

CENTRE FOR JOINT WARFARE STUDIES



DEFENCE REFORMS- TRANSFORMING INDIAN MILITARY FORCE TO MILITARY POWER

OCCASIONAL PAPER

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“At a time when major powers are reducing their forces and rely more on technology, we are still constantly seeking to expand the size of our forces. Modernisation and expansion of forces at the same time is a difficult and unnecessary goal. We need forces that are agile, mobile and driven by technology, not just human valour.”

Prime Minister Narendra Modi, Combined Commanders Conference, December 15, 2015

While addressing the Combined Commanders Conference in December 2015 onboard INS Vikramaditya, **Prime Minister Modi** challenged senior military commanders to reform their “**beliefs, doctrines, objectives and strategies.**” Prime Minister Modi identified six areas for military reforms to include restructuring higher defence organisation, defence planning,

joint warfare, manpower rationalization (Teeth to Tail Ratio), defence procurement and professional military education. PMs directions challenged the established structures, systems and organisations of India’s military and the mindset of senior military leaders.

It is an established fact that Nations always prepare and fight the last war. To assume that the Armed Forces are not prepared to combat future security challenges will be incorrect, however, the concepts, doctrines, capabilities and capacities required may not be adequate. The Ministry of Defence (MoD) and the Armed forces have shied away from initiating reforms and disturbing the status quo. The resistance to structural and systematic changes, and a review of policies, procedures and processes to keep pace with future security challenges and modern day multi domain warfare remains a major weakness. The armed forces are mandated to ensure the territorial integrity

of our nation, which also implies securing our borders, 3488 km of the Line of Actual Control (LAC) along the India-China border, 772 km of the Line of control (LC) in J&K and 126 km of the Actual Ground Position Line (AGPL) in Siachen Glacier in addition to a 7516 km long coast line. India's unsettled and porous borders manned by the army lie at altitudes of 4500 meters and above with woefully inadequate infrastructure and extreme climatic conditions demanding ab initio deployment of a large number of troops. China's aggressiveness and assertiveness is ever increasing as witnessed in the over a month long standoff at Doklam along the India-Bhutan- China Trijunction. The continuing proxy war being waged by Pakistan, the ever increasing and omnipresent threat from terrorists, and the imperative to safeguard our national interests and assets in our areas of influence dictate that we enhance capacities and build capabilities. Given the multiplicity of threats to our national security across all domains, it is essential that a pragmatic and dispassionate analysis be carried out so as to derive desired military capabilities and enhance capacities, given that the defence budget is limited and will remain so, due to competitive and imperative national priorities of development and poverty alleviation. The security challenges also dictate a manpower centric deployment of troops for border defence along LAC, ensuring sanctity of the LC, an effective counter infiltration grid on the LC and counter terrorist operations.

The Ministry of Defence (MoD) and the armed forces need to review and rebalance force structures to optimise the combat power and synergise all assets to transform the armed forces from a 'MILITARY FORCE to a MILITARY POWER' capable of securing the nation, the people and assets across the

full spectrum of conflict. This can only be achieved by a pragmatic approach in ensuring synergy, integration and jointness among the MoD and the armed forces both inter and intra service, revamping the logistics support systems by integrating civil infrastructure and resources reducing the 'Teeth to Tail Ratio' , inducting ' Force Substitutors', and equally importantly a hard and dispassionate review of the effectiveness and efficiency of over six lac non combatants in various support organisations paid out of the defence budget.

The military needs change, it is time for reform to ensure a more effective, efficient, present relevant and future ready military to meet multiple security challenges across the full spectrum of conflict, given a pragmatic defence budget. Defence budget cannot be stretched beyond a point, which means the MoD and Armed Forces have a tough choice for resource deployment. Reducing revenue expenses and more spending for capital pose the biggest challenge for MoD.

