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Making India Self-Reliant



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1. Introduction

Among the many casualties of the COVID-19 pandemic was the accelerated decline of the global rules-based order. This was most evident in the context of access to vaccines. The rich liberal democracies put national interest above global humanitarian needs. They stockpiled more vaccines than was warranted, while the developing countries were left to fend for themselves. There have been repeated pleas from WHO and representatives of poorer nations to improve vaccine access for vulnerable populations universally, however global inequity remains significant even today. Vaccine nationalism revealed that in desperate and extreme circumstances, when global rules-based order conflicts with the national interest, national interest will trump global humanitarian needs. In these dark circumstances, India was fortunate to vaccinate more than a billion people, primarily on account of her self-reliance in the production and research of COVID-19 vaccines. Had India not been self-reliant, we would have braced ourselves for a catastrophe of untold magnitude. The pandemic has compelled us to rethink national issues related to self-reliance, globalization, and trade. The war in Ukraine has further escalated these concerns as countries explore ways of reducing strategic dependence on others. In this essay, I explore 3 key sectors of India - food, energy and defence - which demand self-reliance and reduced dependence on external vicissitudes.

2. Self-Reliance Not Autarky

It is important to state upfront that self-reliance does not imply autarky. Inspired by the 'infant industry' argument from trade theory, India experimented with decades of protectionism. The opportunity costs of this was in the form of decades of low economic growth and high levels of poverty even 50 years after independence. However, a fundamental job of the State is to protect the lives and safeguard its citizens' interests and take all necessary steps such that these are not in jeopardy. Having suffered for decades under inward looking protectionist regimes, India must find the appropriate balance between gaining self-reliance in strategic sectors and avoiding the pitfalls of protectionism. Therefore, from the perspective of national interest, I identify three critical sectors to focus in the overall strategy of *Atmanirbharta* - food,

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energy and security. In the final section of this paper, I highlight the underlying guiding principles to balance policies of trade liberalization and strengthening domestic social security nets.

3. Food Security

India's Green revolution in the 1960s played an instrumental role in achieving food security. It is important to remind ourselves that India had a food shortage in the mid-1960s with a growing population and low productivity in the agriculture sector. Leading newspapers in India had reported that "Millions of people in India were facing dire distress" in accessing food. Under these circumstances, the then Government was compelled to seek food aid from the United States, the PL-480 program. It was evident to the leadership that external reliance on food, with the survival of millions of Indians dependent from "ship to mouth," was unsustainable, socially, economically, and politically. However, to achieve food security, India had to enhance farm productivity. This required adopting a high-yield variety of wheat, rice, and other grains developed in Mexico and the Philippines, which the US-based Rockefeller Foundation facilitated. However, all this would not have been possible if the farmers did not cooperate with the Government in adopting the high-yield variety of grains. Therefore, one could argue that the success of the Green revolution in making India self-reliant on food was an outcome of the availability and adoption of the best available global technology, farm-centric policies by the Government, and the cooperation of the farmers to bring a transformational change. The data shows a dramatic increase in food production since 1966: The food production index rose from 23 in 1966 to 112 in 2019, where 2014-2016 was the base at 100. The trends in the food Production Index over 50 years is presented in Figure 1a below. Food production index measures the changes in the production of food crops that are considered edible and that contain nutrients in a given year relative to base year. In the latest global ranking available (2018) of 189 countries, India is ranked 27.

^{† †} https://www.theglobaleconomy.com/rankings/food_production_index/

Food production index (2014-2016 = 100)

100

80

40

23

20

1970 1975 1980 1985 1990 1995 2000 2005 2010 2015

Chart: Shamika Ravi (ORF) • Source: The World Bank Open Data • Created with Datawrapper

Figure 1a: Food Production Index

We also note a significant decline in food imports as a percent of merchandise imports: a drop from 34% in 1966 to less than 4% in 2019. Both these two measures combined, indicate a robust improvement in food security for India and strengthening self-reliance, over the last decades.

