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An Effort of India's Military Modernisation: Army in 2020

ABSTRACT: Since independence in 1947, india economy and population have been growing steadily now a country with over one billion peoples indias priority is socio_economic development at the same time india believes that an assured level of regional stability is necessary for this development.india has traditionally pursued a broad policy of defensive defence.however military developments and growing hostilities with Pakistan have causedher to shift to a strategy of war prevention .consequences of strategic change international security order.key development include nuclear proliferation the growing ascendance of economic power as a key factor in international relations,indias relationship with the united states and Russia trubulence in central asia, Afghanistan global terrorism and continuing enmity with china and Pakistan

KEYWORD; internal security, external security,global security environment, strategic development of army in 2020,fucture war ,doctrinal issues,

.: “ If you know your enmies and know yourself ,you will not be imperiled in a hundred battles ,if if you do not know your enmies but do know yourself you will win one and lose one if you do not know your enemies nor yourself you will be imperiled in very single battle” the art of war,Sun Tzu (6th century BC),

“Before you start some work ,always ask yourself three question why am I doing it, what the results might be and will I be successful. Only when you think deeply and find satisfactory answers to These questions, go ahead.”
- Kautilya

“The true might of a nation is to be sought for not so much in the strength of its army which is but the means of materialising this might, but in the health of its spirit that it has the will (National will) to protect it from dangers external and internal.” - Major General JFC Fuller

This article objectively analyses the security threats external, internal, covert and overt, state and non state posed to our country. As most of the world adopt this paper bases the quantum of threat posed by a security threats through its capability and interest and purported intention. It ,

The Future world is likely to be as volatile as any in the history of mankind. Our potential adversaries will be well armed, and are likely to confront us in many conventional as well as unconventional ways. Any inability in our neighboring countries and the extended region of our interest, directly or indirectly, will impinge upon India's security. Strategic planning has always linked military operations to a political outcome that is desired to be achieved by nation.

Nations adopt a national strategy in order to attain their national interests or goals. Clarity of strategic vision is very important. By tradition, India has been a peace-loving and responsible nation. It has abjured aggression, espoused the doctrine of 'Ahimsa' or non-violence, led the non-aligned group of nations and played a constructive role as a member of the United Nations

We can focus it as “to *preserve national interests and safeguard territorial integrity and unity of the country, against any external or internal threats, by deterrence or by waging a war*”

Change, in the coming decades, is likely to be much faster, for a number of reasons. Technology is rapidly changing and if the Defense does not absorb it at the same rate, it is likely to be left behind. Being the army of a democratic country, all societal changes do have a profound effect on the structure and functioning of the army. Some other obvious reasons are the war on terrorism, the volatile regional environment and internal dynamics with a security bias.

Future wars will be conducted with the aim of achieving a situation of political advantages and not merely victory. Traditional war-making concepts of capturing territory, destruction of military forces or strategic resources, and attacking fortified defences are becoming less relevant in modern warfare. Low intensity conflicts are likely to be the preferred mode of waging war in future.

All ***operations on the future*** will be joint and combined and there will be a substantial increase in the employment of the third dimension, for both friendly and enemy situations, as well as the creation of a favorable public opinion. Effect Based Operations (EBO) is one such concept that has emerged in recent times, perhaps in the post cold war era. This concept apparently aims at addressing the newer threats that have mushroomed in the form of irregular warfare or the Fourth Generation Warfare (FGW).

- Operations in the future may not be easily divided into conventional conflicts or low intensity conflicts.
- The shadows of nuclear weapons would also influence the planning and conduct of operations.
- The army needs to increasingly focus on the operational level of war, as the outcome of any future war will largely depend on the success or failure of operational level battles.

In order to effectively plan, coordinate, and execute rapid, simultaneous and decisive operations, to the depth desired, the army needs to restructure and reorient its philosophy of conventional war-fighting. The army needs to develop a force capable of rapid deployment, with in-built speed, lethality and information dominance that will enable it to conduct decisive operations. The structure of the army should also be such that it can meet challenges across the entire spectrum of threat that is likely to manifest themselves.

Internal threats to India's security are mostly non-military in nature, although some require military force to deal with them. The *proxy war* in Jammu and Kashmir (J&K) initiated by Pakistan and insurgencies in other part of India, especially in the Northeastern states, require military force to tackle. In the complex battlefield of the future, it would be essential for the army to develop its human resources to a high pitch, so that they are able to meet the challenges of the future. The intention was to have a pragmatic look at what the nation should aspire to, in the light of emerging threats and challenges.