Wars in today's context cannot be fought with outdated organisations and structures, wherein the army, the navy and the air force conduct operations in a linear stand alone mode, with coordination and cooperation only being achieved based on personalities. War is a joint endeavour, wherein all elements of national power and all resources of the union are synergised. This truism is even more relevant in the present context, as warfare today is a complex phenomenon likely to be waged in the multidimensional and multi domain space. This complexity is likely to increase in the future. The reasons include high technology, the nature of modern war, new threats and challenges and the reality of nuclear weapons in the arsenal of our potential adversaries. Consequently, a joint force, which acts in an integrated manner,

is not just desirable but an imperative. The complexities of the future security environment demand that India be prepared to face a wide range of threats of varying levels of intensity. Success in countering these threats will require skillful integration of the core competencies of the three Services into an integrated force structure. However, re-organisation by itself will not succeed in achieving such integration. What is also required is a change in mindset, a change that makes every soldier, sailor and air warrior feel that he is a member of the Indian Armed Forces, and not just the Indian Army, the Indian Navy or the Indian Air Force. The Indian military is also among the least 'joint' major militaries in the world and can optimise resources specially by inhouse reforms enabling **joint intelligence, planning, training, communications, logistics and force development prior to structured joint operations.**

Despite the best efforts of countless devoted people, resources allocated for national security are not used to their full potential. Departments and organisations, for the most part, accomplish their core missions. However, they are ill equipped to integrate their efforts and to deliver an efficient response on a sustained basis. Good people may sometimes rise above an inefficient system, but over time the limitations of the system make the task ever more difficult. As large resources are involved in national security, there is little scope for inefficiency in managing the nation's defence. Today, the nation faces a mounting backlog of defence purchases, with finite resources and competing priorities. Under the circumstances, a constant push towards higher levels of efficiency is essential for safeguarding national interests. This is

best achieved by aligning authority and accountability by appointing a single authority to ensure Operational Preparedness in the form of the much deliberated and delayed Chief of Defence Staff (CDS). For the present the Service chiefs will continue to be responsible for operational readiness.

It is a national security imperative to appoint a CDS with the requisite authority and mandate. Envisaged role of the CDS could be:-

- CDS should have the primary role of being the Principal Advisor to the Prime Minister and the Government, through the Defence Minister, on all matters pertaining to India's national security.
- CDS should provide 'strategic vision' and be responsible for all strategic perspective planning, operational and contingency planning.
- In peacetime, the primary role of CDS should focus exclusively on war preparedness having a bearing on strategic operations.
- In terms of war preparedness, the CDS should have a major role in refinement and integration of operational plans, creation of logistic means to sustain operational plans and ensuring build-up of strategic reserves of arms, ammunition, military hardware, supplies and fuel requirements. In effect, he will be responsible for Financial Planning, Budgetary allocations and force structures of the three services.
- The CDS should prepare the annual Defence Intelligence Estimate and the requirements of Defence intelligence to meet the existent threats.
- The CDS should exercise operational command over Strategic Forces Command and the Andaman and Nicobar Command and other bi-service or tri-

service commands that may evolve in the future, like Cyber, Space and Special Operations Command, till the formation of integrated theatre commands.

- The CDS has to be viewed as the 'Head' of the Indian Armed Forces in terms of providing strategic control, strategic direction and strategic vision, strategic direction and strategic control.
- CDS should have the primary role in formulation of defence policies.

Another major weakness is the lack of a promulgated and propagated National Security Strategy (NSS). This should be corrected and a NSS promulgated. This is a national imperative. From the NSS will flow a rationale and well structured National Military Strategy (NMS). The national military objectives(NMO) will be culled out from the NMS. From the NMOs the armed forces will derive the desired military capabilities. The present capability building is mostly based on single service requirement at best coordinated to please all at the HQ IDS. It is important and a dictate of the budget allocations that military capabilities are synergised in sync with NSS.

