I have been privileged to have a close association with P. Chidambaram, in various capacities over the past two decades, beginning in 1991 when I served under him as Commerce Secretary and he was the Commerce Minister. When the history of India’s economic reforms post 1991 is written, Chidambaram will undoubtedly figure as the second most important political personality, after Dr. Manmohan Singh, pushing the reform agenda forward. He has a strong conviction that India has the capacity to grow rapidly and compete successfully in an increasingly integrated and competitive world economy and also that this growth can be made sufficiently inclusive to transform the lives of the mass of our people. He recognises that the private sector and markets have a major role to play in India’s development, but he also believes the government must proactively support the process, intervene when necessary to regulate markets and deal with market failure. It is a pleasure to contribute this paper to a volume in his honour as he enters an unprecedented third term as India’s Finance Minister.

The paper focuses on some of the key challenges in achieving the Twelfth Plan scenario of “Strong Inclusive Growth” which targets an average of 8 percent growth over five years. This implies an acceleration from under 6 percent growth in 2012-13, to slightly higher than 9 percent in the last two years. While the economy did achieve 9 percent growth for five years prior to 2008, that was when the global economy was booming. It will be much more difficult in a period when the global economy is projected to remain weak and the Plan itself emphasises that it is feasible only if bold and difficult policy decisions can be taken in many areas. This paper discusses some of these decisions.

The paper consists of five sections. Section I takes the reader back in time to recount how the trade policy reforms of 1991 were implemented. The story is of special relevance for this volume since it describes the critical role played by Chidambaram himself in the first year of reforms, and also because it provides important pointers for policy formulation at the current juncture. Section II briefly outlines what is meant by strong inclusive growth, and especially the relationship between the two objectives of rapid growth and inclusiveness. Section III discusses the macro-economic constraints on achieving faster growth. Section IV discusses constraints posed by three critical sectors, energy water and land, which call for bold policy action. Section V discusses how rapid growth can be made inclusive.

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1 The author is currently Deputy Chairman, Planning Commission, in the Government of India. The views expressed are those of the author.
The Congress Government under Prime Minister Narasimha Rao, which took office on 21st June 1991, inherited a crisis situation. A loss of confidence had caused capital flows to dry up, and foreign exchange reserves had plummeted to rock bottom levels. The new government had to take action even before the Budget could be presented. A modest devaluation of 10% was announced on July 1, but it was clear that this was not enough and a further adjustment would be needed.

Chidambaram had just taken charge as the Commerce Minister and we were busily engaged in briefing him on the need for radical changes in trade policy. I was deeply impressed, as were others, by his razor sharp mind and the speed with which he grasped complex issues and mastered details without losing sight of the big picture. An important initiative we were considering at the time was the replacement of the old REP license system with a new tradable incentive licence for exporters to be called Eximscrips. These would be issued for a face value of 30% of the value of exports, (40% for some products) and could be used to import any item up to this value from the restricted imports list. Being tradable, exporters could sell the license and the price received would reflect the premium people were willing to pay to import restricted items. The sales proceeds would improve export profitability without imposing a direct burden on the budget. Since the total value of Eximscrips would be linked to exports there was no danger of a flood of imports – excess demand for imports would simply lead to a higher premium on the licence. The move constituted a genuine import liberalisation since it would eliminate the need to issue import licenses for items on the restricted list.

The trade policy was scheduled to be unveiled some weeks later, but on July 3 Finance Minister Dr. Manmohan Singh, telephoned me to say that a second exchange rate devaluation would be announced that very evening, and it was necessary simultaneously to announce the withdrawal of Cash Compensatory Support (CCS) for exports. He said he would explain this to Chidambaram a little later, but I should brief him in advance. In briefing Chidambaram, I explained that the Finance Ministry felt that the second exchange rate adjustment would amount to a cumulative devaluation of 24% making continuation of the CCS unnecessary. Abolishing the CCS would also be a signal of seriousness in reducing the fiscal deficit, which was very important for restoring confidence internationally. CCS

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2 Exporters were familiar with tradable licenses because the REP licenses, which allowed duty free imports of the imports needed for exports, were freely tradable. The difference was that REP licenses were designed to allow imports of items imports actually needed for exports and they were allowed duty-free whereas the Eximscrip only allowed free imports of restricted items without any licence, but on full payment of duty.
was a long established instrument for export promotion, and its abolition was bound to provoke criticism from exporters. However, I pointed out that we would avoid this criticism if we could announce the new trade policy we had been discussing, including especially the Eximscrips, and present the abolition of the CCS as part of the new trade policy. Since in those days any change in import policy needed the approval of the Commerce Minister, the Finance Minister and the Prime Minister, this would require exceptionally fast decision making.

Chidambaram agreed to try to persuade Dr. Manmohan Singh to agree to the trade policy reforms being announced that very evening. We trooped off to meet the Finance Minister and Chidambaram explained the proposal in detail to Dr Singh and his key officials. The officials had doubts about the proposed liberalisation, but Dr. Manmohan Singh readily agreed. He asked only how long it would take to work out the proposal and obtain the P.M.’s approval, since the announcement of the devaluation could not be delayed. Chidambaram promptly assured him that we would have the file ready in a few hours.

We returned to the Commerce Ministry and worked feverishly to outline the proposals, with Chidambaram taking a deep interest in all the details. The file was signed by the two Ministers, in quick succession, and then taken by them that very evening to the Prime Minister Narasimha Rao. Chidambaram explained the proposal to the Prime Minister who asked Dr. Singh whether it had his approval. On receiving confirmation, the Prime Minister promptly signed the file (there was no detailed examination by the PMO). Jairam Ramesh, then a consultant in the PMO, was asked to ensure that it received wide publicity.

The second devaluation was duly announced on the evening of July 3 and Dr Manmohan Singh indicated that a supporting package of trade policy reforms would be announced separately by the Commerce Ministry later that evening. On July 4, Chidambaram held a Press Conference to explain the wide ranging trade policy changes. He highlighted the star role of the Eximscrip and also outlined his vision of trade policy in future, stating that it was the intention of the government to reduce tariffs over time and also to move to “full convertibility of the rupee on trade account” in three to five years. The policy received fulsome support from the Times of India, which, in its editorial on July 5 has this to say: “The new trade policy is a commendable example of thinking big. Instead of being a scratch here and fiddle there, it outlines a strategy to make the rupee convertible in three to five years. Its importance lies not in its many individual clauses but in the vision of a new India that stands on its own feet and pays for its imports through exports that do not need artificial props and never ending subsidies.” The editorial concluded by approvingly quoting Chidambaram’s

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3 What was meant by convertibility on “trade account” was that rupees could be freely exchanged for foreign currency to import goods leaving the pressure of excess demand foreign exchange on this account to be reflected in the exchange rate.
words to the Press “We have always had wings, but suffered a fear of flying” and went on to urge “We should now soar in the high skies of trade”.

As it happened, events moved even faster than Chidambaram had anticipated. Eximscripts proved so successful that in less than a year they were replaced by a dual exchange rate. I had moved to the Finance Ministry in late 1991 and in March 1992 we introduced a system in which exporters were required to surrender a portion of their foreign exchange earnings at the official exchange rate selling the rest in the market at a market determined exchange rate. The system worked so well, that one year later in 1993, we moved to a unified exchange rate. Chidambaram’s target of making the rupee convertible on trade account in three to five years was achieved within two years!

Six Lessons from 1991

There are six important lessons from the events of 1991 which are relevant today. First and most important, Chidambaram’s readiness to give up discretionary power in support of a system with much less discretion was absolutely critical. A similar willingness to give up discretionary power in favour of more transparent market driven processes is needed in many areas, not only in the Centre but even more so in the States.

Second, both Chidambaram and Dr Manmohan Singh were willing to take a risk: one can never be sure how a policy change will work out in practice, especially in the short run, and the trade policy of 1991 was a major change. The Finance Ministry officials, who opposed the liberalization, were not willing to take the risk: they suffered from the fear of flying syndrome.

Third, when radical policy changes are contemplated, bureaucrats may have different views, as indeed the senior bureaucrats in the Finance Ministry did on trade liberalisation, but this need not become an obstacle to reform when the political decision makers are clear about what they want.

Fourth, it is easier to make major changes, when they are based on ideas that have been discussed and on which some consensus on policy has emerged. The need for trade policy liberalisation had been extensively discussed among economists. The specific idea of

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4 The exchange proceeds surrendered at the official exchange rate were used for oil imports and government debt service payments, and all items previously on the restricted list were made freely importable using foreign exchange obtained from the market.
Eximscripts was first mooted by Prakash Hebalkar in an article in Business India some years earlier, and both Dr. C. Rangarajan and I had written papers supporting and elaborating this approach. There are many ideas on the table today which have been similarly extensively discussed on which there is considerable professional agreement, though not a complete consensus.

Fifth, it is extremely important to adopt a holistic approach in designing policy to make the maximum impact. The trade policy reforms were explicitly articulated as part of a broader intention to reduce tariffs over time, to open the economy to capital flows, and to move to a flexible exchange rate regime. Had the devaluation and the abolition of CCS been announced as a Finance Ministry initiative on July 3, and the trade policy changes been made a few weeks later, we would not have had the Times of India commending the government for thinking big.