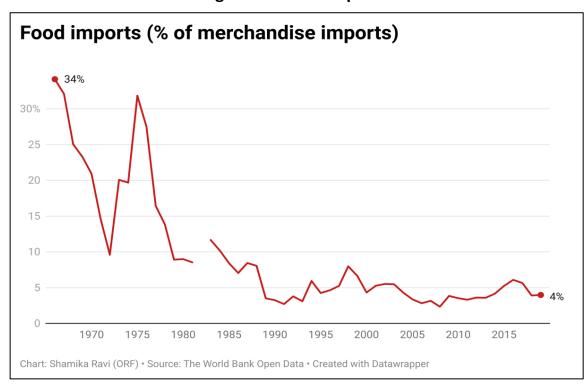


Figure 1b: Food Imports

4. Energy Security

From 2000 to 2019, the Indian per capita Gross Domestic Product (GDP) has grown at an annual rate of 5.2%, while per capita energy use in terms of oil consumption has increased at an annual rate of 3.4%[‡]. In terms of per capita oil consumption in kilograms, it has grown from 417 in 2000 to 637 in 2014, as shown in Figure 2a. As a result of increased per capita energy use, India's reliance on imports to meet its growing needs has increased significantly from 20% in 2000 to 34% in 2014. When we compare India to other large economies such as the United States (US) and China, with the energy use of 6,961 and 2237 kgs of per capita oil consumption in 2014, respectively, we find that India has a much higher reliance on imports for its energy use compared to the United States and China, as reported in Figure 2b. Interestingly, the US has reduced its dependence on oil imports from approximately 24% in 2000 to 9% in 2014. This reliance on imports implies that the future growth and development of the Indian economy would be subjected to global geo-political events that influence the availability of oil. Such external dependence might not be desirable from an energy security perspective.

Given that domestic oil production might not be sufficient to meet our growing energy needs, we would have to redouble our efforts towards renewable energy, which can be domestically sourced. Unfortunately, the data suggests that India's renewable energy consumption as a percent of total energy consumption has reduced from 59% in 1990 to 32% in 2018, as shown in Figure 2c. The data means that if India has to achieve energy security for sustained growth and development and safeguard our interests from global geo-political events that could influence the price and availability of oil, we would need an Energy Revolution, something similar to the Green Revolution. We would need a dramatic shift towards renewable, which would require government support and encouragement.

The present Government has committed a change towards renewables, but it would need an equivalent commitment from State and the local governments. In short, a shift towards renewables has to become a mass movement; however, unlike the Green revolution, which was limited to a few states of Punjab, Haryana, and Western Uttar Pradesh, the *Energy revolution has to become a Pan India mass movement*. An added benefit of moving towards renewables would be the positive impact on climate change and

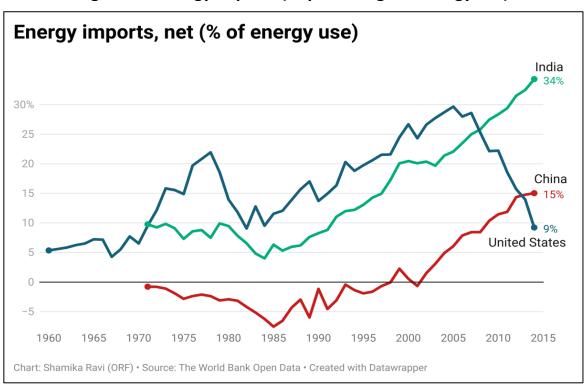
[‡] This is based on data from 2000 to 2014, data post 2014 is not available.

towards achieving long term sustainable growth targets for the global economy. The world cannot meet its climate targets without India's support and contribution. India, must, therefore be ready to seize this leadership opportunity.

