

360° Series



360° Series

Fair Observer



The State of the Indian Republic

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ABOUT FAIR OBSERVER

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Our digital media platform has more than 2,500 contributors from 90 countries, cutting across borders, backgrounds and beliefs. With fact-checking and a rigorous editorial process, we provide diversity and quality in an era of echo chambers and fake news.

Our education arm runs training programs on subjects such as digital media, writing and more. In particular, we inspire young people around the world to be more engaged citizens and to participate in a global discourse.

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The State of the Indian Republic

Atul Singh
September 22, 2020

The health of India's democracy is important for its 1.3 billion citizens, its region and the world.

On August 15, India celebrated 73 years of independence. By some metrics, the country has been a fantastic success. Multi-ethnic states such as Yugoslavia and the Soviet Union collapsed in the early 1990s. In contrast, India is still united despite its bewildering diversity in terms of religion, region, language, caste and class. Its democracy has proved resilient and political power still changes hands peacefully.

The Republic of India began as and continues to be an audacious experiment. India's independence came at a terrible cost. In 1947, the departing British partitioned the country into India and Pakistan, leading to violence and the largest migration in history. Despite the violence and chaos, India chose a pluralistic democracy and inspired other colonized nations to pursue independence.

Since then, India has changed dramatically. Some trumpet the country's great achievements. Others damn its monumental failures. In 2020, India still offers insights and lessons to many other nations around the world. With a population of more than 1.3 billion people, the state and health of the Republic of India is a matter of global importance.

The Story of the Republic

In seven decades, Indians have become much better off physically and financially on aggregate. For a start, they are living longer. Life expectancy in 1947 was 32 years. Today, it is over 69. During British rule, famine was a part of Indian life. It began with the Great Bengal

Famine of 1769-70, which killed 10 million people, a third of the population of Bengal. During World War II, an estimated 3 to 5 million people died as Bengal's grain was diverted to the overseas British war effort. Since independence in 1947, India has suffered no major famine and has achieved food security for the first time in centuries.

There are many other achievements. India's per capita GDP has improved dramatically. Literacy has increased from 11% in 1947 to 74% as per the 2011 census. Social mobility for women and members of lower castes has increased. A Dalit (India's lowest caste) woman has held office as chief minister of India's largest state and a woman has been prime minister. India now has nuclear and space programs and is on the verge of great power status.

Yet there are warts in the picture. Cambridge economist Joan Robinson had a lifelong love affair with India and famously observed, "Whatever you can rightly say about India, the opposite is also true." Her observation holds true today.

Indians may not be dying of hunger, but too many of them are still struggling to get enough food or water. In the 2019 Global Hunger Index, India ranks at a lowly 102 out of 117 qualifying countries. As of 2017, 37.9% of children under 5 were stunted and 14.5% of the population was undernourished. These rates are comparable to countries in sub-Saharan Africa, not in East or Southeast Asia. According to NITI Aayog, the premier policy think tank of the government, India faces the worst water crisis in its history and about 600 million face acute shortages. With nearly 70% of the water contaminated, India ranks 120 out of 122 countries in the water quality index.

To add insult to injury, India's health care system is in crisis. Numerous research papers have chronicled the low quality of primary care facilities for women and children. A study by The Lancet found that 2.4 million Indians die of treatable diseases every year. A 2016 report by the World Health Organization found that 57.3%

of India's doctors did not have a medical qualification. When it came to nurses and midwives, 67.1% had education only up to secondary school level. Rural areas are poorly served. Public health care has declined dramatically. Even the poor turn to private health care where profiteering is rife.

Like health care, education is in poor health. Annual reports invariably find young Indians lacking in cognitive development, early language and early numeracy. Teachers are often recruited on the basis of bribery. Like doctors, many are not qualified for their jobs. In addition, schools often lack basic facilities like water or electricity. Anyone who can afford to do so sends their children to private schools. For many, the focus of education is clearing entrance examinations to government-run, highly-subsidized elite universities. As a result, a booming \$40-billion private coaching industry has emerged, which trains students for such examinations, allowing little space for innovation.

Like education, India's environment is in a dire state. The air in cities like Delhi or Bangalore is almost unbreathable. Sewage and industrial waste are discharged into rivers, streams, ponds, lakes and other water bodies. Plastic litters the land, including the high Himalayas. The levels of pollution have made scientists offer repeated warnings about impending environmental disasters to little effect.

The Indian economy is in a similar state to the environment. Even before the COVID-19 pandemic, growth had stalled and jobs dried up. More than 50% of Indians are under 25 and over 65% under 35. Thanks to selective abortion and gender discrimination, India has higher female mortality and more men than women. These single men present a major national challenge. Thanks to persistently high unemployment, there is a real risk that India's much-trumpeted demographic dividend could turn into a demographic disaster.

India's institutions that are supposed to deal with these challenges are in dangerous decline. In politics, crime pays. Money and muscle power

are essential for winning elections. Identity politics in the form of religion, region, caste and class has risen to alarming levels. In bureaucracy, corruption works. Colonial laws and post-independence ones have led to restrictive red tape. Citizens navigate it through bribery, personal networks or political influence.

Furthermore, elite bureaucrats are held in high esteem. After they clear a grueling exam in their 20s, these mandarins are deemed omniscient. They head everything from exam boards to airlines and move seamlessly across ministries of culture, agriculture and finance. Neither lack of domain expertise nor incompetence holds them back.

Like the bureaucracy, India's judiciary faces major issues. Like Bollywood, the profession of law is known for nepotism, not competence. The judicial system is infamous for its delays. Over 3.7 million, about 10% of the total number of cases, have been pending for over 10 years. Hence, many citizens turn to local crime bosses instead of courts for justice. Many of these criminals go on to run for office. Even the police are accused of behaving like a mafia. With the crumbling of the criminal justice system, they are increasingly taking to vigilante justice and extrajudicial killings.

The weakening of institutions has gravely undermined the rule of law. The republic may not yet be in peril, but it is not too far off from a major crisis.

Why Does the Indian Republic Matter?

When the Soviet Union collapsed in 1991, there were high hopes for a new age of peace and progress. Democracy was the new natural order of the universe. In 2020, that romance with democracy has dimmed. Strongmen are in power in many countries. Polarization runs high. India is no exception to this global trend and it assumes importance for five key reasons.

First, the Indian republic matters most to its 1.3 billion citizens. Its success would mean better lives for nearly a fifth of humanity.

Second, if the republic fails to deliver essential services or meet minimal expectations

of its citizens, India could experience violence, chaos and even disintegration. The entire region could go up in flames as in 1947 when the British partitioned the country into India and Pakistan.

Third, India has long been an exemplar for the decolonized world. Countries like Tanzania and South Africa avidly studied India's imperfect but resilient democracy. India provides a good roadmap for the bumpy transition from a traditional to a democratic society.

Fourth, the Indian republic offers rich insights for any multicultural, multiethnic, multireligious democracy. The promise and peril of such an experiment are laid bare in India.

Fifth, India poses difficult questions for our time. Can democracies avoid degenerating into popularity contests between competing special interest groups? If so, how? Can a humongous republic with innumerable moving parts reform itself? If so, what does it take? If not, what lies ahead? Answers to such questions will determine the future course of history.

***Atul Singh** is the founder, CEO and editor-in-chief of Fair Observer.

India Must Modernize Its Inefficient Defense Production System

K. Sreedhar Rao & Atul Singh
September 22, 2020

The state-owned system of production is cost-inefficient, delivers poor quality and imperils India's long-term security.

In a complex world, countries have to clearly identify and evaluate external threats on a continuous basis. These are no longer only military, insurgent and terror, but also scientific, technological and economic.

In the Indian situation, foreign powers have engaged in cyberattacks, electronic warfare, illegal fake currency circulation and media manipulation to exacerbate the country's internal fault lines. To counter such a multiplicity of threats, India must build up comprehensive national power. More than ever, this power is a composite of economic, industrial, scientific, technological, innovation, military and intelligence capabilities.

Threats, External and Internal

India is the only country that shares land borders with two nuclear states: China and Pakistan. With Pakistan, India shares a maritime boundary too. Pakistan, a country born after the partitioning of British India in 1947, has been congenitally hostile to and consistently opposed the very idea of India. It waged wars against India in 1948, 1965 and 1971. A little more than two decades ago, it destroyed a promising Indian peace initiative by taking over strategic heights in Kargil, an Indian district in Ladakh, provoking a limited but bloody conflict in 1999.

The bitter bone of contention between India and Pakistan is Kashmir. As a self-defined haven for Muslims, Pakistan refuses to accept Kashmir as a part of India. It has backed an armed insurgency as part of its strategy to bleed India with a thousand cuts. Pakistan's goal is to dismember its larger neighbor, beginning with Kashmir. In the 1980s, it backed a bloody insurgency in Punjab, which eventually failed. Since then, it has doubled down on Kashmir.

Pakistan's fixation with India has defined its foreign policy since its inception. During the Cold War, Islamabad allied with the US, mainly to wrest Kashmir from India. In recent years, it has aligned itself with China to counter India in every possible manner.

China's relations with India are becoming increasingly complicated. This can be explained as a big power competition. This began as early as the 1950s when both countries were emerging from the shadows of imperial powers after two centuries of domination. In 1962, India lost to

China in a brief but traumatic war. Since then, the two countries have not been able to agree upon a border, and the Chinese have been nibbling away at Indian territory more aggressively in recent years. At its essence, the Chinese game plan is simple: China wants to emerge as a superpower and a rival to the US. It wants to block India's rise as an Asian power and a rival in the region.

Like any large and diverse country, India has numerous internal security challenges. Insurgency remains a serious threat in Kashmir as well as India's northeastern region that borders Bhutan, China, Myanmar and Bangladesh. India has faced a communist Naxalite insurgency since the 1950s. Islamic extremism, aided and abetted by foreign powers and jihadi organizations, especially Pakistan and its proxies, is increasing dramatically. The long coastline of India makes it extremely vulnerable to terrorist attacks as the 2008 massacre in Mumbai demonstrated.

Given such threats, it goes without saying that India needs a strong security apparatus of military, police and intelligence. Importantly, the country also requires a robust defense production apparatus for three reasons.

First, India must have the ability to produce key requirements of its armed forces to enable them to be combat-ready. Otherwise, India would be dependent on imports and at the mercy of foreign suppliers, especially at critical times.

Second, India must profit from new dual-use technologies and capabilities that emerge from defense production as France, Russia and the US have demonstrated repeatedly. These have a multiplier effect in boosting a country's technological base, driving growth in its economy and creating new jobs.

Third, India cannot rely exclusively on the public exchequer for ensuring defense preparedness, given competing demands on the budget, paucity of foreign exchange reserves, dependency on Middle Eastern oil and welfare-oriented policies. Hence, the participation of the private sector in defense production is a *sine qua non*.

The Story of Defense Production in India

India has credible experience in defense production for over two centuries. The British set up a gun carriage factory in 1801 that began production in 1802 and is still operational today. World War I provided the impetus for the British to increase production. The number and range of these factories increased significantly until the end of World War II. Defense facilities and their management structure, namely the Ordnance Factory Board (OFB), are yet another legacy of the British like India's bureaucracy, judiciary and military.

After the defeat in 1962, India created a number of defense public sector undertakings (DPSUs). These are units owned and managed by the government. Like most other government-owned entities, these units never really had any incentive to achieve excellence. They have been unable to satisfy the requirements of the armed forces even partially. India has consequently continued to import critical equipment from foreign original equipment manufacturers (OEMs). The foreign OEMs have earned the trust of the armed forces for quality, delivery schedules and even confidentiality. India continues to pay huge royalties for technologies transferred for producing imported equipment in the DPSUs.

These foreign OEMs are largely privately owned but enjoy strong state support from their home governments. Yet India has not demonstrated the same level of trust in its own private sector companies. Even though India liberalized its economy in 1991, it permitted private sector participation in defense only in 2001. Nearly 20 years later, the private sector production of 170 billion rupees (\$2.27 billion) comprises just about 21.3% of the 800 billion rupees (\$10.67 billion) total defense sector. Most of this production is in low-value goods.

While the US relies on Boeing, Raytheon and Northrop Grumman for many of its new defense technologies, India has entrusted the task of development of such technologies exclusively to its Defense Research and Development

Organization (DRDO). In theory, India should be producing cutting-edge, high-quality defense material with institutions like the DRDO. The reality is very different

In a nutshell, the present apparatus that India has for satisfying the requirements of its defense services is entirely inadequate. In view of the deteriorating security conditions on its borders and increasing internal threats, this failure could prove catastrophic. In the past, India's failures led to colonization. Tomorrow, these might lead to Balkanization.

What Has Gone Wrong?

Ordnance factories are India's oldest defense production units. They produce a vast variety of equipment and supplies. Run by the OFB, they fall under the administrative control of the Ministry of Defense. These OFB factories are run by officers of the Indian Ordnance Factory Service (IOFS) who are a part of Indian civil services. They are generalist administrators with little technological expertise.

Like much of the government, the OFB is not accountable for quality, timeliness and efficiency. There is no pressure to produce returns on public investment. The OFB pays little attention to operational efficiency, and cost-effectiveness has seldom been part of its calculus. They do not even produce annual profit and loss statements or balance sheets. They function in absolute opacity as monopolies with captive buyers.

The Directorate General of Quality Assurance (DGQA), another colonial legacy, is responsible for the quality assurance of products produced by OFB factories. It falls under the administrative control of the defense ministry just like the OFB. This arrangement is misguided. While the OFB is the producer, the DGQA is supposedly responsible for the quality of OFB products. The armed forces are the consumers but have no right to evaluate the quality of the products they use. The DGQA neither produces nor consumes and is not responsible or liable for poor quality or anything going wrong. It is bureaucratic, inefficient and incompetent. Over time, the

DGQA has even acquired an odious reputation for its integrity. This has serious implications for India's national security.

Many in India have long recognized the need for reform. A proposal recently emerged to convert the OFB into a public sector company. This would make India's 33 ordnance factories into DPSUs. Importantly, the DPSUs themselves have been a failure as explained above. This reform measure is ill-conceived, half-hearted and doomed to failure.

The problems of the post-1962 DPSU model run deep too. They also operate as monopolies with the armed forces as their captive customers. DPSU employees enjoy complete job security, are not accountable for quality, delays or cost overruns. Strong unions resist any reforms. DPSUs operate in an environment of financial indiscipline. There is no compulsion to generate a reasonable return on capital and even continuous losses do not lead to closure. These losses have become a persistent drain on the public exchequer and suck up taxpayer money that could have gone to health, education or infrastructure.

To be fair to DPSUs, they are not responsible for all their shortcomings. They have no autonomy to run their organizations. The Ministry of Defense micromanages recruitment, promotion, pay structure and investment decisions. DPSUs do very little in-house research or development. Instead, they rely on the DRDO or foreign licenses. Top management appointments by the government are far too often dispensed as patronage. Merit and achievement often become secondary considerations and, at times, interventions to promote a social justice agenda weaken DPSU performance.

This performance has dangerous consequences. If a soldier guarding India's borders gets inferior DPSU products, then it diminishes his fighting ability. The lack of DPSU accountability for quality, timely delivery and cost control weakens India's national security. When a plane made by Hindustan Aeronautics Limited (HAL) fails midair and the pilot dies, the

country does not hold HAL accountable. This means that DPSUs have no incentive to maintain quality standards. Even items produced under a license are subject to unconscionable delays and extreme cost escalations. For example, the Germans can produce a submarine completing all trials within two years. In contrast, India's DPSUs take over 10 years to assemble semi-knocked-down kits. DPSUs took an eternity to manufacture Arjun, India's main battle tank, even though most of its critical components are simply imports.

Whose Fault?

Undoubtedly, it is not just DPSUs who are at fault. There are deeper reasons for India's failure to achieve even a reasonable degree of self-reliance in the vital area of defense production and its defense research and development capabilities.

First, India has a narrow technological and scientific base. Since the mid-1990s India has invested less than 1% of its GDP for research and development activities. On the other hand, China has steadily boosted its research and development expenditure and has crossed 2% of its GDP.

It is important to note that China's GDP has grown faster than India's and is now four times the size of its southern neighbor. Thanks to its increased expenditure, China now manufactures products that sell across the world.

In contrast, Indian industry still struggles to sell globally and is starved of skilled manpower. India's best technical talent still migrates to greener pastures. Except for a handful of enterprises, none of the vaunted information technology firms in India have created a top brand or a reputed product line. The situation is worse in the manufacturing sector.

Second, India suffers from a lack of skilled manpower for even the most basic of industrial activities. An outmoded education system churns out millions of white-collar job seekers. Technical jobs like machining, plumbing, electrical works, mechanical works and quality assurance are treated as inferior pursuits. Even

engineers from premier institutes seldom aspire for a hands-on career profile. They prefer to go into management or government service.

India is desperately short of a workforce with advanced manufacturing floor skills. The few skilled technicians are a prized lot. Both the private and the public sectors compete for them. Enlightened thought leaders in the information technology sector like Narayana Murthy have often bemoaned the fact that India's education system is failing to produce employable candidates, forcing private enterprises to establish in-house training institutions.

To increase the scale and improve the quality of industrial production, India needs to raise an army of trained workers. This would involve nothing short of a cultural revolution in both industry and education.

Some Solutions

In truth, the real answer to the problem is privatization. Taxpayer money must not be wasted on inefficient ordnance factories or DPSUs. If the armed forces could choose suppliers from a competitive marketplace, there would be huge savings for the taxpayer. Furthermore, the forces would be able to get high-quality products that meet the highest standards. Those who object to privatization should remember that India buys all its high-end defense equipment from private players, well-known OEMs such as Rafale jets from Dassault Aviation and M777 howitzers from BAE Systems.

Not all ordnance factories can be turned into DPSUs and not all DPSUs can be privatized. Those units that cannot be turned around must be closed down. In addition, not all DPSUs need to be privatized. Some would be in core strategic sectors and they need professional management and operational autonomy. A part of their shareholding could be sold in the market to bring financial discipline and competitiveness to these DPSUs.

Like any high-performing company in the world, the government should empower the board

of directors of DPSUs and give them operational autonomy. Any DPSU board should be able to select its top management and hold its feet to the fire. The DPSUs must select top management from the open market by offering competitive pay, allowances and incentives. Similarly, they must recruit other employees on the basis of merit, and merit alone. The board must set high-performance standards for employees and foster a culture of excellence. The board and management must exercise financial discipline to generate returns on capital.