Finally, the episode demonstrates that our much maligned system can deliver results very fast when necessary. I cannot recall any other occasion when such a major restructuring of established policy, involving more than one Ministry, and actually requiring the approval of the Prime Minister, was taken in the short space of about ten hours!

These lessons should be kept in mind as we shape policy to address the challenges facing us in the years ahead.

II. Conceptualising Faster and More Inclusive Growth

The Twelfth Plan states explicitly that although planners are often criticised for focussing too much on growth, this is not the basis on which Indian plans have ever been made. The Twelfth Plan objective is to ensure a broad based improvement in living standards which is captured in the formulation “strong inclusive growth”. Inclusiveness means that growth must not only be rapid, it must also be more inclusive in all the different senses in which the term is used: it must reduce poverty faster, be regionally well dispersed, reduce urban rural differentials, improve access to basic service for all and narrow the gaps between historically disadvantaged groups such as SCs, STs, OBCs and minorities and work to eliminate gender differentials.

Available evidence, summarised in the Plan document, suggests that growth has indeed been more inclusive in recent years than it was earlier. Poverty has fallen much faster after 2004, agriculture has accelerated and real per capita consumption in rural areas has increased at 6.6 percent per year after 2004-05, whereas it increased by only 1.1 percent per year in the preceding ten years. However, expectations have also mounted and much more is expected in this area. Government policy will be judged by how far we can meet heightened
expectations. The Twelfth Plan responds to these expectations by identifying 25 monitorable targets which would measure progress towards inclusiveness of which rapid growth of GDP is only one.

There are two ways in which the inclusiveness objective can be achieved and both are important. One is through government financed programmes which deliver various benefits to the poor. The second is through faster growth itself creating faster expansion of employment and income earning opportunities. Many who are genuinely concerned about inclusiveness, tend to underplay the direct impact of growth viewing it as a “trickle down approach”, and prefer to focus instead on government programmes which appear to address inclusiveness concerns more directly. These programmes are indeed important, and indeed even essential, but the direct impact of growth on inclusiveness should not be underestimated because the “trickle” can become a “flood” depending on the pattern of growth. Some types of growth are inherently more inclusive than others, and policies that succeed in making growth as inclusive as possible can achieve a great deal.

The two channels are also not independent of each other. Faster growth helps the first part of the strategy by generating the revenues needed to fund inclusive programmes. Symmetrically, inclusiveness programmes, especially those focusing on health and education improve the growth especially of the economy. In the rest of this paper we focus on challenges to accelerating growth and the challenge of making growth more inclusive.

II. The Feasibility of 8 percent Growth

Accelerating from less than 6 percent growth in 2012-13 to something more than 9 percent within three years is obviously difficult. Taking a longer term perspective, the acceleration is less formidable but still demanding: from an average of 7.7 percent over the past ten years to 9 plus percent by 2015-16. It is reasonable to ask whether this is really possible in a period when the performance of industrialised countries is expected to be very weak.

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5 Chapter I of the Twelfth Plan lists 25 monitorable targets relating to different dimensions of inclusiveness. Growth of GDP is only one of these targets.

6 The preference for programmes is understandable because they provide direct benefits and the effectiveness of the programme is more easily identifiable and attributable to the programme. CSOs have a special affinity to this approach because CSOs are ideally suited to working with such programmes in a supervisory or advisory role.

7 Using the ten year average GDP growth as the base possibly overstates India’s underlying growth capacity because the global economy was performing above trend for many years. Bhandari (2012) reports that if an H.P. Filter is used to clean the GDP series the average over the last ten years is 7.2 percent. What the Plan target therefore implies is raising this to a sustainable 9 percent by the last two years of the Plan.
If we were counting on an export led growth strategy to achieve this outcome we could rule it out straight away, since exports are bound to be affected by depressed conditions in industrialised countries. However, India’s strategy is based not on an “export led” growth, but rather on efforts to increase the capability of the economy on the supply side. This approach implicitly assumes that if the supply side constraints on growth can be overcome, the aggregate demand needed to support the growth will come from domestic sources, i.e., expanding domestic consumption and higher levels of investment. The strategy builds on the fact that rapid growth over the past several years demonstrates that strong foundations have been laid. It calls for action on several fronts, e.g., (a) achieving high levels of investment to ensure a sufficient growth in capital stock, (b) promoting skill development to ensure the availability of skilled labour needed to support higher growth, and (c) complementing growth in capital and labour inputs by a faster growth of total factor productivity resulting from the pursuit of efficiency enhancing reforms.

**Macro Economic Balancing: Investment, Savings and the CAD.**

A higher rate of investment is critical to remove supply side constraints on growth because it expands the capital stock and therefore the production potential in the medium term. It also provides a demand stimulus in the short term to substitute for weak export demand. The Plan projects that the rate of fixed investment, which reached a peak of 33.7 percent of GDP in 2007-08 and then declined to around 32 percent in 2011-12, will have to rise to 35 percent in 2016-17. The expansion in investment will have to be led by private investment which declined sharply after 2007-08 and needs to be revived.

Micro-economic balancing requires that the increase in investment must be supported by a corresponding increase in domestic savings so that the investment – savings gap, which determines the current account deficit (CAD), is contained at acceptable levels. The savings implications are summarised in Table 1. All three components of savings – household, private corporate and public sector – are projected to increase over time as a percentage of GDP, but the largest improvement is expected from public sector savings, which had experienced the sharpest decline after 2007-08.

If these savings projections are realised, they will reduce the investment savings gap over the Plan period and therefore the current account deficit to 2.2 percent by the end of the Plan. Even so, the current account deficit is likely to remain high at about 3 percent for the next two years, which is well above the traditional comfort level. Financing a current account deficit of this size will pose problems and these are discussed below but the improvement in government savings needed to achieve this outcome is itself a major challenge posing difficult policy choices.
Increasing government savings as projected in Table 1 implies a reduction in the fiscal deficit.\(^8\) A lower fiscal deficit will help to achieve higher investment levels by reversing the squeeze on resources for the commercial sector caused by the expansion of the deficit in recent years. In 2007-08 the net financial saving of the household sector was 11.6 percent of GDP and the combined fiscal deficit was only 4 percent, which meant that about 7.6 percent of GDP was channelled through the financial system to the commercial sector. By 2011-12, the net financial savings of the household sector had declined to less than 10 percent of GDP and the combined fiscal deficit had increased to 8.1 percent, squeezing the amount available from the financial system to less than 2 percent of the GDP! This massive squeeze undoubtedly accounts for the high interest rates and scarcity of finance which has been a constant complaint of investors.

The Finance Ministry has targeted reducing the fiscal deficit of the Central Government from 5.3 percent of GDP in 2012-13 to 3 percent by 2016-17. This implies a combined fiscal deficit of around 5 percent of GDP for the Centre and the States in 2016-17. If the net financial savings of households increase as projected, to say 11 percent by 2016-17, and the combined fiscal deficit is 5 percent the resources available for the commercial sector would expand to at least 6 percent of GDP compared with less than 2 percent in 2011-12.\(^9\)

**Reducing the Fiscal Deficit**

Reducing the fiscal deficit requires action on two fronts: improved revenue collection and reduction of subsidies. Action to mobilise revenues in the short run should ideally focus on better tax administration rather than raising tax rates, since the existing tax rates had produced higher tax ratios earlier. The most important revenue related initiative is the introduction of a Goods and Services Tax (GST) which is expected to improve revenue mobilisation of both the Centre and the states, and also to stimulate economic efficiency. Introducing the GST requires a constitutional amendment and requires the consent of a sufficient number of state governments. Fortunately, early indications suggest that differences are being narrowed which means the GST could become a reality fairly soon. Credible progress towards this end is perhaps the most important signal for markets.

The second element in fiscal consolidation is the control of subsidies. The main central government subsidies are on food, fertilizer and petroleum products (mainly diesel, LPG, and kerosene) and these have increased from 1.42 percent of GDP in 2007-08 to 2.44

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8 An increase in public savings need not lead to a fall in the fiscal deficit if capital expenditure in the public sector is also increased. However, the Twelfth Plan does not envisage a large increase in public sector capital expenditure.

9 Some of this increase in domestic intermediation would be offset by the reduction in the current account deficit, but the net availability of finance would expand substantially.
percent in 2011-12.\textsuperscript{10} The resource projections of the Twelfth Plan assume that subsidies can be reduced to 1.5 percent of GDP by 2016-17. Unless this is done, it will not be possible to finance the various plan programmes outlined in the Twelfth Plan. Reducing subsidies is never easy. There is little appreciation, either by the public, or in the political arena, that if subsidies are not reduced, then either the fiscal deficit will have to be higher than planned, or some items of Plan expenditure may have to be reduced, or additional taxes may have to be levied, and each of these alternatives has adverse consequences.\textsuperscript{11}

The problem is compounded by the fact that subsidies in India involve large leakages and are not targeted to the really needy. An innovation that will help in improving targeting and controlling leakage is the decision of the Central Government, beginning January 1, 2013 to shift progressively to making payments for various schemes e.g. scholarships, old age pensions, widows’ pensions, and also wages under MGNREGA, directly to bank accounts of beneficiaries using an electronic payment system based on the unique ID numbers generated by Aadhar. In due course, the Adhar platform, with its assurance of removing duplication, could be used to provide subsidies directly to beneficiaries in the form of an electronic credit which could be used in the PDS which would assure physical delivery of commodities at a non-subsidised price allowing beneficiaries to use electronic credit to purchase these commodities by paying only the subsidised price. This would eliminate the incentive on the part of those who manage the supply chain to sell the items in the market.

