ECONOMIC PLANNING IN INDIA

For the possible remedies of the country's economic stagnation, poverty and backwardness; state has to play a key role in economic and social spheres. Planning is the instrument to carry out these duties. It is the systematic and scientific utilization of available resources to achieve national goals. While the short-term objectives varied from plan to plan, the long-term objectives of Indian planning are based on the principle of high growth rate, social justice and economic self-reliance.

STRATEGY OF INDIAN PLANNING

The strategy for Indian Planning is based on the principles of comprehensiveness, balanced development and accelerated growth to be achieved through the instrument of mixed economy. The 1990 crisis, however, brought some major changes in our strategy. Year 1991 was the watershed in the history of Indian planning. The key objectives of strategy of planning in India included:-

1. Economic Development:

The main objective of Indian planning is to achieve the goal of economic development economic development is necessary for under developed countries because they can solve the problems of general poverty, unemployment and backwardness through it. Economic development is concerned with the increase in per capita income and causes behind this increase. Economic development refers to the raising of the people from inhuman elements like poverty unemployment and ill heath etc.

2. Increase Employment:

Another objective of the plans is better utilization of man power resource and increasing employment opportunities. Measures have been taken to provide employment to millions of people during plans. It is estimated that by the end of Tenth Plan (2007) 39 crore people will be employed.

3. Self-Sufficient:

It has been the objective of the plans that the country becomes self-sufficient regarding food grains and industrial raw material like iron and steel etc. Also, growth is to be self sustained for which rates of saving and investment are to be raised. With the completion of Third Plan, Indian economy has reached the take off stage of development. The main objective of the Tenth Plan is to get rid of dependence on foreign aid by increasing export trade and developing internal resources.

4. Economic Stability:

Stability is as important as growth. It implies absence of frequent and excessive occurrence of inflation and deflation. If the price level rises very high or falls very low, many types of structural imbalances are created in the economy. Economic stability has been one of the objectives of every Five year plan in India. Some rise in prices is inevitable as a result of economic development, but it should not be out of proportions. However, since the beginning of second plan, the prices have been rising rather considerably.

5. Social Welfare and Services:

The objective of the five year plans has been to promote labour welfare, economic development of backward classes and social welfare of the poor people. Development of social services like education, health, technical education, scientific advancement etc. has also been the objective of the Plans.

6. Regional Development:

Different regions of India are not economically equally developed. Punjab, Haryana, Gujarat, Maharashtra, Tamil Nadu, Andhra Pradesh etc. are relatively more developed. But U.P., Bihar, Orissa, Nagaland, Meghalaya and H.P. are economically backward. Rapid economic development of backward regions is one of the priorities of five year plans to achieve regional

equality.

7. Comprehensive Development:

All round development of the economy is another objective of the five year plans. Development of all economic activities viz. agriculture, industry, transport, power etc. is sought to be simultaneously achieved. First Plan laid emphasis on the development of agriculture. Second plan gave priority to the development of heavy industries. In the Eighth Plan maximum stress was on the development of human resources.

8. To Reduce Economic Inequalities:

Every Plan has aimed at reducing economic inequalities. Economic inequalities are indicative of exploitation and injustice in the country. It results in making the rich richer and the poor poorer. Several measures have been taken in the plans to achieve the objectives of economic equality specially by way of progressive taxation and reservation of jobs for the economically backward classes. The goal of socialistic pattern of society was set in the second plan mainly to achieve this objective.

9. Social Justice:

Another objective of every plan has been to promote social justice. It is possible in two ways, one is to reduce the poverty of the poorest section of the society and the other is to reduce the inequalities of wealth and income. According to Eighth Plan, a person is poor if the spends on consumption less than Rs. 328 per month in rural area and Rs. 454 per month in urban area at 1999-2000 prices. About 26 percent of Indian population lives below poverty line. The tenth plan aims to reduce this to 21%.

10. Increase in Standard of Living:

The other objective of the plan is to increase the standard of living of the people. Standard of living depends on many factors such as per capita increase in income, price stability, equal distribution of income etc. During the period of Plans, the per capita income at current prices has reached only up to Rs. 20988.