The DPSUs must also do their own research and development. This does not mean that they stop working with the DRDO. It just means that they are responsible for all aspects of their performance. They can and indeed must collaborate with other institutions, especially the DRDO, but the buck for all aspects of their performance stops with them. Also, the DPSUs must have the power to raise capital in the form of both equity and debt from capital markets. The value of their shares and the rating of their debt will reflect the true worth of their enterprise, make the DPSU management accountable and compel them to perform optimally.

In theory, the DRDO is expected to develop world-class defense technologies India needs to lessen reliance on imports. In reality, the DRDO is yet to establish itself as a reliable source for high-technology and battle-ready products that can more than match that of the adversaries. Of course, there are notable exceptions, particularly when it comes to rockets and guided missiles. The DRDO needs to replicate these successes in other fields.

Like DPSUs, the DRDO also needs operational autonomy. Those who run the DRDO must be able to hire and fire, set pay and standards, and run the organization optimally to produce technologies that Indian armed forces need. At the same time, the DRDO must be accountable for its performance. Its key job is to produce indigenous technology and reduce dependence on imports. Furthermore, the DRDO

has to achieve this under tight timelines, given rising threats to India's national security.

The DGQA has become totally outdated. This colonial institution must be disbanded. The consumer of the product must have the right to decide if a product is good enough, while the producer must be held fully responsible for both the quality and the delivery of its supplies. The producer must also suffer penalties for its failures. In practical terms, the armed forces who use defense products must have a choice to select products and producers. They should also be able to go to court and claim damages or ask for penalties if producers supply products that fall short of their quality standards.

Finally, the defense sector needs some of the same reforms that one of the authors suggested to the prime minister in a memo on May 5. In their words, India "must no longer have the power to throttle supply-side activity." Indian entrepreneurs do well around the world. It is time to unleash Indian entrepreneurial energy in the defense sector too. This will improve quality, cut costs and make India more secure in the years and decades ahead.

For too long, India has failed to promote a culture of excellence while allowing mediocrity to flourish. It has derided merit and achievement while tolerating inefficiency and dishonesty. This has caused serious damage to the nation's economic progress and the welfare of its people. This culture has imperiled national security. Hence, India must focus on developing a culture of excellence in all fields. Given the multiplicity of threats, defense production must be the sector that becomes an exemplar of excellence for this new culture of excellence.

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India's Higher Education Must Be More Holistic

Arush Kishore
September 28, 2020

Both the craze for engineering and the fixation for Anglo-Saxon institutions are fueled by a hypercompetitive job market and few quality higher education institutions.

In 2020, exams for the 10th grade conducted by India's Central Board of Secondary Education (CBSE) led to impressive results. Of the 1.8 million students who took the exam, 10% scored over 90% and 2.23% scored over 95%. In 2019, a similar number wrote the exam with 13% scoring above 90% and 2.23% over 95%, comprising 220,000 and 56,000 students, respectively. If results were an indicator of the state of school education, India is doing quite well.

Things could be getting even better. The government has announced the New Education Policy (NEP) 2020 with much fanfare. It is a much-delayed and long-awaited review of the status quo. My daughter in the eighth grade is enthused by the choice that the NEP offers. Yet, like all policies, especially in India, much depends on its rollout and implementation.

Why Engineering Is a Big Deal

Like most other parents, I follow the news and try to keep abreast of what is happening to aid my child's decisions about the future. The last three decades have demonstrated the great equalizing power of education. Globalization gave all those who had a certain level of education the opportunity to compete in a global labor market. They found employability around the world. Some did better than others. Today, those who studied engineering are running not only information technology companies but also hedge funds.

In the Indian context, those with engineering degrees run everything from marketing and finance in the private sector to intelligence and the ministry of culture in the government. This raises an important question: Why do those who study engineering dominate in most professions in India?

The answer is simple: India defines merit exceedingly narrowly. In a country where labor is plentiful and jobs are scarce, anyone with half-decent quantitative ability strives to get an engineering education. Since 1991, rapid economic growth led to more job creation in India, but most applicants lacked relevant skills. Clearly, higher education was not equipping students for the job market.

Faced with such a situation, companies sought the most efficient way out. They focused on hiring students with a basic understanding of logic and proficiency in numbers. Other knowledge and skills were deemed superfluous. Companies assumed that logical and numerate candidates could always pick up other skills on the job. So, they focused on hiring engineering graduates for all sorts of positions. Others were deemed almost unemployable.

When I ask other parents about the educational choices they make for their children, their unequivocal answer is employability. These choices are based on personal experience. Parents want the best for their children. They want them to get jobs, not starve on the street. So, we send our children to coaching classes from the age of 9 or 10 to clear engineering entrance examinations.

Why Indians Study Abroad

We are not just spending on private coaching. We Indians are also spending \$20 billion per year to send our children to universities in Anglo-Saxon lands. We do so because getting into top institutions such as the Indian Institutes of Technology (IITs) or Delhi University is difficult. The entrance exam for the IITs is the hardest in the world. Even the third cut off list for applicants to Delhi University requires candidates to have a minimum of 98%.

There is another reason we send our children abroad. Anglo-Saxon universities in the US, the UK, Canada, Australia and New Zealand offer higher quality education, better facilities and greater career opportunities. An education in Anglo-Saxon lands promises a better life for our children.

The decision to send children abroad does not happen after school. To study abroad, children study in schools that follow the International Baccalaureate (IB) curriculum instead of the CBSE one. While IB grades are preferred by Anglo-Saxon universities, they are not accepted by Indian institutions. So, parents have to make the choice of sending their children abroad at a rather early stage. It determines the schools they choose for their children.

In India, there are many school boards apart from CBSE. These follow different standards in their marking. Equalization committees have emerged to do the hazardous job of comparing apples to oranges. They do so by giving unearned marks to students who have written their exams for boards deemed to be tougher. This process is ridden with pitfalls and hundreds of thousands pay the price for this arbitrary equalization. It is little surprise that IB schools tempt Indian parents.

Higher education outside the elite schools in India is in a poor state. In 2018, 101 business schools applied to shut shop. Their student enrollments had dipped after their graduates had been unable to get jobs. The education these schools offer has few takers in the job market, leaving them with no option but to close.

To understand the hypercompetition for jobs in the country, it is important to remember that more than 600 million Indians, over 50% of the country, are under 25. Employment figures still run low despite past years of high growth. So, India's young population has to compete ferociously to get "quality" education or good jobs. Not only jobs in medicine or engineering but also in sales or marketing are exceedingly difficult to come by. Hence, parents send children to Anglo-Saxon universities so that they acquire a

good education and a decent job. It is for the same reason parents push children into engineering if they study in India.

Making everyone study engineering does not make sense, though. Recruiting most jobs from engineering schools is not a great idea either. The three "Rs" — reading, w(r)iting and a(r)ithmetic — cannot be the monopoly of engineering graduates. There must be space for young people in the labor market who have studied history or philosophy. We must come up with a more catholic concept that gives students a holistic education.

As a father, I hope fervently for reforms in this direction. I want my daughter to have more meaningful choices to study in India. I want her to be able to decide what to study as per her intrinsic interests, not the arbitrary dictates of an oppressive job market.

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India's Need of the Hour: Organic Fruit Production

Satya Prakash Negi
September 30, 2020

Market pressures and a culture of convenience have led to pervasive insecticide usage and other pollution in the Himalayas that can only be tackled by a return to organic farming.

While sipping a hot cup of tea and browsing the latest news on my cellphone on the morning of July 20, the headline "Himachal to be fruit bowl soon, Rs 100-cr project planned" caught my attention. To put this in an international context, this project amounts to approximately \$13.6 million. When I

read the article, I learned that the state government of Himachal Pradesh in India was set to launch the HP Shiva Pilot Project to promote fruit production in new areas. The government chose four districts for the project: Bilaspur, Mandi, Kangra and Hamirpur.

As a proud Himachali, I am indeed thrilled. My Himalayan state has already carved a niche for quality apple production in India. Today, Himachal Pradesh contributes 40% of total apple production in the country. It has come to be known as the “apple state” of India.

Yet it is important to remember that apple cultivation is confined mainly to the three districts of Kinnaur, Kullu and Shimla. Smaller pockets in districts such as Mandi, Chamba, Sirmour and Lahaul-Spiti also produce apples. These high hills provide ideal climatic conditions for apple crops with the requisite chilling season in the winter. Apples are not native to Himachal Pradesh. Just as the Englishman Sir Henry Nicholas Ridley introduced rubber to Southeast Asia, the American Samuel Evans Stokes pioneered apple orchards in the state.

The story of apples in India did not quite begin with Stokes. For centuries, Kashmiris had grown apples. Even in Himachal Pradesh, the British had introduced varieties such as the red-flushed Pippin, a crisp cooking apple, but these varieties turned out to be too sour for Indian tastes. It is Stokes who earns credit for apple cultivation, though. He introduced the sweeter-tasting “red delicious” from Missouri that proved a hit with the Indian palate. Later, he introduced the similarly successful “golden delicious.”

The new project aims to take a leaf out of Stokes’ book and will introduce fruits like orange, litchi, pomegranate and guava in areas where fruit is not produced currently. In the past, the horticulture department has done a good job of popularizing fruit production in the state. It is quite likely that this new project might succeed and make Himachal Pradesh the fruit bowl of India.

The news report not only described the new project but also other initiatives by the Himachal

Pradesh state government. These include the provision of insecticides at subsidized rates to protect horticultural crops. This is a dream for commercial farmers and a nightmare for environmentalists. Himachal Pradesh might become the fruit bowl of India, but is the intensive use of insecticides a price worth paying?

A Story of Apple Production

An examination of horticulture in Himachal Pradesh might provide some answers to this question. My native district of Kinnaur is renowned for high-quality apple orchards. Kinnaur apples are prized for their natural color and lusciousness. Such is their reputation that apple sellers in other parts of India start passing off apples from other districts of Himachal Pradesh as Kinnaur apples.

Apples from other districts of Himachal Pradesh ripen by July. Kinnaur apples ripen later because they are grown at a higher altitude. They only start ripening by the second week of September. Apples of Gangyul Valley, also known as Ropa Valley, ripen even later. They come from a cluster of six villages in the trans-Himalayan region of Himachal Pradesh, comprising Shiaso, Sunnam, Taling, Rushkalang, Giabong and Ropa. Gangyul apples sometimes take as long as November to ripen, traditionally hitting the finest fruit markets of the country around the great Indian festival of Diwali.

The memory of an incident from my student days still brings a smile to my face. Back then, I was in Chandigarh, popularly known as “City Beautiful,” which acts as a gateway to Himachal Pradesh. A thelewala, a hawker who sells from a cart, was selling apples. This elderly gentleman proudly informed me that the apples on his cart were from “Chinor,” which I presumed to refer to my native district of Kinnaur.

I played along and teasingly asked him about Chinor. The gentleman was clueless about the exact location of the place but told me it was a distant faraway place, high in the mountains. His words, “Chinor mein desh ka sabse badhiya seb

hota hai” (Chinor produces the best apples in the country) still echo in my ears. My heart swelled with pride when he said so even though his apples were not from Kinnaur. I know because this incident occurred in August, a month when Kinnaur apples are yet to arrive in the market.

A little bit of context is essential for the reader. I was born in one of the trans-Himalayan villages of Gangyul Valley. I come from a family of farmers. During the 1980s and early 1990s, I never heard of anyone using industrial fertilizers or pesticides. Most farmers could not even afford them. Only in the late 1990s did chemical sprays on apple trees kick off. They began during the flowering season and continued until harvest. These sprays were prescribed by well-meaning professionals in the horticulture department.

Yet there is little evidence that chemical sprays were actually needed in Kinnaur at that time. Experts advised farmers who took their advice on board. The goal for both was increased output. There might have been an organic way to do so, but all parties were looking for quick results. This was the most convenient shortcut to a bigger harvest and more money. The results have not been entirely salubrious for Gangyul Valley and Kinnaur district.

Fruit Production and Pollution

The culture of convenience has not only led to increased insecticide usage, but also pollution in the form of empty bottles, cans, containers, packets of various kinds and plastics. Each time I see such trash, I am reminded of Rachel Carson’s classic on adverse environmental effects of insecticide pollution, “Silent Spring.” I shudder with dread at the thought of the looming consequences of all kinds of environmental pollution in Himachal Pradesh.

Even in Gangyul Valley, the use of insecticides is increasing. The famously pristine Himalayan spring water here is not so pristine anymore. As a result of pollution, the health of both cattle and humans could decline. As in other parts of the planet, biodiversity might suffer. In the future, the environmental uniqueness of this

trans-Himalayan region could also come under threat.

I have been sharing my concerns with farmers in my region. In Rushkalang, I spoke to Dukhan Negi, a farmer who grows apples. While he does not read or write English, his knowledge of apple varieties, crop timings, various pests, harvesting techniques and more are most impressive.

Although Negi shared some of my concerns, he told me how farmers were prisoners of a new grim reality. Midway through our conversation, he remarked, “Come to my orchard, I will show you how the insects are destroying my apples.” Indeed, there were some insects and insect marks on the apples. He explained that these caused much loss. The market expects apples that look perfect. Apples with insect marks fetch a significantly lower price.

I spoke to another progressive apple grower from the village named O.P. Negi. He has been practicing organic apple cultivation because he is concerned about the environmental hazards from insecticide sprays. Yet he too was concerned that farmers had few alternatives to insecticides. Unless market tastes change, biopesticides might be the only way forward. The ray of hope for him was that Gangyul Valley still produces the best quality apples in Kinnaur. As a health culture develops in India and the government provides increasing horticulture support, our ancestral home could emerge as the source for organically produced high-quality apples.

As I conclude this article, I cannot help but think about apple farming in my region. Undoubtedly, apples have transformed the society and economy of the indigenous people of the remote and rugged mountainous district of Kinnaur. Yet they have exacted a heavy price as well. Apart from the looming threat of environmental pollution, people have become more materialistic, a sense of community feeling has declined and the culture has become more short-sighted.

So, the new project that aims to boost fruit production must ensure that the environment is kept in mind. Himachal Pradesh needs organic

methods of farming, biopesticides and large-scale removal of trash littering its mountain slopes. Earning more money today by supplying national or global markets while polluting the air, water and soil would be killing the goose that lays golden eggs. For Himachal Pradesh, and indeed for India itself, the need of the hour is sustainable, environment-friendly fruit production.

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India's New Agricultural Policy After Decades of Farmer Suffering

Tarun Shridhar
October 5, 2020

Recent Indian government ordinances offer a paradigm shift in the perception of and approach to agriculture marketing.

In India, June 5 was a turning point in the history of the country's agriculture. The government passed three ordinances to unshackle farmers from the restrictive marketing regime that has managed the marketing of agriculture produce for decades. This sweeping stroke promises to bring the entire world of farming technology, post-harvest management and marketing channels at the doorstep of the farmer. The challenge now is to put these promises into action. The national vision of the farm sector is to double the income of farmers by 2022. This move is revolutionary since income is intrinsically linked to how the markets of the harvested produce function.

First, the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance provides much-awaited freedom of choice to farmers and traders. Now, farmers can

sell and purchase produce through trading platforms other than the notorious markets operated by the Agriculture Produce Marketing Committee (APMC). An article published on Fair Observer in 2019 rightly observed how forcing farmers to sell their produce to APMC markets led to the problem of monopsony. As the only buyer of produce, APMC markets faced no competition and offered farmers very low prices. This ordinance promises to increase farmer incomes significantly.

Second, the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance further empowers farmers by creating a framework for direct engagement with processors, agri-business firms and large retailers.

Finally, the Essential Commodities (Amendment) Ordinance releases farm produce from the restrictions imposed by the Essential Commodities Act by severely curtailing regulations on farm produce. Such restrictions will now be permissible only under extremely emergent circumstances.

The trigger for these sweeping changes may have been the disruption in the production and supply chains due to the COVID-19 pandemic. The health crisis and the resulting nationwide lockdown necessitated drastic steps to provide immediate relief to the agriculture sector. However, we must not forget that agricultural marketing reforms have been in public discourse for nearly two decades. In practice, they always appeared to take two steps backward for every step taken forward. Petty politics, instead of agricultural needs, dominated these decisions. Hence the officials of the Ministry of Agriculture deserve recognition. They have used a crisis as an opportunity to free farmers from the oppressive yoke of red tape, rigged markets and little choice.

Poor Infrastructure, Corruption and Lack of Accessibility

Before discussing the details of the three ordinances, let us briefly review the existing structure and context of the marketing of

agriculture produce. The overarching legislations governing agricultural markets are the APMC acts of the respective Indian states. These were enacted with the laudable objectives of ensuring fair prices to farmers and safeguarding them from the exploitation of middlemen. They aimed to enable farmers to sell their produce easily.

These acts created the institution of the APMC, which operates agricultural markets commonly called APMC mandis, the Indian word for a market. Ironically, the APMCs have achieved the precise opposite of what their architects envisaged. In their enthusiasm to ensure stability, most state governments discouraged the rise of private mandis and even criminalized setting up competing markets. This created monstrous monopolies of APMC mandis controlled by influential cartels. Instead of offering fair prices to farmers, these mandis artificially manipulated prices. The management of APMC mandis remained opaque and exploited farmers while claiming to serve them. In particular, small and marginal farmers were at the mercy of wealthy traders at these markets.

Unsurprisingly, the January 2019 report of the parliamentary standing committee on agriculture noted that the APMC acts had not achieved their purpose. With cartels at APMC mandis dictating the terms of trade, farmers face unreasonable deductions from the sale returns of their produce in the form of market fees, commission charges and other levies that rightfully should be paid by traders. On occasions, these farmers are charged the same fees multiple times. Corruption is rampant. Aside from a handful of exceptions, mandis tend to have poor infrastructure. Basic facilities for post-harvest management of agricultural produce such as grading, sorting and packaging are lacking. Supporting services, such as banks, post offices and resting places, have also failed to develop. If some facilities exist in some mandis, they are of extremely poor quality.

Additionally, the number of such markets is grossly inadequate. The National Commission on Farmers has recommended that an agriculture market should serve a geographical area of not

more than 80 square kilometers, whereas the existing national average is 496 square kilometers. Both the quantity and quality of APMC mandis are lacking. It's tragic that an institution established to protect farmers from exploitation has become the source of it. It is for this reason that the parliamentary report recommended that creating alternative marketing platforms should be a priority. It observed that the APMC acts had led to restrictive markets and obstructed the emergence of competitive markets. Regrettably, the Indian farmer did not have the right to choose his customer thanks to the APMC acts.