\textit{Financing the Current Account Deficit}

Even if we succeed in reducing the fiscal deficit as projected, we will still be faced with the challenge of financing a current account deficit of around 3 percent of GDP in the next two years. This requires a net inflow of about $60 to 65 billion a year, which should ideally consist of FDI and FII flows, with external borrowing being kept within prudent levels. Failure to finance the deficit would destabilise the strategy, putting pressure on the rupee, increasing inflationary pressure on domestic prices, which in turn would trigger pressure for policies of demand contraction, which would hit investment and lead to lower growth.

\textsuperscript{10} This estimate probably under estimates the full burden of subsidies because of traditional under provisioning for this item in the budget.

\textsuperscript{11} The public debate typically assumes that it is easy to raise resources by taxing the rich and “bringing back black money stashed abroad” but there are limits to what can be achieved through these means. It should be noted that substantial efforts to improve the tax ratio are already factored into the Plan projections. They need to be supported by action on subsidies in addition.
India was able to attract large volumes of capital flows before the 2008 crisis, but that was in a very different global environment. Although fears of worst case scenarios in the global economy, such as the collapse of the Euro or the US being pushed over a fiscal cliff have now receded, the availability of capital for emerging market countries remains uncertain. Despite these uncertainties, it can be argued that India can attract external capital on the scale required if the economy is once again seen as reverting to a higher growth path, with macro-economic balances under control, and a Government policy that is seen as welcoming foreign investment.

The prospects for a return to high growth depend on the implementation of the various policy initiatives discussed in this paper. As far as policy towards FDI is concerned, government has taken several steps which signal its keenness to attract FDI and FII flows. FDI in single brand and multi brand retail has been liberalised, and FDI limits in airlines, broadcasting, pension fund management and insurance have been increased. Some of these initiatives, especially raising the FDI cap on insurance from 26% to 49% are subject to Parliamentary approval and investors will wait to see if the legislative process is completed, but government’s desire to attract FDI should not be in doubt. While those pushing for further liberalisation naturally focus attention on those areas where some restrictions remain in place, the areas of the economy that are already open are very large. On the FII front, some actions taken at the time of the 2012-13 budget had created uncertainty in the minds of investors. Recognising these concerns, two expert committees were appointed – one under Dr. Parthasarthy Shome and the other under S. Rangachary – to look at these issues. Some of the recommendations of these committees have already been accepted and a positive decision on others would greatly help to reassure foreign investors.12

**Reviving Investor Sentiment**

The increases in domestic savings discussed above are necessary to support higher levels of investment, but they do not ensure that investors will make the investment decisions that would actually lead to higher investment. As noted above, the investment revival projected in the Twelfth Plan is based on a strong increase in private investment, and this depends critically upon the state of animal spirits. These in turn are driven by a combination of psychology, perceptions of global conditions and various domestic factors. Global conditions are outside our control, but there are a number of domestic factors that have had a negative effect on investor sentiment that need to be addressed.

In the short run, the most urgent task is to resolve the problems faced by a large number of infrastructure projects that are held up for a variety of reasons. Several power

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12 At the time this paper was written the application of the General Anti Avoidance Rules (GAAR) had been postponed by 2 years.
projects are stuck because of non availability of domestic coal and gas. Both coal and gas can be imported, but import prices of these fuels are much above domestic prices, creating a reluctance to import. Tariff rationalisation is a pre-requisite for absorbing the higher costs of imported fuel. While some tariff revisions have taken place in the recent past, an arrangement that passes on higher fuel prices to consumers is not yet in place. If open access to consumers is introduced, the marginal costs of imported fuel can be passed on to consumers through the market mechanism. Expeditious resolution of this problem would help. Many infrastructure projects are also held up because of lack of environmental and forest clearances. Environmental concerns are certainly important and it is probably true that in the past they were not given the attention they deserve. However, there is also a perception that clearance procedures are unduly dilatory and also non-transparent. Delays are partly a consequence of the fact that Ministries exercising regulatory functions are often under pressure from environment activists, who tend to take extreme positions, and also seek the intervention of the Courts. For all these reasons, the system does not function in a manner which encourages adoption of a holistic, problem solving approach.

The draft Twelfth Plan document had drawn specific attention to this problem, and called for a new mechanism to resolve the problem. When the draft was discussed in the full Planning Commission, it was Finance Minister Chidambaram who suggested that the problem could be resolved by setting up a National Investment Board chaired by the Prime Minister, and empowered to resolve these issues. This idea has since been implemented in the form of a new Cabinet Committee on Investment, chaired by the Prime Minister, which will seek to resolve problems where decisions on large projects are unduly delayed. The establishment of the Committee is an innovation which could help speed up decision making while also balancing different concerns.

In the longer run, perhaps the most effective way of stimulating a strong revival of private investment would be to address India’s infrastructure deficit, which is a major factor lowering productivity and competitiveness. The Eleventh Plan emphasised infrastructure development and met with some success in this area as investment in infrastructure increased from 5 percent of GDP during the Tenth Plan to 7.2 percent in the Eleventh Plan. Recognising the scarcity of public resources, the Eleventh Plan consciously adopted a strategy of increased reliance on private investment in infrastructure. This strategy proved

13 It is worth noting that the Courts do not always support environmental activism when it intervenes against projects. In the case of the Vishugad-Pipal Koti Hydro-electric project, an environmental activist challenged the validity of the environmental clearance and the petition was rejected by the Green Tribunal. This was appealed to the Supreme Court. The Bench, consisting of justices H.L. Dattu and Ranjan Gogoi, dismissed the petition and observed that “The moment a power project is to start, litigation is filed in courts. If initially the project cost is Rs.1000 crore, it escalates to Rs.10,000 crore over the years and tax payer money is wasted. We really wonder what people in this country say. They say they don’t want a hydro-electric plant or a nuclear plant but every body wants bijli (electricity).
successful and the share of the private sector in infrastructure investment increased from 20 percent in the Tenth Plan to 37 percent in the Eleventh Plan. A recent World Bank report states that India has been the top recipient of PPP activity in infrastructure since 2006.

The challenge ahead is to build on the achievement in the Eleventh Plan and raise the total investment in infrastructure to 9 percent of GDP by the end of the Plan period. This implies a total investment in infrastructure in the Twelfth Plan period of around $1 trillion. Since there will be heavy demand on public resources from sectors such as health and education, the share of the private sector in infrastructure investment will have to increase to 48 percent, and this is reflected in the increase in corporate investment projected in the Twelfth Plan. This is by any standard a very ambitious target and achieving it depends critically on our ability to address various problems currently hampering PPP projects.

**Problems with PPP Based Investments**

While the expansion of PPP projects in recent years is a major achievement, many implementation problems have arisen which need to be addressed quickly if the objective of attracting private investment to build infrastructure is not to be jeopardised. Five elements are particularly important.

First, PPPs must be governed by well defined concession agreements which specify the standards of service delivery expected, the price that can be charged to customers and the division of risks between the concessionaire and the government. This should be followed by a robust competitive bidding process for award of the project. If the concession agreements are subjected to public debate, it should be possible to reassure the public that the process is fair and protects public interest. Competitive bidding is clearly critical to avoid the usual suspicions about cronyism.

Second, concession agreements should include penalties for non performance on the part of the concessionaire and also the government. Penalties for the concessionaire help to reassure the public that the concessionaire cannot blithely ignore service standard obligations. Penalties on the government for non-performance are also important since they incentivise government officials to deliver as promised in order to avoid accountability for invocation of the penalty. Experience shows that many PPP projects are inordinately delayed because of the lack of clearances of various sorts including relatively simple matters such as shifting of utilities. Compensatory clearances triggered by such delays improve the balance of risks in the project and encourage concessionaires to bid higher amounts for award of the concession.

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14 Logically, risks must be assigned to the party best able to manage them. Thus in a road concession, the risk of non performance in terms of timely shifting of utilities, or completion of some land acquisition must be borne by the government while the risks associated with mobilising financial and physical resources, and all the construction risks must be borne by the concessionaire.
Third, PPPs once awarded must be closely monitored to ensure that the standards of service prescribed in the concession are actually achieved and that customer grievances are attended to. The central government has recently introduced a standardised monitoring system for all PPP projects which will ensure effective monitoring and oversight of service delivery.

