

POWERING FUTURE

As the world grapples with the twin challenges of energy security and climate change, nuclear energy is re-emerging as a critical component in the global transition towards cleaner energy systems. For India, with its growing population, urbanization, and industrial demands, the Nuclear Energy Mission represents both a strategic necessity and a vision for a sustainable, self-reliant future.

India's tryst with nuclear energy dates back to the 1940s, led by visionary scientists like Homi Bhabha. Today, under the aegis of the Department of Atomic Energy (DAE) and organizations like NPCIL (Nuclear Power Corporation of India Ltd.), the nation operates over 20 nuclear reactors and has plans for significant expansion. The government's ambitious vision under the Nuclear Energy Mission is to increase nuclear power capacity from the current 7,000 MW to 22,480 MW by 2031, underlining its growing importance in India's energy mix.

What sets nuclear energy apart is its ability to generate massive amounts of electricity with near-zero carbon emissions. In a country like India, where thermal power still dominates and renewable energy has limitations of intermittency, nuclear provides a clean, stable, and reliable alternative. It is essential not only to meet our climate goals under the Paris Agreement but also to reduce dependency on imported fossil fuels, strengthen energy sovereignty, and ensure round-the-clock power for all.

A major highlight of India's approach is its unique three-stage nuclear program, which begins with pressurized heavy water reactors (PHWRs) using natural uranium, moves on to fast breeder reactors using plutonium, and ultimately aims to tap the vast reserves of thorium, a resource where India holds global leadership. If successful, this model can ensure centuries of energy security through indigenous fuel.

However, challenges remain. Public perception continues to be a barrier, especially post-Fukushima, with concerns around radiation, waste disposal, and nuclear accidents. Transparency, education, and safety assurance from the government and the nuclear establishment are vital to build trust. India also needs to expedite the setting up of new reactors, streamline regulatory approvals, and ensure robust disaster preparedness mechanisms.

Additionally, international cooperation in nuclear energy-be it through technology transfers, fuel supply agreements, or civil nuclear deals-must be leveraged without compromising strategic autonomy. India's clean energy diplomacy and participation in global forums on nuclear safety and regulation can help position it as a responsible nuclear power, both militarily and civilly.

The Nuclear Energy Mission is not merely about adding gigawatts to the grid-it is about shaping a resilient, self-reliant, and sustainable energy future. As India strides forward in its Amrit Kaal, it must embrace nuclear power not with blind optimism but with informed resolve-balancing innovation with safety, ambition with responsibility. The atom, when handled wisely, can illuminate the path to a cleaner, stronger India.

■ NARENDRA MODI

Today, 8th September, is a very special day for all those who are passionate about Indian culture and music. It is particularly more special for my sisters and brothers of Assam. After all, it is the birth anniversary of Dr. Bhupen Hazarika, one of the most extraordinary voices India has ever known. As you are all aware, this year marks the beginning of his birth centenary celebrations. It is an occasion to revisit his monumental contributions to Indian artistic expression and public consciousness.

What Bhupen Da gave us extends far beyond music. His works embodied emotions that transcended melody. More than just a voice, he was the heartbeat of the people. Generations have grown up listening to his songs, each word resonating with themes of kindness, social justice, unity and deep-rooted belonging.

From Assam emerged a voice that flowed like a timeless river, crossing borders and cultures, carrying with it the spirit of humanity. Bhupen Da travelled the globe, rubbed shoulders with the who's who across all spectrums of society, but he remained deeply connected to his roots in Assam. The rich oral traditions, folk melodies and community storytelling practices of Assam deeply shaped his early childhood. These experiences formed the bedrock of his artistic vocabulary. He always carried the spirit of Assam's indigenous identity and the ethos of his people.