The APMC mandis tend to be noisy, messy, chaotic and unhygienic. So, it is no surprise that a large number of farmers, especially the small and marginal ones, do not sell to APMC mandis, but they do to intermediaries and unlicensed traders. Though there are no official figures available, various studies place the share of these informal intermediaries or middlemen at 30-55%. The figure is lower in the case of food grains but very high for horticulture produce.

There exist, in many places, several layers between the farmers and the mandis. Thus, the safety net that these mandis aim to provide farmers is already diluted. The much-maligned middleman has become an integral part of the agriculture marketing system. One of the most significant aspects of the three ordinances promulgated on June 5 is to recognize and integrate these middlemen into a liberalized regulatory framework. Now, they can enter into bona fide trade relations with farmers.

A New, Better Approach

In 2003, the Ministry of Agriculture attempted reform after prolonged discussions. It came out with a model legislation for states to emulate: the APMC Marketing (Development and Regulation) Act, 2003. Curiously, the focus here also remained on regulation; the preamble mentions "improved regulation in marketing" before it talks of the "development of an efficient marketing system." In contrast, the recent

ordinances offer a pleasant contrast. The term “regulation” itself has been done away with. The first ordinance declares its objective to be “promotion and facilitation” and the second one “empowerment and protection.” These ordinances present a paradigm shift in Indian agricultural policy.

The key objectives and their provisions in the trade and commerce ordinance are as follows: creation of an ecosystem of freedom of choice to farmers and traders for sale and purchase of farmers’ produce; formation of competitive alternative trading channels; promotion of transparent and barrier-free intra-state trade and inter-state trade; facilitation of trade of produce outside the physical premises of notified markets; and creation of viable electronic trading platforms.

As per the new ordinances, farmers are to be paid on the day of the transaction or within a maximum of three working days. They do away with the onerous licensing system that required farmers to obtain several licenses to trade in different mandis within the same state. Gone is the market fee in the “trading area,” which is defined as any area of transaction outside the present day-notified mandi.

Now, APMC mandis will now face serious competition and might be spurred into reforming themselves. Further, to the great relief of farmers, the dispute resolution mechanism has been kept simple and local, with preference being accorded to resolution through conciliation. The ordinance also envisages a price information and market intelligence system, thus equipping farmers for determining the price of their produce.

The key features of the price assurance and farm services ordinance are as follows: creation of a national framework on farming agreements; protection and empowerment of farmers in their engagement with the likes of large agribusiness firms, wholesalers and large retailers; and promotion of remunerative price agreements and a fair and transparent framework.

The ordinance also recognizes the possibility of an adverse impact on the rights of

sharecroppers in the changed business environment. Hence, it has a specific provision for protecting their rights. The risk of markets and prices is likely to be transferred from the farmers to the contracting entities. Finally, the essential commodities ordinance clearly states, “the regulatory system needs to be liberalized ... for the purpose of increasing the competitiveness in the agriculture sector and enhancing the income of farmers.” Accordingly, regulation of farm produce such as cereals, pulses, oilseeds, edible oils, onions and potatoes is only possible in extraordinary circumstances such as war, famine, a natural calamity of grave nature or an extraordinary price rise.

Ensuring Lasting Change

The reforms in agriculture marketing by way of these three ordinances are holistic. A primary problem with earlier legislation was that farmers could only sell their produce to specified traders in particular locations. As a result, farmers have been inevitably pushed to alternative buyers outside the legal framework, including middlemen and direct buyers. Small and marginal farmers suffer from an inherent disadvantage in such an environment. They lack access to market information. Even when they have some information, they lack the capital and technology that high-value crops require. The liberalization of agricultural markets will increase revenue avenues for farmers and improve their monetary returns.

The proof of the pudding is in eating. The success of the ordinances will be determined by their implementation, which must be carried out in letter and spirit. While the ordinances remove aberrations and deficiencies in the regulatory structure, achieving their goals requires a strengthening of institutional capacity and infrastructure. Investment in agriculture, post-harvest infrastructure and marketing framework are all grossly inadequate. While these reforms should spur investment, it would be premature to expect that to happen automatically. Further efforts and interventions are called for. The big

challenge ahead is to implement these reforms in the incredibly diverse markets across the country and to build strong alternatives as envisaged by the new legislation.

A seemingly unrelated point is important regarding these ordinances. A recent article criticized the bureaucracy for drafting documents in language that was “officialese or bureaucratese.” This pejorative term is used for language full of jargon that is wordy and vague. Such criticism cannot be leveled against these ordinances. They serve as exemplars for other official documents. They are simple, straightforward and eminently understandable. The philosophy, intention and objectives of the ordinances are effectively spelled out in the preambles, which are among the best-drafted government documents in recent times. The trick now lies in achieving what they say.

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Indigenous Communities Can Counter Naxals and Protect Forests in India

Satya Prakash Negi
October 15, 2020

A new paradigm that allows indigenous communities to maintain traditional livelihoods and improves their living standards is the sensible option forward.

On the night of July 11, Naxalites blew up 12 buildings in the forest department’s field office-cum-quarters in the Berkela forest area of Pashchimi Singhbhum district in Jharkhand, India. Naxalites are Maoists who have

fought a bloody insurgency against the Indian state in some rural and forest areas for over six decades. In 2006, Manmohan Singh, the prime minister at the time, called this insurgency “the single biggest internal-security challenge” the country has ever faced.

In recent years, the Naxalite insurgency has ebbed. So, this attack sent shock waves across administration in general and the forest department in particular. Fortunately, no one died in the attack. The Naxals asked staff to vacate the premises and warned of consequences if police were informed before destruction. Even as the police swung into action to apprehend the attackers, forest officials huddled together for introspection.

Forests, Minerals and Indigenous People

I have served in the jungles of Jharkhand as a forestry professional. The attack has made me reflect deeply. Naxalite attacks in Jharkhand are not new. For years, Naxals have intimidated state functionaries through various means, including attacks and assassinations. To understand the persisting nature of the Naxalite insurgency, we have to examine Jharkhand closely.

Jharkhand is a state that lies to the south of Bihar and the west of Bengal, two fertile Gangetic states of India. To its southeast and southwest, it borders two other poor but resource-rich states of Chhattisgarh and Odisha. Jharkhand literally means “bushland.” It is endowed with rich natural resources, including both forests and minerals such as coal, iron, copper, mica and uranium.

Jharkhand is predominantly inhabited by diverse indigenous communities. The Indian Constitution gives these communities a “scheduled tribes” status. As per the 2011 census, they comprise 8.2% of India’s population. In contrast, scheduled tribes form a much higher 26.3% of the population in Jharkhand. Historically, Jharkhand was a part of Bihar and the people of Jharkhand felt neglected and marginalized. Therefore, they agitated for a separate state both to safeguard their identity and

to achieve control over their rich resources of “jal, jungle aur jameen,” Hindi for water, forests and land.

On November 15, 2000, Jharkhand was formed. I remember the date fondly. A grand function was held in Ranchi’s Raj Bhawan, the governor’s house. I was still what is called a “probationer” in government parlance. As an officer of the Indian Forest Service (IFS), I was doing my training at the Shri Krishna Institute Public Administration just across the road from the Raj Bhawan. Many officers were visiting from Patna and staying at the institute’s guest house. They were also milling around the resplendent surroundings of the Raj Bhawan.

The staff of the guest house who belonged to the scheduled tribes were in a jubilant mood. I asked one of them, a gentleman named Khalkho, as to what the formation of Jharkhand meant for him. His instant response, “abua dishum, abua raj,” which translates as “our state, our rule,” still rings in my ears. Khalkho also went on to inform me that henceforth it would be his children, not dikus, the local term for outsiders, who would get preference in jobs.

Despite two decades of abua raj in abua dishum, all is clearly not well in Jharkhand. Berkela is barely 15 kilometers from Chaibasa, the district headquarters of Pashchimi Singhbhum. Scheduled tribes form 67.3% of the population in the district, and the region is rich both in mineral and forest resources. Forest cover forms about 47% of the area, making the district rich in biodiversity. The famous Saranda forest, known for excellent Sal trees and its natural regeneration, is also located here. Much of the Jharkhand’s mineral wealth, especially iron ore, is found under these forests.

These rich resources have not improved the living standards of scheduled tribes of the area. Instead, the forests have become home to the Naxals who take refuge there. Various development agencies have shied away from this area. Only the forest department dares to venture there to fulfill its duty to protect and conserve Pashchimi Singhbhum’s forests for posterity. The

Naxal attack will certainly sap the department’s morale.

To combat Naxalism, the forest department has to connect with local communities. Addressing their livelihood issues is essential for winning the trust of marginalized people in a resource-rich land. Only winning goodwill in Pashchimi Singhbhum and elsewhere would help combat the Naxal menace.

Yet there is a problem. First, the mandate of the forest department is mainly the protection, conservation and development of forests, not providing livelihood or improving living standards for local communities. Second, the department lacks adequate resources to reach out to communities even if it was given the mandate to do so. The budget allocations for forest departments across India have been low and Jharkhand is no exception.

Involve Indigenous Communities

Few realize that forests and indigenous communities have a symbiotic relationship whether in the Amazon or in Pashchimi Singhbhum. They worship nature and tend to revere trees. They have used forest resources sustainably for centuries if not millennia. Therefore, it is important for any forest department to work with these communities. To be fair to the forest department in Jharkhand, it is already making an effort to do so. However, it faces a vicious timber mafia that is hell-bent on chopping down trees to meet rising urban demand. Mining — legal and illegal — is another threat to forests and local communities. Too often, the forest department finds itself outgunned and is unable to protect these communities or the forests they live in.

Goal 15 of the Sustainable Development Goals of the United Nations aims to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.” To achieve this, the government of Jharkhand has to focus on people-oriented natural resources

governance. Simply put, they have to involve local communities in the conservation of forests and make the forest department work closely with them.

My experience of working in various forests in Jharkhand tells me that sometimes, overzealous measures by dogmatic forest officials do more harm than good. They often take draconian action against indigenous communities for petty offenses that probably should not have been illegal in the first place. After all, these communities have to live. The forests are their only sustenance. So, draconian implementation of some laws leads to the forest department losing the trust and faith of the indigenous communities.

Of course, there are many forest officials who are empathetic, courageous and exceptional. They interact with local communities on a day-to-day basis. Indeed, these officials maintain high moral standards even when their very lives are in danger.

The Naxals are not like Russian or Chinese communists of the last century. They do not really have any ideology. Instead, they have become a vocation for unemployed, disgruntled and misguided youths. Many Naxals are recruited by intimidation and are then subjected to indoctrination. Quite a few of them start enjoying the power that comes from wielding a gun. These youths invariably come from marginalized indigenous communities and find Naxal propaganda seductive.

To counter the Naxals, both the state and central governments must gain the confidence of the indigenous communities living in the forests. To do so, the government must protect their forest-based livelihood. It must also generate sustained employment through forest-based skill development programs that teach indigenous communities to put their incredibly rare know-how to good use.

Such policies would increase the living standard of local people. They would also turn the indigenous communities into the eyes and ears of the government, thwarting Naxal

violence. These policies would also involve the delegation of some powers and financial authority to local forest officials and indigenous communities. It would be fair to say that it is time for a real abua raj in abua dishum.

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India's New Education Policy Is Hodgepodge

Satish Jha
October 20, 2020

The new policy is full of cliched soundbites and cosmetic changes that do nothing to improve education in India.

The union cabinet of the government of India recently announced its 2020 National Education Policy (NEP). This is the first education policy developed by a non-Congress party government since independence. Coming 34 years after the last formulation of a fully-fledged education policy, Indians anticipated a significant pivot in the education system to leverage the country's demographic dividend. India's current political leadership claimed it wanted to make the country a "vishwa guru," the Sanskrit word for a world teacher, and would dramatically reform its education. Therefore, great expectations from the NEP seemed natural.

Prima facie, the NEP might make many Indians happy because it has something in it for everyone. However, a careful read reveals that the NEP does little to change the direction of our education. It largely promises cosmetic changes. In essence, the NEP is a collection of myriad aspirational expressions, not a coherent policy framework.

The ideologues of the ruling Bharatiya Janata Party (BJP) may find the references to ancient wisdom of India heartening. It might lead to young Indians learning that Banabhatta outlined 64 forms of art or Sushruta pioneered glorious surgical techniques. However, it does little to prepare the young to shape the future.

Given my advocacy of long-term policymaking, I should have reasons to thank those who drafted the NEP. They have taken a 20-year view and set goals for 2040. Just as we plan over a 20-year timespan, not a five-year one, for our children, so should our national plans. Yet a bad 20-year plan is worse than its bad five-year counterpart, and that is my problem with the NEP.

What Are the Changes Proposed?

Let me pick on a key aspect of the plan. The NEP proposes the three-language formula. This means that, all over the country, students will learn three languages. These are Hindi, English and the regional language of the respective state. The government believes that it is abolishing language barriers in the country. Instead, this has triggered off a storm in non-Hindi speaking states. In Tamil Nadu, there has been long-standing opposition to Hindi as compulsory learning or administration. The three-language formula has been around since 1968 but failed to take off because parts of India resent the domination and imposition of Hindi.

There is another tiny little matter. Demand for learning in English has taken off around the country, including and especially in Hindi-speaking areas. Thanks to the legacy of colonization, the advent of globalization and a host of other factors, English has emerged as the language of success in India. The people do not care for the three-language formula one jot. Yet the BJP's NEP is flogging a dead horse.

Many have lauded the NEP for promoting multidisciplinary education. This has long been discussed. At far too young an age, Indians are cast into rigid silos of arts, science and commerce. As a result, they lose love for learning

and end up at lower-productivity levels than their counterparts in Europe or East Asia. The NEP allows students to change disciplines more easily along the same lines as in the US. However, this flexibility will only benefit the country if quality education is offered in different disciplines. For instance, English and history are taught terribly in a rote-based manner in most schools. Shifting from science or commerce to study either subject might enable a student to pass more easily but would achieve little else.

The NEP offers greater flexibility in earning degrees either over a period of time or across subjects. Offering multiple entry and exit points in higher education is a good idea. It may help people find their true interests and give them second or third chances in life. However, the key logical next step is to unlink degrees from jobs, where academic degrees are immaterial. A new form of recruiting that is based on demonstrated merit and knowledge of the work itself is the way forward for the country. The NEP has missed that opportunity to curb India's fixation with degrees and promote a culture of focus on work.

Supporters claim that the NEP is focusing on work by combining vocational education with school and college education. In due course of time, vocational education will be on par with other degree programs. A carpenter, a plumber or an electrician will command the same respect as someone with a master's degree in literature, history or sociology. This argument is disingenuous. Increasing "respect" for vocational programs involves changes in social perceptions. It requires much deeper and drastic changes than those envisaged by the NEP.

Bad Thinking and Poor Drafting

In fact, the NEP is full of seemingly good ideas that have simply not been thought through. It has passing references to fostering creativity and instituting a 360-degree view in student report cards. It also throws in digital education, adult learning and lok-vidya (folk education) about local heritage and culture. Yet the NEP fails to

tell anyone how these ideas will come into practice.

The drafters of the NEP forget that soundbites are not policy. Nor are tweaks. Turning a 5+3+2+2 system into a 10+2 or 5+3+3 one does not change the way students are taught or the way they learn.

Similarly, giving a certificate after year one, a diploma after year two and a bachelor's after year three does not change syllabi, pedagogy and learning. Yes, a student can drop out after a year with a certificate, but would that be worth the paper it was written on?

To change education, India must improve the quality and commitment of its teachers. Training them in institutions with new names or giving students multiple exits or entries in a four-year bachelor of education program offers flexibility in getting a degree but does not improve the quality of their instruction.

In comparison with earlier education policies, the National Education Policy is a poorly-drafted document. It is a testament to how India has regressed under the BJP. The demonetization policy was instituted by a hasty, poorly-drafted document. It seems that the government does not have the intellectual policymaking firepower of its predecessors.

One sentence in paragraph 4.13 on page 14 of the NEP captures drafting woes common to recent government documents when it proclaims: "In particular, students who wish to change one or more of the three languages they are studying may do so in Grade 6 or 7, as long as they are able to demonstrate basic proficiency in three languages (including one language of India at the literature level) by the end of secondary school."

And So...

Does this mean that students can change the languages they are learning as long as they can travel into the future, i.e., Grade 12, and prove they are proficient in the new languages they choose? Or does it mean that students must be prepared to prove proficiency in the languages

they choose in Grade 12? Sadly, the NEP is full of such unadulterated absolute nonsense.

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India's New Education Policy: Not Paying Attention

Chittaranjan Kaul
November 11, 2020

The COVID-19 pandemic holds the promise of a radical overhaul of what we value in education.

It was instructive that probably the most consequential event in the life of the Indian Republic merited nothing more than three pro-forma single-sentence references to "epidemics and pandemics" in the recently-adopted National Education Policy 2020. The policy must have been discussed and agreed by the Union Cabinet wearing masks, a clear and present reminder of how much has changed. Yet the document approved acknowledges COVID-19 only to exhort higher education institutions to undertake epidemiological research and advocate greater use of technology in delivery mechanisms.

That is a pity. COVID-19 has brought lessons in its wake that we will ignore at our peril. In a societal sense, the pandemic has laid bare the fragile and counterproductive assumptions that underpin the way we have organized ourselves. Education, as the primary mechanism that drives long-term change in a society, must respond in a way that protects and strengthens children today and the nation tomorrow.

Institutionalization of Education

Three important mechanisms of social organization that have been taken for granted in education during recent decades are institutionalization, urbanization and globalization. If COVID-19 is not a one-off event — and there is no reason to assume that it is given how exploitative our engagement with our environment continues to be — each one of them must be reassessed for worth, especially for how they affect the future of our children.

Institutionalization has promoted the idea that the only learning worth our children's time and our money is the one that is provided in schools, colleges and universities. Across most of the world, this has made learning information-centric and uncritical. It has packed children into rows and columns in classrooms and made them unfamiliar with their surroundings. It has taken them away from the productive use of their hands and bodies, and valorized “brain work,” creating an artificial crisis of periodic unemployment even before the unimaginable destruction of employment caused by COVID-19.