Energy use (kg of oil equivalent per capita) Chart: Shamika Ravi (ORF) • Source: The World Bank Open Data • Created with Datawrapper

Figure 2a. Energy Use in India (Kg of oil equivalent per capita)





Renewable energy consumption (% of total final energy consumption)

59%

50

45

40

35

1990

1995

2000

2005

2010

2015

32%

Chart: Shamika Ravi (ORF) • Source: The World Bank Open Data • Created with Datawrapper

Figure 2c: Renewable Energy Consumption (as % of total energy consumption)

5. Defence and National Security

The emergence of China as an economic and political power in the last two decades has disrupted the global political order. It is hard to predict the long-term global consequences of this phenomenon; however, there is a growing impact of Chinese influence in the South Asian region regarding financial support and infrastructure. If India has to play an important role to provide a balance of power in the region, then India will have to pursue a twin strategy of economic development and growth and at the same time strengthen its national security. As far as national security is concerned, India would become self-reliant in the Arms Industrial complex with China's economic and political rise. India is currently dependent on other countries for the latest technology in aircraft, artillery, radar systems, missile, and drone technology. For example, in 2020, it imported more than three billion US dollars' worth of arms, as shown in Figure 3a. One major way for India to become self-reliant in the Arms industry is to encourage public-private partnerships. The private sector works with government grants to develop the latest technology. An explicit strategy to engage with the private sector should also involve the start-ups actively participating in the sector. The recent push for Make in India in the defence sector is a significant step in the right direction. A major development opened few days back – when India got its first ever export order for BrahMos missiles from the Philippines' Defence Ministry. They signed a contract for US\$ 374 million with the BrahMos Aerospace Pvt Ltd (BAPL) to supply undisclosed number of missiles. This is a very significant step towards bolstering India's young but robust defence industry.

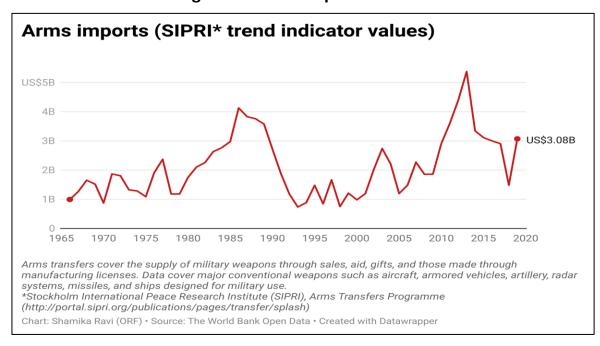
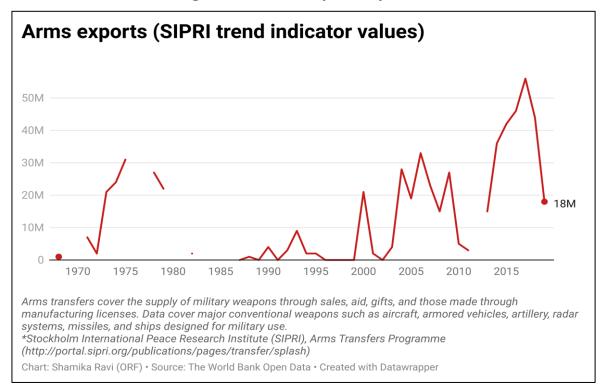


Figure 3a: Arms Imports of India





6. Globalization and Trade

The early 1970s witnessed a unique phenomenon of stagflation; stagnant output and inflation or rise in prices. Till then, the economic policy of the Government across the world was primarily driven by an empirical regularity of a negative relationship between inflation and unemployment. Keynesianism, in the form of fiscal policy of the Government, was used as an instrument to maintain a desired level of unemployment. However, stagflation compelled a rethink of economic policy. It led to a rise of an intellectual movement, neoliberal economics.

