

due to COVID-19, and in this battle, India not only needs to protect itself but also has to keep moving forward.<sup>1</sup> What he referred to is that India has to protect its interests and its citizens and sustain it largely by itself, which in other term means an India which is self-dependent. He further said that a self-reliant India will stand on five pillars viz. Economy, which brings in quantum jump and not incremental change; Infrastructure, which should become the identity of India; System, based on 21st century technology driven arrangements; Vibrant Demography, which is our source of energy for a self-reliant India; and Demand, whereby the strength of our demand and supply chain should be utilised to full capacity.<sup>2</sup>

In short, the call was for a near revamp of the overall Indian economy, infrastructure, capitalisation on technology, and utilisation of a vibrant demography through bold reforms to enhance Indian capacity and capabilities. The address was aimed to chart a new way forward in a moment of grave national and international crisis. In his address, the PM also announced a special economic package which, taken together with earlier announcements during Covid crisis and decisions taken by RBI, was to the tune of Rs 20 lakh crore; equivalent to almost 10 per cent of India's GDP.<sup>3</sup> Following this announcement, the Finance Minister, Ms Nirmala Sitharaman, through five press conferences, announced the detailed measures under the economic package. It was intended to give a formidable shape to the vision with concrete initiatives towards achieving 'Atma Nirbhar Bharat'.

Some of the reforms announced by the finance minister were directly linked to the economic developments and reviving economy, which in turn is expected to boost the income of the masses. It included increase in borrowing limits, Privatisation of Public Sector Enterprise (PSEs), collateral free loans for businesses, corpus for Micro, Small and Medium Enterprises (MSMEs), Schemes for Non-Banking Financial Companies (NBFCs), ease of doing business for corporates, amendments to Companies Act, 2013, concessional credit boost to farmers and agri-infrastructure fund, one nation on card, free food grain supply to migrants, Affordable Rental Housing Complexes (ARHC) for migrant workers / urban poor.<sup>4</sup> Later in November, the Union Cabinet gave approval to introduce the Production-Linked Incentive (PLI) Scheme in 10 key sectors for enhancing India's manufacturing capabilities and enhancing exports – Atma Nirbhar Bharat.<sup>5</sup>

### **Conceptual Understanding of the Atma Nirbharta**

At the very conceptual level, it has often been interpreted as an isolationist policy, where India seeks to shield itself from the external shocks. A kind of protectionist policy followed by India during the pre-liberalisation era that had led to the economic crisis of 1991. However, the Prime Minister and the Indian Foreign Minister as also Niti Aayog CEO Amitabh Kant have repeatedly suggested that the policy is of self-sustainability and sharing Indian products with the world. Amitabh Kant said, “Atmanirbhar Bharat mission is [...] not about protectionism. It’s about abilities of Indian companies to create world-class products, capture the Indian market and then use the strength of the domestic market to penetrate the global market”.<sup>6</sup>

The External Affairs Minister (EAM) had taken a step forward in defining Atmanirbharta when he said, “The objective of Atmanirbhar Bharat is to build greater national capacities so that we can make a stronger contribution globally. What, according to the EAM, appears to be a national initiative is basically an endeavour that has the global partnership at the centre of it, which in turn will contribute to the larger global rebalancing.”<sup>7</sup> Indian EAM clearly understands that Indian economy is intertwined with the global economy, and any shock on the global economy is going to impact India and its public. The strategic significance of India’s economy to the world needs to be exploited and it can be done only through making India self-reliant and self-dependent.

At the institutional and administrative level, the aim is to bring changes to various institutions and administration that could spur the momentum of change envisioned by the government. It visions reform at the social, bureaucratic, and political level. The essence is to reform for better quality of governance and policies across the public and private domain. Society or demography is looked upon as both the engine or agency for the change and the recipient of these changes. At the centre of any governance is the society and the people. The policies and the early announcement clearly put people as the beneficiary.

### **Five Pillars of Atma Nirbhar Bharat**

The five pillars of Atma Nirbhar Bharat, as stated by the Indian PM, are crucial because these are the specific areas that faced

the maximum disruption due to covid-19 pandemic and are equally the most crucial clogs of the wheel for the development.

**Economy.** The outbreak of covid-19 pandemic and the subsequent global crisis clearly demonstrated that the world, including India, was not fully prepared to handle the crisis without external help. The lack of proper medical infrastructure to scale of the crisis, the existing gaps in supply and demand of medical equipment and medicine, and the spiral impact of the lockdowns clearly took toll on the lives of ordinary citizens and had an impact on the Indian economy. Indian economy was hit hard by the covid-19 as the informal sector had to bear the brunt of the lockdown because of various reasons, including migration. One of the consequences of lockdown measures in the country has led to an unprecedented migration of workers and families from large urban centres to rural India. For decades, millions of workers have migrated from their rural homes and villages to urban cities, looking for opportunities and livelihoods.<sup>8</sup>

The covid-19 has hit the world economic order and institutions as well. The existing world order has been challenged severely as experts are of the view that the neoliberal economic globalisation will take a major beating in the wake of the pandemic. Economists are warning of a global recession<sup>9</sup>, and the impact of the pandemic on global economy is clearly visible; however, India has been able to recover much better than many of its counterparts.

