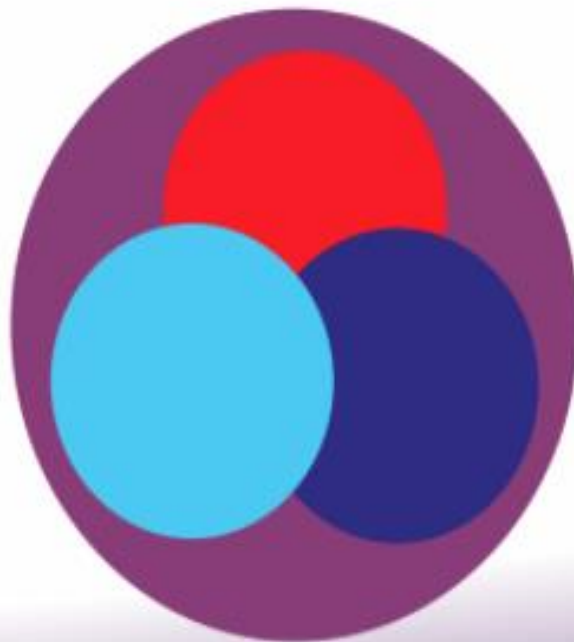


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**MITIGATION OF NON TRADITIONAL
SECURITY CHALLENGES FOR INDIA**

SYNERGY

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Mitigation of non traditional security challenges for india

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From the Desk OF CDS

India's traditional security challenges are well documented and the Nation is fully geared to face them proactively. Synergy has been achieved among the various organs of our country in general and armed forces in particular. India is steadily moving forward, to achieve the rightful place in the global order through various developmental programmes of the Government and assured security against inimical forces.

Our country is equally affected by lesser known challenges such as food, water and energy security, piracy, terrorism and the like. These Non Traditional Security Challenges (NTSCs) obfuscated by more visible issues adversely affect our resilience, perseverance and general well being. In the Indian context these challenges are emerging mainly from issues such as; Energy, Food and Water Security; Infectious Diseases and Pandemics, Terrorism and Insurgency, Organized Crime, Drug Trafficking, Human Trafficking, Money Laundering, Economic Terrorism or, Circulation of Fake Indian Currency Notes (FICN), Climate Change, Environmental Degradation and Natural Disasters. Mitigation of these challenges requires in-depth understanding of various elements causing them and then reinforcing the existing structures or, creating new ones. A long term strategy is essentially needed for this purpose. The COVID-19 pandemic has reiterated the need to re-examine the multitude of non traditional security challenges, their mitigation measures and structures needed to proactively face them.

Socio-economic consequences of the NTSCs are many and are required to be taken into consideration while planning the strategy. While such non traditional security challenges may not directly impact national security; they can be catalytic in undermining critical elements of

national security. It is thus imperative that our National Security Strategy should also include securitisation of NTSCs such as infectious diseases for preparing response strategy to deal with them. As the NTSCs know no boundaries, the mitigation measures would have to be ensured with an integrated response mechanism.

India has done well in combating COVID-19. The need is to draw correct lessons and be future ready by identifying/defining the new age threats and creating cost effective structures and systems to mitigate and defeat NTSCs. CENJOWS has identified and elaborated the theme “**Mitigation of Non Traditional Security Challenges for India**” in this issue of the Synergy Journal and have endeavoured to bring this dormant yet important subject to the fore.



(Bipin Rawat)

Gen

Chief of Defence Staff

FOREWORD

The emerging world order post COVID-19 pandemic appears uncertain and tends towards a multi-polar shape from its earlier contours of moving towards a bi-polar one. The new order is likely to offer many challenges and opportunities for India. While the traditional security challenges will continue to reshape themselves and get addressed; the Non Traditional Security Challenges (NTSCs) could initiate major global order transformations in the years to come. These challenges could be in the realm of Economic Security, Environmental Security, Political Security and Human Security.

NTSCs for India are varied and many, requiring enhanced understanding and attention. Challenges arising out of maritime and CBRNe issues also need deeper understanding and deserve a graded response. The existing legislations, organisations and structures seem insufficient to address these challenges. There is perhaps the need for a comprehensive legislation along the lines of NDMA Act 2005 to attempt holistic mitigation. Existing linkages could be strengthened and new linkages created among NSCS, NDMA, NITI Aayog and concerned Ministries for ensuring a proactive and prompt response for mitigation of all NTSCs. SOPs, plans and responsibilities of all stakeholders needs to be revisited, revised and prepared. Capabilities and capacity building in respective areas need to be built up indigenously, upholding the spirit of 'Atmanirbhar Bharat'.

The Aug 2020 issue of the Synergy Journal has chosen NTSCs for India as its theme. The papers in this journal have clearly identified the challenges raised by NTSCs and suggested a host of measures and ideas to address them.



(R Hari Kumar)

Vice Adm

CISC & Chairman CENJOWS

EMERGING WORLD ORDER POST COVID19: A GLOBAL PERSPECTIVE

Air Chief Mshl Arup Raha, PVSM, AVSM, VM (Retd)*

Introduction

The COVID19, Wuhan virus pandemic has caused the biggest crisis for the humanity after the World War II. It has plunged the world's rich and poor, developed and developing nations alike into an unprecedented turmoil in recent history. Its impact has been as devastating, if not more than the second world war. This time the protagonists are the 'Humankind' and a 'Virus', an unseen adversary. In the ensuing conflict the 'Humankind' is likely to win but this war would leave scars in many dimensions - physical, psychological, financial, societal & even military skirmish resulting in martyrdom of soldiers in Galwan Valley clash in Ladakh as collateral effect. Nations are bracing up for the changes that the people across the world have to adopt & adapt themselves to, ushering in a major change in our lifestyle.

Impact on Strategic Security

The strategic security of most nations has been breached, including the rich & powerful without firing a single bullet because of the pandemic. The overall Comprehensive National Power (CNP) of every nation has been adversely affected. Though the hard power of nations, ie, military power has not diminished in the immediate term to protect the sovereignty of land borders, maritime boundaries and aerospace frontiers, but in the middle & long term the capacity of military power would dwindle due to adverse economic footprint of the pandemic. Funding for military capabilities & projects would take a direct hit for several years, since

the savings would be ploughed into meeting more competing urgent demands of healthcare infrastructure development, revival of devastated economies and other welfare schemes for the disadvantaged sections of the society.

Effect on Soft Power

Lockdown. The impact of the contagion related lockdown & containment programme has been very severe on elements of soft power, ie, economic development which includes industrial production, trade & commerce, hospitality industry, travel & tourism, education as well as service sectors. Security of human resources has undergone serious stress & strain of unimaginable dimensions.

Economy. Revival of devastated economies across the world is the biggest challenge confronting every nation. The draconian lockdown is being extended repeatedly since the contagion continues to flourish, thus stymying the revival strategies. Huge funds through economic packages are being pumped into various sectors of industry, business & commerce, MSMEs etc to re-establish 'supply' chain of goods & services and simultaneously putting money into the hands of the people, ie, daily wage-earners, workers, migrant labour & others to create 'demand' side of economic activities, to build up a momentum in the recovery process.

Human Resources. The devastation of economy has destroyed the livelihood of people. The worst affected are the poor, daily wage-earners and the labour force in the unorganised sector like migrant labour. They are undergoing the worst hardship amongst the people.

Healthcare. Providing adequate healthcare to the virus affected people, screening & testing of suspected patients, provisioning of ventilators, PPEs, isolation centres, Corona wards, shortage of doctors & caregivers etc have imposed unprecedented challenges on healthcare system in every country, rich or poor. The visuals of suffering & a large number of deaths have exacerbated our psychological stress.

Contagion Control Mechanism. In the ‘global village’ with excellent connectivity by air, land & sea, as well as ease of trans-national movement of people, the effectiveness of pandemic control mechanism has come into question, especially the role of WHO in advising the world on the virulence of the contagion and effective measures to prevent its spread. The lapse can be fixed on opaque handling of the Wuhan virus by China & irresponsible behaviour of WHO & China. The world’s reaction indicates mistrust & isolation of China. The Chinese all across the globe are facing persecution because of the huge failure of CPC leadership in Beijing in preventing the spread of the virus in the early stages of its detection in Wuhan.

World’s Vulnerability: Over- Dependence on China

China: World’s Manufacturing Hub. The US under the leadership of President Nixon & the Secretary of State Kissinger ushered China into the world economy in 1972 bringing an end to their isolation. It was a calculated strategic initiative by the US, firstly, to inject market economy into China to destroy Communism; secondly, to strengthen China against its rival the USSR, though both were Communist regimes and thus weaken Soviet Union and lastly, to reap the benefit of trade with China by importing cheap goods to US. They provided very favourable terms of tariff and trade, turning China into the ‘Manufacturing Hub’ of the entire world. The greed of the developed world & later the developing countries in cheap goods by outsourcing everything to China has jeopardised the strategic autonomy of nations, which has been evident during the Corona crisis.

Corrective Action. The remedial measures are already under implementation by major powers to plug their over-dependence on a regime which is opaque, authoritarian & oppressive with little regard for international laws, rules, conventions etc. These are:-

- Relocation of industry, production centres & supply chains from China to other competitive destinations across the

world. The US, Japan, EU nations, Australia etc have **already** declared their intentions including government funding for such relocation.

- Boycott of Chinese goods by public in general, if not as government policy has started because of the mistrust in anything that is Chinese, post Corona pandemic.
- Outsourcing to China would diminish progressively as **alternative supply chains get operational in the next few years.**
- China’ s economy would be hit adversely when demand for its goods dwindle now & in the future.
- China’ s investment abroad & hostile take-over of premier companies in a depressed market induced by the pandemic are being prevented by most governments. Chinese companies, especially in Communications & IT are being rejected in their bid to capture the world market.

Other Strategic Changes Post COVID19

Most of the BRI projects have stalled as an after effect of the current economic slowdown. The affected nations have grown suspicious **of Chinese intentions, especially after its isolation post COVID19.** It may result in the collapse of BRI, the flagship project of Xi Xingping overshadowing the famous ‘Marshall Plan’ of the US, post WW II, which was designed to revive the world economy under US leadership.

The BRI funding & other projects under Chinese control have created vassal states, reeling under debt trap. Chinese state-sponsored **companies executing these projects have a ‘vice-like grip’ over these nations exploiting their economic vulnerabilities.** This predatory practice & selfish intentions are creating friction instead of gratitude towards China.

China is fast losing sympathy, goodwill & trust of beneficiary nations of Chinese largesse in Africa & Asia. There is a huge wave of anger & disaffection among them against exploitation by China of their

natural resources like minerals & timber etc through corrupt practices resulting in uncontrolled ecological & environmental degradation. These issues have gained traction due to Wuhan virus pandemic.

Therefore, China's dream of superpower status may take much longer to materialise post - Wuhan virus pandemic. In fact, the collapse of the CPC authority with pro- democracy movement gaining ground, revolt against suppression of dissidents & oppression of ethnic minorities in Tibet & Xinjiang is very much on the cards, which may happen sooner than later. The COVID19 pandemic induced momentum may result in a change of guard in Beijing and the demise of CPC, ushering in a democratic regime with a benign outlook in world affairs.

Aggressive Behaviour of China in COVID Times

China has worked on a long term strategy to lead the world as a superpower leveraging its economic & military prowess. It includes winning five conflicts in the next three decades, ie, by 2050; viz, integration of Taiwan, gain control of Senkaku Islands from Japan in East China Sea (ECS), annex territories in Mongolia & in Russia (adjacent to former Manchuria) claimed to be Chinese and lastly annex Southern Tibet (Arunachal Pradesh). The arrogance of power is reflected in their aggressiveness & the attempt to follow the hegemon US in the past in declaring blatantly that "you are either with us or against us" & suffer their wrath if anyone does not fall in line.

It also includes an attempt to wrest control of world institutions, be it financial, trade & commerce, functioning of the UN/UNSC, WTO, WHO, environment & climate control etc, which have been dominated by US & western powers. They want these bodies to be entirely under Chinese influence. They are also working hard to change the uni-polar world order under US leadership to bi-polar with China as the other pole and not a multi- polar world which is more desirable for balance in global affairs. China has disdain for the aspirations of India with one-sixth of world population and a major economy to be another pole, not even in Asia.

However, the CPC is in an over-drive to reach the superpower status in a hurry. They are behaving aggressively through orchestration of military clashes with the littoral states of SCS & ECS as well as India **along the LAC in the Himalayan borders trying to win most of the five conflicts of their strategic plan in one stroke.** Therefore, it is not strange that they have chosen this moment when the world is reeling under the pandemic originating in China to orchestrate confrontation with neighbours.

The reasons behind such behaviour are not difficult to discern:-

- China's reputation as an emerging superpower is at stake because of the Wuhan virus pandemic which has devastated the world economy & livelihood of people. There is unprecedented angst amongst people against China for this debacle.
- Majority of powerful nations are seeking China to come clean on the Wuhan virus origin & its uncontrolled spread across the globe & take responsibility for it. China's culpability became **obvious when it did not permit the UNSC to discuss the** pandemic issue in the beginning, though later on a resolution **was passed by the UNSC after a delay of four months.**
- **The US has intensified the trade war & sanctions against** China, as a fall out of their frustrations over unusual trade imbalance, malpractices by Chinese traders & government **and stealing of technologies from US institutions & research** centres by Chinese citizens.
- The pro- democracy protests in Hong Kong have turned **extensive & intensive defying Beijing's authority & draconian** laws.
- China therefore is playing a strategic game to capitalise on **the inability of the affected rival nations to fight back under** pandemic over-hang.
- The CPC is playing to the gallery for internal audience to divert their attention from the crisis of national disrepute. It is aimed

at propping up a narrative to portray the CPC leadership in good light and the invincibility of Xi Jinping as their lifelong Chairman to achieve glory for China.

However, the net result of such strategic brinkmanship by China has pushed the regional & world powers to develop partnerships & alliances against Chinese hegemonic behaviour, which does not augur well for China's superpower dreams.

India would have to prepare for a long haul since the Chinese hostility towards it would intensify progressively. India cannot hope for reciprocation of 'One China Policy' with 'One India Policy' by China. The world can hope for the collapse of CPC under its own weight, since the unusual mix of market economy & communist authoritarian repressive regime cannot co-exist for long. It is like oil & water, they never mix. Market economy has brought in economic development satisfying the basic needs of people supporting a higher standard of living but the aspirational higher needs as per Maslow's Law of hierarchy of needs, like freedom of expression, liberty etc in terms of improvement in quality of life cannot be achieved under the tyranny of oppressive Communist rule.

Summary

COVID19 pandemic has rapidly changed the world's strategic security outlook. Military alliances & co-operation will take shape to counter Chinese aggressiveness in the region.

World trade & commerce will overcome the vulnerability of over-dependence on China for manufactured goods through relocation of manufacturing hubs & alternative supply chains:-

- China's premier position as a manufacturing hub would diminish due to lack of demand.

- Chinese investments & aggressive takeover of companies abroad would be stone-walled to reduce vulnerability to Chinese predatory tactics.
- BRI will face strong headwinds which have stalled due to economic slowdown consequent to the pandemic.
- Budgets for military would reduce & funds diverted to other pressing spheres to revive economy. A lean & mean military would be the need of the hour. Military reforms, enhanced jointness & self reliance through indigenisation would be the way forward.

- Healthcare would be a priority sector for all nations.
- Contagion control mechanism in terms of policy, SOPs, infrastructure would be put in place, similar to HADR operations.

- Laws & welfare schemes would be enacted and implemented to reduce the vulnerabilities of migrant labour in unorganized sectors, especially in India.
- The only positive outcome of the lockdown has been the revival and healing of the environment. Steps would be necessary to maintain it.

- **Our 'way of life' may change more or less permanently to fight pandemics in future.**

***Air Chief Mshl Arup Raha, PVSM, AVSM, VM (Retd)** is a former Chief of Air Staff of the IAF

A NEW WORLD ORDER POST-COVID19: CHALLENGES AND OPPORTUNITIES FOR INDIA

Lt Gen Vinod Bhatia, PVSM, AVSM, SM (Retd)*

COVID 19 has undoubtedly been the biggest disruptor in centuries. The pandemic caused by the made in China 'Corona Virus' has changed the behavior of individuals, families, society, people, regions and nations. The pandemic has impacted all walks of life, in an interconnected world. The world has changed, taking a major economic hit, with millions out of work. While the world still battles the Pandemic not so successfully, seeking an elusive vaccine, it is time to look at an insecure and uncertain future. The emerging world order post COVID 19 will throw up new equations and challenges. While India faces major challenges in battling COVID19 and China's 'Military Coercion' along the Line of Actual Control (LAC), there is a need to look ahead and read the contours and structures of an emerging world order and more importantly the many challenges and opportunities such events are likely to throw up in the Indian context.

World order is a fundamental concept of international relations. At its core, world order is a description and a measure of the world's condition at a particular moment or over a specified period of time. It tends to reflect the degree to which there are widely accepted rules as to how international relations ought to be carried out and the degree to which there is a balance of power to buttress those rules so that those who disagree with them are not tempted to violate them or are likely to fail if in fact they do. Any measure of order necessarily includes elements of both order and disorder and the balance between them. For

over seven decades the world order has had clear definitions, post the Second World War, we had a bipolar world, the US led NATO and the Soviet led Warsaw Pact. Sustained albeit delicate peace was ensured by a nuclear deterrence and shared concerns of 'Mutual Assured Destruction' leading to 'Mutual Assured Survival'. The Non Aligned nations despite some attempts failed to influence the international community and the global power architecture. With the collapse of the Soviet Union in the early 90s, the US emerged as the sole global power in a unipolar world, boasting of an unparalleled military, economic and technological might. Now, however, against the backdrop of a retrenching United States, a rising China, a resentful and assertive Russia, a nuclear North Korea, and an ambitious Iran, not to mention a number of serious global challenges, much of what had been assumed can no longer be taken for granted. Both the balance of power and the consensus at the heart of world orders have faded. Year 2020 dawned with new challenges, a pandemic; the world was not prepared for. COVID 19 in the first half of this year changed all established norms, beliefs and equations. As the world geared to fight the Made in China 'Coronavirus' directly blaming China for the pandemic, China retaliated by an aggressiveness and arrogance neither seen nor expected from responsible nations, with an utter and total disregard for the 'Rule Based Global Order'. China, taking advantage of the world's attention in battling the COVID19, demonstrated an unprecedented arrogance and aggressive behaviour indicating initial challenges to the established world order. China's aggression along the India - China Line of Actual Control (LAC) by executing multiple incursions, changing the 'Status Quo' and shattering the nearly five decade of 'Peace and Tranquility' with complete disregard to the five agreements between the two nations is the clarion call on an emerging world order post COVID

19. The aggressive behavior was not limited to the LAC alone; it was more than evident in China's military coercion in the South China Sea, East Sea, against Vietnam, Malaysia, Indonesia, Taiwan, Korea and Philippines. China also attempts to silence it's Internal faultlines with the Hongkong protests and reportedly internal dissent in the CCP by

a nationalistic fervour. China's actions forced a redeployment of US military combat power from Europe, to prepare and be ready to meet future threats, emanating from China. The US also redeployed two of its most powerful aircraft carriers USS Nimitz and USS Ronald Reagan in the South China Sea a clear indicator of US concerns of a growing China challenging the 'Freedom of Navigation Operations. This also demonstrated America's will to limit China's growing influence and use of military force in a moment of radical international uncertainty. Despite many commentaries to the contrary, it is difficult to predict what the long-term impact of the COVID 19 crisis will be on the quest for world order. The last major pandemic is not generally judged to have had a major impact, but that is likely because it happened in a world already fragmented by World War I. By contrast, although this crisis occurs at a troubling time geopolitically, including the withdrawal of the United States from global leadership, until the pandemic it was a period of interdependence and prosperity for many countries. This plague puts immense strain on individual governments, divides societies, and exacerbates societal inequalities. It encourages leaders to act unilaterally and nationally, rather than in concert. It demonstrates the weaknesses of most international organizations. It exacerbates tensions between the United States and China. It prompts the United States' adversaries to try to take advantage of Washington's tardy and confused reaction to the epidemic.

In the last five hundred years there have been sixteen transitions of world power, of which twelve have been violent and only four have been peaceful. As the world prepares for another transition of world power from a unipolar world with the US as the sole superpower to a China driven bipolar world, the future is uncertain. India and other global leaders would definitely prefer a multipolar world. Today, China has displaced the United States as the world's largest economy measured in terms of the amount of goods and services a citizen can buy in his own country (purchasing power parity).

What Xi Jinping calls the 'China Dream' expresses the deepest aspirations of hundreds of millions of Chinese, who wish to be not only rich but also powerful. At the core of China's civilizational creed is the belief—or conceit—that China is the center of the universe. In the oft-repeated narrative, a century of Chinese weakness led to exploitation and national humiliation by Western colonialists and Japan. In Beijing's view, China is now being restored to its rightful place, where its power commands recognition of and respect for China's core interests.

Never before in history has a great power risen so fast, and in so many different spheres, as the China we see today. In three short decades, the backward farming nation of both presidents' childhoods has become the world's largest manufacturer and largest trader. It may overtake the US during President Xi's time in office to become the world's largest economy. In his speech in Seattle in September 2015, President Xi Jinping tackled the threat of the two nations' strategic rivalry head on: "There is no such things as the so-called Thucydides trap in the world. But should major countries time and again make the mistakes of strategic miscalculation, they might create such traps for themselves." This was a clear and categorical statement coming from the supreme leader of China, an emerging superpower. China now sees an opportunity in the pandemic to challenge the US as the sole superpower. There is a definite shift of power from West to East. As and when the transition happens, will it lead to war or will it be a peaceful one? Will the emerging world order be a Bipolar or a Multipolar world? These are the uncertainties of the emerging world order badly mauled by COVID 19. The spread is still on the rise with fatalities on the rise. The economy is facing unprecedented challenges impacting the world with a forecast of only China, India and a few others not likely to witness a negative growth. COVID 19, black swan event, is a major disruptor of a scale never ever witnessed earlier. The main impact of the disruption is health and economy. Some global economic institutions have forecast the cumulative loss from the pandemic in the range of USD 6 to 9 trillion or approximately 7 to 10 % of the global GDP.

The key question is what the likely shape of the emerging world order is and more importantly what are the challenges and opportunities for India?

On the initial outbreak of the Pandemic, India reached out to its neighbourhood with PM Modi holding a video conference with the Heads of States, as also reaching out to nations in West Asia and even the US providing much needed urgent medicines. India's soft power is recognised by the world. It is an opportunity for India to fulfill its leadership role as a global leader, and demonstrate to the world the interests and power of a 'Risen, Responsible and Resurgent India. It is unfortunate that while India prepared to fight COVID 19 along with other nations and the world, China engaged India along the LAC, forcing India to divert its attention, focus, energy and resources. Shattering a four and a half decade 'Peace and Tranquility' along the LAC on 15/16 June, PLA troops attacked an Indian Patrol at Galwan with primitive spikes causing twenty fatalities. This was a total violation and disregard to the existing agreements and the famous 'Wuhan Spirit'. This one incident has not only changed the very dynamics of LAC management but India - China relations. India now faces a security threat from China in the immediate to near term. A heretofore dormant threat in the long term now knocks on India's doors, literally. This is a major challenge for India as on account of China's aggressive attitude a collaborative threat from a China- Pakistan nexus is a reality for which India will need to prepare.

The Challenges

As the 'Balance of Power' shifts from West to the East and China gets ready to challenge US supremacy, India will be the balancing power. India's stance however should be driven by its own interests, and hence will need to ensure a fine balance between the "balance of power' and 'balance of interests'. The emerging Geopolitical architecture will dictate the world order for this century and India should ensure its rightful and just place in the comity of nations as a global leader.

As India's national aim is to transform to a 'Modern, Prosperous and Secure Nation' ensuring the well being of its 1.36 Bn people. The economy which is the prime component of growth faces unknown and uncertain challenges for reasons other than economy for once, leaving the pundits in a quandary on the recovery and way ahead. The economic impact on India needs to be assessed by what some Harvard economists call the "shape of the shock" and its "structural legacy". These will depend on the nature and extent of the disease burden, resources deployed/diverted for treatment/care/ vaccine, the trajectory of the pandemic, the collateral damage to sectors, state of the pre-crisis economy, policy responses and special measures taken. Developing countries, including India, face several economic challenges. These include volatility and precipitous fall in financial markets and commodity prices, and financing gap due to shrinking fiscal revenues and Covid-19 expenditure. Liquidity crunch, disruptions in international trade, and transport, depletion of foreign exchange reserves, devaluation of their currencies, fall in export revenues due to export controls and contraction in global markets and economic engines also causes for concern. We also face the prospects of a global food, pharmaceuticals and medical supplies crisis as producing countries impose export control and stockpiling. India could face a remittances crisis due to coronavirus related redundancies in major labour export markets.

In addition to economic and societal changes, India post COVID 19 faces new challenges in the form of nontraditional security threats. Most of these challenges are old but the manifestation of these challenges has now taken a magnitude and importance not realised earlier.

Opportunities

Every challenge also throws up opportunities and so has the present pandemic. This is an opportunity for India to assert its rightful position as a global leader, reaching out to the neighbourhood, extended neighbourhood, South East Asia, West Asia, African nations and the West. China's aggressiveness and arrogance is a wakeup call for India.

India is left with no choice and time now but to stand up and strengthen itself in the Diplomatic, Military and most importantly economic domain. The call for an 'Atma Nirbhar India' came at the right time, but the words need to be converted to deeds. An action plan has to be backed by a pragmatic and implementable time bound way forward. While addressing on the occasion of 95th Annual Day of Indian Chamber of Commerce (ICC), via video conferencing, PM Modi said, "Every citizen of this country has resolved to turn this crisis into an opportunity. We have to make this a major turning point for this nation. What is the turning point; it is a self reliant India". He further added that "At this time we've to take the Indian economy out of 'command and control' and take it towards 'plug and play'. This isn't the time for a conservative approach. It's time for bold decisions and bold investments. It's time to prepare a globally competitive supply chain".

A "new India" industrial and trade policy is needed to incentivise our entrepreneurs to be makers, not just traders. They must build a Make in India hub to meet domestic and global Covid 19 related demand and subsequent rebound and revenge consumption. The adversity bought on by the virus can become a transformative economic opportunity to "Build Back Better".

In the diplomatic domain India needs to 'Bind to Balance' with nations with congruence of interests - a multi polar world. An anti China policy though natural post Galwan, may not be in the best interest of India. India definitely needs to review and reshape its 'China Policy' which has to be contemporary and forward looking. India's foreign policy should be based on India's interests even though it may be risky in the near term. The neighbourhood first policy is in tatters and needs a reboot. China's 'string of pearls' has to be countered by India and like minded nations with their own 'String of Diamonds'.

A strategic rebalance is now an imperative in the 'Military Domain'. The resource crunch on defence will continue despite the China threat

and the growing frequency of nontraditional security threats, for which the armed forces will need to reorient as a responder. For the military it is back to the ' Kargil Moment' as a matter of speaking. It cannot be business as usual as and when the ongoing situation along the LAC stabilises. A comprehensive review is a must and India will have to build military capabilities and enhance capacities in a well planned and optimal way forward. India and the military can not afford emergent procurements in crisis situations as has been done after Surgical strikes, Pulwama, Doklam and now with PLA incursions. It is not about increasing defence budget but more about optimal utilisation. India will also have to focus on creating a viable defence industrial base transiting to a self reliant in defence manufacturing. Another priority weakness which needs to be addressed is the Infrastructure development along our northern borders. There is a focus alright, but it is too little too late. India also should develop and exploit the strategic locational advantage of the Andaman and Nicobar Islands. A credible threat in China's Malacca dilemma will be a pressure point to deter China's aggressive behaviour along the LAC.

Post COVID19, there are uncertainties and insecurity in the emerging world order. India will have to seize the opportunity and ensure that we have a rightful place in the comity of nations as a global leader. India as a risen, responsible and resurgent power should prepare to exploit the emerging world order to its advantage, to ensure the security and well being of the 1.36 billion Indians.

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NON TRADITIONAL SECURITY CHALLENGES FOR INDIA

Vice Adm HCS Bisht, PVSM, AVSM (Retd)*

Introduction

The concept of National Security, generally revolves around external threats faced by nations, from potential adversaries. Major powers spend billions of dollars on building their military arsenals to ensure security from traditional threats, since all financial matrices/calculations utilized for national security are based on traditional security threats. Whilst these threats or challenges are based on defined contours, Non Traditional Security Challenges (NTSCs) are much more nebulous, at times without any known parameters. However, amongst the NTSCs, terrorism, low intensity conflicts, natural calamities etc have, over time, taken a form, based on which response mechanism can be defined to some extent and invariably these are factored in the security paradigm of various countries. Amongst all these NTSCs, one challenge which is rearing its head as the most threatening is that of infectious diseases and pandemics, which are like the invisible enemy, who can't be seen with the naked eye/ equipment but which can cause devastation not only in a particular country but the whole world, given that the world now is a globalized village.

The NTSCs, by convention, did not until recently fit in the framework of the typical definition of National Security. Whilst the focus on traditional military threats to the physical security of the country and its people is important, the interconnected and interdependent nature of the world today demands equal attention towards NTSCs since they

have the potential to create widespread political and economic instability in the world. They also illustrate to the world that security can no longer be limited to traditional concerns of maintaining and protecting national interests against external military intervention, but must include any form of non traditional threats, where lives can be lost and which can impact the functioning of the security establishment of the country in some form or the other.

The NTSCs are challenges to the survival and well-being of societies that arise out of primarily non-military sources, such as climate change, infectious diseases, natural disasters, irregular migration, food shortages, human trafficking etc.¹ Whilst all the above mentioned challenges can cause enormous impact on human lives but as is becoming clear, the threat of infectious diseases can be most devastating of all. The 'Covid-19' or the 'Wuhan virus' has shown to the world that traditional military and non military threats pale in comparison to the lethality of an unchecked pandemic. Nobody in the world probably would have realized, just six months ago, about the devastation and the fear psychosis caused by this pandemic. The fatalities alone have till date crossed the 500,000 mark, with many more likely till it vanishes from the world, if at all. The sole superpower, USA with probably the best medical facilities in the world, has been brought to its knees, with more than 25,00,000 infections and more than 1,25,000 fatalities, till the end of June 2020. The economic fall out has been unprecedented, with major economies spiraling into recession. However this is not the first time that the world is seeing the impact of a growing menace of a pandemic. There is historical evidence to suggest that the world has been impacted by epidemics/pandemics like bubonic plague, Spanish flu, Asian flu, HIV/AIDS, SARS etc earlier. However, given that Covid-19 has spread its tentacles literally across the whole world and is showing no signs of abating, itself indicates that its impact would be much more debilitating than any other epidemic/pandemic in recent history.

Natural calamities and Infectious diseases as NTSCs

A very significant aspect of NTSCs are natural calamities. The world has been witness to the devastation caused by floods, earthquakes, storms, heat waves and drought that has affected millions of people till date. For example in 2014 alone, 107 million people across 94 countries were affected by natural calamities.² In the last two months i.e. in May and June '20, India has been battered by two cyclones. Cyclone 'Amphan' categorized as a super cyclone, with wind speeds upto 260 kmph, which originated in the Bay of Bengal, created havoc on the East coast, especially in West Bengal. Similarly cyclone 'Nisarga' which originated in the Arabian Sea also caused enormous damage in Maharashtra and Konkan area. Various agencies of the state like the Armed Forces, NDRF, other centre and state agencies and volunteers rise to the occasion to render humanitarian assistance and disaster relief, as is the norm in such cases. It is often seen that during severe natural calamities, when normal life of citizens gets badly affected, law and order tends to become an issue and thus, natural calamities can pose a security challenge in the times to come.

Though natural calamities can be threatening to human lives, they generally come with a warning (except earthquakes), are generally short lived, affect a finite number of people and their impact and aftermath are generally manageable. Infectious diseases, which the world had not until now taken very seriously, can be very long lasting and impact human lives in many ways apart from countless fatalities. The advancement in technology coupled with the ease of travel and trade, resulting in increased movement of people and goods across the world, has heightened states' and societies' vulnerabilities to the spread of infectious diseases and the emergence of bio-terrorism. Through the 1980s onwards, the threat of infectious diseases gained prominence in security discourses in the West with many countries beginning to frame the spread of infectious diseases in national security terms. However, it was not until the 2003 Severe Acute Respiratory Syndrome (SARS) epidemic, which originated in China but was limited

to South East Asia that health security came to prominence in its own right in world politics. SARS illustrated the weakness of the global health system and the vulnerability of increasingly globalized societies, particularly in Asia. This global prominence of health security in the early 2000s prompted a shift towards a more cooperative approach among many states and organizations. Typical of this was the World Health Organization's decision to re-orientate its strategy from 'health work' to 'global health security'. Since the year 2000, several other infectious disease outbreaks have had implications worldwide, besides the 2003 SARS epidemic. In 2009, the H1N1 influenza virus epidemic affected a large part of the world. More recently in 2013, the Ebola virus outbreak in West Africa showed the dramatic impact such diseases can have on the state. In 2015, the Middle East respiratory syndrome (MERS) outbreak which originated in Saudi Arabia and later impacted South Korea demonstrated the interconnectivity between the Middle East and East Asia.³ With the increase in global travel, it became apparent that a transnational approach to NTS was needed, as all these outbreaks were framed as potential or actual threats to global health security.

How will the post COVID-19 world look like

Though the world is still in the midst of the pandemic, crystal gazing into the future is gradually becoming clearer and the fault lines are becoming more clearly marked. A large no of countries are either recovering from the scourge of the pandemic or are getting used to living with it. People are also fed up of staying under lock down conditions and are more brazen now in taking the risk of going about their work even at the risk of contracting the virus.

The world opinion of China

In all of the above, one thing is becoming very clear and that is 'how the world is going to look at China in the post Covid world. China's defiant attitude, in not owning up responsibility for spread of the pandemic and the attempt to deflect blame is annoying the world community and they want to see punitive action for China in some form or the other. A large

no of countries, especially in South East Asia and Africa, whose silence has been bought by China through the policy of debt trap, are tight lipped about their aversion towards it but sooner or later they will also voice their opinion. Despite infecting the whole world, China has not shown any remorse. Rather it has adopted an aggressive stance and that may be the reason for the world community to lose interest in the 'Dragon' as a large number of countries want to pull out their investments from China and relocate them elsewhere. How this will take effect on ground can only seen to be believed in the near term, since China over the years has made itself the world's largest factory, producing all sorts of products at very competitive rates. Though there is lot of optimism in India that businesses and corporates shifting from China will set up shop in India, however that seems a little far fetched now since India has to first create the ecosystem to absorb and manage the businesses.

China is also diverting attention from the issue by behaving like the typical hegemon, grabbing territory both on land and at sea and bullying all those countries, who voice an opinion against her. Beijing is getting peeved at any country which is questioning the origins of the virus and threatening them with punitive action like how it has behaved with Australia. As per WION news of 25th June 20, nearly 100 countries worldwide have indicated their interest in investigating the origins of the virus. Beijing is rebutting all allegations and on the contrary controlling the narrative by trying to be savior of the world from the virus by supplying testing kits etc, a large no of which have turned out to be defective. However, the Dragon seems to have lost face with its own people, since a large majority has lost jobs and this coupled with its own frustration is compelling it to divert attention of its people by creating disturbance not only along the South China Sea but more importantly along Indian borders. There are numerous reports of Chinese hackers resorting to cyber attacks worldwide. China's belligerence at the Galwan Valley in Ladakh, wherein 20 Indian Army personnel lost their lives, depicts a devious, unethical, arrogant and an irrational attitude on their part. Needless to state that the world is taking note of all such activities by China.

US-China relationship

A very important aspect of Chinese policy is relationship with the US. The bilateral relationship which was dwindling prior to the pandemic due to trade standoff between them has almost hit rock bottom and it is now one of confrontation between the two. The pandemic has seen increasing rhetoric on both sides and with the election season in the U.S., confrontation is only likely to increase. Some US lawmakers and senators have even gone to the extent of asking China to pay for the enormous loss of lives and economic loss which they have suffered due to the Wuhan virus. China's brazen military activities in the South China Sea, with utter disregard to International Law have prompted the US Navy to deploy a huge naval task force of 3 Carrier Battle Groups in the region to deal with any Chinese misadventures. Overall, it is evident that China's credibility has taken a huge dip as far as the world opinion is concerned and it will impact China's economic and military prowess considerably.

Role of US in world affairs

Another trend that is taking shape is probably the fall from grace for the US. After a century of being in the forefront of shaping the global order and maintaining a substantial lead from whoever was in the second position, it appears that the US may be struggling to remain in the forefront. The enormous loss of lives from the Wuhan virus, followed by ugly protests across not only the US but also across the world, post racial killings by the police and bringing down of historical statues, all tell a tale of a gloomy outlook for the US and its gradual retreat from the top slot. US also seem to have lost the credibility that it had in its hey days. President Donald Trump's slogan of 'America first' is slowly giving way to 'America Alone'. The Trump Administration's policy of withdrawing from multilateral frameworks and institutions has put them on a shaky ground as far as world leadership is concerned. Whilst countries around the world were losing trust in the U.S.'s leadership on various matters, its bungled response at home to the pandemic indicates that the world is also losing trust in the competence of the US government. The above

notwithstanding, the U.S. still remains the largest economy and the largest military power but is probably losing the will and ability to lead. The withdrawal of US forces from Germany and Afghanistan are some indicators of this trend. China is trying hard to fill in this vacuum, by hook or by crook, but given its credibility and acceptability, especially in the post Covid-19 world, it probably has a long way to go.

The EU Scenario

The trans-Atlantic divide is also aggravating an intra-European rift. A fractured EU was visible, firstly by Britain's decision on BREXIT and thereafter during political mud slinging between EU nations, when Covid-19 cases were multiplying in various EU countries. Further damage was done when Italy, the first victim of Covid-19 in EU, was denied medical equipment by its EU neighbours, who introduced export controls, which ultimately led to China airlifting medical teams and critical supplies. The Shenzhen visa or free-border movement has already become a victim to the pandemic. The EU will need considerable soul searching to rediscover the limits of free movement of goods, services, capital and people, the underlying theme of the European experiment of shared sovereignty. ⁴

The Oil Factor

A very significant impact of this pandemic has been on the oil prices, which have taken a big hit. As is well known, oil is considered to be the prime mover of any economy and therefore any impact on oil prices will hit the world economy very badly. The resultant effect will be a looming economic recession and turmoil in oil prices. These in turn are likely to exacerbate internal tensions in West Asian countries, some of which are solely dependent on oil revenues. The Aviation sector has been hit very hard, with most countries struggling to recover post lock down. Similar is the case with the shipping industry. Whilst international shipping traffic has taken a huge beating, International oil trade has also been badly impacted by the pandemic. Huge oil tankers carrying hundreds of thousands tons of oil are stuck at sea, without any destination, since

there is no demand. This is also having a debilitating effect on the morale of the crew on board, some of whom have not been rotated for months. Further, long-standing rivalries in the Gulf region have often led to local conflicts but can now create political instability in countries where the political structures are fragile.