Brilliance came to Bhupen Da at a very young age. At the age of just five, he sang at a public event and quickly caught the attention of none other than Lakshminath Bezbaruah, the pioneering figure of Assamese literature. By the time he was a teenager, he had recorded his first song. But music was only one part of his personality. Bhupen Da was as much an intellectual at heart...curious, articulate and driven by an insatiable desire to understand the world. Cultural legends like Jyoti Prasad Agarwala and Bishnu Prasad Rabha left a deep impression on his mind and also deepened his spirit of enquiry. It

A tribute to Bhupen Da



was also this desire to learn that made him excel at Cotton College, Banaras Hindu University and took him to the United States, where he interacted with leading academics, thinkers and musicians of those times. He met Paul Robeson, the legendary artist and civil rights leader. Robeson's song "Ol' Man River" became the inspiration for Bhupen Da's iconic composition 'Bistirno Parore.' The much-admired former American First Lady, Eleanor Roosevelt, awarded him a Gold Medal for his performances of Indian folk music.

Bhupen Da had the option of remaining in the US, but he returned to India and immersed himself in music. From radio to theatre, films to educational documentaries, he was well-versed in each of these media. Wherever he went, he emphasised supporting young talent. His works combined lyrical flair and also gave social messages, touching upon justice for the poor, rural development, strength of common citizens, to name a few. Through his music, he gave voice to the aspirations of boatmen, tea garden workers, women, farmers, etc. In addition to being nostalgic, Bhupen Da's works also became a powerful lens to view modernity. A lot of people, especially from the socially backward classes like



him, derived strength and hope from his music.

The spirit of 'Ek Bharat, Shreshtha Bharat' found powerful expression in Bhupen Hazarika's life journey. His works transcended linguistic and regional boundaries to unite people across the country. He composed for films in Assamese, Bengali and Hindi. He made Assam visible and audible to the rest of India. It is no exaggeration to say that he helped shape the cultural identity of modern Assam, both for those within the state and for the Assamese diaspora across the globe.

Bhupen Da, although not really a political person, did remain connected to the world of public service as well. In 1967, he was elected as an independent MLA from Nauboicha constituency in Assam, demonstrating how deeply his public persona was rooted in the people's trust. Though he never became a career politician, his passion for serving others was highly impactful.

The people and Government of India have recognised his enormous contributions over the years. He was conferred with several awards, including the Padma Shri, Padma Bhushan, Padma Vibhushan, Dadasaheb Phalke Award and more. In

2019, it was an honour for me personally and for the NDA government that the Bharat Ratna was conferred upon him during our tenure. People from across the world, especially those from Assam and the Northeast, expressed joy that this honour was conferred upon him. This honour celebrated the principles that Bhupen Da held dear to his heart- that music, when grounded in truth, can transcend all barriers. That a song can carry the weight of a people's dreams and move hearts across the world.

I remember the time Bhupen Da passed away in 2011. I had seen on television how lakhs of people attended his funeral. Every eye was moist that time. Even in death, like in his illustrious life, he brought people together. It was thus fitting that he was cremated at the Jalukbari hillock overlooking the Brahmaputra, the very river that had been the lifeline of his music, metaphors and memories. It is gladdening that the Assam Government has supported the work of the Bhupen Hazarika Cultural Trust, which is working to popularise his life journey among youngsters.

Bhupen Hazarika's life teaches us the power of empathy, of listening to people and of staying rooted. His songs continue to be sung by young and old alike. His music teaches us to be compassionate and courageous. It asks us to remember our rivers, our labourers, our tea workers, our Nari Shakti and our Yuva Shakti. It encourages us to believe in unity in diversity.

Bharat is blessed to have Bhupen Hazarika. As we celebrate the beginning of his centenary year, let us reiterate our commitment to spreading his message far and wide. May it also inspire us to keep working to support music, art and culture, to encourage young talent and make India a nurturing ground for creativity and artistic excellence.

It is only fitting that one of India's most significant infrastructure projects, the bridge connecting Dhola and Sadiya, bears the name of Bhupen Hazarika. Just as his songs connected hearts across regions, this bridge connects lands and people.