Despite the designation of Integrated Headquarters of the MoD (Army/Air Force/ Navy), the three services continue to be attached offices with inadequate say in policy formation. There is an urgent and immediate need to correct this by ensuring integration of the services with not only the MoD but with all structures of the MoD, to include DRDO, OFB and DPSUs, which as of now continue to function in a stand alone, suboptimal mode as a separate vertical of MoD. For effective functioning of these organizations there is a need for meaningful integration by posting service officers both at the apex and functional level to these organisations.

A DRDO lab will be more responsive if it is headed conjointly by a scientist and a service officer of equivalent rank, similarly a General Manager of select Ordnance factories should be service officers. The shipyards and dockyards are headed by Naval Officers and their effectiveness and response to the Navy is well known. This needs to be replicated for Ordnance Factories.

Before analysing the rationale and requirement of the Armed Forces a look at the present manpower strengths and budget is a must. The total strength of the Army is approx 1.2mn, the Navy 80,000 and the Indian Air Force another 1,40,000 taking a total of the Armed Forces to 1.4 million, making it the world's fourth largest Armed Force after China, Russia and the US. In addition to the 1.4 million strong military, the Ministry of Defence also employs a little over 6,00,000 civilian employees of which 2,60,000 are embedded into the three services and the remaining 3,40,000 form part of the 30 odd civil organizations of the MoD like Indian Ordnance Factories, DRDO, DPSUs, CGDA, DGQA, GREF and the MES among others. How do these figures stack up. Against a fighting element of approx 9 Lac soldiers which includes Infantry, Mechanised Infantry, Armoured, Artillery, Engineers, Air Defence and Aviation, there are 4,50,000 uniformed personnel in the combat support services in addition to approximately six lac civilian employees, and hence the infamous and unaffordable teeth to tail ratio of 1:1. Given these statistics there can be no doubt that the Armed Forces need to right size specially so to meet the imperatives of raising the Special Operations, Cyber and Space commands and cater to growth of Army Aviation, Electronic Warfare, UAV units and C4ISR.

The overall ratio of Revenue and Capital expenditure is 64.67% : 35.33%. For the Army alone the ratio of revenue vs capital is 81% : 19% of which 73% goes for pay and allowances, which seem rather disproportionate, hampering modernisation. The Armed Forces for far too long have looked for transformation and reforms within their own service. Effective reforms cannot take place without the direct intervention and synergy at the MoD. In sync with the PMs directions, former Raksha Mantri Shri Manohar Parrikar constituted Lt Gen Shekatkar Committee, which in itself was a positive and path breaking initiative as it aimed to **“Enhance combat capabilities by rebalancing the defence expenditure”**, scrutinizing all organizations and every person paid out of the defence budget. The committee submitted its report in end December 2016 which is believed to be all encompassing and doable, and also includes transition management. Implementation of the Shekatkar Committee recommendations in totality, will be a major contributory factor in transforming the Indian military force to a military power.

India is a ‘Risen and Responsible’ power, however there is a need to achieve ‘Strategic Autonomy’, at present India continues to be one of the largest exporter of arms and equipment. The DRDO established in 1958 has a network of 51 laboratories with a 30,000 workforce which unfortunately comprises of only about 7,000 scientists, spending nearly 6% of the defence budget. The DRDO has achieved success in strategic defence systems and some cutting edge technologies but falls far short in meeting the defence needs and soldiers aspirations of tactical defence systems including small arms in the low-medium technological domain. The

DRDO needs to cut manpower costs as each scientist cannot be supported by four administrative persons a teeth to tail ratio of 1:4.

Similarly there is a requirement to revamp the Indian Ordnance factories which have a huge strength of nearly 90,000 personnel, with most of the factories not being cost effective, forcing the captive armed forces to procure Ordnance factory produced products at exorbitant costs adding to the skewed defence revenue budget. The Indian Ordnance Factories (IOF) need to be cost efficient and competitive or the armed forces be allowed to source their non critical needs from the growing private sector. The various DPSUs are no better, with possibly a marginal better cost effectiveness. Some of the IOF could function on the Government Owned Corporate Operated (GOCO) model. The IOF should no longer be seen as a tool for providing socio-economic benefits to the local population. It is a well documented fact that the armed forces being captive customers are made to pay exorbitant rates for IOF manufactured equipment.

