An Economic Strategy for India

Abhijit Banerjee, Pranjul Bhandari, Sajjid Chinoy, Maitreesh Ghatak, Gita Gopinath, Amartya Lahiri, Neelkanth Mishra, Prachi Mishra, Karthik Muralidharan, Rohini Pande, Eswar Prasad, Raghuram Rajan, and E. Somanathan.

The Imperative for Strong, Equitable, and Sustainable Growth

India is one of the fastest growing large countries in the world, having grown at an average of almost 7 percent for the last 25 years. There have been many notable reforms over this period – most recently, the co-operative fiscal federalism that has brought the Goods and Services Tax into being, the enactment of the Indian Bankruptcy Code, and the dramatic dis-inflation of recent years, partly as a result of a move to an inflation targeting regime.

While commendable, we should not be satisfied with this. India is still one of the poorest countries in the G-20, and poor countries ought to grow faster because catch-up growth is easier. As important, the benefits of growth in India have been distributed extremely unequally, with top incomes rising much faster than the rest. We have seen new environmental challenges, in the form of sharp increases in both local pollution levels and in CO2 emissions that, if unchecked, threaten to stall or reverse progress. India is also not creating enough jobs: even though data on employment in India are both low quality and controversial, the recent news that 28 million applied for 90,000 low level railway jobs suggests we are not satisfying the demand for jobs.[1] Unfortunately, we are not well-positioned to follow the export-led growth path that allowed many Asian countries to climb out of poverty. Despite abundant cheap labor, we are not part of many global supply chains. Even as global firms seek to diversify away from China so as to reduce political risk, India is rarely seen as an obvious alternative.

Given India's continental size, it need not follow the export-led path. It will, however, have to ensure that growth generates jobs and incomes across the skill spectrum, in the process

- Creating semi-skilled jobs for those currently underemployed or unemployed and those who are seeking to leave low productivity agriculture, even while enhancing the productivity of agriculture itself, and the earnings of the agriculture-dependent population.
- Increasing labor participation of women -- India has one of the lowest female participation rates in the labor force, down from 35 percent in 1990 to 27 percent in 2017. It is one of the few countries where this ratio has fallen. This limits the talent pool that the economy can draw upon, as well as constraining the life choices of women, many of whom, the evidence suggests, would like to be working.
- Spreading jobs and economic development from the coastal states to the interior, as well as Kashmir and the North Eastern states.

There are tremendous possibilities for reforms that will take us towards faster and more equitable growth, as this report will lay out. However, we have to allocate scarce resources carefully to make sure that there is enough investment in sectors such as infrastructure to create jobs. India's aggregate fiscal deficit (state plus center) is still close to 6.5 percent of GDP, higher than almost any in the G-20, and not significantly lower than levels that existed five years ago. However, our investment rate has fallen sharply in recent years. Despite that, our external financing requirement (as measured by the current account deficit) increased appreciably earlier this year, increasing vulnerability. Moreover, to the extent that India grows while being more reliant on domestic demand than were other Asian emerging markets, it needs a much greater focus on macroeconomic stability than they did. For all these reasons, it needs to prioritize government spending better, focusing on filling clear investment gaps and protecting the vulnerable. It also needs to increase revenues by making the tax system more progressive

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[1] https://timesofindia.indiatimes.com/india/over-2-8-crore-apply-for-90000-railways-jobs/articleshow/63551672.cms

both in taxes levied as well as through more effective collection from rich non-payers, by bringing more people into the tax net, and by charging users for government services where appropriate.

A key factor in spurring growth will be reforms that alleviate "supply side" constraints on growth and job creation. We have to enable both the industrial sector as well as the service sector to operate at larger scale. This involves embracing highly overdue labor reforms including allowing for a rich menu of contracts with workers that allow for more possibilities than just permanent workers and short term contractual labor in firms. Such additional contracting possibilities could give workers more job security, give firms the incentive to train and invest in their skilling, even while giving firms more reason to scale up. Similarly, cleaner title to land, as well as a land acquisition process that protects the seller while simplifying acquisition, will reduce the cost of developing land, a critical need if we are to create jobs. A more predictable and better regulatory environment – which prunes redundant or unnecessary regulation, carefully sets regulations in new areas necessitated by our development, and enforces regulations effectively and impartially – will create a much better environment for business. We must also improve the capabilities as well as strengthen the independence of our regulatory institutions.

