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Defence, Make in India and the Illusive Goal of Self Reliance

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The Indian Air Force's Sarang display team performs on the last day of the 12th edition of 'AERO India 2019', at Yelahanka Air Base in Bengaluru, Sunday, Feb 24, 2019. Photo: PTI /Shailendra Bhojak

The potential rise of a private military industrial complex with a collusive relationship with the State and its security apparatus is one of the most dangerous developments that has taken place in the last five years, writes *Amitabha Pande, retired Indian Administrative Service (IAS) officer* ***who has served in the Union Ministries of Science and Technology, and Defence. The idea of national security is seen primarily in militaristic terms, and 'national' has been conflated with the government in power; the government has been conflated with a 'strong***

leader', and corporate collusion in military affairs ensures that maintaining and perpetuating conflict remains not just a political vested interest but becomes an economic and financial one as well.

Given this situation, Pande suggests that the way to ensure that the interests of the Armed Forces and their preparedness are insulated from the growth of a predatory military industrial complex is to work towards large scale devolution of powers of acquisition to the Armed Forces helping them to develop in-house managerial capabilities in complex acquisition processes and exercising devolved powers with responsibility.

The euphoria over the growth prospects of the private sector in defence production still prevails even though prospective vendors have not received any major orders in the last five years. Ever since the sector was opened up for private investment, including Foreign Direct Investment (FDI), the expectation has been that it will become a major contributor to the 'Make in India' initiative, accelerate manufacturing-led industrial growth and attract a flood of investment in capital and technology. It was, and continues to be, widely believed that this opportunity had been constrained because of an essential conservatism among our policy makers that made them reluctant to open the sector to private investment, and it was only this Government which had the boldness of vision to do so.

Indian engineering and manufacturing giants — such as Larsen & Toubro, the Mahindras, Bharat Forge, the Adanis, the Ambanis, the Tatas, among others —have reportedly been drooling over prospects of big orders: they have been teaming up with the best and the biggest in the world — manufacturers of aircraft, guns, missiles, ammunition, military electronics, communication systems — to make a mark in a sector they had earlier been kept at an arm's length from. New more direct relationships are said to be emerging between users and private industry, no longer mediated by the Defence PSUs (Public Sector Units) and the Government Ordnance Factories with their dog in the manger attitudes. Despite very slow progress, there has been excitement in the air that the closed world of defence procurements is now

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going to be accessible to persons other than those who operated out of Mehrauli farmhouses and Delhi's Gymkhana Club.

Even surrendering the opportunity for Transfer of Technology (ToT) based manufacture of the Rafale aircraft by the Hindustan Aeronautics Limited (HAL) in the wake of the biggest defence deal in recent times, has not yet deflated the euphoria. Ironically, the idea of giving up on manufacture and opting for a dubious 'offsets' deal instead, has been done by a Government which has made heavy weather of its thrust on manufacturing industry. Justified on grounds of 'emergency', the deal is a thin attempt at disguising the interests of crony capital and shows that if rent seeking opportunities are threatened by the possibility of regular manufacture, policy objectives will not come in the way of deal making.

However, despite this deviation from policy in the Rafale deal, much optimism still prevails about the potential of growth in the defence industry. On the surface, the logic appears absurdly simple and unassailable. The defence market is growing in double digits. The capital budget has more than quadrupled in less than a decade. India is the sixth largest defence spender in the world and the world's largest importer. Dependence on import is more than 60 per cent. The Indian private sector is considered to have matured sufficiently both in terms of size and scale of operations as well as in technology development, adaptation and assimilation capabilities, making it more capable than ever before of seizing this unique opportunity. It is argued that the inherent bias of the government as a buyer towards its own Defence Public Sector Undertakings (DPSUs) and Ordnance Factories, had prevented the private sector from taking advantage of the market opportunity. With the promised correction in this bias, the easing of restrictive regulations and simplification of procurement processes, the sector is now supposedly ripe for take-off.

Naive decision-makers

It is a matter of constant wonderment that many of our policy decisions continue to be based on such naive optimism and manufactured hype. Worse, this naivete is compounded by an inability to ask inconvenient questions, even by those in industry, who one would have expected to have a hard-headed business sense.

The optimism is not confined to potential vendors. It permeates official policy, it is a part of every expert committee that has examined the subject and it is projected on to every growth scenario envisioned for the Indian economy. Underlying the optimism is an ideological premise that self-reliance in defence production is a desirable, in fact, a strategically necessary objective, and that it is incumbent on any Government to create conditions that would stimulate the growth of the sector.

