufacturing defence equipment to bolster mutual security endeavours.

**Current Trends in India-US Relations** It was underscored that 2023 marked a pinnacle in India-US relations, highlighted by Prime Minister Modi’s state visit and President Biden’s reciprocal visit to India. Presently, an unparalleled level of trust exists between the two nations, rooted in shared democratic values, with no regression in the relationship anticipated from its current standing. India and the US are aligned strategically, fostering increased people-to-people connections. Indian professionals have excelled in the United States, with Indian-origin CEOs leading major multinational corporations and Indian doctors treating one in four Americans. Despite comprising only 1.4% of the American population, Indians contribute significantly to the tax base, reflecting a growing interest in India among Americans. Recognising the diversity of opinions within their populations, India and the US should engage in constructive
dialogue to address criticisms and forge ahead. Embracing and respecting differences in their respective systems, they can collaborate effectively as leading democracies to combat ideological extremism.

**India & US: A Multiplicative Relation** India and the US embody distinct models of democracy and diversity, which warrant acknowledgment and celebration. In the current context, both nations rely on each other mutually. Their relationship transcends mere addition; it holds a multiplicative potential. Together, India and the US have the capacity to positively impact the global landscape. Several instances were cited during the discussion to illustrate this point.

- **G20** The effective leadership of India in the G20 has been widely praised. Amidst turbulent times, India succeeded in fostering consensus among member nations and issuing a communique during one of the most contentious periods in recent history. Notably, India ensured the representation of the developing world, amplifying their voices within the forum.

  India’s G20 presidency was marked by commendable initiatives addressing crucial global issues such as international financial system reform, women’s empowerment, the climate crisis, and global health concerns. Furthermore, new initiatives launched on the sidelines of the G20, including the biofuel alliance and the India-Middle East Economic Corridor (IMEC), hold promise for India, the United States, and the international community as a whole.

- **Healthcare** India and the US have collaborated in developing a vaccine for dengue fever. The US researchers made a breakthrough on dengue fever vaccine but needed scientific and technical capacity to bring that up to scale and to market. To bridge the gap, the research was shared with three different Indian companies in a partnership. The research is in the final stages of clinical trials and
soon India and the US will develop a dengue vaccine that would benefit populations across the globe.

- **Developmental Assistance** The Indian Ministry of External Affairs and the United States Agency for International Development (USAID) are collaborating to assist third-world countries through a trilateral development program. In October, within the framework of this initiative, India organized two distinct capacity-building programs, supported by USAID funding, aimed at training physicians and healthcare professionals from Fiji. These programs focused on enhancing skills in telemedicine and psychosocial care. Other nations, like Tanzania, have also expressed interest in receiving similar assistance.

**Defence and Technology** India and the US are collaborating in high-technology areas such as semiconductors, telecommunication, artificial intelligence, and defence. The Initiative on Critical and Emerging Technology (iCET) is a major milestone in this direction.

India-US defence collaboration spans a range of initiatives, including joint training, military exercises, and partnerships within the defence industry, all aimed at bolstering regional security and stability. There is a need for both nations to deepen their engagement in assessing future threats and to seek avenues for enhanced defence cooperation, particularly in areas such as technology transfer and interoperability.

**Trade and Supply Chain Resilience** The trade volume between the US and India has surged to almost $200 billion, facilitated by lowered tariffs and a thriving flow of goods. Emphasis was placed on the necessity of tackling trade barriers between the two nations, initiating discussions for a free trade agreement, and examining avenues for Indian firms to invest in the US. Additionally, there was discussion on the importance of bolstering supply chain resilience and diversifying sources of supplies.
**QUAD** India holds a pivotal position within the Quad, steering its direction and influencing its future role significantly. In an era where multilateral platforms like the United Nations are largely dysfunctional, India has effectively championed the formation of issue-based minilateral groupings that yield tangible results. The Quad and initiatives like the India-Middle East-Europe Economic Corridor (IMEC) serve as prime examples of these innovative arrangements.

**IMEC** Even though the Middle East is mired in conflict between Israel and Hamas in Gaza, there is still optimism regarding the India-Middle East-Europe Economic Corridor (IMEC) initiative. The preparation and planning is taking place among the stakeholders including India, US and regional partners. The end of war would further speed up the project.