Fourth, PPPs need effective dispute resolution mechanisms to deal with disputes which are bound to arise in the course of implementation including disputes during the operation of the concession. This is an extremely important requirement as our existing system is visibly deficient on this score. Disputes relating to payment demands are often not settled expeditiously because of the tendency on the part of government agencies to appeal all decisions against the government, often going all the way to the Supreme Court. This only creates an environment in which good quality private investors will shy away from participation. A possible solution is for the government to set up a common dispute settlement mechanism for all disputes relating to PPPs in infrastructure.

Finally, infrastructure projects need to be financed by long term debt, preferably in domestic currency. Reduction of the fiscal deficit, as discussed above, will help to increase the availability of financial resources. This must be accompanied by progress towards developing a healthy corporate bond market. India has developed a fairly sophisticated capital market for listed equities, but the corporate bond market is much smaller than it should be. Long term debt should be raised through the bond market and not through banks, which are subject to limits on asset liability mismatches, but banks prefer to extend loans rather than extend credit through investment in corporate bonds. The insurance industry is the most logical source of funds for corporate bonds and the proposal to increase the FDI limit in insurance from 26% at present to 49%, which is pending parliamentary approval, assumes special importance in this context. It is also necessary to consider whether the regulatory restrictions imposed on insurers are suitable to allow such financing. Recent regulatory changes which allowed the establishment of Infrastructure Debt Funds should help and the creation of these funds should be actively promoted.

State governments have a major role in infrastructure development since they are responsible for much of the infrastructure relevant for investors. This includes availability of reliable power, quality of urban infrastructure, especially water and sewerage, the existence of industrial estates facilitating easy location of industry, the quality of state and district roads linking up with the National Highway system, etc. Since state governments also have resource constraints, they would be well advised to rely on PPP as much as possible and many states are actually doing so. They should consider creating specialised units within the
government that would help implementation of infrastructure projects in PPP mode, taking account of the major problem areas listed above.

**Ease of Doing Business**

Improving the “ease of doing business” can have a major positive impact on investor sentiment and should be high on the government’s agenda. India currently ranks 132<sup>nd</sup> out of 185 countries in a World Bank report on ease of doing business, based on performance on 10 separate components listed in Table 2 (IBRD 2009). Interestingly, India’s ranking varies considerably across indicators, from a very respectable 23<sup>rd</sup> in “getting credit” to an abysmally low 182<sup>nd</sup> in “getting construction permits” and 184<sup>th</sup> in “enforcing contracts”.

Some of indicators listed in Table 2 refer to areas in the domain of the states, but others require action by the Central Government. Some of the problem areas such as resolving insolvency and enforcing contracts involve deep institutional reform, including changes in the law, and possibly also changes in judicial procedures. The Central Government has taken several initiatives in this regard. A new Company Law, with improved processes for resolving bankruptcies, has been introduced in Parliament. The Judicial Accountability Bill provides for the establishment of specialised commercial benches which should accelerate decision making in commercial cases. Digitalisation of courts and court procedures is underway and should help expedite the legal process. The full impact of these initiatives will take time to surface. The effectiveness of new laws is known only after they are tested in the courts but the fact that these issues are being addressed should help create a favourable investment climate.

**III. Some Sectoral Constraints on Growth**

The high growth target calls for reforms in many sectors in order to produce the higher rate of total factor productivity growth which is a key element of the supply side strategy. Discussion of the full reform agenda is beyond the scope of this paper. In this Section, we focus on three factors, energy, water and land that could present serious constraints on growth if necessary reforms are not introduced.

**Energy Policies to Support Growth**

Rapid growth requires an expanded supply of energy and this could prove to be a major constraint since India is not well endowed with domestic energy resources. We have traditionally been highly import-dependent in petroleum products, but we now face rising import dependence for natural gas and also thermal coal. This would be less of a problem if supplies were freely available in world markets at low prices but in fact imported energy is expensive, and energy prices are not expected to fall. Both balance of payments
considerations and energy security considerations therefore suggest that we need to contain energy demand on the one hand and increase domestic production on the other. This calls for action on several fronts.

Ten of the most important policy issues are listed below. Taken collectively, they represent a fairly extensive reform agenda in which some of the difficult actions have to be taken by the Centre, while others are in the domain of the states.

(i) Energy prices have a crucial role to play in balancing energy demand and supply. To constrain demand, prices facing consumers should reflect the true cost of energy, so that energy efficiency is incentivised. To incentivise supply, prices facing producers must reflect the cost of the marginal source of supply, i.e., imports, so that investment in production of energy is sufficiently encouraged. The present configuration of energy prices does not meet these requirements. Domestic prices for diesel, LPG and kerosene are significantly lower than trade parity prices. Prices of Indian coal are also well below the prices for imported coal, even after adjusting for the higher calorific value of the latter. Domestic natural gas prices are around one third the price at which imported gas is available. Prices cannot be adjusted to cover the full gap at one go, but there must be general acceptance of a phased adjustment, over say a two year period for petroleum products including natural gas, and perhaps three to four years for coal.

(ii) The area where the need for price adjustment is most discussed is petroleum products where state owned petroleum companies are suffering large under-recoveries on account of diesel, LPG and Kerosene, much beyond the capacity of the budget to subsidise. Some steps have been taken. A small adjustment in diesel prices was made in 2011 and a two step approach implemented in January 2013 whereby prices of bulk supply of diesel (about 18 percent of the total) were fully adjusted, while in the case of retail sales a phased adjustment has been announced involving small monthly increases in prices for retail sales which would eliminate under recovery over 18 months. The supply of subsidised LPG cylinders has been limited to nine per household, with purchases above this number being at the market rate. With these adjustments, the under-recovery on petroleum products in 2013-14 would be reduced from an estimated Rs. 160,000 crore if the changes had not been made, to around Rs. 135,000 crore. This would be further reduced to Rs. 55,000 crore in 2015-16 when the entire diesel under-recovery is eliminated and LPG and kerosene are the only areas of under-recovery. This is a substantial adjustment over a two year period but the subsidy is still very high. It could be reduced further if there is some upward adjustment of the subsidised prices.
of LPG cylinders and also of kerosene, both of which are much lower than in neighbouring countries.\textsuperscript{15}

(iii) A phased increase in coal prices is also necessary to align domestic prices with global prices.\textsuperscript{16} This should not be viewed as a windfall gain for the domestic coal industry. It is needed to cover higher costs of remedial action to compensate for loss of forest cover, which is likely to become more important in future, and also to encourage a shift to underground mining which is much less damaging to the environment than open cast mining, but is also more expensive. India produces only 10\% of its coal through underground mines whereas China relies dominantly on underground mines. It is essential to increase the share of coal produced through underground mines.

(iv) Almost 40 percent of India’s potential coal mines are in forest areas and opening new mines, or even expanding production in existing mines in these areas, requires environmental and forest clearances, including clearances for the construction of railway lines and roads to transport the coal. Environmental protection is critical for sustainability, but as noted earlier, the existing process of granting clearances involves a great deal of arbitrariness about the conditions under which clearances will be given. There is need for a comprehensive review of the existing procedure to ensure that decisions are taken on the basis of strictly scientific considerations. Furthermore, if scientifically sound considerations really prevent the exploitation of large volumes of our domestic coal resources, we should recognise this explicitly and plan for a much larger volume of imports. This would make it more urgent to align domestic prices more closely with import prices to make it easier to absorb imported coal.

(v) There is a strong case for repealing the Coal Nationalisation Act since both petroleum and natural Gas are much more valuable than coal, and they are both open to private sector exploration and development. Private sector mining in coal is currently allowed for captive mines but such mines are not allowed to expand their production to meet other domestic demand even though we are importing much higher priced coal at the margin. There is no logical reason why the coal sector should not be opened up for non captive mining.\textsuperscript{17} Until

\textsuperscript{15} This calculation assumes no increase in volumes. If we allow for volume increases the subsidy would be higher.

\textsuperscript{16} It is not easy to define the relevant global price for coal since only a small portion of total coal production is traded, and domestic coal prices in coal producing countries are lower than prices of traded coal. However, some comparator reference price can be worked out.

\textsuperscript{17} This does not mean the privatization of Coal India; it only means opening coal production to competition from the private sector. Since the Government has already decided that coal mining blocks will in future be awarded on the basis of competitive auctions, the private sector could be brought in through a transparent procedure of allocation.
that is done, Coal India should buy surplus coal from domestic captive mines at a suitably incentivised price to avoid having to import at a much higher price.

(vi) If prices of primary energy sources increase as discussed above, it will also necessitate an upward revision in average electricity tariffs. Electricity tariffs are too low at present to cover current normative costs in many states and increases in electricity prices are a politically sensitive issue at the state level. Nevertheless, a rise in prices has to should be accepted in the interest of ensuring a financially viable power sector. Higher electricity prices will incentivise consumers currently receiving underpriced electricity to economise on electricity use and will also help to encourage a shift to renewable energy which is currently more expensive than conventional energy and is viable only with a subsidy. The need for a subsidy will be reduced if electricity prices are raised to cover economic costs. The adverse impact of higher electricity tariffs on the poor can be easily met by providing a lifeline supply of electricity to all consumers at a low price for the initial slab and offsetting this by higher prices on the balance amount.