Opportunities and Challenges for India

Earlier during the lockdown period, Electronic and print media worldwide was agog with news that major companies the world over, would shift out of China as a punitive action against them for suppressing info about the pandemic during the initial phase. However, a big challenge for Indian manufacturers is to capture the market by way of prices and volumes, since China has penetrated our everyday lives in such a manner that no other country can match their prices. China is not only the world's factory for manufacturing common use and low end products but also the major investor in most ventures. Just to give an example, Chinese companies like Alibaba and Tencent Holdings Ltd are huge stakeholders in companies like Big Basket, Ola cabs, Zomato, Swiggy Paytm etc not to mention about the Chinese mobile companies like Oppo, Vivo, Xiaomi etc, which have literally flooded the Indian mobile market. Nonetheless, it is an opportunity for India to start replacing China as the world's manufacturing hub, provided India is able to make the overall environment conducive for manufacturing the range of products which China is doing at present. This will also require us to bring about a number of improvements in our overall system, change in work culture, changes in labour laws etc with an overall aim of creating a better business friendly environment.

National Security Strategy (NSS)

While there exist contingencies/strategy to deal with various kinds of NTSCs by various ministries/organizations in India, especially those concerning terrorism, natural calamities etc but given the initial response to Covid-19, there does not seem to be any contingency plans for dealing with infectious diseases in India. This virus has shown to the world that

of all NTSCs, pandemics are the most dangerous, since they have the ability to spread like wild fire and instill a fear psychosis in the world.

Most nations in the world have their National Security Strategy/ Defence White Paper published and available in the open domain. There is a strong case for having a comprehensive National Security Strategy (NSS) in India also, factoring in contingencies for NTSCs in it, with active involvement of the Armed Forces. This is especially relevant since Armed Forces are not only the first responders in case of natural disasters but also the major contributors. While the aim is not to downplay the role of agencies like NDRF etc but the muscle which Armed Forces can bring in any situation is much more than any other organization. Be it floods, cyclones, earthquakes, tsunamis etc it is only the Armed Forces which can muster not only huge resources but niche capability to mitigate the impact of the disaster. To give a few examples, in case of floods or cyclones, which are so common in India, it is only the Armed Forces which can provide resources like large manpower, helicopters, boats, divers, etc. Also pandemics and epidemics apparently don't form part of such strategies, whilst chemical/biological warfare, forms part of NSS. Given the scale of worldwide damage caused by Covid-19, it is important that a threat from an epidemic/pandemic alongwith the mitigating measures should find a prominent place in the NSS, since apart from its impact on the population, a pandemic like Covid-19 can also be used as a low cost weapon by terrorists to infect large population centres. Also mitigation measures for pandemics should be an important component of the National Disaster Management policy, since this is by far the worst disaster staring in the face of the country since partition. Further, the Armed Forces could be employed to play a significant role in a contingency like this. For example, apart from aid to civil authorities during Covid-19, the Armed Forces could have been involved more gainfully in a variety of roles e.g. to assist in transportation of the flood of migrant labour, whose movements were marred to a large extent by centre/state issues, creating/managing large scale distribution centres/quarantine/isolation centres etc. The Armed Forces probably could have managed the crisis in a much neater manner.

Successful Global Models to Tackle NTSCs

At a macro level, India can look at some international models to combat NTSCs. Whilst India has a time tested security system, it has some inherent shortcomings. Firstly it is very compartmentalized, with a strong turf protection mindset. Also delineation of responsibility between different agencies is very blurred, especially when there are centre/state issues. In order to have a comprehensive approach to tackling any future NTSCs, we could look at the model of holistic Defence which some countries follow. An example, which can be gleaned, is that of Sweden and Switzerland, which is also adapted by Singapore. The Singapore model is one, which can be suitably tweaked and possibly adopted by us incrementally. The Singapore Govt follows a concept which is called 'Total Defence'. It is based on the understanding that besides military action, aggressors can also attack the country by wrecking its economic system, tearing its social fabric apart, targeting Singaporeans' beliefs and commitment to defence, and its ability to recover from disasters, both natural and man-made. 'Total Defence' encompasses six key pillars which are, Military Defence, Civil Defence, Economic Defence, Social Defence, Psychological Defence and the latest one being Digital Defence. ⁵ These six verticals of a comprehensive Defence System encompass security of the nation in its totality. Given that we have a large population with numerous agencies involved with blurred lines of responsibility, coupled with centre/state issues, we probably can adopt an expanded version of 'Total Defence', especially when it comes to dealing with aspects like natural disasters, pandemics etc. Some of these verticals, especially those dealing with NTSCs could have a co-ordinating staff, drawn from NSCS, Armed Forces, NDMA, Niti Aayog etc, basically to ensure that there is proper co-ordination between the concerned ministries and departments.

Conclusion

The impact caused by COVID-19 is unprecedented. This has totally changed the way human beings lived just six months ago, wherein no one would have imagined a world with masks, sanitizers, social distancing etc.

Social norms like shaking hands, hugging etc have literally disappeared and 'Lockdown' has become a buzzword. All this has happened because of China, who in the initial stages of the pandemic tried to hide information from the world and thereafter continued to spin the narrative and that too when Beijing had the experience of a similar disease, i.e. SARS of 2003. Reports are emerging that China had come to know about the enormity of the problem much before Dec 19 but didn't sound the desired alarm till almost third week of Jan 20. Further, even WHO failed in its responsibility to sound a 'Health alarm' to the whole world. What is surprising is that the world today is in the grip of global pandemic, a never before seen crisis, one which is possibly the single biggest threat facing humanity since World War II. Hitherto the very mention of the axiom, Non Traditional security Challenge (NTSC) evoked a response in terms of say threats like terrorism, asymmetric threats, Hybrid warfare, cyber warfare etc but the threat of a global pandemic was never thought of. Today Covid-19 is emerging as the biggest NTSC for the world, since it can penetrate any household and cause death and destruction. Further, it doesn't have any cure and nobody knows how long it will last. However, the good news is that India seems to be managing the crisis reasonably well. At least it has learnt the correct lessons and hopefully any future contingency of this kind will not be as big a bolt from the blue.

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End Notes:

- i. NTS-Asia- Sourced from: Caballero-Anthony, M. (ed.). 2016. An Introduction to Non Traditional Security Studies – A Transnational Approach. Sage Publications, London.
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DEFINING NON TRADITIONAL SECURITY CHALLENGES IN THE INDIAN CONTEXT

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Introduction

The security is no longer confined to the conventional or traditional threats. Today, the term security encompasses a much broader connotation. The scope of threats has enlarged because of gradual but fundamental and long-term changes occurring in the international system.

Traditional security dominated the realm of security through much of the 20th Century. Military and especially nuclear security issues dominated the security studies field during its traditional, or 'golden age'. The 'golden age' received its name because at that time the field was productive, influential and coherent all at once, and served as the 'formative period of the new discipline. This era defined security studies and how academics and security experts viewed it. Transition from traditional to new forms of study of threats occurred in the 1970s and 1980s, which marked the turning point as the 1990s. There are two likely explanations: One explanation may be the shift in the United States foreign policy from deterrence to détente as an instrumental change for the security studies field; another explanation is that the shifts began to take place among experts and practitioners in the 1970s and 1980s but did not become institutionalized until the 1990s.¹

In general, there are seven security foci: military, nuclear, peace and conflict, economic, environmental, political and human. The categorization of these foci may, however, be done along the lines of

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traditional and non traditional security with military and nuclear security studies comprising the traditional security agenda while the remaining peace and conflict, economic, environmental, political and human constitute the burgeoning field of non traditional security studies.²

Traditional security primarily analyzes conventional foreign threats to state security. Including military and nuclear security, traditional security studies deal with military spending, research and development, organization and strategy, threat assessment, and issues of arms control and proliferation. Traditional security studies often require access to sensitive information and thus are likely to be handled by government agencies.

Non traditional security studies generally shift the focus from the state to the individual and recognizes a broader range of threats to national and individual security, including state and non-state actors / forces. Economic and environmental security are just two examples of this more decentralized conception of security, which closely affect individuals rather than states per se.³ As per the available data, non traditional security studies are very quickly becoming the norm. In fact, the non traditional security threats have become prominent with the flow of globalization, the increasing number of intra-state conflicts, and unprecedented role acquired by the non-state actors.

In the post-Cold War period the discussion on non traditional security was initiated by the United Nations' Development Program (UNDP) Report 1994. This UNDP Report basically encouraged international initiatives or debates on non traditional security and human security. Along with UNDP report, another school, which emerged to argue the criticality of new security, was the so-called 'Copenhagen School'. This approach not only broadened but also emphasized that non-military issues can be considered matters of security even if they are not threatening states.⁴

In 2004, UN Secretary General's panel identified a cluster of security issues, which went beyond the traditional concept of security. The high level panel drew attention to six clusters of non traditional security issues including large scale human right abuses, genocide, poverty, infectious disease and nuclear, radiological, chemical and biological weapons; transnational organized crime etc.⁵

It is proposed to study the subject under the following heads:-

- Non traditional Security Threats – Definition, Characteristics and Components/ Branches.
- Non traditional Security Challenges in the Indian Context.

NON TRADITIONAL SECURITY THREATS

Definition

Non traditional security threats may be defined as “challenges to the survival and well-being of peoples and states that arise primarily out of non-military sources, such as climate change, cross-border environmental degradation and resources depletion, infectious diseases or pandemics, natural disasters, irregular migration, energy, food and water shortages, people smuggling, drug trafficking and other forms of transnational crime.”⁶

These dangers are often transnational in scope, defying unilateral remedies and requiring comprehensive – political, economic, social – responses, as well as humanitarian use of military force.

Common Characteristics of Non traditional Security Threats

Non traditional security threats have certain common characteristics:

- They are generally non-military in nature.
- The threats are transnational in scope with regards to their origins, conceptions and effects. They are neither totally domestic nor purely inter-state and are transmitted rapidly due to globalization and communication revolution.
- They do not stem from competition between states or shifts

in the balance of power, but are often defined in political and socioeconomic terms.

- Non traditional security issues such as resource scarcity and irregular migration cause societal and political instability and hence become threats to security.
- Other threats like climate change are often caused by human-induced disturbances to the fragile balance of nature with dire consequences to both states and societies, which are often difficult to reverse or repair.
- National solutions are often inadequate and would thus essentially require regional and multilateral cooperation.
- The referent of security is no longer just the state (state sovereignty or territorial integrity), but also the people (survival, well-being, dignity) both at individual and societal levels.⁷

Branches of Non Traditional Security Threats

For the purpose of comprehensive analysis, one can divide non traditional security threats in to five broad branches:-

- Peace and Conflict.** It relates to the study of armed conflict between states, between states and non-state actors, and between non-state actors. The fields covered include the drivers of conflict (ethnic, linguistic, religious, politics etc.), the roots of terrorism, the prerequisites for sustainable peace, and the role of international actors in ending conflict and promoting peace.
- Economic Security.** It encompasses issues related to international trade, international finance, international aid and economic development. As a sub-field of security studies, economic security emphasizes the analysis of a country's economic power and development capacity relative to other states in the region or the world.
- Environmental Security.** It encompasses issues related to natural resources, environmental degradation, climate change and energy security.

- Political Security.** It encompasses issues related to law, democracy, corruption, foreign policy, regional confidence building, history, culture, civil liberties, nationalism and neocolonialism.
- Human Security.** It encompasses all issues related to development, education, culture, history, civil liberties, human rights and migration security, including human trafficking and refugee concerns.⁸

NON TRADITIONAL SECURITY CHALLENGES IN THE INDIAN CONTEXT

India, being a developing country with a growing population and limited resources, has the daunting task of providing jobs, food, water, education, health facilities and other necessities to the vast population. Any shortcoming in this will have adverse consequences. Even a cursory glance shows that India is vulnerable to terrorism, organized crime, illegal migrations and to the adverse effects of climate change. It is necessary to have an accurate assessment of the non traditional security challenges, which India faces. These are being elaborated in succeeding paragraphs and are not necessarily in the same order of priority.

Energy security. Energy is integral for an individual and collective progress of the society. It has become a strategic commodity considering the implications it has on sustained growth of economy and human development. India is pragmatic about its energy use, looking for alternatives but not sacrificing energy consumption. Given the scarcity of energy resources, high-energy prices, difficulties of access, transportation and shipping of energy resources, the threat of sabotage, ensuring energy supplies has become a top priority for foreign policy and security establishments. Though India scores high on energy security according to the World Energy Institute Index but the index has dipped almost every year since 2000. The reasons are reduction in energy storage and diversity of primary energy supply as

well as an import dependency. Therefore, India needs to mitigate import dependence on oil and gas; enhance domestic manufacturing; integrate large variable renewable energy capacity and optimize flexible operation of conventional generation.⁹

Food Security. Attaining food security is a matter of prime importance for India where more than a-third of its population is estimated to be absolutely poor, and as many as one half of its children have suffered from malnourishment over the last three decades. Several important issues have emerged in the context of food security in India. The challenges posed to food security in India can be listed as: liberalization of the economy and its impact on agriculture and food security; establishment of the WTO and the agreement on Agriculture; climate change and its impact on food production and prices; prevalence of hunger and poverty coexisting with high levels of food stocks; introduction of the targeted Public Distribution System; “Right to Food campaign; and the National Food Security Bill.

According to Food and Agricultural Organization (FAO), food security emerges when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security has three important and closely related components, which are availability of food, access to food, and absorption of food.¹⁰

Water Security. India is home to 18 percent of the worldwide human population and 15 percent of the worldwide animal population. However, it has just 4 percent of worldwide freshwater assets. It is estimated that per capita, yearly freshwater accessibility in 2019 was around 1,368 cubic meters, which is assessed to go down to 1,293 cubic meters in 2025 and further drop to 1,140 cubic meters in 2050.¹¹ A rapidly increasing population and urbanization have driven up water demands all across the country, while years of pollution, inefficient methods of farming, decentralized water governance, groundwater exploitation and

poor infrastructure have depleted the water supply. Trends are alarming and we cannot neglect this fact that we are already living under water-scarce conditions.

Water security is not only related to water for food and drinking, but it is also related to marketing and consumer markets also. The GDP of the country will also be affected because of this water crisis. Improving water security must be a cross-sectoral theme. It is essential to sustainably manage the nexus of water, food, energy and climate variability, to support sustainable socio-economic growth and political stability all across the globe.¹² Hence it is the need of the hour to chalk out the plans and make India a water-secure country and safeguard it from water scarcity. Good water governance is required in the country.

Infectious Diseases and Pandemics. Though the impact of infectious diseases and pandemics as a non traditional security challenge to the people of a nation was well known but the recent COVID-19 pandemic is an eye-opener. It started as a global health crisis, but it immediately spread to and started to influence the other domains of life all over the world. The crisis directly affected economies across the globe. All the economies of the world are under recession. In case of India, it exposed the gross inadequacy of public health infrastructure therefore we have to go for extended lockdown so that we could reinforce the health infrastructure for receiving and treating the rising number of COVID-19 patients.

We need to develop new techniques and technologies for infection control and commensurate vaccines across large populations. Cities, states and regions must consistently prepare to protect their people from pandemics through stockpiling, cooperative planning and exploration at the frontiers of science.¹³

Terrorism and Insurgency. The terrorism and insurgency are the most significant among India's security challenges. The transnational threat

of terrorism is closely related to India's traditional security threat vis-à-vis Pakistan. When India defeated Pakistan in 1971 and carved out a new state of Bangladesh from its erstwhile territory of East Pakistan, Pakistan realized that it could never defeat India in a conventional war. Hence Pakistan launched Proxy war against India and called its strategy as "*To bleed India by thousand cuts*". Initially Pakistan started by infiltrating terrorists in Jammu & Kashmir. While Kashmiri terrorist groups continue to focus their primary tactical efforts in the region of Kashmir, Pakistan initiated a new strategy to include large urban areas across India - attacks such as those on India's parliament in 2001, on the US consulate in Kolkata in 2002, and the Mumbai attacks of 2008, indicate a much larger area and scale of attacks under consideration by the terror groups. Lashkar-e-Taiba (LeT) and Jaish-e-Mohammed (JeM) are the main terrorist organizations operating from Pakistan.

Radical Maoist insurgents, known as the Naxalites, are a serious threat across several central Indian states including Orissa, Jharkhand, Chhattisgarh, Bihar, Madhya Pradesh, Maharashtra, and Andhra Pradesh. In the Northeast, insurgent groups similarly operate in Nagaland, Manipur, Assam, Tripura, and Meghalaya. Furthermore, insurgent groups developed bases in countries across the border including Bangladesh, Bhutan, and Myanmar.

These challenges are so complex and widespread that a whole-of-the-government approach involving military, paramilitary, central armed police forces and civil administration is required to neutralize them.

Organized Crime. Organized crime is a threat that is well connected with terrorism. Criminal groups in South Asia have been known to collaborate with terrorist groups in international operations on a variety of levels. The connections include logistical support in weapons procurement, shared routes, training, and ideological overlap. Organized crime networks have constructed a strong cooperative relationship with terrorist groups in the region. Terrorist groups leverage criminal trafficking routes for the

transport of weaponry, while the syndicates in return request training in the use of guns and explosives and safe passage through militant territory.¹⁴ Organized crime poses a serious problem for India, with well-established trade in drugs, weapons, and humans supported by the informal hawala money transfer network.

Drug Trafficking. Drug trafficking poses a highly entrenched threat to India. Much of the trafficking of narcotics and other illegal drugs in Asia traverses South Asia. Routes cross from Myanmar, Laos and Thailand (golden triangle) through India, as well as from Afghanistan, Pakistan, and Iran (golden crescent). Traffickers send narcotics from Afghanistan to Pakistan and through South India to the Indian Ocean and on to destinations in Europe and Russia. Heroin and other drugs are transferred from Southeast Asia and Myanmar through India to western destinations. India is also the world's largest legal producer of opium for pharmaceutical purposes. A small part of this licit production is diverted to be sold abroad illegally by organized crime, although the majority of diverted opium is used locally.¹⁵

Human Trafficking. Crime syndicates dominate the trade in people in South Asia and the numbers of prostitutes trafficked from or in to the region runs into the millions. Women are smuggled into India from Nepal and Bangladesh. The trafficking leads to yet another transnational threat, the rapid spread of AIDs in the region and in the present context one can add Coronavirus also. Approximately 0.36 percent of the adult population of India was infected with AIDs in 2006, representing more than 2.5 million people.¹⁶ Further, Dubai remains a popular destination and transfer point for prostitution organized by Indian criminal networks. These human smuggling routes could easily be leveraged by terrorist groups to transfer personnel and weaponry. There are number of examples, where terrorist and the sleeper agents have been infiltrated in to India through Nepal and Bangladesh.

Money Laundering. Transnational money laundering networks, also

known in South Asia as hawala, pose a threat in several arenas. These hawala networks originally arose from the weakness of the banking system in rural areas. The system, which relies on trust between individuals and social networks, is common in South Asia, particularly in India and the Middle East. Transactions can be as simple as an individual in Mumbai paying the illegal vendor \$5,000 in cash (in rupees), with another individual receiving the \$5,000 in dollars in New York, with little or no record of the transaction having taken place. The scale of such transactions is unknown, thereby leading to ubiquitous use of hawala by criminal and terrorist groups to transfer illegal proceeds.¹⁷

Economic Terrorism or Circulation of Fake Indian Currency Notes (FICN). FICN could be seen as a form of “economic terrorism” practiced by external sources to damage India’s economy. Economic terrorism refers to the behind-the-scenes manipulation of a nation’s economy by state or non-state actors. The Financial Action Task Force (FATF) Report of 2013 found that the Indian rupee was the ninth most counterfeited currency in terms of its value and stood third in terms of the number of FICN detected around the world. This is a grave concern to India and if not dealt with would have had serious implications as counterfeit currency can reduce the value of the currency and increase inflation. Most counterfeit Indian currency notes are printed in Pakistan, according to various intelligence inputs. Pakistan’s Inter-Services Intelligence (ISI) has been instrumental in pumping counterfeit Indian notes into India through several countries viz., Nepal, Bangladesh, Myanmar, Thailand, Malaysia, Sri Lanka, Dubai and even China is emerging as a new transit route. Often, ISI co-opts the Indian diaspora to send the FICN to India.¹⁸ Prime Minister Narendra Modi, in his address to the nation on 8 November 2016, while demonetizing Rs 500 and Rs 1000 notes, stated one of the reasons for this policy was to counter the rising menace of fake Indian currency notes.

Climate change. Climate change is regarded as an existential threat in the long term. The projected consequences of climate change such as

floods, droughts, sea rise, ice-melt and extreme weather events can have serious security implications. For example due to climate change, the Arctic Sea is melting as a result of which the geo political environment in the region is changing. The quest for hydrocarbons and other resources in the Arctic Sea has intensified. New shipping routes have opened up. India will need to study the impact of Arctic meltdown at its own security & foreign policy.

Environmental Degradation. India's economic growth has brought with it the challenge of environmental degradation. Deforestation, air and water pollution, poor sanitation, and the over subsidized use of natural resources are just a few of the problems plaguing the nation. Excessive bureaucracy hampers the ability of any agency to oversee and implement change. Lack of accountability among the agencies adds to the confusion, deterring interagency cooperation on solving critical problems. For example, Yamuna River in Delhi demonstrates lack of political will and bureaucratic failure in ensuring implementation on ground. A report by the Central Pollution Control Board stated that 70 percent of Indian urban areas had critically unhealthy air pollutant levels. The report placed responsibility for these rising pollution levels on increased vehicle usage and industrial production. Whereas car and two-wheeler sales are increasing at the rate of 15 percent per year, road capacity is expanding at less than 1 percent.¹⁹ The result is severe congestion and rising emissions. The environmental degradation in the neighboring countries also equally impacts our people. For instance, Chinese plans to divert waters from the rivers inside Tibet for hydroelectric power, farming, and industrial use in the dry North and Northwestern regions of China, would create shortages in both India and Bangladesh, raising alarm in both countries that China would wield greater power over the region's critical water resources.²⁰

Natural Disasters. Natural Disasters e.g. tsunami, floods, earthquakes, nuclear accidents/ incidents (Chernobyl, Fukushima) etc. can pose challenges randomly and pre planned measures are required for the mitigation of such disasters.

Conclusion

While there is a well-planned and coordinated strategy as also the customized organizations to handle traditional security challenges, the non traditional security challenges remain unpredictable in many ways and are complex in nature, requiring multi-pronged approach involving multitude of agencies. Left unaddressed even partially these security challenges would be detrimental to achieving the national objectives. The COVID-19 pandemic has raised the need to reexamine the multitude of non traditional security challenges, their mitigation measures and structures needed to proactively face them holistically.

While traditional security threats are confined in scope, non traditional security threats are unlimited and keep expanding based on the innovative mind and cunningness of non-state actors. The challenges listed above will never be complete. Bio-terrorism, Cyber-terrorism, irregular/economic migration, prosecution of minorities, piracy, religious extremism, virtual societal warfare for changing the values and behavior pattern of society and intervention into the education sector to degrade Indian civilization linkages, culture and beliefs are some other challenges. Demographic dividends/disaster and threat to Indian diaspora / Persons of Indian Origin (PIOs) such as discriminatory policies in Uganda, Kenya, Yemen etc. can pose a long term security challenge to India.

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SECURITY CHALLENGES: A CASE OF CONTINUITY AND CHANGE

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“Before all else, be armed.” - Machiavelli

Security

The break-up of erstwhile USSR opened up new vistas for the world politics and there was a transition from one dominant power to islands of many power centres and conflicts in the world socio-eco-politico-military landscape. New world order appeared with the “flat” world and the fight for “justice” took new forms with 9/11 attack in the ever-changing mosaic of Volatile, Uncertain, Complex and Ambiguous mass. It dawned that traditional militaries cannot address and eradicate extremists who are highly motivated and are ably supported by conducting influence operations by invisible or partly visible adversaries. The traditional threats so well defined during the cold war era changed their contours to encompass areas not envisaged before though debated. Covid-19 opened up a new paradigm of what could be a security challenge and the price of the ignorance is paid by downfall of economy, thousands of deaths -and counting- and the lockdown- an unprecedented upheaval of the world as one. For India, drought, locust swarming and unseasonal rains, not to speak of tremors if not earthquakes and always looming large on the horizon our neighbour China fills the glass. As Nye and Welch put it, the global stage is becoming crowded, and states are not the only actors anymore in a dynamic international political stage. As a result, states find it increasingly difficult and complicated in tackling these new-age conflicts, not because the rules of the game have

changed, but because there are no rules to begin with, in the first place. Security is dynamic concept. In today's date the term has a different meaning and value for scholars, policy makers and analysts from all over the world. In the words of Mahbub- ul-Haq "Human Security is not concern with weapons. It is concern with human dignity". Thus human security is security of the people and also security of an individual- the security which is available everywhere, in homes, at jobs, on streets and environment. Human security develops through humane development. Security of human being and at the same time security of the state is also important. There is always a fear that the state can exceed the limit of legitimacy to indulge in unacceptable level of violence. Thus state becomes the provider and predator of security. Natural hazards such as tsunami, earthquakes, floods, landslides and drought are taken as act of God and hence security assurance against them needs to be built up by allocation requisite resources to disaster management agencies with well defined areas of control, freedom, accountability and responsibility. In the same category would be external aggression by adversaries in a traditional domain that is by land, sea or air or a combination of these.

Politics and Securitization

The famous quote "Politics have no relation to morals" by Machiavelli is being proven once again in Covid spread if the origin of the virus is to be believed to be laboratory driven. And it seems will be proven again and again in the zooming fight of supremacy and the statecraft. Politics simply put is governing people by securitization. Securitization is a process through which public issues become security issues that require special attention of the State and need to be always handled and resourced by the Government. Therefore, in a sense, securitization will be synonymous with politicization. This is more so since conventionally, security represents highest interest of politics. The security challenges emanate from the concept of security which is always evolving based on leadership, values, society norms, justice demography and many other factors not to forget technological innovations and classical fight between capitalism and communism, authoritarian regimes and

democratic regimes et al. Machiavellian threat is a term that captures the general nature of the threats quite well. Machiavellian political doctrine placed expediency above political morality and countenanced the use of craft and deceit in order to maintain authority and effect the purposes of the ruler. It could well have aims and goals at odds with its target and may be prepared to flout protocol, civility, ethics and even law to achieve goals. If the security challenges are Machiavellian, then the answer lies in the corresponding Machiavellian robustness to counteract the challenge successfully. The protocol design of the security challenge or threat would be governed by actively hostile and intelligent protocol designers that can transcend any border, nationality, faith, belief and value system. If we consider security apparatus as a network of networks, then the challenges emerge from the possibility of threat to its confidentiality, integrity, availability, authentication, access control, authorisation, accounting and non-repudiation. The taxonomy of actively malicious intelligent parties will include intrusion, disruption, exploitation, co-opting, probing and nuisance.

Dangers to Security

Security challenges could be “hard or soft”, “traditional or non traditional”, “active or passive”. As Kautilya put it, the various kinds of dangers are:

- that which is of external origins and internal abetment,
- that which is of internal origins and external abetment,
- that which is of external origins and external abetment,
- that which is of internal origins and internal abetment.

Of these four kinds of dangers, internal dangers should be got rid of first; for it is the internal troubles, like the fear from a lurking snake, that are more serious than external trouble. Prof Balbir Singh Sihag author of “Kautilya: the founder of Economics” has observed that Kautilya adopted a multi-pronged approach towards National security, a rarity in his times. Traditional and Non Traditional threats are therefore intertwined. Historically, national security was perceived within the traditional

framework by keeping nation-state at the centre. ...Non traditional security revolves around the human face of security where socio-economic survival and sustenance are central. Non traditional security is also defined as human security. Because of the very nature of perception of what human security is and its complex relationship with conventional security perception, the challenges are accordingly congruent as well as converging. Traditional security issues are about the threats against the essential values of the state, territorial integrity, and political sovereignty. ... All such means, as well as the essence of traditional security, are constantly changing under the impact of technological innovation, new ideas, and political evolution. The “Traditional Notion of Security” covers both the external and internal threats of a country’s security. External threats consist of four components i.e. military threats, threat of war, balance of power and alliance building, while internal threats can be many.

The Complexity

As Dupont stresses, “The security of states has no real meaning if divorced from its human constituents. This is even more so when one tries to define the desirable outcome of activities to render human communities secure. Camilleri asserts that the critical issue is the maintenance of a social order that is able to generate sufficient degrees of confidence into the future. Security is therefore a psychosocial condition. In an effort to give the concept explanatory power despite its multidimensional character, Camilleri, in line with McSweeney, conversely defines insecurity as “related to the experience of social disruption, the fragility of social relationships, the absence of cognitive control over, or affective empathy with, various forms of human interaction (which obviously include the ecological implications of such interaction). Camilleri consequently defines insecurity as the “perceived disruption—actual or potential—of the social order.” In this paradigm where insecurity is inextricably linked with the problem of collective identity, nationalism, and the nation-state are modern and far-reaching responses to the experience of insecurity. However, problems such as the lack of capacity and good governance, as well as the increasing salience of transnational phenomena, challenge the conventional notion of states as single providers of security for their

citizen. While political security and economic security is well appreciated, human security could have seven categories viz. unabated population growth, disparities in economic opportunities, excessive international migrations, environmental degradation, drug production and trafficking, international terrorism.

Traditional Versus Non Traditional Security Threats

The difference between traditional and non traditional security threats is not so water-tight now as it perhaps appeared in the last century. The traditional concept of security envisages the use of military means to deal with the threats to the unity, territorial integrity and sovereignty of a state. Now, a level of ‘permeability’ has evolved. The difference can be seen in the table given here.

Traditional	Non traditional
<ol style="list-style-type: none">1. Traditional notion is concerned with the use of military, war, balance of power and alliance building.2. Traditional notion is concerned with the state and its governing institutions.3. It is confined to state only by thinking of internal and external threats.4. Its main focus is on force only to achieve the target.	<ol style="list-style-type: none">1. It goes beyond military by threatening conditions necessary for human survival.2. It covers broad aspect of security i.e. hunger, diseases, etc.3. It covers not only the state but also all individuals or human kind.4. It comprises cooperation, hence it protects human or global security.

It can be seen that the features/ characteristics of non traditional security are that they are non-military in nature, transnational in scope- neither totally domestic nor purely interstate and can be transmitted rapidly due to the globalization and communication revolution. They are defined as challenges to the survival and well-being of peoples and states that arise primarily out of non-military sources emanated by the non-state actors.

In Volume 54 Issue 1 April 2019 of International Journal of Engineering, Applied and Management Sciences Paradigms(IJEAM), Hoang Dinh Phi, Nguyen Van Huong, Hoang Anh Tuan, Nguyen Xuan Huynh have given a comparison between TS and NTS, company’s

competitiveness to assess the management's effectiveness and efficiency.

Description	Traditional Security (TS)	Non traditional Security (NS)	Similarity TS-NS	New Points of NS
Basic Concept: State- centered approach, hard security; people-centered approach; soft security; two Sides of a coin	TS is national security. State centred approach hard security	NTS is the security of state, humans (communities), and enterprises. People centred approach, soft security	Inter-related relationship, two sides of a coin	NTS is a new concept started in the era of globalization
Main Aim	Protect State, sovereignty, and territory against military threats	Ensure safety, stability, and sustainable development of State, humans, enterprises	Inter-related relationship	Humans and enterprises recognize the aim to manage their security
Main actor, subjects in management	State	State, humans, enterprises	Inter-related relationship	Humans and enterprises have legal rights to protect themselves
Main Tools	Laws and policies, army and weapons, police and arms	Laws, policies, and resources of state power and resources of humans power and resources of enterprises	Interrelated relationship	Humans and enterprises have soft power and resources to manage
Direct Impacts	Survival of governing party, political regime, sovereignty	Stability of State survival and happiness of humans safety and development of enterprises	Interrelated relationship	Impacts can be scalable, national and transnational

From above, it can be seen how closely the two types of threats are intricately linked in terms of their relationship. That also highlights the complexity, the congruence and the convergence in these threats.

Human Security Index

The Human Security Index (HSI) aims to characterize the security of an individual or group at home, in one's village, country, and the Earth.

Is everyone treated well, not unduly deprived of education/ knowledge and a healthy and peaceful life? The HSI aims to support existing and future developers of well-intentioned indicators which may be used by development analysts/ strategists/ implementers, by emphasizing outcomes rather than modalities. The HSI is now conceptually framed in a trinity of economic, environmental, and social fabric. The Economic Fabric Index attempts to characterize financial resources, including protection from financial catastrophe, for everyone. The Environmental Fabric Index blends risk of environmental disasters, environmentally healthy living conditions, environmental sustainability and governance. The Social Fabric Index blends diversity, education and information empowerment, food security, governance, health, and peacefulness. All this is a work-in-progress, with additional input datasets being evolved. Mahbub ul Haq first drew global attention to the concept of human security in the United Nations Development Programme's 1994 *Human Development Report* and sought to influence the UN's 1995 World Summit on Social Development in Copenhagen. The UNDP's 1994 Human Development Report's definition of human security argues that the scope of global security should be expanded to include threats in seven areas that are given in succeeding paragraphs.

Economic Security. Economic security requires an assured basic income for individuals, usually from productive and remunerative work or, as a last resort, from a publicly financed safety net. In this sense, only about a quarter of the world's people are presently economically secure. While the economic security problem may be more serious in developing countries, concern also arises in developed countries as well. Unemployment problems constitute an important factor underlying political tensions and ethnic violence.

Food Security. Food security requires that all people at all times have both physical and economic access to basic food. According to the United Nations, the overall availability of food is not a problem; rather the problem often is the poor distribution of food and a lack of purchasing

power. In the past, food security problems have been dealt with at both national and global levels. However, their impacts are limited. According to UN, the key is to tackle the problems relating to access to assets, work and assured income (related to economic security).

Health Security. Health security aims to guarantee a minimum protection from diseases and unhealthy lifestyles. In developing countries, the major causes of death traditionally were infectious and parasitic diseases, whereas in industrialized countries, the major killers were diseases of the circulatory system. Today, lifestyle-related chronic diseases are leading killers worldwide, with 80 percent of deaths from chronic diseases occurring in low- and middle-income countries. According to the United Nations, in both developing and industrial countries, threats to health security are usually greater for poor people in rural areas, particularly children. This is due to malnutrition and insufficient access to health services, clean water and other basic necessities.

Environmental Security. Environmental security aims to protect people from the short- and long-term ravages of nature, man-made threats in nature, and deterioration of the natural environment. In developing countries, lack of access to clean water resources is one of the greatest environmental threats. In industrial countries, one of the major threats is air pollution. Global warming, caused by the emission of greenhouse gases, is another environmental security issue.

Personal Security. Personal security aims to protect people from physical violence, whether from the state or external states, from violent individuals and sub-state actors, from domestic abuse, or from predatory adults. For many people, the greatest source of anxiety is crime, particularly violent crime.

Community Security. Community security aims to protect people from the loss of traditional relationships and values and from sectarian and ethnic violence. Traditional communities, particularly minority ethnic

groups are often threatened. About half of the world's states have experienced some inter-ethnic strife. The United Nations declared 1993 the Year of Indigenous People to highlight the continuing vulnerability of the 300 million aboriginal people in 70 countries as they face a widening spiral of violence.

Political Security. Political security is concerned with whether people live in a society that honours their basic human rights. According to a survey conducted by Amnesty International, political repression, systematic torture, ill treatment or disappearance was still practised in 110 countries. Human rights violations are most frequent during periods of political unrest. Along with repressing individuals and groups, governments may try to exercise control over ideas and information. Since then, human security has been receiving more attention from the key global development institutions, such as the World Bank. Tadjbakhsh, among others, traces the evolution of human security in international organizations, concluding that the concept has been manipulated and transformed considerably since 1994 to fit organizational interests.

Management of Non Traditional Security (MNS)

As a new branch of management science, MNS is now at the first stage of its development from theory to practice. Caballero-Anthony and Cook have introduced a normative framework for a comprehensive understanding of the decision-making process in MNS, and for the evaluation of the success or failure of a given NS policy response. The eight characteristics identified by the United Nations (UN) are elaborated in the framework, including: participation by both men and women; the rule of law; transparency; responsiveness; consensus-oriented; equity and inclusiveness; effectiveness and efficiency; and accountability. This basic tool is important for the evaluation of the NS policies of governments in general, but it is inadequate to assess the MNS at the institutional level (ministry, city, provincial, district, commune) and at the corporate level. By reviewing the current approaches to NS studies, it can be concluded that approaches are widely different and each approach is often developed

and applied for one area of NS studies. So far, there has not yet a comprehensive or multi-purpose approach for MNS. WHO's approach is appropriate for the collaboration in management of global health security at international level. UNDSS's RSM approach is mainly designed for the management and protection of human security for UN personnel. And FAO's FIES approach is adequate for measurement and monitoring the state of food insecurity at the global level and national level. Since 2015, for three years of research, the authors have designed, developed and tested the MNS Basic Equation as the theoretical framework for the analysis and/ or combined qualitative and quantitative assessment of the MNS at national, subnational and corporate level and in most areas of NS:

$$\begin{aligned} \text{MNS of a Subject} &= (\text{Safety} + \text{Stability} + \text{Sustainability}) - (\text{Cost} \\ &\text{\& Result of Risk Management} + \text{cost and result of Crisis} \\ &\text{Management} + \text{Cost \& Result of Crisis Recovery Management}) \\ \text{MNS (or S in short)} &= (S1 + S2 + S3) - (C1 + C2 + C3) \\ S &= 3S - 3C \text{ where, } 3S, 2S, 3C, 2C \text{ do not hold the mathematical} \\ &\text{meaning of multiplication but rather verbal notation.} \end{aligned}$$

This basic MNS equation can also be called the 3S & 3C Equation for easy reference. This equation is designed and tested based on the financial principle that, as the result of a management process, any security value must be considered in relation to the loss and the cost of the investment paid for the related activities to get the result. S1, S2, and S3 are the factors that represent the final results or achievements of any MNS activity during a period of time, while C1, C2, and C3 are the factors that reflect MNS activities and the associated cost. For a simple and basic assessment of MNS, a short form of this equation, that is, 2S & 2C or $S = (S1+S2) - (C1+C2)$, can be used for various purposes.