**Conclusion** A broad spectrum of collaborative endeavours spanning space exploration, trade, diplomacy, defence, technology, and clean energy underscores the deepening strategic partnership between India and the US, rooted in shared democratic values. Various geopolitical events, including the Russia-Ukraine conflict, the Israel-Hamas dispute, disruptions in the global supply chain, China’s rise, and Indo-Pacific security concerns, were discussed during the meeting. It was emphasized that we inhabit an era of rapid and unforeseen changes, wherein India and the US, as “natural partners,” serve as force multipliers, particularly in advancing a rules-based global order. The positive outcomes of their partnership extend beyond their own interests, benefitting the entire world.
Address by DGNO: Operation Sankalp: India’s Navy’s Recent Activities in Western Indian Ocean Region

Prepared by Araudra Singh

To discuss the ongoing developments in the Western Indian Ocean Region (WIOR) and Indian Navy’s (IN) recent proactive engagements in the region, on April 15th, VIF organised a talk by V Adm AN Pramod, Director General Naval Operations (DGNO), titled “Operation Sankalp-Indian Navy’s recent activities in the Western Indian Ocean Region”. Director VIF, Dr. Arvind Gupta made the opening remarks while V Adm Satish Soni, offering his comments as the Moderator, set the stage for the Talk. The Talk was also attended by Lt. Gen RK Sawhney, Lt. Gen Rakesh Sharma, Amb. DP Srivastava, Brig. Vinod Anand, Capt. Anurag Bisen, Col Sunil Yadav, Dr Saroj Bishoyi, Ms. Prerna Gandhi, Sh. Anurag Sharma and several other VIF scholars. The key points made by the DGNO and those that emerged during the extensive discussions that followed the Talk, discussed below.

- Against the backdrop of Israel Hamas conflict, the IN has been engaged in the WIOR since December 2023. The fallout of the conflict in the maritime domain has resulted in substantially increased underseeing drone and missile attacks, incidents of piracy and hijacking, on the merchant shipping, in the Gulf of Aden (GoA) and the Red Sea.
- The war has resulted in a 50 percent decrease in regional maritime traffic and a significant rise in freight and insurance rates.
• The IN has deployed over 12 warships, marine commandos, and special Explosive Ordinance Disposal (EOD) teams, maritime patrol aircraft and other platforms. For over 125 days now (till April 15th), IN has deployed over 5500 personnel, and 23 ships, which have conducted surveillance for over 1000 hours and undertaken boarding/investigations numbering over 1000.

• IN has usually been the first responder to arrive at the scene of the incident and has firmly responded to maritime incidents in the Arabian Sea and WIOR. IN has expanded the scope of Op Sankalp to include the east coast of Somalia and South WIOR to thwart acts of pirates, to date responding to 14 incidents.

• IN has demonstrated strength, resilience and resolve as the first responder and preferred security partner to thwart piracy, drone attacks and render assistance to the affected seafarers. IN operations have been concentrated in three areas i.e., the Gulf of Aden, Arabian Sea, and east coast of Somalia.

• To undertake maritime security operations (MSO) across such a vast expanse involving a multitude of international actors requires seamless coordination and synergy at multiple levels. The successful, sustained conduct of the ongoing operations is a testament to IN’s.

• Diligent efforts have been made to make first-hand, detailed and factually correct information on incidents available to all stakeholders. Also, the Information Fusion Centre-Indian Ocean Region (IFC-IOR) has maintained linkages with relevant stakeholders to ensure expeditious information sharing whenever required.

• Proactive actions by IN ships in the region span from firefighting assistance, rescue of troops, medical aid, safe escort of vessels and narcotics operations.

• After MV Marlin Luanda was hit by a missile in the Gulf of Aden on 26th January, the IN ships responded to the distress call and
helped extinguish a fire after relentless efforts. In the process, INs actions also averted a major environmental disaster. In spite of the risk associated with the boarding the fire-struck vessel, the IN made a bold call and rescued 20 crew members.