(vii) The distribution sub-sector in electricity is critical for the viability of the sector as a whole because it is this sub-sector which generates the revenues to cover upstream payments to generating and transmission companies. Distribution remains largely Government owned and suffers from losses due to a combination of technical inefficiencies and outright theft. A turnaround in the financial position of discoms is critical for future expansion in the power sector because generation projects will not be able to obtain finance if they are seen as selling power to discoms that are financially unviable. Introducing the private sector into electricity distribution, at least in some areas, could improve efficiency and would facilitate competitive benchmarking for the system as a whole. Improved efficiency in distribution will also help moderate the rise in electricity prices that would otherwise be necessary to cover higher fuel costs. This is an area where action lies entirely with state governments.

(viii) The introduction of Open Access is another important reform which is entirely within the hands of state governments. It would create a competitive market in electricity for bulk consumers, incentivising independent power producers to compete with the local utility to supply reliable power to such customers at a negotiated rate. The distribution companies would be paid a wheeling charge for the use of the network and also a cross subsidy surcharge to cover the cross subsidy which bulk consumers are expected to bear to cover the underpricing for lower income consumers. The competitive pressure introduced by open access would also encourage the utilities to become more efficient in order to retain their paying bulk consumers. The Electricity Act (2003) had mandated that open access should be implemented by January 1, 2009. Unfortunately open access has not been operationalised in any state.
(ix) The terms under which contracts have been awarded for exploration of oil and natural gas under the New Exploration and Licensing Policy (NELP) have been criticised because they provided for cost recovery before determining profit petroleum (which is then shared with the government) and this was felt to be prone to misuse. The formula for determining the gas price in the case of gas fields also needed revision to reflect changed market conditions. Recommendations for simplification of the contract terms and a new formula for gas, linking the price of natural gas to be paid to producers to a combination of global gas price indicators are being considered. Early implementation of these recommendations would create an environment which would attract more investors to bid for NELP blocks.

(x) Looking further ahead, it is necessary to plan for a much larger use of renewable energy especially solar and wind energy. Renewable energy is more expensive than conventional energy but costs are falling especially for solar photovoltaic generation. Rationalisation of electricity prices as proposed above will make renewable energy more competitive without the need for a subsidy. The use of renewable energy also needs to be facilitated by allowing easier integration of decentralised electricity production into the grid through use of smart grids, including “net metering” which allows surplus solar electricity to be fed back into the grid. Time of day tariffs will be particularly supportive of solar energy since it is available precisely at times of peak demand and higher electricity tariffs at times of peak demand would make solar energy more competitive. Once again this is an area where the states have to take a lead, through the state electricity regulatory commissions.

The ten policy actions listed above define a wide ranging agenda for reform which would go a long way to creating an energy sector which is capable of supporting the country’s transition to 9 percent growth. They involve an increase in energy prices which is politically difficult but is in line with what has been proposed in the Twelfth Plan. It is necessary to mould public opinion to a realisation that we need to move in this direction if we want to achieve our objective of balancing energy demand with supply, while also containing import requirements and shifting to renewable energy sources. Most importantly, the public needs to be educated to realise that if we fail to rationalise energy prices we may not be able to achieve the rapid growth targeted which also means other expectations, including those relating to employment opportunities and inclusiveness, will need to be scaled down.

The Problem of Water Scarcity

Water is another area which presents new challenges. Until recently, the overall water availability situation in the country was viewed as reasonably comfortable, although there were areas of acute water scarcity. The latest assessment is less sanguine and it is estimated
that on a business as usual basis total demand may exceed supply by as much as 50 percent. Since water deficits cannot be made up through imports, what this really means is that unless water use efficiency is increased greatly, the growth rate projected simply cannot be achieved.

Water is a state subject and virtually all the steps needed have to be taken by state governments though the Centre can help with financial resources. As in the case of energy, the policy agenda includes many difficult decisions. Public awareness of the issues involved is much less than in energy, partly because most of the decisions are at the state level and most state governments have not initiated public discussion on these issues. Fortunately, this is an area where we can move more slowly provided we do so decisively. Ten steps needed to respond to the water problems are listed below.

(i) State governments should give priority to completing ongoing large irrigation projects as quickly as possible, instead of spreading limited resources thinly on multiple projects. Thin spreading of resources is motivated by the desire to stake as wide a claim as possible to available resources, but it has the consequence of greatly delaying benefits from the schemes underway.

(ii) Agriculture currently accounts for about 80 percent of total water use but this could easily be cut by 40 to 50 percent for many crops by using modern techniques of planting such as the system of rice intensification (SRI) and through greater use of drip irrigation. Unfortunately, farmers have little incentive to use canal water efficiently since it is priced at about 15 percent of the operating and management costs, with capital costs left out completely. This makes large irrigation systems financially unviable, leading to poor maintenance and deterioration. It also encourages farmers in upper reaches of the system to appropriate disproportionate amounts of water for growing highly water intensive crops, while farmers in the lower reaches of the system don’t get water. The problem of equitable access to water cannot be solved by raising prices since price adjustments needed to ensure equitable distribution would be too large and politically unacceptable. The problem can only be overcome by establishing water regulatory authorities which are empowered to enforce an appropriate distribution of canal water between drinking needs, industrial use and agricultural use, with further regulation to ensure equitable distribution throughout the command area. This has been done in Maharashtra with some success, and the practice needs to be spread more widely.

(iii) Rational use of ground water is more difficult to achieve because the law at present gives individual farmers the right to extract as much water as they want from bore wells on
their own land and underpricing of electricity only encourages over use. The result is gross overdrawal of water in many states, with the water table declining sharply, to the disadvantage of poorer farmers who cannot afford powerful pumps. However, there is hope that once farmers realise the unsustainability of current practices, they will themselves be willing to accept cooperative solutions which reduce ground water use. Andhra Pradesh provides an example where farmers have co-operated to adopt cropping patterns which do not involve excessive use of water. Active involvement of NGOs that have built up credibility by working in this area can be a great help.

(iv) An important step in encouraging co-operative action by farmers is greater knowledge of the state of the aquifer to determine the sustainable rate of drawal. The Twelfth Plan proposes a detailed exercise for mapping all aquifers over the Plan period which would help establish sustainable rates of drawal. This is a first step for organising farmers to cooperate in finding collective solutions. The Centre has a big role to play in getting this done.

(v) It is necessary to expand the existing programme of watershed management to conserve water as much as possible by constructing water holding structures on the surface and accelerating ground water recharge. Such projects are much more cost effective than large irrigation schemes, and are also much less disruptive in terms of uprooting people. State governments should give much greater priority to these projects in their own plans and the central government should incentivize this process by increasing allocations to the central government watershed management programme, and also by allowing convergence with other central schemes to promote such efforts. Since, the returns from investment in watershed management are much higher than on larger irrigation projects, the Central Government would do better to put more resources in this area than supporting large irrigation projects. States could consider imposing a cess on electricity for agriculture in all areas where water tables are falling, and earmark the proceeds of the cess to fund ground water recharge in those areas.

(vi) Given the likelihood of water becoming a scarce natural resource, there is an overwhelming case for the Central Government to fund agricultural research directed towards developing crop varieties capable of handling water stress without loss of productivity.

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18 This is sometimes defended by farmers on the grounds that canal water pricing does not even cover maintenance with no coverage of capital costs and it is therefore only fair that electricity is underpriced to put farmers dependent on ground water on a level playing field since they bear the full capital cost of the pump.
(vii) Water efficiency in industrial applications also needs to be increased. Power generation accounts for about 80 percent of water used in industry and Indian power plants consume 8 to 10 times as much water per MW as plants in developed countries because of inefficiencies in technology for both cooling and ash handling.\(^{19}\) There is a strong case for the Central Electricity Authority using regulatory steps to force a switch to water saving technology for future power plants. The additional capital cost involved should be fully reflected in the price allowed to be charged for power.

(viii) Pollution of fresh water sources reduces effective availability and regulation should work to prevent it by ensuring that all water drawn from these sources for urban consumption should be treated to an acceptable level before being returned to water bodies or to the ground. Water supplied to urban households and other urban consumers should therefore be priced to cover not only the cost of delivering potable water, but also the associated cost of sewage treatment, so that water is returned in an acceptable condition. Imposition of higher charges for water will be vociferously resisted on the ground that water is a basic necessity, but this concern is best met by ensuring a minimum “lifeline supply” to each household at an affordable price, while water use above the minimum is priced to cover full cost. Unless user charges are rationalised in this way, the water utility will not be financially viable. Since urban governments do not have the fiscal capacity to cover costs, this will mean inadequate investment to expand supplies and continuing water pollution.\(^{20}\)

(ix) Industrial units should be forced to treat all effluent before discharge, and the polluting units should bear the full cost of treatment at the site. Supply of fresh water to such units should also be priced high so as to encourage them to treat and reuse water as much as possible. Where there are a large number of small scale units, it may not be possible for each unit to set up a water treatment facility, but groups of units can do so collectively and bank finance should be provided for this purpose.