From the foregoing, it is seen that non traditional security challenges are many with overlap on traditional threats thus having a congruence as well as convergence as finally it will be the State which has

the legitimacy to use force for implementation as Weber puts it. One can classify the threats in many ways. Information security, religious ex-tremism, proliferation of chemical and biological weapons, N-security, poverty, national and international organised crimes, international terrorism, infectious diseases, epidemics and pandemics, energy security, water scarcity and contamination, climate and environmental changes are also to be treated as non traditional security threats as the ramifications impinge on human dignity in some form or the other. Lyle J. Goldstein has observed that the approaches of US and China towards non traditional security are not congruent but quite complementary. The challenges once analysed threadbare will give the remedies and actions to be taken by the individuals, groups, society, the State and the world as a whole.

“When we try to pick up anything by itself, we find it hitched to everything else in the universe.”

- John Muir

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End Notes:

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NON TRADITIONAL SECURITY CHALLENGES IMPACT AND MITIGATION

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Threats and challenges that are non traditional in nature (NTSC) are often neglected or not adequately appreciated, even though they threaten the very survival and well being of the country. Such traits could range from global pandemics, climate change, irregular migration, transnational crime or even economic instability. According to Anthony Caballero in his book, “An Introduction to Non traditional Security”, these threats are often transnational in nature and require united efforts of more than one state.

A flurry of articles doing the rounds indicate that China in some manner has won the Third World War without firing a shot. Whether the pandemic was part orchestrated or not, too much credit is being given to China. One way or the other, it is a definite wake-up call and a harbinger of emerging threats.

Non traditional threats like biological warfare and the like will need greater attention both from the preventive and defensive measures point of view. Proactive and possible offensive use of such weapons by rogue adversaries will also have to be catered for. Nations are fighting the crisis on a war footing. Countermeasures being taken are that of a biological war. Qiao Liang and Wang Xiangsui, in their book titled ‘Unrestricted Warfare,’ published in February 1999, cited several instances of non-conventional attacks. More than any physical war, it is the psychological warfare dimension that will become extremely important.

The United States and Europe suffered the most initially, perhaps due to complacency, delayed response, a large influx of Chinese tourists and returnees from China post business or travel. According to a report published by The New York Times on 22 March, “at least 175,000 people left Wuhan on 1 January 2020. The departures from Wuhan accelerated over the next three weeks. About 7 million people left in January, before travel was restricted. By the time Wuhan was placed under a lockdown and airlines started cancelling flights... outbreaks were already growing in over 30 cities across 26 countries, most carried by travellers from Wuhan.” China is widely acknowledged as the origin and the main cause of the spread of the virus, which is commonly being called the Wuhan or the Chinese virus. As a result, it has become the target of worldwide resentment, although it is trying all possible means to deny the alleged accusations. This crisis has also raised doubts on the vigilance and effectiveness of the World Health Organization (WHO), which is expected to be at the vanguard.

Israeli Prime Minister Benjamin Netanyahu said, “We are at war with an invisible enemy: the coronavirus,” and declared “Israel is going to use counter-terrorism technologies to track coronavirus carriers”. India should participate in the rising echo of voices against China for its alleged role in the origin and spread of the corona virus. The demand by the US and several other countries to force the WHO to institute an inquiry in this regard must be supported vigorously. Coronavirus pandemic is, beyond reasonable doubt, an outcome of criminal negligence on the part of Chinese authorities.

India has coped relatively better due to quicker reactions, leadership initiatives and citizen cooperation. Its response to the crisis appears to have a positive effect on the world, as being a responsible power that has the situation generally under control.

IMPACT AND MITIGATION MEASURES TO OVERCOME CHALLENGES

Healthcare

The focus in any threat or epidemic must always follow the dictum that prevention is better than cure. We are all aware that the ultimate answer to the Covid 19 virus is finding a suitable vaccine. However, that is many months away. In the meantime, we should concentrate on preventing the virus from spreading. Prevention is a sine quo non for every perceived challenge or threat. Sagacity lies in its anticipation and preparation. Especially in matters of healthcare, this means increasing the immunity levels across the wider cross section of the population to make our future generations healthier and stronger. This should be part of the basic foundation of any health care programme.

Every adverse situation has a silver lining and this is no exception. The central and state budgets for health have always been abysmally low. Perhaps this is a God given opportunity to revisit the allocation of funds to medicine and healthcare. There is an urgent requirement of building medical infrastructure and healthcare facilities, especially for emergency and trauma services. Emphasis must be laid on conducting quality research and development both at the government and private levels. Measures must be taken to provide space to traditional streams of medicine like ayurveda, unani and homeopathy. The Ayush Bharat programme is a step in the right direction.

Mindset Changes

De-congestion of cities and metros has been much debated but rarely implemented. Overcrowding in urban areas has reached unsustainable levels. Urban and town planning parameters are generally given a go by at the altar of redevelopment and employment generation. Unplanned and illegal construction is the bane of vote bank politics and has ruined natural and artificial drainage systems in towns and cities, besides being an impediment to fire safety norms. Creation of open spaces and green areas must be made mandatory for any new construction. Emphasis

should be laid on the development of tier two and three cities with their integral ecosystems. Proliferation of educational institutions in smaller towns will ensure that there is no rush of students to move to metros.

This is as good a time as any to re-awaken to the significance of climate change. Just a few months into the threat of this pandemic and the world has already accepted the immediate and substantial effect on pollution stricken areas. Better air quality index and the appearance of birds and wildlife in urban areas has been an eye-opener. It is obvious to the planners that thermal power shall continue to remain the mainstay of the Indian energy sector in the near to medium term. However, there is also a dire need to refocus on energy use and strive for renewable energy.

A very significant mindset change has been the concept of work from home. Although this has been prevalent in the western countries, it had started building its roots in India in the last 5 to 10 years. The pandemic of course has now led to the entire workforce of some organisations undergoing an almost complete shift. For many corporates, work from home might become the new normal especially information technology, knowledge workers and consultants. Many large companies have been pleasantly surprised with substantial savings in transportation, logistics and electricity. Video conferencing is the order of the day and group meetings on Google, Zoom and the like have become very popular indeed.

With extended lock downs, lifestyles have undergone an almost irreversible change. Not inviting visitors at home has become an accepted norm. Being forced to stay indoors although resented initially is now being followed willingly as a healthcare necessity. Network streaming on the TV, laptop or the mobile phone has become the most sought after form of entertainment. Propensity to manage with less and imbibe a frugal lifestyle is becoming commonplace.

National cause must have priority over social cause. While human security and citizen welfare is mandatory, it cannot be at the expense of

national security and the greater cause. It is incumbent on leaders at all levels to appeal to the citizens at large that differences based on political ideology, caste, religion or region must be cast aside. Solutions have to be arrived at by following a mature, humane and inclusive approach in an atmosphere of social equilibrium.

Economy

Though relatively successful from a public health perspective, the Indian economy has been severely impacted by the nation-wide lockdown. As is the case all over the world, irrespective of the type of national response, economies have suffered a major setback due to Covid 19. Most official sources and rating agencies, both global and internal have indicated a steep fall in the GDP estimates. The contraction may not be uniform but will differ from sector to sector. Income drops have been reported across the nation and unemployment has risen to almost 30%. Over half of the businesses have been affected with supply chains placed under tremendous stress. The rural sector showed admirable resilience and bore the impact reasonably well. Government revenue especially tax collection has been severely affected.

A string of measures have been announced by the government to restore the situation ranging from healthcare to food security and direct relief to the poor and marginalised segment of society. An economic package worth Rs 20 lakh crore was announced by the Prime Minister with an emphasis on self-reliance. There is however an eager expectancy in the public, especially the business and trading community at large that the Finance Ministry and the RBI will take further steps to revive the economy.

The lock down has not only affected lives of people globally, it has had a huge impact on the digital economy. Online meetings, business deals, training, concepts and webinars have become much more acceptable, thereby leading to increase of internet data consumption. Usage of document signing solutions, open source material and cloud computing has gone up many fold. The hardware industry has however

been hit hard, for example mobile handset manufacturers. While the digitally enabled continue with their lives and livelihoods, those who do not have access to digital infrastructure are facing prospects of loss of income. As educational institutions remain closed, the digitally challenged will find it hard to compete due to lack of access.

Research and development will assume far-reaching significance. A greater stimulus to indigenous research and adequate funding will become absolutely vital.

Structural Philosophy

Keeping the federal nature of our government as enshrined in the Constitution, it was obvious that there were likely to be challenges in the realm of governance and control. With different political parties holding the reins at the Centre and in many of the states, there was possibility of contradiction in policy-making and thought processes in an emergency situation. However, the pandemic required the state to take charge and regulate the public in a manner that would prevent the virus from spreading and for the betterment of society. The country's healthcare system that includes government hospitals down to the district level, doctors and healthcare workers had to be controlled centrally for a cogent and effective response to the pandemic. The contribution of the private sector was always a given but the conditions under which these had to be provided and the timing had to be considered by the public health authorities. Despite the hesitancy and reservation by some of the states, the guidance from the Centre was well received and worked out reasonably well.

The National Disaster Management Act 2005 was invoked to control the situation. It emerged that the Act had not been fully designed to cater for non traditional security challenges like this pandemic. It has been suggested in some quarters that a separate legislation for mitigation of NTSCs be taken up. It was observed that several prompt actions were taken to overcome the emergence of unexpected threats in the current situation. Although it would be prudent to consider amendments

and modification in the Act for the future, it should not necessitate an all-together fresh legislation. Existing linkages must be strengthened between the ministries, NSCS, NDMA, NITI Ayog and such relevant organisations. A team of experts could be tasked to identify likely non traditional threats and recommend an appropriate response philosophy.

External Dimension

Most experts feel that China will continue to grow at a slower pace but its reputation having suffered, it may have to be content with a lower profile in international relations. On the question of global firms looking for areas beyond China to manufacture their products, many are of the opinion that India can benefit from this situation but it needs to showcase itself as an attractive market and a profitable manufacturing hub. The time is ripe to strategically leverage our size, population and markets. The federal and state governments must work in tandem to identify specific industries and sectors that need to be developed with an eye on their potential for growth. In the medium to long term, supply chains involving China must be reworked.

Over-dependence on China is likely to see a reversal from most of the major economies. Regional and global alignments may undergo a significant change that could be detrimental to China's global designs. The QUAD group of countries that include the US, Japan, Australia and India, several African nations as well as regional groupings such as the EU and ASEAN, could reconsider their political and economic postures. As of now, many countries across continents have based their relations with China purely on economic benefits that accrue as a result of their cooperation with it. China's attempt to realign globalisation with its Belt and Road Initiative could possibly be retarded to some degree.

A global challenge as unique and at such a massive scale as this one would certainly necessitate a re-assessment of the geo-strategic and geo-political equations in the corridors of diplomacy and national security. It is a time to assume a leadership role by proactive intervention

and cooperation. The situation arising from this epidemic must be gainfully exploited by India as it provides an opportunity to occupy its rightful place in the emerging world order.

Impact on the Defence Forces

Almost all departments of the Ministry of Defence have come forward to contribute to mitigate the challenges posed by this pandemic. Efforts range from evacuation of stranded civilians in foreign countries to providing relief material across the nation. The initiative of the Government to reach out and show genuine concern for the Indian diaspora has instilled tremendous faith and confidence. Medical and manpower resources have been dedicated to treating patients and quarantine centres have been established in many stations. Defence PSUs like BEL, OFB and BDL have taken up Covid related manufacturing. With the global supply chains coming under pressure, there is a greater thrust on local supplies. Impetus is being given to create indigenous substitutes as part of the Make in India programme to reduce dependence on imports.

The emergence of a non traditional threat does not necessitate the reduction in conventional force levels. This must be resisted at the outset, as it is a dangerous thought. Space, cyber and NBCW dimensions have to be given a higher weightage in planning and implementation. Information warfare will play a key role in any future design of confrontation or conflict.

The Territorial Army system needs a relook. The structure could be on the lines of the National Guard of the USA. In this case, the States will have a quicker response instead of the Centre having to react each and every time. The essential services component of the Territorial Army should be revamped, especially the medical segment. A closer integration with the National Defence Response Force is also necessary.

The ex-servicemen fraternity is increasing every year by almost 50,000. Availability of a young, disciplined and dedicated force between the ages of 40 to 65 is presently not playing any role in nation building,

except in solitary pockets and that too on a voluntary basis. NTSC situations are a great opportunity to display their organisational skills, law enforcing acumen and even healthcare experience. They could be structured into a force of emergency responders. With the necessary legislative process, a modified organisation could be carved and linked to the Reservists or some such existing model.

The Corps of Military Police and its counterparts in the Navy and the Air Force could be gainfully employed in times of national emergency. However, they must be provided police powers that they do not presently have. The Army Act and corresponding Service Acts will require necessary amendments after due legislation. This is as good an opportunity to do so as it will be highly useful in counter terrorism and counter insurgency operations. Women soldiers in the CMP with police powers will be an invaluable asset.

Availability of technology and the awareness of its utility in multifarious ways should be adopted into the education and training philosophy of the armed forces. Online education programmes and optimal utilisation of workspaces should be the order of the day. Co-opting non-military and non-serving officers for instructional purposes should become the norm. Qualified retired officers should be employed for virtual classroom instructions. Technology enhancers and specialised IT training should be encouraged.

The work culture in the defence services should be open to review. Particularly in peace stations, the newer work methodology should be adopted. Work from home should be encouraged wherever feasible and possible. Dependence on clerks should be reduced to the barest minimum. Working online while strictly adhering to cyber security should be the form. This would also help in reducing paperwork. Video conferencing will reduce travel both inter and intra-city.

The defence services are already a shining example of secularism.

There is a requirement to lay emphasis to ethics, values, mindfulness and consciousness. Introduction of spiritual training in stages and at the appropriate levels is the need of the hour. Yoga must form an integral part of the physical and mental well being of soldiers, sailors and airmen. This would be an excellent subject that could be introduced at the Indian National Defence University.

Healthcare has been a very important facet in the Armed Forces. The medical services have been rather rigid in following their time tested allopathic systems. Resistance to accept alternate streams of ancient medicine must be worn down. Ayurveda, homeopathy and such known ancient practices must be allowed to complement the existing system to a measured degree.

Conclusion

India's political and healthcare decisions have received adequate domestic support and worldwide acclaim. The joint emphasis on lives and livelihood has worked reasonably well on balance. Mitigation of any national level threat will necessitate a holistic approach employing all elements of comprehensive national power.

What has emerged is that the old and traditional ways of living and thinking are no longer sacrosanct. All assumptions and perceptions need to be questioned so that various options and contingencies can be deliberated upon. In the short term it is necessary to fine-tune the control measures but as we go forward, it would be prudent to cater for better surveillance to check potential risks. The government has to focus on the long and tedious road to recovery. Policy makers will have to offer fresh solutions with clarity and foresight to the Government who in turn should be willing to make tough political decisions.

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CBRN THREATS AND THE ROLE OF THE NDMA FOR MITIGATION

Cmde G Prakash, NM (Retd)*

Opportune Moment in History

There couldn't have been a more opportune time to write this piece. Here we are, in a world overwhelmed by a biological disaster that, as of 10 Jul 2020 when I am writing this piece, has infected over one crore twenty six lakh people the world over and killed almost six lakh. USA, a 'superpower', looks fragile and vulnerable, with over 32 lakh infections and the number of deaths fast approaching 1,40,000. As an example of the terrible state of helplessness the famed 'powers' of Europe are facing, Britain has had around 3,00,000 infections and over 40000 deaths. We in India are beginning to realise that we aren't headed for rosy times either, with known infections approaching nine lakh and the number of deaths breaking records on many passing days.

Worse is the fact, that no one has any idea as to how and when this pandemic will subside. Meanwhile, the virus continues to spread. Its source, ostensibly under investigation, is a subject of much speculation and international bad blood. People the world over are going through hell. Unemployment, poverty, inequality and uncharted depths of depression from unaccustomed forced lockdowns inside homes, are wreaking havoc.

Every generation encounters localised disasters of various intensities. But once in a long while comes along, a global pandemic that causes cataclysmic destruction. The Covid 19 episode is one such,

coming one hundred years after the previous one, the Spanish flu, which killed around five crore people worldwide. The Covid 19 episode has shown us the entire spectrum of the disruption possible from a true blood Biological disaster. Other than personal tragedies associated with the massive scale of death, world over, production and consumption have been hit and supply chains lie fallow. The world's wealth has diminished and the future looks bleak. Theories, policies, beliefs across a large spectrum of areas, from international cooperation to local disaster mitigation have been tested and many have been revealed to be meaningless.

So, this is an excellent time for reflection. But any thought that the world as a whole will learn serious lessons from this episode and move to restore a less chaotic, less strenuous, more cooperative, more benign, gentle world of milk and honey, is utopian. As long as humans rule this world, conflict and strife are assured. The regular chemical accidents we keep encountering, the unending terrorist action from Pakistan even in these times of Corona etc must convince us that each element of CBRN will remain ever relevant to India. The only sane option is to expect more disasters in the future and prepare international, national and local structures for mitigation. However, as the current happenings between WHO and USA show, even international structures may not work when in real trouble and countries will turn inwards during such times.

National Security & NDMA

Though anything that had the potential to degrade the life of any citizen constitutes a national security issue, this view was accepted by the world only a few decades after the second world war. National security remained linked purely to military dangers till then. Today, with neighbours looking to exploit any little chink in our society to imperil us, there are plenty of ways in which non traditional methods can be used to endanger our national security. As the necessity directly emanates from the security of the nation itself, the structures created for mitigation have to be necessarily uncluttered, nimble and above all, supremely

empowered. The NDMA, with its present structure, mandate and functional architecture doesn't appear to meet such lofty requirements.

History shows that bad times bring a combo of trouble and multiple problems tend to co-exist. For instance, during the Spanish Flu, despite tens of millions dying worldwide, the highly resource intensive World War I continued, that too for several years. The same way, even during the current Covid 19 crisis, the world is seeing several traditional as well non traditional security challenges at play concurrently. Successful mitigation of these simultaneously is possible only at the apex level, ie, by the National Security Council itself. It is a question of balancing myriad fights, with limited resources, with the criticality of each challenge changing priorities all the time. It is the NSC alone which can achieve this. Offloading an important part like CBRN threats to an agency like NDMA and its subsidiaries is likely to result in failure.

Tsunami Effect

Despite the occurrence of various disasters since independence, especially the terrible Bhopal Gas Tragedy of 1984, it was only in 1999 that a High Powered Committee was set up for Disaster Management at the national level. Though this was followed by the setting up of a National Committee after the Gujarat earthquake of 2001 to make recommendations on the preparation of Disaster Management plans and suggesting effective mitigation mechanisms, it was the Tsunami of Dec 2004 that provided new vigour to the process.

India's quick reaction in reaching out with assistance to Sri Lanka, Indonesia and Maldives, mainly through a massive deployment of the Indian Navy, duly supported by elements of the Army and Air Force, was a watershed event. India had reacted faster than the Americans in our region and that too, when we ourselves had been hit by the Tsunami. The distinct capacity excess, will to act and competence that we displayed made the world sit up and take notice. This event led to India formalising its approach to disaster management with the Disaster Management

Act (DMA) of Dec 2005 and the formation of the National Disaster Management Authority (NDMA) and the National Disaster Relief Force (NDRF) subsequently. The critical lesson we must remember from this genesis is the unbreakable link the armed forces have had with disaster relief in India, and for ever will retain, whenever India will face a disaster. Greater the disaster, greater will be the role of the armed forces.

NDMA

It is acknowledged that with the enactment of the DMA, a paradigm shift happened in India's approach to disaster management. This was a shift from post disaster relief and rehabilitation to pre-disaster prevention and preparedness. Therefore, fittingly, NDMA's stated Vision came to be, to 'build a safer and disaster resilient India by a holistic, pro-active, technology driven and sustainable development strategy that involves all stakeholders and fosters a culture of prevention, preparedness and mitigation'. This is comprehensive. But it is also a tough task to achieve this vision, especially in a complex country like ours. With the conviction that critical analysis and questioning the status quo contributes greatly to useful progress, I write the following.

Enduring Strength of Armed Forces

The armed forces have held centre stage in mitigating almost every major disaster in India because of certain advantages they alone enjoy among the various Government agencies in India. Salient among these are their size, training, discipline, equipment, organisation and the ability to innovate in the face of uncertainties. Also of importance has been the sheer geographic spread of the Armed Forces in our country. With all these, it was possible for them to effectively contribute to disasters in India, where about 58 per cent of India's geographical area is earthquake prone, 68 per cent is drought prone, 12 per cent is flood prone and eight per cent prone to cyclones.

Further, the large Indian Navy, and in some ways the IAF too, have had long years of experience in helping many foreign countries in

recovering from natural disasters. The confidence that the citizens and official machinery in India and in several countries abroad have gained from our illustrious past is immense. This cannot be allowed to wither away. Hence, it is important that the NDMA structurally embraces the armed forces much more than it does now.

Prevention & Preparedness

The shift of our Disaster Management doctrine from post disaster relief and rehabilitation to prevention and preparedness comes with great responsibilities. Firstly, as disasters directly degrade national security and disrupt the lives of our citizens, the investment behind the new doctrine has to be without limits, always erring on the side of caution. Prevention demands major changes to our culture, in the way we view safety, our basic honesty, sense of responsibility to the community and discipline. In a country where the majority is bogged down in their daily struggles, and deeply weighed down by legacy societal baggage, expecting them to get converted is illogical. In this light, the present number of people the NDMA plans to train as trainers to spread awareness and the efforts being taken to influence the general public's approach to safety and disaster prevention, appear inadequate. The gigantic effort involved in meeting the stated vision, can be greatly offset with the use of as many as we can get from the large pool of about three million ex-servicemen in the country.

NDMA – Leadership

Though the NDMA has the Prime Minister himself at its head, its current manning appears inadequate. Though the DMA 2005 caters for up to nine Members at the apex level to provide leadership under the PM, only five have been filled. One retired General, two IAS Officers and two professionals in the field of disaster make up these five. It is important that the remaining four vacancies be filled with Officers from the Army, Navy and the Air Force, with at least one being a CBRN Specialist. Further, there are definite gains to be made by inducting more Armed Forces personnel qualified in CBRN, who retire from Short Service

Commissions, into the NDMA staff. It is also useful, if Members of the NDMA and the people under them are chosen for their qualifications and experience in the study and management of disasters, rather than by rank held.

Perils of Multi Agency Cooperation

As it often happens with Govt organisations in India, the mandate, structure and mode of functioning prescribed for NDMA is not likely to produce useful results. The sheer task of coordinating with multiple ministries is unwieldy. The National Executive Committee too, is too unwieldy to be even gathered together easily. For meaningful results to be achieved, NDMA/ SDMA must have sweeping powers across departments.

Empowering Local Govt Bodies

However much we in India make our apex organisations strong structurally, there is no doubt that it is the robustness of systems and structures at state and local levels that can make mitigation of any disaster effective. Disaster after disaster have revealed the *sarkar mai baap* approach of the average citizen. This is an unfortunate mindset that originated and solidified during the long years of colonial rule. It was the result of the Benevolent Feudalism the British employed in their colonies. While local governments are supported with money, other resources, sharing of best practices etc, it is the general public that we must work on. Not an easy task in India, where much of the population is struggling to make a living or is distracted by a multitude of divisive issues.

CBRN & India

Traditionally, it is the armed forces that have shouldered the lion's share of tasks during natural disasters in India. They have also been the most invested in the study and mitigation of the R and the N elements of CBRN threats. While the C element of CBRN has received some attention from civil society owing to a string of industrial disasters, the B element has

lain somewhat under addressed. It is important for us to build on the existing strengths, in order to achieve useful proficiencies at the national level.

Chemical Threats

Independent India has regularly faced chemical disasters. However, the industrial mishap at Vizag in early May 2020 that killed 11 and led to over 5000 being hospitalised remind us, that incidents like the massive Bhopal gas Tragedy that killed 5295 are not incidents from an industrially backward past, not likely to recur. Industrial accidents will happen again, owing to procedural mistakes, dereliction of duty, poor quality material used in creating infrastructure, poor maintenance or sabotage. It is well known that strict implementation of existing rules, strict periodic inspections and assured, expeditious exemplary punishment for violations will bring much relief in the future. However, realities like confrontational politics, social contradictions, poor levels of education and corruption have the potential to condemn the long line of our industrial disasters to perpetuity.

There are two steps for its mitigation. One is the induction of motivated professionals from the field of academics and social work into the disaster management system, along with executive powers akin to the bureaucracy. The second is to bring in qualified personnel from the vast pool of ex- servicemen available in this country. Combined, these two groups can effectively ensure the entire spectrum of preventive as well post disaster measures, like enforcement of town planning rules for siting human dwellings in the vicinity of industrial areas, training the population on detecting and identifying chemical fallouts, enabling people to take care of themselves, creating infrastructure for shelters, and developing methods to disseminate warnings with speed, devoid of confusion. Above all, it is strict enforcement of industrial safety regulations that can avoid chemical disasters. When a NDMA member was asked at a post disaster press conference how they planned to ensure that disasters like the recent one at Vizag didn't recur, his answer

was that adherence to the existing rules simply had to be enforced. Mitigation of Chemical threats therefore is best done primarily through strong authority.

Biological Threat

The Covid 19 pandemic has indicated how any amount of preparation can flounder in the face of a massive scale Biological disaster. Now that the destruction that a Biological attack can create has been practically demonstrated, the world will do well to unite against sinister agencies which would have noted the possibilities and may aim to employ Biological warfare.

Though without the flashiness of a nuclear explosion, Biological threats hold the maximum potential for disruption in time, space and effect. As they are also relatively easy to perpetrate, they should receive the most urgent attention at the highest level. Hence, this should be directly under the NSC itself, with orders directly going to SDMAs, in order to avoid unnecessary levels of communication which cause delays. Here too, the armed forces, with their huge spread and capabilities should immediately be called in to help at the large scale required. A case in point is the unprecedented mass migration of labourers that happened as a result of the national lockdown. The armed forces could have done an excellent job of facilitating that mass movement, devoid of pitfalls brought on by politics.

Radiological & Nuclear Threats

While radiological threats through industrial mishaps can be expected to be rare, it is a possibility through dirty bombs emanating from countries where Govts are hard pressed to protect their radiological assets. With nuclear threats too not easy to materialise in the modern world against pure civilian areas, actions for the mitigation of Radiological and Nuclear threats could be primarily left to the armed forces. Though the related orders would have to flow from the NSC, a small military authority and a large pool of nationally distributed, trained former military personnel

could run the national effort in managing these two threats wherever they occur.

CBRN – Not Undetachable

Grouping entities not entirely connected with each other is a common trap. Sometimes such vestigial hyphenations are simply legacy groupings, made when much was not known about each entity involved. Separating each element and resolving the challenges around each is a practical solution. CBRN appears to be one such. Someone somewhere in the past linked them and we continue with it. Going by their characteristics, CBRN is best handled in three separate entities. C and B as independent entities and R & N as a third one.

Preparing the Population

The most difficult thing in India is making the general population aware of various dangers, training them to contribute to mitigation and making them understand that they themselves are the solution till specialist help arrives. This is best done through civilian structures and hence is one area where NDMA can concentrate on. The Indian population in general is hugely deficient of a culture of safety. While it is possible to get some success through educating adults, the main effort should be among children, through school and community programmes. Training should therefore become a core area for the NDMA.

USA – A Fine Model

Govt organisations around the world tend to solve problems gone by and fail to adequately look ahead. The Federal Emergency Management Agency (FEMA) under the Department of Homeland Security in USA is one such. This agency set up in 1978 – 79 was celebrated, till Hurricane Katrina happened in August 2005, causing \$100 billion in damage and over 1,800 deaths. In the severe criticism that followed, FEMA underwent a major transition. However, it being a Govt organisation, some problems still remain. Some things that changed since Katrina and some which

didn't even after the experience of Katrina, are excellent indicators for us in our approach to disaster relief.

Improvements

One was leadership. The Director of FEMA at the time of Katrina was a political appointee with no background of disaster relief activities, who had to retire in disgrace soon after the event. From then on, leadership of FEMA is always with an experienced vertical specialist in disaster relief. Next was the change of disaster relief doctrine into a primarily 'whole community' approach that involved the private sector, community groups and common citizens in disaster preparedness. Here, care was taken to see that the private sector involved was seen by FEMA as partners and not as subordinates. Another was the increased use of social media for information exchange between government agencies and the civil society. The next was adopting a doctrine of prevention and preparation, going beyond mere re-building, which manifested in fine tuning urban housing regulations, improvement to canal networks, roads and other infrastructure. Probably the most important was the great enhancement in authority for FEMA, which allowed them to move resources to disaster zones before the disaster rather than wait for formal requests from governors after the event. From then on, truckloads of food, water and tents would be positioned outside flood zones, waiting for rains to subside so they could be rushed to the recovery zone.

Personal Experience

This author has personally witnessed the above in operation when in the USA during Hurricane Florence in Sep 2018. We were scheduled to travel by road from Florida to Maryland and had to advance our journey by a day owing to the hurricane. As we dashed over 1100 miles that we had to cover - owing to automatic redirection of traffic away from the coast to make way for citizens leaving the vulnerable areas and for disaster relief forces to move in, - we saw the massive mobilisation. Thousands of military vehicles, cranes, water bowsers, refrigerated

trucks, fuel tankers, ambulances et al, were moving towards the areas likely to be affected. The radio gave reliable official information regularly and advanced computer modelling made accurate predictions. The President signed the necessary order to treat the event as an emergency well in advance and there was a reassuring feeling of someone being in effective charge.

What Remains Unchanged

Foremost among these is the lack of sustained attention from the Dept of Homeland Security, whose priorities justifiably keeps shifting. Despite the renewed focus since Katrina, FEMA still has limitations in its powers with respect to prevention and preparation, mainly in the area of deciding land use, zoning and development, which are made at the state and local levels. Further, politicians and bureaucrats at all levels of government have taken their eyes off disaster relief, leading to inadequate enforcement of legal norms and facilitation of violations under influence of various hues.

Way Ahead

In its current form the NDMA doesn't appear to be adequately endowed to handle its entire mandate, which includes CBRN threats. Towards this, a fresh central legislation for mitigation of NTSCs, akin to NDMA Act 2005 may be considered necessary. Further, as sweeping powers across ministries, as well as between the central and state governments will be required for effective control and coordination, especially during the preparation and post disaster recovery phases, the National Security Council may have to be assigned the responsibility for operationalisation of the new legislation. An additional wing could be created in the NSCS for this purpose, manned in a large measure by members from the armed forces, both serving and retired.

The existing linkages could be strengthened and new, exclusive linkages created among NSCS, NDMA, NITI Ayog and concerned

Ministries for ensuring a proactive and prompt response for mitigation of all NTSCs. These linkages must adopt a unified functional approach between the Centre and the States, like what exists between NDMA and SDMA.

Core agencies made up of vertical specialists need to be created separately for handling Chemical and Biological elements of CBRN from civilian backgrounds and a combined agency created for Radiological and Nuclear elements comprising of specialists from the armed forces. These agencies could be charged with making up the core handling teams at the NSCS in case of disasters, while NDMA could be tasked to concentrate solely on coordinating training and awareness campaigns in the country. It is a different kind of jointness that the country needs, in handling disaster relief in general and CBRN threats in particular.

The country is still awaiting a National Security Strategy document. Devoting a major part of this document to management of NTSCs, especially CBRN threats, would pay much dividend. This document could make provisions for additional budgeting to meet the operating expenditure for the NSCS, NDMA and other entities involved.

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CENTRAL AND STATE AUTHORITIES IN MITIGATION OF NON TRADITIONAL SECURITY CHALLENGES

Shri R Chandrashekhar*

In his seminal treatise *'An Introduction to Non Traditional Security Studies – A Transnational Approach'*, Caballero- Anthony, Professor of International Relations and Head of the Centre for Non Traditional Security (NTS) Studies at the S. Rajaratnam School of International Studies, Singapore outlines the characteristics of non traditional security threats as when *"the referent of security is no longer just the state (state sovereignty or territorial integrity), but also the people (survival, well-being, dignity) both at individual and societal levels"* and that for such non traditional threats, *"national solutions are often inadequate"* and these *"essentially require regional and multilateral cooperation"*.

A requirement for some cooperative spirit is necessary between the Central and State Governments in Federal Structures like India that have large land masses.

Major Non Traditional Security Threats (NTSTs) for India

The serious Non Traditional Security Threats India faces are terrorism, organised crime, drug trafficking, illegal migration, disasters caused by cyclones, earthquakes, floods, landslides etc., besides shortage of natural resources, environmental degradation and currently, the ongoing COVID-19 pandemic.

This article focuses on the roles of the Central and State Governments in India in their effort to coordinate their respective efforts seamlessly to face the challenge of Non Traditional Security Threats.

India's Federal Polity

India has a Federal Structure of Government wherein there is a division of power between the Federal (Central) and State Governments. The other defining features of federalism in India are the Supremacy of the Constitution, an Independent Supreme Court and Upper House of Parliament (Rajya Sabha) representing the States of the Union. This is of particular significance as Bills brought before Parliament by the Central Government are debated and discussed in the Rajya Sabha, at which States have representation, before they become law.

INDIA'S SECURITY ARCHITECTURE

Constitutional Provisions

As mentioned, the 7th Schedule of the Indian Constitution contains three lists – Union, State and Concurrent lists.

Subjects that fall within the ambit of the Union List include defence, foreign affairs, railways and banking.

The State List contains subjects such as police, public order, and public health. Article 355 of the Constitution expressly casts a duty on the Union to protect every state against external aggression and internal disturbance.

Although “Public Order” is listed in the States’ list of subjects, States may require the assistance of the Armed Forces of the Central Government in times of serious disorder mounting to “internal disturbance”.

Parliament has the exclusive power to legislate in respect of matters in the Union List and States Legislatures insofar as subjects in

the State List. Parliament and the State Legislatures also have power to make laws on any matters in the Concurrent List, which includes subjects such as criminal law and procedure, civil procedure, education, marriage and divorce.

Residuary power to legislate on matters that are not mentioned in either of the list rests with Parliament.

Articles 73 and 162 of the Constitution stipulate that the executive power of the Centre and the States is co-extensive with their respective legislative powers. This means that Central and State governments can only take executive actions in matters where Parliament and State legislatures, respectively, have powers to legislate.

A law made by a State legislature, repugnant to a law made by Parliament or an existing law applicable in that State, in regard to any matter enumerated in the Concurrent List, shall be void to the extent of repugnancy.

Decision-Making Authorities and Agencies of the Central Government

Decision-making and Executive Agencies of the Central Government that compose the Central Security Architecture of the Nation for all Security threats, including NTSTs, are the following:

- The Cabinet Committee on Security (CCS) and the National Security Council (NSC). *(Chaired by the Prime Minister and comprising of Ministers of Home Affairs, Defence, External Affairs, Finance with the NSA as an attendee of the CSS and as a member of the NSC).*
- The Cabinet Secretariat and the National Security Council Secretariat (NSCS) *(Report to the Cabinet Secretary and the National Security Adviser respectively)*
- The Ministry of Home Affairs.
- The Intelligence Bureau (IB) *(Reports to the Home Minister).*

- The Research and Analysis Wing (R&AW) (*Reports to the Cabinet Secretary, which is under the direct charge of the Prime Minister*).
- The Joint Intelligence Committee (JIC), National Technical Research Organisation (NTRO), Aviation Research Centre (ARC) (*Report to the NSA who reports directly to the PMO*).
- The Defence Intelligence Agency (DIA) and the Intelligence Agencies of the Armed Forces.

Central Government Controlled Executive Agencies and Organisation

The Central Armed Police Forces

- ***With Border Management Responsibilities*** : Assam Rifles (AR), Border Security Force (BSF), Indo Tibetan Border Police (ITBP), Sashastra Seema Bal (SSB)
- ***With Law and Order and Internal Security Responsibilities:*** Central Industrial Security Force (CISF), Central Reserve Police Force (CRPF), National Security Guard (NSG).
- ***With Responsibility for Disaster Management:*** The National Disaster Response Force. (NDRF). (*Set up as per the Disaster Management Act*).

The Armed Forces as Responders

The Armed Forces constitute an important element of Government's response capacity. The Indian Armed Forces are supposed to be called upon to intervene and take on specific tasks only when the situation goes beyond the capability of civil administration. Though they are to be the second responders in a major disasters / situations, but generally become the first responders, particularly if located nearby. Due to their ability to organize action, speed of operational response and the resources and capabilities, the Armed Forces have played a major role in emergency support functions such as communications, search and rescue operations, health and medical facilities, transportation, power, food and civil supplies, public works and engineering and maintain law and order.

States – the ‘Executors’ of Central Laws

It is important to note that in the event of occurrence of NTSTs the responsibility to undertake rescue, relief and rehabilitation measures and delivery of assistance to affected people is that of the State Governments.

State Government Decision-Making Apparatus

At the State Capital

- Each State Government has its own Cabinet of Ministers serviced by the respective Chief Secretary and a Department of Home Affairs under who the State Police apparatus operates.
- The State Police has responsibility to handle regular crime investigation. There is a network of Police Stations, each with jurisdictional responsibility for assigned areas of the State.
- The Special Branch, which is a separate wing of the State Police that handles intelligence-based operations.

Executive Authorities at Subsequent Levels

The Officers involved in decision-making at levels below the State capital are Revenue Divisional Commissioners and Other Heads of Departments, Collectors, Sub-Collectors, Tahsildars, Block Development Authorities (Block is the unit of Relief Organisation with BDO in charge of the unit), State level Committee on Natural Calamities, District level Committee on Natural Calamities, Panchayat Samities and Gram Panchayats.

District Collector – The lynchpin. The district administration is the focal point for implementation of all governmental plans and activities. The Collector of the district is the administrative head for all matters within the district and is an official from the Indian Administrative Service. The appointment has three major functions - Revenue, Magisterial and Development. Apart from these major functions, the appointment carries a large number of miscellaneous functions entrusted on it by both the State and the Central Governments, such as conduct of elections,

supervising local government institutions, and importantly dealing with calamities / situations where people of the District are affected at large.

District Apparatus. Districts have a Crisis Management Committee, usually headed by the Collector. There are also Incident Response Team (IRT) at District, Sub District and local levels. IRTs comprise of a designated official with responsibility of Incident Commander, other officials and generally a Liaison / Public Relations Officer (composition and designation would vary from State to State). The District Authorities have responsibility for planning operations and logistics and for ensuring capacity development, general awareness and, programs to prevent / counter the fallout of threats.