There is an idealogical premise that self-reliance in defence production is a desirable, strategically necessary objective.

Is it not perplexing that despite 60 years of pumping in extraordinarily massive investments in creating a vast defence R&D and defence production base in the public sector, the lament over our dependence on imports has remained much the same? Import dependence was the reason why such huge investments were made in the first place and though India's sources of supply have diversified in the last 30 years, the proportion of imports to domestic production has remained the same. The seminal study by Behera (2013) shows that the index of self-reliance, which had initially improved since the 1990s, actually deteriorated between 2006-7 and 2012-13.

After the Kargil war in 1999, there have been as many as nine high-powered committees to go into the reforms required to give a stimulus to defence manufacture, especially in the private sector and attract FDI and technology. It began with the Group of Ministers on National Security in 2000, the Kelkar Committee in 2005, the Sisodia Committee in 2007, the Rama Rao Committee in 2009, the V.K. Misra Committee in 2009, the Naresh Chandra, the Ravinder Gupta and the B.K. Chaturvedi Committees in 2012, with the last one being the Dhirendra Singh Committee in 2015. While each committee had different terms of reference and a different focus, the matter of developing indigenous manufacturing capability and reforming the acquisition process was central to each of them.

Most of the Committee reports except those of the Kelkar Committee and the Dhirendra Singh Committee remain classified; however, Behera's study gives an excellent summation of the main recommendations of each committee based on

information gathered from various other official sources and personal interviews with the Chairpersons.

Although many of the recommendations of these committees have been fully implemented and some partially, there has been little progress either by way of greater self-reliance, or substantive growth in private investment in the sector, or faster acquisitions, or major developments in indigenous design and development. To some extent, this has to do with piecemeal and half-hearted implementation but to a much greater extent, it is a problem connected with the nature of the demand for defence materiel.

All expert committees and almost all analysts assume that the inability of a public sector dominated production infrastructure to meet the demand creates the opportunity for a more efficient and a more customer friendly private sector to move in. This is illogical, for while ownership and management control of production may have an impact on efficiency and the quality of service (and that, too, is debatable), it can make no difference to the ostensible gap in demand, especially as all production in the public sector is against confirmed orders. In fact, if anything, because the public sector is effectively insured against market uncertainties and does not have to incur any 'marketing' costs, its ability to meet the demand gap should be theoretically superior to that of the private sector.

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So why is it not? Why do imports continue to dominate defence procurements? Why is there a continuous shortfall in production against targets and assured demand? Shortfalls are often to the extent of 60 per cent or more and capacity utilisation (even if one excludes the inbuilt surge capacity), depending on how one measures it, sometimes less than 20 or 30 per cent.

In assessing India's capacity for indigenous production, there is often a tendency to overlook the sheer size of the capital investments made in the Ordnance Factories and the Defence PSUs. It is difficult to obtain the figures of the investment costs in India's 41 odd Ordnance Factories, the nine Defence PSUs and 50 DRDO establishments because data has to be mined from investments spread over many

budgets and under different budgetary heads. Many of the costs normally associated with a civilian industrial project are not correctly reflected in the financial details available. The cost of acquiring or purchasing land, for example, is generally not treated as a part of project costs — and we are talking of land which often runs into thousands of acres for a single factory — but absorbed in the overall Defence Budget. Similarly, whenever knowhow is imported or is a part of a Technology Transfer Agreement, that cost is often embedded in the total procurement cost.

The point of mentioning this is to underscore that the investments made in creating a military industrial base have been massive. No one other than the Government could have invested on so large a scale. Even today, given uncertain prospects, the Indian private sector is unlikely to be able to sink so much capital in greenfield projects.

It needs to be emphasised that in addition to the size of investments the public sector production infrastructure spans almost the complete range of defence material: aircraft, tanks and heavy vehicles, guns, small arms, missiles, helicopters, ships, submarines, ammunition of all kinds, motor vehicles, electronics and computer-based devices, communication systems, radars, intelligence equipment, etc., as well as general stores like special clothing, blankets, tentage, and shoes. So, even in terms of range, there are no apparent deficiencies in the existing infrastructure which could provide a natural opening to the private sector.

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A huge surplus of capacity therefore exists, both because projects are over designed to cater to surge requirements and because the Government tends to be a profligate spender. So the gap between demand and supply is not because of capacity constraints in the production system but because demand is unstable and unpredictable. The Audit Report for the year 2013-’14 for Ordnance Factories shows that almost 50 per cent of the shortfall in production was on account of either short closure of orders or a sudden drop in demand.