(x) Rational management of the nation’s water resources requires optimising the use of water in inter-state rivers. Unfortunately, as water is becoming scarcer, it is increasingly difficult to reach agreement among states on sharing of inter-state rivers. Although water is a state subject, the Constitution contains a provision whereby inter-state rivers can be regulated...

\(^{19}\) Most plants in India use the “once through system” for cooling, in which water used for cooling is discharged without recycling, instead of the “closed loop system” in which the water is recycled after topping up with fresh water to offset evaporation.

\(^{20}\) Since inadequate supplies inevitably lead to inequity, with water being denied to poorer areas, the poor get pushed to get water from tankers at much higher cost.
provided Parliament passes a law for this purpose but this has never been attempted. The only law passed thus far is for the establishment of Water Tribunals to settle inter state water disputes, and this mechanism is proving less and less effective. A possible way forward is to pass a National Framework Law, with the consent of the states, which would not impinge on their sovereignty but would establish general principles which might govern the sharing of water in inter-state rivers.

Land

Rapid growth of the economy requires land to be available for new industries and industrial expansion, and also for expanding urbanisation. Ideally, land required for such expansion should either be provided by the government from government owned land or be purchased from willing sellers at a market determined price. However, several problems arise. Concern is sometimes expressed that this will divert land from agriculture, compromising food security. This fear is greatly exaggerated since the diversion over the next twenty years will be a miniscule portion of total agricultural land, and can be more than made up by increases in land productivity which are entirely feasible.

A more serious problem is that the existence of multiple owners of small holdings can make it difficult to purchase land in the quantity required of the likelihood that some land owners will refuse to sell. To overcome this problem, land for industry has in the past often been obtained by compulsory acquisition under the Land acquisition Act. This has led to considerable resistance on the part of land owners for what is seen as coercive acquisition at unfair prices determined on the basis of the very low rates used in official records. The problem is compounded when the acquisition is in tribal areas as in the case of mining leases. In these cases the land is not owned by the tribals, but its acquisition disrupts their traditional lifestyles.

These problems are sought to be addressed by a new Land Acquisition and Rehabilitation Bill which has been introduced in Parliament. The Bill allows compulsory acquisition of land for public purposes, which include the establishment of state owned industrial estates, but with enhanced rates of compensation and provision for rehabilitation of those other than landowners whose livelihood would be disrupted by the acquisition. It can also be used when land is needed for private industry to deal with the hold out problem, when most of the land has been acquired in the market but some pockets cannot be obtained, but with the additional requirement that rehabilitation provisions must apply to the whole project area including the portion acquired through market sales.

The proposed legislation will create a fairer basis for land acquisition from the perspective of landowners. As far as industry is concerned, it will encourage state
governments to acquire land that is not fertile and may be remote from urban areas at present, but could be made accessible by building road and rail connectivity. Such estates could be pre-cleared for certain industries from the environmental perspective. If state governments were to provide good quality industrial estates, with necessary infrastructure in place, it would automatically put a ceiling on land costs for new industries since those wishing to set up new or expansion units would have the freedom to go to these estates or find their own location elsewhere if they can get it cheaper. States that act quickly to set up such estates would be able to attract more investment.

V. Growth and Inclusiveness

Thus far we focussed on the macro-economic and sectoral constraints on achieving faster growth. In this section, we focus on the challenge of making growth more inclusive through the two channels discussed earlier, viz, implementing programmes aimed at inclusiveness and adopting policies that will make growth internally more inclusive.

*Plan Programmes Aimed at Inclusiveness*

Over the years, the central government has evolved a large number of programmes aimed at promoting inclusiveness. The more important of these are listed in Table 3, classified into three broad categories. The first category consists of programmes which aim at increasing the earning power of the poor, either individually or through the development of areas which are backward where development will help hitherto excluded sections of the population. The second category includes programmes for education and skill development and healthcare which not only directly improve welfare, but also increase the growth potential of the economy over a longer period by upgrading the quality of the human resources. The third category of programmes can be viewed as transfers to supplement the income of the poor. All these programmes are “centrally sponsored schemes”, for which the Central Government provides resources but the schemes are implemented by the state governments.

The total resources devoted to these programmes in 2012-13 amounts to Rs. 2,10,067 crore, or a little over 40 percent of total provision in the Centre’s budget for plan expenditure, including support to the states. Advocates for greater inclusiveness typically push for more expenditure on the programmes they are interested in. The level of expenditure on these programmes is certainly relevant for the inclusiveness of the strategy but, it is necessary to go beyond expenditure to consider actual impact on welfare. Fortunately, there is now an accumulation of evidence on the functioning of most programmes based on monitoring and evaluation studies. As one would expect, performance varies across programmes and in individual programmes across states. However, while monitoring tells us whether the
programmes are delivering results, it does not always tell us how performance can be improved. Much depends heavily on how the programmes are designed and how well they are implemented on the ground. The fact that these programmes though funded by the Centre, are implemented by state government agencies poses its own set of problems.

The extent to which programmes do not necessarily produce early results can be seen from the experience in primary education, which has been a priority area. Substantial resources have been allocated to this area though the Sarva Shiksha Abhiyan and the Mid Day Meal Programme. School facilities have expanded and primary school enrolment is now near universal. School attendance has also improved, thanks to the Mid Day Meal. However, despite the expansion in inputs, the quality of education provided remains poor. The Annual Status of Education Report (ASER), conducted regularly by Pratham since 2006, show that almost half the children in grade V cannot read what children in grade II should be able to read. The situation is better in some states, and worse in others, but the variation is relatively narrow around a generally low mean. More disturbingly, the surveys show no improvement over time on average, though there are interesting differences across states there is a slow improvement in the Southern and Western States and a slow deterioration in Northern and Eastern states.

Teacher absenteeism and low motivation is a major factor explaining poor learning outcomes, but there is no consensus on how to remedy the situation. Official policy focusses on improving teacher training, but field results show that better trained teachers do not perform better in terms of regularity of attendance or motivation. Some think that the answer lies in better school supervision by the existing system of school administration, with stronger penalties for non performance such as withholding promotions. Others advocate more radical solutions such as hiring teachers initially on contract and confirming them only later, and promoting them subsequently only on the basis of performance. However, but it is not clear whether existing rules or teacher unions will allow such arrangements. Many believe that the solution lies in empowering panchayats to supervise schools through Education Committees of the Panchayat. However, states have done little to give these bodies effective control over functionaries and funds and there are also serious capacity constraints which limit the ability of elected representatives in these bodies to exercise effective control. 21

Similar problems exist in health. Health care centres have not been expanded on anything like the scale that has been achieved for primary education, but the Twelfth Plan has substantially increased the central government allocation for the health sector, giving it the largest expansion of all sectors. However, while the focus of the health programme is to

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21 Evaluation studies have found that whereas Village Health and Education Committees have been set up in many panchayats, it is often the case that those listed as Members are not aware of this fact!
provide PHCs and sub centres with qualified staff, the real problem is that even where PHCs and sub-centres exit, and qualified staff have been posted, the service delivery is poor. Field studies show that qualified doctors do not really perform better than untrained or semi trained personnel.\(^2\) This suggests that larger financial resources to expand the system without reforming the system itself, may not deliver results.

States often complain that resources provided under various centrally sponsored schemes are encumbered by rigid Central guidelines, which are often not suited to the specific conditions of the state. This is a valid concern and the Twelfth Plan – therefore, proposes to introduce greater flexibility in the guidelines to tailor them to state specific requirements. It is also proposed to allow states to use 10 percent of the funds provided by the centre in specific schemes as a flexi fund for projects in the general area without having to abide even by the state specific guidelines. This will give the states much needed flexibility to innovate, which is highly desirable.

The scope for expanding the set of inclusiveness oriented programmes is obviously constrained by the total availability of resources. Allocations for some programmes – notably health and education – have to be increased substantially over time since the expenditure on these sectors is currently below what may be called a reasonable international norm. There is much that needs to be done to improve the efficiency in use of resources in health and education, but the need for additional resources in these areas cannot be disputed. However, priority to health and education only means that the other inclusiveness programmes will be more constrained.

The scope for expansion in other inclusiveness programmes should depend on the assessment of their effectiveness compared with other claimants for public resources. Two groups of alternative claimants are relevant in this context. The first is the set of programmes which have a direct impact on growth such as expanded investment in infrastructure, investment in science and technology, higher education, and transfers to states to assist in their development. The other source of competing demands for resources is the subsidies in the system. As noted earlier, central subsidies on food, fertilizer and petroleum products together account for about 2.4 percent of GDP, which is larger than the total expenditure on all the inclusiveness programmes listed in Table 3. The food subsidy can be viewed as sacrosanct, but subsidies for petroleum products are not and resources currently eaten up by this subsidy may have a greater inclusive impact if diverted to well targeted inclusiveness programmes or to programmes that promote inclusive growth. Since subsidies are non-Plan expenditure, the scale of subsidies are not part of the resource allocation exercise for the Plan

\(^2\) Refer to Himanshu et al in Health Affairs
although, as noted above, the resource projections in the Plan are based on a reduction in these subsidies from 2.4 percent of GDP in 2011-12 to 1.5 percent in 2016-17.  