In contrast to Keynesian economics, where Government was the solution to the problem of unemployment, neoliberal economics argued that Government was the problem itself; an increase in public spending does not affect unemployment while leading to an acceleration in undesirable social inflation. The primary tenets of neoliberal economics are reduction in public expenditure, reduction in corporate taxes, deregulation of industry, increased emphasis on markets, and free trade. These were not mere intellectual ideas, but in the mid-1980s, neoliberal economics became a political movement in the world's leading economies, the United States and the United Kingdom. Neoliberal economics also influenced multilateral institutions such as the World Bank and the International Monetary Fund.

However, in the Indian context, neoliberal economic ideas came on the back of the economic crisis in the early 1990s. The Indian economic crisis of the 1990s had its roots in draconian government policies towards business in the 1960s. It was primarily an outcome of complete mistrust by politicians, bureaucrats, and the intellectual elites of the business class, which led to bureaucratic strangulation of the economy via license raj, protectionism, and nationalization. Economic activity (except for the agriculture sector) was generally subjected to tyranny without a tyrant. In the guise of poverty reduction (or "Garibi hatao") and national interest, Indian industry was protected from competition from the outside world. Though there is evidence from other countries, who in the early stages of their development, resorted to the protectionism of industry; the United States in mid 19th century, Germany in the late 19th century, South Korea in the 1950s, but this was primarily to help the domestic industry develop and reach the level of standards to be able to compete globally. However, once the industry achieved global standards, protectionism was shunned in favour of free trade to gain access to the international markets for its industry. Unfortunately, the Indian experience with protectionism was very different; it deprived Indians of global products. At the same time, the local industry did not develop to compete at the global level or take advantage of the global markets.

Even though neoliberal ideas of deregulation, liberalization, free trade, and markets are an appealing alternative to draconian government policies of the 1960s, one must be cautious in blind adoption of these ideas. The global financial crisis in 2008 exposed the dark side of neo-liberal economic ideas. One of the perilous effects of neo-liberal economic ideas has been on the widening gap between the rich and the poor. For example, research on world inequality has shown that the bottom 50% of the global population owns less than 1% of the global wealth, while the top 10% own more than 80% of the total global wealth. It has been argued that "Contemporary global inequalities are close to their early 20th-century level, at the peak of Western imperialism."

The other challenge to neo-liberal economic ideas is concerning trade liberalization. A textbook analysis of free trade reveals its overall benefits. However, in reality, trade liberalization, even though beneficial to most people, could displace many people to cause political and social disruption, as witnessed in some of the world's leading economies. The disgruntlement of those whose livelihoods are disrupted due to trade liberalization would need to be addressed upfront. Paradoxically this implies that trade liberalization would need to be simultaneously accompanied by government expansion of social safety nets to address the concern of those displaced due to trade liberalization.

Therefore, India needs an alternative and a self-reliant development model "with Indian characteristics." The Indian model of growth and development should encourage trade liberalization, but safety nets should be in place to address displacement issues. Market efficiency and privatization should be encouraged but with sufficient safeguard that economic power is not concentrated in the hands of the few. Unfortunately, the neo-liberal economic models that focus exclusively on efficiency does not address political and social issues arising from the concentration of wealth. Most of the western democracies today are reeling under anti-globalisation pressures from within. Over the last three decades, India has been a net gainer from globalisation, but moving forward will require a fine balance between trade liberalisation and strengthening of domestic safety nets across the country. We must learn from the experiences of western democracies and avoid their pitfalls.

Given the rise of China as an economic and global political power, India has to provide a balance of power for peace and stability in the region. For that to happen, India must address domestic development issues via growth and technological advancement, which requires significant investments in hard infrastructure and, more importantly, major investments in human capital through raising the quantity and quality of education and health available to our citizens. The recent evacuation exercises of nearly twenty thousand Indian students from conflict-ridden Ukraine is a sharp reminder for the need to strengthen our higher education sector so that it can accommodate the aspirations of our youth. People build nations. And to build a strong and self-reliant India, we must, invest greatly in our people.