- Since the onset of the Hamas conflict, the IN has been involved in the rescue of more than 150 crew members from the seven hijacked MVs and fishing vessels, including 30 Iranian and 50 Pakistani fishermen.
- In a particularly daring act, concerning the hijacking of MV Ruen by a Somali pirate ship, the IN initially intercepted the hijacked ship, subsequently negotiating the release of the injured Bulgarian crew after over 40 hours of coercive actions. Through resolute actions and negotiations by the crew of INS Kolkat, the pirate ship eventually surrendered. Thereafter, in accordance with the recently promulgated Anti-Piracy Act, all the pirates were handed over to Mumbai Police and a charge sheet was filed against each of them.
- Recently, the IN was also involved in apprehending a vessel carrying 3300 kilograms of narcotics, in its largest-ever haul.
- IN has also coordinated with the Indian Air Force to ensure the safety of civilian seafarers, captured by pirates. The resolute efforts of the IN in the recent past have garnered widespread recognition from the international community and the IOR states in particular.
- The array of actions undertaken by the IN reaffirms its status as a responsible maritime force and first responder in the IOR committed to protecting trade and safety of seafarers, irrespective of their nationality. The naval force remains combat-ready, credible, cohesive and future-proof to ensure safe seas and adhere to the Prime Minister’s SAGAR vision.
On 18 April, the Vivekananda International Foundation (VIF) organised a talk on “Maritime Security of India” by Vice Admiral G Ashok Kumar, NMSC. Vice Admiral Tarun Sobti, Deputy Chief of the Naval Staff (DCNS) was also present. The Talk was also attended by Sh. Jayant Mishra, Former Director General, Department of Revenue Intelligence. In addition, Indian Coast Guard was represented by DIG Ajay Chaturvedi. Cmde Manish Sinha, Captain KS Vikramaditya, Comdt RK Shrivastava along with three other scholars participated from the National Maritime Foundation. The VIF participants included Lt. General R. K. Sawhney, Vice Admiral Satish Soni, Captain Anurag Bisen, Col. Sunil Yadav, Dr Saroj Bishoyi, Ms. Prerna Gandhi and Sh. Anurag Sharma.

The Director VIF, Dr. Arvind Gupta, delivered the opening remarks by reflecting on historical recommendations, notably from the Kargil Review Committee and the wake-up call prompted by the 26/11 attack. He emphasised the fragmented nature of maritime security and flagged various pressing issues such as capacity building, strengthening maritime infrastructure, and gaps in maritime laws and regulation, particularly in international waters, to combat issues like piracy drug trafficking.

Commencing his address, Vice Admiral Ashok Kumar provided insights into India’s maritime significance and the establishment of NMSC to
address evolving challenges. He highlighted the import of India’s coastline, exclusive economic zone (EEZ), and the predominance of maritime trade.

The establishment of NMSC is a culmination of recommendations dating back to the GoM Report of 2001, emphasizing the need for an apex-level coordinator in maritime security. The commission’s role as the fifth vertical in the National Security Council Secretariat (NSCS) underscores its significance in coordinating efforts across multiple agencies and ensuring a cohesive approach to maritime security. One of the primary objectives of NMSC is to address the numerous issues in the maritime domain, including non-traditional security threats, fragmented maritime security, capacity building of states, including their marine police, maritime laws, infrastructure development, fishing boat regulation and registration, and international cooperation. These challenges necessitate a holistic approach involving coordination among various agencies, capacity building, and adherence to international maritime laws, such as UNCLOS.