**Making Growth Itself More Inclusive**

We now turn to the second track in promoting inclusiveness which relies on adopting policies that will make the pattern of growth itself inherently more inclusive. Two key components of the Twelfth Plan strategy, which are particularly relevant in this context, are the promotion of agriculture and faster employment creation through the manufacturing sector.

**Agricultural Growth and Inclusiveness**

Agricultural growth is critical for inclusiveness if only because agriculture is the dominant activity for half the population. Fortunately, agriculture has accelerated from 2.4 percent per year in the Tenth Plan to 3.4 percent in the Eleventh Plan. The uptrend in productivity that began in the Eleventh Plan is expected to continue and the Twelfth Plan target of 4 percent growth is therefore eminently achievable.

Since agricultural GDP now accounts for only 14 percent of total GDP, an increase in agricultural growth from 3.4 percent to 4 percent will directly contribute less than a tenth of one percentage point to overall GDP growth. This may appear negligible, but the impact on inclusiveness will be much greater because it is a larger proportion of their incomes. Faster agricultural growth will also be associated with greater upstream and downstream economic activity in rural areas which adds to rural income and employment. Higher incomes in rural areas on all these counts also lead to higher rural consumption, which in turn generates economic activity in the form of shops, food stalls, and even personal services such as beauty parlours. For all these reasons faster agricultural growth can be expected to have a very positive impact on rural poverty.

The policies required to achieve the 4 percent growth target for agriculture cover a number of areas and action is already underway in many though there is room for improvement. This includes better water management, improved extension services to spread better agricultural technology, strengthened credit delivery, better seeds, and improved rural infrastructure.

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23 A special problem with subsidies is that they are open ended in the sense that the amounts mentioned in the budget are often based on assumptions that prices will be suitably adjusted to live within the total provided but these decision are not taken.

24 Upstream activity, i.e., traders selling agricultural inputs and the expansion of machine leasing and repair services, does not figure in agricultural GDP, which only measures value added in agriculture, but it adds to non-agricultural GDP and generates rural employment. This is also true of downstream activity related to post harvest management, transport and marketing.
infrastructure generally, especially access to electricity and better road connectivity to markets. Since the mix of crops and non-crop agriculture varies according to agro-climatic conditions, the agricultural strategy.

Some aspects that call for focussed attention are listed below. As in other areas, some of the actions that have to be taken are in the realm of the Centre but others are in the hands of states.

i) Indian agriculture has been diversifying away from foodgrains and towards horticultural crops and non crop agriculture such as dairying, poultry and inland fisheries. This is a natural process which will accelerate but non-foodgrain agriculture requires special marketing support, including post harvest management and logistic infrastructure such as chilling plants, refrigerated trucks, etc. Marketing of perishable produce, unlike the case with foodgrains, will be dominated by the private sector or cooperatives where these exist and this calls for radical reform of outdated Agriculture Produce Marketing Committee Acts to allow freer private sector entry into markets including the possibility of direct purchase from farmers. This is an area that lies entirely in the domain of state governments, but vested interests have prevented bolder action thus far.

(ii) There is need for a strategic shift in agricultural policy away from subsidising inputs, such as fertiliser and power, towards investing larger amounts in other ways of increasing land productivity. The total provision for fertilizer subsidy in the Central budget in 2012-13 was Rs. 72,000 crores whereas the total plan provision for agriculture, including agricultural research irrigation and watershed management was only Rs._____ crore. Not only is the total volume of subsidy too high compared with other support measures, it is also characterised by distortions which have a negative effect on productivity. Nitrogenous fertilisers (N) are excessively subsidised compared to P and K.\textsuperscript{25} Excessive subsidisation of N leads to overuse of urea, disturbing the nutrient balance in the soil and reducing soil productivity over time. Furthermore, while chemical fertilisers are subsidised, organic fertilisers, which are environmentally better, are not. Fertiliser subsidy is entirely in the hands of the central government and corrective steps must be taken by the Centre.

(iii) Similar considerations arise in relation to the subsidy on electricity supplied to agriculture, which is borne by state governments. The scale of this subsidy is not easily quantified because most state governments keep electricity tariffs lower than they should be, but it is at least Rs.30,000 to Rs.40,000 crore if properly computed.

\textsuperscript{25} The imbalance has worsened recently because the subsidy for P and K fertilisers has been shifted to a fixed nutrient based subsidy, with prices to the farmer varying with world market prices while urea prices have not been changed since 2002. As world prices of DAP and MOP have shot up, the prices of these fertilisers have increased sharply
(iv) Rationalisation of tenancy laws is another area which is important for inclusiveness. The agriculture dependent population includes a very large proportion of families with very small holdings which are not viable to cultivate. However agriculturists are typically unwilling to sell their land, and they are also unwilling to lease it out for fear that the tenant may gain tenancy rights. In some states, tenancy is not legally allowed. There is a strong case for amending the laws to allow small and marginal land holders to lease out their land, with the confidence that they could reclaim it if needed, there would be a more efficient allocation of land to farmers able to expand, while facilitating those wanting to move out of farming to do so, at least temporarily.²⁶ The Twelfth Plan has proposed an innovative idea of creating a “Village Land Bank” in which farmers could “deposit” the land, with the right to withdraw the land after a specified number of crop years, and the land bank can then lease out the land for the stated period paying the lease rental to the original depositor. Interposing a public agency between the lessor and the lessee will increase the security that the land can be reclaimed.

v) Agricultural research needs to be greatly strengthened both in terms of the resources devoted to it and also by implementing institutional reform along the lines recommended by the Mashelkar Committee and the Swaminathan Committee. While some changes have been made, the bulk of the recommendations have yet to be implemented. With the looming threat of climate change, it is necessary to strengthen the National Agricultural Research System very substantially. Some of the uncertainty that has been introduced into the procedures for clearing new GM varieties also needs to be resolved.

*Employment Generation in Manufacturing*

One of the best ways growth can be made more inclusive is to ensure that it creates a sufficient number of new employment opportunities to satisfy the aspirations of the new entrants into the labour force, and also absorb some of the labour which should move out of agriculture.²⁷ This can be done in many non-agricultural sectors such as transport, tourism health, education etc. but the experience of other emerging market countries is that a large part of the new employment must be created in manufacturing. Manufacturing in India has underperformed in this respect because it has not grown as rapidly as it should have and has been much less labour intensive than might have been hoped.

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²⁶ NSSO Surveys reveal that 49 percent of farming families want to move out of farming because they no longer view it as profitable. This is often projected as a failure of policy but a gradual shift out of farming to more productive job opportunities is a natural part of the development process. The key issue is whether such opportunities outside agriculture are being provided. The object of policy should not be to stop the efflux but rather to make sure that it is a smooth shift to higher income earning activity.

²⁷ Agriculture should not be seen as an area for increase in total employment. In fact we need to plan to facilitate people moving out of agriculture for better paying jobs outside which will also raise income levels of those who remain.
The growth of manufacturing in the Eleventh Plan was only 7 percent against a target of double digit growth. The Twelfth Plan assumes a significant acceleration in manufacturing from 2.5 percent growth in 2011-12 to 10 percent by the end of the Twelfth Plan. Some of the reasons why the growth of manufacturing has disappointed have already been discussed. They include weaknesses in infrastructure, especially power supply and transport connectivity, problems related to the ease of doing business and the scarcity of financial resources because of high fiscal deficits. Corrective action in these areas should raise the growth of manufacturing in future.

Faster growth in manufacturing also requires a shift in the structure of the sector which at present is characterised by a few large firms at the capital intensive end of the spectrum, which account for a substantial proportion of manufacturing value added but relatively little employment, while at the other end of the spectrum there is an inordinate concentration of small firms with employment below 50 workers per firm. There are not enough firms in the middle category, employing say between 100 to 300 persons. Whereas the very small firms are very labour intensive, they typically do not operate at high level of technology and do not offer quality jobs and most of them are unlikely to have the dynamism to support rapid growth. It is the missing firms in the middle category, which could have provided the foundation for strong manufacturing sector providing a wide range of high quality jobs. The more successful of these firms could be expected to grow to larger scale, exerting competitive pressure on established larger units, while also expanding total employment in the process.

Encouragement of this middle size segment would contribute to both faster growth and greater employment generation. One of the ways in which middle sized companies can be incentivized to expand is the development of industrial estates which provide ready availability of land and other necessary infrastructure. The development of clusters, which provide economies of agglomeration, is also important. As noted earlier in the context of land availability, state governments need to plan actively for setting up modern industrial estates and also for the development of clusters in order to create an environment in which middle sized technologically capable firms can flourish. The proposal to establish National Manufacturing Zones, which is an integral part of the Twelfth Plan manufacturing strategy, is a step in this direction and success in this area would be critical.