It has snapped children's connections with their land, their environment, their culture and their communities, replacing them with words in ink on paper or typeface on a computer screen. In India, a mindless pedagogy has further ensured that institutionalization fails even in its own objectives as student achievement in “learning metrics,” mainly focused on literacy, numeracy and data, has kept falling.

With pre-school centers closed, COVID-19 has brought attention squarely to the role of parents in the holistic development of their young children. (We started Sajag, a program for coaching caregivers in nurturing care in April 2020. It now reaches over 1.5 million families and is set to expand further. Many others have started similar programs.) By forcing the closure of schools and colleges, COVID-19 presents us with the opportunity to explore what exactly is being lost when schools close. It also creates the possibility that we will discover how much there is to learn in communities, on land, in

relationships and in discovery and invention, outside the school. It has the promise of suggesting a radical overhaul of what we value in education.

Urbanization of Communities

Urbanization has caused us to believe that ghettoization of people in cities is inevitable as we “develop.” With economic and social policies in most countries oriented toward this shibboleth, we have seen unhygienic conditions grow exponentially in cities, even as rural communities have been devastated by the loss of populations. Mental health challenges in urban communities have become alarming, accentuated simply by the inhuman stresses that accompany urban living. For our young, it has meant few physical spaces for wholesome growth and play, little opportunity for meaningful community engagement, and a social landscape tragically barren of nurturing experiences.

By attacking densely-packed urban communities disproportionately, COVID-19 has laid bare the fallacy of organizing ourselves solely for economic efficiency. It asks us to reconsider how physical communities should be laid out, how large they should be, how they should harmonize into the surrounding landscape and how their cultural, economic and political sinews should function.

We have also been fed the inevitability of globalization, almost as a primal force. It is true that it promises economic efficiency, but we have, in the process, lost much. Diversity is the essence of risk reduction and long-term survival and thriving, whether at the level of an organization, a community, a nation or, indeed, evolution of life itself. In a few short decades, blinded by the promise of economic efficiency, we have traded diversity away for massive inequality and loss of local skills, trades, crafts, self-reliance, agency and autonomy. Our textbooks, the only source of information promoted by our policies, have consistently failed to ignite an examination of the underlying

assumptions and the all too visible outcomes among our children.

COVID-19 has alerted us to the downsides of these Faustian bargains. Its dramatic spread is certainly a result of our way of life, with air travel being the primary vector. The heart-breaking spectacle of tens of millions of migrant workers walking hundreds of kilometers and sleeping on asphalt roads in India's scorching summer heat is another. They discovered that they had no means of support, no community, no fallback when their employment ceased. COVID-19 has also awakened us rudely to the reality that having the world's fastest GDP growth rate is no protection against ending up with the world's steepest fall in GDP and widespread misery.

Globalization of Society

The globalizing impulse has led to entire education systems being unmoored from authentic experience and unresponsive to local needs. As a result, it has fostered and valorized the creation of an alienating and alienated elite. The reaction to that is a distressing level of anti-intellectualism throughout the world. That, of course, creates the fodder for the assembly line that is perhaps the holy grail of the globalizing philosophy in the first place, but it also creates a dangerous level of instability and irrationality in society that can eventually only tear everything apart.

To the extent that we continue to regard globalization as self-evidently good, we create the potential for damaging our children, inhibiting their learning and creating a world that is less fit for them. Time has come to drop the fiction that local wisdom is somehow inferior and to engage in a meaningful dialogue that hasn't foreclosed on the alternatives.

To disregard such fundamental questions in an education policy adopted in the middle of the pandemic makes little sense. These should be the subject of widespread dialogue, including in our schools and colleges, before and after the adoption of the policy. The sensibilities that arise from such deliberations must inform our liberal

education as well as the conduct of professions such as engineering, town planning, medicine, economics, sociology and, indeed, education. An education policy that doesn't even consider the questions relevant to how our education system should be structured has surely not paid attention.

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India's Police: An Instrument of Injustice

Javeed Ahmad
November 19, 2020

India's archaic laws allow politicians to use the police for their own purposes, not public benefit.

When Alexander the Great marched into Phrygian, the capital of Gordinium, in 333 BC, he was told that an oracle had declared that any man who could unravel the Gordian knot — deemed impossible to untangle — would rule over Asia. After wrestling with the knot for a time with no success, Alexander drew his sword and cut the knot into half with a single stroke. To paraphrase the Bard of Avon, police reforms in India await a similar creative solution to a seemingly insurmountable problem.

It is ironic that, more than seven decades after independence, the police in India are still governed by the Indian Police Act of 1861. The British introduced this act immediately after what they called the 1857 Sepoy Mutiny. As per the Commonwealth Human Rights Initiative, the 1861 legislation was enacted with "the purpose of crushing dissent and any movement for self government." After the 1857 uprising, the British monarchy took over from the East India Company, creating a colonial administrative

architecture that would become the jewel in its crown. Along with the 1861 act, the 1860 Indian Penal Code was a major pillar of the new criminal justice system that served London well until India's independence in 1947.

The Legacy of the Raj

Independent India adopted a new constitution that gave states jurisdiction over the police. Henceforth, it was not New Delhi but state capitals that controlled policing. However, those who drafted the constitution failed to craft legislation to create a new police force in tune with the new demands of democracy. The police force retained its colonial character, carrying the will of its new political masters. Order ordained by these masters had to be maintained. The rule of law and due process were to play second fiddle.

Like many former colonies, India became a democracy in form while its police force remained colonial in spirit. In the first few decades after independence, the combination of enlightened leaders, ignorant public opinion, some outstanding officers and the broad hegemony of one political party papered over the incongruity of the arrangement. That could not, and did not, last.

From the 1960s, Indian politics became increasingly fractious. By the mid-1970s, the pulls and pressures on police departments, thanks to political interference, increased dramatically. Inadequate organizational structure, exploitative ethos and brutal behavior came to typify the police force. In 1975, then-Prime Minister Indira Gandhi, the daughter of Jawaharlal Nehru, used the police to impose a state of emergency on the country. As in colonial times, the police suppressed civil liberties, foisted false cases on the ruling party's political opponents and even enforced sterilization on unwilling young men under a draconian family planning plan.

In 1977, the opposition won a historic victory. Immediately after taking power, the new government instituted the National Police Commission (NPC) to review India's system of

policing and suggest reforms. It produced eight reports, including a Model Police Act, between 1979 and 1981. It also appointed a commission of inquiry under a retired chief justice of India, J.C. Shah. Its 1978 report chronicled the excesses, malpractices and misdeeds of the government during the emergency. It found that the police had obediently and brutally carried out instructions of its political masters, cowing the country into submission.

To date, these reports have been gathering dust. Governments have come and gone since 1981. They have implemented peripheral recommendations but ignored substantive ones that relate to accountability and autonomy.

Echoes Across the Country

In 2020, the police are still bound by diktats of the political bosses. The Delhi riots earlier this year prompted allegations of political interference, a repeat of what happened in the 1984 unrest. It moved Julio Ribeiro, one of the country's most respected police officers, to write a letter to the police chief of Delhi. He asked for a fair probe into the riots and questioned why the police did not investigate members of the ruling party for delivering hate speeches.

Ribeiro's question can be echoed across the country. The chief ministers of India's 28 states control the police just as British governors once did. Politicians pay lip service to police reforms but are unable to let go of the power they wield. At its essence, there is a fundamental asymmetry of power between the police and the citizens: The former are not accountable to the latter. The police answer only to their political and bureaucratic bosses.

The failure of politicians to reform the police has led to citizens and retired senior police officers appealing to the judiciary for change. In 2006, the Supreme Court of India passed a landmark judgment and gave seven clear directives. The government of India and its federal counterparts in state capitals were supposed to implement these directives. Instead, most have been ignored or implemented half-

heartedly. As a result, many a chief justice had lamented that not a single state government is willing to cooperate: What's to be done?

The power politicians wield in various state capitals comes from Section 3 of the 1861 Police Act, which states: "The superintendence of the police throughout a general police-district shall vest in and shall be exercised by the State Government to which such district is subordinate, and except as authorized under the provisions of this Act, no person, officer of Court shall be empowered by the State Government to supersede or control any police functionary."

Simply put, chief ministers and their consiglieres, the senior officers of the elite Indian Administrative Service and Indian Police Service (IPS), control every district in their states. The Model Police Act drafted by the NPC more than four decades ago recommended a tempering of this unfettered power of state governments. Its Section 39 provides for the state government to "exercise its superintendence ... in such manner ... as to promote the professional efficiency of the police."

The Second Administrative Reforms Commission (ARC) set up by the Indian government concluded that the proposed Section 39 was insufficient to provide police autonomy. Informal and often illegal instructions to the police are pervasive. It recommended that an amendment to the Model Police Act that expressly forbade illegal or mala fide demands from the police. It also recommended that obstruction of justice be categorized as an offense. Needless to say, the government of India is yet to accept the ARC's recommendations, let aside implement them.

Crime Pays

This politics-police equation is completely lopsided, with India's law enforcement the handmaiden of the politicians in power. This has been supported by numerous committees such as the one headed by Justice K.T. Thomas and scholars like Milan Vaishav. In fact, Indian voters have been increasingly electing politicians

who face criminal proceedings against them. Money and muscle play a growing role in Indian politics. The result is decline, if not collapse, of the policing and criminal justice system.

After 73 years of independence, the formal institutions left behind by the British Raj are weakening. For ambitious politicians, controlling the police is an important way to secure benefits for themselves, consolidate electoral gains and distribute benefits to their supporters. If politicians control the police, they can avoid criminal investigations into their activities. They can hobble opponents with false or frivolous charges. They can also dispense patronage to their core supporters who are often members of their community. This partisan use of the police furthers identity politics in an increasingly divided land. As a result, the rule of law suffers and the Indian state weakens.

The police force itself has become politicized in many if not all states. Caste, community or religious affinity is often more important than professionalism, diligence or excellence. Many politicians try to recruit members of their own group into the police. Since police officers have job security, this social engineering of the police can institutionalize the coercive power of a group long after their politician is voted out.

The Indian police have been weighed, measured and found wanting on numerous occasions. In 1992, the police stood by as a mob demolished the Babri Masjid mosque and, 10 years later, they did the same during the 2002 Gujarat riots. The rise in extrajudicial killings demonstrates the failure of due process of law. In 2005, the BBC reported that India's "fake encounters" — staged confrontations between criminals and the police, where the criminals mostly end up dead — were shockingly common. During the emergency in the 1970s and in recent years, the police have stifled dissent by slapping colonial-era sedition charges.

The police continue to wield repression on the streets. Beating people arbitrarily is common. In recent years, marginalized groups such as Dalits, minorities, tribesmen and women who protest

peacefully have faced increased police brutality. Paul Brass has found that governments have used “curfews as means of control, victimization, and outright violence against targeted groups rather than as devices to bring peace during violent times for the benefit of all.”

Instrument of Injustice

In India, the police no longer have a reputation for probity or for being an instrument of justice. In fact, the insensitive, illegal, inhuman and indefensible handling of the September murder and gang rape of a Dalit girl in Hathras, a district in India’s most populous state of Uttar Pradesh, laid bare the utterly unprofessional work culture of the Indian police. Such conduct occurs with numbing regularity because the political elite is deeply invested in the status quo.

Prospects for reform seem dim. In 2003, R.K. Raghavan, a former director of the Central Bureau of Investigation, observed that the police would continue to do the politicians’ bidding unless certain basic reforms were enacted. The judiciary cannot enact these reforms — it is the politicians’ duty. Until “they look upon the police as a tool to settle political scores with their adversaries, nothing will improve.” Raghavan went on to argue that prospects for police reform were bleak “because the corruption that cuts across party lines, brings with it unanimity that the status quo should remain.”

In September 2020, Indian Prime Minister Narendra Modi gave a speech to graduating IPS officers and called for a trust-based policing system. He argued that those who believe that instilling fear among the populace is the most effective policing strategy are out of sync with the march of the nation and its vibrant democracy. Modi’s actions have not matched his rhetoric.

India does not need another report or judgment. It awaits a statesman who can rise above the temptations of short-term electoral gains and work for long-term national benefits and who will not hesitate to wield the sword to cut the Gordian knot that keeps the politician and

the police bound together. Only then will India have rule of law, not mere order, and justice for all instead of for a privileged few.

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Land Reform Can Transform India’s Economy

B.K. Agarwal
November 24, 2020

Restrictions on land leasing and ownership have prevented India’s agricultural industry from realizing its full potential.

According to the Centre for Monitoring Indian Economy, India faces a serious decline in employment due to the COVID-19 crisis. An estimated 122 million people lost their jobs during the first quarter of 2020. Streams of migrant workers returned to their villages — often the only fallback option for the millions working in urban informal sectors. Regardless of their vows to never come back to the cities, the majority of them will likely have to return in order to earn their livelihood. In the present state of affairs, agriculture, the mainstay of rural India, cannot offer them incomes comparable to industries and construction firms in cities.

Despite its falling share in the economy, agriculture is India’s most important sector. Its contribution to the country’s GDP has decreased from 51.81% in 1950-51 to 15.87% in 2018-19, but it still employs about 42% of the country’s workforce. While increasing shares of secondary and tertiary sectors is a natural phenomenon of economic growth, in India, this has happened without maximizing the potential for growth in

agriculture. Per-acre yields of rice and wheat in India are drastically lower than those of other BRICS nations.

The shift in GDP share is the result of high growth rates in secondary and tertiary sectors despite relative stagnation in agriculture. The agricultural sector still has a massive scope to generate greater income and employment. However, this can be done only with the spirit of liberalization, similar to what other sectors of the economy have received since the 1990s.

Overregulation and Underutilization

Soon after independence, land reform laws were enacted throughout the country with the objective of distributing land equitably and increasing the efficiency of farm operations. This produced only partial success due to a variety of reasons. The ownership of only 4% of operated land could be transferred to cultivators, 97% of which lies in just seven states — Assam, Gujarat, Himachal Pradesh, Karnataka, Kerala, Maharashtra and West Bengal. Notwithstanding this uninspiring outcome, land reform laws foisted excessive restrictions on the tenancy of agricultural land.

This has adversely affected the growth of agriculture in the country. Landowners are reluctant to lease out their land under formal tenancy due to their fear of losing it permanently. According to National Sample Survey Reports, about 15 million tenants cultivate 10 million hectares of land on an informal basis; 92% of these tenants are landless laborers or marginal farmers. They have no security of tenure or access to institutional credit, crop insurance and other benefits offered to farmers under government schemes. Due to legal restrictions on tenancy, many landowners who cannot cultivate themselves prefer to leave their land fallow. In 2015-16, 26.72 million hectares of land were left fallow across India.

These restrictions on access to cultivable land not only deprive poor people in rural areas of opportunities to enhance their incomes, but also have a detrimental effect on the growth of the entire agriculture sector. Simply formalizing

tenancy and cultivating millions hectares of fallow land can be a game-changer for agriculture in India. Once tenants get security of tenure and access to institutional credit, they will have requisite incentives and funds to make long-term investments on their land.

This can be achieved only with immediate and effective policy interventions by state governments. The National Institution for Transforming India, the premier policy think tank of the government of India, has set the ball rolling by publishing the Model Agricultural Land Leasing Act, 2016, to help the states enact new laws or make required changes to their existing laws on the tenancy. The Model Act seeks to formalize tenancy agreements, circumventing the restrictions imposed by the land-reform laws of the state. It aims to integrate the security of tenure along with the protection of ownership. However, until now, only a few states have gone ahead in this direction.

Uttar Pradesh, Uttarakhand and Madhya Pradesh have amended their existing laws to allow the renting of agricultural land on liberal terms. The Maharashtra Agricultural Land Leasing Bill, 2017, now awaits the assent of the president of India. The Andhra Pradesh Land Licensed Cultivators Act, 2011, was enacted even before the Model Act of 2016 was framed. This special law has recently been replaced with the Andhra Pradesh Crop Cultivator Rights Act, 2019. The other states also need to implement this vital reform to transform agriculture in their states.

Alternate Solutions

The enactment or amendment of laws is only a first step in improving the access of the rural poor to the land. Even in states where these laws have been enacted, very few landowners and tenants have come forward to enter formal agreements. Landowners are still apprehensive of losing their land, and tenants are still afraid of getting ousted if they insist on formal agreements. Therefore, state governments also need to effectively communicate with tenants and landowners to

allay their fears and convey the benefits of formal agreements to them.

Until the time when requisite laws are enacted effectively, group loans can provide relief to informal tenants. In Kerala, where tenancy is illegal, about 250,000 informal tenants have organized themselves into joint liability groups. These groups receive crop loans from banks without requiring formal tenancy agreements. The guidelines of the Reserve Bank of India and the National Bank for Agriculture and Rural Development allow such agreements without requiring formal tenancy. Alternatively, Odisha has recently launched the Balaram scheme to provide agricultural credit to groups of landless laborers. Other states should also liaise with banks to provide credit to informal tenants until the time when legal provisions for allowing tenancy are put in place.

Such reforms have enormous potential to revamp and develop Indian agriculture, especially during the ongoing economic turmoil. At the national level, the central government has shown the way forward by deregulating agricultural markets. Now it is time for states to act decisively.

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What Ails Corporate Governance in India?

Sunil Asnani
November 30, 2020

A combination of disclosure, regulation and enforcement can improve corporate governance in India’s public sector.

Most businesses perish not because of strong competition or adverse macroeconomic conditions but because of cracks within. One such failing is weak corporate governance. For publicly listed companies, this often translates to controlling shareholders or “promoters” pursuing policies and practices in their own interests at the expense of minority shareholders. It turns out that companies with such promoters are at greater risk of crises and near-death moments in bad economic cycles. Those companies with better governance, where promoters act responsibly in the interests of shareholders, tend to do better during adversity. In fact, savvy investors now treat good corporate governance as an intangible asset.

This can be best seen in India’s banking sector. In general, private sector banks have practiced better governance than state-owned ones. Consequently, their financial and operating metrics also tell a story of profitable growth with less asset quality issues than their public sector peers. No wonder that private sector banks trade at a higher valuation than public sector ones.

Higher valuation puts these banks into a virtuous growth cycle. They are able to raise capital cheaply with less dilution. This reinforces their already high return ratios, which in turn continue to support a higher valuation. This self-perpetuating cycle has led to long-term compounding of shareholder returns. State-owned peers have fared much worse.