The NMSC informed that Maritime security encompasses internal, territorial and international waters, presenting distinct challenges in each domain. While guarding ports and coastal areas requires collaboration between agencies like the Navy and Coast Guard, ensuring security in international waters demands international cooperation and the adoption of multilateral initiatives. Indian Navy’s initiatives such as mission-based deployments and the Information Fusion Centre-Indian Ocean Region (IFC-IOR) demonstrate India’s commitment to addressing non-traditional security threats in the maritime domain. However, numerous challenges persist, including extra-regional presence, illegal fishing activities, debt-trap diplomacy, and extra regional countries’ maritime research and data collection. Addressing these challenges requires a comprehensive strategy encompassing capacity building, technology integration, and diplomatic engagement.
During the discussions, questions were raised regarding the coordination between the Coast Guard and Navy, protection of seafloor cables, India’s participation in maritime security initiatives, and policy revisions. Admiral Kumar highlighted the lack of a comprehensive definition of coastal security and defence until recent years. The delineation of roles, with coastal security under the purview of the Coast Guard and coastal defence aligned with the Navy, underscores the importance of clarity in operational frameworks. Addressing concerns about safeguarding seafloor cables, he emphasized the preventive measures being taken by operators, despite the majority being privately owned. While rerouting capabilities mitigate risks, the importance of protective measures for vulnerable cable landing points was underscored, signaling a proactive approach to mitigate potential threats.

Contemplating India’s participation in the trilateral/multilateral exercises in the Indian Ocean Region (IOR) such as the *Maritime Security Belt,* deliberations underscored the deliberate decision-making process and the cautious approach necessitated by geopolitical complexities. Drug trafficking and maritime security necessitates focused operations and multilateral cooperation to effectively combat transnational threats.

In conclusion, NMSC averred that it is imperative for force structures and training protocols to adapt, encompassing both traditional combat preparedness and strategies to address non-conventional adversaries effectively. Moreover, a crucial aspect that demands attention is the realm of maritime laws and boundaries. There exists a notable deficit in understanding maritime laws, necessitating comprehensive training and alignment with domestic legislations to effectively navigate this domain. Recognizing that maritime security is not the sole responsibility of any single entity, it becomes apparent that tackling this multi-faceted challenge requires a concerted effort from various agencies.
Establishing Defence Manufacturing Ecosystem in India

Prepared by Dr Saroj Bishoyi

The VIF in collaboration with the Indian Institute of Technology (IIT), Madras held a Roundtable Discussion on “Establishing Defence Manufacturing Ecosystem in India” at the VIF on 18th April 2024, where the participants deliberated the importance of establishing a defence manufacturing ecosystem in India, emphasizing the significance of a strong scientific and technological ecosystem for national security, the need for strategic vision and investment in high-tech industries, and collaboration between academia, industry, and the armed forces to drive innovation and address job new requirements. Director, Dr Arvind Gupta chaired the discussion. Dr Gupta underlined the importance of inputs from the academics in establishing a strong defence manufacturing as well as scientific and technological ecosystem in the country. The industry representatives, senior government officials, and members from the strategic community in addition to the expert group members from the VIF participated in the discussion. Four Professors from IIT, Madras made their presentations which followed by a brainstorming discussion on the issues pertaining to defence manufacturing in India.

On April 18th, the VIF, in partnership with IIT Madras, hosted a Roundtable Discussion on “Building India’s Defence Manufacturing Ecosystem”. Participants stressed the need for a robust scientific and technological framework for national security, emphasising strategic investment in high-tech industries and collaboration among academia, industry, and the
armed forces, to spur innovation and address job requirements. Chaired by Director Dr. Arvind Gupta, the discussion highlighted academia’s role in fostering a strong defence manufacturing ecosystem. Industry leaders, government officials, strategic community members, and expert group representatives from VIF engaged in brainstorming sessions, after four Professors from IIT, Madras made their presentations.

Rear Admiral Deepak Bansal, VSM (Retd.), Professor of Practice at the Department of Mechanical Engineering, IIT-Madras, presented on the “Establishment of the Indigenisation and Innovation Centre for Defence Systems (IICDS) at IIT, Madras.” He detailed the potential contributions of IICDS to India’s defence capabilities, innovation landscape, and economic growth. The centre aims to expedite the indigenization of defence technologies, encourage innovation, and bolster national security by fostering collaboration among government agencies, research institutions, academia, and private industries. It will serve as a focal point for collaborative research, development, testing, and training, driving the growth of indigenous defence capabilities. By promoting collaboration, advancing research and development, and cultivating a skilled workforce, he stressed that the centre would propel India towards self-reliance in defence technologies, thereby enhancing national security and global leadership in the defence sector.