**Technology.** Technology and its related services played crucial role during the lockdowns. Lockdown placed technology squarely at the forefront, driving activities digitally and virtually. It was being used widely to tackle the pandemic. Digitalisation of services — from telehealth to online education to cashless transfers and emergency assistance has been at the centre of country's responses.<sup>10</sup> In India, the digital payment, virtual meetings and seminars, virtual medical consultation became norm and has continued even after the lockdowns have been lifted, and when the country is fast moving towards normalcy. Technological support, despite shortcomings, was instrumental in sustaining the day to day activities as well as the economy.

Technological dependence on the West has been a persistent problem in the past. However, this is one of the sectors where India has achieved monumental success in the last 2 decades,

and that is reflected on her performance in other related sectors, including the service sector. However, despite these successes, India still needs to go a long way in the new fields of technology, particularly Artificial Intelligence and Quantum computing and Machine Learning. It is expected that with the PM's vision for Atma Nirbhar Bharat, India is going to make quantum jump in the field of technology. Reliance Jio's announcement of leading India's march into the 5G era with the development of a complete 5G solution is a step towards the direction. Similarly, Indian technological institutions and education hubs need to develop technologies made in India and take it further to industry for production.

**Infrastructure.** Absence of robust health and related service infrastructure further compounded India's problem. The existing medical infrastructure which caters to 1.37 billion people was left wanting for enhanced modernisation. The paucity of capabilities to absorb the scale of hospitalisation and medication attention, almost faced by every other country including the developed ones, was a factor that forced the Indian government to look at the infrastructure issue in a renewed manner. It wasn't the health and hospitality sector alone that faced the brunt of the pandemic but also the digital infrastructure, logistics, telecommunication, agriculture and industry infrastructure and power sector that faced the brunt. Prime Minister in his speech of 12 May 2020 emphasised on the role of infrastructure, and why infrastructure should become the identity of India.

**Demography.** India's growing population has two very crucial dimensions to it: first, the larger section of the society is youth, and is also urban based. According to one of the UN reports, India's urban population is estimated to stand at 675 million in 2035, the second highest behind China's one billion. The report further says, despite greater incidence of the virus in urban areas and the economic difficulties created by the pandemic, cities are once again serving as beacons of opportunity to people in search of employment, education and training or taking refuge from conflict.<sup>11</sup> The urban centres are also centres for opportunities for a large number of Indians who migrate from rural areas in search of better prospects and are largely youths.

According to a Ministry of Statistics and Programme Implementation (MoSPI)'s report titled 'Youth in India 2022', by

the year 2036, those above the age of 30 will form the majority of the country's population. 'Youth', in the report, refers to people in the 15 to 29 age group, as defined in the Centre's National Youth Policy, 2014.<sup>12</sup> Therefore, India in the coming decades will be fast losing its current advantage of demographic dividend. It may turn out to be a liability if more jobs, and employment opportunities, are not provided to the youth. Government understands the urgency to utilise these youth in a productive manner; and there could not be any other way than to facilitate their contribution to the growth of the nation. "If India does not create enough jobs and its workers are not adequately prepared for those jobs, its demographic dividend may turn into a liability. And education and skill development will be the biggest enablers for reaping this dividend", says another report by the Confederation of Indian Industry (CII) released on India's Demographic Dividend.<sup>13</sup> Therefore, understanding the urgency, government has given special attention to the youth while talking about Atmanirbharta.

**Supply and Demand.** In his clarion call for Atmanirbhar Bharat, the PM clearly emphasised the need to strengthen India's demand and supply chain, and its utilisation to full capacity. He underlined the importance of strengthening all stakeholders in the supply chain to increase, as well as fulfil, the demand.<sup>14</sup> The supply chain reforms included for agriculture, a rational tax system, simple and clear laws, capable human resource and a strong financial system to promote business, attract investment, and further strengthen Make in India.<sup>15</sup> It was well evident that the lockdown had brought severe disruptions to the supply chain which further led to supply side and demand side shrinking by 22.9 per cent and 23.9 per cent respectively in Q1, 2020-21.<sup>16</sup> The disruption on the supply and demand chain had impacted the overall consumption and savings of the masses. It had also impacted production and export of the goods.

The clarion call by the Prime Minister towards Atmanirbhar Bharat has been implemented by all the sectors, including private sectors, working in various industries as well as by all the ministries of the government. The government also identified 12 key sectors where it was looking to promote quality production not just to make India a self-reliant but also a global exporter. These 12 sectors are food processing; organic farming; iron; aluminium and copper; agro-chemicals; electronics; industrial machinery; furniture;

leather and shoes; auto parts; textiles; and coveralls, masks, sanitisers and ventilators.