Urban Bodies. The responsibility to manage incidents and disasters in urban areas rests with the Municipal Commissioner and Chief Executive Officer. The urban local body (Municipal Corporations/Councils) are responsible for formulation of master plans, training and capacity building of municipal staff, conducting general awareness programs in the urban areas, functioning of fire services, setting up of search and rescue teams, operationalizing emergency medical teams, ambulance services etc., as necessary.

Block and Tehsil Level. At the block/Tehsil level, Incident Response Teams are headed by Sub Divisional Officer/Tehsildar.

Panchayat Level. Panchayats are responsible to take necessary action in their zone of authority.

State Disaster Management Authority

Under the Disaster Management Act 2005, States have their respective State Disaster Management Authority under the Chairmanship of the Chief Ministers with Members nominated from the experts, ministers and bureaucrats with Chief Secretary as the Member Secretary. All decisions of the Authority are deemed to be a decision of the Government and

no further references are required in order to implement the decisions taken by the Authority.

Each district is also mandated to have a District Disaster Management Authority, who will make a District Disaster Management Plan, set up an Emergency Operations Centre at the District HQ and for capacity development and to carry out activities for prevention, preparedness, and mitigation of impact of the disaster.

Legal Provisions

There is an array of laws that have been brought into force from time to time to empower Government and its Agencies, both at Central and State levels, to better face threats and situations.

Unlawful Activities Prevention Act (UAPA), 1967 *(as amended from time to time)*

Designed to deal with associations and activities that questioned the territorial integrity of India, the UAPA is compliant to the provisions of the 7th Schedule of the Constitution. The UAPA has seen several amendments, the most recent being the Unlawful Activities (Prevention) Amendment Act, 2019 (UAPA, 2019) which dealt with expanding the definition of “terrorist” to include individuals under Section 35 and 36 of Chapter VI of the Act. The NCTC Order, 2012 (discussed subsequently) has also been issued under the provisions of the UAPA, 1967.

National Security Act (NSA) 1980

NSA, 1980 is amongst the most draconian laws operating with its provisions considered as easily prone to misuse. Section 3 of the NSA gives power to the Central and State Governments to detain individuals for a maximum period of 12 months. Government is also allowed to withhold information supporting detention made under its provisions in “public interest” and the detained person not allowed a lawyer during this period.

The National Investigation Agency (NIA) Act, 2008

The NIA, brought into force as a consequence to 26/11 Mumbai Attacks authorises the setting up of a National Investigation Agency (NIA) to meet the need for a specific body to deal with terror related activities. It is a Central Counter Terrorism Law Enforcement Agency empowered to deal with terror related crimes across states without special permission from the States.

There are apprehensions in some States on how the provisions of the NIA Act infringe powers of States. The Government of Chattisgarh has filed a petition in the Hon'ble Supreme Court challenging the NIA Act in its present form. As pleaded in the petition, (the Act in its present form) *“not only takes away the power of conducting investigation by the plaintiff through Police but also confers unfettered discretionary and arbitrary powers on the defendant. Moreover, there are no rules governing the exercise of power which gives ample discretion to the defendant to exercise its power at any juncture without providing any reason or justification for the same.”*

The NIA Act does not require the Centre to take prior consent from the State before taking over an investigation of a case in that State which clearly repudiates the idea of State sovereignty as envisaged under the Constitution as it *“completely takes away the States’ power to investigate offences which have been categorised as scheduled offence under the NIA Act which has been committed within the jurisdiction of the State.”*

NCTC Order, 2012

The National Counter Terrorism Centre (Organization, Functions, Powers and Duties) Order, 2012 was issued in 2102 to set up the NCTC under the provisions of the UAPA, 1967. The very preamble of the Order states it to meet the need for *“single and effective point”* of control and coordination of all counter terrorism measures and that it is *“desirable that the body be equipped to (i) integrate all intelligence; (ii) analyse it; and (iii) effectively respond to it”*.

The purport of the Order is that specialised capabilities come at a price and are a scarce resource to be under the control of the Centre to be utilised whenever and wherever required across the country. Unlike the American NCTC (which deals only with strategic planning and integration of intelligence without any operational involvement), the Indian Agency (since established) was to not only have intelligence functions but also empowered to conduct operations.

Opposition to the NCTC

Various States had forcefully raised the issue of such sweeping powers vested in a Central Agency violating the autonomy of state governments, given that as per the 7th Schedule of the Constitution 'law and order' is a State subject.

Strategic experts, important amongst them being B Raman, former Additional Secretary of the Cabinet Secretariat and one-time head of the counter-terrorism division of the R&AW had pointed out that there are significant loopholes which may still be used in selectively targeting States for political ends.

At the operations level, opposition to the NCTC had been on account of how the Agency was being empowered to search and arrest people without keeping State governments, their Police or Anti-Terror Squads in the loop. NCTC Officers have the authority to enter States at will to conduct search/ arrest operations without informing the State machinery.

The States' however view this as sanction for arbitrary exercise of power. The Centre on its part sought to assuage concerns by State Police DGPs and Chiefs of ATSS being made members of the NCTC Standing Council and being informed prior to NCTC conducting an operation in their State. States would prefer 'joint operations' instead which would safeguard the efficacy of the authority of State Police Forces.

Some States have taken initiatives to empower themselves with adequate laws as also to build capabilities to face challenges peculiar to them. Some such laws that are invoked frequently and are often discussed are the following:

Maharashtra Control of Organised Crime Act, 1999 (MCOCA).

Enacted to combat organised crime and terrorism states in its Preamble that *“the existing legal framework, i.e. the penal and procedural laws and the adjudicatory system, are found to be rather inadequate to curb or control the menace of organised crime. Government has, therefore, decided to enact a special law with stringent and deterrent provisions including in certain circumstances power to intercept wire, electronic or oral communication to control the menace of organised crime”*. Some ‘draconian’ variations from the normal law are confessions before senior police officers are admissible, not only against the accused giving the confession but also against the other accused in the same case and being here is no provision for granting anticipatory bail for 6 months to the accused.

Karnataka Control of Organised Crimes Act, 2000. Modelled on the Maharashtra Control of Organised Crime Act, 1999 with the stated purpose to fight underworld and organized crime. An amendment bill was passed on 29 July 2009, making main changes to the Act, adding ‘terrorist act’ to purview of ‘organized crime’.

The Gujarat Control of Organised Crime Act (GUJCOCA) is drawn on the lines of the MCOCA and the Karnataka Control of Organised Crime Act (for Karnataka) Act. It had been passed by the Gujarat legislature in April 2003 but has been accorded accent of the President only on 5th November 2019. The long-standing controversy regarding delay in grant of Presidential accent has raised serious debate on the nature of federalism in India and how harmonious are Centre-State relations in the Country.

Specialist Forces

A good example of States ramping up own capabilities is that of the Andhra Pradesh Greyhound Force (since split between AP and Telangana) that are specially trained for deep forest pursuit and combat. The Force was raised in the year 1989 at the initiative of IPS officer K. S. Vyas who was sadly assassinated by members of the PWG against whom the Greyhounds achieved enormous success and have been described by senior Police Officers as the best anti-insurgency force that specialises in anti-Maoist operations and as experts in jungle warfare.

Centre – State Issues from handling of the Ongoing COVID 19 Crisis

In case of the ongoing COVID Pandemic, the Central Government however invoked the Disaster Management Act, 2005.

‘Public health and sanitation’ are specific subjects of legislation under the State list. The Epidemic Act, 1897, in Section 2, gives powers to the State Government if it is satisfied that any part of the state is affected by or threatened to be affected by outbreak of any dangerous epidemic disease and if it feels that there are no measures in the ordinary provisions of law to deal with the said epidemic, the State Government may take following measures for the safeguard of the public at large.

The role of the Central Government under Section 2A is to inspect ships and vessels leaving or arriving in the territories of India and also empowers the government to detain such vessels if required. The pandemic being in the nature of an epidemic is considered by states to be a subject within their allocated subjects and the Central Government, by invoking the Disaster Management Act, 2005 this is seen by States as the Central Government overriding their jurisdiction. The Disaster Management Act 2005, invoked in case of the ongoing pandemic, mandates the Centre to consult States. The fact that states have expressed apprehensions itself indicates a lack of adequate consultations.

The Central government's zone classifications into 'red' and 'orange' zones for instance, evoked sharp criticisms from several States who complained of absence of consultation and demand for more autonomy in making such classifications.

Ambiguous orders regarding inter-State movement has left the fate of hundreds of thousands of migrant workers in a state of chaos to be handled by district administrations with inadequate resources.

In case of Threats affecting more than one State or are of 'pan-India' nature, urgency is for assessing the nature of impact, its magnitude and to determine the response. As it is the States that are required to provide 'last mile' mitigation and relief so their direct participation in decision making forums are necessary to avoid gaps in plans and their execution.

The contention of States too, are not without merit. A case in point is Chief Minister Naveen Patnaik's contention of the NCTC not to be bestowed such wide-ranging power of arrest, search and seizure that are not provided for in any democracy. At the functional level, the prospect of needless competition between a Central Intelligence Agency and the local Police Force could impact information sharing and investigations negatively. Past instances of the Central Government promulgating Ordinances that impact Centre – State Relations have also not been helpful.

On the flip side, even well-motivated initiatives by the Central Government to address impact of threats have faced strong resistance and came to be viewed as an attempt to encroach on the powers of the States.

A balanced assessment however is that the pandemic however is a 'never before' type of threat the likes of which would not have been envisaged by the Founding Fathers at the time of drawing up Subject

lists for the 7th Schedule of the Constitution. Even if intentions and motives at all levels are noble, there is need for a transparent 'inclusive' approach to assessing the dimensions of the threat and drawing up response strategies.

National Security Imperatives in Conflict with Constitutional Tenets?

Need for pragmatism to realise that when a grave National Security threat looms on the Nation, the Centre must assume responsibility and do so for the entire period of the threat persists. There may be requirement to set up 'threat-specific' mechanisms, even ad hoc special Agencies whose mandate and terms of functioning States would need to accept. In such times, insistence on adherence to the division of powers as laid out in the 7th Schedule would be anachronistic.

Federalism in essence is a symbiotic relation between Centre and States. The Centre by itself has neither ware withal not outreach to conduct, say intelligence gathering activities or investigation of crimes. Cooperation of States in providing information, conducting investigations and a host of activities ranging from ensuring law and order, providing relief etc is vital.

Centre at the Helm

The nation as a whole must rise above mindset, organisational ego and political differences to face and impending crisis. At times when a catastrophic threat looms, the nation must bind as a whole to combat it.

In doing so, the initiative, primacy and responsibility to take the lead and steer the nation through choppy waters vests with the Central Government.

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THE NEED TO FACTOR NON TRADITIONAL SECURITY CHALLENGES AS PART OF NATIONAL SECURITY STRATEGY

Lt Gen Rakesh Sharma, PVSM, UYSM, AVSM, VSM (Retd)*

Prelude

The traditional Tamil treatise, Thirukkural, written over 2,000 years ago had defined a nations' characteristics, "*Pini inmai Selvam Vilaivinbam Emam, aniyenba Nattirkiv vainthu,*" implying that, "The important elements that constitute a nation are: being disease free; wealth; high productivity; harmonious living and strong defence."¹

Indian security compass have changed unimaginably in 21st century. In 2020 alone, the security ambit has stretched the nation and governance immensely. The year will be remembered in the world and in India for the catastrophic pandemic COVID 19, that has seen over 22,000 deaths already, hundreds of thousands affected, unprecedented lock-downs, and yet no end in sight. Two major cyclones, Amphan on 16 May in Orissa and West Bengal and Nisarga on 01 June in Maharashtra wrought havoc. There were 134 terrorists killed in Jammu and Kashmir and 646 cease fire violations took place on the Line of Control with Pakistan Army from 01 Jan to 30 June 2020.² There is a serious conflictual scenario ongoing with Peoples Liberation Army of China in Eastern Ladakh. In June 2020 itself, hackers based in China attempted over 40,000 cyber attacks on India's Information Technology infrastructure and banking sector. Massive rains have brought flood like situation in Mumbai in July 2020. To top it there was localised but severe

gunfight between UP Police and gangsters near Kanpur. In all a heady concoction, all under the larger head of 'security'!

The shift in the nature of conflict – the diversity and diffusion of threats, the lethality and typology of weapon systems developed or under development, is forcing states to consider new ways of protecting their monopoly on violence. Hence, the nature of future conflicts may require that those concerned with preserving the state's monopoly on force look beyond traditional categories. For example, overpopulation, unemployment or economic disparities will be a source of future conflicts, they are worthy of the security planner's attention. Indeed socio-economic issues become part and parcel of the comprehensive national security, augmenting territorial protection of nation's frontiers, air space and maritime domains, as also safeguard national interests.

The greatest challenge of our times is to be able to make correct and timely assessments of the changes taking place and the nature and extent of challenges and opportunities they present.³ India, hence, has to prepare herself to be the cynosure of the world and accept the challenges and the opportunities that will stem out. This paper, hence will examine the non traditional security challenges, in the overall scope of the securitisation debate and the National Security Strategy.

Changing Concepts of Comprehensive National Security

A traditional understanding, often attributed to Max Weber, implied security of states was related to threat of any change that might threaten that monopoly of nation on violence--whether through external invasion or internal rebellion. Post cessation of Cold War, the securitisation debate broadened the concept of security. The UN Development Programme in 1994 came up with a report on the subject:

The concept of security has far too long interpreted narrowly: as security of territory from external aggression... Forgotten were legitimate concerns of ordinary people who sought security in their

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daily lives ...For many of them, security symbolised protection from the threat of disease, hunger, unemployment, crime, social conflict, political repression and environmental hazards.⁴

National security is a multifaceted and all encompassing concept related to building comprehensive national power. It envisages a symbiotic relationship between internal and external security, reinforcing the premise that a country's external security posture is organically linked to its internal strength. External challenges can be met by effective diplomacy and adequate defence capability. The conventional view of the definition of national security is that it is concerned with the preservation of state sovereignty most especially its monopoly on use of force and the protection of national interests.

On external security, unlike any other country in the World, Indian security is marred by legacy issues that include unresolved boundary disputes, not coming to terms with the partition of the sub continent, or culture of competition and challenge in case of one and unwillingness to accept India as a reckonable regional player in the case of the other, undermining Indian strategic space as it seeks to expand its political, economic and strategic influence. Case in point is the aggression shown by Peoples Liberation Army of China in Eastern Ladakh in May/June 2020. There thus exists an omnipresent danger of regional strategic instability with potential for escalation threatening India's territorial integrity and strategic cohesion.

The concept of 'National Security' has been evolving over the years. In today's changed and complex world, security now has a much broader construct with geopolitical interests, internal stability, economic and social security, sustainability, human security. In most cases these overlap, are interlinked with Indian growth and well-being of its peoples. India faces myriad security challenges both external and internal. The difference between traditional and non traditional security threats is not so water-tight now as it appeared in the last century. The traditional

concept of security envisages the use of military means to deal with the threats to the unity, territorial integrity and sovereignty of a state.

In recent times, however, comprehensive national security should encompass more than this. It is argued that human welfare is in and of itself a security issue.⁵ Thus construed, such things as poverty, disease, and environmental degradation are security threats not just because they lead to conflict, but because they are in and of themselves violations of “human security.”⁶ Other scholars have argued that to define security in this way is to strip the term of all real meaning. While some of the non--traditional challenges had been anticipated by framers of the Constitution, thereafter a large number have emerged which demand re-evaluation. The debate is indeed yet inconclusive, though such broad-basing of the definition of national security may tantamount to denigrating the importance of management of national security.

Comprehensive national security can therefore be defined to include avoidance of shortage of basic requirements of a nations’ population, the provision of clean air, clean water and healthy surroundings as also environmental security. In addition, provision of adequate food health care, education, energy, employment, old age care and good governance. It must also include pandemics, narcotics, organised crime, failing states and use of terrorism as an instrument of foreign policy. Such a comprehensive security can be done only as a part of cooperative efforts of the international community.⁷

Increasing Salience of Non Traditional Security Challenges

Non traditional security challenges in their myriad forms, have assumed greater prominence in the security discourse in India. Non-military sources of instability, with the weakening of economic, social and environmental fabrics, is challenging the state centric approach to security. Why has the salience of non traditional threats challenges increased in India? This can be ascribed to five major reasons:

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- Growing aspirations of a rising population lead to societal tensions as the economic development is not inclusive.
- Serious emergence of non traditional challenges like pandemics (Covid19 is the major case in point), food and water security, climate change, transnational crime, et al.
- Global interdependence has its negativism in the form of greed, making the rich richer and non-rich poorer, jobs losses, social injustice, unfair working conditions, exploitation of labour, and the like.
- Non-state actors, including transnational crime syndicates, challenge the monopoly of state on violence. Non-state actors like NGOs corporations push for issues in their agenda, like the work of human rights organisations as Amnesty International or Greenpeace.
- Human Security has enlarged in manifold dimensions.

It is necessary herein to delve into the issue of Human Security. As noted in UN General Assembly resolution 66/290, “...*human security is an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood and dignity of their people.*” It calls for “*people-centred, comprehensive, context-specific and prevention-oriented responses that strengthen the protection and empowerment of all people.*” In India the indicators are mostly internal matters of the state such as poverty, hunger, increased economic disparity, population growth, number of refugees and Internally Displaced Persons, violent groups within the state, corruption and another measure of democratic capacities, provision of education, healthcare, sanitation and other services.⁸ Consequently, ‘human security’ has been opined to express the need of populace for safety in other arenas of basic need – like access to clean food and water, environmental and energy security, freedom from economic exploitation, protection from arbitrary violence by the police, gangs, etc. This concept is useful and important in indicating the variety of human needs that must be satisfied, and must be an effective overall policy goal.

One of the biggest problems that would face India and having a direct bearing on the country's economy and security will be the likelihood of continuing illegal migration from lesser developed regions of the sub-continent. While numerous factors attribute towards this, a major rationale is the steep rise in population with increasing pressure on land and mounting unemployment and better economic opportunities in India. The Group of Ministers, in their recommendations on the *National Security System* (February 2001), while taking care of Bangladesh's sensitivity in the matter, reiterated that '*the massive illegal immigration poses a grave danger to our security, social harmony and economic well being*'.⁹

Again the issue of urbanization in India, and its attendant problems looms large. India already has eight mega cities, 46 metropolitan cities and 38 million plus cities. In future, most urban agglomerations will be along transport corridors, distinction between rural and urban getting blurred. Paucity of infrastructural facilities – water supply, sewerage, developed land, housing, and transportation will all effect crime and communal incidents.¹⁰ These are not concerns that could be wished away as secondary to more pressing anxieties, they affect the socio-economic fabric of the nation and can be causative to greater internal strife with trans-border linkages or spill over. Similarly socio-economic disparities and problems or provincial/ethnic aspirations of the peoples in the nations of Southern Asia provide basis for conflictual disquiet, despite better economic within the region.

It is apparent that Non traditional security issues are challenges to the survival and well-being of peoples and states that arise primarily out of non-military sources, which could be such as climate change, resources scarcity, infectious diseases, natural disasters, irregular migration, food shortages, people smuggling, drug trafficking and transnational crime. These cannot be brushed aside as being of lesser consequence than external security threats and challenges.

Managing the Expansive Realm of National Security

India does not, as yet, have a well articulated National Security Strategy Document, for which two reasons can be adduced: -

- First, there is no political consensus in the country on national security issues. For example there is no consensus on how to treat challenges from Pakistan and China. There is little agreement on how to deal with Maoism. Similarly, the views of political parties on Kashmir and insurgencies in the North-East differ widely. Even today there is no clarity how the government will deal with such (Mumbai terror attacks) in the future.
- Secondly, the government has not been able to address the crucial issue of coordination required to formulate and address the issues of national security. The National Security Council lacks the power to enforce anything. There is no common understanding of what constitutes national security.¹¹

Our nation's security strategy should establish the national long-term objectives, action programmes and resource allocation priorities, and as grand strategy, envisage, development and coordination of all national power instruments, to achieve national goals in an ever-changing globalised environment. In the past, security strategy has often been focused on external threats, and more specifically external *military* threats (which therefore require a military response). It is imperative to accept that what can be regarded as developmental or policy issue, can easily become a major security challenge, especially of the non traditional kind. India has a long history of being sensitive to concerns relating to poverty, environment, population growth, socio-economic irregularities, etc.

Over the last few decades, the Indian government has launched numerous schemes aiming towards socioeconomic development of the peoples. However, these issues were regarded as developmental issues

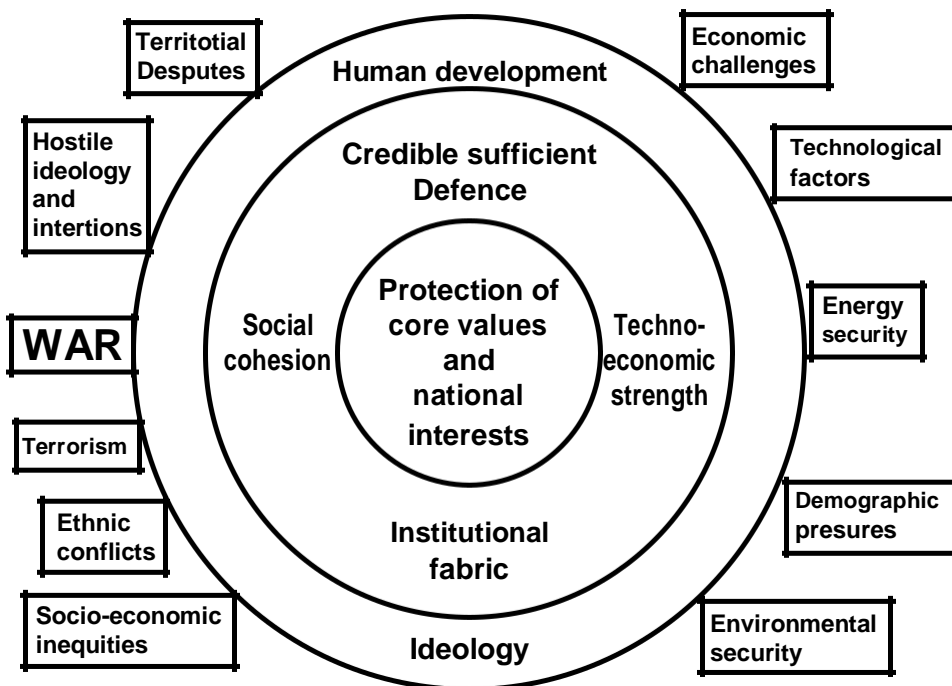
and not security issues. The Constitution provides the basic structure for governance and progress in keeping with India's vision of growth based on strength of its plurality. Experience of the past 70 years has however, brought to fore the aspect of security and its impact on every facet of India's developmental vision.

How are non traditional security issues different from traditional security issues? The difference between traditional and non traditional security threats is not so water-tight now as it appears. The traditional concept of security envisages the use of military means to deal with the threats to the unity, territorial integrity and sovereignty of a state. However, if one envisages the utilisation of military like in the ongoing pandemic, in natural and manmade calamities or even in the Jat agitation in Haryana in 2016, and mostly as first responders, it mandates focussed preparations on the part of the armed forces. It also nullifies the difference between traditional and non traditional security challenges. Any logical aspiration of peoples has the potential of getting out of control and becoming an agitation, even a violent one, and spread through larger part of a region, or even in the nation. Hence National Security transcends the larger reach of socio-economic development, and has to be parallelly studied and actioned upon. This vein of expanded security must be accepted as unambiguous and all pervading.

In a seminal document, though a little dated and yet relevant, the Planning Commission of India had placed traditional and non traditional challenges in perspective. In the diagram illustrated below, the innermost ring represents the core values and vital interests that a state seeks to protect, preserve and promote. Beyond the outermost ring are the multi-dimensional multifarious challenges and threats that impinge ultimately on this core through more visible components represented in the figure in terms of the middle ring.”¹²

There is therefore a need to define the broad security related objectives necessary to meet the aspirations of every Indian. These are:-

**THE NEED TO FACTOR NON TRADITIONAL SECURITY
CHALLENGES AS PART OF NATIONAL SECURITY STRATEGY**



- Maintaining the unity and territorial integrity of India.
- Providing for each citizen the right to life, liberty, equity and welfare also a good standard of living;
- Working towards a peaceful, prosperous and friendly extended neighbourhood;
- Sustained high rates of inclusive economic growth;
- Credible capacities for conventional as well as non-conventional defence and dealing with asymmetric threats such as cross border terrorism;
- Political stability, internal social harmony, law, order and justice;
- Wide consensus in polity on the basic parameters of foreign and domestic policies based on informed awareness and understanding of issues.¹³

There is need for a State centric focussed approach to National Security Strategy that includes traditional and non traditional challenges.

The Nation has been managing security challenges that keep recurring. Already capabilities have been created, and a response mechanism exists. The existing mechanisms in India seem dissipated to a large variety of departments with loose control. Hence, there is a need for a systemic to prognosticate, predict, create capabilities, provide options for action and execute them. In a nation like India, the size of a sub-continent, a Department of Homeland Security or Internal Security with an over-arching Centre for Non Traditional Challenges with due expertise, is essential to data-mine, predict large scale migrations patterns, increased ethnic, social and religious cleavages, demographic stresses, resource management, social breakdown, environmental degradation, pandemics, et al. This inter-agency Centre is needed specifically for Conflict Prediction, Management, and Resolution; for control of emergency services and first responders, para-military organisations, intelligence agencies and even immigration. Such an organisation will create competences and provide the core to contemplate and act against non traditional security threats.

Conclusion

K Subrahmanyam, the doyen of Indian strategic thinkers, had defined comprehensive national security to include avoidance of shortage of basic requirements of a country's population – clean air, water, healthy surroundings, environmental security, food, healthcare, education, employment, old age care and governance. It is apparent that the human security has become co-terminus with national security.¹⁴ The concept of security has indeed been interpreted narrowly in India. Traditional security rigourously follows military matters and run the risk of overlooking challenges emanating from non traditional sources.

For the forthcoming quarter of the century the components of National Security need to be redefined. The traditional view that National Security is related only to security from external aggression needs to be changed. Internal stability and order and comprehensive national strength of the country are equally important factors in protecting and maintaining the security of the nation state. Indeed the definition of national security

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even in India has acquired clarity and a widened scope, with non traditional threats forming a significant parcel. Security predicament of India should not be on the basis of linear extrapolation of past experiences.

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End Notes:

- 1 Address by President Abdul Kalam in the Central Hall of Parliament after being sworn in as the President of India accessed at http://www.indianembassy.org/president/july_25_02.html
- 2 Data drawn from South Asian Terrorism Portal, accessed at <https://www.satp.org/data-sheet-terrorist-attack/fatalities/india-jammukashmir>
- 3 Jasjit Singh, “ A Security Strategy for the 21st Century, in AVM Kapil Kak, Ed, Comprehensive Security for an Emerging India, Centre for Air Power Studies, New Delhi, 2010, pp1.
- 4 UNDP. 1994. *Human Development Report 1994: New Dimensions of Human Security*, available at <http://www.hdr.undp.org/en/content/human-development-report-1994>
- 5 Stephen E. Sachs, “The Changing Definition of Security,” available from www.stevesachs.com/papers/paper_security.htm, accessed March 2008.
- 6 Carolyn Pumphrey, *Global Climate Change: National Security Implications*, May 2008, accessed at <http://www.StrategicStudiesInstitute.army.mil/>
- 7 K Subrahmanyam, in AVM Kapil Kak, Ed, *Comprehensive Security for an Emerging India*, Centre for Air Power Studies, New Delhi, 2010, pp xx.
- 8 Huma Tariq, *Human Security Challenges in India*, *South Asia Journal*, 11 Aug 2017, accessed at <http://southasiajournal.net/human-security-challenges-in-india/>
- 9 See *Demographic Movements: The Threat to India’s Economy and Security*, *Low Intensity Conflict & Law Enforcement*, 2004. Vol: II, Issue 1., pp94-115.
- 10 Sivaramakrishnan KC, no.27. pp209-219.
- 11 Arvind Gupta, *A National Security Document for India*, IDSA Comment, accessed at www.idsa.in, 20 Oct 2011.
- 12 Jasjit Singh, *Vision of Peace in 2020*, Background paper in *India Vision 2020*, Planning Commission of India, Dec 2004
- 13 DPG Conference Reports, Vol. 1, Issue 2 *Conclave on a National Security Doctrine for India*, accessed at https://www.delhipolicygroup.org/uploads_dpg/publication_file/conclave-on-a-national-security-doctrine-for-india-1025.pdf
- 14 K Subrahmanyam, in AVM Kapil Kak, Ed, *Comprehensive Security for an Emerging India*, Centre for Air Power Studies, New Delhi, 2010, pp xxi.

NEED FOR LEGISLATION IN NON TRADITIONAL SECURITY CHALLENGES

Gp Capt GD Sharma, VSM (Retd)*

Non Traditional Security (NTS) challenges are primarily different from the issues of territorial security but, still these are important for survival and well-being of nation state and its citizens. Climate change, resources scarcity, infectious diseases, natural disasters, irregular migration, food shortages, people smuggling, drug trafficking and transnational crime, cybercrimes etc. are some of these which in their wake bring misery and insecurity to the people and Nation states. Latter are therefore responsible to eradicate or minimise these.

Why legislation?

These threats often being transnational in nature require responses in multiple realms –political, economic, social and even at times humanitarian use of military force. The laws to tackle these threats should be specific, appropriate, and deterrent and; at the same time, should follow a humane approach. The enactment of draconian security laws that allows unregulated use of force with impunity, often lead to serious human rights violations of ordinary people. For general acceptance, before enactment, these laws should be adequately deliberated at various levels so that these not only avoid the problems, deter future occurrences and are looked at positively by the public at large. Most of the threats being transactional in nature should also be in conformity with the international laws for seeking multilateral cooperation if needed. In this respect, article 51 of the Constitution of India, empowers the state to enact laws in conformity with the international laws. This aspect is also

included in the directive principles of state policy which provides that, “the state shall endeavour to foster respect for international law and treaty obligations”.² This is particularly important as the relationship between human rights and security has been addressed in most international and regional human rights treaties many of these have been ratified by India.

Some NTS issues look otherwise innocuous and do not seem to challenge the security of the state or its citizens but, when examined deeply these reveal that without set of roles or laws the NTS situations can go out of control. So, code of conduct or guidelines are needed to bring order in a given situation. Some specific cases are discussed below to lay emphasis on this point of view.

Irregular migration

Non traditional security issues such as irregular migration can cause societal and political instability hence, these can potentially threaten the security of the state . India since Independence has faced large scale illegal migration from our neighbouring countries. Apart from some political reasons, the migration could have occurred as a natural process possibly due to relatively better avenues of livelihood in India than available in the neighbouring countries. Preventing illegal immigrants is vital as they take share of the resource meant for our citizens leading to anxiety and turmoil in our society besides, it also poses a security threat. Some related laws are discussed.

The Passport Act 1920. It empowers the government to make rules requiring persons entering India to be in possession of passports. This rule also granted the government the power to remove from India any person who entered without a passport.

The Foreigner act 1946. The foreigner Act apart from defining a ‘foreigner’ a person, who is not a citizen of India, empowered the government to make provisions for prohibiting, regulating or restricting the entry of foreigners into India. The 1946 Act is which still in applicable, empowers

the government to take such steps as are necessary, including the use of force for securing compliance with such directions. The most important provision of this law is that, the 'burden of proof' lies with the person, and not with the authorities. This has been upheld by a Constitution Bench of the Supreme Court.

The Illegal Migrants (Determination by Tribunals) Act, 1983. The state of Assam faced widespread agitation by the local inhabitants in seventies and eighties due to unabated illegal migration from Bangladesh. So much so, that the locals feared of becoming a minority in their own state. The protests officially ended after the Assam accord of Aug 1985. In pursuance of the accord, the illegal migrants(Determination by tribunals) act 1983 was used for detection and deportation of illegal migrants who had entered India on or after March 25, 1971. But it failed to achieve its objectives as it put a very heavy burden upon the authorities to establish whether a person is an illegal migrant. This created difficulties in implementation. The result of the IMDT Act was that a number of non-Indians who may have entered Assam after March 25, 1971 without possession of valid documents, continue to reside in Assam. Accordingly, it was struck down by the Supreme Court which held that the act "has created the biggest hurdle and is the main impediment or barrier in the identification and deportation of illegal migrants. Now all issues of illegal immigration are dealt under the Foreigner act 1946.

Most illegal immigrants take the plea of being refugee and seek protection from deportation under the International refugee convention of 1951. India is not a signatory of the International refugee convention. Accordingly, Government of India replying to a Public interest Litigation(PIL) in supreme court on 09 Aug 2012 submitted that," the policy of the government of India does not support any kind of illegal migration either into its territory or illegal immigration of its citizens and the government is committed to deporting illegal Bangladeshi migrants, but only lawfully."³

Climate Change

The global warming in its wake will result in rise in sea level, increased cyclonic activity, changes in the ambient temperature and the precipitation pattern. The rise in sea-level will submerge low lying islands across the world. In south Asia, both India and Bangladesh will get affected. We are already facing illegal immigration from Bangladesh which will increase substantially when several low areas in Bangladesh get submerged. It is estimated that the change in temperature will also affect the growth and crop pattern. Due to shifting growing seasons for major crops such as rice, production of these could fall by estimated 40%. In India too, around seven million people are projected to be displaced due to submersion of parts of Mumbai and Chennai, if global temperatures were to rise by a mere 2 °C (3.6 °F). Countries around the world, including India, have expressed their commitment towards reducing carbon emissions which is the main cause of the global warming but, environmental experts feel that targets will not be achieved effectively unless there is stringent legislation to deal with the issue.

Under the Paris Agreement, India pledged to reduce the emission intensity of its gross domestic product by 33-35 per cent over 2005 levels by 2030 and create additional carbon sink of 2.5 -3 billion tonnes of CO₂ equivalent through additional forest and tree cover.

Two countries, Suriname, a country on the North-eastern coast of South America, and Bhutan have already declared themselves carbon negative. Several other countries who have enacted legislations in this regard are New Zealand, United Kingdom, France, Sweden and Scotland. We are reluctant to pass law since it will bring in verifiable accountability which we can ill afford at this stage of development as India is nearly 80% dependant on the fossil fuels for power generation. To maintain growth cycle, we need to reduce dependence on other fossil fuels to achieve net-zero carbon emissions in a planned and timed manner. India's commitment to the Paris agreement is therefore, being pursued through the moral binding.⁴

Infectious diseases

Minimizing the transmission of infectious diseases is a core function of public health law. The extent of use of legal powers should vary according to the seriousness of the disease, the means of transmission, and how easily the disease is transmitted.

Law can contribute to the prevention of infectious diseases. In this process, it may authorize interferences with freedom of movement, the right to control one's health and body, privacy, and property rights. However, its application should be based on ethical and transparent practices without discrimination on grounds of race, gender, tribal background, or other inappropriate criteria. The reasonable means, proportionality and distributive justice are thus the key focus area for effective implementation of public health laws.

Public health laws should authorize compulsory treatment only in circumstances where an individual is unable or unwilling to give consent for treatment, and where his behaviour creates a significant risk of transmission of a serious disease. Use of criminal laws should be used with care as it becomes a disincentive for the affected to seek treatment and he try to hide it. For example, compulsory quarantine on coronavirus infection is seen as harassment by vulnerable groups which led people to hide it. Proper communication and humane treatment could avoid it.⁵

Indian Laws on Pandemics

On facing coronavirus pandemic, the union government advised states to invoke the Epidemic Diseases Act (EDA) of 1897 with in their jurisdictions to control the pandemic. This 123-year-old colonial law and requires review as it suffers from several lacunae. It actually was framed, amidst the outbreak of the bubonic plague in Mumbai but, It proved inadequate, and the plague soon spread to the other parts of India. A bill to replace this law a Public Health (Prevention, Control and Management of Epidemics, Bio-Terrorism and Disasters) has been drafted in 2017 but, it is yet to be tabled in Parliament.

The colonial law suffers many shortcomings and lack of clarity on some specific basic rules on travel restrictions, examination and quarantine of persons suspected of being infected in hospitals or temporary accommodations, and statutory health inspections of any ship or vessel leaving or arriving at any port of call. The law also specifies consequences on violation leading to imposition of penalties under section 188 of the Indian Penal Code which essentially deals with the acts of disobedience to a government order.

In the past, there have been attempts to draft statutes predicated on community health such as the Model Public Health Act of 1955 updated in 1987. The Union government, however, has been unable to convince states to adopt the law since health is a State subject. Many states have therefore, their own laws on public health. We need to have enabling legal framework that will allow an efficient lockdown of entire cities, the quarantining of people, the temporary closure of business, and the distribution of medicines etc . Provision of Public health services should be recognised as a fundamental right of the people. In the ongoing coronavirus pandemic, an avoidable situation was experienced where government permitted suspension of treatment of other serious diseases in hospitals after being overwhelmed with the pandemic. Similarly, as no enabling provision existed for lockdown, it imposed curfew and invoked section 144 of CrPC. ⁶

To manage outbreak of Coronavirus, Government of India has invoked the Disaster Management Act of 2005 which is not meant for medical emergencies but, actually deals with disasters such as catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area. Having experienced the health pandemic, legislation of the comprehensive public health law is needed urgently.

Natural Disasters

India is prone to several natural disasters every year possibly due to the adverse by product of the climate change. We have faced Gujarat earthquake in 2001 and Tsunami in 2004. Both disasters besides, leaving behind a trail of massive death and destruction, also exposed the inadequacy in handling by the central and the state governments. The constitution of India does not have provisions on the natural disasters. These thus do not appear in any of the union, state or concurrent list. But, under article 248 of the constitution central government has the residuary powers to frame laws, accordingly parliament enacted the Disaster management act 2005 which presently constitutes the core of legal framework of handling disasters in the country.

Earlier following the colonial practice, the disasters were managed at the district, sub district level under the administrative control of the state government. After the enactment of disaster management act the central government is playing the active role in the disaster management. The states who otherwise are very sensitive to their area of jurisdiction in the federal structure of the nation are willingly allowing the centre to extend its jurisdiction for disaster management with in the state.

The Disaster Management Act in 2005 provides for the legal framework in which the structures, functionaries and activities related to management of disasters are given. The Act not only stipulates the national agencies and functionaries along with their powers and functions, it also lays out a comprehensive framework within which the state, district and local level bodies are constituted and officials designated to discharge their assigned tasks and responsibilities in the management of disasters.

At the apex level, there is a National Disaster Management Authority (NDMA) which formulates policies and approves the national plan for disaster management.