Scale is also key for productivity growth which, in turn, is essential for India to expand its share of world exports. The ongoing reorientation of the United States away from dependence on China provides India with a great opportunity to position itself as a viable alternative for cheap sourcing of goods and parts. But this would require macro and industrial policy reforms of the kind just outlined that remove existing impediments to India becoming a valued partner in global supply chains. Rolling back the recent increases in import tariffs along with a renewed commitment to resisting protective policies would be a good way of signaling this goal.

In outlining an economic agenda, we have to recognize government capacity is limited – the number of government employees is often low relative to the tasks they are assigned. This is often compounded by low staff motivation and relatedly high absenteeism, as well as inadequate training. Government takes on too much, while delivering too little. Yet for growth to be equitable, a must in our democracy, effective and well-targeted government engagement is essential.

One partial solution is more decentralization, with more powers and funding delegated to the states, and perhaps more importantly, within the states to municipalities and panchayats. It will allow for a much more dynamic decision-making process, resulting in government policies that are more sensitive to local conditions, as well as more local democratic control of officialdom.

The strategic use of technology has the potential to help here as long as we are careful not to make a fetish of technology, are mindful of the human dimension of transactions, and deploy technology with enough safeguards. Technology can make it easier to monitor flows of funds and uses of funding locally, allowing for more devolution of funding, something that has been proposed by previous Finance Commissions. More generally, effective use of technology can also help substitute for government manpower, increase the points of access to government services, help monitor service provision, and reduce leakage in the system.

The debate on whether the public sector should occupy areas that can be done by the private sector will no doubt continue, and there is an obvious case for exiting areas where the public sector contributes little while draining the exchequer and distorting competition. The government should also reconsider its interventions in areas where it adds noise and uncertainty – for instance, the constant fiddling with agricultural import tariffs, the unpredictable closures or opening of export and import windows, and the inability to procure agricultural commodities or release them effectively, does significantly more damage than good to agriculture. While actions are taken in the name of the farmer or the consumer, it is the middleman who often benefits.

Moreover, even when the consumer benefits from high farm production and low agricultural prices, which also help contain inflation, the cost to the farmers can be significant. The case of pulses is revealing. In 2016-17 for example, India witnessed its highest ever domestic production – close to 23 million metric tonnes—likely reflecting a combination of a normal monsoon after successive droughts and the farmer response to higher market prices and MSPs. This was sufficient to fully satisfy domestic demand. Despite that, India imported a hefty 6.6 million tonnes of pulses (almost a third of total domestic production) at zero import duty – leading to a massive domestic supply glut, and a sharp and sustained fall in pulse prices over the next two years which continues to this day, with prices currently 30% lower than their 2016 peaks.

In addition to getting the government out of areas it should not be in, there is an equally urgent task of strengthening the government in areas it does poorly or is virtually absent in – for instance, regulating and certifying educational or medical service providers, apprehending and successfully prosecuting economic offenders, or regulating haphazard development and environmental despoliation without blocking growth.

For growth to be equitable and sustained, we have to reform our education, skilling, healthcare, and welfare systems significantly. Our record on primary education is dismal, with only about half of the children in class five able to do math or reading at the second-grade level. Parents have responded by increasingly migrating to private schooling, but private schools are only slightly better than government schools, and in their current form will not solve the problem of low education quality. It does not get better at higher grades—our PISA scores were so low that we refused to participate again in that international benchmarking exercise. The poor quality of human capital may already be constraining growth (industry is increasingly concerned about the large and growing skill deficit), limits its inclusiveness and prompt a premature move to replace workers with machines.