The focus was on the shaping of military strategy to meet the challenges, the recommended strategy, coping with proxy war the dire needs to sustainable development, a vibrant defence R&D base and self-reliance, and rapid technology integration.

The need for the *restructuring of the force and doctrinal changes* needed to enable the Indian Army to continue to be a potent force, which would be able to successfully fight the nation's war in 2020 and beyond.

The *nation's nuclear forces* be vastly enhanced and made more potent. This would increase their deterrence value, and would also enhance the nation's strategic autonomy, increase international political leverage and bargaining power, as well as immunity from politico-military pressures and economic and technology sanctions.

- A substantial nuclear capability, including sizeable numbers of thermonuclear devices in our nuclear arsenal, would enable the nation to play a substantial role in shaping the world order.

- A substantial increase in our missile forces, along with the fielding of qualitatively better and longer-range missiles, was also recommended.

All armed forces need to have a plan and a vision for the next 20-25 years to focus on. The Indian Army also has such a vision up to 2025 and it is on account which encapsulates in three small words what we intend to achieve: “**Victory Through Vision**”

Strategic Development of Army2020:

The Indian Army is the 4th largest in the world, in term of numbers, as well as in terms of some items of capital equipment.

Since Independence in 1947, the army has been engaged in active operations on a sustained basis, with only short period of peace. These challenges have helped the army to earn a formidable reputation of a force that delivers, usually against heavy odds.

There have been broadly *two major structural changes* in size and organizational structures of the army.

- The First was the post-1962 expansion, and
- The second was in the mid-Eighties.

However, the impact of these changes was soon lost, as there was no matching change in doctrine.

Resultantly, the army has generally remained static, both structurally and in doctrine terms, expect for incremental changes, to meet challenges as they arose. What the army has lacked is a futuristic vision and a firm resolves for change, as also the courage to adopt the innovative and shun the predictable. The 21st century had opened with the global environment focused more on economic issues and multilateral and bilateral cooperation amongst nations, However, after the events of September 11,2001 (9/11), security issues have reemerged and taken centre-stage.

The army has been heavily committed in dealing with internal threats like insurgencies, terrorism, and proxy war. This has undoubtedly been at the expense of its war-readiness, as well as the desired quality of life. As low intensity conflict will increasingly manifest themselves in the future, the army has to restructure itself, so that while it combats insurgencies and manages high-grade political violence, it continues to retain its combat edge. *Having two sets of forces, the traditional army for deterrence and waging war and an internal security force (ISF) for combating LIC is perhaps one answer.* Major reforms and restructuring would be required for this.

Force structure of the army:

It should be such that it is able to achieve the objectives of the nation expects from it. We need to be regional players of eminence as well as have to say in global strategic formulations. The army's capabilities therefore, must include the following:

Nuclear: We need to refine our nuclear doctrine which should continue to be primarily for deterrence, but for us in case we are forced to use the nuclear option. Our retaliatory capability must be potent, comprehensive and timely. This entails besides a range of warheads, the requisite delivery and support systems. We need to build up our current missile capability substantially so that the army is equipped with a full range of missiles, capable of reaching all possible targets.

Conventional: Credible conventional deterrence will continue to be important. The conventional capability of the army must be comprehensive against our likely adversaries, the army must maintain an effective superiority in conventional forces vis-à-vis Pakistan. The army must also have capability to punitive response to provocations short of war. The challenges China is expected to pose in the mid and long-terms requires that our deterrence capability be upgraded, by adding a potent offensive capability to our current posture.

Low Intensity Conflict: The army needs to support the counter insurgency strategy of the nation, without diluting its conventional capability. It must have adequate capability to fight high grade insurgency in any part of India, as well as proxy wars of the type currently being waged by Pakistan in Jammu and Kashmir. This may imply a separate force, which must be equipped, manned and trained specifically for this role.

Peace-Keeping: The army will have to play an enhanced role in Peace-Keeping operations, mostly under the aegis of the United Nations, but perhaps under other circumstances too.

Restructuring does not merely mean changes in organizational structures. It includes optimization of doctrine and concepts, restructuring of the field force, efficient management of internal conflicts, upgrading HRD, streamlining logistics and modernizing the army training methodology.

The imperatives of restructuring are:

- Compatibility with the likely security environment and battlefield milieu.
- Balance between manpower, weapons and force multipliers.
- Conforming to the availability and allocation of funds.