Despite a large number of state-owned banks, the majority of credit growth in India is led by private sector banks. In fact, state-owned banks are struggling and the government is forced to merge them to ensure their survival. The success of well-run private banks demonstrates how good governance can lower a company's cost of capital. That is not all. The resulting higher valuation also gives such companies immense pricing power in corporate transactions and talent management, widening their economic moat.

Multiple Issues

India boasts of the oldest stock exchange in Asia, which is also the region's largest. However, corporate governance in India still lags behind many other places like Singapore or Taiwan. India must understand that good corporate governance is the foundation of a lasting business. It builds investor confidence and has other benefits. India is short of capital and needs to earn investors' trust. Without an infusion of capital, the Indian economy will fail to thrive.

There are multiple issues that plague corporate governance in India.

First is the lack of accountability among controlling shareholders. For example, promoters get away with appointing their friends, ex-employees and business-school classmates as independent directors with no one raising an eyebrow. Often, statutory auditors are given only one-year extensions to pressurize them to "comply" with management demands. Compliant auditors tend to persist for too long, developing far-too-cozy relationships with the very people they are supposed to keep an eye on. With no strong checks and balances, promoters are in effect incentivized to take advantage of minority shareholders.

Second is the slow and selective enforcement by the Securities and Exchange Board of India (SEBI), the country's market regulator. Cases against the management's missteps take years to resolve. SEBI generally hands out warnings or mild punishments. This could be because SEBI does not have enough resources to deal with a

large number of cases, or it could be a lack of authority or competence. In certain cases, promoters are extremely powerful and politically connected. Given that regulators are political appointees, it is far from easy for them to ignore pressure from politicians, remain impartial, punish the powerful and deliver justice.

Third is the fact that markets do not punish poorly managed companies for their misdeeds. India needs deeper markets with broader participation for true price discovery. Stock markets must be treated as marketplaces, not as forums for votes of confidence on the government's economic policies. Because governments place too much importance on market performance, they have an incentive to keep them inflated. Indian corporate bond markets are even worse than stock markets in terms of participation. They are really accessible to only a handful of companies.

Fourth is the lack of transparency and weak disclosure requirements. This further perpetuates weak governance. The most detailed yearly disclosures by Indian companies are annual reports, which are often colorful marketing decks instead of detailed, factful and insightful documents, like the 10-Ks in the US. The quarterly earnings report for many companies is just a one-pager. This discloses summary items only without any breakdown of details.

Earlier, manufacturing companies were mandated to disclose operational details pertaining to capacity, production and inventory. A few years ago, this disclosure requirement was done away with. Now, the only time companies make adequate disclosures only during their initial public offerings, which is a mere one-time event instead of an annual exercise.

Bringing Sense to the Madness

The only way to bring some sense to the madness in India's public markets is to give more independence, power and resources to SEBI. At the same time, India must seriously penalize auditors and boards of companies for overlooking management follies. In addition, the authorities

must incentivize and protect whistleblowers in a similar manner to developed economies.

Some argue that complying with higher disclosure requirements might be too costly for smaller companies. That is not true. Furthermore, even the top 100 Indian companies default frequently on mandatory disclosures. Instead of reducing requirements for disclosures, India should lower costs of disclosures and compliance by using more technology.

Another way to improve the health of India's public markets is to increase market participation and trading volumes. Then good corporate governance would be rewarded while poor corporate governance would be penalized. Making short-selling a smoother affair might make the market deeper and more liquid. To increase depth in corporate bond markets, India must make lasting banking reforms. This involves privatization and granting more powers to the banking regulator.

An unintended consequence of banking reform might be the improvement of India's infrastructure. Currently, many state-owned enterprises in infrastructure sectors such as power are mismanaged because their bosses are able to buy time by restructuring their bank loans. Banking reforms will make that impossible and will transform this sector too.

A combination of disclosure, regulation and enforcement can improve corporate governance. Reforms can also reduce conflicts of interests as well as create the right incentives and disincentives for Indian companies. These would inevitably lead to some short-term backlash, but the substantial long-term benefits are too significant to be ignored.

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Agriculture Is India's Ray of Hope in Time of Crisis

Devinder Sharma
December 3, 2020

The COVID-19 pandemic has revealed that agriculture could be the unlikely sector that spurs economic growth in India.

As India completes 73 years of independence, agriculture has emerged as a mainstay of the economy. Despite the COVID-19 crisis, Indian agriculture is poised to grow by an estimated 3% in 2020-21. Shaktikanta Das, the governor of the Reserve Bank of India (RBI), has acknowledged that agriculture remains a "beacon of hope" at a time the economy is shrinking.

The government has announced a new agricultural policy that has drawn both supporters and detractors. Farmer protests have broken out in parts of the country. About 50,000 have marched to New Delhi from the agrarian state of Punjab, objecting to the loosening of price, storage and sales regulations that have traditionally shielded India's farmers from the free market forces.

As of August 25, the International Monetary Fund projected India's real GDP growth to be 4.5% in 2020. This shrinking of the economy in a country with a growing population could lead to a major crisis. Already, jobs are scarce, industrial production has declined, services have suffered and demand has plummeted. Even after decades of independence, agriculture remains "the largest source of livelihoods in India." As India gears up to celebrate Mahatma Gandhi's 151st birthday, there is no better time than now to achieve the Gandhian vision of rural self-reliance.

Blessing in Disguise

COVID-19 has made rural areas more important than ever. On March 25, Indian Prime Minister

Narendra Modi announced a nationwide lockdown. It took the country by surprise. Millions of urban migrant workers were left with little choice but to walk home to their villages. Carrying their meager household possessions and with their small children in tow, many walked hundreds of kilometers, suffering thirst, hunger and pain. Some died en route.

India's Economic Survey 2016-17 estimated the "annual inter-state migration [to be] about 5-6.5 million between 2001 and 2011." In 2020, this migration has been reversed. People who fled rural areas for urban jobs have returned home. Chinmay Tumble, a professor of economics at the Indian Institute of Management Ahmedabad and an expert on migration, estimates that 30 million migrants might have returned to their villages since the lockdown began. The number could be as high as 70-80 million if reverse intrastate migration is accounted for.

The reverse migration from urban to rural areas might be a blessing in disguise. Over the last few decades, urban migration has led to overcrowding of cities, the proliferation of slums and much misery for poor migrants. In cities, they have lacked community, cultural moorings and social safety nets. The massive migration to India's cities was a result of failed economic policies that focused on megacities while neglecting villages. Several studies have found that at least 60% to 70% of the migrant workers who returned to their native places are unlikely to return back to the cities, at least not in the near future. The millions of migrant workers, whom I refer to as agricultural refugees, flocked to cities because the government's economic policies kept them impoverished.

A recent study by the Organisation for Economic Co-operation and Development in collaboration with ICRIER, a New Delhi-based think tank, concluded that Indian farmers suffered a cumulative loss of Rs. 45 lakh crore (over \$600 billion) between 2000 and 2016-17 because of such policies. Subsequently, the NITI Aayog, a policy think tank of the government of India, admitted that, between 2011-12 and 2015-

16, the growth in real farm incomes was less than 0.5% every year. It was 0.44% to be exact.

Since then, the growth in real farm incomes has been near zero. With farm incomes growing painfully slowly and then stagnating, what else could be expected from the rural workforce but migration to cities where menial jobs as daily wage workers give many the only shot at survival?

Despite the Hardships

Despite these hardships, Indian farmers have toiled hard to produce a bumper harvest year after year. This has led to overflowing food stocks. Reports show that this abundance of food grains has come in handy. The government has been able to provide subsidized rations to over 720 million people during the four months of the post-COVID-19 lockdown. In addition, the government has been able to provide free rations to the needy.

A buoyant agricultural output has hidden a severe agrarian crisis. Farmers get little money for their produce. With less money available in their hands, rural demand has dipped. This had led to a slowdown in the Indian economy even prior to the lockdown. In a country where the agricultural workforce accounts for nearly 50% of the population, the surest way to bolster the economy is to create more rural demand. This involves providing farmers with decent incomes.

The lockdown has increased downward pressure on farm incomes. It coincided with the rabi (winter crop) harvest season and resulted in a crash in demand for winter produce. Farmers suffered huge losses in the case of perishables such as vegetables, fruits, flowers, poultry, dairy and fish. Not all news is grim though. On May 15, the United States Department of Agriculture estimated that India is on course to produce "a record 295.7 million metric tons, with estimated record rice, wheat and corn production."

For the next kharif (monsoon crop) season, the sowing area coverage of summer crops has increased by 13.92% as compared to last year. With rains expected to be normal, and with a

much higher area under cultivation, the kharif harvest will be bountiful just like the rabi one. It seems that in these times of crisis, agriculture alone provides a ray of hope in India.

Aim for an Economic New Normal

The coronavirus pandemic has come as a timely reminder of the limitations of dominant economic thinking. Its inherent bias and blind spots stand exposed. For the last two centuries and more, economics has sacrificed agriculture on the altar of industry. The dominant assumption is that industry drives productivity and growth.

India has never quite managed to industrialize like, for example, the US or China. Still, it has kept farm incomes low and neglected public investment in agriculture for many decades. As per the RBI, this investment hovered around 0.4% of the GDP between 2011-12 and 2017-18. It is little surprise that agriculture has floundered in India.

The time has come to change outdated economic thinking. Agriculture matters to India because it employs a majority of the country's population. It provides food security to 1.3 billion people whose ancestors suffered repeated famines until a few decades ago. COVID-19 gives the country the opportunity to return not to normal, but to a new normal.

The return of migrant labor to villages gives India the opportunity to reinvigorate its rural economy. The country must tap the socioeconomic wealth of rural enterprise, its diversity, and the traditional knowledge base. Prime Minister Narendra Modi's vision of Atmanirbhar Bharat — a self-reliant India — can only be achieved through a focus on agriculture. A sharp focus, sensible policies and public investment can unleash growth not only in the sector but also in the country.

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It's Time to Introduce a Universal Basic Income for India's Farmers

A. Amarender Reddy

December 15, 2020

Instead of guaranteeing minimum support prices across India, it may be time to consider a minimum basic income for farmers.

In September, India passed three bills that immediately led to protests by farmers demanding to repeal the legislation. The new laws seek to remove the government's minimum support price for produce that shielded India's farmers from free-market forces for decades. In allowing the farmers to set prices and sell directly to businesses, the reforms are pro-market and reflect the changing times. In a globalized era where the free market is king, India has to open its agricultural sector to the world sooner or later in order to take advantage of global demand for produce.

In these transitional times, ensuring farmers' incomes through price policy is not practical. It will only lead to inefficiency, causing India to lose the competitive advantage in an ever-expanding global economy. However, with over 40% of the country's workforce employed in the agriculture sector, it is the government's responsibility to ensure farmers' livelihoods. Most of the countries are shifting from price policies to income policies to ensure farmers' incomes by adopting universal basic income (UBI) schemes.

Targeted Basic Income

Universal Basic Income is a regular, unconditional cash payment given to every household in the country. The idea of UBI originated in the West, dating back to as far back as the 16th century, to ensure a minimum guaranteed income to every citizen. Most of the developing countries are also using a modified

form of UBI to ensure farmers' income to protect them from the looming threat of fluctuating and declining prices.

The main advantage of the scheme is that it does not intervene in the functioning of agricultural markets and allows free trade. Unlike loan weavers, it does not impair credit culture and, unlike minimum support prices for crops, it does not encourage the cultivation of one crop at the expense of another. It also avoids complex and costly administrative procedures and lethargy in implementing schemes like procurement of grains under India's Public Distribution System.

International experience shows that UBI makes people happier and healthier, meaning that everyone benefits. A modified version of the UBI scheme, a targeted PM Kisan Samman Nidhi (PM-KISAN) scheme, was already in place in India. Under PM-KISAN, every season, a specified sum of money is directly transferred to farmers' bank accounts based on land records. Many state governments are implementing similar targeted basic income schemes, including Telangana, Andhra Pradesh, Karnataka and Odhisa.

PM-KISAN covers all of India. It is benefiting over 120 million farmers who own less than 5 acres of land with a total budget of \$9.8 billion per year on the assumption that land records can be used as a means for verification to identify farmers. The main opposition party, Indian National Congress, has promised a similar scheme in its 2019 election manifesto. The Minimum Income Guarantee Scheme, formally the Nyuntam Aay Yojana, was designed to help 50 million "poorest families" by assuring them a guaranteeing minimum income of ₹6,000 per month or ₹72,000 a year." All households with a monthly income below 12,000 rupees (\$163) would be eligible, taking the total budget to an estimated to be \$48.9 billion, or 1.9% of the GDP.

Shifting Policy

As a first step in shifting from price policy to income policy, PM-KISAN must cover basic

input costs like fertilizer irrigation and pesticides, as well as cover periodic losses due to floods, droughts and price fluctuations. However, the scheme should not become an excessive burden on the exchequer. It seems that the benefits under some of the state schemes like the Rythu Bandhu in Telangana achieve much better results by transferring 10,000 rupees per acre to each farmer.

If all of India's 28 states were to implement a Rythu Bandhu-type scheme in its current form, it would cost 1.85% of the GDP. If these schemes are to remain sustainable in the long run, they need to be targeted well. Small farmers should get at least equal if not more benefits than bigger farmers, whereas Rythu Bandhu is progressive in benefits, with bigger landowners getting more money than the small farmers. The means for verification needs to be standardized, with no opportunity to inflate the beneficiaries by local officials.

Some farmers' organizations complain that PM-KISAN or similar schemes are benefiting absentee landlords rather than real farmers. These schemes are prone to errors. The inclusion error means that a proportion of those selected under a scheme are not really farmers, like absentee landlords with 40 acres of land getting benefits of 400,000 rupees per annum under Rythu Bandhu. The exclusion error occurs when a proportion of those intended to benefit are excluded from the scheme as a result of improper design. For instance, under Rythu Bandhu, tenant farmers, whose share of land is around 25% in the state, are not eligible despite being the actual cultivators who bear all the risks.

These inclusion and exclusion errors can be effectively reduced by proper design of the scheme and by using means-verification tools like online land records or validated bank accounts, tenancy certificates, etc.

Backbone Infrastructure

To implement any form of PM-KISAN-type of income support to farmers, India's government has to identify farmers correctly without any

scope for errors. For example, the digitization of land records is still a work in progress and needs to be accelerated. Computerization of land records has been completed only in 87% of the villages in India. Only three states — Karnataka, Telangana and Odisha — have completed 100% computerization of land records, while the remaining states have computerized between 80% and 90% of the records.

Particularly, records in Bihar, Uttar Pradesh and other northeastern states are not updated. With the initiation of the Pradhan Mantri Jan Dhan Yojana (PMJDY), almost every farmer now has a bank account associated with Aadhar — India's national identification number. Under PMJDY, about 355 million Aadhar-linked bank accounts were created as against 248 million households in India, which can be used for direct money transfers to farmers.

Budget allocation to an enhanced UBI scheme in the form of a modified PM-KISAN model should not come at the cost of reducing public expenditure on agriculture and other subsidies. The high fiscal costs of UBI may force the government to roll back some subsidies like free electricity, fertilizers and food. If the state retreats from public provisions like the Public Distribution System, it is doubtful how far the private sector will go to fill this gap even if incentivized by profits.

It is possible that the prices of some of the inputs will go up on the open market and move out of reach for small farmers. In the past, a government retreat from primary education and health care led to the proliferation of private schools and hospitals that charged extortionate fees unaffordable for the poor. State provision of agricultural and rural infrastructure is a more cost-effective, socially just, redistributive and sustainable way of meeting the farmers' needs than leaving them to depend on the free market.

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It's Time to Make India's Education Good Enough for All

Rhea Bhasin
July 20, 2021

If the government fails to reform the education system, India will become an even more unequal and divided nation than it is today.

The COVID-19 pandemic has detrimentally impacted education systems worldwide. Of the 1.2 billion children that the coronavirus has thrown out of classrooms, at least one-third have no access to remote learning and hence no access to education. The UN estimates that 24 million children will not return to school due to the fallout from the pandemic. Solving the education crisis needs to be a priority for governments.

This issue is of particular significance in India, where the pandemic has steeply, and perhaps irreversibly, increased education inequality. Over 1.5 million schools have closed down, depriving 6 million children of basic education. The government has been preoccupied with issues such as the pandemic, the migrant crisis, the farmer protests and state elections. It has failed to focus on education.

Exacerbated Negatives

Even as capitalist a country as the United States provides its populace with free public schooling. In contrast, a supposedly socialist India is unable to educate its children. India, currently in its youth-bulge phase, has 600 million citizens under the age of 25. The education of these young people can and should be India's catalyst for economic, social and political growth.

The socioeconomic benefits of education outweigh its costs. For example, the pervasiveness of child marriage among girls with no education is 30.8% versus 2.4% for girls who

have received higher education. Bearing in mind the fact that more than one out of four Indian child brides become teenage mothers, providing girls with education could help solve the problem of child marriage, which would subsequently combat teenage pregnancy and high infant mortality rates. Education could also reduce the rampancy of child labor while also reducing rates of preventable diseases.

Unfortunately, the Right of Children to Free and Compulsory Education Act, 2009 (RTE) and India's new education policy have no provision for dealing with the current crisis. Its Constitution declares India to be a "sovereign, socialist, secular, democratic republic." Many politicians claim to be socialists. Yet the pandemic has proven that socialism is merely an empty slogan in India. Health and education are highly privatized. Citizens have to pay for basic treatments and for half-decent schools.

The education system had many issues long before COVID-19 made matters worse. The pandemic has only exacerbated the negatives. The RTE had noble intentions but mixed results. India needs a modern education system that expands both the minds of the young and the arc of their opportunities. The pandemic has been terrible for students, but it provides a great opportunity for reform. It remains to be seen if the government will grasp the opportunity.

Legislating Education

Under the current legislation, both the central government in Delhi and the state governments individually can pass laws concerning education. Generally, schools are administered by the state departments of education, while the central government dictates overall guidelines and policy. The Ministry of Human Resource Development oversees the education and literacy of the entire country, conducted in three types of schools: private unaided, private aided, and government-funded and government-run public schools. According to data from the Indian Education Ministry, 75% of all schools are government-owned, responsible for the education

of approximately 65% of all school students, or 113 million, across 20 states.