Healthcare is another area of major concern. In particular, the public system has largely been abandoned by the patients seeking regular primary care. They prefer paying for private treatment even though many practitioners are unqualified and prescribe the wrong treatment in more than 70% of the cases. This is partly a consequence of the failure of the public sector-- public sector practitioners are often absent, and when present they put very little effort into treatment. It is unclear how the recent Ayushman Bharat insurance scheme, which is the main current effort to deal with healthcare issues, will address this issue.

This is especially a problem because dealing with the large growing burden of non-communicable diseases (NCDs) and the many, only partly-solved, child and maternal health issues, relies heavily on getting frontline providers to lead the charge. Similar concerns apply in the education sector. A failure to ensure high-quality education and health care provision means that a substantial proportion of our future labor force will grow up underequipped with skills needed in the labor market and suffering from the long term consequences of stunting and wasting. Much of the middle-aged population will be dealing with debilitating diseases that could have been prevented or controlled. This obviously limits the sustainability and the inclusiveness of growth.

The environment is, of course, a critical challenge to the continuation of our growth and to the extent to which growth translates into improved quality of life. Many of our cities are increasingly experiencing levels of pollution that border on the toxic. If we cannot manage the environment at our present level of development, greater growth will make matters far worse. The consequences of environmentally myopic policies are reflected, for example, in the rapidly falling water table in many parts of the country, which threatens the sustainability of our agriculture. Relatedly, climate change is already having very significant effects on productivity and the quality of lives in India and we need to be at the forefront of global efforts to combat it.

That our current policies do not add up to an inclusive and sustainable growth agenda is reflected in growing agitation across our society. Agrarian unrest, and the constant demand for loan waivers, is now compounded by demands for some form of government support from sections of society that are nowhere near the poorest. This reflects Indians' growing anxiety about their future and that of their children in an increasingly winner-take-all society, where they often end up on the losing side. Our welfare schemes like the MGNREGA and Pradhan Mantri Gramin Awas Yojana are mostly directed towards the very poor (the one exception being the public distribution system), so they do not serve the purpose of protecting those outside that group. Without stronger, sustainable, and inclusive growth we simply do not have the resources to expand our welfare schemes significantly, but if we do generate that growth, not only will there be less demand for welfare but there will be more resources to service any demand.

The bottom line is that while we have performed creditably in the last 25 years across different administrations, we cannot be complacent about our economic challenges. They are mounting. We are a group of economists, each with different specializations and interests, who have come together to offer proposals for the way ahead. Some of us are based in India, some outside, but we are all closely engaged in, and concerned about, India's development. We do not belong to any party, nor are we from the government. We hope this non-partisan analysis of our situation, while not intended to be comprehensive, will help spur debate as India moves to elections. The rest of this note summarizes our proposals, and offers our consensus view on some of the key issues we face. We then append individual notes by members of the group, which offers more details of individual views and proposals. Each note reflects the view of the author(s) in their personal capacity, and does not necessarily represent the institution they are affiliated with.

Macroeconomic stability: a prerequisite to sustainable growth and job creation

India's economic history is replete with the same lesson: preserving and protecting macroeconomic stability is an essential prerequisite to strong and sustained growth. Every time macro stability has been traded off to boost growth, the economy has been pushed towards a crisis, the consequences of which have undermined the very growth that was the initial policy focus.

Ensuring macroeconomic stability has at least three elements to it: maintaining low and stable inflation, ensuring the consolidated fiscal deficit leaves enough space for private investment, and ensuring that the current account deficit is sustainable and can be financed largely through stable capital inflows, to help insulate the economy from sudden swings in global sentiment. High and variable inflation constitutes a regressive tax, with the poor bearing the biggest brunt, since their incomes are typically least indexed to inflation. It also dissuades foreign investors from investing in rupee assets. Similarly, large and unsustainable fiscal/external imbalances impart significant macroeconomic and financial market uncertainty, push up borrowing costs and risk premia in the economy and threaten financial stability. All this impedes private and public investment.