The DGQA functions directly under the MoD Defence Production. As the control for contract awarding, manufacture and the quality control is mandated to the Secretary defence production, thus leading to acceptance of poor quality products. It has been reported that nearly eighty plus tank barrels have burst during practice firing leading to loss of life and limb. The DGQA, the DGAQA and the DGQNA should function under the HQ IDS/ CISC/CDS. The DGQA has a total manpower of approx 11,000, the technical staff which is the core competencies of the QA and OC is only about 3500, the rest being administrative support staff, a ratio of 1:2.

The defence accounts department of the MoD in itself is an unproductive drain on the defence budget. Instead of being a watchdog and contributing to financial efficiency, the Armed forces often are frustrated an account of the financial delays as a result of archaic regulations, procedures and processes. The Armed Forces are subjected to both pre-audit and post audit leading to cost and time overruns in execution of various projects and contracts with little or no value addition. It is only twice in the last two decades that the capital budget has been fully spent. The capital budget should be a roll on budget wherein the unspent funds are carried forward to the next year. The 20,000 strong workforce of auditors on an average have raised approx 65,000 audit objections annually over the last five years, which translates to less than four per auditor per annum. This workforce can be reduced by about 85%, without any adverse impact and the CGDA adopt “e-auditing”/ Computer Aided Audit Technique (CAAT) thus accruing major savings in manpower costs. As Mr. Bhartendu Kumar Singh, of the Indian Defence Accounts Service, in an article in the Eurasia Review points out “the Accounts Branch of the Indian Air Force, for example, has 492 commissioned officers and 7,000 men catering to the pay matters of 1,60,000 officers and men in the Air Force. On a competitive note, the same can be provided by 300 people on the civilian side very easily.

The Military Engineering Service (MES) is another white elephant manned by over 80,000 personnel with a budget of approx 14,000 crores, spending over 70% of the budget on salaries. The MES can easily be reduced to about 30% of its present strength by outsourcing the maintenance services in all Cantonments and military stations in peace, leaving the MES to execute only

Capital Works and maintenance contracts.

The NCC is an excellent organisation contributing to nation building and youth development. The growth of the NCC is hampered by a lack of resource in terms of instructors and staff. The Mod and NCC should expand and the resource requirement can be met by resorting to re-employment of officers, JCOs and NCOs from the areas where they are to be employed.

The present day struggle the world over is retention of trained, experienced and quality manpower. The Indian armed forces due to the varied terrain and multiplicity of tasks need a judicious mix of young, experienced and trained manpower resource. This can be best achieved by enhancing the colour service of the soldier by two years. This will also result in a recurring saving in pension bill of 13 to 15 thousand crores, year on year. A sum which can be better utilised for modernisation.

India is probably one of the two mega nations in the world which is adding to its military might by resorting to manpower accretions. The other nation being the US wherein the Trump administration has approved a 70,000 or 11% accretion to the army and marines indicating a shift from the way they plan to meet future security challenges. On the other hand post the 04 September 2015 military parade where China demonstrated its military might, President Xi Jinping surprised the PLA by declaring cuts of 300,000 troops.

The MoD needs to take a hard look at the effectiveness and the teeth to tail ratios of the various organizations functioning directly under its control in addition to the Armed Forces. A scrutiny of flab among the Armed Forces alone will not achieve

the desired budgetary rebalance as is commonly believed. The Army which is held guilty of excessive manpower with a major expenditure on manpower costs, in effect is allotted only 56% of the defence budget, with 1.2 million soldiers. It is a well known fact that the Indian army soldier costs minimum and delivers the maximum.