Another area of policy that is relevant for both the growth of the manufacturing sector and for its employment generation potential is the reform of labour laws. India’s labour laws are generally regarded as more complex than those of most other countries and also less flexible. Employers do not have the flexibility to reduce the size of the permanent workforce, or to close down an industrial unit, when faced with a decline in demand, except with the
permission of the relevant government, which is almost never granted in practice. This discourages investors from labour intensive areas of production. Those that do venture into this area and are in a position to expand, often forego economies of scale that might come from expansion, and set up multiple smaller units in different locations to avoid having to deal with a large labour force. Employers also try to get around the law by hiring a large proportion of their labour force in the form of contract workers, who are kept on the rolls only temporarily, and rotated out before the time period when any worker has to be given permanent status. Restrictive labour laws are often cited as one of the factors that prevented Indian entrepreneurs from reaping the full benefit of the abolition of the Multi Fibre Agreement, which eliminated quota restrictions on imports of textiles and garments into the industrialized world.

Reform of labour laws is a politically sensitive issue and there is an understandable suspicion that those advocating it are taking an anti-labour position, based on simplistic “hire and fire” notions. This suspicion is understandable in a country where unemployment is a problem and especially at a point when the economy is going through a slowdown. The political sensitivity of the issue has meant that government has taken the position that a change in labour laws will only be made when a consensus has evolved. This has yet to happen but there is no doubt that the issue is important and will have to be addressed sooner or later.

It needs to be clarified that no reasonable person would advocate a simplistic hire and fire policy in our situation. However, many of the provisions in the existing laws are archaic and could be changed without compromising genuine labour interests. Looking ahead, there is a case for arguing that Indian industry needs a degree of flexibility comparable with that available in other countries with whom we are competing in our markets and globally and this can be done while observing accepted standards of labour rights.

The real problem is that we do not have a system of social security which would provide unemployment benefits to individuals who lose their jobs, with the scale of the benefits related to the period of employment. In the longer run, it is necessary to move towards such a system to be funded by a combination of contributions by employers and workers with the government having a residual role. Setting up such a system may initially involve payments by the government to cover the excess of payments that may have to be made until a reasonable corpus is built up and this deficit would have to be covered by the government, but it would quickly be self financing. Introduction of such a system as part of a package which gave greater flexibility to shed labour if needed might be acceptable to labour interests. It would certainly encourage a much faster growth of employment in the organized sector, which is surely what any Trade Union leadership would want.
V. Conclusion

The issues discussed in this paper are only a subset of the full agenda of reforms which needs to be undertaken if India is to realise the scenario of “strong inclusive growth” presented in the Twelfth Plan. These reforms will contribute to the growth of total factor productivity which, together with growth of primary inputs, mainly capital and human resources, provide the impetus for growth from the supply side. A comprehensive discussion of these reforms is beyond the scope of this paper. The paper has attempted to highlight a number of critical policy challenges which need to be addressed if we are to achieve the objective of strong inclusive growth. A credible response requires actions by the central government and also by the state governments. Business as usual, with incremental change here and there will not do. Harking back to the lessons of 1991, we need to think big and do things differently, often taking a risk with new approaches, and finding ways of over-riding bureaucratic delays. If we fail in this endeavour, we will be reduced to trying what the Times of India in 1991 rightly derided as “a scratch here and a fiddle there”, which will definitely not achieve the objective of achieving faster, more inclusive and sustainable growth.
## Table 1

**Macro Economic Parameters of the Twelfth Plan**  
*(As percentages of GDP)*

<table>
<thead>
<tr>
<th>Ratios in Constant Prices</th>
<th>2007-08</th>
<th>2011-12</th>
<th>2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gross Domestic Capital Formation</td>
<td>39.0</td>
<td>37.9</td>
<td>40.0</td>
</tr>
<tr>
<td>2. Fixed Investment, of which</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>8.2</td>
<td>7.8</td>
<td>8.4</td>
</tr>
<tr>
<td>Private Corporate</td>
<td>15.0</td>
<td>11.6</td>
<td>14.8</td>
</tr>
<tr>
<td>Household</td>
<td>10.5</td>
<td>14.3</td>
<td>11.8</td>
</tr>
<tr>
<td>Ratios in Current Prices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Gross Domestic Savings, of which</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Savings</td>
<td>22.4</td>
<td>22.3</td>
<td>23.5</td>
</tr>
<tr>
<td>Private Corporate Savings</td>
<td>9.4</td>
<td>7.2</td>
<td>8.5</td>
</tr>
<tr>
<td>Public Sector Savings</td>
<td>5.0</td>
<td>1.3</td>
<td>4.3</td>
</tr>
<tr>
<td>4. Gross Domestic Capital Formation</td>
<td>38.0</td>
<td>35.5</td>
<td>38.7</td>
</tr>
<tr>
<td>5. Investment Savings Gap(^1)</td>
<td>1.2</td>
<td>4.7</td>
<td>2.4</td>
</tr>
<tr>
<td>6. Current Account Deficit</td>
<td>1.3</td>
<td>4.2</td>
<td>2.2</td>
</tr>
<tr>
<td>7. Fiscal Balance (Centre plus States)</td>
<td>-4.0</td>
<td>-8.1</td>
<td>-5.0</td>
</tr>
</tbody>
</table>

Note: Data are taken from Tables 2.2, 2.3 and 2.5 in Chapter 2 of the Twelfth Five Year Plan Vol.1.

1 The difference between the rate of Gross Domestic Capital Formation and the rate of Gross Domestic Savings in current prices should be identically equal to the current account deficit. The difference in the figures in the table is due to errors and omissions since the current account deficit is as recorded in the balance of payments statistics whereas the investment and savings figures are from the national accounts.

2 Data for 2011-12 are estimates and for 2016-17 are projections made by the Planning Commission in connection with the Twelfth Plan Exercise.
<table>
<thead>
<tr>
<th>Indicators</th>
<th>India’s Rank in 185 Countries</th>
<th>State or Central Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Starting a Business</td>
<td>173</td>
<td>Mainly state government</td>
</tr>
<tr>
<td>2. Dealing with Construction Permit</td>
<td>182</td>
<td>State government</td>
</tr>
<tr>
<td>3. Getting Electricity</td>
<td>105</td>
<td>State government</td>
</tr>
<tr>
<td>4. Registering Property</td>
<td>94</td>
<td>State Government</td>
</tr>
<tr>
<td>5. Getting Credit</td>
<td>23</td>
<td>Banks/Central Government owned</td>
</tr>
<tr>
<td>6. Protecting Investors</td>
<td>49</td>
<td>Centre and States</td>
</tr>
<tr>
<td>7. Paying Taxes</td>
<td>152</td>
<td>Centre and States</td>
</tr>
<tr>
<td>8. Trading Across Borders</td>
<td>127</td>
<td>Central Government</td>
</tr>
<tr>
<td>9. Enforcing Contracts</td>
<td>184</td>
<td>Both Centre and States</td>
</tr>
<tr>
<td>10. Resolving Insolvency</td>
<td>116</td>
<td>Centre</td>
</tr>
</tbody>
</table>

**Overall Rank in Ease of Doing Business out of 185 countries** 132
Table 3

Inclusiveness Programmes during Eleventh Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Programme Description</th>
<th>2012-13 (BE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)</td>
<td>33,000</td>
</tr>
<tr>
<td>2.</td>
<td>National Urban Livelihood Mission</td>
<td>838</td>
</tr>
<tr>
<td>3.</td>
<td>National Rural Livelihood Mission (NRLM)</td>
<td>3,915</td>
</tr>
<tr>
<td>4.</td>
<td>Pradhan Mantri Gram Sadak Yojana (PMGSY)</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Schemes under JNNURM for the poor</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)</td>
<td>4,900</td>
</tr>
<tr>
<td>7.</td>
<td>Backward Region Grant Fund (BRGF)</td>
<td>12,040</td>
</tr>
</tbody>
</table>

**Livelihood and Income Support**

| 8.  | Sarva Shiksha Abhiyan (SSA)                                                          | 25,555       |
| 9.  | Rashtriya Madhyamik Shiksha Abhiyan (RMSA)                                           | 3,124        |
| 10. | Mid Day Meal (MDM)                                                                   | 11,937       |
| 11. | National Health Mission (NHM)                                                        | 20,542       |
| 12. | Integrated Child Development Service                                                 | 15,850       |
| 13. | Rashtriya Swasthya Bima Yojana (RSBY)                                                | 1,017        |
| 14. | Rajiv Gandhi Drinking Water & Sanitation Mission (RGDWSM)                            | 14,000       |

**Income Supporting**

| 15. | National Social Assistance Programme (NSAP)                                          | 8,382        |
| 16. | Indira Awas Yojana (IAY)                                                             | 11,075       |
| 17. | Welfare of ST including tribal sub-plan and article No. 275(a)                       | 3,861        |
| 18. | Welfare of SC&OB                                                                     | 4,753        |
| 19. | Scholarship for Minorities                                                           | 1,260        |

**Total**                                                                                     **2,09,983**

**As percentage of GDP**                                                                    **2.07**

**As percentage of Total Plan Expenditure**                                                  **40.32**