Future Wars:

Future wars will be conducted with the aim of achieving a situation of political advantage, and not merely victory. Traditional war-making concepts of capturing territory, destruction of military forces or strategic resources and attacking fortified defences are becoming less relevant in modern warfare. ***Deterring war*** would be the primary aim of the army. The army

need to conceptualize the integrated battle at the operational level and the major focus must be to target the minds of the enemy's military and political leadership.

Future conflicts must be won quickly and decisively, with few friendly casualties in a time-frame that makes simple attraction methods of war-fighting obsolete. ***In future operations, army formations would need to gain destructive positional advantage over the adversary.*** This is possible only if the army develops the ability to manoeuvre rapidly. The army needs to restructure and reorient its philosophy of conventional war fighting. The army should concentrate on three-dimensional warfare, which entails doctrine changes like shifting focus from the battlefield to battle space.

The ***army need to redesign*** its combat forces with an emphasis on deploy-ability, maneuverability, battle space awareness, lethality and survivability. At the same time transit from manpower orientation to high technology. *Linear tactics*, which have long been the forte of the Indian Army, need to be discarded.

The focus on adhering to detailed orders, with nearly every aspect of the operation centrally controlled and 'synchronized' needs to give way to a bold and offensive approach. Innovative methods need to be planned for restoring mobility in the mountains, where long periods in a defensive mode have fostered a defensive mentality.

Technology is advancing at an astonishing pace. The fruits of the information age-precision and information – coupled with future breakthrough in mobility, could lead to significant new capabilities at every echelon. There is a need in the army for a doctrinal shift towards mobility and agility on the one hand and greater reliance on technology on the other.

"In order for a war to be just, three things are necessary. First, the authority of the sovereign.... Secondly, a just cause.... Thirdly... a rightful intention. "
St. Thomas Aquinas, *Summa Theologica*

While force structures and doctrinal changes are a subject of further study, it would be useful to sum up some of the implications which arise from the security scenario and threat perceptions. These are briefly enumerated below.

- The *major armed threats to India* remain those from Pakistan and China and from internal armed movements.
- A *nuclear war is unlikely*; but to ensure this it is necessary that India build up a demonstrated nuclear deterrent.
- Conventional wars, either with Pakistan or China, will be limited, in both objectives and time. In this context, one needs to relook at the forces, especially offensive forces. Do we need a number of lighter offensive formations instead of large strike corps?

- *Modern conventional warfare* places a premium on dispersion, mobility and ability to regroup and disperse quickly. What are the types of forces required for such war?
- While *wars may be short*, they will be intense and casualty rates, for both men and material, will be able to prepare troops for this.
- Men will be under requires integrated management of the electromagnetic spectrum and airspace. Joint doctrines will need to be evolved.
- While RMA places a premium on mobility and mechanization, much of our land frontier lie in jungle or mountainous terrain and our future organizations must cater for these.
- Even in the plains, many of our important cities, for example pathankot, Gurdaspur, Amristar, etc lie very close to the border. We will, therefore, need certain static forces to defend these, as there is no space to fight a mobile defensive battle ahead of these.
- LIC will remain a major task for the army. This conflict is also manpower intensive, can we have common organizations, for both conventional and LIC and if not, what are the costs involved in having two separate types of forces?
- All land warfare, including LIC, is land-air warfare and our doctrines and training must work to integrate both these forces so as to be able to operate jointly.

India's Internal Security Environment in 2020:

- India is a rapidly developing country with a GDP growth of seven percent. It has a huge reserve of technical manpower and strong liberal political culture, a youthful population more than half of which will be below 30 years of age in 2020.
- Black money and drug trafficking must be put to an end as they not only ruin the economy but also corrupt the youth.
- Communalism, sectarianism, regional parochialism, and sub-nationalism are on the rise. There is growing criminalization of politics and a culture of 'vote banks' has taken root. Politicization of the bureaucracy and the police, is well-established.
- The Armed Forces have, so far, been able to remain insulated from politics. Unless these evils are overcome, in 2020, we may have a nation whose internal security environment will be extremely unhealthy. Distributive justice with regard to sharing of revenues and the fruits of development is an imperative, if radical left movements, currently active in the country, are to be eliminated by 2015 or so. The separatist movements in the North-East and J & K must be amicably resolved.