According to Oxfam India, 80% of students in government schools have received no education since the pandemic began. Furthermore, despite the government broadcasting certain classes on television, many students have been unable to access them because they lack basic infrastructure at home. Over 200 million Indians do not own a television, phone or radio. Additionally, this method of teaching and learning is not interactive, with students finding it difficult to grasp the material.

While poor government schools remain closed, private schools have adapted to virtual learning. However, only 23% of all Indian households have access to a computer. This figure drops to only 4% among the rural population. Rural areas in particular are struggling with the fallout from the pandemic such as the migrant crisis and rampant unemployment, so education ranks low on local governments' priority lists.

To make matters worse, the closing of schools in early 2020 translated to the effective cancellation of the Mid-Day Meal Scheme that provided 116 million schoolchildren with hot meals. The central government has drafted guidelines for states and union territories to supply cooked meals or food-security allowances to schoolchildren. However, it is clear that various municipalities have failed to implement these guidelines. For instance, Bihar took 44.6 million tons of grains from the central government in 2019 to feed schoolchildren; in 2020, this figure dropped to zero. Children are not only missing out on education but also on nutrients. This is reversing years of progress that India had made in combating malnutrition. It is well known that malnutrition hinders intellectual development and can lead to poor academic performance, disease and even death. Children in poor families now face an increased risk of malnutrition as the gap between them and their more prosperous counterparts increases by the day.

But even children from more affluent families are struggling to cope with online learning. Depression and anxiety are on the rise. In India, board examinations — the final set of tests for students graduating from high school — have been canceled. This has left millions of students worrying about their future.

Misguided Provisions

One of the key problems with the Right of Children to Free and Compulsory Education Act is that it is poorly drafted. It is unclear and repetitive. According to the District Information System of Education, as of 2016, only 13% of all Indian schools achieved compliance with RTE norms. As a national act, the RTE establishes certain parameters, procedures and standards for both private and public schools to follow. It places a primary emphasis on the idea of education for all by dictating that every child between the ages of six and 14 must be eligible to receive free education. However, Indian children are still struggling to obtain the education promised to them.

The most adversely affected are the children living in rural areas who make up 73% of Indian youth. About 90% of the facilities in these districts are government-run public schools that struggle with untrained teachers and poor infrastructure, failing to meet the standards set by the RTE. Schools that do not follow these standards are forced to shut down. In many cases, these schools are the only option available.

According to the India School Closure Report published by Centre for Civil Society in India, between April 2015 to March 2018, 2,469 schools were closed in 14 states due to RTE non-compliance, while 4,482 were threatened with closure and a further 13,546 were served closure notices. In line with Luis Miranda's analysis for Forbes India, if we assume an average of 200 students per institution in Punjab, the closure of 1,170 schools there as of August 2015 amounted to 234,000 students being unable to attend a school of their choice or to receive an education at all in just one state.

For several states, data on the extent of school closures remain missing. As of 2016, total enrolment in public schools was only 1% higher for elementary schools and 2% higher for secondary schools compared to 2000. Data from 2016 reveal that enrolment decreased in states such as Madhya Pradesh, Assam and West Bengal.

The RTE has misguided provisions that may be well-meaning but are highly damaging. The act mandates a 25% quota to be reserved at the entry-level of educational institutions for students from economically weaker sections and disadvantaged groups. The law states that the central government must reimburse schools for the costs incurred due to the quota by either paying schools' per-child expenses or the fees charged, whichever is lower.

However, this provision has been implemented unevenly. In 2013-14, Madhya Pradesh filled 88.2% of the 25% quota and Rajasthan filled 69.3%, while states like Uttar Pradesh managed only 3.62% and Andhra Pradesh just 0.21%. Furthermore, corruption under the quota provision is also rampant. Parents often issue fraudulent income certificates to qualify under the quota, and schools do not oppose bribery as they favor students from affluent families. When wealthy private schools try to integrate economically weaker students, existing students often withdraw their admission due to a broad physical, infrastructural and cultural chasm between the classes. In India, there is still a stigma around studying with someone from a vastly differing economic background.

Adding Insult to Injury

There is another problem with the quota system for economically underprivileged children. The central government is supposed to reimburse state governments who fund schools for filling their quota. Unfortunately, there is no methodology for this. The central government decides on an ad hoc basis what any state is supposed to get. For example, in India's most populous state of Uttar

Pradesh, expenditure per child per year is 3,064 rupees, or approximately \$41. However, the central government gives this state of 236 million people only 450 rupees, or around \$6, for every poor child. Naturally, schools have little incentive to fill their quota for economically underprivileged children, meaning that a mere 3.62% of the seats are filled.

More significantly, the RTE has failed to address the fundamental issue of the lack of quality in Indian education. According to the 2018 “Annual Status of Education Report,” 55% of fifth graders in public schools could not read a second-grade textbook. The quality of teachers tends to be poor. Their pedagogies are almost invariably outdated. Teachers often lack motivation and training. In 2015-16, 512,000 teachers — or one in six — in elementary government schools were untrained.

One nationwide survey revealed a teacher absentee rate of 23.6% in rural areas. In states like Uttar Pradesh, teachers are hired by paying bribes. Often, they are barely literate. When teachers are qualified, they often run private coaching businesses instead of teaching in the schools.

To add insult to injury, untrained teachers use curricula that have little relevance to the lives of poor schoolchildren. They champion rote-based learning and, more often than not, destroy creativity. Many schools lack proper buildings, decent roofs and proper toilet facilities, especially for girls. Blackboards, basic learning aids and even chalk can run short. In 2018-19, only 28% of all government schools had computers and only 12% had an internet connection. Despite the government campaigning for a digital India, it has done little to provide computers and internet connectivity to schools across the country.

Time for Reform

As of 2020, India spent just 3.1% of its GDP on education. Importantly, every national policy since 1968 has recommended a figure of 6%. Other developing countries such as South Africa and Brazil spend 6.5% and 6.3% respectively.

The government of India could start with emulating its BRICS counterparts in increasing the amount it spends on rearing the next generation.

Even the little amount India spends on education often does not reach schoolchildren, the intended beneficiaries of the system. Like all aspects of Indian life, corruption causes much harm to the most vulnerable of the country’s citizens. The upper and middle classes almost invariably send their children to private schools, as do officials in charge of drafting India’s education policy. It is only the children of the poor who end up in government education, with parents having little knowledge or influence to demand either accountability or quality.

Officers of the Indian Administrative Service (IAS) preside over all ministries in India from finance and industry to culture and education. These IAS officers have little if any experience in education. These officers often spend their time trying to get postings to departments with more power and greater opportunities for corruption. They have little incentive to reform the broken system either at the level of the state or national government. Politicians see little gain from focusing on education either. They are always too busy with the next election.

India’s citizens have to demand better use of their taxpayer money. The best use of that money in the long term is investment in education, not only in as funding but also good policymaking. Politicians must entrust this policy to educationists, not IAS officers. In the past, India’s great institutions were set up by the likes of Rabindranath Tagore, Madan Mohan Malaviya and Sir Syed Ahmad Khan, not faceless bureaucrats.

India needs educational reform now more than ever. The pandemic has been devastating for hundreds of millions of students. If the government fails to act now, India will become an even more unequal and divided nation than it is today. Without high-quality mass education, the country will never have the skill or the knowledge base to be a truly dynamic economy.

India's government schools need to be good enough for the children of top politicians, not just for its poor downtrodden masses.

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India's Highway Construction Is in the Fast Lane

Vikram K. Malkani
August 23, 2021

To boost growth, India is aggressively developing its transportation infrastructure, including railways, roads and even commercial waterways.

When experts look back at the early 2000s, they will observe that India embarked on a construction spree to develop its transport infrastructure. The country is emulating what the United States and Europe did in the previous century and what China and East Asia have done more recently.

Traditionally, India focused on railways. For the last 20 years, roads have been the priority. Now, the country is also focusing on its 116 rivers and long coastline to develop commercial waterways.

As is well known, various factors contribute to a nation's development. The most fundamental is the availability of food and water for the population. Here, India has had some success since its independence in 1947. In health care and education, India can and must do better. India also needs to improve safety and security for its citizens and improve the rule of law. The factor most important for India's development is perhaps transportation because it has the greatest multiplier effect on the economy. As a result,

transportation has the greatest potential to improve the lives of ordinary citizens.

Transportation infrastructure, such as railways, roads, air traffic and waterways, are the arteries of a country's economy. The German economy was built on the backbone of an outstanding railway system and the legendary autobahn. The US is knit together by a crisscrossing network of freight trains, interstate highways and airports. Advanced economies like Japan, South Korea, Switzerland and the Netherlands are known for their evolved infrastructure.

In recent years, China has set the standard for implementing infrastructure at a scale and speed unprecedented in history. Most economists credit spectacular rates of economic growth to Chinese investment in infrastructure. India is betting that building good infrastructure will boost growth, create jobs and raise the standard of living for hundreds of millions.

Railway and Highway Infrastructure

According to a 2018 report by NITI Aayog, the premier policy think tank of the Indian government, 59% of all freight in India is transported by road, 35% by railways, 6% by waterways and less than 1% by air.

On March 31, 2020, India's railway track length stood at 126,366 kilometers and, on March 31, 2019, the length of national highways was 132,500 kilometers. Per 100 square kilometers, India has more railway tracks and highways than countries like the US and France. This does not necessarily mean India is doing well. South Korea and Japan have over four times the highway length per 100 square kilometers.

Instead of the density of infrastructure per unit area, density per population size seems to be the more accurate metric. When it comes to infrastructure per million people, India fares very poorly. For instance, Indonesia's population is merely 20% of India's, but its highways are twice as long as India's. South Korea's population is a tiny 4% of India's, but its highways are thrice as long as India's. The top two stars on the

infrastructure front are the US and Australia, followed by Japan and France.

India's highway network is inadequate for the country's needs. Highways comprise 1.94% of India's total road networks but carry a staggering 40% of total road traffic. This means that not only do they suffer high wear and tear, but transportation continues to be a big bottleneck for the economy. It is little surprise that India is finally investing in transport infrastructure.

After independence in 1947, India underinvested in infrastructure. Two centuries of colonial extraction had left the country with limited resources and almost unlimited public needs. In its early years of independence, India struggled to feed its masses. There was little money to build railways, roads, ports, airports and transport infrastructure.

India also lacked the expertise to build such infrastructure at scale. Planners, engineers and skilled labor were all in short supply. The nation did not have enough knowledge of transport technology either. There was another challenge in a densely populated democratic country. Infrastructure projects result in the displacement of large numbers of people. Many resist, others negotiate hard and still, others approach their local politicians who start resisting these projects to win votes.

India's varied geography also imposed daunting challenges for developing infrastructure. Largely flat countries like Australia and France could focus on railways, which run twice as long as their roads. Mountainous countries like South Korea and Japan have built more roads than railway lines. While plains and plateaus in India are crisscrossed by railway lines, roads are the means of transportation in its extensive mountainous regions.

A New Focus

Over the last 20 years, India's focus has shifted to roads. This began under the coalition National Democratic Alliance (NDA) government led by Atal Bihari Vajpayee of the Bharatiya Janata Party (BJP). Although this government lost the

2004 election, NDA's vision set in motion transport infrastructure development. In 2014, the BJP-led NDA returned to power and accelerated the building of highways across the country.

NDA-initiated highway construction was kickstarted by the Golden Quadrilateral, a project connecting India's four biggest cities: Delhi, Mumbai, Chennai and Kolkata. This boosted economic growth. Since NDA returned to power, India has embarked on Bharatmala Pariyojana, an ambitious project to connect the entire country through a network of highways like the fabled interstate highway system of the US. Even remote regions such as the northeast and Jammu and Kashmir will be covered.

In the past, India did not measure highways as per international standards. This meant their growth could not be measured and compared easily. To quote management guru Peter F. Drucker, "If you can't measure it, you can't improve it." Since 2018, the measure of highway length in India has been aligned with international standards. While impressive figures on the growth of national highways have been published, their interpretation now is clear and consistent.

There has also been a steady increase in highway construction rates. In March 2021, it reached 37 kms/day. For the 2020-21 financial year — India's financial year begins on April 1 and ends on March 31 — road construction averaged 29.81 kms/day. In 2014-15, the rate was 16.61 kms/day. Six years on, the road construction rate has almost doubled and is the fastest India has achieved since independence. The credit goes to Nitin Gadkari, the minister for road transport, one of the star performers of the NDA cabinet. In March, he claimed that India had secured the world record for fastest road construction.

India's Evolving Waterways Make a Big Splash

The oldest civilizations have originated and flourished near major rivers for a simple reason. They provide fresh water, a fundamental human

need. Rivers also provided an easy way to travel and transport goods before the advent of roads and railways. Even today, commercial transport of goods via rivers, lakes and oceans continues to cost less than via land. While container ships regularly carry goods across the high seas, most countries no longer use their rivers very well. The US, Australia, Japan, Russia and China are among the few countries that use their rivers and inland waterways well.

India has 116 rivers. Potentially, these could provide 35,000 kilometers of waterways and should be tapped. The government set up the Inland Waterways Authority of India in 1986 for “development and regulation of inland waterways for shipping and navigation.” In spite of tremendous cost advantages, waterways’ commercialization received little attention over the next 30 years. In 2016, the NDA declared 111 rivers across India as national waterways, a quantum leap up from five. By 2020, the government operationalized 12 of these waterways. The journey to suitably develop the remaining 99 will be a long and expensive one. However, this investment will cut logistics costs tremendously in the long run and boost India’s competitiveness.

Gadkari points out that the cost of logistics in India is 18% of the total cost of production. For China, this figure is 8-10%. Notably, waterways account for 47% of total transportation in China, compared to 3.5% in India. As waterways develop, so will commercial activity along their banks and lead to job creation.

India has another major underutilized natural resource. It has a long coastline of 7,500 kilometers spread across 14 states. To develop ports and coastal transportation, the government has launched the Sagarmala project. This could achieve what the Golden Quadrilateral did for roads in the past. By 2025, the government aims to increase the share of waterways transportation from 3.5% to 6%, reducing logistics costs, boosting exports and generating 4 million new jobs.

The Road Ahead

About 53% of India’s population is under 25 years of age and many of them need jobs. Employed young people are more likely to send their children to school. They are likely to eat better and live longer. So far, India’s growth rate has not exceeded the job creation rate. For social and political stability, the government needs to create jobs.

While India’s economy continues to grow, the pace of growth does not match the employment needs of India’s young population. Building infrastructure is one of the best ways to generate employment because of its massive multiplier effect in an emerging economy like India. The country needs competent ministers and bureaucrats with domain expertise such as Gadkari. Key ministries overseeing power and finance in New Delhi and India’s state capitals should emulate this model.

Along with building infrastructure, India must reform its arcane laws of colonial and socialist heritage to boost economic activity. The government must also reform education and vocational training in collaboration with industry to raise the skills of the workforce, improve employability and increase productivity. This is a tall order, but if India can get its house in order, then domestic and foreign investment would flow in. Then, the country would finally be able to join the Asian tigers as one of the world’s fast-growing economies.

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Liberalizing India's Economy Is Critical for Global Stability

Surya Kanegaonkar
September 7, 2021

As China becomes an increasingly unreliable trading partner, India can step up if it makes the right reforms and adopts prescient policies.

The COVID-19 pandemic is increasing inequality globally and even advanced economies have not been spared. Before the pandemic began in 2020, inequality was on the rise. Decades of globalization, loose monetary policy and the rise of oligopolies have contributed to this phenomenon. In many ways, globalization has kept inflation down. When Walmart imports Chinese goods, Americans get more for less.

China can manufacture cheaply because labor costs are low. The Chinese Communist Party (CCP) also runs an authoritarian regime. The regime has repressive land and labor laws with scant regard for human rights. Legally, the CCP owns all the land in China and can appropriate any property it wants. Similarly, workers have little recourse to courts and sometimes work in slave-like conditions.

A rising China is challenging the postwar global order. Democracies, including the United States, are finding it difficult to meet the challenge for two reasons. First, loose monetary policies in recent years have brought back the specter of inflation. Second, no economy other than China's can meet the supply needs of advanced economies. From laptops to toys, most goods are made in China.

Labor arbitrage has defined globalization from its early years. Companies set up factories where wages tend to be lower. This increases revenues and profits, making consumers and shareholders happy. Given rising inflationary expectations,

advanced economies need labor arbitrage to keep costs of goods down. At the same time, these democratic societies want to decouple their supply chain from China.

With the size of its young workforce, India has a unique opportunity to become the new workshop of the world and emerge as a stabilizing global force in a multipolar world. To grasp this historic opportunity, it has to liberalize its economy wisely.

The Legacy of the Past

India could do well to heed the lessons of the past. The Soviet Union, Western Europe and the US emerged as strong economies after World War II by leveraging their manufacturing base. The war economy had led to a relentless focus on infrastructure, mass production and industrialization. In the case of Western Europe, the Marshall Plan helped put shattered economies back on track.

Over time, these advanced economies deindustrialized and production started shifting to emerging economies. China's rapprochement with the US allowed it to enter the postwar Western economic system. Reforms in 1978 were critical to its success. The fall of the Soviet Union in 1991 created a brave new world where companies chased cheap production. China, with its size, scale and speedy centralized decision-making, emerged as the big winner.

As production moved to China, workers lost jobs in advanced economies and other industries did not emerge to retrain and employ them. The Rust Belt in the US has become a synonym for down-at-heel places left behind by globalization. Even as workers grew poorer, shareholders grew wealthier, exacerbating inequality.

Today, the United States finds itself in a complicated position with China. On the one hand, the Middle Kingdom steals intellectual property, transgresses international law and challenges the US. On the other hand, it supplies American consumers with cheap goods they need. America's economic stimulus during the pandemic has, in fact, reinforced the country's

dependency on China. So, Washington cannot hold China's feet to the fire and penalize its bad behavior. Beijing follows its policy of pinpricks short of outright conflict.

The US dollar is the reserve currency of the world. Since the days of Alan Greenspan, the Federal Reserve has followed a loose monetary policy. After the 2007-08 financial crisis, the US adopted the Japanese playbook from the 1990s and introduced quantitative easing. In practice, this means buying treasury and even corporate bonds to release money into the economy after interest rates touch zero. Such increased liquidity in the US has led to bloated company valuations and allowed the likes of Amazon or Uber to expand their operations. The cost of capital has been so low that profitability in the short or even medium run matters little.