Group Entrepreneurship for Rural Development

■ DR. BANARSI LAL

Group entrepreneurship is a business approach where multiple individuals join together to start and run a venture. Unlike traditional entrepreneurship which revolves around a single person, group entrepreneurship leverages the diverse skills, experiences and resources of a group. This collective effort enhances productivity and efficiency making it more effective in technologically advanced sectors and Self Help Groups (SHGs). In this entrepreneurship leadership roles are distributed among the group members. This shared leadership model allows far more balanced decision-making and reduces the burden on any one person. One of the biggest advantages of group entrepreneurship is the combination of group skills and enterprises. The diversity enables the group to tackle complex challenges more effectively. Group entrepreneurship fosters a collaborative environment where ideas can be freely exchanged, leading to innovative solutions and products. Allocating resources fairly and efficiently is crucial for the success of group ventures.

Agriculture forms the backbone of the Indian economy. In India about 70 per cent of population seeks employment in agricultural sector. Majority of the

farmers in India are small, marginal and agricultural labourers and a large number of them are either unemployed or underemployed. If we look at the contribution of this sector to the total Gross Domestic Product (16.0 per cent), this percentage dependence on agriculture seems to be high and indicates to the intensity of disguised unemployment and under-employment in this sector. The employment opportunities in this sector may decline due to the application of labour saving technology declined public investment and lifting of quantitative restrictions on imports of agricultural products. Also the urban organised sector does not appear to be promising in absorbing growing workforce. This is evident from decline in the absolute number of jobs in public sector enterprises due to retrenchment and disinvestment policy.

Although, urban informal sector is growing very fast and a large numbers of youths are absorbed by it but the exodus of rural workers in urban areas is creating a serious problem, to the carrying capacity of urban sector. Under these circumstances, the viable option for providing gainful employment to the growing rural workforce and to lessen the burden of manpower in agriculture seems to be in generating more employ-

ment. During the planning period, rural development strategy has shifted from growth oriented to welfare oriented and further to empowerment oriented. Our development strategy was based on trickledown theory up to the Fourth Plan in which emphasis was laid on acceleration of growth on the presumption that its benefits would percolate down to the lowest strata of society. This top down approach could not prove effective in alleviating rural poverty. From the Fifth Plan, Government of India tilted its development strategy towards the welfare of downtrodden and underprivileged sections of rural society. Since then, a large number of self-employment programmes have been launched by the Government of India. One of the drawbacks of these programmes was that the group entrepreneurship was not followed in them. Development of Women and Children in Rural Areas (DWACRA) was the only programme which was based on the group approach, covering 10-15 poor rural women in a group. The major objective of DWACRA was to develop the income generating skills among the rural women. Training for Rural Youths for Self Employment (TRYSEM) was another self-employment programme. The major objective of which was to

develop technical skills among rural youths. In 1999, Government of India started a new self-employment programme called as Swarnjayanti Gram Swarozgar Yojana (SGSY), which is based on group approach. Major objective of this programme is to establish a large number of rural enterprises. This is a holistic programme covering all aspects of self-employment, viz., organisation of the rural poor in to the self-help groups. It is credit-cum-subsidy programme. It involves the banks in the planning, preparation of projects, identification of clusters, infrastructure planning, capacity building and choice activity of SHGs. This programme also involves market intelligence, development of markets, consultancy services and institutional arrangements for marketing of the goods. Review of all these self-employment schemes indicates that the policy focus has been largely on poverty alleviation rather than on creation of income and wealth on sustainable basis through investment in productive employment generating activities. Beneficiaries of most of these schemes are poor and illiterate who lack necessary skills to run the activities. A big or medium enterprise can easily hire the workers with different skills. It is not possible in micro enterprise to have

access to all these skills and due to lack of necessary skills, many of them could not survive. Thus, development of rural industries under group entrepreneurship can be a good option in this regard.