Fiscal consolidation to creating space for more investment

The economy has made significant progress in combating inflation in recent years. Over the last 4 years inflation has averaged just over 4% versus almost 10% in the previous five years, and household inflation expectations are getting progressively anchored. The same, however, cannot be said of the fiscal side. While the center's fiscal deficit has been steadily brought down, the combined deficit of the states – even after adjusting for UDAY – has continued to widen in recent years and, thereby, largely undone the center's consolidation. Consequently, the consolidated fiscal deficit in 2017-18, stood above 6.5%, not very different from its levels five years ago. Our primary suggestions to make progress on this difficult issue are:

- Sticking to the path laid out by the FRBM Review Committee such that the consolidated fiscal deficit is brought down to 5% and general government debt to 60% of GDP
- Formulating a "grand bargain" between the center and the states, giving states incentives to be aligned with the center's fiscal goals, which is something that is currently almost entirely missing:
    - Use the model of the GST council as a successful example of cooperative fiscal federalism
    - Finance Commission awards can be used to reward good behavior.
    - Central guarantees for the market borrowings of the states that go beyond pre-specified limits need to be removed gradually so that a state faces market borrowing costs that are correlated with its fiscal performance.
- Better accounting for contingent and off-balance sheet liabilities of the states and the center, so as to estimate overall government financing needs, and therefore its claim on savings. This is especially important when we add necessary healthcare and pension schemes that will last well into the future. Such entitlements have to be costed based on long term usage and growth, not on current costs, especially since entitlements are virtually impossible to withdraw.

De-risking the external sector

India's heavy dependence on oil imports often results in "boom-bust" cycles on the balance of payments when crude prices change. For example, the CAD narrowed to 0.7% of GDP in 2016-17 as crude prices fell and was then tracking close to 3% of GDP in 2018 when crude prices bounced back up. This resulted in a large balance of payments surplus in the first instance and a large deficit in the second. These sharp swings complicate monetary policy, as well as exchange rate and liquidity management, and create undue external and fiscal volatility (since oil prices also alter the fiscal math). We should:

- Undertake a systematic program to hedge global crude prices, as Panama, Ghana and Mexico have begun to do.
- Carry out a set of steps to de-risk the external sector by
    - Attracting more FDI,
    - Dis-incentivizing "hot money"
    - Encouraging more hedging of foreign currency borrowing by firms
    - Developing domestic substitute financial assets linked to gold prices.

<u>Fixing the Stressed Sectors</u>

Careful but quick policy reforms are needed for the sectors/areas that are stressed. These include agriculture, infrastructure (including power), exports and banking. There are common themes in any revival. Typically, we need to redeploy government effort in each of these sectors, focusing it on areas where it is truly needed to play an enabling role, while freeing the sector of excessive bureaucracy and intervention, which results in inadequate access to markets, distorted prices, and poor incentives. While the recent focus on improving India's ranking on the World Bank's Doing Business measures is commendable, we should guard against the temptation to focus on the specifics of the World Bank measures, while neglecting the broader impediments to producing in India. We now consider each of these sectors in more detail.

Agriculture & the rural economy

We need deep rooted transformation of agriculture, treating it not as a sector that has to be propped up through repeated sops, but as an engine of India's job creation and growth. For that, it is imperative that we thoroughly reform agricultural and land policies. In particular, a key source of agrarian distress in recent years has been that the terms-of-trade confronting farmers has turned progressively more adverse, partly as a result of policies to combat food inflation. While low inflation is desirable in itself, the impact on farmers also needs to be taken into account. A policy priority should be to reduce distortions in farm product prices as well as input prices. Another important enabler is technology, both in educating and informing farmers, as well as in opening access to markets. Some specific proposals include