Loose monetary policy has enabled the US to counter China's state-subsidized companies to some degree. Yet both policies have distorted the market. The US can only continue with loose monetary policy as long as inflation is low. Should inflation rise, interest rates would also have to rise. This might trigger a stock market collapse, increase the cost of capital for its companies and weaken the global dominance of the US economy.

To persist with its economic model and simultaneously contain China, the US needs to curb inflation. This is only possible by shifting some if not all production away from China. Mexico, Vietnam and Bangladesh are possible alternatives. Mexico has a major drug, violence and governance problem. Vietnam and Bangladesh benefit from huge Chinese investment. Therefore, they might not be the best hedge for securing supply chains from the Middle Kingdom, especially if the companies manufacturing in these countries are Chinese.

As a vibrant democracy with a formidable military, India offers the US and the West a unique hedge against China. For geopolitical reasons alone, manufacturing in India makes sense. However, doing business in the country continues to be difficult because of red tape,

corruption, erratic policymaking, a colonial bureaucracy with a socialistic culture and more.

India's Nehruvian past still hobbles the nation's economy. The country adopted socialist command-and-control policies using a colonial-era bureaucracy that prevented the economy from achieving high economic growth. Manufacturing suffered the most. To start a factory, any entrepreneur needed multiple licenses that cost time, money and energy. Poor infrastructure made it difficult for manufacturers to compete with their East Asian counterparts. While wages were low in India, the cost of doing business made many manufacturers uncompetitive.

Acquiring land in India is still a challenge. The experience of the Tata group in Singur revealed both political and legal risks that still exist. Similarly, convoluted labor laws made hiring and firing onerous, rendering companies inflexible and unable to respond quickly to market demand. Liberalization in 1991 improved matters, but the state continues to choke the supply side of the Indian economy.

In the second half of the 1990s, liberalization lost momentum. Coalition governments supported by strong interest groups stalled reforms. In fact, India drifted back to left-leaning policies starting 2004 and this severely limited economic growth. For instance, many industrial and infrastructure projects were killed by ministers to protect the environment. India's toxic legacy of Nehruvian socialism persisted in terms of continuing state intervention. The country never meaningfully transitioned from an agricultural to an industrial economy and still suffers from low productivity. This in turn has constrained consumption and slowed down growth.

India's much-heralded information technology sector only grew because it was new. The government did not exactly know what was going on and, as a result, there were fewer regulations to constrain this sector. Fewer regulations meant that the likes of Infosys and Wipro had greater autonomy in decision-making and fewer bribes to pay.

Reduce Red Tape

The first thing that India needs is an overhaul of its colonial-era bureaucracy that resolutely strives to occupy the commanding heights of the economy. It foists endless red tape on business, strangles entrepreneurship and takes too long to make most decisions. Government service is seen as lifelong employment. Once people become bureaucrats, they have little incentive to perform. Like their colonial predecessors, they lord over citizens instead of serving them. Rarely do they craft sensible policies. Even when a government comes up with a good policy, bureaucrats implement it poorly when they are not sabotaging it actively. This must change. Bureaucrats must be accountable to citizens. Performance-linked promotions and dismissal for underperformance are long overdue.

Over the years, politicians have tried to deliver benefits and services to citizens to win reelection. To get around a corrupt, colonial and dysfunctional bureaucracy, they instituted direct benefit transfers for welfare schemes, emulating other emerging economies like Brazil. This move is necessary but not sufficient. India needs sound economic policymaking directed by domain experts in each administrative department.

Only members of the Indian Administrative Service (IAS) occupy key positions in the finance ministry. Instead, India needs economists, chartered accountants, finance professionals and those with varied skill sets in this ministry. The treasuries of the US, Britain, Germany and almost every advanced economies have this diversity of talent in their upper echelons.

There is no reason why economic policymaking in 21st-century India should be monopolized by an archaic IAS. The government has made noise about the lateral entry of professionals into policymaking, but tangible results have been few and far between.

If the bureaucracy holds India back, so does the judiciary. Nearly 37 million cases are pending in the courts. It takes around six years for a case to be resolved in a subordinate court, over three years in the high courts and another three years in

the supreme court. A case that goes all the way to the supreme court takes an average of 10 years to resolve. Many cases get stuck for 20 to 30 years or more.

India needs to reform its judicial system if its economy is to thrive. Justice is invariably delayed, if not denied, and it also costs an arm and a leg. Not only does it add to transaction costs, but it also undermines business confidence. Virtual courts have already shown the way forward during the pandemic. A higher number of judges using both in-person and online technology could reduce the seemingly unending number of pending cases.

Create Efficient Markets

To improve labor productivity and consumption, the government must reduce inflation and improve purchasing power. For decades after independence in 1947, India was united politically but divided economically. Producers in one state could not sell in other states without paying taxes and, in some cases, bribes. In agricultural markets, they could not even sell in other districts. India's new goods and services tax (GST) might be imperfect, but it has already made a difference. Even during a pandemic, interstate goods movement rose by 20% and menu costs, a term in economics used for the costs of adapting to changing prices or taxes, dropped because tax filings were done online.

The 2016 Insolvency and Bankruptcy Code has led to major efficiency gains. Now, lenders can recover their debt more speedily. Bankruptcy proceedings are now much simpler even if haircuts remain high. Unsurprisingly, India has risen in the World Bank Doing Business rankings from 130 in 2016 to 63 in 2020.

As Atul Singh and Manu Sharma explained in an article on Fair Observer in 2018, non-performing assets of Indian banks have led to a financial crisis. The government could do well to adopt some if not all the reforms the authors suggested. Given rising inflationary pressures because of rising oil prices, India's central bank can no longer cut rates. So, the government has to

be creative in tackling its banking issues and free up liquidity for Indian businesses with great potential to grow. Banks burnt by poor lending in the past and fearful of corruption charges as well must discover the judgment and appetite to lend to deserving businesses in a fast-growing economy that needs credit for capital formation.

A little-noticed need of the Indian economy is to strengthen its own credit rating systems and agencies. Capital flows are aided by accurate corporate and political risk assessment. The US enjoys a global comparative advantage in attracting investments thanks to the big three homegrown agencies: S&P, Moody's and Fitch. These agencies tend to fall short in their India assessment. The standards they set give American companies an advantage over Indian ones.

Therefore, both the private sector and the government must strengthen Indian rating agencies such as CRISIL and ICRA. These agencies are improving continuously. They now have access to increased digital high-frequency data, which they can interpret in the domestic context. As a result, Indian agencies can benchmark corporate or sovereign risk better than their American counterparts for domestic markets. A better benchmarking of risk is likely to deepen the bond market and cause a multiplier effect by enabling companies to raise money for increased capital expenditure.

For decades, India followed a socialist model of agriculture, doling out large unsustainable subsidies. As Singh and Sharma explained in a separate article, the Soviet model was the inspiration for the Indian one. Indian agriculture denuded groundwater, emptied government coffers and lowered farm productivity. The current reforms allow farmers to grow what they want and sell wherever they want to bypass parasitic middlemen. The new legislation emulates the US farm bills and promises to boost agricultural production, lower inflation and increase exports. This legislation might also lower rural hunger and improve India's human capital in the long term.

India has to transition hundreds of millions from agriculture to industry. Currently, 58% of the country's population is dependent on agriculture and contributes just 20% to gross domestic product (GDP). All advanced and industrialized economies have a much lower percentage of their populations engaged in agriculture. In the US, the figure is 1.3% and in Vietnam, 43% work in agriculture. The last time the US had 50% of its population engaged in agriculture was in 1870.

Improve Infrastructure

To facilitate movement from agriculture to industry, India must invest in infrastructure and urbanization. For decades, its infrastructure has been woefully inadequate. Indian cities are known to be chaotic and do not provide basic services to their citizens. Recently, India launched a \$1.9-trillion National Infrastructure Pipeline that is engaged in a rollout of road, rail, seaport and airports to connect centers of manufacturing with points of export. This focus on infrastructure has to be consistent and relentless.

India could emulate Chinese cities like Chongqing and Shenzhen that could be home to industry and hubs of trade, both domestic and international. Projects like the smart city in Dholera, 80 kilometers from Gujarat's capital of Ahmedabad, are the way forward. Similarly, the new Production Linked Incentive scheme is the sort of policy India needs. The Tatas are setting up a plant to manufacture lithium-ion batteries under this scheme. Not only could Indian industry meet the needs of a fast-growing market, but it could also be a source of cheap imports for many other countries.

India must not only focus on metropolises, but also smaller cities and towns where the cost of living is lower. Digitalization of work will allow people to stay in such urban areas. Of course, they will need investment and organization for which India must tap capital and talent not only nationally but internationally. For instance, pension funds in North America and Europe are

seeking growth to meet their increasing liabilities. If India could get its act together, investment into Indian markets could be significant.

A key part of infrastructure that needs reform in a low energy consumption society is the power sector. Gujarat's growth is underpinned by increased production and improved distribution of electricity.

The rest of the country must emulate this westernmost state and Gujarat itself must bring in further reforms. Renewable energy sources such as gas, solar, wind and hydro must grow further. A nationwide energy market would bring in efficiency gains and boost growth.

A focus on renewable energy also brings risks and opportunities. Currently, China controls critical metals and rare earths required in electric vehicle and battery manufacturing. Beijing has an effective monopoly over 80% of the world's cobalt, 50% of lithium, 85% of rare earth oxides and 90% of rare earth metals. A decarbonized future cannot be intrinsically linked to an authoritarian state that has a history of not playing by free market rules.

India's \$1.1-billion "Deep Ocean Mission" offers a unique opportunity for the country to provide energy security to democratic nations in North America, Europe and elsewhere. As they transition to clean technologies, India can provide a safer, more reliable and benign alternative to an increasingly belligerent China.

An Opportunity

In 2021, India has a historic opportunity to enter a new economic arc. The global conditions could not be more favorable. Advanced economies are looking to decouple from China without triggering inflation.

India is the only country with the size and the scale to be an alternative. Its large youth population and rising middle class are powerful tailwinds for high economic growth. Indeed, India owes it not only to its citizens, but also to the rest of the world to get its act together and

become a force for global stability at a time of much volatility and uncertainty.

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An Indian Journey From School to Homeschooling

Ira Tanwani
September 21, 2021

After studying in the UK for a year, an Indian student chose to learn by herself instead of being taught in a system that suppressed critical thinking, logical argument and free expression.

Even as a 13-year-old, I had strong views on education. I had the opportunity to study in two countries with entirely different education systems. I began my education in India and studied for five years in Ahmedabad. My father then moved to the United Kingdom and I studied in a London-based school for a year.

In India, I disliked school and grew to hate exams. My time in the UK transformed my school experience. I loved my classes and going to school. When I returned to India, I decided not to go to school. Instead, I studied at home and curiously missed not having to write exams at the end of the year.

I can speak about the Indian schooling system with confidence. My experience has been corroborated by others. The Indian schooling system seems to have common problems across the country and needs major reform. I stayed in London only briefly and do not know as much about British schooling. Some experiences may be unique to the particular school I attended.

My Indian Experience

When I went to school in India, I studied diligently and my teachers liked me. I participated in many extracurricular activities such as dance and art that I tremendously enjoyed. On the whole, however, I did not like school and was unhappy.

One of the reasons for my unhappiness was my school's rigid dress code. Every day, I was supposed to turn up wearing an impeccable uniform. My hair had to be shiny, well-oiled and held together by a black hair tie. Every morning, teachers would scrutinize uniforms before class. They expected students to follow the school dress code diligently. We were warned of the dire consequences if we violated the code. For example, they threatened to paint the nails of boys who grew them long.

Ironically, teachers imposed these rules most strictly on those too young to dress themselves. The 6-year-olds who came to school were terrified of being publicly humiliated and punished for something outside their control. I found this system of punishment archaic and problematic. To me, the rules my school obsessed about did not seem relevant. I felt the school was trying to fault students for the smallest of details.

Another reason why I did not enjoy school was the poor behavior of certain teachers. They mocked some students by giving them humiliating names. These teachers also casually swore at us if we erred. Although I was never a target of this, I found such behavior disconcerting.

My physical education teacher often behaved this way. He gave us demeaning names, swore at us and imposed severe punishments, such as running around the playground and performing squats. This teacher also hit children who frustrated him. Because of this teacher, I did not like the physical education classes and stayed away from sports. My mother and I lodged a complaint against him but nothing came out of it. The school principal claimed to be against the teacher's methods. However, she did nothing. To this day, the teacher remains unchanged.

I have vivid memories of the vice principal too. On one occasion, she interrupted class to announce a new rule: No student would speak any language other than English at school. She told us menacingly that, if students broke this rule, they would be fined. Immediately after making this announcement, the vice principal started conversing with the class teacher in Gujarati. The fact that the class teacher taught us English exaggerated the irony of the situation. The vice principal was also infamous for being rude and condescending not only toward students, but also their parents and even grandparents.

Insults, threats and hypocrisy made school unpleasant. I eagerly looked forward to afternoons when I could leave school and return home. At night, I felt anxious because I feared the morning when I would have to get ready and leave for school. Often, I missed school by claiming to be unwell.

I must point out that my school enjoyed a great reputation. It is deemed to be one of the best in Ahmedabad. Schools in my city and in much of India are run according to the same norms. My friends in other schools had similar experiences. Changing schools seemed futile. After going away to the UK and experiencing British schooling for a year, I came to realize exactly why I had disliked school in India. The problem was much bigger and systemic than the occasional rude teacher.

My British Experience

I moved to the United Kingdom because my father chose to do a degree there. When we moved, the school year had already begun. Few schools were admitting students. We went to different schools to see if they would admit my elder sister and me. My sister visited two or three schools before finding a place in one. I was unexpectedly admitted into the first school we stepped into. The school administrator told me that I would start the next day.

This news came as a surprise to me. A bigger shock awaited when the administrator revealed

that my teacher was to be a “he.” In India, I had found male teachers to be the most aggressive, insensitive and rude. I feared this would be the case in the UK as well. I was already anxious about going to school in a new continent. Knowing that my new teacher would be male added to that anxiety.

On my first day at school, I arrived late. My mother and I lost our way in a new city. To my surprise, the teacher was waiting for us. He was friendly and kind. Within minutes of meeting him, I calmed down. I was ashamed of the preconception I had formed of him. My teacher had turned out to be very different. He asked three classmates who had volunteered to be my “buddies” to show me around. They broke the ice and I felt welcomed on the first day at school.

I found my British school to be completely different from my Indian one. Teacher–student interactions were more friendly, open and informal. Students called teachers by their first names. This was rare even for UK schools and took some getting used to.

In India, schools are hierarchical. Teachers are patronizing even when they are polite. Students are almost always belittled. They have to address their teachers as “sir” and “madam” as a sign of respect. However, teachers rarely reciprocate the respect, which I have always believed to be unfair. Students are the most important people in any education system, deserving of respect in return.

In the UK, I liked addressing my teacher by his first name. In my view, this formed a closer connection and an amiable learning atmosphere. My British teacher often sat down with us and shared what was planned for us academically. We could ask questions freely and he would respond to them diligently. He had high expectations from us and made us think. In the UK, I realized that schools could maintain discipline without condescension. The teacher–student relationship can be one of mutual respect.

In India, schools obsess about discipline. Students have to comply with a laundry list of rules and are punished even for minor violations.

Corporal punishment is now rare in urban areas but still occurs. Some parents even support this form of punishment. They believe in the archaic dictum, “Spare the rod, spoil the child.”

The discipline enforced in Indian schools seems to have surprisingly little impact. When they leave school, the people of India are hardly rule-conforming; in fact, they are rebellious. This is most evidently seen on the roads of India where drivers blatantly ignore traffic rules. Painting zebra-crossings, for example, is wasteful. The drivers of India have unanimously decided to ignore them, despite being instructed otherwise when obtaining their licenses.

In the UK, my school did have rules and imposed them. However, they were fewer, less controlling and more sensible than those in India. The teachers were authoritative when necessary but never authoritarian.

In India, even when teachers acted in our best interest, they did so in an intimidating manner. One teacher once asked us if we had social media accounts. Those who raised their hands were told there would be “legal action” against them because no one under 18 was supposed to have social media accounts. The teacher was trying to protect us from online dangers, but the aggressive approach did not inspire trust. It was in the UK that I discovered the dangers of cybercrime when we were taught about it at school. Our Indian school could have done the same instead of threatening students. Schools in India choose to scare children out of problems where they could reason with them instead.

In India, I hated school and lied about being sick to stay at home. In contrast, I loved school in the UK. For the first time, I wanted to go to school even when I was ill.

Contrasting Approaches to Learning

In India, textbooks were treated like the Bible and teachers followed them completely. Once they taught a chapter, we had to answer questions at the end of it. Most of the time, the teacher would simply dictate the answer to us and all we had to do was write down what they said. Older

students had the liberty to write down answers on their own, but there was little need for originality. Copying down relevant sections of the chapter could fully answer most, if not all, questions.

Questions were invariably formulaic as well. For example, this question was posed at the end of chapter six of the class eight geography textbook of the National Council for Educational Research and Training (NCERT): “The world population has grown very rapidly. Why?” Teachers expected students to pull out an excerpt from the chapter verbatim. This was deemed to be the correct answer: “The main reason for this growth was that with better food supplies and medicine, deaths were reducing, while the number of births remained fairly high.” The five other questions that followed had to be answered similarly by quoting relevant lines from chapter six.

To answer questions, teachers told us to put brackets around appropriate sentences in chapters and write down the respective question numbers next to them. Once we had matched questions with answers, we simply had to copy both of them down in our notebook. This process of answering questions was tedious and almost pointless. Preparing for exams was similarly mind-numbing. All we had to do was memorize what we had written in our notebook and reproduce the answers during the exams.

Only creative writing offered an escape from the monotony. Even here the topics teachers gave out for essays and stories were again mostly formulaic. Books were available that had essays and stories on these topics. All that most students did was memorize from them and present the material as their own. The “writing” in “creative writing” was anything but creative.

In India, school involved little learning. I did not make inferences, analyze topics or interpret things originally. We were not encouraged to think critically and express our opinions. I realized that the Indian education system does not foster critical thinking or creativity.

In the UK, school was rich in learning. We were divided into sets with different teachers

depending on our level of understanding of the subject. We began every class by writing down the learning intention in our notebooks.

I remember my math classes well. Sometimes, we played mathematical games. We had to use formal methods and the language of mathematics to explain our strategies, making us vocalize our way of thinking.