There are five principal reasons why the Indian defence market is so unreliable

Firstly, the creation of a manufacturing base is very capital and technology intensive and has a long gestation period. For a factory to reach optimum levels of capacity utilisation, it could take anywhere between five to 10 to even 15 years, where a large part of the infrastructure may already exist. By the time a unit commences production, any of the following developments can take place:-

- There could be changes in the threat assessment/ strategy involving a complete change in priorities . For instance, buying a new advanced radar system may acquire a higher priority instead of adding more tanks or armoured vehicles.
- Newer technologies could make products outdated unable to match with what the enemy may have acquired.
- Geopolitical changes, like the breakup of the Soviet Union, could disrupt technology transfer arrangements that in turn could impact production plans, product quality and pricing.
- As happened after the dismantling of the Soviet bloc, surplus stores may become available at throwaway prices compared with similar products being produced indigenously.

Secondly, while the Services do draw up long and medium term acquisition priorities, the priorities are not always linked to availability of funds. Each time there is a budgetary squeeze, the priorities go haywire because meeting committed liabilities, in the case of international contracts, takes precedence over continuing orders for indigenous production.

Thirdly, in a hierarchical set up like the armed forces, priorities often follow the preferences of those in command, especially the Chiefs of Staff. Notwithstanding medium and long term procurement priorities being pre-determined, there is sufficient flexibility in the system to allow a Chief to re-order priorities, citing either resource constraints or changes in threat assessment. For example, a particular Chief may prefer acquiring new radar systems instead of modernising and retrofitting the existing tank fleet. There have been instances where a priority pursued by one Chief of Staff — on the basis of which a long drawn out procurement process has been negotiated, approvals obtained, technology transfer and indigenous production plans

worked out and at the last minute the whole project — has had to be abandoned because the successor has changed priorities. Such whimsical changes, which happen oftener than one would imagine, can play havoc with industry.

Fourthly, the relationship between the R&D establishment, production agencies (public or private) and the end user is extremely weak and the producer is in no position ever to keep pace with technological improvements offered by foreign suppliers even if the production is under a Technology Transfer agreement. The user is invariably reluctant to accept what he sees as an inferior product which he is compelled to buy at a higher price merely to keep indigenous production going. Moreover, the producer is unable to respond to customer needs because it does not have requisite R&D support even for making marginal improvements in performance or adding features or making other user-specific alterations. The relationships are so bureaucratically mediated (and that includes a formidable bureaucracy within the armed forces connected with drawing up Service Qualitative Requirements (SQR), conducting trials etc.) that within the existing set-up it is impossible to follow a customer-oriented approach to product development, exercising technology choices and working out long term production plans.

Defence sector: biggest arena for corruption

Fifthly, within the Government, the defence sector is the single biggest arena for 'rent-seeking' behaviour. The opacity of transactions, the cloak of secrecy within which all decisions are veiled, the bewildering procedural labyrinth that has to be navigated for any procurement, the monopsonistic nature of the market, the exclusivity of technologies, the cosy familiarity between retired defence personnel and arms agents and dealers, the long chain of deal fixers and go-betweens at various levels — all go to show that corruption is deeply embedded in the system as a whole and not in just one part of it. Imports offer an easier route for corruption, especially in purchases made under umbrella Government-to-Government agreements as these are easier to keep under wraps. Margins are particularly high for purchase of spares and ammunition as these are tied to OEMs (Original Equipment Manufacturers) and purchases can go through without following a competitive bidding process.

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Shifting to indigenous sources for procurement disrupts the corruption chain and will always be resisted.

Given these uncertainties in demand, any or all of the following developments may take place in case there is a major expansion in the private sector manufacturing base:

- Those unaware of the unpredictable nature of the market may sink in substantial investments before they realise that it was not prudent to do so and then try to find better ways of recovering their investment.
- Those aware of the uncertainties but still keen to enter the market for lucrative rent-seeking opportunities may invest just enough to become a SKD/ CKD assembler and primarily offer a convenient way to route imports and provide a means of earning and distributing commissions, both legitimate and illegitimate.
- Existing PSUs/ Ordnance factories confronted with possible loss of business may combine with the 'preferred' private sector players to get a share of the business, especially the kit assembly variety and thereby retain some income stream to make up for lost/foreclosed orders. Alternatively, private sector players may team up with PSUs to have them act as a front.
- Existing investments will become a drag on limited resources and circumscribe user choices.
- Private sector investments will clamour for assured/ guaranteed orders and by pre-empting a chunk of the budgetary resources further limit options for buying new products.