As the executive arm of the NDMA, the National Executive Committee (NEC) assists the National Authority in the discharge of its functions and has the responsibility for implementing the policies and plans of the National Authority for Disaster Management.

Under the Act, the NDMA and the NEC will not only approve the national plans but also the plans of the respective union ministries/departments. In that, they will also lay down guidelines for the state authorities, coordinate the enforcement and implementation of these policies and plans for disaster management and ensure timely response.

At the sub-national level and on the lines of the national framework, the Act provides for the constitution of corresponding bodies at the state level also in the name of the State Disaster Management Authority (SDMA) and the State Executive Committee (SEC) down to the district level at the level of DDMA which is the pivot around which the structure of disaster management at the district level would be erected.⁷ The disaster management act is applied along with other allied laws on environment such as Clean Air act 1971, Water Act 1984, Environment Act, 1986, and finally Indian Penal Code, 1860 which lays down penal liabilities in case of intentional violations of above acts.

Cyber Crimes

Normally, the offences are dealt under the Indian Panel code and the Criminal procedure code but, IT crimes against the state or people are not covered in it hence, Indian Parliament legislated a specific Information Technology Act, 2000 which is the primary law in India for dealing with cybercrimes. The law lists several cyber offences with detailed descriptions that constitute the offences and various penalties that are incurred for commission of the crimes. These are listed from section 65 to 71 of the IT Act.

The cyber-crimes are committed not only against the individuals but, can also be committed against the states. For example Section

66F of the act defines the cyber terrorism as acts “which intends to threaten the unity, integrity, security or sovereignty of India or strike terror in the people or any section of the people by denying access to any person who is authorised to access the computer resource or attempts to access the computer resource himself when not authorised and by his acts causes injury to the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality, or in relation to contempt of court, defamation or incitement to an offence, or to the advantage of any foreign nation, group of individuals or otherwise, is also guilty of **cyber terrorism**”. The act is punishable with imprisonment which may extend to life imprisonment.

There are however, are some parallel provisions both in IPC and IT act. For example, Sections 43 and 66 of the IT Act, punish hacking, data theft and introducing and spreading viruses through computer network, damaging computers or computer network or denying the access to the authorised person or destroying the computer on conviction can imposed three years imprisonment or fine of Rs. 500000/- or both. Similarly, in IPC section 378 on theft, section 424 of IPC on fraudulently removing the property, section 425 on wrongful gain and wrongful loss and sections 463,465 and 468 dealing with forgery and cheating also apply along with section 66 of the IT act.

But not all cybercrimes are provided in IPC. For example, there is no punishment for violation of privacy in the IPC. Similarly, Section 67C of the IT Act requires an ‘intermediary’ to preserve and retain such information as may be specified for such duration and in such manner and format as the Central Government may prescribe. There is no provision for this in the IPC. There is no provision in IPC for cyber terrorism as well. There is demand for amendment of IPC to include the cyber-crimes and repeal the IT act for their overlaps and clashes which create confusion and can be taken advantage by the cyber criminals.⁸

Transnational Crimes

India is vastly affected by various criminal activities which are transnational in nature. Such activities include smuggling, firearms trafficking, human and drug trafficking, prostitution, kidnapping and Fake Indian Currency Notes (FICN). Many of these activities are used by the terrorist networks to expand their nefarious activities in India. The lack of education, poverty, unemployment and pursuing radical ideology supported by religious-political beliefs assist in its unbridled growth.

The government of India faces significant challenges in combating transnational crimes because the procedural laws are significantly insufficient in dealing with these. For example, in section 167 of Criminal Procedure Code, the law enforcement agencies are expected to file a charge sheet in three days after arrest of a person and failure to do will result in accused getting bail from the court. The problem is also aggravated by the fact that organized crimes being transnational in character has international ramifications, that make it hard to investigate within the stipulated timeframe. Further, the confession made before the police officers are not admissible in the courts under the Indian Evidence Act. Hence, obtaining conviction under the laws is very difficult and also time consuming.⁹ Under the common criminal law, the cases are dealt as the circumstances of the cases under the section 120 for criminal conspiracy, section 391, 399, 400 and 402 for acts of exhortation and dacoity and 364A for seeking ransom on kidnapping.¹⁰

In 1967, the centre enacted a Unlawful Activities (Prevention) Act with an aim to prevent unlawful activities associations in India. The main objective of the law is to deal with activities which are directed against the integrity and sovereignty of India. The unlawful associations and terrorist activities are acted upon under this act. The FICN cases too which has potential to weaken the Indian economy with implications on Indian sovereignty are dealt under the UAPA 1967.

There is no central legislation to tackle 'gang activity' with countrywide applicability. Some states have enacted local laws to suppress the organised crimes. For example, the State of Uttar Pradesh, have enacted Uttar Pradesh Gangsters and Anti-Social Activities (Prevention) Act, 1986, which is applicable in that UP only. Similarly, the state of Maharashtra has enacted Maharashtra Control of Organised Crime Act, 1999 for the state of Maharashtra to deal against the menace of organised crimes.^{11,12}

Besides the above, there are several central laws to deal with specific crimes some of these are as given below:-

- The Customs Act, 1962
- The Narcotics Drugs and Psychotropic Substances Act, 1984;
- The Immoral Traffic (Prevention) Act, 1956
- Foreign Exchange Regulation Act, 1973.¹³

Conclusion

Non traditional security challenges have implications on the national survivability and wellbeing of its people hence; these must be given great amount of importance in tackling them. Some of these have direct impact on national sovereignty. The acts of terrorism, illegal migration, money laundering, and issue of Fake Indian currency Notes, drug smuggling etc have security implications hence, these must be dealt effectively by the law enforcing agencies and the legal institutions with deterrent effect to discourage these crimes. Armed forces may not be directly involved in eradicating this menace but, their knowledge about those which have indirect impact on the national security is important.

All non traditional security challenges must be investigated and dealt with preferably under specific laws but, it is extremely difficult to have specific law for each non traditional threat hence, many of these are dealt under the prevalent general laws which suffer lacunae such as

delays in investigation due to their transnational character of the crimes and their adjudication by the courts of law too suffer from long gestation periods.

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End Notes:

- 1 <https://rsis-ntsasia.org/about-nts-asia/>
- 2 http://humanrightsinitiative.org/old/publications/chogm/chogm_2007/docs/the_need_to_reconcile_security_&_human_rights.pdf
- 3 <https://www.thehindu.com/news/national/committed-to-deporting-illegal-mi-grants-but-only-lawfully-centre/article3747019.ece>
- 4 <https://economictimes.indiatimes.com/news/environment/global-warming/india-must-enact-stringent-law-to-combat-rapidly-changing-climate-experts/articleshow/72668982.cms?from=mdr>
- 5 <https://www.who.int/healthsystems/topics/health-law/chapter10.pdf?ua=1>
- 6 <https://www.orfonline.org/research/indias-fight-against-health-emergencies-in-search-of-a-legal-architecture-63884/>
- 7 http://ili.ac.in/pdf/p13_rajendra.pdf
- 8 <https://www.mondaq.com/india/it-and-internet/891738/cyber-crimes-under-the-ipc-and-it-act--an-uneasy-co-existence>
- 9 https://www.researchgate.net/publication/329862526_transnational_organized_crime_in_india_a_new_framework_of_analysis
- 10 <https://www.mha.gov.in/sites/default/files/A1967-37.pdf>
- 11 <http://www.legalservicesindia.com/article/1290/Organized-Crime-In-India.html>
- 12 <https://www.satp.org/satporgtp/countries/india/document/actandordinances/maharashtra1999.htm>
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STRATEGIES TO MITIGATE NON TRADITIONAL SECURITY CHALLENGES FOR INDIA

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In the strategic community of India and to a great extent of the rest of the world it is not very traditional to examine and analyze non traditional security challenges (NTSCs) to a nation's security. This is primarily because there is little attraction among the reading and viewing public to go beyond the traditional understanding of security which harps upon borders, internal violence or turbulence and the larger involvement of kinetic actions. Academically too it has been convenient to place security essentially into compartments of kinetic and non-kinetic domains; in the latter case NTSCs tend to get obfuscated by sub domains such as psychological, media and cyber threats which too are a form of NTSCs. The former is far more appealing to base human instincts with the propensity to rush to defend or impose a state's will using kinetic means. The fears and emotions arising from kinetic threats tend to evoke greater concern. The current Covid 19 pandemic, increasing natural and manmade disasters, the enhanced impact of climate change and the general issues arising from other social factors are now forcing alteration in orientation. However, a fuller understanding of the definition of NTSCs differentiated from the traditional security challenges may yet be necessary before embarking on any analysis of their scope in today's world and how nations such as India need to handle them.

The scope of NTSCs is extremely large hence the need for identification and analysis of the core issues. For the purpose of this

essay a brief understanding of the definition is presented besides some selected domains which have been expanded for the purpose of analysis. These domains are as follows:-

- Food Security
- Water Scarcity
- Energy and Environment Security
- Public Health
- Economic Security and Forced Migration
- **Ideological Conflicts and Religious Radicalism**
- Organized Crime
- Information Security and Protection from Propaganda

A definition used by the Consortium of Non Traditional Security Studies in Asia reads as follows:-

“Non traditional security issues are challenges to the survival and well-being of peoples and states that arise primarily out of non-military sources, such as climate change, resources scarcity, infectious diseases, natural disasters, irregular migration, food **shortages**, **people smuggling**, **drug trafficking and transnational** crime. These dangers are often transnational in scope, defying unilateral remedies and requiring comprehensive – political, economic, social – responses, as well as humanitarian use of military force.”

Non traditional security focuses on non-military threats with these common characteristics:-

- The threats are transnational in nature with regards to their origins, conceptions and effects.
- They do not stem from competition between states or shifts **in the balance of power, but are often defined in political and socio-economic terms.**

- Non traditional security issues such as resource scarcity and irregular migration cause societal and political instability and hence become threats to security, in many cases leading to weakening of traditional security.
- Other threats like climate change are often caused by human-induced disturbances to the fragile balance of nature with dire consequences to both states and societies which are often **difficult to reverse or repair**.
- National solutions are often inadequate and would thus essentially require regional and multilateral cooperation.

Although the definition and the subsequent explanation allude to there being almost no interstate issues involved except cooperation to overcome the origin and impact, there could be occasions when a cascading set of events may transcend into both the traditional and non traditional domains. A little more explanation about the relationship between non traditional threats and National Security will perhaps lend greater clarification to the differentiation.

A majority of nations exist for and work towards the realization of certain aspirations they set for themselves. The social and economic progress and well-being of the people is invariably one of the major aspirations. However, there will be forces that will prevent the achievement of these; many natural and many deliberately man made. Any trends, events, or acts which prevent the realization of national aspirations are termed threats to security. The national efforts to neutralize or ward off such threats can be termed as measures contributing towards National Security. Through this explanation we have broadened the scope of National Security to include external or interstate and internal threats of a kinetic nature and extended it to the sphere of NTSCs. We cannot discount the fact that the latter may well be induced by external and internal factors which have linkage to traditional threats. A good example of this is the havoc wrought upon the people of Syria by the interplay of external forces and internal faction driven politics which brought about the

nine year old Syrian Civil War. These have led to a complete breakdown of human security resulting in resource depletion, destruction of civic facilities and human migration which has resulted in transcontinental movement of populations. Similarly Iran has been subjected to forced isolation through the system of sanctions preventing it from pursuing activities the state would normally pursue to ensure basics of human security such as food sufficiency, health care, employment and trade. Aspirations of the people of both nations are therefore adversely affected thus making them inherently insecure. The origin of the threats remain kinetic actions partially triggered by external forces but the effects remain NTSCs in nature

While India too suffers from the impact of traditional security threats at its borders and proxy activities of inimical neighbours these are countered through robust military capability supplemented by intelligence and police organizations. It's in the non traditional domain that there are undefined threats from natural and man-made disasters, other social, economic or political causes and some externally induced non kinetic means.

Disasters as Security Threats

With global environmental organizations constantly warning dire consequences of climate change, a study released by the UN Office for Disaster Risk Reduction in 2018 revealed that disaster-related economic losses globally stood at about \$3 trillion in the last two decades. India has been among the top five countries with absolute economic losses of about \$79.5 billion between 1998 and 2017. The US topped the list with \$945 billion of disaster-related economic losses during the period, followed by China (\$492 billion), Japan (\$376 billion) and India (\$79.5 billion). At least 91% of all major disasters recorded worldwide from 1998 to 2017 were climate-related, recording 7,255 events during the period. "It is also clear that the economic losses suffered by low and lower-middle income countries have crippling consequences for their future development and undermine efforts to achieve the 17 Sustainable

Development Goals (laid down by the UN) in particular, the eradication of poverty,” it said in the report. Among these 17 goals are No Poverty, Zero Hunger, Good Health and Well Being, Gender Equality and Quality Education. Disasters have a crippling effect on all of them, especially in developing countries where deployable resources to mitigate and resuscitate are limited. What is obvious from the report also is the **fact that while losses in financial terms are quantifiable the effect at the human end is always difficult to determine. Displaced populations**, loss of working and earning ability and the relief effort divert resources, time and effort of a nation from its normal nation building efforts thus compromising aspirational achievements and in turn security.

In India the concept of disaster management (DM), till as late as 2001, was to await a disaster and respond to it with the nearest human resources and limited equipment to render relief, and fall back upon the **Prime Minister’s Relief Fund to help with some relief finances. Invariably** the Armed Forces and the Police were pressed into the relief effort with **material hurriedly collected and transported. The Gujarat earthquake of 2001 triggered the need for a more scientific and management related** approach to DM. Between 2001 and 2005 a transformation occurred with a clearer and more mature understanding that disaster relief was just not good enough; it was disaster risk reduction (DRR) that should form the approach so that the effect from disaster is minimized. This led to the enactment of the Disaster Management Act of 2005 and the setting up of the National Disaster Management Authority with the **Prime Minister as its Chairman. A fillip to the entire concept of DM was given** in a short time frame. DRR now forms the basis of the approach with four basic principles:-

- Reducing exposure to hazards (floods, cyclones, landslides etc).
- Lessening vulnerability of people and property.
- Optimizing use of land and environment to reduce risk.
- Improving preparedness for adverse events.

STRATEGIES TO MITIGATE NON TRADITIONAL SECURITY CHALLENGES FOR INDIA

The idea behind DRR was to lessen the impact of hazards and the scale of severity by adopting strategies and actions such as:-

- Making communities more resilient to risk by preparing them for potential hazards. Community awareness allows people to adopt a practical approach such as cooperation in timely evacuation; forming community based early response teams and using some local rescue methods in a more organized way.
- Effective use of technology for early warning and timely communication of the same to the last man on ground. Last mile connectivity for rapid communication of information proves the biggest challenge but with digital mass communication **this has become simpler. GIS mapped and machine linked** especially dedicated communication is now proving a boon.
- Effective structures for DM at state and district level.
- Frequent and progressive training for disaster managers and **their teams through table top and mock exercises.**
- A gender and psycho social perspective has been added to DRR.

There is no doubt that the drastic change in the concept of DM in India and visionary strategies have greatly diluted the NTSCs arising from the destruction and trauma of disasters. Among these strategies is international cooperation involving projects such as the Coalition for Disaster Resilient Infrastructure (CDRI), a brainchild of Prime Minister Narendra Modi. It is an international coalition to evolve best practices in the development of infrastructure that can resist most disasters. The Prime Minister's Ten Point Program outlined in 2016 is another focused campaign while the National Cyclone Risk Mitigation Program (NCRMP) **remains a one billion US\$ flagship World Bank aided program which** has helped drastically reduce casualties from cyclones in India's coastal areas. The 15th Finance Commission has done yeoman service for DRR in India through an allocation of Rs 28000 crore for disaster risk

mitigation for a five year period. Among the finest decisions taken in relation to disaster response has been the setting up of the National Disaster Relief Force (NDRF) with 12 battalions, now being increased to 16.

Food Security

The UN defines food security as - “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”. India suffered the ignominy of famines several times in its history and of extreme food shortage in 1966 when the US sponsored PL-480 package had to be rushed as aid. Thereafter it overcame the challenge and brought about the Green Revolution in agriculture and the White Revolution in milk and dairy production. The challenge, however, remains due to the lack of an equitable distribution system and low purchasing power of the lower segments of the population which remain stricken by poverty. The government has instituted an effective public distribution system (PDS) which many times is adversely affected by corruption. The lack of food security in some segments of the population creates social vulnerability and potential exploitation towards criminal activity. It also brings about such undesirable trends as increased size of families to provide more working hands and also migration. India needs education and a better work culture for its bureaucracy to alleviate such challenges. The plethora of government programs such as MNREGA are all well-conceived but many times lack implementation energy.

Water Scarcity

Despite abundant rain there exists a shortage of water in India due to much of the water running waste and insufficient storage. This too leads to human migration and insufficient exploitation of land for agriculture. Water harvesting and conservation techniques besides such scientific methods as drip irrigation mastered by Israel, need more extensive usage through education and mixing traditional and scientific methods in tandem.

Although India has made improvements over the past decades to both the availability and quality of municipal drinking water systems, the population size has stressed planned water resources and rural areas are largely left out. Regardless of improvements to drinking water, many water sources are contaminated with both bio and chemical pollutants, and over 21% of the country's diseases are water-related. Furthermore, only 33% of the country has access to traditional sanitation. In addition, water scarcity in India is expected to worsen as the overall population is expected to increase to 1.6 billion by year 2050. To that end, global water scarcity is expected to become a leading cause of national political conflict in the future. The prognosis for India is no different and water wars are often referred to as types of future conflicts. Mitigation measures are difficult, expensive and time consuming. Yet, environmental justice needs to be restored in India so that families can raise their children with dignity, and providing clean water to communities is one such way to best ensure that chance.

Energy and Environment Security

This covers the entire spectrum of energy and is not restricted to the narrow interpretation relating to only hydrocarbons. India imports almost 75 percent of its energy needs and is therefore many times hamstrung by geopolitical developments which strain her strategic autonomy for the sake of sustained flow of energy. Maintaining a high GDP rate is contingent upon optimum energy pricing at source. To overcome dynamic pricing, move towards alternative sources of renewable energy for production of power is under focus. Solar and wind farms automatically assume importance. As per Climate Risk Index 2020 released by the environment think tank, German watch, India's rank has worsened from the 14th spot in 2017 to 5th in 2018 in the global vulnerability ladder. Thus move towards electric automobiles is an imperative to reduce the carbon footprint. The move towards electrification in transportation related to the automobile sector is making the Indian government adopt a goal of making 30% of Indian vehicles electric powered by 2030. By 2023, it wants all three-wheelers to run on batteries. This will be contingent upon

sufficiency and efficiency of the battery industry, indigenous technology, better research and development and partial subsidization. The benefit is for all to see. Just the use of electric buses in China has already cut its oil consumption by 300,000 barrels per day, which helps it to save \$5 billion on oil imports each year.

Direct emissions from automobiles include smog-forming pollutants (such as nitrogen oxides), other pollutants harmful to human health, and greenhouse gases (GHGs), primarily carbon dioxide. All-electric vehicles produce zero direct emissions, which specifically helps improve air quality in urban areas. Pollution and other environmental degradation costs India \$80 billion a year, nearly 6% of gross domestic product, as per a World Bank report. The report cited a recent survey of 132 countries which ranked India 126th for environmental performance and last for air pollution, even worse than neighboring China, due to its power stations, traffic congestion, industry and other factors. About 23% of child mortality and 2.5% of all adult deaths in the country can be attributed to environmental degradation,” said Muthukumara S. Mani, a senior economist at the World Bank, adding that “India needs to put a value to its natural resources and ecosystem services for an environmentally sustainable future”. This remains a serious challenge which the current government is fully seized of.

Public Health

India is presently in a state of transition — economically, demographically, and epidemiologically — in terms of health. While the last decade has seen remarkable economic development particularly in terms of GDP growth rate, unfortunately this progress is accompanied by growing disparities between the rich and the poor. There is strong evidence to suggest that this income inequality or disparity between the different socioeconomic classes is associated with worse health outcomes. Widening the gap between the rich and the poor has damaging health and social consequences. While financial inclusion and social security measures are being implemented by the Government to

bridge economic inequalities, health sector too must ensure that health disparities between and among social and economic classes are also addressed adequately. In the light of the experience with Covid 19 the Ministry of Health and Family Welfare has revised its demands on the 15th Finance Commission from Rs 4.99 lakh crore to Rs 6.04 lakh crore from 2021-22 to 2025-26. Expenditure outlay will have to be matched with organizational control to ensure full impact.

Economic Security and the Problem of Forced Migration

When the footprint of development starts to get skewed the trend of migration is triggered. In a large country of the size of India the federal structure gives a high degree of freedom to the states to pursue their development models. However, it is not always possible to maintain uniform development parameters or models. The issues at stake are many. Firstly, the information revolution has brought the glitzy side of urban life to the knowledge of the rural population. People migrate with little knowledge of what is at stake. Secondly, cities bursting at the seams can hardly absorb more. Their creaking infrastructure is stretched beyond limits. Thirdly, it happens due to mismatch of facilities available in the urban and rural domains in areas such as education, health care or entertainment. It leads to very high density of urban population, growth of slums with their connected social issues such as poor health care and high levels of social and psychological stress leading to gender related and other crimes. It affects national reputation with the nation's aspiration of being a hub for business development and tourism taking a nosedive adversely affecting the economy. Mega urban centres like the eight Tier 1 cities and many Tier 2 towns too suffer frequent impact of disaster due to problems of high density of population which cause severe problems connected with sanitation, sewage, water and electricity. Political compulsions in a democracy obviate taking any draconian measures to reduce the human footprint. What can be done is to reduce the rural to urban migration by diverting a part of the development budget of bigger cities towards smaller ones to create facilities for education, health care and greater employment including the encouragement of business and

technology parks. Information campaigns are required to bring home to rural folk the benefits of rural life. During Covid 19 lockdown we have witnessed reverse migration, loss of jobs, and collapse of small businesses, with lives of even daily wage owners being affected. A more equitable distribution of population in smaller urban areas and overall focus on revitalizing livelihood means in the rural segment will be very helpful for the Indian social, economic and political scene.

Ideological Conflicts and Religious Radicalism

These are considered as part of the grey zone between traditional and non traditional conflicts. Ideological and religion based threats form a socio-political construct. In nations such as the US or India which have a diverse make up of population there will always be elements who are vulnerable to exploitation due to perceived grievances which are more than those related to economics of existence. As part of NTSCs it is important to flag these as an area of concern. These may not necessarily relate to terrorism or any other forms of violence but subversion towards anti national activity keeps active the spark of divisiveness and works against National Security. Narrow ideological agenda pandering to beliefs which are not in sync with the nation's unity is a failing external forces find useful in weakening the social fabric of a nation. Strong intelligence, policing, community resilience against divisiveness and information drives loaded with patriotic content are all useful in countering such trends.

Religious radicalism is a trend the world has witnessed in recent years and is a domain related to National Security too. It harps on exclusiveness of a faith with intolerance at the base of its philosophy. This too works against national unity and needs a concerted drive through information, education, cooperation by clergy and segregation of affected persons for de-radicalization. A counter radicalization strategy has to be evolved by the authorities with a deep psychological study of the target population.

Religious radicalism and ideological conflicts remain under the ambit of NTSCs unless they transcend into violent internal campaigns when they enter into the grey zone and require a mix of traditional and non traditional ways of handling or countering. For the government, surveillance, progressive research on cultural issues and information campaigns are some of the ways towards handling them.

Organized Crime

Use of counterfeit currency, linkages between terrorists and the underworld, smuggling, narcotics and arms running all fall within the ambit of organized crime. The Mumbai terror attack was a manifestation of how such crime syndicates can adversely affect National Security. The underworld also taps into the organized crime network in order to set up highly successful drug smuggling networks to fund their campaigns. To add to this is the recent trend towards tax evasion and non-repayment of large bank loans which affects business sentiment and investor confidence. Urban and rural mafia with political and police protection also hold the business community to ransom. India has been looking towards large scale police and banking reforms but has not succeeded in this due to vested interests and this remains one of the major challenges in the future which require legislative and judicial intervention.

Information Security and Protection from Propaganda

Although there is scope to examine many other NTSCs the domain of information and protection from propaganda covers a large ground of sub domains. The information revolution has brought in its wake a transformation in the way people communicate, share information or indulge in entertainment. They have also made themselves vulnerable because adversaries long in search of access to the minds of the people of India now have the necessary tools available to impinge propaganda with divisive and anti-national agenda. Besides the cyber domain, which can adversely target the economy, infrastructure, various business facilities and governance activity, information through media or direct to people is used to skew their thinking against national interest. Both

the major adversaries of India – China and Pakistan, have mastered the information tools and developed systems to target the nation. Pakistan's Inter Services Public Relations (ISPR) Wing has professionalized this domain. China has adopted the doctrine of Three Warfares – Media, Cyber and Legal as one of its major strategies. Both remain in concert to target the minds of the Indian populace to subvert with deep study and progressive development in these fields. While India is an IT power house its psychological warfare through media and the cyber domain remains relatively underdeveloped. There is a need for a body to be set as an 'authority' on the lines of many other constitutional bodies to develop this capability both in the defensive and offensive domains well beyond the frittered efforts which are currently at play. Development of a better strategic culture, awareness, higher education oriented towards strategic thinking and the inclusion of information within the scope of National Security are some of the immediate steps needed in this direction.

Conclusion

Traditional threats to security of the nation are well recognized and constantly analyzed by security agencies. NTSCs are far larger in scope with much less attention paid to them since their scope to affect the achievement of national aspirations is much less understood. National Security related bodies and strategic think tanks need to broaden their scope of research to include these within the space of their activities. Academic orientation towards them also needs a fillip with the inclusion of these within the research projects of relevant departments of these institutions. A greater intellectual footprint is needed in the field of NTSCs to include them within the scope of strategic security studies in future. Perhaps the upcoming National Defence University (NDU) will make it a point to give these their deserving share of emphasis in future research.

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NON TRADITIONAL SECURITY CHALLENGES IN THE INDIAN MARITIME DOMAIN: STRATEGIES FOR MITIGATION

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India occupies a predominant position in the Asian landmass with a large geographical area and ranks second in terms of population, just behind China. The Himalayas in the North and North-east form a natural national boundary as well as barrier between India and its neighbours on land – part exception being Bangladesh. The unique positioning of India in geographical terms however, is due to its peninsular landmass jutting out into the Indian Ocean to a significant extent, thus providing it with a maritime frontier on all three sides – western seaboard abutting the Arabian Sea, eastern seaboard facing Bay of Bengal and the Southern tip pointing into vastness of the Indian Ocean. The Indian Ocean perhaps derives its name on account of this unique geographical placement of India.

India is thus extremely fortunate to have such a large maritime frontage – measuring more than 7516 km – which also results in huge attendant benefits vis-a-vis territorial waters, exclusive economic zone (EEZ) and continental shelf allocated in accordance with the UNCLOS-1982 convention and the commission on Limits of Continental Shelf (CLCS). This maritime entitlement enables India to engage in robust economic activities and provides space for exploitation of natural resources like fossil fuels and fisheries. Its 13 major ports and some 187 minor ports facilitate more than 90 percent of total trade. Almost 2.03 million square km of Indian EEZ is rich in living and non-living resources. About 25 percent of

Indian requirement of oil and natural gas comes from its offshore oil fields. Further, 1197 outlying islands spread across both its seabords, provide India with strategic reach much beyond its mainland.¹

Maritime Security Challenges for India

However, the vastness of this Indian maritime entitlement and the necessity of securing it towards benefit of the country; whilst denying its illegal and unlawful exploitation by inimical elements, presents equally huge challenges. For instance, more than 75 percent of Indian energy – so vital for sustaining Indian economic engine – being imported from Africa and the Middle East follows vital sea lanes and choke points of the Indian Ocean. Similarly, Lakshadweep islands in the Arabian Sea and Andaman and Nicobar chain, lying deep in the Bay of Bengal – some of which are more proximate to other countries – require surveillance against illegal occupation and exploitation. The challenges get further magnified when adjoining high seas also have to be monitored, in order to preempt inimical activities originating from there.

Security challenges explicitly posed by and on account of the instruments of State actors – like the naval and other law enforcement forces – can be termed as ‘traditional’ ones. These can manifest in activities like regular combat operations, localised skirmishes, coercive presence, aiding and abetting the enemy, or obstructing own sea-borne economic activities. On the other hand, activities of non-state actors which jeopardise the Indian security and adversely impact its national interests would fall in the ‘non traditional’ security challenges. However, in some cases where a revisionist State decides to use non-state actors as a national policy against the interests of the other States, the line between ‘traditional’ and ‘non traditional’ security challenges gets blurred. Such a situation may be deemed to lie in ‘hybrid domain’, but would largely be considered as posing security challenges of ‘non traditional’ nature. India in particular, has suffered severely on account of such State supported ‘non traditional’ threats in the past, and continues to grapple with security challenges emanating there from.

Non Traditional Maritime Security Challenges

The Non Traditional Security Challenges (NTSCs) have been defined in the concept note of this Journal as ‘challenges to the survival and well-being of people and States that arise primarily out of non-military **sources.**’ **In the context of this definition, the NTSCs facing India – as** also rest of the Indian Ocean littoral – in maritime domain can broadly be divided in following three categories, on the basis of level, scale, gravity of impact on the national security, and effect on national interests:-

- State supported acts of non-state rogue elements, at or from the sea
- Non traditional security challenges of human making
- Non traditional security challenges arising from natural causes

Acts of non-State rogue elements at or from the sea

The acts of terror at sea or from the sea, and related activities like gun-running and transportation of weapons of mass destruction (WMD) – with or without State support – are the gravest of the non traditional security challenges facing India. Maritime terrorism, according to a maritime analyst, can manifest in under-mentioned ways and means:-

- Piracy with ideological motive
- **Armed Robbery to finance terror activities** — **Extortion**
- Direct attack on offshore oil/gas platforms and Single Buoy Moorings
- Direct attack on a port /harbour facility
- Direct attack on ships at anchorage or alongside
- Direct attack on near-coast nuclear/industrial installations
- Indirect attack from hijacked ships on shore installations/cities — **Infiltration for attacks in the hinterland**
- Indirect attack on harbours by disrupting safe navigation aids, or by sinking ships/boats in straits/narrow channels

The most visible act of this type was the Mumbai terror attack by Pakistan-supported terrorists in November 2008 – also dubbed as the 26/11 incident. Such attacks can have debilitating consequences for the Indian coastal cities, ports, nuclear installations, industrial infrastructure; cause panic amongst leisure and adventure tourists; and place the Indian island territories and its inhabitants at great risk. While the probability of major terrorist action from or at sea has progressively reduced after proactive collaborative effort, the consequences of even one such attack can admittedly be quite serious. Further, a combination of the terrorists' ability to move freely across reasonably unregulated high seas, and the known proliferation of nuclear technology through sea route, constitute the greatest contemporary threat to the globally interconnected economies.

Cross border gun running through sea route is considered to be much easier. A major instance of such occurrence came to light during the investigation of the 1993 Mumbai serial blasts, wherein it was found that huge cache of arms, ammunition and explosives was landed at Raigad coast near Mumbai, and subsequently used for causing serial blasts. A ship of Iranian ownership 'Nafis-I', carrying nine foreign nationals with guns, was captured about 170 nautical miles north-west of Mumbai on 14 August 2011, after three days of coordinated surveillance by the Indian Navy's warship *Mysore*, reconnaissance aircraft, ship-borne helicopters and marine commandoes³.

Similarly, ships carrying alleged consignment of components to be used for production of missiles bound for Pakistan have been seized by Kandla Port authorities. While a North Korean freighter 'Ku Wol San' carrying missile parts to Karachi was seized in 1999, the latest occurrence relates to the detention of a Chinese ship 'Da Cui Yun', for carrying an industrial autoclave – used for manufacturing ballistic missiles – in February 2020.⁴

Man-made Non Traditional Security Challenges

The other non traditional security challenges at sea – though not directly linked to terrorism and associated activities – are of equal concern. These range from piracy, hostage taking for ransom, armed robbery, drug-running, human trafficking, to ocean environment pollution, and illegal, unreported and unregulated (IUU) fishing. Piracy and hostage taking of ships and its crew, primarily for monetary gains, has existed for a long time. Since the turn of 21st Century, these criminal activities saw a huge boost, particularly in the seas adjoining two critical choke points – the Malacca Strait and the Gulf of Aden – of the Indian Ocean. While no link emerged between piracy and terrorism, huge sums of money involved alongside terror financing requirements does make this linkage a realistic possibility, for States like India, which are actively threatened by terrorist acts.

This Ocean provided a perfect environment for pirates due to its vast expanse of open waters, difficult coastlines, long distances, crowded sea lanes, and most importantly, failed or failing states lying on its rim. As the economically ascendant region started attracting more capital and trade, pirates simply followed the money. Somalia, with a long and ungoverned coastline, lack of economic opportunity for its populace and defunct governance structures, became an ideal breeding ground for pirates. For instance, at its peak in 2011, out of total 353 piracy incidents and 33 hijackings, 237 and 24 respectively were attributed to the Somali pirates⁵. After a decade of unchecked growth, the menace of piracy in Gulf of Aden and off Somalia, was finally brought under control through multinational naval effort, with only four incidents being reported in 2014.⁶ While current piracy and hijacking incidents have reduced to insignificant numbers, the multinational naval forces continue to operate in the area.

Heroin production in Afghanistan continues to be utilised mostly for generating money through Pakistani grey markets and transit routes

– named as Golden Crescent – for terror financing. Myanmar is the principle producer of opium and heroin in South-East Asia. It is the hub of drug trade in the region along with Laos and Thailand, forming the Golden Triangle. The adjacent Chinese province of Yunnan which acts as a main market as well as transit route for South-East Asian drugs, tends to form a golden quadrilateral.⁷ Large consignments are reportedly smuggled by drug-running cartels from the Golden triangle, through sea route via Maldives and Sri Lanka to countries in Europe and the US. Drug-running routes passing through Northern Indian Ocean, and resultant monetary gains being used to finance terror activities, is indeed a huge threat to regional security.

Most of the human trafficking through sea happens within South-East Asia. A 2008 Lloyd's study contends that about 2-2.25 Lakh women and children from South-East Asia are trafficked annually. Cambodia, Laos, Myanmar, Thailand, Vietnam and Malaysia are hot-spots of such activities.⁸ The problem of human smuggling by sea route through Bay of Bengal became particularly acute in 2015, when about 33,600 refugees and migrants of various nationalities – including Rohingyas from Myanmar – illegally fled their countries. It also resulted in death of about 370 people at sea.⁹ Tighter control in destination countries like Malaysia and Thailand due to Covid-19 concerns, is forcing such refugees/migrants to remain at sea for prolonged periods, and is likely to cause a humanitarian crisis akin to 2015. While most illegal Rohingya migration to India occurs through contiguous India-Myanmar land borders; ongoing human smuggling/trafficking through the Andaman Sea towards South-East Asian destinations, and eventually into Bangladesh, is certainly a cause of concern.

Illegal, Unreported and Unregulated (IUU) fishing accounts for more than 20 percent of global reported fish catches. An estimate suggests that 11 to 26 million Tons of Fish are harvested via IUU route annually. In addition to causing huge economic losses to States and their fishing communities, IUU fishing worsens effects of climate change,

imposes social and environmental costs, escalates crime and human rights abuses, and increases prospects of military conflicts. In recognition of these adverse impacts, the 2015 UN Sustainable Development Goals (SDGs) included SDG Article 14.4, which directs countries to voluntarily undertake measures to eliminate IUU fishing by 2020.¹⁰ However this target will certainly be missed by a wide margin due to lack of forceful and unified all-round effort.

IUU fishing is quite rampant in the Indian EEZ also, particularly off Andaman and Nicobar islands, and in the Arabian sea. Prominent defaulters belong to China and Taiwan, though Sri Lankan and Indonesian¹¹ fishermen have also been apprehended while poaching and illegal fishing. As recently as June 2019, 10 Chinese trawlers owned by Dongxinglong Ocean Fishing Company – which can together harvest 80,000 Tons of fish in a month – were apprehended off Ratnagiri Coast of Maharashtra by the Indian Coast Guard.¹²

One of the least innocuous non traditional threats relates to rampant ocean environment pollution, which is going to pose serious wide-ranging consequences in the long run. High seas which are free from States' jurisdiction are clandestinely used to dump waste which cannot be easily disposed of on land. Dredged material, agricultural and industrial waste, sewage, life-expired ammunition, radioactive residue, dangerous chemical effluents etc. are amongst the deadly wastes¹³ regularly dumped at sea. Though UNCLOS Articles 216-217 and 218-220 grant the Flag State and coastal States respectively, the powers to enforce international rules and standards concerning sea pollution;¹⁴ these are at best, enforced within the maritime jurisdiction of coastal States only. Thus pollution incidents at high seas are overlooked most of the time.

Non Traditional Security Challenges Arising From Natural Causes

Natural disasters which cause immense loss of life and property in coastal areas and bring untold misery upon inhabitants are the third

dimension of non traditional security challenges. These may take the form of cyclones, Tsunami, rise of sea level with resultant inundation of sizeable tracts along the coast, as also undue salination of soil and potable-water bodies/sources inland. Adverse effects of climate change – with consequent wind patterns disturbances and erratic changes in ocean temperature and salinity profiles – have of late, contributed to an increase in the severity of cyclones.

The Tsunami in the Indian Ocean in December 2004, which was particularly severe along Indian coast and adjoining neighbourhood, continues to remind the littoral States of threats posed by natural calamities. It caused widespread loss of life and property in Andaman and Nicobar Islands and along the Tamilnadu coast, in Sri Lanka, Maldives, Banda Aceh in Indonesia and many other coastal areas along the Bay of Bengal rim. Super cyclone ‘Nargis’ that hit Myanmar in 2008, ‘Hudhud’ which devastated Visakhapatnam in 2014, ‘Phailin’ which caused massive devastation in Odisha in 2013, and the most recent ‘Amphan’ which crossed the Sunderbans and severely affected Kolkata and Bangladesh in May 2020, are few examples of natural disasters posing serious non traditional challenges.

Sea level rise associated with global warming has begun to have telling effect on coastal States, with sizeable submergence of low-lying areas on certain islands of Maldives being reported. In fact, the doomsday scenario at current rate of sea-level rise predicts that substantial landmass of Maldives will be submerged in next 20 years, with the whole country going under by 2085.¹⁵

Strategies for Mitigation of non traditional security challenges

There is great merit in countries inhabiting the IOR littoral to adopt a collaborative approach for mitigating common NTSCs facing them. Given the inherent geographical centrality of India in IOR and its size, the Country should certainly play a major role and contribute relatively larger resources towards this collective effort. At the next lower level,

the Indian maritime establishment must prepare strategies to address each category of NTSC mentioned above, build capabilities, generate resources and execute the most appropriate plan befitting the challenge. Since India has been facing such challenges for a long time, there are in fact, many strategies already in place, which need to be progressively refined on the basis of past experiences, introduction of new technologies, and evolving nature of the challenges, to name a few.