Expansion of rural industrialisation can play a big role in abating distress migration from rural areas and stopping drain, thus reducing the pressure on urban civic services and boosting rural income and employment. Total food grain production in 2024-25 was 353.95 million tonnes. India is the second largest producer of fruits and vegetables in the world after China and first in milk production in the world. Our country is also having largest cattle population in the world. These agricultural products are partially utilized by the food-processing industries. For example in our country only about 4.5 per cent of fruits and 2.7 vegetables are processed compared to 70 per cent in Brazil, 30 per cent in Thailand, 78 per cent in Philippines and 80 per cent in Malaysia. We lack proper storage and processing facilities due to which we have post-harvest losses of more than Rs. 50,000 crores. We can reduce these losses by improving the transport facilities, storage and processing of agricultural products etc. On the basis of demand and supply parameters, food industry in India can play a vital role

in increasing rural income and employment through agricultural commercialisation, diversification and value addition.

For promoting group entrepreneurship among the rural youths, there is need to identify the unemployed educated youths and organise them in groups for jointly taking up some enterprising projects. Each group would have 5-10 rural youths trained in different skills. Agro and non-agro based rural small scale industries can be established by involving the unemployed youths. These industries should be based on the locally available resources. The funds of these industries would be mobilised through bank loans and subsidy to the target groups. Gram Panchayats should be entrusted the responsibility of identifying the different type of unemployed workers willing to join the group. There is need develop a suitable institutional market mechanism for the products of the enterprises. Efforts from NABARD, other commercial banks, rural local government and Non-Governmental Organizations (NGOs) are required to promote group entrepreneurship. Group entrepreneurship can pave the way for more inclusive and sustainable economic growth.

(The writer is Chief Scientist & Head, KVK Reasi SKUAST-Jammu)

Foreign Lobby and Indian Economy: An Invisible Hand Against the Market?

■ PROF. VIRENDER KOUNDAL

India stands today as the world's fastest growing large economy, backed by a robust GDP growth rate, progressive tax reforms, and a massive overhaul of its indirect tax system through the Goods and Services Tax (GST). The Union Budget's structural reforms, including bold income tax rationalization, a focus on infrastructure spending, and long-term policy clarity, have strengthened the country's macro-economic profile. Yet, despite this enviable position, Indian equity markets tell a different story. The NIFTY 50, India's premier benchmark index, has been underperforming relative to macro fundamentals. Foreign Institutional Investors (FIIs), who once served as the engine of Indian market rallies, are now net sellers at record levels. Short positions in the derivatives market hover around an unprecedented 92%, raising serious questions about whether an invisible lobby is working against India's economic narrative both from within and outside its borders.

To understand this paradox, it is essential to unpack the interplay between India's strong economic fundamentals and the peculiar behavior of global investors. At one level, the global financial ecosystem has been navigating turbulent waters. The United States Federal Reserve's prolonged hawkish stance has kept global liquidity tight. Rising U.S. bond yields offer FIIs a safe and lucrative

alternative, prompting capital flight from emerging markets, including India. Added to this is the uncertainty surrounding global geopolitics wars, supply chain realignments, and energy price volatility that make investors more risk-averse. Yet, the magnitude of FII selling in India far exceeds what macroeconomic reasoning alone can justify.

Between 2022 and 2024, FIIs cumulatively sold Indian equities worth billions of dollars, even as domestic investors, particularly retail and mutual funds, emerged as counterbalancing buyers. The selling intensity has not abated in 2025 either, with foreign investors booking profits and widening their short bets. This is not a casual exit but a calculated strategy that seems disproportionate to India's fundamentals. When GDP growth surpasses 7, inflation moderates within the Reserve Bank's tolerance band, and corporate earnings reflect resilience, why should FIIs abandon India at such scale? It raises a deeper question whether this is merely portfolio rebalancing or whether coordinated lobbying interests are at play.

The concept of a 'foreign lobby' influencing India's financial trajectory is not new. Throughout history, global powers have leveraged capital markets to influence economic policy and political decisions in emerging economies. By exerting pressure through financial volatility, they create an environment where policymakers are forced to prioritize exter-

nal sentiment over domestic requirements. In India's case, despite consistent signals of macro stability, the NIFTY remains under pressure. This is symptomatic of forces working to undermine investor confidence. The disproportionate build-up of short positions, nearing 92% in derivatives, suggests not only hedging activity but also deliberate bearish positioning. It is difficult to ignore the possibility that certain financial cartels are actively pushing down valuations to weaken India's growth story in the global arena.