However, with few exceptions, this scepticism is not shared widely enough to dampen the enthusiasm of government policy-makers and their cheerleaders in industry. The Draft Defence Production Policy, 2018, put out by the government sets seemingly impossible targets not just for achieving self-reliance by 2025 but for making India one of the largest producers

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and exporters of defence material and becoming a global leader in Cyberspace and AI Technologies.

Before considering the larger ethical issues of the growth of a military-industrial complex and the societal impact of such a development, one needs to question some of the principal reasons cited for having an aggressive promotional policy for defence production. This is what the draft policy document says:

> **'A vibrant defence industry is a crucial component of effective defence capability and to achieve national sovereignty and military superiority. The attainment of the same will ensure:**
>
> **1. Strategic independence**
>
> **2. Sovereign capability in selected areas**
>
> **3. Cost effective defence equipment**
>
> **4. Collateral benefits ensuing from the endeavours of defence industry.'**

In a globalised world order, the hallmark of which is regulated and calibrated interdependence, the idea of securing 'strategic independence' by being able to produce most of our own defence material is an archaic one.

Strategic capability and autonomy depends on multiple factors: economic strength, high levels of human development, internal political and social stability, and military strength. Military capability, in turn, depends among other things on the kind of weaponry and equipment the forces have. It is immaterial whether such equipment is produced indigenously or imported. Reliance on a sub-standard indigenous product compared with a state-of-the-art imported one impairs military capability and ties the hands of the forces into fighting an unequal battle simply in order to protect indigenous production. A disproportionate focus on developing self-reliance in production can, and often does, come into conflict with the objective of our forces being fighting fit.

A case in point, for example, was that of bullet proof protective wear for the troops. At a time when most of the world had moved on to lightweight Kevlar-based wear,

our troops were forced to use very uncomfortable, heavy, unwieldy metal armour developed by the DRDO. The armour was so unwieldy that it made it very difficult for troops to undertake counter-insurgency operations, and it is possible that many fatalities occurred because they were so poorly equipped. For several years the induction of Kevlar was resisted so as to sustain an indigenously developed product.

Several such examples abound.

The point is that the interests of industrial promotion do not necessarily coincide with those of operational preparedness, and achieving strategic capability is not contingent on being able to produce your own weaponry. More often than not, capability is impaired when self-reliance becomes a goal by itself. The armed forces should have the freedom to decide what equipment they need to fight with, what is cost effective and what enhances their capability rather than whether it is imported or indigenous. The Ministry of Defence is not the Ministry of Industrial Promotion, and confusing these distinct roles can impair India's capability.

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In a less globalised world a few decades ago, when national governments exercised substantial control and influence over defence transactions and political considerations played a determining role, there was a real possibility of supplies being restricted or denied. This could have a crippling effect on military capability and therefore, self- reliance in critical equipment and systems was essential and a worthwhile objective.

This is still the case with the nuclear trade, but in almost everything else restrictive regimes have substantially eased up and commercial considerations far outweigh political ones, even among countries inimical to one another. Obtaining the most advanced fighter aircraft, for example, from any of the major aircraft manufacturers anywhere in the world is no longer a problem and, in fact, the market is infinitely more competitive than it has been anytime in recent history. Domestic defence markets for most western manufacturers have shrunk and they depend almost totally

on export markets for their survival. With few exceptions, It is substantially a buyer's market.

As one of the biggest buyers in a buyer's market, India is uniquely positioned to leverage this opportunity to gain strategic advantage, far more than it could by investing scarce resources in chasing the illusory goal of self- reliance.

It would be different if private investment in defence production was purely market-driven and under conditions of fair global competition. However, the thrust of policy interventions has been to protect domestic producers by making it increasingly difficult for the user to choose an imported product without first having to go through a procedural labyrinth to ensure that the possibility of designing, developing and producing indigenously is exhausted before choosing the 'buy' option - an option made even more complex in the case of imports. The Defence Procurement Procedure has been amended, revised, reformulated endlessly since 1992 (the last revision was done in 2016) and each revision, ostensibly in the interests of safeguarding the interests of domestic production, has ended up making the acquisition process so complicated that any fresh acquisition, whether 'Make and Buy' or 'Make' or just 'Buy' would take 10 to 15 years between projecting a necessity and inducting the system/product into service. This more than any other factor, impairs our operational preparedness in a way as to make the whole concept of 'strategic independence' by reducing import dependence, fallacious.