Collective approach towards mitigating NTSCs

With an aim of attaining “... *mutually beneficial maritime security outcomes within the Indian Ocean*”¹⁶, India took the lead to formulate and launch the Indian Ocean Naval Symposium (IONS) in February 2008. The inaugural meet held in New Delhi saw the participation of Navy Chiefs – or heads of primary uniformed maritime security agencies where no formal navy exists – of 27 IOR littoral States. This initiative has gathered momentum through inclusive participation and continues to grow in scope and scale over last 12 years. Principal objectives of IONS lay emphasis on collective maritime security and specifically include the following:⁻¹⁷

- Strengthen the capability of all littoral nation-states of the Indian Ocean to address present and anticipated challenges to maritime security.
- Establish a variety of multinational maritime cooperative mechanisms designed to mitigate maritime security concerns among members.

Another regional mechanism, Indian Ocean Rim Association (IORA) – with 20 IOR member countries – has existed since 1997 under the erstwhile name of Indian Ocean Rim Association for Regional Cooperation (IOR-ARC). Its focus has largely been on socio-economic cooperation. However, acknowledging that trouble-free trade flows in the region were contingent on assured maritime safety and security, IORA also committed in 2014 to “...*address shared maritime security*

challenges that threaten sea lines of communication and transportation in the Indian Ocean, notably piracy and terrorism.”¹⁸

‘Milan’ series of biennial exercises – as the name suggests – were initiated by India in Andaman Islands in 1995 to provide an appropriate platform for littoral navies to familiarise with each others’ functional organisations, working ethos, operating procedures, inherent sensitivities and the like. Expansion of this initiative from a sub-regional small scale to pan-Indian Ocean context is itself a testimony of its unqualified success and future potential towards collective mitigation of NTSCs.

As regards collaborative anti-piracy effort, synergised activities of US led combined Task Forces (CTF) 151 and 152; EU sponsored Operation Atalanta; and escort missions of countries like India, Japan, China, South Korea, Iran, Indonesia and Singapore without being part of any formal grouping; have virtually eliminated piracy in the Gulf of Aden and off Somalia. Similarly, the Malacca Strait Security Initiative (MSSI) – a collaborative effort of Malaysia, Singapore, Indonesia and Thailand since 2004 – has reduced piracy incidents to insignificant level in the Malacca and Singapore Straits area.

Indian strategies to address NTSCs in its maritime areas

After 26/11 terror attack in Mumbai, the Indian Government carried out significant changes in its coastal security structures and standard operating procedures (SOPs), alongside major infrastructure overhaul. Indian Navy was designated as the lead agency, charged with overall Coastal Security in coordination with the Coast Guard, States’ marine police, port authorities and other central/state government organs. Main steps initiated to avoid recurrence of terror incidents from sea are as follows:-¹⁹

- Joint Operation Centres (JOC) were set up at Mumbai, Visakhapatnam, Kochi, Port Blair; jointly manned and operated by Navy and Coast Guard.

- National C3I Network was established for real-time maritime domain awareness, linking the Navy and Coast Guard, both, at field and apex levels.
- ‘Sagar Prahari Bal’, comprising 1,000 men and 80 fast interceptor crafts was formed for force protection; and security of naval bases, vulnerable assets (VAs) and vulnerable points (VPs) along the coast.
- Surface and air surveillance was enhanced by the Indian Navy, Coast Guard Ships and aircraft along the coast and offshore development areas.
- Coastal Radar Stations and Auto Identification System (AIS) Chains set up.
- Marine Police of coastal states and Union Territories were strengthened.

In order to curb piracy, India has been deploying a naval ship continuously for last 12 years to escort merchant ship convoys from and to the Gulf of Aden, in coordination with navies of other countries, as mentioned earlier. Indian navy has been quite proactive in this task, with INS Tabar, in fact, becoming the first ship to decisively fire upon and sink a pirate mother ship in November 2008. The Indian naval ships, their helicopters and marine commandoes have also foiled attacks, arrested pirates as also confiscated arms and ammunition on many occasions. The Indian naval and Coast Guard ships have also been regularly patrolling the EEZ of neighbouring countries like Maldives and Sri Lanka.

The Indian Navy is envisaged to perform four roles, namely, military, diplomatic, constabulary and benign, to address broad spectrum of security challenges in the maritime domain.²⁰ While it's military and diplomatic roles deal with traditional challenges – and hence are out of purview of this article – the constabulary and benign roles fit exactly with the kind of actions required to mitigate NTSCs. The objectives, missions and tasks for the Indian Navy in constabulary role, reproduced verbatim at Table-1 below are self explanatory, with regard to man-made NTSCs,

including terrorism at and from the sea.

Objectives	Missions	Tasks
— Coastal Defence	— Counter-terrorism	— Counter-Infiltration
— Security of EEZ	— Policing	— Anti-Piracy
— Good order at Sea		— Anti-Poaching
		— Anti-Trafficking

Table 1 - Objectives, Missions and Tasks of Indian Navy in Constabulary Role Source: Indian Maritime Doctrine - 2009, p. 116

Similarly, the objectives, missions and tasks for the Indian Navy in benign role, outlined in Table-2 below cover the NTSCs arising out of natural calamities.

Objectives	Missions	Tasks
— Promote civil safety and security	— HADR	— Provision of relief material and supplies
— Project National Soft power	— Aid to Civil Authorities	— Medical assistance
		— Diving assistance
		— Hydrographic assistance etc.

Table 2 - Objectives, Missions and Tasks of Indian Navy in Benign Role Source: Indian Maritime Doctrine - 2009, p. 120

The ongoing Covid-19 epidemic, with its unique set of characteristics in the maritime domain, has raised new non traditional challenges, for mitigation of which, the Indian Navy and other maritime agencies must formulate appropriate strategies under its 'benign' role. These must necessarily cover three aspects of: keeping the Force free from this pandemic; assisting the proximate community and the Nation in mitigating its impact; and maintaining operational readiness to address traditional and non traditional security threats in the maritime domain. One major task performed by the Indian Navy relates to the repatriation of Indian personnel

from Maldives and Sri Lanka on naval ships in May-June 2020, under the aegis of 'Samudra Setu' mission launched by the Indian Government.²¹ At the same time, another landing ship, INS Kesari, was dispatched on a COVID aid mission to Indian Ocean countries of Maldives, Mauritius, Madagascar, Comoros and Seychelles; with medicines, food items and medical assistance teams as part of the 'Mission Sagar' initiative.²²

Conclusion

The NTSCs in the maritime domain have a large component of uncertainty with regard to time, place and probability. Thus, howsoever hard a State may try to draw strategies to mitigate them, it will perforce be responding most of the time, to crisis situations occurring without warning or adequate notice. Also, resources available to single States, howsoever well endowed they may be, will prove to be inadequate, particularly in face of natural calamities, like Tsunami or the ongoing Covid-19 Pandemic. Therefore, it makes sense to adopt collaborative approach towards collective mitigation of such NTSCs.

This task though considered to be highly desirable, is easier said than done, on account of various factors, like difference in national perspectives, lack of resources, sub-regional fault-lines, and above-all varying degrees of commitment towards joint acts of common good. Nevertheless, there are no other options, if the region has to be ahead of the curve, and respond effectively to mitigate NTSCs, particularly when most of them transcend national jurisdiction and have sub-regional impact, in the minimum.

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End Notes:

- 1 Maritime statistics of India have been sourced from the Indian Maritime Doctrine (INBR 8) of 2009.
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- 4 Shishir Gupta, 'DRDO seizes missile autoclave from Chinese ship, allowed to leave for Pak,' Hindustan Times, 21 February 2020, <https://www.hindustantimes.com/india-news/drdo-experts-to-study-chinese-vessel-s-cargo/story-tmOktwvGIjFCOmQZe7xalI.html> (accessed 25 June 2020).
- 5 ICC Commercial Crime Services, 'Annual Piracy Report-2011', <http://www.icc-ccs.org/piracy-reporting-centre/piracynewsfigures> (accessed 26 June 2020).
- 6 International Maritime Bureau (IMB), 'Piracy and Armed Robbery against Ships—2014 Annual Report', January 2015, Table 1, p. 5, <http://www.hellenicshippingnews.com/wp-content/uploads/2015/01/2014-Annual-IMB-Piracy-Report-ABRIDGED.pdf> (accessed 26 June 2020).
- 7 Rommel Banlaoi, 'Maritime Security threats in post 9/11 South East Asia: Regional Responses,' in Herbert-Burns, Sam Bateman, Peter Lehr eds., *Llyod's MIU Handbook of Maritime Security* (CRC Press, Florida, USA, 2009), p. 261.
- 8 Rommel Banlaoi, 'Maritime Security threats in post 9/11 South East Asia: Regional Responses,' *ibid*, p. 260.
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- 11 Stop Illegal Fishing, 'Indian Coast Guard nabs Indonesian fishing boat with 39 crew members for illegal fishing,' 31 October 2017, <https://stopillegalfishing.com/press-links/indian-coast-guard-nabs-indonesian-fishing-boat-39-crew-members-illegal-fishing/> (accessed 26 June 2020).
- 12 Badri Chatterjee, 'In troubled waters: 10 Chinese vessels found fishing illegally in Maharashtra,' Hindustan Times, 20 June 2019, <https://www.hindustantimes.com/mumbai-news/in-troubled-waters-10-chinese-vessels-found-fishing-illegally-in-maharashtra/story-Fi->

**NON TRADITIONAL SECURITY CHALLENGES IN THE INDIAN MARITIME
DOMAIN: STRATEGIES FOR MITIGATION**

- gOPCnmT3o0xuSDeqFjvN.html (accessed 26 June 2020).
- 13 Waste dumped into the ocean is categorised into black, gray, and white lists. Organo-halogen compounds, mercury compounds and pure mercury, cadmium compounds and pure cadmium, any type of plastic, crude oil and oil products, refined petroleum and residue, highly radioactive waste and any material made for biological or chemical warfare fall in the black list. Gray list includes water contaminated with arsenic, copper, lead, zinc, organo-silicon compounds, any type of cyanide, fluoride, pesticides, pesticide by-products, acids and bases, beryllium, chromium, nickel and nickel compounds, vanadium, scrap metal, containers, bulky wastes, lower level radioactive material and any material that will affect the ecosystem due to the amount in which it is dumped. White list includes all other materials excluded from these two lists. Though the white list items are deemed as safe materials, they are not to be dumped in ecologically vulnerable areas such as coral reefs. See <http://marinebio.org/Oceans/Ocean-Dumping.asp> for details.
 - 14 Articles 216-217 of UNCLOS 1982 provide that the primary obligation to enforce laws and regulations for the protection and preservation of the marine environment from dumping and from vessels rests with the Flag State, which must ensure that vessels under its jurisdiction comply. Further, Articles 218-220 grant the Port and coastal States the right to enforce generally accepted international rules and standards vis-à-vis foreign flagged vessels.
 - 15 Climate Hot Map, 'Republic of Maldives,' <https://www.climatehotmap.org/global-warm-ing-locations/republic-of-maldives.html#:~:text=With%20no%20ground%20surface%20higher,the%20Kiribati%20hot%20spot.3> (accessed 26 June 2020).
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 - 17 For details, see Australian IONS website, <http://www.navy.gov.au/ions/charter> (accessed 28 June 2020).
 - 18 14th Meeting of the Council of Ministers of Indian Ocean Rim Association: Perth Communiqué, 09 October 2014, <http://www.iora.net/documents/communique.aspx> (accessed 28 June 2020).
 - 19 These are based on the reply of Indian Defence Minister in Parliament. Details are available in PIB press release, <http://pib.nic.in/newsite/erelease.aspx?relid=74946> (accessed 28 June 2020).
 - 20 The Indian Maritime Doctrine (INBR 8) of 2009, p. 91.
 - 21 Indian Navy website, 'Indian Navy Launches Operation "Samudra Setu"', <https://www.indiannavy.nic.in/content/indian-navy-launches-operation-samudra-setu-0> (accessed 29 June 2020)
 - 22 The Indian Express, 'Indian Navy's landing ship INS Kesari sets sail on COVID aid mission to Indian Ocean countries,' 11 May 2020, <https://indianexpress.com/article/india/ins-kesari-sets-sail-on-covid-aid-mission-to-indian-ocean-countries-6403557/> (accessed 29 June 2020)

SOCIO ECONOMIC CONSEQUENCES OF NON TRADITIONAL SECURITY CHALLENGES

Lt Gen Rameshwar Yadav, PVSM, AVSM, VSM (Retd)*

The world is witnessing a nontraditional threat in form of virus pandemic which has created unprecedented societal upheaval that goes beyond imagination and combined wisdom of the human race. It has impacted the lives of billions across the world with economic structures crumbling in a free fall with inevitable long term social and psychological strains. Surely, the bastions of institutions to sanitize and secure the citizen from the external inimical influences impacting the socio- economic synergies seem to have been breached.

This is a pointer towards the new vistas capable of impacting on national stability which may warrant going beyond mandate of military as the primary harbinger of security. There are host of other means of coercive assertions to make the opponent submit to the dictates of the aggressor even without crossing the borders. India is no exception to this phenomenon. There are finite answers to prepare for traditional military threats, but the inimical import of nontraditional threats with its infinite variables is unfathomable as of now.

The warfare has transcended through number of generations starting from bow and arrow to the era of standoff means of destruction with longer ranges, accuracy and lethality. Further to this the NBC connect has accorded an inviolable politico-military deterrence of strategic dimensions. In the recent times, the conventional war fighting over

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land air and sea has undergone transformation with addition of nuclear, biological, chemical, sub conventional, cyber and space dimensions making it a military challenge of hybrid nature with undefined ethical boundaries. Add to above, it is the economy which is assuming primacy in waging war through sanctions and restrictive regimes.

The dislocation of the enemy lies in breaking the will power of the opponent to stand up to the might of the opponent. Therefore, winning or losing a war lies in the minds of the commanders which remains a constant denominator irrespective of means of waging wars. The principles of war continue to be relevant; however, it is fighting war in a different way that happens to be the focus of the proponents of warfare. While the superior technology continues to be the decisive tool of aggression, the goal post seems to have shifted towards objectives other than organized military targets and structures.

It has enlarged the span of warfare shifting the focus from the front line soldiers to the logistics, processes and support structures for survival through covert as well as overt means. The larger definition of the national security encompasses economy, food, water, energy, health, information, technology, industry, infrastructure and societal peace, besides security of the national borders. All these security ingredients can be used individually, or collectively to threaten the opponent to cause break down of governance. The net result is that the objectives of the attacker has shifted to the people with intentions to disrupt the economic synergies and create societal chaos so as to raise the cost of war to the next level, thereby facilitating early conflict termination.

It leads us to a new phraseology of Non Traditional Security threats (NTST) which is an adjunct to the military threats as we have understood all this time. The NTS threats have no ethics, morals and rules of engagement. These capitalize on primacy of deceit, duplicity and dubious ways of destroying the economic structures and denial of means of human survival. To do that, denial of energy, technology, markets,

weapons, trade & supply chain alongside manipulating information, creating health catastrophe thereby disruption of existential services are the chosen methods. It is targeted to bring about total collapse of the institutions of governance orchestrating a situation of disaster of very high dimensions. The war, therefore, would manifest equally in the civilian domain alongside the military in times to come.

The Wuhan virus pandemic is one such example of NTST with shades of bioterrorism, albeit in its innocuous format sans accountability of its perpetrators. There are going to be casualties surpassing statistics of most of the wars proving veracity of virus as a potent weapon of mass destruction and mayhem of worst kind. It is a war without mobilizing armies and crossing the borders, yet dislocating the opponent and achieving political objectives validating theory of war in all its manifestations.

The US has been using economic sanctions as a political weapon to make her opponents agree to her dictates. They have been imposing such sanctions all across the globe as a mechanism for the purpose of their geo political domination. In case of Iran, US has threatened to impose sanctions on the countries who continue to import energy resources from Iran. Similarly, oil was used as a weapon by the OPEC countries three decades for their politico-economic purposes. China is known to practice debt diplomacy wherein they help out the impoverished countries in their development schemes and later force them to dance to their tunes.

Due to current pandemic, the industry and markets have taken a hit in a big way disturbing the entire production and supply chain impacting on demand and supply. The energy sector which is the prime mover of economy is also under market stress. As a result the economies are most vulnerable leading to unprecedented structural changes which are governed more out of environmental compulsions and not as per the tenets of commercial prudence. Economy, therefore is emerging as one of the NTST impacting the civil as well as military in a substantial

manner. It prompts us to become self reliant in material requirements to maximum extent lest we may have to compromise in our political autonomy.

One of the biggest social impact of economic wars is on employment. In US, the most advanced economy, there are more than 33 million unemployment registrants as a fallout of virus pandemic. As per Centre for Monitoring Indian Economy (CMIE) a total of 60 million jobs have been lost in the age group of 20s and 30s in India. Such a high rate of unemployment would increase the crimes like hunger riots, thefts, murders, mafia culture leading to anarchy and societal insecurity. Therefore, the socio- economic scenario is not going to be the same in the aftermath of the pandemic.

The digital technology has brought in revolution of unimagined proportions on exponential scale adding outer space and cyber domain to the lexicon of NTST alongside existing weapons of mass destruction of NBC orientations. The entire sets of activities are done silently executed from anywhere across the world thereby defying the barriers of physical boundaries of the sovereign nations. The hard as well as the soft threat are continuum of each other in the cyber space as the information lying in the computers or a web site can be manipulated both for espionage as well as for sabotage depending on the intentions of the information seeker.

Besides hardcore military uses, the cyber attacks may be directed towards the national logistics supply chain and industrial infrastructure impacting on the economy in a big way. Therefore, the cyber warfare has tremendous potential to bring about devastation of unimaginable dimensions which makes it a weapon of mass disruption, damage and destruction. With the ever increasing cyber intrusion in the national management matrix, the vulnerability of the systems and processes is also on the rise.

The introduction of 5G technology in near future would further increase the scope and scale of the cyber threats. It will increase the data piracy and its manipulation for inimical purposes as the 5G technology resides with limited countries namely China and US as of now. Accordingly, “Data sovereignty” becomes important in order to retain superiority in the cyber space. The safety and security of a nation would be a function of its capabilities to obtain, synthesize, and use the big data and artificial intelligence in national interests.

The forays into space with military imprints alongside ever increasing cyber war capabilities have further added to the potency and reach of NTST. It provides a capability to destroy surveillance, communication, navigation, cyber/digital satellites with hostile intentions. Besides military targets, enemy satellites controlling the civil logistics infrastructure like railways, civil aviation, road transport, IWT, communication & IT network etc can be incapacitated or destroyed, if required. Such utility services, if denied to the enemy would create chaos leading to administrative and political breakdown forcing the enemy to give in.

The combination of cyber, space and sub conventional warfare has potential to neutralize capabilities of best of forces despite superior combat ratios to win a war. In short it has potential to bring about total paralysis and lock down of civic systems, a disaster situation beyond capacity of management of the governments.

The disaster, true to its definition, comes without notice at places not appreciated, and create a situation for which one is not prepared for . In Most of the NTST situations, there are going to be large scale casualties besides the administrative disruptions of higher magnitude impacting on the economic structures and societal harmony. The current pandemic may be taken as the basis of our discussion as it has thrown up large number of issues of governance in such situations. Reviving

economy, providing medical care to injured, food & shelter to the displaced populations and restoration of civic amenities becomes the prime concerns of the administration to bring life back to near normalcy at the earliest.

The economy being the essence of survival of a nation state, it needs utmost indulgence of the government and all the ingredients which make up its structures and processes. The Indian economy was expected to grow around 6% in the beginning of the year 2020, whereas within five months the estimates are touching the bottom of the scale. It would require innovative ways to modify fiscal and industrial policies alongside labour laws to tide over the negative trends and initiate revival process.

In the current situation, the incomes have reduced due to closer of companies & businesses, tourism, and transport leading to layoffs, and freeze on salaries and allowances. Since rest of the world is also in the similar situation, there is no hope international trade picking up soon. Moreover, with the exodus of migrant skilled workers from the industrial hubs, it is going to be difficult task to restart the industrial production to achieve optimum profitability. Besides this, the government may be forced to increase the taxation to cover up the additional expenditure incurred in handling the crisis situation. All these would add to overheads increasing the cost of production leading to inflation further reducing the demand.

Looking at such a bleak picture there are fair chances of recession setting in unless the economic activities are revived at the earliest. The resuscitation of the economy would warrant investment on infrastructure, technology, and training of new set of workers. There would also be a need to generate employment for migrant workers in their home states as quite a few are unlikely to go back to the industrial hubs in distant lands. Accordingly, the government has to pitch in to provide requisite financial assistance to the industry as well as the individuals.

The government has announced a stimulus of approximately 20 lakh crs spanning across all the sectors so that shortfalls in economy can be covered up at the earliest. A special emphasis has been laid to increase FDI by creating conducive environment for ease of doing business. Such a step is also likely to motivate foreign countries to shift their manufacturing units to India. It would bring in foreign capital, technology, advance skill sets and promote local ancillary industry, besides generation of large number of direct and indirect jobs. Since such eventualities can come any time, it may be better to cater for a 'federal reserve fund' in the union budget instead of cutting down allocations to other financial heads, or going to public for financial support.

One of the most relevant factors that have emerged to tide over the NTST is the need of self reliance for our national material requirements. The government should initiate appropriate measures to encourage the industry to produce items of strategic nature within the country in sufficient quantities. While dependence on products and services ex import cannot be done away totally, it can be reduced gradually once domestic industry has acquired optimum import substitution capabilities. In the interim, sufficient quantities of essential items ex import may be stocked to create a buffer for emergent requirements.

The stability and financial buoyancy of the stock market and its external linkages need to be monitored so as to sanitize the economy from exploitative trends in such vulnerable times. China is known to be on the prowl to acquire higher stocks in multinationals in order to control the world economy. The recent order of the government to take their concurrence for sale of stocks to foreign companies is a step towards providing protection to vulnerable Indian companies. The internal financial markets also need to be managed to avoid any opportunist tendencies of the banks and corporate houses to exploit the situation of economic slowdown.

A new concept of working from home has emerged for conduct of business and education through the digital domain. The conferences and discussions for the purpose of business, administration and hosts of other day today professional requirements can be done easily without physical interaction. It likely to see lesser number of people travelling, better time management, lesser office space and overhead costs leading to harmonious work environment resulting in higher productivity.

Similarly, the education sector is expected to benefit immensely with higher quality content as there would be accessibility to best of the teachers and study material on line. It would also reduce the cost of education as the infrastructure and other overheads would be reduced to quite an extent. Therefore, emergence of digital offices, banks, businesses, retail chains, services and hosts of other socio-economic fields would bring about better efficiency and also economies of scale.

With the spurt in online businesses the foot falls in the malls for purchase of the luxury goods are expected to reduce. Whereas, the importance of neighbourhood retail shops providing essential services has been amply highlighted leading to correction of imbalance that had occurred due to western inspired mall culture. It has potential to encourage the self employed sector giving a boost to small and medium business enterprises. Realizing the potential of employment generation the government has already initiated schemes for grant of affordable loans to the individuals as well as MSMEs as part of stimulus package.

The recent experience of the pandemic has brought out significance of interdependence of all segments of the society for conduct of economic activities as also the human survival as a common thread. The institutional neglect of the work force has emerged as the biggest fault line in our social system. The mass exodus of the workers have proved their indispensability to the run the economic and societal services exposing myopic vested interests of proponents of son of soil theory.

The current pattern suggests that there is concentration of industries in the Western and Southern regions counting for more than 60% of industrial and service sector jobs. Whereas, Northern and Eastern regions are more agriculture predominant and substantial work force migrates to these developed regions. This regional imbalance needs to be leveled up for development and benefit of the society.

The pandemic has highlighted the need of social security, employment and capacity buildings of the administration as three major challenges in the NTST scenario. The social security in Indian rural environment lies in the comfort of the home in the villages. These people from farmers' stock venture out from their homes as a compulsion to earn living due to ever shrinking land holding plus lack of avenues of employment locally. It has a cascading effect on landless service providers in the villages forcing them also to migrate to the towns seeking small time jobs.

The remedy lies in decreasing the physical distance of employment avenues from the catchment areas of the work force to the maximum possible extent. It warrants relocating part of the industry from urban to the rural areas, alongside making agriculture sector more lucrative to check the current migration trends. In present day scenario most of the interior areas are connected by roads and have power & digital linkages. Therefore, it should not be a major restricting factor anymore for shifting the selected industries away from urban areas. The 'Make in India' mission of the government may well include 'Make in Interiors of India' as one of its sub sets. Such a policy would create additional jobs closer to home for the rural youth resulting in reverse migration.

The format of agriculture based economy also needs a paradigm shift in its construct, in order to make it more attractive. In current system, other than food production, all other associated economic activities are handled by the businessmen making handsome profits leaving pittance to the farmers. This dynamics has to change. The traditional system

of farmers selling their produce individually needs to be changed to a cooperative marketing at village level to avert exploitation by the wily middlemen. It is time to make the farmer as the lead partner of the agro products supply chain.

The seasonal migration of agricultural and construction labour from impoverish states to affluent areas takes place every year. It is a highly neglected sector which needs sovereign protection in unforeseen adverse contingencies like it happened recently. The concept of minimum daily wages has to be made more humanitarian as the present compensation is too meager and exploitative in content. It needs to include reasonable allowances for essential social security factors at par with the organized sector to accord human dignity to individuals.

A national doctrine to deal with the NTPTs need to be formulated to include likely contingencies, capabilities and capacities to work out the organizational structures, procedures and processes. In that, the 'National Disaster Management Authority' is one of the nominated agencies to coordinate and execute the disaster related operations in concert with the state administrations. Other higher capability organizations get into the threat management process as the situation escalates.

The district being the basic executive unit needs to be structurally empowered to take care of health, economic revival and welfare of the displaced populations under their jurisdiction. It may be prudent to create optimal healthcare facilities in each of the districts with adequate reserves of PPEs, beds, equipment and medicines catering for varied health disasters. Based on the recent experience, SOPs may be worked out for provision of transport, shelters and food for the displaced population.

The states may like to maintain stocks of rations, medicines, tents, boats, chemicals, water storage equipment etc distributed suitably for functional ease to provide the necessary help when needed. It is also

important that the officials at lower echelons are aware of the plans on 'need to know' basis so that there are no gaps in the higher intentions and its execution.

The political dispensation has a great responsibility to ensure that there is least disturbance to the internal security and harmonious social environment while the nation is under existential threats and concomitant geo-political stress. The diplomacy has a crucial role in shaping the international environment to acquire strategic pull with positive synergies. The government needs to build up harmonious political equations with the international community so that there is support available from abroad in the time of crisis.

The concept of 'Atmanirbharta' (self sufficiency) is the way to make our economy strong and resilient to nontraditional threats leading to disaster contingencies in Indian context. Another important tenet is inclusivity of Bharat and India by increasing the sovereign support to the workers, a necessity in order to build up a stronger 'Team India'. Inspiring and encouraging the masses to stay calm and stable by the higher leadership putting aside their political differentials is an essential part of dealing with NTPTs. It would be prudent to make our systems 'Future Proof, to handle the socio-economic inimical situations in an institutional manner with professional ease. It is a joint and inclusive national effort sans any scope of political opportunism. Let us all invest our intellect and resources towards this national objective.

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ROLE OF EDUCATION SECTOR IN MITIGATION OF NON TRADITIONAL SECURITY CHALLENGES

Gp Capt Rajesh Bhandari*

*Education is the most important weapon,
Which you can use to change the world.*

Nelson Mandela

Introduction

Non Traditional Security Challenges (NTSCs) are the issues that arise primarily out of non-military sources, such as climate change, resource scarcity, infectious diseases, natural disasters, mass migration, food shortages, human trafficking, drug trafficking, cyber wars and transnational crimes. These challenges are often transnational in scope, defying unilateral remedies and requiring comprehensive – political, economic, social – responses, as well as humanitarian use of military force. Presently the entire world is going through the COVID-19 pandemic, or Severe Acute Respiratory Syndrome coronavirus. The coronavirus COVID-19 pandemic is the defining global health crisis of our times and the biggest challenge we have faced since World War 2. Since its emergence in Asia late last year, the virus has spread to every continent and this is a serious Non Traditional Security Challenge.

Education plays an important role in preparedness and planning crucial support for the development of policies and strategies that contribute to Non Traditional Security Challenges preparedness

efforts. Non Traditional Security Challenges can manifest as traditional security challenges sometimes, and the role of the state and military in dealing with these are issue-based and area-specific, they rely on facts and interpretation of data. The process of education sector planning begins from- sector diagnosis, context analysis, monitoring of implementation strategies, to clearly identify the core vulnerabilities of the country and play an important role in both natural disasters and conflict. Through education planning and process, the vulnerabilities can be reduced via capacity gap analysis, strategic planning, policy formulation, and streamlining the monitoring and evaluation progress. Non Traditional Security Challenges like disaster preparedness and conflict mitigation issues can be addressed through education, however, the conflict issues are likely to be more contentious and difficult to address because of their political, ideological or religious foundations.

Education vs Ignorance

Education contributes a lot to the Non Traditional Security Challenges preparedness efforts. Disaster-prone countries can construct disaster-resistant academic institutions to minimize the potential damage to education infrastructure and loss of life. Like Chile witnessed a devastating earthquake in February 2010, which was of a larger magnitude on the Richter scale than the Haitian earthquake one month earlier. As a result of effective disaster preparedness plans, seismic-resistant infrastructure, and strong emergency response teams and practices in general, Chile managed the effects of the earthquake with better response. The disaster therefore had less of an impact. Similarly, the earthquakes in Pakistan and China in the past decade also caused great damage and loss of life due to lack of preparedness. Therefore contingency planning in such environments, provides a sound basis for sustainable recovery and reconstruction of the education infrastructure and system.

Ignorance on the other hand leads to disaster of a momentous proportion. In this fast moving world there is no scope for being ignorant

or uninformed. Misleading the people in the name of faith or religion is equal to a criminal activity and can lead to tragic consequences. Media and civil societies can play a big role in mitigating these social anomalies.

Importance of Education in Non Traditional Security Challenges

Violent conflicts and natural disasters like Covid 19 can have profound adverse impacts on a country's economy and education systems. Educational planning plays an important role in preparing for such disaster and in mitigating the potential for conflict in both the short and the long term. Considerable work has already been initiated to include disaster management measures in education sector plans and policies in many countries including India. Measures for addressing the underlying tensions leading to conflict are frequently omitted from education sector planning process. There are many different steps in the educational planning process that can contribute to the mitigation of various risks related to both natural disaster and conflict. i.e. Non Traditional Security Challenges. It conceived by outlining how some organizations are using the "Cluster approach" in the education sector for capacity development in Non Traditional Security Challenges reduction and conflict mitigation measures.

Assam, a North Eastern state, is highly prone to both floods and earthquakes. Since 2007 Action Aid, in partnership with local NGO GVM, has supported disaster risk reduction through education among people at the grassroot level which includes the state's schools. Multi-faceted actions have been implemented to make schools in high-risk areas safer, and to enable schools to be a locus for disaster risk reduction. Strengthening education in Non Traditional Security Challenges reduces the efforts within a countries's emergency preparedness planning and is one of the core objectives of the Education Clusters. The ultimate responsibility and ownership of teaching is to be carried out by with governments of those countries. Reduction of Non Traditional Security Challenges originating from

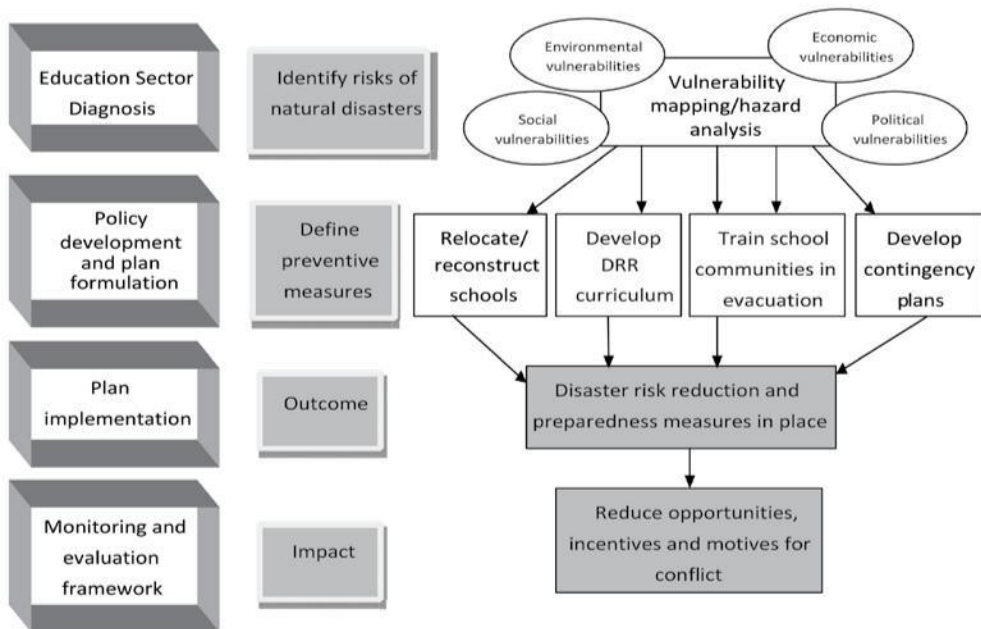
natural hazards, many of the principles and approaches are applicable to other categories of risk as well.

Education for Preparedness for Non Traditional Security Challenges

Growing global concern have been witnessed over the last few decades in regards to global warming and climate change, energy depletion, food and water shortages, as well as other Non Traditional Security Challenges that have claimed the lives of so many. Several UN reports have highlighted the relationship between conflict and natural disasters, displacement and climate change. Displacement caused by natural disaster can result in reduced access to natural resources such as water, land or food. The increased inequalities as a result of natural disasters can also be considered motives for conflict. Most of the narrative on natural disasters focuses on the immediate material effects of such events and the recovery from their impact. Most of the incidences of natural disaster since the 1930s, fifty percent resulted in some form of conflict.

Many countries including India have braced up to face Non Traditional Security Challenges and are at different steps of the planning process as they come under pressure to adapt their education strategies for disaster mitigation. Education planning in some Central American countries for example have been confronted with natural disasters such as hurricanes, epidemics and periods of high seismic activity. In the 1990s Central American countries focused their efforts on pilot plans and preparedness training for teachers for emergencies and gradually included disaster management in education in various innovative and systematic ways. During the Education Cluster Pilot Workshop for senior Ministry of Education officials in 2009, a ministry official from El Salvador presented the work they had undertaken to integrate education and disaster risk reduction through its “School Protection Plan”.

Mitigating of Non Traditional Security Challenges through Preparedness



The Figure¹ above shows the..*Mitigating conflict through preparedness and planning for natural disasters*²

Policies and strategies ensure that countries which are better prepared to take on the challenges like natural disasters can indirectly contribute to mitigating the risks of conflict. Natural disasters and conflict generally coexist-this point is significant and cannot be ignored. It is therefore important to take into account the social, political and economic challenges related to the disaster and determine how these may contribute to conflict. Through sound vulnerability analysis that leads to preventive measures can be developed and implemented by educational planning which will minimize the impact of natural disaster. Many lives can be saved, more injuries will be prevented, and the

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2 The suggested components in the right hand set of boxes are illustrative not exhaustive. Taken from

damage would be minimised when prompt measures are taken ahead of any Non Traditional Security Challenge. The education system has a greater chance of functioning and maintaining the education of population during an emergency when disaster/conflict reduction measures are in place before its onset. Awareness, education, preparedness, and prediction and sound warning systems can reduce the disruptive impacts of any Non Traditional Security Challenge on communities.

Disaster Risk Reduction (DRR) measures are taken ahead of a disaster. DRR is a systematic approach identifying, assessing and reducing the risks of disaster. It aims to reduce socio-economic vulnerabilities to disaster as well as dealing with the environmental and other hazards that trigger them.

Use of Material and Methods

Involving human resource and instilling skills and capacity through education are some building measures which along with Disaster Risk Reduction (DRR) can help and empower children to become thoughtful and proactive leaders, prepared and alert, to advocate disaster mitigation needs and to manage and strengthen their community to become resilient to the threats and consequences. It helps us identify and map local capacities to cope with these hazards. Ultimately, this DRR approach helps to conduct effective disaster response while reducing risks. It also ensures that our emergency response does no harm by replacing or reinstating critical vulnerabilities. The education system has a greater chance to educating children and young adults to deal with any emergency in a systematic way. The integration of DRR in the Education Cluster's work before an emergency is directly linked to the Cluster's overall effectiveness in supporting the countries to lead the emergency response and recovery. By constant education on disaster risk reduction and focusing on key strategic interventions at the highest level, cluster coordinators can bring about changes and help to establish a system to function efficiently during an emergency.

Strengthening of Mechanisms to Combat Non Traditional Security Challenges

Many countries are recognizing the necessity to introduce the measures of preparedness for natural disasters. Strength development for disaster preparedness in the education sector focuses on practical components of preparing and responding to disaster.³ This involves in strengthening of capacity to conduct needs assessments; develop and implement contingency plans; adapt or construct safe education institutions; it involves teacher training and preparedness of schools; and adapting a revised curricula. Such initiatives would be required at different levels of the education system. Most governments prone to natural disaster have a national emergency centre or unit often based in the office of the Prime Minister to support disaster preparedness activities like National Disaster Management Authority (NDMA). In India it is an autonomous and constitutionally established federal authority mandated to deal with whole spectrum of disasters and their management. It is responsible for framing policies, laying down guidelines and coordination with the State Disaster Management Authorities (SDMAs) to ensure a holistic and distributed approach to disaster management. Headed by the Prime Minister of India it can have up to nine other members.