One must also consider the timing of these moves. India is in the middle of a geopolitical repositioning emerging as a manufacturing hub, a digital innovation leader, and a preferred investment destination in the Global South. Trade diversification away from China has opened enormous opportunities for India, from electronics to pharmaceuticals. However, such shifts threaten entrenched global interests. A strong, independent India poses a challenge to traditional Western dominance in capital flows and production networks. If India is able to sustain high growth while strengthening its domestic capital markets, the dependency on foreign investors reduces drastically. This could explain the aggressive FII withdrawal less a response to fundamentals, and more a tactical move to test India's economic resilience.

Domestic factors also merit scrutiny. While India's macro picture is strong, internal challenges persist.

Rural distress, uneven job creation, and pockets of corporate debt vulnerability provide foreign players with convenient narratives to justify bearish calls. Furthermore, domestic political contestations often amplify pessimistic sentiment. Lobbying is not only external; there are elements within who profit from volatility. Hedge funds, speculative traders, and even domestic brokers can align with global short-sellers, amplifying downward pressure on markets. Such alignment, whether conscious or opportunistic, contributes to the underperformance of NIFTY despite fundamentally bullish conditions.

A critical piece of this puzzle lies in perception management. Global rating agencies, brokerage houses, and international think tanks play an outsized role in shaping narratives around emerging markets. India's repeated calls for sovereign rating upgrades have been ignored despite strong fundamentals, while minor fiscal slippages are magnified disproportionately. Reports from certain global investment banks frequently caution against India, citing governance issues, market valuations, or regulatory risks-often while ignoring similar or worse conditions in other economies. This creates an aura of uncertainty that serves the interests of those betting against Indian markets. In many ways, the market is not just about numbers but also about stories, and the stories being written about India abroad are not always aligned with its ground reality.

The question then arises: if a foreign lobby is indeed at play, what is the end goal? At one level, it could be to slow down India's ascent as an alternative to China. By creating market volatility, foreign lobbies can discourage long-term institutional investors such as pension funds or sovereign wealth funds from making strategic allocations to India. Another objective could be to pressure Indian policymakers into maintaining a favorable stance for multinational corporations. For example, aggressive selling around key policy announcements can send a message that markets will punish reforms not aligned with foreign interests. At the extreme, such financial pressure can be used as a tool of economic statecraft, subtly influencing India's geopolitical choices.

However, the narrative is not entirely bleak. The resilience of domestic investors has emerged as a formidable counterweight. Retail participation through systematic investment plans (SIPs) and mutual funds has grown exponentially, creating a steady inflow that cushions against FII volatility. The rise of domestic institutional investors signals a structural transformation where Indian capital is increasingly shaping Indian markets. In the long run, this reduces vulnerability to foreign lobbying. Furthermore, government policies to deepen bond markets, encourage sovereign wealth participation, and attract long-term patient capital are slowly shifting the balance

of power.

For now, the paradox persists. India remains a top global growth story, yet its markets underperform. FIIs continue to sell at record levels, shorts dominate derivatives, and NIFTY rallies fail to match macroeconomic progress. The suspicion of a coordinated lobby internal and external cannot be dismissed. Policymakers, investors, and regulators must remain vigilant. Strengthening transparency in derivative markets, curbing manipulative practices, and enhancing investor awareness are crucial steps. India's journey will not be without challenges, but if its domestic strength continues to rise, the power of any foreign lobby will diminish in the long run.

Ultimately, the Indian market is a battleground of narratives. The foreign lobby, if indeed it is working against India, thrives on perception, volatility, and fear. Countering it requires confidence, resilience, and strategic clarity. As India steps into a new economic era marked by self-reliance, digital leadership, and manufacturing strength, the real test lies not in GDP numbers alone but in ensuring that its financial markets reflect its true potential. The NIFTY may not be rallying today, but the silent accumulation of domestic capital may well lay the foundation for the next great bull run one led not by foreign lobbies but by India itself.

(The writer is Professor of Department of Economics, University of Jammu)