- Increase investment in research – covering new seeds including genetically modified (GM) ones, latest farming and irrigation techniques and disseminate new techniques widely, including through digital means. Invest in infrastructure such as irrigation, roads, and improved transport and storage logistics. Eschew loan waivers that divert resources from needed investment.
- Ensure that farmers receive more of what is paid by the consumer by
    - Improving farmer access to domestic and international markets by reducing fees, restrictions on competition and building the necessary infrastructure.
    - Foregoing frequent closing or opening of access to international markets
- Facilitate farming at scale for relevant crops
    - through the creation of farmer/producer cooperatives,
    - by enabling easier long-term leasing of land, for which land titling is an important prerequisite.
- Move to a fixed cash subsidy per acre cultivated based on digitizing and identifying plots (as demonstrated successfully by the Rythu Bandhu Scheme of the Govt. of Telangana)
    - Replace price support schemes that are costly (because of corruption and inefficiencies in procurement and storage), ineffective (because procurement is not widespread, especially when and where most needed), and distortionary (because the wrong crops are incentivized).
- Improve and expand the current Pradhan Mantri Fasal Bima Yojana (PMFBY), especially as the climate gets more volatile.
    - Here quick assessment of crop damage using new technologies such as satellite images and drones, as well as quick payout into bank accounts, will enhance adoption.
- For landless laborers, the best short-term policy option is likely to be to strengthen the National Rural Employment Guarantee Scheme. Evidence suggests places with well-implemented NREGS schemes have significantly higher market wages – without hurting employment. Thus, increasing allocations to, and ensuring better implementation of, NREGS may be the best immediate policy option to protect the landless rural poor

- Efficiency of NREGS spending can be increased by working with line departments to improve asset quality and create better quality rural infrastructure

Infrastructure

Accelerating the pace of the infrastructure build-out will help in a number of ways; it will create jobs in construction and new economic activity around the resulting roads, ports, airports, railways, and housing; it will promote inclusion as it connects interior rural areas to markets; it will make our exports (and import-competing manufacturing) more competitive as it reduces input costs such as land (as cheaper areas are connected) and power, as well as improves logistics and reduces transportation costs; it will open up India to both domestic and foreign tourism, which can be a tremendous source of semi-skilled jobs. This will require

- Untangling stalled projects through continued efforts to improve the land acquisition process, addressing environmental clearance issues, improving raw material availability and establishing various sector regulators.
- Improving access to land for development, through computerized land mapping, government-guaranteed titling, the creation of land banks, use of auctions for land acquisition, etc. Some states have been much more successful in these than others. The model of the GST Council can be used for sharing best practices between center and state, as well as for formulating national actions such as land titling reform.
- Freeing up public resources for investment through public finance reforms (asset recycling, asset swaps, expenditure reform).
- Revitalizing public-private-partnerships with appropriate and enforceable risk allocation.
- Creating Special Economic Zones, not necessarily with a sole focus on exports, but also for domestic production. Improved infrastructure and access to land and environmental clearances in such zones can accelerate investment. These can also be “laboratories” for some experimentation with alternative regulations before there is a decision to scale them up. It is important, however, that the SEZ do not degenerate again into opportunities for land-grabbing and rent-seeking.

Power

Despite having some of the largest reserves of coal, as well as having substantial unutilized power generation capacity, India is both short of coal as well as short of power. These are policy self-goals, arising from both the dominant presence of government in coal mining and power distribution as well as populist impulses in pricing. Nevertheless, our low base allows us to choose a path that is both more energy efficient as well as less polluting as we reform the system for the twenty first century. For this we need:

- Free energy pricing to generate more exploration, especially for cleaner gas, while using carbon taxes (or tradeable carbon use permits) to align private incentives and social costs.
- Expand participation in auctions of mining rights for coal
- Allow more competition in allocation of natural gas blocks and exploitation of natural gas resources.
- Improve access and reliability of the power grid so that the use of inefficient diesel generators is reduced.
- Reform distribution by creating competition for state monopolies.

- Integrate renewables into power production, recognizing there will be a need for additional balancing power and storage.