Threats and Challenges to India in 2020:

- India is not likely to face a military threat from the USA or China because of its strength, both military and economic.
- **PAKISTAN:** medium level military threat may arise from Pakistan if it fails to make adequate economic and political progress, or, its leadership passes to radical elements, or, the country as such, fails and lapses into a state of anarchy.

- **BANGLADESH:** may pose a very low level threat if it decides to encourage demographic ‘aggression’ by using its over-sized armed forces in support.
- **Non-military challenges** may have to be faced by our Army in the 2020 time frame:
- Human resources of appropriate quality may get drawn to the more lucrative civilian sector.
- Funds allotted to the Armed Forces should be sustained at a level of three per cent of GDP for at least 12 to 15 years so as to ensure requisite modernization and making good existing shortfalls.
- Defence Research and Development Organization (DRDO) must be upgraded qualitatively and top quality scientists should be inducted into it.
- Government should fund their defence research projects and give them guarantees of sizeable orders to encourage their partnership with the DRDO
- Scientific and technical manpower will be eagerly sought by other countries. To overcome this ‘brain-drain’, we should improve the working conditions and research facilities in our country.
- The IT driven revolution in military affairs requires that the Army ‘manages’ these changes in a systematic and smooth manner. We need to create an integrated force working in an ‘unified battle space’; seamless communications; extensive exploitation of IT with excellent ‘cyber security’; top quality space based and terrestrial surveillance systems and fully operationalised C4I2 systems. This convergence of various technologies and capabilities will bestow the forces with much enhanced force-multiplier benefits through Network Centric Warfare (NCW).

Nature of Warfare in 2020:

- They will be of short duration, say, a week or less
- ‘Cold Start’ will be attempted whenever possible to achieve surprise and maximize gains.
- The entire border is likely to be activated with shallow thrusts, very heavy firepower and short span maneuvers.
- Nuclear weapons may not be used; their use may, however, be threatened.
- Integrated action by all three services will be crucial for the enhancement of our combat power vis-à-vis the adversary’s.
- Levels of technology employed in the wars will be higher than at present.
- Wars will end in stalemate, with little or no gain, and heavy losses to military as well as civilian targets.

Doctrinal Issues:

Doctrine is a system of views adopted in given period on the aims and character of a possible war, on the preparation of a country and its armed forces for such a possibility as well as

on the method of waging war should it break out. Changing circumstances must be constantly evaluated because they can modify beliefs and necessitate changes to doctrine.

Considering *the enlarged spectrum of war and the new dimensions of warfare*, which are contextually relevant, some guiding principles or doctrinal precepts, as to be a prepared to win across the full range of military operations in any theatre of war or operations, in any contingency. Doctrinal precepts advocated for inclusion of Joint Armed Forces Doctrines are:

- **Indian Way of Going to War:** There should be an Indian way of going to war. As citizens and soldiers of this great nation, we conduct military business in a peculiarly Indian Way. This needs to be formal procedure followed. In fact, our political leadership, perhaps for political reasons, shies away from giving written directives, the COSC convert abstract political aim(s) and objectives and if after analysis they come to the conclusion that the political aim set forth is not achievable, they must have the courage to say so. The nation must not go to war for an unachievable political aim. This process is called Regressive Planning because it moves from the highest strategic body to the lower echelons of command.
- **Operational Art as the War-Fighting Doctrine:** The essence of operational art is to convert the given political objective (strategic goals) into military objectives and to achieve these goals with least cost to own side.
- **Effect Based Operation (EBO):** Looks at our force structures from the perspective of achieving the effects desired. At the strategic level, we may require to break enemy's will to fight or his cohesion, while at the operational level, we may wish to destroy the enemy's operational reserves. *EBO requires superior military capabilities*, to be built into the force structure military capabilities, to be built into the force structure through the use of technology coupled with innovative operational art, to achieve, the most appropriate components is used at each stage of the battle to ensure economy with least collateral damage.
- **Shared Fighting culture:** Currently the planning for war is peculiar and exclusive to each Service. This must give way to joint training, joint planning and joint conduct of war. This will demand a culture change in the way we do things.
- **Address the Vulnerability and Weakness of the Opponent:** To avoid attritional warfare and to use the asymmetry of even a superior opponent to our advantage, we should concentrate on his vulnerabilities/weakness. To learn this art, we have to train ourselves through joint war-games in all possible scenarios.
- **Directive Style of Command:** For successful application of operational art, in future wars, the command style cannot be rigidly centralized as per our current practice. A more flexible style, which encourages risk taking and maximum initiative by subordinate commanders, will have to be adopted. This change of culture will also allow subordinates to conceptually grasp the higher commander's intention and the higher framework of war

and facilitate the adoption of the manoeuvre approach to warfare in the Indian Context, in all types of terrain.