To understand the relevance of the Atmanirbharta during and beyond the pandemic years, it is imperative to look at one industry that urgently needed indigenous solution to India's import dependence — Defence Industry. The overseas dependence has clearly threatened and undermined India's defence preparedness and indigenisation.

### **Defence Sector Initiatives**

Defence sector is one of the key sectors where India has, for long, been importing its arms and ammunition. The policy announcement was a big step towards self-reliance in defence sector. It also offers a great opportunity to the Indian defence industry to rise to the occasion to manufacture the items in the negative list by using their own design and development capabilities or adopting the technologies designed and developed by Defence Research and Development Organisation (DRDO) to meet the requirements of the armed forces in the coming years. The government has taken several policy initiatives in the past few years under 'Make in India' program and brought in reforms to encourage indigenous design, development, and manufacture of defence equipment in the country, including design and development of the projects like Kamov 31.

It is according priority to procurement of capital items from domestic sources under Defence Acquisition Procedure (DAP)-2020. Some other initiatives are: announcement of 18 major defence platforms for industry led design & development; notification of two 'Positive Indigenisation Lists' of total 209 items of Services and one 'Positive Indigenisation List' of total 2851 items of Defence Public Sector Undertakings (DPSUs); simplification of industrial licensing process with longer validity period; liberalisation of Foreign Direct Investment (FDI) policy allowing 74% FDI under automatic route; simplification of Make Procedure; launch of innovations for Defence Excellence (iDEX) scheme involving start-ups & MSMEs; implementation of Public Procurement (preference to Make in India) Order 2017; reforms in offset policy with thrust on attracting investment and Transfer of Technology for defence manufacturing by assigning higher



multipliers; and establishment of two Defence Industrial Corridors, one each in Uttar Pradesh and Tamil Nadu.<sup>17</sup>

MoD has also launched a 'SRIJAN' portal to promote indigenisation by the industry. 19509 defence items, which were earlier imported, have been uploaded on the portal for indigenisation. Out of them, the Indian industry has shown interest for indigenisation of 4006 defence items so far.<sup>18</sup> With focus of government on indigenisation and procurement of defence products from the domestic resources, the expenditure on defence procurement from foreign sources has reduced from 46 per cent to 36 per cent in the last four years, i.e., from 2018-19 to 2021-22. Moreover, the government, in the last four years, i.e. from 2018-19 to 2021-22, has accorded Acceptance of Necessity (AoN) to 162 proposals, worth Rs 2,51,130 crore approximately, under various categories of capital procurement from domestic sources.<sup>19</sup> This clearly suggests that a lot has been happening under the Atmanirbhar Bharat initiative and the government has been able to gain some benefit as far as the indigenisation of defence production is concerned, reflecting in the reduction of the expenditure from foreign sources.

### **Conclusion**

Indian PM's call for Atma Nirbharta, amidst a global crisis of unprecedented scale and nature, has been one of the most astute and bold decision of the government, with its own share of pitfalls. The demand for making India not just a large-scale market for the world but also a country that produces for the global market has been under debate for the last many decades. The clarion call has the potential to turn the debate into a reality. The government has shown commitment both in terms of investment, and policy prescription to undertake what it needs to make India an Atma Nirbhar Bharat; the journey, however, is going to be long and arduous.

### **Endnotes**

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<sup>10</sup> Ms. Era Dabla-Norris, Vitor Gaspar, and Ms. Kalpana Kochhar, "Preparing for an Unknown World", International Monetary Fund. 01 June 2020 <https://www.imf.org/en/Publications/fandd/issues/2020/06/the-international-order-post-covid19-dabla>

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## Perspective on Lethal Autonomous Weapon Systems (LAWS): Employment and Legal Aspects

Mr Mohammed Zaid®

*Robot hordes that can murder people are no longer just the product of science fiction. There are now Lethal Automated Weapons Systems (LAWS) to inflict casualties on opponents during conflicts. Autonomous systems will use machine and deep learning to work 'at the speed of light' in situations such as cyberattacks, hypersonic missiles attacks, electronic warfare etc. Currently, the volume of data being produced by surveillance drones and terrorist organisations, monitoring social media posts, is overwhelming military experts. Mr. Work established an algorithmic warfare team to explore how AI may aid in the pursuit of Islamic State fighters in Syria and mobile missile launchers in North Korea, before he left the Pentagon.<sup>1</sup> At the moment, drone technologies are altering the character of the battlefield and allowing the military to partially control warfare from a distance with standoff precision kinetic weapon platforms. LAWS, which are gradually entering combat, serve as an illustration. As this technology develops further, it may eventually influence how future battlefields will look. It can be stated that the development of robots was driven by the idea that soldiers' lives shouldn't be in danger unnecessarily. But one cannot take a simplistic view of R&D and deployment of LAWS since there are ethical and legal issues involved that merit a concurrent reflection and debate. The article examines the military uses of LAWS as well as arguments over the use of such systems, including ethical and legal implications.*

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