Areas affected by conflict may be even more prone to the risk of natural disasters, as in the case of Sri Lankans living in rural areas in the northern regions occupied by Tamil separatists. Not only is the infrastructure and social services in these areas weakened by constant fights but as “Metzger” explains, “The people living there are often unaware of the risks to which they are exposed. They do not know how to prevent and mitigate disasters and are not prepared for

3 See International Strategy for Disaster Reduction (ISDR)
<http://www.unisdr.org/>, Inter-agency Network for Education in Emergencies (INEE)
<http://www.ineesite.org/index.php/post/drr/>, the Global Education Cluster
<http://onerresponse.info/GlobalClusters/Education/Pages/default.aspx>, and UNESCO
<http://www2.unescobkk.org/elib/publications/103/disaster.pdf> among others.

emergencies. Children, who make up almost one quarter of the total population of Sri Lanka, are especially vulnerable. They are the ones who suffer most, physically and mentally from the consequences of both the armed conflict and the natural disasters like tsunami, as victims of land mines and armed clashes, as child soldiers or orphans of the flood disaster.” In Sri Lanka for example, after the tsunami in 2004, disaster risk management was introduced into their schools. A report by GTZ outlines the process through which children learnt to protect themselves from potential hazards and to respond appropriately. In turn, they “Become the messengers of disaster safety, carrying the message home to their families and out into society as a whole, thereby the schools acted as important multipliers”. There are also many more examples on disaster preparedness to support capacity development in this area. It is not common to see disaster preparedness reflected in national education plans, however there are certain countries and regions that are more prepared than others.

Strengthening of Networks for Non Traditional Security Challenges

Contingency planning as part of an overall sector response to emergencies provides a sound basis for sustainable recovery and reconstruction of the education infrastructure and system. Many countries have started preparing for Non Traditional Security Challenges through strengthening Network and are at different steps of the planning process as they come under pressure to adapt their education strategies for disaster mitigation. Countries like Nepal and Mozambique have been affected by continuous conflict and natural calamities of high intensity over the last decade. UNICEF and Save the Children, the co-leads of the Education Cluster, have taken the lead for response and preparedness through Education in Emergencies (EiE). A key element of their work has been to advocate with and help the Ministry of Education (MOE) and help it to assume the leadership of EiE. The MOE is now an active co-lead with UNICEF and Save the Children in the Education Cluster and has earmarked focal points

at the national and district levels. The MOE has integrated EiE into their Governance and Accountability Action Plan, which is part of their annual education sector plan, ensuring continued access to education for children during natural disasters and conflict.

Developing Capacity to Overcome Challenges

The process of engaging with government authorities for capacity development may differ in situations of natural disaster and conflict. Whereas the processes of developing capacity in both situations maybe similar in many ways, especially in some countries where they suffer from Non Traditional Security Challenges like natural disaster and conflict concurrently. Both may imply curriculum and teaching reforms, training and skills development. 'Fragile' countries or those which are constantly in conflict, often present fewer opportunities of engagement due to political instability and insecurity.

It is important to ensure that the stakeholders who undertake an education sector diagnosis have the capacity to examine the ways that the education system may contribute to alleviate the conflict. In Afghanistan⁴ for example, it has been virtually impossible for either the Ministry of Education or capacity development organizations such as IIEP to work at the regional or district level for security reasons. This evidently has implications for the sustainability of capacity development programmes and will affect their outcomes.

Engage Children as Effective Agents of change and Key Actors in Non Traditional Security Challenges

“Educating a child is like Educating a Family”

The role of education in Non Traditional Security Challenges involves teaching children risk reduction and management material.

⁴ Afghanistan, refer to www.planipolis.iiep.unesco.org

Furthermore through children, families and communities can be educated. Therefore sensitizing children to the global challenges has to be initiated. Through drawing competitions, open-house discussions, debate, extempore speeches, essay writing, recitation, street plays, folk songs and seminars on disaster, climate and environment protection to be organised and ensure a high level of participation. The results from these undertakings are encouraging. Thereby the inclusion of DRR education in school curriculum is recommended at all levels.

‘Education Clusters’ has done much to spearhead and facilitate action to integrate learning and reduce disaster risk. They effect leaders from across society to initiate programs that bring about awareness and improve the ability of institutions, communities and individuals to anticipate Non Traditional Security Challenge and potentially minimize their destructive force. By making these opportunities available to all, implementation is not just a matter of top-down policy, but also a bottom-up approach. The implementation of the strategies and steps will take time, as well as considerable effort and commitment. Systematic action is required by all stakeholders whether at global, national or local level. Cluster Coordinators, Sector Working Groups and technical staff will continue to play a significant role in advocating for DRR to be an integral aspect of both effective emergency response and longer term education sector development.

Non traditional issues can manifest as security challenges, and the role of the state and military in dealing with these. Issue-based and area-specific, they rely on facts and interpretation of data, avoiding alarmist predictions. The process of education sector planning – from sector diagnosis, context analysis through to monitoring of implementation strategies –should identify the core vulnerabilities of the country and the education sector to both natural disasters and conflict. Through this process these vulnerabilities can be reduced through capacity gap analysis, strategic planning, policy formulation,

and monitoring and evaluating progress.. For example, disaster-prone countries can construct disaster-resistant academic institutions to minimize the potential damage to infrastructure and loss of life.

Conclusion

After a comprehensive analysis of the role of education in mitigation of Non Traditional Security Challenges, it is possible to develop strategies that are an integral part of the education sector planning process. Teachers and children as stakeholders play an important role both in reducing disaster challenges and helping their communities become more resilient. Capacity strengthening, assessing the needs, developing and implementing of contingency plans, formalizing safe education institutions; train and prepare teachers /schools and design comprehensive education programmes are the major issues in tackling any Non Traditional Security Challenges.

Human resources are a backbone of any nation and harnessing this valuable resource as a means of mitigating of Non Traditional Security Challenges is clearly achievable. The Education Cluster plays an important role in making it a reality. In this fast changing world which is challenged by a number of non traditional security issues including the food–energy–water nexus, climate change, transnational crime, terrorism, disaster relief and economic performance, education initiative has already started reaping dividends to the nations who are practicing it. Also, Disaster risk reduction is also achievable and the Education Cluster play an important role in making it a reality. With technological advancements, acquiring knowledge and its application is regarded as the only effective way to mitigate Non Traditional Security Challenges.

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ROLE OF THE NSCS FOR FORECASTING AND COMBATING NON TRADITIONAL SECURITY CHALLENGES

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Abstract

The non traditional security (NTS) issues have led to a paradigm shift in contours of national security from state-centric to anthropo-centric. Amidst the growing complexity of threat matrix, the current and future security concerns are no longer confined solely to inter-state conflict and protection of sovereign territories and include geopolitical, diplomatic, military and technological dimensions. The NTS threats are transnational in scope and multi-dimensional in nature, necessitating multilateral solution and international cooperation. These threats, therefore, are increasingly driving national security and foreign policy agendas. In this scenario, national security management has to move beyond operational and tactical issue to the strategic planning. This study examines the function and role of NSCS in combating non traditional security matters. It concludes that the NSCS plays a pivotal role in securing national security and strategic interests. It, however, needs to overcome institutional constraints to leverage multi-disciplinary domain and technical expertise to contribute to long-term strategic planning and bolster India's security diplomacy in shaping the global agenda on NTS issues.

Introduction

The notion of national security has undergone a significant change post 9/11 terrorist attack.¹ In post-9/11 world, there has been rethinking towards a more comprehensive concept of national security beyond the politico-military dimension of inter-state conflict.² Over the past two decades, this has continued as the transnational threats have assumed a growing importance as a new variable in the contemporary national security and foreign policy formulation.³ Growing globalisation, asymmetric capability of non-state actors and technological developments, especially in the information and communication technology (ICTs), have further accelerated the integration of a 'new normal' security paradigm in the national security strategies. The broad contours of national security now encompass the varying dimensions of political, economic, social, and human security that place humans rather than states at the conceptual core.

There is a growing recognition that these new security challenges, now referred to as non traditional security (NTS) threats, are shared global security concerns and hence require enhanced international cooperation and action. Non traditional security issues have also been explicit in various bilateral and multilateral security arrangements, which reflect the growing significance of these issues in the contemporary geopolitics.⁴ It is therefore increasingly becoming crucial to develop a

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The United Nations Security Council (UNSC) Resolution 1368 (2001) recognised inter-national terrorism as a threat to international peace and security. UNSC Resolution S/ RES/1368 (2001), 12 September 2001.
 - 2 Kuniharu Kakihara (2003). The Post 9/11 Paradigm Shift and its Effects on East Asia. IIPS Policy Paper 292E, January 2003. <http://www.iips.org/en/research/data/bp292e.pdf>
 - 3 Damian Sanges d'Abadie (2003). From 11/9 to 9/11: Continuity or Change in International Politics? *Outono-Inverno*, 106 (2), 123-134. https://comum.rcaap.pt/bitstream/10400.26/1391/1/NeD106_DamianSangesdAbadie.pdf.
 - 4 Angela Pennisi di Floristella (2013). Are non traditional security challenges leading regional organizations towards greater convergence? The EU and ASEAN security systems in comparative perspective. *Asia Europe Journal*, 11(2013), 21–38
 - 4 Mely Caballero- Anthony (2009). Reshaping the Contours of Regional Security Architecture. In: Michael J Green and Bates Gill (eds., 2007). *Asia's New Multilateralism*. New York: Columbia University Press; Shahar Hameiri and Lee Jone (2015). *Governing Bor-*

new framework for analysis and response strategies to address national security concerns in a broader geopolitical landscape. The broader strategic view is critical to meet the challenges and opportunities of emerging global security architecture.⁵

Many countries have established mechanisms and institutions under National Security Council (NSC) structure to analyze the national security environment.⁶ In case of India, National Security Council was constituted in 1999 to deal with national security challenges in a holistic sense and to bring about synergy among different security institutions.⁷ Over the last two decades, the NSC structure has been the focal point for coordination among government agencies on national security matters and national security policy formulation. It has contributed immensely to secure India's national security and strategic interests. The paper aims to provide an overview of the function and role of the NSCS structure in combating non traditional security (NTS) challenges.

Non Traditional Threats and National Security

The non traditional security issues (NTS) are increasingly occupying a pivotal place in national security and foreign policy agenda including bilateral and multilateral cooperation. In contrast to traditional security concerns, NTS issues are no longer confined to inter-state conflict and military dimension and comprise diverse functional areas of national security ranging from military to political, economic, social, environmental, and human security. The multi-dimensional security issues are broadly known as non traditional security issues.

derless Threats- Non Traditional Security and the Politics of State Transformation. Cambridge: Cambridge University Press.

- 5 Bates Gill (2007). *Rising Star: China's New Security Diplomacy*. Washington: Brookings Institution Press, 2007; Imran Ali Sandano (2018). *Non traditional Security Diplomacy: An Ultimate Option for South Asia*. *Journal of Political Studies*.
- 6 Rand, *National Security Decision-Making Structures and Security Sector Reform 2005*.
- 7 Arvind Gupta, Cabinet Secretariat (1999, April 16). Resolution No. 281/29/6/98/TS.

http://egazette.nic.in/WriteReadData/1999/E_94_2013_050.pdf

ROLE OF THE NSCS FOR FORECASTING AND COMBATING NON TRADITIONAL SECURITY CHALLENGES

The securitisation of dynamic and emerging multidimensional NTS threats has added complexity to contemporary security environment.⁸ NTS issues such as energy security, terrorism, economic instability, maritime security, piracy, human trafficking, climate change, pandemic, and climate change are now considered part of a broader national security strategy in many countries.⁹ These developments have resulted in a paradigm shift in contours of national security from state-centric to anthro-centric.

States have generally a shared understanding about the NTS threats, especially in terms of the need for international cooperation and institutionalized response. Also, non-state actors with transnational presence are emerging as important actors. They have developed asymmetric capability to influence security and geo-political stability. Terrorists, trans-national criminal organizations, cyber hackers and other malicious non-state actors have transformed global affairs with increased capabilities of mass disruption.¹⁰ The power of non-state actors is inversely proportional to the power of the state. The weaker the state, the greater the impact and the number of violent non-state actors, and the other way around.¹¹ The increasing influence of non-

8 According to Copenhagen school, an issue becomes part of security realm if a securitisation actor presents a reference object (usually a state) as being threatened by an existential threat. Buzan, B. at el. (1998). *Security: A New Framework for Analysis*. Boulder, Co: Lynne Rienner Publishers, p.21; Mely Caballero-Anthony (ed, 2016). *An Introduction to Non Traditional Security Studies- A Transnational Approach*. London: Sage Publications.

9 National Security Strategy of the United States of America 2017, <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>; Russian National Security Strategy, December 2015; the People's Republic of China China's National Defense in the New Era Foreign Languages Press Co. Ltd., Beijing, China, 2019; Defence and National Security Strategic Review 2017, Japan's National Security Strategy (2013), Council of EU (2009), European Security Strategy Council of the European Union A Secure Europe In A Better World

10 CRS Report (2020, April 7). *Renewed Great Power Competition: Implications for De-fense—Issues for Congress*, p. 22. <https://fas.org/sgp/crs/natsec/R43838.pdf>

11 Taneski, N., & Bogatinov, D (2019). *Intelligence as a Response to Contemporary Threats from Non-State Actor*, 12th International Scientific and Professional Conference ‘‘Crisis

state actors– such as terrorist and hackers – pose another kind of security challenge. The attribution of conduct of non-state actors to the state has been, for a long time, a contentious issue.¹² The existing gaps in the international normative framework are exploited by states who use non-state actors as proxies in order to achieve their strategic objectives.¹³

State- centric view of security alone is no longer effective in dealing with the global issues that surpass the territorial boundaries of states.¹⁴ The security threats posed by NTS issues defies conventional unilateral solutions and are compelling states to move towards bilateral, regional and global cooperation. These, in turn, have profound implications on security and foreign policy agenda. As a result, the policy-makers have to find new and innovative ways to address these new NTS security challenges. Ultimately, national security policies need to be adapted to respond more effectively to emerging non traditional security threats. This necessitates developing a new methodology for strategic assessment of the transnational NTS threats. A multidisciplinary analysis of diplomatic, military, intelligence, economic and technological dimensions of NTS threats is needed to address the complex national security and foreign policy challenges.

Contours of India's Non Traditional Security Threats

In India's security calculus, the non traditional security (NTS) threats are increasingly becoming prominent in the light of strategic dynamics

Management Days', Conference Proceeding, Hrvatska – Croatia, May 27-29, 2019, pp. 14-22. https://dku.hr/wp-content/uploads/2019/12/DKU-2019-Proceedings_v2.pdf.

- 12 Ilias Plakokefalos (2017). The Use of Force by Non-State Actors and the Limits of Attribution of Conduct: A Reply to Vladyslav Lanovoy. *European Journal of International Law*, 28 (2), 587–593. <https://doi.org/10.1093/ejil/chx029>
- 13 Cristian Bărbulescu (2018). National Resilience Strategic Option of State Actors to Adapt to Hybrid Threats Strategic Impact, 3-4/2018, 32-41. https://cssas.unap.ro/en/pdf_periodicals/si68-69.pdf
- 14 Mohd Iqbal Mohd Huda(2018):. The Development of Japan's International Human Security Diplomacy: Towards A "Normal" Country? *Jebat: Malaysian Journal of History, Politics & Strategic Studies*, 45 (1), 79-102

and geopolitical competition in the Indo-Pacific region.¹⁵ The multi-dimensional NTS threats demand a comprehensive and integrated response in an institutionalised manner. In this regard, India's security apparatus faces a daunting task to assess and forecast developments of strategic concern and identify opportunities as well as vulnerabilities for decision-makers. It needs to adopt a "whole-of-government approach" in confronting the "strategic uncertainties" looming on its horizon as well as non traditional threats.¹⁶ This section outlines India's major non traditional security threats and challenges.

Environmental Security

Environmental security has been described as a bundle of issues which involves the role that the environment and natural resources can play in peace and security, including environmental causes and drivers of conflict, environmental impacts of conflict, environmental recovery, and post-conflict peacebuilding.¹⁷ The emergence of global environmental problems such as environmental degradation and Climate Change has given rise to recognition of environmental factors in national security. Environmental security affects the overall national security, which consists of political, economic and military security.¹⁸

15 MEA (2020). Indo-Pacific Division Briefs. https://mea.gov.in/Portal/ForeignRelation/Indo_Feb_07_2020.pdf Jagannath Panda (2020). The Strategic Imperatives of Modi's Indo-Pacific Ocean Initiative. East West Center Asia-Pacific Bulletin, No. 503. <https://www.eastwestcenter.org/system/tdf/private/apb503.pdf?file=1&-type=node&id=37466>

16 The Economic Times (2020, May 20). India needs 'whole-of-govt approach' to confront strategic uncertainties: Army Chief. <https://economictimes.indiatimes.com/news/defence/india-needs-whole-of-govt-approach-to-confront-strategic-uncertainties-army-chief/articleshow/75658526.cms?from=mdr>

17 Global Environment Facility (2018). Environmental Security: Dimensions and Priorities. 54th GEF Council Meeting, June 24 – 26, 2018. https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.STAP_C.54.Inf_06_Environmental_Security.pdf; Rita Floyd (2010). Security and the Environment: Securitisation Theory and US Environmental Security Policy, Cambridge: Cambridge University Press.

18 Olha Bezpaloova et al. (2020). March Vo State Environmental Security in National and Globalization Aspects. Journal of Security and Sustainability Issues, 9 (3)

Climate change is increasingly recognised as a “threat multiplier” that can exacerbate existing sources of conflict and insecurity.¹⁹ Sea-level rise from climate change is projected to expose a country to increased risks, including coastal erosion, flooding and maritime disputes with neighbouring countries. Rising sea levels impact current maritime disputes, such as in the South China Sea, and could create new ones. Rapidly receding Arctic sea ice could enable access to previously inaccessible natural resource deposits and maritime transport routes.

The discourse on impact of climate change on security has been evolving since the early 2000s. In April 2007, the security implications of climate change were discussed by the United Nations Security Council (UNSC).²⁰ In 2009, the UN General Assembly (UNGA) passed Resolution 63/281, wherein it acknowledged that the impacts of climate change could have possible security implications.²¹ In 2016, United Nations Environment Programme (UNEP) adopted a resolution on the protection of the environment in areas affected by armed conflict.²²

In the 2020 Environmental Performance Index (EPI), India comes in near the bottom of the global rankings at 168th place out of

19 Climate change was first discussed by the UN Security Council in 2007. Since then, it is working on to address the security implications of climate change: in July 2011, UNSC issued a presidential statement on the possible implications of climate change on international peace and security; in March 2017, UNSC resolution 2349 was adopted in the light of the conflict in the Lake Chad Basin; and in July 2018, a debate was held on climate-related security risks; in January 2019, the term “threat multiplier” was used in UNSC debate. While it acknowledges the risks of climate change and is a step forward, but it is not clear whether it is sufficient for the UNSC to act under Article 39 of the UN Charter.

See UN General Assembly, Climate change and its possible security implications-Report of the Secretary-General, A/64/350. https://www.un.org/ga/search/view_doc.asp?symbol=A/64/350

20 UNSC (2007). S/PV.5663. <https://undocs.org/S/PV.5663>

21 UNGA (2009). Climate Change and Its Possible Security Implications. A/RES/63/281, 3 June 2009.

22 UNEP (2016). Protection of the environment in areas affected by armed conflict. UNEP/EA.2/Res.15, 23–27 May 2016.

180 countries, with particularly low scores on air quality and climate change mitigation. India's decarbonization agenda needs to accelerate, and it faces a number of serious environmental health risks, including poor air quality. According to the 2020 World Climate and Security Report, all regions are facing significant or higher security risks due to the global nature of the risks.²³ Climate change induced sea-level rise poses a particular security threat to the Indo-Asia Pacific.²⁴ According to Joint Doctrine of Indian Armed Forces, environmental degradation and climate change have emerged as a critical area of security paradigm.²⁵ The climate change related non traditional security challenges to India include intense flooding, food security and migration risks. The eastern coastal states of Andhra Pradesh, Odisha, and West Bengal have low-elevation coastal zones with significant cyclone and flooding risks.²⁶

Energy Security

Energy security is critical to the security, sovereignty, and well-being of any country.²⁷ However, energy security remain dependent on oil imports from the Middle East oil, with the Persian Gulf and the Strait of Hormuz at the core.²⁸ Interestingly, stability and reliability in energy supplies do not necessarily depend on the market forces, but the geopolitics and diplomacy have always played crucial role in acquiring energy supplies for any country.²⁹ Global energy supplies from Middle East countries have been frequently disrupted because of regional instability and conflict. Critical choke points along sea routes like the Strait of Hormuz, the

23 Francesco Femia & Caitlin Werrell (ed., 2020). The World Climate and Security Report 2020. The Center for Climate and Security. https://climateandsecurity.files.wordpress.com/2020/02/world-climate-security-report-2020_2_13.pdf

24 Francesco Femia & Caitlin Werrell, Ibid, p.42.

25 IDS (2017). Joint Doctrine Indian Armed Forces. p.20.

26 The Robert Strauss Center for International Security and Law. *Complex Emergencies in Asia Dashboard*. <http://strauss.tacc.utexas.edu/#/d>

27 Bala Baskar. Energy Security and Economic Development in India- A Holistic approach, TERI.

28 Liu Xuejun & Wu Lei (2014). The Energy New World Order, Mideast Oil and US Energy Security. *Journal of Middle Eastern and Islamic Studies (in Asia)*, 8 (3), 25-47.

29 Bala Baskar, ibid.

Suez Canal, the Bab-el-Mandeb Strait, and the Strait of Malacca have particularly become vulnerable due to geopolitical dynamics. The risks of maritime piracy have thrown up new challenges of energy security. Critical energy infrastructure (CEI), such as oil and gas pipelines, storage infrastructures and electricity grids are critical for ensuring the continuity and stability of energy supply. The emerging threats such as terrorist and cyber-attacks, and natural disasters to CEI pose serious risks to energy security.³⁰

India is the world's third-largest consumer of oil after the US and China. It is a net importer of oil and highly dependent on imported oil from the Gulf region. It imported 227 MMT crude oil for Rs. 7,16,627 crores in 2019-2020, which accounts to about 25 percent of gross domestic product (GDP).³¹ Imports as a share of oil consumption have been rising for decades, despite a number of initiatives to increase domestic production and curb growth in demand. To address supply disruptions, the government has set up of strategic oil reserve facilities at Visakhapatnam, Mangalore, and Padur. The present strategic reserve capacity of 40 million barrels can cover about 10 days of current net imports. However, given the expected growth in oil consumption, the same volume may cover only four days of net imports in 2040. Therefore, it is important that the government pursue the second phase of its strategic stockholding policy, which would add an additional 50 million barrels, and also prepares subsequent phases.³² Further, the landscape of energy security has been changing rapidly. With regard to evolving geopolitics of gas, it faces diplomatic challenges in negotiating gas supplies through pipelines.

30 Alessandro Niglia (ed., 2015). *The Protection of Critical Energy Infrastructure Against Emerging Security Challenges*. Amsterdam: IOS Press.

31 Petroleum Planning & Analysis Cell (May 2020). *PPAC's Snapshot of India's Oil & Gas data*. <https://www.ppac.gov.in/WriteReadData/Reports/202006240523389430529SnapshotofIndia%E2%80%99sOil&Gasdata,May2020.pdf>

32 IEA (2020). *India's energy policy: Key findings of the IEA's In-Depth Review 2020*.

Maritime Security

The maritime environment remains a favorable theatre for armed violence, crime, and terrorism given its expanse, lack of regulation, esoteric character, and general importance as a critical conduit for international trade.³³ Maritime security has become a core security concern among major global security actors. This priority is reflected in its increasing significance in national strategic several maritime security strategies published in the past decade—including those of the US, UK, France, India, NATO, the European Union (EU) and the African Union (AU).³⁴ Maritime security matrix include ocean governance and order at sea, maritime boundary disputes, maritime competition between major powers, scramble for ocean resources including hydrocarbon and minerals, domain specific threats such as coastal security, security of sea lanes, piracy, illicit trafficking in persons and weapons, terrorism, environmental degradation and sea level rise. The risks of piracy have thrown up new challenges of maritime safety and security.

Indo-Pacific region – intertwining both economic and strategic considerations of Indian Ocean and the Pacific Ocean- faces a wide range of maritime security challenges, from security of SLOCs to geopolitical competition. ³⁵ The security and stability of the Indo-Pacific region is critical to secure India's national security and economy. India is generally regarded as a net security provider in the Indian Ocean region. However, the strategic environment in the Indian Ocean region is becoming increasingly complex with the China's forays into this region.³⁶ This has led India-China rivalry to intensify in recent time. Over the past

33 Peter Chalk (2008). *The Maritime Dimension of International Security – Terrorism, Piracy, and Challenges for the United States*. Santa Monica: RAND Corporation, p.43

34 Christian Bueger and Timothy Edmunds (2017). *Beyond seablindness: a new agenda for maritime security studies*. *International Affairs*. 93 (6), 1293–1311

35 Mohan Malik (2014). *Maritime Security in the Indo-Pacific: Perspectives From China, India, and the United States*, *The Indo Pacific Maritime Domain Challenges and Opportunities*, Lanham : Rowman & Littlefield Publishers. Chapter I pp.4-5.

36 Swaran Singh (2011). *China's forays into the Indian Ocean: strategic implications for India*, *Journal of the Indian Ocean Region*, 7(2), 235-248.

decade, India has invested significant resources in public diplomacy to build and leverage its soft power to resurrect her influence in the region.³⁷ It is also trying to increase India's influence with the key Indian Ocean states and bring them into a maritime coalition to block China's growing diplomatic and military inroads into the region.³⁸ Both India and China are actively seeking to forge defence and security alliance with Indo-Pacific countries.

Cyber Security

As the world becomes more digitalized and dependent on ICT technologies, cyber security has increasingly been regarded as a national security issue.³⁹ Major cyber security concerns include increasing cyber-attacks, protection of critical information infrastructure (CII), data protection and espionage. Digital data is now considered as a strategic resource. Growing cyber capability of non-state actors poses new security challenges. Cyber operations by both state actors and non-state actors are increasing in frequency and severity.⁴⁰ The emergence of Artificial Intelligence, Big Data Analytics, Internet of things (IoT), Social Media, Lethal Autonomous Weapon Systems (LAWS) has exacerbated cyber security concerns.⁴¹

37 Ian Hall. India's New Public Diplomacy- Soft Power and the Limits of Government Action. *Asian Survey*, 52 (6), 1089–1110; Angana Das. India's Neighbourhood Policy: Challenges and Prospects, *Jindal Journal of International Affairs*, 4 (1), 18-37; Rani D. Mullen and Sumit Ganguly (2012, May 8). The Rise of India's Soft Power. <https://foreignpolicy.com/2012/05/08/the-rise-of-indias-soft-power/>

38 Kanti Bajpai (2017). Narendra Modi's Pakistan and China policy: assertive bilateral diplomacy, active coalition diplomacy. *International Affairs*, 93(1), 69–91

39 Unal Tatar et al. (ed., 2017). *Strategic Cyber Defense - A Multidisciplinary Perspective*. Amsterdam: IOS Press

40 Eric Talbot Jensen (2012). Cyber Deterrence, *Emory international Law Review*, 26 (2), 773-824.

41 CRS Report (2019). Artificial Intelligence and National Security. <https://fas.org/sgp/crs/natsec/R45178.pdf>; Alexander Babuta et al. (2020). Artificial Intelligence and UK National Security Policy Considerations. https://rusi.org/sites/default/files/ai_national_security_final_web_version.pdf;

NITI Ayog (2018). National Strategy for Artificial Intelligence <https://niti.gov.in/writere->

Cyberspace is now considered as a fifth strategic domain in addition to natural domains of land, sea, air and space. In the last few years, states have increasingly used cyber operations to achieve strategic political, economic, and military objectives.⁴² There were over 250 state-sponsored cyberattacks in the period 2005–18.⁴³ In response to the perceived threat, an increasing number of states are more or less openly investing in cyber warfare capabilities, both offensive and defensive.⁴⁴ Cyber warfare differs fundamentally from traditional armed conflict.⁴⁵ It defies borders and challenges state boundaries.⁴⁶ Cyber-attacks can be used as a force multiplier for conventional military operations because of potential for major collateral and unintended consequences.⁴⁷

The cybersecurity discourse has evolved over the last two decades from internet governance, mass surveillance, data protection to cyber norms. However, after two decades of UNGGE negotiations, States remains polarized on norms of responsible state behaviour in cyberspace. Firstly, the USA-led western group of countries regards existing international law sufficient for guiding state behaviour in cyberspace including applicability of laws of armed conflict. Secondly, another group of countries led by China and Russia would prefer to further develop new cyber norms on state use of ICTs. The debate regarding whether cyber-attacks can be considered armed attacks under Article 51 of the UN Charter is complicated by the issue of attribution of

addata/files/document_publication/NationalStrategy-for-AI-Discussion-Paper.pdf

42 Ido Kilovaty. *Harvard National Security Journal* / Vol. 9

43 SIPRI Yearbook (2019). *Armaments, Disarmament and International Security*. Oxford University Press.

44 Sico van der Mee (2015). *Enhancing International Cyber Security A Key Role for Diplomacy*. *Security and human rights*, 26, 193-205

45 Martti Lehto, & Gerhard Henselmann (2020). *Proceedings of the International Conference on Cyber Warfare & Security*. 316-325. 1

46 Monika Chansoria (2012). *Defying Borders in Future Conflict in East Asia: Chinese Capabilities in The Realm of Information Warfare and Cyber Space*. *Journal of East Asian Affairs*, 26 (1), 105-127, p. 23

47 Brian M. Mazanec (2015). *The Evolution of Cyber war: International Norms for Emerging Technology Weapons*. Potomac Books

the attack. Further, the applicability of the international humanitarian law is being hotly contested by both the groups.

With the view to end stalemate in cyber diplomacy, in December 2018, the UN General Assembly established two new parallel processes: an Open-Ended Working Group (September 2019–July 2020)⁴⁸ and a new UNGGE (December 2019–May 2021)⁴⁹. On 27 December 2019, United Nations General Assembly established an open-ended ad-hoc intergovernmental committee of experts to elaborate a comprehensive international convention on cybercrime.⁵⁰ Many observers view these developments as conflicting and competing initiatives.⁵¹

Health Risks and Pandemic

In an increasingly inter-connected world, infectious diseases could rapidly spread around the world—and potentially cause serious threat to human health, national security and economy. In 2000, the global spread of HIV/AIDS, for instance, prompted the United Nations Security Council (UNSC) to pass resolution 1308, stressing that HIV pandemic may pose a risk to stability and security.⁵² Further, in 2014, the UNSC passed the

48 UNGA (2018). Developments in the field of information and telecommunications in the context of international security, A/RES/73/27, 5 December 2018.

<https://undocs.org/en/A/RES/73/27>

49 UNGA (2018). Advancing responsible State behaviour in cyberspace in the context of international security. A/RES/73/266, 22 December 2018.

<https://undocs.org/en/A/RES/73/266>

50 The Assembly adopted UNGA Third Committee draft on countering the use of ICTs for criminal purposes by a recorded vote of 79 in favour to 60 against, with 30 abstentions.

<https://www.undocs.org/A/74/401> ; UNGA (2019). Countering the use of information and communications technologies for criminal purposes. A/RES/74/247, 27 December 2019. <https://undocs.org/en/A/RES/74/247>

51 Camino Kavanagh (2019). *New Tech, New Threats, and New Governance Challenges: An Opportunity to Craft Smarter Responses?* Washington, DC: Carnegie Endowment for International Peace; Elaine Korzak (2020, March 16). *What's Ahead in the Cyber Norms Debate?* <https://www.lawfareblog.com/whats-ahead-cyber-norms-debate>

52 Colin McInnes (2006). *HIV / AIDS and Security*. *International Affairs*. 82 (2), 315-326. UNSC (2000). Resolution 1308 (2000). S/RES/1308 (2000), 17 July 2000. <http://unscr.com/files/2000/01308.pdf>

resolution 2177 declaring that the Ebola virus constitutes a threat to international peace and security.⁵³ These developments represent the culmination of a trend towards securitisation of infectious diseases within the UN system. The securitization of the health risks primarily concerns the spread of infectious diseases. Many governments perceive such diseases no longer as merely conventional issues for clinical medicine or public health but also as more pervasive threats to national and even international security.⁵⁴

The recent outbreak of Covid-19 pandemic is a watershed event in highlighting the global ramification and severity of non traditional security challenges. Indeed, Covid-19 has become the most severe security threat and the socio-political crisis of the present century.⁵⁵ As of June 28, 2020, the World Health Organization (WHO) has reported a cumulative total of 98,43,073 confirmed cases and 4,95,760 deaths worldwide.⁵⁶ The IMF has projected a deeper recession in 2020 and a slower recovery in 2021. Global output is projected to decline by 4.9 percent in 2020. Further, the global economy will suffer a cumulative loss of over \$12 trillion over two years (2020–21) from this crisis.⁵⁷ These data underscore that though non traditional security threats may not directly damage the national security, they can be catalytic in affecting the critical elements of the national security. It is thus imperative that national security strategy should include securitisation of infectious diseases for preparing response strategy to deal with health risks and pandemic.

53 UNSC (2014). Resolution 2177 (2014). S/RES/2177(2014), 18 September 2014. https://www.un.org/en/ga/search/view_doc.asp?symbol=S/RES/2177%20%282014%29

54 Stefan Elbe (2018). *Pandemics, Pills, and Politics- Governing Global Health Security* Baltimore: Johns Hopkins University Press.

55 Sarwat Rauf (2020). Is Pandemic Exposing National Security Vulnerabilities? <https://www.geopolitica.ru/en/article/pandemic-exposing-national-security-vulnerabilities>

56 WHO (2020, June 28). Coronavirus disease (COVID-19) Situation Report– 160. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200628-covid-19-si-trep-160.pdf?sfvrsn=2fe1c658_2

57 Gita Gopinath (2020, June 20). Reopening from the Great Lockdown: *Uneven and Uncertain Recovery* <https://blogs.imf.org/2020/06/24/reopening-from-the-great-lock-down-uneven-and-uncertain-recovery/>

THE ROLE OF NSCS IN COMBATING NON TRADITIONAL SECURITY CHALLENGES

India has established a robust institutional framework to address national security threats including non traditional security (NTS) threats. This section provides an overview of the role and function of NSCS in forecasting and combating NTS threats.

Pivotal Role in National Security Policy-Making

In 1999, the Central Government constituted the National Security Council (NSC) as the apex advisory body on national security matters.⁵⁸ It was entrusted with the task of national security management including external and internal threats, intelligence coordination and non traditional security threats.⁵⁹ The institutional structure of the NSC include Strategic Policy Group (SPG) as the principal mechanism for inter-ministerial coordination on national security policies; the National Security Advisory Board (NSAB) to advise the NSC on national security issues; and National Security Council Secretariat (NSCS) functioning as the secretariat for NSC and also servicing SPG and NSAB.⁶⁰ NSCS functions as the backbone of the NSC structure.⁶¹ Its functions include secretariat services to NSC, SPG and NSAB; preparation of papers for the consideration of NSC and SPG; and intelligence analysis and assessment of national security issues.⁶² Since its inception in 1999, the NSCS has assumed an increasingly significant role in the formulation of national security policy and implementation.

In the national security apparatus, NSCS serve as a central point for national security issues. While security and intelligence elements are spread over various Ministries/ Agencies, all Ministries/Agencies

58 See Cabinet Secretariat (1999, April 16), supra note 7.

59 Ibid.

60 Ibid.

61 For details of evolution of NSC structure, see P.S. Raghavan (2019): The Evolution of India's National Security Architecture, *Journal of Defence Studies*, 13 (3), 33-52.

62 Cabinet Secretariat (1999, April 16), Ibid.

are required to consult the NSCS on national security related matters.⁶³ Further, inter-agency coordination is an important institutional mechanism at NSCS to synergise among relevant security agencies on response strategies and action-plan.

In fulfilling its role, NSCS also engages with the national security establishment including National Security Advisor (NSA), National Security Council (NSC), Cabinet Committee on Security. It assists the National Security Adviser (NSA) and the National Security Council (NSC) on national security matters.⁶⁴ While all critical policy decisions are cleared by the Cabinet Committee on Security (CCS),⁶⁵ NSCS plays a pivotal role in national security policy formulations and actions including non-security issues in a holistic manner.

Focal Point for Strategic Assessment of National Security Challenges

The non traditional security challenges have resulted in a 'new normal' in security discourse. The expanded contours of national security have also led to demand on the security and intelligence apparatus for a comprehensive strategic assessment of security environment.⁶⁶ The internal structure and mechanisms at NSCS enables it to adopt a multi-disciplinary approach for strategic analysis, unlike the unidirectional approach followed by the line Ministries and agencies. The unique structure of NSCS and domain expertise facilitates it to generate new ideas and action plan on important national security issues through

63 Shakti Sinha (2018). Inter-ministerial and Inter-departmental Coordination. In: Gurmeet Kanwal and Neha Kohli (eds.). *Defence Reforms: A National Imperative*. New Delhi: Pentagon Press, Chapter 9, pp. 130-144; Manoj Shrivastava (2015). *Re-Energising Indian Intelligence*. New Delhi: Vij Books

64 Cabinet Secretariat (2019). Cabinet Secretariat Notification, 6 August, 2019.

65 Bibhu Prasad Routray (2013). *National Security Decision-Making in India*, RSIS Mono-graph No. 27, p.15. <https://www.files.ethz.ch/isn/163172/Monograph27.pdf>

66 Saikat Datta (2018). *Intelligence, Strategic Assessment, And Decision Process Deficit - The Absence of Indian Learning from Crisis to Crisis*. Washington, D.C.: Stimson Center; Rajeev Bhutani (2016). *Reforming And Restructuring : Higher Defence Organization Of India*. New Delhi: Centre for Joint Warfare Studies (CENJOWS)

brain-storming, discussions, national security reviews, holistic evaluation of opportunities and vulnerabilities, preparation of policy papers, and consultation with relevant stakeholders.

NSCS acts as a useful platform to coordinate among stakeholder departments/agencies to have a holistic and strategic stance on national security issues, including NTS threats. It collates and analyses intelligence and other inputs on developments impinging on national security, prepares strategic papers after consultations with relevant stakeholders, facilitates inter-agency coordination of actions and monitors implementation of major decisions relating to national security including non traditional security issues.⁶⁷

These processes and mechanisms enables NCSC to perform its function as the focal point for a strategic assessment of the national security issues holistically and synergistically by examining multi-dimensional issues in the geopolitical, diplomatic, military and technological dimensions.⁶⁸ The NSCS is being revamped to enhance its capacity in the context of the emerging security environment, emanating from NTS issues, with an emphasis on domain knowledge and technical expertise.⁶⁹ This is supposed to enable NSCS in providing situational awareness of the national security environment at the strategic level.