Exports

India's non-oil, non-gold current account has deteriorated by almost 3% of GDP in the last three years, suggesting an urgent need to improve the underlying competitiveness of the tradable sector. Boosting exports should be the lynchpin of that strategy. The existing constraints in the export sector appear to be reflective of more general problems in manufacturing: low scale of production, low productivity, bureaucratic impediments, high cost of inputs like land and power. We have suggested ways to address these earlier. In addition,

- Trade agreements, simpler documentation procedures at ports, and low and stable tariffs are needed so that we can be part of global supply chains. High tariffs and other impediments to cross-border trade not only hamper domestic exporters but will also discourage foreign manufacturers from seeing India as a viable part of their supply chains.

Financial Sector

Given the non-performing asset (NPA) build up in the banking system, it is imperative we make the banking system more robust and well capitalized, expand its capacity to extend credit, and improve incentives to lend to the most productive sectors. While the recent travails of the NBFCs are a matter of concern, some of their problems stem from an overly rapid expansion of their balance sheets as they grew to substitute for banks. Stability in the banking system will help spread stability to other parts of the financial system as, of course, will the reverse.

The main challenges for the banking sector are to improve governance, transparency, and incentives in the banking system. Key measures should include

- Cleaning up bank balance sheets by reviving projects that can be revived after restructuring debt.
- Improving governance and management at the public-sector banks and then recapitalizing them.
- De-risking banking by encouraging risk transfers to non-banks and the market; and reducing the number and weight of government mandates for PSBs, and banks more generally.

The non-bank financial sector needs a strong banking system as well as deep equity and bond markets, supported by liquid secondary markets and a robust regulatory and legal infrastructure. Key priorities include:

- Developing a liquid and deep corporate bond market through policies to encourage institutional investor participation.
- Enhancing liquidity in the government debt market and making it more attractive to institutional and retail investors
- Developing missing (or nascent) markets like fixed income derivatives to hedge the credit and interest rate risk of fixed income securities.

Making growth inclusive and sustainable

A good job is often the most important form of inclusion. In addition, we need to help individuals obtain the human capabilities that will enable them to secure and hold that job, as well as protect those who cannot get jobs. Let us now turn to proposals on inclusion.

Education

The single greatest limitation of the Indian education system is its inability to deliver universal functional literacy and numeracy in primary school. Several studies show that students who fail to achieve basic skills by the end of class 3 learn very little in subsequent years even if they are enrolled in school. Our top education policy priority is therefore:

- A national mission to achieve universal functional literacy and numeracy by class 3. Key elements of delivering on this mission should include:
    - Improve incentives of existing teachers to attend and teach well
    - Providing districts/schools with resources to hire supplemental tutors/utilize new technologies that will provide small-group instruction to students so that they can be taught at the right level.
    - Independent measurement of learning outcomes with rewards/recognition to states/districts/blocks/schools based on improvements in learning.

The Right to Education (RTE) Bill's input-based approach to education quality was unlikely to succeed given the extensive evidence that most school inputs are neither necessary nor sufficient for improving learning outcomes. RTE has led to an unnecessary and disruptive closure of several low-cost private schools that parents were choosing of their own accord. In many cases, even government schools are in violation of these input-based norms. We therefore recommend:

- Repealing all input-based mandates for schools under the RTE (for both public and private schools) and changing the approach to regulation of private schools based on transparency and disclosure as opposed to input-based mandates.
    - Such an approach will facilitate (as opposed to inhibit) the expansion of quality private-school providers.
    - It would also facilitate localized cost-effective innovations by government schools, which may be made difficult by the RTE (such as hiring tutors without formal teaching credentials for providing supplemental instructional support).

- Finally, since school education is mainly in the domain of state governments, we recommend that the MHRD seriously implement the initiative established by the NITI Aayog under it's "School Education Quality Index (SEQI)" initiative. Implementing the SEQI consistently, and tying some amounts of central funding to the extent of improvement in these indicators over time will help to:
    - Shift the policy focus to outcomes rather than inputs and programs
    - Encourage state-led innovation in cost-effective policies to improve outcomes
    - Facilitate documentation and sharing of best practices across states

While improvement in schooling is a key building block to education, we cannot neglect either vocational training/skilling or college education. Both will be critical to providing our youth with the wherewithal for the jobs of the future. High quality research universities will be essential, both to train the teachers for our colleges as well as to fuel the innovation needed for the next stage of our growth.