I enjoyed my English classes as well. In class, we were supposed to make inferences about the theme of the text and explain our reasoning. I also learned to structure arguments in the point, evidence and explanation format, popularly known as PEE. I learned not only to write but also to edit my writing. Teachers would mark our work and students would do a “response to marking” exercise. This meant students could improve their work iteratively.

In the UK, answers would ask for a contribution by the student, which resulted in a collaboration. The experience was individualized. We also discussed things in detail during class, which meant we heard many points of view. We learned how to justify our opinions instead of merely asserting and how to challenge an idea or defend it. We made our case and debated issues. Listening to opposing arguments expanded our mental horizons.

The books we used in Britain were a world apart from textbooks in India. For instance, “Key Stage Three English” is a reference book from the UK. It has an extract from Chinua Achebe’s “Things Fall Apart” and then poses the following question: “The writer presents the reader with a strongly negative view of Unoka. He is clearly a flawed character with very few redeeming qualities.’ How far do you agree with this statement? You should include: your own perceptions of Unoka; the techniques the writer has used to influence your perceptions; evidence from the text to support your ideas.”

Such questions demand original thinking and make the students express their own thoughts. These questions also make students more rigorous in their thinking as they have to read the text carefully and engage deeply with the author.

Opinions and assertions are not enough. Students have to construct arguments based on logic and facts. During my time in the UK, I had to learn how to analyze, understand implications and form judgments. I got an excellent education.

Contrasting Attitudes Toward Examinations

In India, success in examinations is the holy grail. People believe that examinations are accurate measures of capability, but they fail to recognize how problematic they are. Examinations reward rote learning. Little more than a sharp memory and handling time pressure is needed to guarantee a good result. Indians do not realize that some of the most original thinkers have struggled in tests. Nobel laureate in physics Roger Penrose was “very slow” and “didn’t necessarily do very well” in his tests.

Students in India take a lot of examinations and are under enormous pressure to perform well in them. So, the purpose of studying is mostly to do well in exams and not to learn. When I was in India, examinations were the main incentive to study. Schools prepare students for the end-of-year tests, succeeding in which is painted to be the goal of the academic year.

In the UK, we had examinations too. In Year 6, students take the Standard Assessment Tests (SATs). These are similar to nationwide board exams in India, but there is less pressure in Britain compared to India. In India, students taking board exams are expected to give up all extra-curricular activities. For many months, they are supposed to focus only on their studies. The SATs were different. Teachers prepared us for them and we took mock tests, but there was no syllabus given and no memorization was needed. Coming from India, I asked my teacher for a syllabus but was told there was none. The atmosphere before the SATs was strangely calm and, for most of the year, school was normal.

I understand that this comparison of the UK and India might be unfair. India is a poorer country with a much larger population and there are only a few good schools and colleges. As a result, competition for places is intense.

Therefore, Indians care deeply about examinations as they are a gateway to success. This nurtures a culture in which Indians obsess about examinations even when they do not really matter, such as those taken in lower grades. The system is examination-centric, not student-centric.

My Return to India

When my father’s stint in the UK ended, we returned to India. I had no intention of rejoining my much-hated old school. I enrolled in another school but quickly realized that it was worse than my previous one. After only a day at the new school, I rejoined the old school.

On the very first day at the old school, I found myself comparing it to my time in the UK. I found the school greatly problematic and it made me deeply unhappy. As a result, I did not attend school for three weeks and had to summon a lot of courage to return. To make matters worse, I had returned in the middle of the academic year and needed to catch up.

Few teachers were supportive. In fact, most teachers demanded an impossible feat. They wanted me to write up everything that had been done over six months in my notebooks while simultaneously keeping up with their teaching. I tried to find the superhuman strength necessary for this task and wrote persistently to catch up. This caused exhaustion and I started missing school. This only added to the burden because I had to catch up with the days I missed.

By the time the annual examinations approached, I was almost worn out. We were to be tested on everything taught throughout the year, but the extra writing was hindering my exam preparation. My parents requested my teachers to exempt me from the extra writing assignments. I did not make the request because that would have been deemed rude.

In any case, I had no interest in taking the annual examination. In the UK, I had learned much of what the school was teaching and testing. I was putting in so much effort in copying out what I had missed, but I was learning

nothing. I concluded that a school that taught me nothing was pointless, so I decided not to return until the new academic year began when I would be learning something new.

My parents opposed my decision. According to them, one could not skip ahead. They had followed the norm their entire lives and had turned out just fine. They did not want me jeopardizing my future. They also did not believe that I already knew what was being taught. On their insistence, I reversed my decision of not going to school and took the year-end examinations. My results were splendid but the experience of taking the examinations was horrible. On the day the results were announced, I broke school rules, dressed boldly and showed up in my colorful clothes instead of the school uniform. I was making a statement on what I had decided would be my last day in school.

My decision not to go to school worried my parents. To add to their worries, I did not study at all for four months. I spent this time playing games, creating art and enjoying myself. School had made me angry and I loathed the idea of taking tests. So, I took a break. My father was worried about me not studying and repeatedly requested me to restart and not fall behind my peers. I dismissed his concern.

My Homeschooling Experience

After four months, I started getting bored. Around this time, I was asked a math question. To my surprise, I could not answer it. I realized my four months of inactivity had taken a toll. The idea of intellectually falling behind my ex-peers shocked me, which motivated me to start studying again. I began with a mathematics textbook that my parents had bought for me and was able to finish the entire year's syllabus in two months. I was amazed at my achievement and it made me realize that I did not need school. Teaching myself was much more fun, so I decided to become a homeschooler.

My decision worried my parents. They had thought me not attending school was just a phase. In India, homeschooling is rare and rather

stigmatized. Most people associate it with students who cannot keep up with their studies or are extremely uncomfortable in social settings. My parents had similar impressions.

But my parents' apprehensions did not affect me. I am competitive. I do not like my peers knowing more than I do whether they are from India or the UK. So, I started studying both the Indian and the British curricula. I asked my parents to order textbooks from both India and Britain. By the time these textbooks arrived, I had lost a few weeks of the academic year already shortened by the four months of inactivity.

My challenge was to complete two curricula in less time than what students in the UK or India spent to cover one curriculum. The task was daunting, but my doubts were not enough to supersede my ambition. I started by making a plan.

I wrote down all the subjects I planned to study, along with my learning goals for the year. I then planned out every single day for the next two months. I had never planned my studies before. Inevitably, I overestimated and underestimated the time I would take to study some topics and there were days I struggled to meet my goals. However, I disliked falling short and would work harder on such days to achieve my objectives. I did my utmost to keep to my schedule.

The line between studying and not studying became blurred at home. There were no school hours and I would sometimes study till late in the evening. My self-imposed deadlines were helpful as they made me avoid succumbing to laziness. Making a schedule for myself made me appreciate the work of teachers behind the scenes. Structuring student schedules is no easy task. Eventually, I learned to set better deadlines and began to understand how much time I would need to spend on various topics.

Although doing two curricula simultaneously put me under pressure, it allowed me to learn more. I discovered that some topics were introduced to students in the UK but not in India and vice-versa in the same academic year. Some

of the topics that overlapped were explained better in the UK curriculum, while others in the Indian one. This deepened my understanding.

Homeschooling required great self-discipline. I had to plan my studies for the year and then adhere to that plan in an environment not dedicated to studying. Distraction came easily. At one point, I began cutting corners because there was no one to stop me. I missed many targets and gave myself a written warning, a practice common in Indian schools. Fortunately, this worked. I learned to avoid laziness and largely stuck to my deadlines.

Homeschooling has given me more choice and made me more creative. I began learning French, an Indian classical dance named Kathak and to play the drums.

There are downsides to homeschooling. I have felt lonely. I missed chatting with my fellow students and general social interaction. To counter this isolation, I started reading aloud. I often read in different rhythms and accents, imagining and emulating different teachers teaching me the subjects. I have increased my extracurricular activities; most of my evenings are booked.

Initially, I was secretive about being a homeschooler. Only my close family knew about it. I told my friends and old classmates I had changed schools. I told new acquaintances I was still in my old school. I did so to avoid the influx of questions and presumptions that would inevitably follow the revelation.

Completing a year of homeschooling filled me with a level of pride and a sense of accomplishment that I had not experienced before. Academically, I had covered two curricula in a short span of time. I had experimented with different learning methods and discovered which ones most suited me. I had become more adventurous and willing to venture into new areas like linguistics. I had studied for myself and not for passing exams. This was a euphoric feeling.

Examinations, National Policy and the Future

When I was homeschooling, almost everyone suggested I take some sort of exam. It seemed to me that this suggestion came from a lack of faith in my desire, discipline and capability to learn on my own. Therefore, I would not comply.

However, once I finished both curricula, I lacked a sense of completion. Strangely and surprisingly, I wanted to mark the end of the academic year with examinations. Perhaps the Indian education system had indeed left its mark on me. So, I asked my parents to set me examinations on both sets of curricula. They were reluctant to play the role of examiners, but I insisted.

As novice examiners, my parents made errors in choosing the questions and setting time limits. Yet the examinations were rigorous and I fared well in them. Studying for these exams and sitting for them was satisfying because I had chosen to do so, unlike those taken in school. Moreover, taking the exams had been a mere afterthought, not the purpose of the learning I had done throughout the year.

My problems with the Indian education system arose from its arbitrariness, focus on rote learning and lack of critical thinking. To my satisfaction, India's National Education Policy 2020 acknowledges these shortcomings and calls for "greater critical thinking." It goes on to say that the "overall thrust of curriculum and pedagogy reform ... will be to move the education system towards real understanding ... and away from the culture of rote learning as is largely present today."

Change begins with an admission of the need for it. India has admitted it has a big problem. Hopefully, it will now start taking steps to resolve it.

I do not know if I will continue with homeschooling. I may end up choosing the easier option. When teachers handle the planning and responsibility for conducting studies, life is simpler. Going to school would take a huge burden off my shoulders. I am also curious to see if India's new policy will change anything. Regardless of what I do going forward, I am

proud to declare that I homeschooled and, because of it, I changed for the better.

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Unnatural Disasters: India's Environmental Mismanagement

Tarun Shridhar
October 7, 2021

Disasters in India regularly cause loss of lives and property because of man-made reasons, which can be addressed with some cheap, easy and effective measures.

“If we don't learn from the tragedies of the past, we are cursed to repeat them in the future,” proclaims the home page of the website of the Himachal Pradesh State Disaster Management Authority.

To ensure that the irony is not lost on either the creator or the visitor of the website, just above the quote is a ticker flashing a sequence of major disasters that have afflicted the state, from the 1905 earthquake in the Kangra region to the cloudbursts of recent years. This information includes the morbid details of the number of lives lost, property damage and economic costs, displaying an undeniable, if unintended, pattern of loss and neglect.

Himachal Pradesh is credited with having one of the best State Disaster Management Plans in the country. In fact, a few years ago, the government of India had advised other states to emulate Himachal Pradesh. Relief operations too are carried out with a fair degree of alacrity and responsiveness. Yet Himachal Pradesh falls well short of international best standards.

A well-drafted plan document and post-event response cannot absolve the state of its complicity in the deaths of citizens and the loss

of valuable public and private property. Where has the state gone wrong in its approach to managing disasters that now recur too frequently?

Nature Takes Its Toll

Perched on the Himalayas, the youngest and the most fragile mountain system in the world, Himachal Pradesh is predisposed to hazards and calamities. While it is blessed with an abundance of rich natural resources, Himachal Pradesh is one of the most disaster-prone states in the country. Nature — in the form of earthquakes, cloudbursts, flash floods and landslides — takes its toll here.

In July, 14 people died and four went missing after flash floods ripped through the state. The same month, a boulder rolled downhill, killing nine, while another collapsed a bridge. In August, at least 11 died and up to 30 people were reported missing following a landslide that buried passing vehicles. In winter, avalanches are a regular occurrence, causing death and destruction.

Himachal Pradesh is also vulnerable to earthquakes. Since January 2019, at least 14 earthquakes have been recorded, the latest one just yesterday. None of them have killed anyone or caused significant damage, but the state has experienced some of the most disastrous earthquakes in history. The Kangra earthquake of 1905 killed 20,000 people. Other major quakes have followed, and scientists estimate that Himachal Pradesh could be hit with an earthquake of high magnitude equal to or greater than 8.0 on the Richter scale.

In July, the state government estimated that 187 people had died and four had gone missing because of natural disasters and accidents in the brief period beginning June 13 and ending July 27. These events killed 381 animals and caused damages of a staggering 4 billion rupees (\$54 million). The floods and landslides that followed have increased these numbers significantly.

Unnatural Disasters

It is clear that natural disasters have caused Himachal Pradesh much grief and destruction.

Experts are increasingly pointing out that human activity has worsened these extreme events. I take the view that anthropogenic activities are a greater danger to lives, property and certainly the environment than natural disasters.

Therefore, as a first step, we should stop using the phrase “natural disaster,” which absolves humans of any responsibility. These days, most disasters tend to be man-made. In 2010, a 7.0 magnitude earthquake devastated Port-Au-Prince, Haiti’s capital, killing approximately 250,000 people and rendering more than 1 million homeless.

That year, an earthquake of identical magnitude hit New Zealand but resulted in no casualties and caused negligible loss to property. Between the years 2011 and 2012, five major earthquakes, all with a magnitude greater than 7.0, rattled Japan. Yet the country suffered only 13 casualties. The reason for the different death rates in Haiti, New Zealand and Japan is man-made structures.

Earthquakes don’t kill people — badly designed buildings most certainly do. In poor countries, building codes are often rudimentary or not followed through. Building materials are of inferior quality and the work itself shoddy. Governments often push for more construction in the name of development for populist reasons, disregarding environmental factors. Such poor practices lead to disaster in case of events like earthquakes and floods.

Cheap and Easy

Few know that the interventions required for disaster prevention are absurdly simple. Planting trees on slopes, especially soil binding species, is the most effective method to stem soil erosion and prevent landslides. Yet for some inexplicable reason disaster management authorities in India prefer building retaining walls to contain soil erosion.

Another intervention that has proven effective is to avoid cutting off the toe of a mountain slope while constructing buildings or roads. Yet toes of slopes are regularly cut to construct highways all

across the country, and Himachal Pradesh is no exception. By cutting off the toes of slopes, Indian road makers are creating artificial vertical elevations with steeper slopes leading to landslides.

On slopes, good, clean and unclogged roadside drains assume great importance. Sadly, roadside drainage systems in India leave a lot to be desired. In the Himalayas, drains are frequently clogged with rubble and, even more worryingly, plastic.

In a 2020 article, Satya Prakash Negi, a senior officer in the Indian Forest Service, pointed out how plastics threaten the Himalayan environment. They now litter hills, mountains and rivers. Plastic absorbs heat, blocks natural water channels and causes floods as well as landslides that damage roads and property, leading to avoidable deaths.

But perhaps the biggest threat in mountain areas is unregulated, reckless and often illegal mining in riverbeds. Mountain roads invariably have numerous bridges that span riverbeds. Dangerous mining often goes on right under our noses or, more accurately, under our bridges.

Such mining leads to disaster during natural calamities. Often, the very businesses that were profiting from dangerous mining make a killing from post-disaster construction contracts, making a mockery of law and justice.

Vested Indifference

The prevalence of natural disasters begs a simple question: Why have India’s policymakers failed to implement zero-cost interventions and precautions to save lives and property? Is it because of apathy, or are there vested interests at play?

These questions are best answered by examining one particular disaster. In 2017, a whole mountain snapped and buried alive 50 people in Kotrupi village on the Mandi-Pathankot highway in Himachal Pradesh. Parts of the highway were washed away, smaller landslides followed; the area suffered flooding as well. Yet the very next day a group of college students

insisted on walking through the disaster site instead of taking a route that would have added 30 minutes to their journey.

The next day, I saw groups of people posing for photographs in the middle of the river with no concern for safety. That vignette stamped indelibly in my memory captures the indifference to disasters among the Indian public. This indifference is at the root of the country's poor disaster management policies.

There are two other anecdotes that capture this very peculiar Indian indifference. A few years ago, I was at the World Bank for a meeting. A fire alarm sounded, and the entire building was evacuated. Thousands of people came out and assembled in designated spaces outside. This was merely a fire drill, but everyone took it seriously.

We planned a similar drill in the state government headquarters in Shimla, the capital of Himachal Pradesh. The first date had to be postponed because of a ministerial visit. The second one went ahead but senior officials refused to leave the building. They prioritized their files over the exercise. If those in commanding government roles do not take safety seriously, what message does it send to other government servants and the public?

Vested interests also play a role in exacerbating disasters. Those who get construction contracts often grease the palms of those who give them out. Those who are winning contracts to build retaining walls argue against tree plantations. Those practicing engaging in dangerous mining activities persist because it brings them revenues and profits. Private benefit trumps public interest and eventually results in tragedy when disaster strikes.

Populism

Apart from apathy and vested interests, another factor is at play: populism. Encroachment on public lands to build private homes is a problem common to developing countries from Brazil and Kenya to Bangladesh and Indonesia. India is no exception. Politicians seeking votes often promise the “regularization” of such

encroachment. Needless to say, the private homes that are often little more than shanties are rarely safe. They are built on lands that were supposed to have no buildings and do not follow safety regulations.

As a government official, I came across an incident where people had built homes over public drains. Construction over public utilities, especially drains, was prohibited under the law, yet people had flouted it merrily. When talk of imposing the law arose, protests broke out.

The fact that stormwater would wash away homes, sometimes in their entirety, if the drains were blocked did not wash with the protesters. Some politicians took the side of the protesters and put pressure on officials to turn Nelson's eye to the breach of planning regulations.

This situation is repeated again and again all across the country. Indian authorities are wary of imposing any planning regulations in urban areas. For rural areas, they rarely bother to even draft such regulations. The political class supports “regularizing” unauthorized constructions because it is a vote winner. Those whose homes are retrospectively legalized tend to vote for politicians who pushed the measure through. Everything goes swimmingly until disaster strikes, buildings collapse and people die.

What India needs is not only a disaster management plan like Himachal Pradesh's but also a cool examination of the causes of such disasters. Public apathy must end. We must confront vested interests and put public benefit over private profit, and politicians must look at longer-term horizons instead of a few votes in the next election. For a start, India must move away from pouring ever more concrete on its slopes to planting more trees that save the soil and allow us to bask in the cool shadows of our hills.

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