The desire to develop 'sovereign capability' in selected areas, such as Artificial Intelligence or Cyberspace technologies, is similarly based on unrealistic hype about our R&D and innovation capabilities. Invention and innovation occurs when there is a seamless link between research universities, institutional and commercial R&D platforms, industry and the user. Establishing such links to create an ecosystem dedicated to defence needs, cannot be done through a Government fiat or a policy pronouncement. That is just wishful thinking.

On purely economic grounds, giving a policy push to stimulating the growth of the defence industry has very doubtful value. When investible resources are scarce in a country racked with hunger, malnutrition, disease, illiteracy, squalor, poor infrastructure and faced with the vagaries of climate change and unpredictable

natural disasters, any deliberate push is at the cost of investment going into socially productive areas. It ends up squeezing out investment from where it is critically needed.

Even in simple financial terms, investments are lumpy, have impossibly long gestation periods, create little employment and yield returns which are low in relation to the capital invested. Unlike the Space sector which spawns a vast range of civilian-use technologies, empirical evidence does not suggest that spin-offs from the defence industry are very much superior to those from sectors like energy, or transportation or construction or retail.

If market forces were allowed to operate freely, the defence industry is unlikely to grow on its own and attract investment. Stimulating it artificially, and steering private investment towards it, especially through the strategic partnerships route, only allows a new form of crony capital to emerge. Recent transactions show that the earlier practice of first choosing a system and then designating a production agency in the public sector is giving way to a more collusive way in which crony capital works out in advance a deal with the vendor most likely to be chosen, influences the choice and then works out a way of maximising rent-seeking opportunities.

Wittingly or otherwise, the acquisition process as reformulated now incentivises this form of cronyism and provides it legitimacy. Corporates with strong political connections (Anil Ambani, Adani, L&T, Rajeev Chandrasekhar, for example), little prior experience in defence manufacture and a reputation for being able to swing big deals, are now intimately involved with the acquisition process as ‘industry partners’ rather than as shadowy, behind-the-scenes middlemen. This is infinitely more dangerous because they can disguise kickbacks more easily, so discovering money trails requires extraordinary forensic skills which we do not have; they can claim to be acting in the interests of 'national security' and thereby avoid public/media scrutiny; and they can operate in higher decision-making circles (including that of the Services) with no suspicions raised. Their 'manufacturing' operations are largely a sham, a convenient front. They add little value, create no new jobs and contribute nothing to new technology development. Together with the higher echelons of the Services coming much closer to policy/strategic decision-making levels through

'parallel' institutions like the National Security Adviser (NSA) and his Council Secretariat, we have the beginnings of an Indian 'Deep State'.

The potential rise of a private military industrial complex with a collusive relationship with the state and its security apparatus is one of the most dangerous developments that has taken place in the last five years. In a situation where the idea of national security is seen primarily in militaristic terms, and ‘national’ has been conflated with the government in power, and the government has been conflated with a ‘strong leader’, corporate collusion in military affairs ensures that maintaining and perpetuating conflict remains not just a political vested interest but becomes an economic and financial one as well. Hopefully, the sheer inertia of the bureaucracy will act as a kind of resistance to such a development.

The potential rise of a private military industrial complex with a collusive relationship with the state is one of the most dangerous developments in the last five years.

Is there a way of ensuring that the interests of the armed forces and their preparedness can be insulated from the growth of a predatory military industrial complex? The answer lies in working towards large scale devolution of powers to the armed forces to acquire what they need, when they need and how and from whom they acquire, helping them to develop in-house managerial capabilities in complex acquisition processes and exercising devolved powers with responsibility. Such devolution has to be accompanied by using performance and outcomes-linked budgets more imaginatively as a means of regulating and monitoring devolved powers. In parallel, we need to expand parliamentary oversight over defence expenditure. How this can be achieved without adding another layer of bureaucratic control has to be the subject of another essay.

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In the Government of Punjab he worked at the senior most levels in the Departments of Planning, Science and Technology, Environment and Information and Public Relations. In mid-nineties he was the Chief Executive Officer of the Indian National Trust for Art & Cultural Heritage (INTACH). In the eighties, he was the Managing Director of the Punjab Agro Industries Corporation - a Government owned company which spearheaded the process of transforming agriculture industry linkages in the country and was credited as being the architect of the entry of some of the biggest multi-national enterprises in India?s agribusiness sector including Pepsico. He has also been involved with the commercialisation of technology through Public Private Partnerships in such diverse spheres as biotechnology, engineering industry, agro-processing and aviation.

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