Dealing with the skills shortage

There is wide recognition that the current models of publicly subsidized skilling are not performing very well even though skills are extremely scarce. What seems to work better is the skilling provided by private firms that are training their own labor force. However, under current laws, firms can employ workers for up to one year after which they either have to fire them or make them permanent. Since there are significant costs and inflexibilities in making workers permanent, many firms keep workers on short contracts and terminate them before they can become permanent. This state of affairs serves neither the firm, which has to hire new workers frequently and has no incentive to train them, nor the worker, who has no security of employment, and who is not trained. At the same time, since the government is often the only employer that offers secure jobs, young people spend their twenties applying for these jobs rather than working. However, these jobs are extremely expensive thanks partly to the munificence of the Pay Commissions and therefore there are too few of them. As a result, a cynic could argue that the government and the private sector lack manpower, while young people sit at home filling applications and preparing for tests. We propose that:

- The law be amended to allow for multi-year fixed term labor contracts, renewable when they end. Severance payments should increase steadily with duration of tenure. The intent would be to move more of contract labor into these fixed-term contracts. These will protect labor better, both initially and over time, and give business some flexibility, as well as greater incentives to invest in training labor.
- We study why public-private partnerships have in general not been a success in skilling and identifying and share best practices, since we cannot afford to give up on this vital issue. In particular, it is worth exploring whether it works better to get firms to expand their existing training programs to include trainees they will not necessarily hire, since these training programs clearly provide useful skills -- rather than relying on stand-alone training firms.
- Governments could set up paid internships for those under twenty-six to work as support staff in government departments in field or staff positions. Performance on these could be an eligibility requirement for applying to government jobs. This will both help relieve the manpower problem in government and generate on the job skilling.

Women's labor force participation

There are clearly both supply-side issues--families not allowing women to work, women feeling disempowered—and demand-side issues—lack of women-friendly jobs in the private sector as well as discrimination. Some useful first steps here:

- Greater representation of women in state and national parliament, as well as in public administration, the judiciary, and the police has been shown to reduce bias against women and encourage families to invest in women as earning members.

- Public safety is an important issue for women, and increasing women in the police is a way to make women feel safer.
- Going beyond quotas, increasing awareness of the costs of not having more women in the work force, as well as behavioral change interventions targeted at both women and their families to encourage women's work are also needed.
- Women-friendly policies in the private sector need to be encouraged but legislating that they will need to pay for child care and maternity leaves may just discourage employing women. These need to be subsidized by public funds, at least until private firms start recognizing that they need women.

Healthcare

There is much to be done to reform the healthcare system in India. Increasingly, non-communicable diseases (NCDs) like heart disease, diabetes, and cancer play a much bigger role, so healthcare needs to be reoriented to address these.

- Expand the public health outreach efforts to private sector providers including those without a medical degree. Given that they provide most of the primary healthcare, they have the reach to transmit our public health interventions (immunization, exercise, testing). Studies in West Bengal suggest that training the private sector health providers improves their performance (measured by sending them "fake" patients) by a very significant amount. Based on that West Bengal has already begun to train many thousands of private sector health providers. Overall, it might make sense to
    - develop a series of simple training interventions that help these practitioners improve the quality of the care they provide
    - develop a set of cell-phone based check-lists for treatment protocols (along the lines that Atul Gawande has proposed for the US but much more basic) for these practitioners to use to react to the common symptoms they face
    - develop a simple test that allows the government to certify these practitioners to be health extension workers, delivering various public health interventions.
    - enforce existing laws that make it impossible for these practitioners to dispense high potency antibiotics and steroids, and encourage referrals for cases where these may be warranted.
- Carry out public health campaigns to raise the awareness of NCDs, immunization, and the dangers of over-medication. Recent evidence suggest that edutainment may be a very powerful device in this regard and should be used extensively
- Build a second district hospital in every district head-quarter outside the state capital. Once it is built and is operational, refurbish and modernize the existing district hospital and bring it to acceptable standards. The current district hospital is typically over-crowded in part because it is the only part of the public system that works somewhat better and private alternatives are expensive. The second hospital will provide much-needed back up for the Ayushman Bharat Scheme if the private hospitals do not cooperate. They can also serve as centers for diagnosis and treatment of NCDs.