Prof. P A Ramakrishna from the Department of Aerospace Engineering at IIT-Madras presented on “Enhancing Battlefield Range with Ramjets”. He discussed the use of aluminium-based fuel-rich propellants, which offer greater density compared to current fuels used in hypersonic flight, aiming to expand the flight envelope of ramjets. Ramjets could potentially be utilised in early stages of launch vehicles and missile applications. Prof. Ramakrishna compared aluminium-based fuel-rich propellants with kerosene and hydrogen-fuelled scramjets based on specific impulse data. He also explored their application in submarine propulsion.
Prof. Prabhu Rajgopal, from the Department of Mechanical Engineering, presented on “Tech Transfer and Commercialization: The Role of Innovation at IIT-Madras”. He highlighted the innovative culture and entrepreneurial ecosystem at IIT Madras, drawing from his experiences at the Centre for Non-Destructive Evaluation (NDE) and his involvement in Innovation and Entrepreneurship (I&E). He showcased several novel solutions developed at the laboratory, now widely used in strategic and civil sectors globally. Prof. Rajagopal emphasised the importance of academic support systems in translating high-end research into market-ready products, leveraging India’s diverse industrial base for global competitiveness.

Prof. H S N Murthy, from the Department of Aerospace Engineering, discussed “Empowering Atmanirbhar India through Higher Technical Education: Challenges and Solutions”. He emphasised the crucial role of higher education in national development and advocated for strengthening master’s programs to feed into India’s growing startup ecosystem. Prof. Murthy stressed the need for increased investment in education to achieve India’s economic goals, outlining key steps such as funding, industry collaboration, and skill development within the existing infrastructure of institutions like IITs.

**Major Takeaways and Recommendations**

- Speakers underscored the importance of directly funding academic institutions for deep technology projects rather than relying solely on startups for 50% of the funding.
- Emphasis was placed on quality control in manufacturing processes to establish a robust defence manufacturing ecosystem in the country.
- Increasing orders to fortify domestic industries and boosting production volumes to reduce defence item costs were recommended.
- Better technology absorption and indigenous technology
development in defence manufacturing were deemed crucial.

- Collaboration between industry and academia to address job requirements and engineering specialization was highlighted.
- Interaction among armed forces, academia, and industry to adapt to evolving needs and strategic thinking was advocated. Government practices enabling industry engagement, like defence manufacturing funding and scholarships, were mentioned.
- Closer collaboration among defence personnel, professors, and industry experts to drive innovation and solve problems together was suggested.
- Certification and data’s role in fostering a culture of science and technology, with recommendations for standardizing certifications and enhancing data repositories, were discussed.
- The need for a one-stop solution and technology spin-offs in the defence industry was stressed.
- Suggestions were made to form consortia and standardization efforts to enhance collaboration and innovation in defence industries.
- The importance of entrepreneurship and integrating academia with business, while universities maintain their non-profit status, was emphasised.
- Skill mapping, human resource development, investment, and collaboration to address challenges were highlighted.
- Advanced technical education and the role of postgraduate programs in producing skilled manpower for the industry were deemed necessary.
- Addressing inadequate resources for higher education by increasing faculty and student numbers to meet demand was proposed.
About the VIVEKANANDA INTERNATIONAL FOUNDATION

The Vivekananda International Foundation is an independent non-partisan institution that conducts research and analysis on domestic and international issues, and offers a platform for dialogue and conflict resolution. Some of India’s leading practitioners from the fields of security, military, diplomacy, government, academia and media have come together to generate ideas and stimulate action on national security issues.

The defining feature of VIF lies in its provision of core institutional support which enables the organisation to be flexible in its approach and proactive in changing circumstances, with a long-term focus on India’s strategic, developmental and civilisational interests. The VIF aims to channelise fresh insights and decades of experience harnessed from its faculty into fostering actionable ideas for the nation’s stakeholders.

Since its inception, VIF has pursued quality research and scholarship and made efforts to highlight issues in governance, and strengthen national security. This is being actualised through numerous activities like seminars, round tables, interactive dialogues, Vimarsh (public discourse), conferences and briefings. The publications of VIF form lasting deliverables of VIF’s aspiration to impact on the prevailing discourse on issues concerning India’s national interest.