The Armed forces also need to play a pivotal role in Defence Diplomacy. Given India's 'Responsible Rise' defence diplomacy should form an integral and important constituent of our soft power. Defence Diplomacy is best viewed as a variant of soft power, used in some way to co-opt the strategic thinking of another state. Linking military diplomacy to the concept of soft power, not only encapsulates practices used by governments today, but also illustrates the underlying mechanism that makes defence diplomacy an effective geopolitical tool. As the US experience in Libya, Afghanistan, Iraq and Syria showed, in quick succession, military strength alone is insufficient to triumph in modern conflicts. Rather, in the Global War on Terror and the conflicts to come, "success will be less a matter of imposing one's will and more a function of shaping behaviour – of friends, adversaries, and most importantly, the people in between" (Robert Gates). Increasingly, the ability of military power lies not just in its capacity to drop bombs, but also in its ability to look beyond the use of violence and embrace alternative means of promoting national interests. Military Diplomacy covers the entire range of non warlike activities, undertaken by the armed forces intended to develop a positive attitude and trust in the international community. While the term may be all encompassing, it gives no clue as to what might actually be involved. Reasons for undertaking military diplomacy typically include:

- To 'dispel hostility, build and maintain trust.
- To assist in the development of the democratically accountable armed forces.
- To contribute towards conflict prevention and resolution.

The Armed Forces, in particular the Army needs to look inwards too, and improve the teeth to tail ratio by integrating the civil resources and infrastructure available and outsourcing of certain services, and revamping of policies, procedures and processes. The Army also needs to review certain organizations which are suboptimal in today's environment and context.

The Corps of Electrical and Mechanical Engineering (EME) is the third largest force in the Army, next only to the Infantry and Artillery. Major savings can be affected by outsourcing of repair and servicing of 'B' vehicles to the service stations of the original equipment manufacturer (OEM). The service stations are now located in most of our border areas and can easily be exploited, as is being done by Assam Rifles. The maintenance of specialist vehicles should continue to be the mandate of the EME. The EME also needs to reduce the number of echelons of repairs. It is envisaged that major savings of up to 30,000 personnel can be done from the EME alone by change of archaic procedures and outsourcing without any adverse impact on combat effectiveness. The Army Base Workshops should be corporatized on Government owned Contractor Operated Model. In addition the many station workshops located in cities and major towns are redundant establishments which can be disbanded and their work load outsourced to civil service stations by the Units.

The Army Ordnance Corps (AOC) too needs to modernize and cut down its long

chain to enhance effectiveness and save time and manpower costs and add to efficiency. It is unpardonable that in today's information age the Army has not been able to capture the 4 lac plus inventory thus leading to unnecessary wastages and manpower costs. The Vehicle Depots and companies too needs to be disbanded and the OEMs be instructed to deliver the vehicles straight to the user units. This n India network of all OEMs.

Similarly the ASC too needs to close down the butcheries and resort to procurement through trade. The integral transport units can be reduced and vehicles can be hired through contracts which will reduce the manpower, acquisition and maintenance costs. During emergencies provisions already exist to requisition civil transport. The operational need for animal transport similarly needs a review as roads and tracks now connect more and more areas in the forward zone. This will also facilitate reduction of the Remount and Veterinary Corps. Similarly the petroleum units can be done away with by resorting to direct dependency and hold of reserves by the trade.

The communication requirements manned by the corps of signals post review

can contribute to major redeployment of manpower for Cyber and EW. The Air Formation signal Regiment is an example. The communication architecture should be theaterised and all stakeholders should be able to plug and play. The various dedicated signal regiments from command, corps, division to brigade need to be restructured to form theater specific communication groups, less the signal elements of the strike corps. The armed forces should move to joint communications optimising all resources including civil.

Certain defunct organizations need to be closed without any delay like Military farms, butcheries and stationery depots. These are only an overview of the major manpower savings that can be initiated without any adverse effects and finances utilized for modernization of the Armed Forces.

It is an imperative that the MoD initiate the right changes and implement the recommendations of the Shekatkar committee in totality thus rebalancing the defence expenditure ensuring additional funds for the much needed modernisation of the armed forces.



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Views Expressed are that of the author.

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