Environment

Even while business complains about the difficulty of getting environmental approvals, the quality of our environment leaves much to be desired and with climate change looming we should be thinking in terms of reaching peak emissions within the next decade or so and then sharply reducing them. For all of this we need to get more professional about the environment and climate change, as well as more transparent about the regulatory process.

- A new environmental protection law should be enacted under which pollution regulation is delegated to a fully independent regulator who is appointed for a five-year term and removable only by impeachment. The regulatory agency must be funded automatically through a charge of a fraction of industry revenue. The regulator must be required to use the best available scientific and economic evidence to set pollution fees for pollutants (or inputs closely linked to pollutants) equal to the estimated monetary value of the harm that they cause, and to levy fines for non-compliance. In addition, the regulator may limit or ban some pollutants, and shut down industries that fail to comply. Revenue from fees and fines should go to the government to be used to compensate losers, finance pollution control and clean alternatives, or for the general budget, and should not go to the regulator.
- Policies that would improve energy pricing in the short term pricing can include:
    - Setting Coal India prices at international parity
    - Price electricity at social marginal cost and then use revenues for fairer energy access through, for instance, funding connections under Saubhagya (free of fixed costs) and giving fixed transfers to agricultural users.
    - A separate policy is needed for pollution from cooking and heating fires that is responsible for 25% of Indian air pollution. In order to enable cooking and heating with electricity, electricity bills for low-income households should be refunded up to a limit of 100 KWh/month (300 KWh/month in winter) and a public information campaign conducted via TV and radio to explain the dangers of air pollution from cooking and heating fires. Incentive schemes to prevent burning of crop residue could also be worked out.
    - Adopt EURO fuel standards faster than at present.
- Long term planning changes includes city design that seek to increase public transport, micro electrical vehicles and cycling. India should invest in rail that is easier to electrify (relative to roads). Building regulations should minimize artificial heating and cooling
- Congestion pricing of city traffic by onboard GPS tracking should be mandatory, with revenues used to improve pavements and public transport. The municipality could compensate existing vehicle owners and drivers through a temporary refund of automobile use taxes.

Social Protection

India has more than 400 separate social protection schemes. A vast majority of them are funded at very low levels and do very little. However, they absorb some amount of bureaucratic capacity. And despite the wide variety of schemes available on paper, as the many protests make clear, people do not feel protected. In particular while MGNREGA provides some support for the rural landless, most other relatively poor people have only the PDS to fall back on. This is one reason that it is so difficult to remove any government scheme, however inefficient. There is a clear need to create a reliable pipeline for providing compensation for losers, as we move towards a more rational system of social protection. The Direct Benefits Transfer is a good starting point and building on it by being credible in compensating losers will be key. Specifically we suggest

- Going through the hundreds of schemes and getting rid of most of them, to leave us with a small number that are targeted towards important forms of risk that people face.

- Moving beyond the cash vs kind debate by adopting a choice-based approach on an experimental basis. For example, we could give beneficiaries the choice of opting for a cash transfer instead of subsidized food through the PDS -- instead of policymakers opting for one or the other. With mobile banking and the PDS being digitised with e-PoS machines to enable portability of benefits such a choice-based approach is feasible.
- Automatically indexing social protection programs (such as pensions) to inflation to ensure that their value is not eroded over time. This is especially important since recipients of social welfare pensions are among the most vulnerable.