Fulcrum for Security Diplomacy

NSCS is also acts as a fulcrum for security diplomacy, which is now an

67 PS Raghavan (2020). National Security Determinants of Foreign Policy. In: Arvind Gupta and Anil Wadhawa (ed.). India's Foreign Policy: Surviving in a Turbulent World. New Delhi: Sage Publications India Pvt Ltd, Chapter 2.

68 Arvind Gupta (2018). How India Manages its National Security. New Delhi: Penguin Vi-king.

69 P.S.Raghavan (2019, April 22). Re-Energising India's National Security Structures <https://sniwire.com/2019/04/22/re-energising-indias-national-security-structures-2/>; Tara Karatha (2018, October 17). The Rejig of India's National Security Architecture Has Been a Long Time Coming, <https://thewire.in/security/ajit-doval-national-security-coun-cil-secretariat>

integral part of India's foreign policy. Diplomatic efforts in non traditional security issues has led to India's growing standing in international strategic arena.⁷⁰ For instance, establishment of International Solar Alliance in 2015 marks a diplomatic success for India; Humanitarian Assistance and Disaster Relief (HADR) missions, anti-piracy engagements⁷¹ and assistance in the COVID-19 Crisis⁷² have bolstered India's position as net security provider in Indian Ocean Region.

NSCS, inter alia, has been playing a key role in security diplomacy concerning non traditional security threats such as terrorism, maritime security, coastal security, piracy, and emerging techno-security challenges including cyber security and 5G communication technology. It coordinates the multilateral NSA-level dialogues including BRICS, BIMSTEC, Trilateral Maritime dialogue and represents India in the Regional Anti-Terrorist Structure of the Shanghai Cooperation Organisation (SCO-RATS). It also plays a role in bilateral security dialogue with over 20 countries.⁷³

Cyber Security Coordination

NSCS has been entrusted with the responsibility to coordinate, oversee and ensure the implementation of the framework for cyber security.⁷⁴ In

70 Oliver Stuenkel (2012). India: the next superpower? India's national interests and diplomatic activism: towards global leadership? IDEAS reports - special reports, Kitchen, Nicholas (ed.) SR010. LSE IDEAS, London School of Economics and Political Science, London, UK.

71 C Raja Mohan (2014, March 26). Indian Military Diplomacy: Humanitarian Assistance and Disaster Relief, ISAS Working Paper No. 184; Abhishek Mishra (2020, Feb 3). India's vision of SAGAR: Humanitarian assistance and disaster relief operations in the Indian Ocean Region, Raisina Debates, Neil Melvin (2019, April). The Foreign Military Presence In The Horn Of Africa Region, SIPRI Background Paper. https://www.sipri.org/sites/default/files/2019-05/sipribp1904_2.pdf

72 Niranjan Marjani (2020, April 22). India's Indian Ocean Diplomacy in the COVID-19 Crisis. <https://thediplomat.com/2020/04/indias-indian-ocean-diplomacy-in-the-covid-19-crisis/>

73 PS Raghavan (2020), *ibid*.

74 Ministry of Communication and IT (MCIT). Lok Sabha Unstarred Question no. 14, 7 July 2014. <http://164.100.47.194/Loksabha/Questions/QResult15.aspx?qref=403&l->

this regard, National Cybersecurity Coordinator (NCSC) in the NSCS coordinates with different agencies at the national level for cyber security matters.⁷⁵

NSCS has played a catalytic role in establishing robust national security architecture in country and delineating cyber responsibilities among stakeholders. It facilitated implementation of the 2013 National Cyber Security Policy, with emphasis on capacity building including cyber security research and development and indigenisation. Recently, NSCS has set up a Task Force for formulating the National Cyber Security Strategy.⁷⁶ In addition, it also plays a key role in international cyber cooperation including information sharing on cyber threats, cyber-crimes, CERT-to-CERT cooperation. Further, it plays a prominent role in cyber diplomacy including norms of responsible state-behaviour in cyber space at various bilateral, regional and multilateral level multilateral fora. It has played a key role in signing of bilateral cyber agreements with important countries such as USA, Russia, UK and Israel.⁷⁷

Conclusion

In the era of strategic competition, national security is increasingly becoming intertwined with foreign policy. The traditional concept of national security, too, has been expanded to include transnational and multidimensional security threats – broadly termed as non traditional security (NTS) threats. The complexity and uncertainties of NTS threats

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- 75 Ministry of Home Affairs (MHA). Lok Sabha Unstarred Question no. 1338, 18 December 2018, <http://164.100.24.220/loksabhaquestions/annex/16/AU1338.pdf>; P.S. Raghavan (2019). The Evolution of India's National Security Architecture. *Journal of Defence Studies*, 13 (3), 33-52, at p.41; Ejaz Akram (). A Comparative Analysis of the Structures and Functions of Intelligence Community in Israel and India. <http://www.defencejournal.com/sept99/analysis.htm>
- 76 National Cyber Security Strategy 2020 (NCSS 2020). <https://ncss2020.nic.in/>
- 77 MCIT. Lok Sabha Unstarred Question no. 1062, 8 February 2017. <http://164.100.47.194/Loksabha/Questions/QResult15.aspx?qref=47047&lsno=16>; US Embassy in India. Framework for the US-India Cyber Relationship, 30 August 2016, <https://in.usembassy.gov/framework-u-s-india-cyber-relationship/>

necessitates a strategic assessment of current and emerging security threats in an institutionalised manner. Like many countries, India has set up a robust National Security Council structure for national security management and has established NCSC as the secretariat for the NSC. The NSCS has played a pivotal role in national security management, since its inception in 1999. It has become locus for inter-agency coordination and strategic policy analysis. It has contributed immensely to the government-wide response to national security concerns including non traditional security issues. While NSCS structure is constantly evolving, the internal work culture still remains tuned to tactical rather than strategic thinking.⁷⁸ It, therefore, needs to overcome institutional constraints to augment capacity with emphasis on domain knowledge and technical expertise. This will strengthen its role in national security coordination and strategic planning and thereby contributing to bolster India's security diplomacy in shaping the global agenda on NTS issues.

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⁷⁸ Arvind Gupta (2018), *ibid.*

RECOGNISING AND LEVERAGING THE TRADITIONALITY OF NON TRADITIONAL SECURITY THREATS

Rear Adm Sudarshan Shrikhande, AVSM (Retd)*

“Influenza pandemics are known and expected to result in major national and international consequences including global economic and political destabilization, health resources crises and panic”

- In a paper by an Indian medical, legal team in 2010¹

“History does not repeat itself, but man does”

- Voltaire²

Introduction

This essay takes a contrarian view of the concept note for this special issue of *Synergy* on ‘non traditional security threats’ (NTST) in explaining that most, if not all such threats are actually very traditional. NTST, in this analyst’s view, is an inaccurate and unhelpful term. Of course, the term itself has not been invented in India and has been in vogue in scholarly circles for quite some time. John Mearshimer, an advocate of ‘offensive realism,’ is one of those scholars who mentions non traditional threats towards the end of his book: “another challenge to the realist perspective on survival emphasizes *that the dangers states face today come not from the traditional kind of military threats that realists worry about, but instead from non traditional threats* such as AIDS, environmental degradation, unbounded population growth, and global warming.”³ Of course, while he does not say the term might be unhelpful and inaccurate, he does

add that “Although these dangers are a cause for concern, (they are) not serious enough to threaten the survival of a great power.”⁴

Aim

The inter-related and inter-mingled aims of this paper are that, first, what we call non traditional security threats are very much traditional almost throughout history. Second, that there are fundamental problems that hinder formulation of strategic planning and operational responses if new terms are mistaken for new developments or concepts. In the context of the so-called NTST terminology, it would be seen that the more traditional terms followed by armed forces actually are more logical anyway. Within this, there is little to be gained by the abundance of misleading terms—nothing but jargon—that seem to indicate that armed forces have also stumbled on new types of warfare or even worse, new types of wars. Third, it degrades the value of history, and especially strategic history which is as such, the only evidence we have. The future provides us no evidence whatsoever, but history can inform strategy. Thus, by recognising that the NTSTs are very much traditional, a whole-of-government approach to strategic planning would enable operational execution and better national/ regional global outcome depending on the context of the developing or likely threats.

Defining “Traditional Threats”

Doctrines published by armed forces of several countries over the past few decades have described conflicts in terms of conventional or sub-conventional; high-intensity or low intensity. The spectrum of tasking for armed forces (and the implication that being instruments of the state, for other organs of the state itself) ranged from peace to conflict; from “aid to civil power” as the Army termed it to “benign/ constabulary” tasks as the Navy saw these. In the US, their capstone doctrinal publication mentions *traditional* warfare as compared to *irregular* warfare.⁵ Further in the document, mention is made of other roles requiring ‘Support to Civil Authorities.’⁶

However, scholars began to use the terminology in the context of wars, and major conflicts and created the NTST distinction in the process. One definition for traditional issues is as follows:

“Traditional security issues are about the threats against the essential values of the state, territorial integrity, and political sovereignty. Means, which are also important in defining traditional security, consist of weapons, armaments systems, and the military, but diplomatic means like pacts and alliances aimed at building special relations between states for security purposes are also means of traditional security.”⁷

Similarly, academics began defining NTST as follows:-

“Non traditional security issues are challenges to the survival and well-being of peoples and states that arise primarily out of non-military sources, such as climate change, resources scarcity, infectious diseases, natural disasters, irregular migration, food shortages, people smuggling, drug trafficking and transnational crime. These dangers are often transnational in scope, defying unilateral remedies and requiring comprehensive – political, economic, social – responses, as well as humanitarian use of military force.”⁸

Caballero-Anthony elaborates that some of the characteristics of non-military NTSTs are that they “are transnational...often defined in political and socio-economic terms...cause societal and political instability and become threats to security...often caused by human-induced disturbances to the fragile balance of nature...and essentially require regional and multilateral cooperation...”⁹

The Past Is What “Tradition” Is!

At first glance, there seems to be enough logic to the TSTs and NTSTs as described by scholars. The deeper issues of why this author feels the prefix non traditional could be unhelpful, is discussed below. There is some background to this. In April 2020, when the full seriousness of

the COVI-19 pandemic was sinking in, I had responded to a key Central Government body's request for inputs on "improvements/changes... in various fields to be able to combat such non traditional threats."¹⁰ The opening response to the request was to suggest that epidemics and pandemics have been a part of human history and shall be part of our future as well and hence are among traditional threats. They have occurred during peace and war; have killed political leaders and generals as well as citizens and soldiers; they have devastated populations; they have spread from human and animal carriers and vectors existing in nature and transportation from camel caravans to sailing ships to a world connected by hundreds of airlines. COVID- 19 is the fifth pandemic within the 20 years of this century, albeit the most severe and virulently global. And, this is not counting the ongoing HIV pandemic.¹¹ HIV began from the mid- 1980s; it claimed a high of 1.7 million lives in 2014, the maximum annual toll and even in 2019 nearly 7 million.¹²

Traditional/ Non Traditional? The point about them being traditional and not non traditional security threats is an important one that goes well beyond semantics. If we think of epidemics and pandemics as non traditional, what is it exactly that we mean?

- Are they new? Obviously, they are not.
- Have some people not written or spoken about them? No, a few have, even if they aren't or weren't heard. (For example, in the US, several senior experts, politicians spoke about it. President Obama very clearly spoke about it and the need to do something in preparation, nationally and globally. President Trump claiming that previous administrations had slept over the threats has been shown to be incorrect. In fact, all recent US administrations have done considerable work on this and even the NSS 2017 has several paragraphs on pandemics and bio-terrorism signed by President Trump in the section on Pillar One threats.¹³
- Were pandemics experienced and fought and suffered earlier? Yes, of course. As said, there have been at least four other in this century, not counting HIV. Epidemics and pandemics have been

commonplace in the 20th century and in every century before that, some incredibly devastating.

- Are entirely new responses required for countering pandemics? No, unlikely, even if specific defensive arrangements, treatments and vaccines change. However, the socio-political and socio-economic effects are more similar than dissimilar in essence but may vary greatly on scale as would any “traditional” military conflicts from localized skirmishes to total war.
- Are there no lessons from history, including oral and written “tradition” of epidemics and diseases? If history is a part of the learning process, if a nation’s evolving strategic culture learns from its strategic writings, strategic successes and failures over even centuries, then doesn’t tradition and “traditional” very much form part of an analytical framework? It would be this framework that then may better help us find strategies and tactics that are better conceived as changing contexts of environment, circumstances, context, politics, technology, geography etc are all considered.

The Traditionalism/ Ubiquity of NTST

Consider the ubiquity of several non traditional threats to security. These are described below.

Piracy. According to Caballero-Anthony’s definition, maritime piracy is a crime that is often trans-national, aggravated by man-made and natural reverses like loss of fishing, poverty, political unrest and so on. The first recorded instances of piracy are more than 3000 years old predating the appearance of navies in the Mycean period of very ancient Greek history.¹⁴ In fact, it would not really be facetious to say that, for these early pirates, it was new navies that had become non traditional threats! Navies have mistakenly thought of piracy as a NTSC when they were the reason for a standing state force to fight them and protect trade. The Indian Navy is not alone in terming piracy and illegal fishing, maritime terrorism, climate change, natural disasters as NTSTs.¹⁵

Climate Change. Even if we ignore the pre-historic ice-ages, climate change and cataclysmic climatic events have been part of human history and hence traditional. It is said that 536 CE was “the worst year to be alive” due to a likely volcanic explosion in Iceland that created almost something like what a nuclear winter might be like. The misery lasted several years and is estimated to have killed a quarter of the world’s population due to famine, the “Justinian” plague and the sheer fall in global temperatures.¹⁶ Kraska provides two interesting reflections on the connections between piracy and climate change both, during 800-1220 CE warming period and the 1300-1850 “little ice-age”. The warming enabled the Vikings to turn into accomplished pirates and conquerors who reached into the British Isles, Iceland, and perhaps North America as well. The so-called little ice-age that followed from 1300 to as recent as 1850, resulted in a renewed loss of livelihoods, and pressures for the Vikings and other Northern tribes to move further South into Europe. Piracy was one such occupation that opened up. New wars and conquests followed in which they sailed their longboats for newer conquests in Northern waters, perhaps all the way to the Canada.¹⁷

Water Wars. Water as a cause for future conflict and of course, as a humanitarian crisis, is very much a possibility because it has very frequently been a security issue for all of human history. In fact, the long and dense history of conflicts where water was used as a weapon (by flooding, damming, poisoning, for example) or as a cause for obtaining it for agriculture, is a revelation. The Pacific Institute’s work on its chronology begins with the Lagash-Umma border dispute of 2500 BCE.¹⁸ At the time of writing, Ethiopia, Sudan and Egypt are embroiled— more than ever before—at the operationalisation of the Renaissance Dam on the Blue Nile.¹⁹ Egypt and Ethiopia have threatened war as an option even as the dispute is urgently being discussed in the UN Security Council and the African Union.²⁰

Food Insecurity and Conflict. During the Peloponnesian War (431-404BCE), the need for grain to stave off hunger in Athens led to the failed

attempt at large-scale expeditionary warfare, as we would now call it, all the way to Syracuse in Italy. Thucydides, the contemporary general and dispassionate chronicler of the war, quoted the Athenian leader, Nicias saying about the Syracusans, “(But) their chief advantage over us lies in the number of horses, and in the fact that they grow their grain at home instead of importing it.”²¹ In the First World War, Germany’s stratagem to bring Turkey into the war as an ally against Russia closed the Black Sea to Russia’s exports of grain as well as imports almost completely.²² To ease its food scarcity, hampered as it was by Germany’s U-Boat campaign in the North Atlantic, Britain embarked on its disastrously managed Dardanelles and then the Gallipoli campaigns in 1915.²³ It was not the only attraction for the decision, but an important one. Similarly, during WW II Hitler’s desire for Lebensraum (Living Room) in Russia’s vastness was for resources, including food so that the scarcity and starvation experienced in the First World War could be prevented.²⁴ In 1971, the need to feed about 10 million refugees, escaping Pakistani terror and genocide in the then East Pakistan was becoming a very difficult matter for the Indian government which could primarily be addressed by the liberation of that part of Pakistan. Like water wars, food wars and insecurity are also most traditional and intertwined with a number of other contextual factors and consequences. They should not be considered NTSTs.

Human Trafficking/ Slavery. Slavery has been a very traditional crime against humanity for millennia. For several centuries, until navies started fighting—instead of abetting and supporting—intercontinental slave trade, its very organized, state- supported or accepted existence on land made it one of the most heinous global atrocities. Today, human-trafficking mimics several aspects of slavery. Its volume, routes, methods or details that the victims often *pay* for being trafficked are matters of context and detail. The underlying elements are very traditional.

Pandemics. The current impetus for looking at NTSTs, no matter how illogical the term is, has of course, been triggered by the ongoing

COVID-19 pandemic. As said, for a world experiencing its fifth pandemic in the last two decades, it should have been less strategically surprised. Was the world not looking at or aware of the lessons of history? Just a few nations were not strategically surprised; Taiwan, South Korea, Vietnam, Singapore and perhaps Japan come to mind. Yet, even some of them made tactical errors and had to make major course corrections. The Indian doctors and legal affairs experts quoted in the epigraph were very prescient ten years back when they published their paper. Was it given adequate attention? Did the *traditionalism* of the threat get subsumed in the emphasis on jargon like NTST? All these are difficult to establish, but the price to be paid for inadequate examination of history is often the absence of strategic planning or inadequate planning. In a remarkable book covering the intertwining of conflicts and pandemics, the authors pointedly begin their Preface with a recounting of the four horsemen of the apocalypse. This Biblical reference is for the “first and second riders on their white and red horses represent wars of conquest and civil war. The third horseman with his black horse represents famine. The fourth (represents) Death. ‘To him was given power over a quarter of the earth, with the right to kill by sword and by famine, by pestilence and wild beasts’ (Rev.6:8).”²⁵

Old Concepts in New Jargon

Lest it be thought that militaries can be more accurate with terminologies, a caution is necessary. Errors of terminology can lead governments, cabinets and defence leadership to think that something fundamentally new may be happening when it might not be so. Notable examples are hybrid war, hybrid warfare or grey zone warfare. Almost all warfare, as so forcefully argued by Stoker and Whiteside, has been hybrid warfare with the DIME, lines generally present and effective in different measures.²⁶ Chanakya and Sun Tsu certainly analysed and advocated merits of hybrid warfare and recognized that statecraft and fighting more often than were conducted in the grey Zone. Grey zone warfare is age-old and not something that only “bad guys” wage as has been recently thought of in the West and in India as well which this author has pointed out in

an earlier special issue of Synergy by CENJOWS.²⁷ It is an option for all and always has been so. The issue is not peripheral to the matter of traditional/ non traditional considerations. As Admiral James Goldrick says, “Grey zone activities arguably have a history almost as long as organised activity at sea.”²⁸

In another article he again cautions, “There are good reasons why this unthinking application of jargon must stop. First, ‘non traditional’ implies something new. Adopting the label too often means that the historical record is not consulted, the voice of experience is ignored, and the mistakes of the past are all too often repeated.”²⁹ More often than not, such misconceptions begin elsewhere and are transmitted across the world as a “virus,” but the historical context remains often unexamined. External jargon often becomes internally institutionalised. At the same time, there are papers and essays written elsewhere pointing out to the illogic-- even nonsense-- implied in some of these. Often, these don’t receive much attention. When we think of hybrid warfare, or multi-domain warfare, or Effects Based Operations (EBO) or GZW as new ideas or worse, new types of “wars”, it hampers our strategic thinking, strategic planning and all the actions that ought to emerge out of that planning. There are disadvantages when we elevate tactical and perhaps operational measures like hybrid warfare, distributed lethality, the alphabet soup of the impossibly vague and unnecessary JAM-GC (Joint Concept for Access and Maneuver in Global Commons!) n, EBO, Air-Land Battle, Anti-Access, Area- Denial (A2AD) etc to fundamentally new strategic ideas or operational concepts. A2AD, for instance is nothing more than sea control with sea denial as its subset.³⁰ China, which doesn’t use the term (the Americans coined it) is doing nothing very principally different than several nations have tried to do over a few centuries. What has changed are the different contexts of geography, and tools available, many of which reside on land like shore-base aviation, missiles, etc. Similarly, thinking of Active-Defence, *Three Warfares*, “Little Blue-Men” and so on, as uniquely Chinese concepts is also flawed. There are examples from history for all of these which need not be illustrated here. Stoker and Whiteside are categorical that hybrid

war and GZW (to name two), “should be eliminated from the strategic lexicon. They cause more harm than good... with a resultant negative impact on the crafting of security strategy for the United States...”³¹

The Importance of the Past, i.e. “Tradition.” Historical evaluations are important always for planners and executors of strategy. This is no armchair exercise or hobby and Voltaire’s observation in the second epigraph rings very true. This connection between history and strategy, or the difference between historians and strategists could not have been better worded than by the naval historian Andrew Lambert. He wrote, “The distinction between history and strategy is a matter not of evidence but of intention. If we try to understand what happened... we operate as historians. If we want to know how those events might inform future choices, we operate as strategists. The evidence is the same, the questions are different.”³² Whether we consider the confused categorisation of traditional/ non traditional security threats, the dangers of not evaluating the evidence of history can be very real. Stoker and Whiteside are on target in saying, “When new terms appear—and they will—they must be tested against history and existing theory. Most new so-called classifications of war would be instantly killed if properly examined through these lenses.”³³

New Thinking, Old Understanding & Contextual Evaluation

Having seen that the usage of traditional security threats (TSTs) or NTSTs is not really helpful, the more traditional terms that militaries use encompass strategic, operational and tactical level actions quite well are also the ones more useful. These span from benign tasks to constabulary missions, low intensity to high intensity conflicts and even the possibility of nuclear deterrence collapsing. Likewise, the army uses “aid to civil authority” and the Americans use “support to civil authority.” These cover a range of humanitarian assistance and disaster relief (HADR) which, in India became common currency after the Dec 2004 Tsunami and the creation of the National Disaster Management Authority. In a strategically environmental sense, conflict and peace all, of course,

require continuous whole-of government involvement. This doesn't need elaboration. However, strategic planning is the absolute key for the range of activities required at the apex level and the subsets required at the levels of various ministries, departments, states and district level authorities. Similarly, the defence set-up also gets involved often in the planning, and actually may provide very useful planning and execution details for HADR efficiencies, as one example. Wars and epidemics have often occurred together and have deeply impacted armies across history. There never is a good time for an epidemic, but one during a tense environment or in an ongoing conflict is not something the US, India or even China are experiencing in 2020. Athens too did during the plague in the early years of the Peloponnesian War. Pericles, their leader died of it. Thucydides, who as a general himself was a plague survivor!³⁴

Strategic Planning Could Prevent “Pearl Harbours”. Deep strategic planning begins with no scenario, or almost no scenario being off the strategic planning table. If something is to be pushed off the strategic planning table, it would need to be internally justified and recorded with as much logic as there can be. Secondly, certain degrees of likelihood can be assigned as military officers learn in staff duties and Commanders' Estimates of Situations. Thirdly, planning prevents surprises and every effort to look at a whole-of-ship approach is exactly what is needed to prevent Pearl Harbours for pandemics, climate change or any other “NTSTs”. In India, a refrain often heard is that our major problem is poor implementation. It is true, of course, but rarely is it said that the main reason for poor implementation is inadequate strategic planning and lack of detail required for implementation. There is generally not enough effort put into staff studies and the consequent staff work that is properly documented, periodically updated and then available for implementation. For instance, the NDMA Act 2005, made in the wake of the Tsunami, does not mention pandemics and as such, provides limited utility for coping with one. Surprisingly, the 2017 National Health Policy is also silent on pandemics which is an egregious omission.³⁵ The NHP, 2017

is far too generic and, in fact, does not mention epidemics, pandemics of even influenza outbreaks. One way of looking at its utility would be for the coordinating department for pandemics to ask itself a question: How does the NHP 2017 better equip the nation to combat such a pandemic? If yes, how? If not, why not? Shouldn't policy documents actually be of utility for strategic planning and go beyond being events for some releases and media attention? Such an approach to detailed examination of a range of HADR issues and problems currently called NTSTs could be beneficial to the detailed whole-of-government planning and execution that would prevent "Pearl Harbours." Contextually, of course, course corrections would be made; that is inarguable. But larger framework issues would already be in place.

Could there actually be Non Traditional Threats?

An Exception to Traditional Threats? The main point one would submit here is that if none of the earlier issues are new, *ie non traditional*, then the past becomes useless or only marginally useful for the present or to inform the future as far as strategic planning is concerned. In fact, it may not be an exaggeration to say that the few—perhaps only-- threats that could arguably be called non traditional would be those from Space. One of these could conceivably, be a solar storm or Coronal Mass Ejection (CME) of the type or more severe than the one in Sep 1859.³⁶ Warning time expected for this could be usually less than a day (unlikely to be more than about 18 hours) and if severe action to shut down power grids, land all aircraft, shut down most communications, go into electrical and electronic "bunkers", the world may experience losses of life, trillions of dollars and perhaps months and years of severe economic disruptions.³⁷ In some ways, the possible devastation and consequent loss of life and livelihoods could be as bad or even worse than a pandemic. Yet, some of the prevention measures are to go into a communication and electrical, electronic and transportation lock-down in the 15 to 20 hours warning available. That would be possible only if individual governments have plans for this in place and there is some global cooperative work being done in CME counter-measures. The second conceivable non

traditional threat could be Earth's collision with a large asteroid, or a comet perhaps. (The last major asteroid hit occurred about 65 million years ago ending the dinosaur age. As human history goes, this could be called non traditional quite accurately if it happens again!) But for these there would also be greater warning periods. The third threat, so far only in the realm of science-fiction and film-fantasy would be an attack on Earth by some alien race from outside the galaxy! These possibilities are enumerated here only to underscore the points about not thinking of any of the earlier threats as non traditional so that we are then able to leverage lessons from history for a better strategy to counter these.

Conclusion

The intent of this essay was to suggest that the distinction of humanitarian crises and of more violent conflicts based on their being non traditional and traditional does not seem to be particularly helpful. History remains important for both sets of crises. If anything, there seems to be an intertwining of "NTSTs" and "TSTs" often enough or as a consequence of one of them. While history ought not be templated, it hardly needs reiteration that it provides the only body of evidence for us to study, analyse and use as a framework for the present and to inform us on better ways to cope with the uncertainty that the "future" shall always present. Strategic planning in all fields of human life, in peace and in conflict leverages "tradition", in other words, history.

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End Notes:

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RECOGNISING AND LEVERAGING THE TRADITIONALITY OF NON TRADITIONAL SECURITY THREATS

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NON TRADITIONAL SECURITY CHALLENGES: SUGGESTED MITIGATION STRUCTURES

Air Cmde T Chand (Retd)*

Maslow scientifically ascertained long time back that the security figures high up in the hierarchy of needs of the human beings. The need for security grows from individuals to the family upwards to the nation and most countries including India have formalized national security apparatus at the highest level. National Security Council headed by the National Security Advisor to the Prime Minister takes care of all aspects of the security of India. Broad spectrum of security challenges already emerged, emerging or mutating is regularly taken note of and well established structures are forewarned for eliciting a timely response. CCS (where NSA is also a member) headed by the Prime Minister is the highest body in the country to ensure long term security of India.

Generally speaking traditional challenges from less friendly neighbours get prominent attention from the established structures, organisations and implementers as they visibly affect the national interest and immediate concerns of the population. External, Continental, Aerospace and Maritime security challenges regularly updated by the intelligence network are addressed by the defence forces. Internal security challenges periodically emerging in Jammu and Kashmir, North-Eastern states and areas affected by the left wing extremism are also monitored by the intelligence agencies and neutralized by a mix of CAPFs, State Police and the armed force singly or jointly. Structures exist to address technological security challenges

such as Cyber, Informational, Space and ICT and have of ate been consolidated in the form of Defence Cyber Agency and Defence Space Agency.

Security of a nation and well being of its populace is seriously affected by many other challenges such as Infectious diseases or pandemics, food security, water security, energy security, climate change, national and transnational organized crimes, religious extremism, drugs trafficking, irregular migration, piracy, FICN, demographic dividends/disaster, challenges in the health and education sectors and natural disasters. These security challenges are broadly categorized as Non Traditional Security Challenges (NTSCs) and are defined as “challenges to the survival and well-being of people and states that arise primarily out of non-military sources and include all non military conceivable challenges to the short and long term security of a nation”.

The need to mitigate serious NTSCs caused by natural disasters was felt on several occasions in the past as a result of which NDMA Act came into being in 2005. Supporting structures were created subsequently at national, state and local levels. Disaster Management Act, envisages the creation of National Disaster Management Authority (NDMA), headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers, to spearhead and implement a holistic and integrated approach to Disaster Management in India. In order to translate this vision into policy and plans, the NDMA has adopted a mission-mode approach involving a number of initiatives with the help of various institutions operating at the national, state and local levels. Central Ministries, States and other stakeholders have been involved in the participatory and consultative process of evolving policies and guidelines. Guidelines for management of biological disasters like COVID-19 were also issued by the NDMA in 2008.

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Other NTSCs have traditionally been addressed by the respective Ministries and Departments without a formal supporting legislation or apex level organisations. A number of NTSCs (Food security, Energy security, Health and Education, Water, Climate Change, Demographic Dividends/Disaster) are associated with the inter-ministerial development aspects of the nation, policies for which are steered by the NITI Ayog and planned and executed by the respective Ministries. Inter-Ministry NTSC Issues such as Food Security (Ministry of Consumer Affairs, Food and Public Distribution; Ministry of Food Processing Industries; Ministry of Fisheries, Animal Husbandry and Dairying; Ministry of Agriculture and Farmers Welfare; Department of Fertilizers) get addressed mainly from commercial and not security angle.

Security Challenge aspect normally gets the least consideration for want of formal mitigation structures. Therefore, a central legislation for mitigation of NTSCs, akin to NDMA Act 2005 is considered necessary. National Security Council needs to be assigned the responsibility for operationalisation of the new legislation and an additional wing in NSCS could be created for this purpose. Existing linkages are required to be strengthened and new linkages created among NSCS, NDMA, NITI Ayog and concerned Ministries for ensuring a proactive and prompt response for mitigation of all NTSCs. A unified functional approach between Centre and States needs to be evolved like the NDMA and SDMA. Additional budgeting to meet the operating expenditure needs to be provided to the NSCS, NDMA and concerned Ministries.

Training is required to be imparted to all concerned personnel and periodical rehearsals needs to be undertaken to maintain readiness for facing the challenge when it appears. All possible NTSC mitigation measures should be war gamed and actions required to be taken worked out along with capacity enhancements and budgetary support in various scenarios. This should be undertaken by NSCS and

NDMA with assistance from various Ministries and experts by creating working groups for various threats. These should be incorporated into a Policy document and local SOPs need to be created thereafter. Dissemination down to the lowest level be done and personnel trained and rehearsed for various contingencies. Integration of Media and information dissemination as also countering fake and malicious narratives will pay rich dividends. Scientific community and academia needs to be fully involved in development of tools needed for the mitigation process. Methodology needs to be created for employment of the veteran community for mitigation of the challenges where required. On account of their pan India foot print, commitment and discipline, they form a ready and cost effective pool of trained manpower to be deployed in emergencies. HQs IDS plays an important role for disaster management along with the NDMA. New structures should provide a major role for HQ IDS for mitigation of the NTSCs. India needs to have multilateral, bilateral and regional linkages of institutions for an effective mitigation of the NTSCs in a lead role. Well oiled structures for mitigation of the NTSCs at domestic, regional and global level are sure to serve India's national interest and also enhance its prestige.

Post COVID-19 will be a different world, with strategic technologies driving the emerging world order along with geopolitics, geo-economy and geo-strategy. The world will face NTSCs in addition to the existing threats. India has done extremely well in combating COVID-19. The need is to draw the correct lessons and be future ready by identifying, defining the new age threats and creating cost effective structures and systems to mitigate and defeat NTSCs.

Structures are required to be enriched to ensure an effective and organised system to mitigate emerging and existing NTSCs. Existing organisations e.g. NSCS, NDMA and SDMA need to be strengthened, however additional structures will be required to be future ready. As a conceptual framework the NTSCs can be grouped in four to five

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heads and managed by a task force e.g. task force one, two etc, some falling within the ambit of the existing NDMA and others to be driven by NSCS. Recommended Basic framework could be a multi-tiered one. At apex level an Empowered Group of Ministers (EGM) under PM would be needed. Executive level could be handled best by an Empowered Committees of Experts (ECE) comprising concerned Ministries and Subject Matter Experts, responsible for directions, procurement, positioning and provision of requisite wherewithal, coordinated by NSCS/ Cabinet Secretariate. The Functional level could be addressed by Specialist Task Forces (STF). Specialist forces with a nucleus capable of mustering manpower and other resources in a time urgent response situation or to defeat an emerging threat. These could be dual tasked and trained comprising of NDRF, CAPF, State Police and Armed Forces, capable of integrating and exploiting Home Guards, Railways, NCC, and veterans of Armed Forces, and identified NGOs. At working level various States, Districts, Blocks and Panchayat assets would come in to play. These entities would form the working force under guidance and directions of Specialist Task Forces. Citizens in the neighbourhood are the first responders. Therefore, NTSCs subjects should be included in education curriculum at school and college levels for a wider understanding and coordinated actions.

Various Intelligence agencies will need to be coordinated possibly at and by NSC. This is an imperative for any effective response to mitigate NTSCs. In addition creating a secure data base with data centres located in India should be ensured. NSCS acts as a useful platform to coordinate among stakeholder departments/agencies to have a holistic and strategic stance on national security issues, including NTSCs. It collates and analyses intelligence and other inputs on developments impinging on national security, prepares strategic papers after consultations with relevant stakeholders, facilitates inter-agency coordination of actions and monitors implementation of major decisions relating to national security including non traditional security

issues.¹ NSCS, has been playing a key role in security diplomacy concerning non traditional security threats such as terrorism, maritime security, coastal security and piracy. It coordinates the multilateral NSA-level dialogues including BRICS, BIMSTEC, Trilateral Maritime dialogue and represents India in the Regional Anti-Terrorist Structure of the Shanghai Cooperation Organisation (SCO-RATS). It also plays a role in bilateral security dialogue with over 20 countries.²

What is required is a comprehensive and holistic understanding of security that combines traditional and non traditional aspects. Anything that weakens a nation weakens its security. Anything that adversely affects individuals on a large scale is a security challenge. Seen from this perspective, it is necessary that a country develops its comprehensive national strength³.

The Constitution of India provides the basic structure for governance and progress in keeping with India's vision of growth based on strength of its plurality. Experience of the past has brought to fore the aspect of security and its impact on every facet of India's developmental vision. There are broad security related objectives necessary to meet the aspirations of every Indian. These are: - (a) Maintaining the unity and territorial integrity of India. (b) Providing for each citizen the right to life, liberty, equity and welfare also a good standard of living; (c) Working towards a peaceful, prosperous and friendly extended neighbourhood; (d) Sustained high rates of inclusive economic growth; (e) Credible capacities for conventional as well as non-conventional defence and dealing with asymmetric threats such as cross border terrorism; (f) Political stability, internal social

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harmony, law, order and justice; (g) Wide consensus in polity on the basic parameters of foreign and domestic issues⁴. Development in all spheres of life is essential for achieving these objectives. Scientific and economic development is based on the quality of education. Perhaps the greatest post-independence necessity was of a greater thrust on universal basic education. A literate populace understands demands and works towards security. While this realization has dawned, its implementation still needs more impetus. True security can only come about with education. Consequently transformation of India into a knowledge society must form part of the national security objectives. The National Knowledge Commission (NKC) in its Report had put forward recommendations that need to be implemented. Further India must improve the standards of education in all three segments namely primary, secondary and tertiary as also set up facilities for a skilled work force⁵. Technological development is likely to be a great contributor for the mitigation of the NTSCs.

The Technology Vision 2035⁶ of India delineates twelve 'prerogatives' of all Indians in 2035 that (i) emanate from the vision, (ii) are linked to basic needs and (iii) can be expressed as specific targets. Starting with the most elemental and individual and culminating in the most comprehensive and collective, the twelve prerogatives are: (i) clean air and potable water; (ii) food and nutritional security; (iii) universal healthcare and public hygiene; (iv) 24x7 energy; (v) decent habitat; (vi) quality education, livelihood and creative opportunities; (vii) safe and speedy mobility; (viii) public safety and national security; (ix) cultural diversity and vibrancy; (x) transparent and effective governance; (xi) disaster and climate resilience; and (xii) eco-friendly conservation of natural resources. Critical technologies that would

4 https://www.delhipolicygroup.org/uploads_dpg/publication_file/conclave-on-a-national-security-doctrine-for-india-1025.pdf

5 *ibid*

6 Technology Vision 2035: <https://www.anilkakodkar.in/assignments/Technology-Vision-2035.pdf>

help achieve these prerogatives are identified and also placed on a time line made up of four stages: technology that already exists and is therefore ready for deployment, technology in pilot scale that must be scaled up in order to move from lab to land, technology in the R&D stage that involves further targeted research, and technology that is still in the imagination and could come about as a result of curiosity driven, paradigm shattering research⁷. Alongwith other measures this vision encouraged by the PM has the potential to mobilise all available technologies for holistic mitigation of most of the NTSCs faced by India, in not too distant a future.

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⁷ ibid



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- (a) Parent Service Army/Navy/Air Force/Civil Services
- (b) Rank/ Designation..... (c) Decorations

- (d) Appointment (e) Personal Number
(f) Date of Commission (g) Serving/Retired.....

4. Areas of expertise or interest:-

- (a)
(b)
(c)

5. Any other information that may be of interest to the CENJOWS (including important exposures):-

.....
.....

6. Proof of my identity (Copy of passport/ voters ID Card/ PAN Card/ Iden Card) will be produced after approval of membership.

7. The following are enclosed:-

- (a) Demand Draft/Cheque in favour of CENJOWS payable at New Delhi.
(i) DD/Cheque No..... dated.....
(ii) Amount
(iii) Drawn on Bank.....
- (b) Two stamp sized photographs for membership card.

Place :

Yours faithfully,

Date :

FOR OFFICE USE ONLY

Identity Card/Document No: To be verified by Secretary.

New Delhi

Date

Secretary, CENJOWS

Accepted/Rejected

Membership Number

Place: New Delhi

Date:.....

Director CENJOWS

Note:-

1. Life membership is open for all serving and retired personnel of the Armed Forces, Government Ministries, Academia, members of other think tanks and others interested in studying defence and military strategy.

2. Membership Fees:-

(a) Life Membership:-

(i) Serving/Retired Officers - Rs 1,500/-

(ii) Civilians - Rs 10,000/-

(b) Annual Membership - Rs 1,000/-