- **Manoeuvre Approach:** There is an imperative need to evolve the maneuver approach as the key element underpinning our approach to war-fighting, in all types of terrain, including our mountainous regions. Our force development and organizations will have to cater for this offensive capability that in the future will evolve close integration of air and ground troops.
- **Transformation Through Technology:** We should achieve faster transformation through use of new technologies and innovations coupled with operational art. This will not only methodology of war-fighting but confer distinct advantages which could be maximized through fusion of technology with training, organizational structure and force development.
- **Non-Linearity:** This calls for an attitudinal change in the military mindset with regard to conventional/unconventional ground, air, sea, and space operations. We should be able to translate our deep battles in all five dimensions, including information war, in near simultaneously and synchronize the destructive effects of battles on the ground at sea in the air, in space and in either. This will require infusion of new technologies mentioned earlier.
- **Operational War-Gaming:** A tri-Service war-gaming centre should be established for strategic and operational level war-games to analyze issues such as emerging threats, new settings, new technologies, new concepts and war-fighting methodologies Without such a facility, we will not be able to validate our concepts and doctrines. This is the most urgent requirement in our context.
- **Visionary Leadership:** Yet another requirement of the future is the need for enlightening leadership at military, strategic and operational levels with a large enough vision to fully comprehend the entire perspective of strategic and operational level of warfare without over-identification with tactical objectives. This mandates sound selection procedures and unbiased policies. The key attributes of operational and strategic level leaders are considered to be as under.
 - Professionally astute.
 - Vision
 - Wisdom
 - Contemplative/reflective approach
 - Self-restraint/self-control
 - Self-Knowledge
 - Ability to inspire/ is a role model
 - Sacrifice of personal interest
 - Possesses all attributes of intelligence (IQ emotional intelligence and spiritual intelligence)

- **Close Politico-Military Interaction:** Given the restrictive aspects of short duration wars, the nuclear backdrop and other factors, destruction of the adversary's strategic forces or capture of large tracts of territory will neither be possible nor desirable. War aims will have to be modulated, tempered and calibrated according to the environmental constraints. Therefore, translation of political aim(s) to achievable military objectives of war and skillful conduct of war require a close politico-military interaction throughout.
- **Continental to Maritime Approach:** The following areas of capability development need to be addressed:
 - Creation of Task forces with larger endurance.
 - Enhancing strategic lift capability based deterrence capability.
 - Development of Submarine based deterrence capability.
 - Development of land attack capability from sea.
 - Strategic air power to counter Chinese and Pakistani capabilities and address out of area concerns.
 - Capability to rapidly insert limited number of Special Forces.
 - Network-centric capability to integrate air, land, and sea forces.
 - Effect based and precision strike capability.

Conclusion:

Since Independence in 1947, the army has been engaged in active operations on a sustainable basis, with only short period of peace. These challenges have helped the army to earn a formidable reputation of a force that delivers, usually against heavy odds, with the exceptions of 1962. The professional capabilities of our officers and men are now recognized the world over. However, we cannot rest on our past laurels. The need is to look at, and be prepared for, the future, so that the army continues to have what has just concluded is, thus, of great importance. In the doctrinal context, a number of issues need to be followed up are "formalizing an Indian way of tackling conflicts", "integrated operations", "directive style of command", "a manoeuvre approach", "non-linearity", and "a proactive culture"

There is a symbiotic relationship between military security and economic development, and both must complement each other. Today, our economy is on the upswing, and the modernization of the army has to keep pace. The recent decision to set up a non-lapsable fund will no doubt help, but we must also refine and modernize our procurement procedures. It would be in order to say that Post-Kargil, modernization and induction of various weapon systems, force multipliers and other hi-tech equipment has been significant. India has to ensure that strength, sustainability, reliability and global reach of Indian Defence Forces should be built up and comprehensively strengthened to serve the political directives and national objectives in dealing with the force projection options for the country.

Defence and development are contemporary to each other. It would, thus, be in the fitness of the things to make some assertions about India2020. In the next two decades, the border would be far better managed than at present. Thus, notwithstanding the external and pressures, the year 2020 will see a far more confident India, an acknowledged nuclear power, and a permanent member of United Nation security council, deservingly having a greater say in decision-makin of world.

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