The key strategy had following aspects

- Comprehensive developmental planning.
- Mixed Economy
- Priority development of Public Sector
- Accelerated growth.
- Balanced development:
- Emphasis on Employment

The 1990 crisis brought a paradigm shift in our strategy, from a closed to open system, and from independence to greater inter-dependence (Rao-Manmohan Model). The major components of the model included -

- Liberalization of economy.
- Abandonment of the policy of priority development of Public Sector
- Opened door to foreign private investment
- Integration of economy which world economy

TYPES OF PLANNING:-

(1) **Directive Planning/Imperative Planning:**- The first plan to Seventh Plan are directive Plan, in this economic activities are rigidly regulated by government.

(2) **Indecative Planning/Soft Planning:**- Under this incentives and disincentives are provided to economic entities (capatilist type).

(3) **Centralised Planning:**- The central government take a single plan to entire country.

(4) **Decentralised Planning:**- The whole plan are prepared and implemented at various level.

(5) **Democrative Planning:**- Under this the plans are prepared by the consultation with people.

(6) **Financial Planning:**-Under this the plans are estimated and allocated in terms of money. e.g. Tarees, Profit

(7) **Physical Planning:**-Under this the resources are estimated and allocated in their real term, e.g. Labour force, natural resources etc.

(8) **Perspective Planning:**-This types plans are long term based and goal specific with a given time frame. (10-20 yr)

(9) **Fixed Planning:**- Under this types of plan the term, Policies and target are fixed.

(10) **Rolling Planning**:- Medium terms plans are prepared to coming year with annually arrestment.

Short Term Planning → 1 Year

Medium Term Planning → 4-6 Years

Perspective Term Planning→(15-30 Years)

Multi-Level Planning:

a. By 1980s, India had a system of Multi-Level Planning
b. Levels:
    i. First Level – Centre:
        1. 5 year plans, 20 point program, MPLADS
    ii. second Level- States:
        1. State Planning Boards with CM as Chairman made state level plans
        2. State level plans were parallel to centre level plans
    iii. Third Level – District:
        1. District Planning Boards with DM as Chairman
        2. These plans are now implemented by Panchayats and Municipalities
    iv. Fourth Level – Block:
        1. A part of district level planning
    v. Fifth Level – Local:
        1. Village level Planning
        2. Hill Area Planning
        3. Tribal Area Planning
c. Failure:
    i. Absence of people's participation
    ii. No coordination among various levels
    iii. Only central level plans were implemented due to lack of resources with states and local governments
    iv. Before 73rd and 74th Constitutional Amendment Acts, Local Bodies did not have a constitutional mandate

PLANNING COMMISSION – established- March 1950, Chairperson- PM, Deputy Chairperson- Economic expert, Members (8- 10), their terms and qualification- ………………………..
Non statutory and extra Constitutional body, created by a cabinet resolution,
Objective- assesement of resources and make plan for their judicious use.
Functions

- Economic Planning- Allocation of resources, advising government on economic policy, recommendations regarding strategy for development
- Resource allocation to states – fixes annual size of funds for state
- Interministerial Coordination – to ratify and monitor implementations of development programmes, of various ministeries.

Criticism of Planning Commission – politicization, clashes among ministeries, bureaucratization, undermining the role of finance commission, one size fit all approach etc.

NATIONAL DEVELOPMENT COUNCIL – setup in 1952 by an executive order of government, Chairperson- PM, members- All union cabinet minister, all CM, all administrators of UTs, All members of planning commission.
Non statutory and Extra-Constitutional
Adjunct to planning commission
Objective – to evolve a nation wide concensus over economic policies, by associating state government in planning process.

Functions- to assist and guide planning commission in formulation of plans, final approval to plan given by it, to monitor implementation of plan and to make changes if required.

NATIONAL INSTITUTION FOR TRANSFORMING INDIA (NITI Ayog)

The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015. NITI Aayog is the premier policy 'Think Tank' of the Government of India, providing both directional and policy inputs. While designing strategic and long term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States.

The Government of India, in keeping with its reform agenda, constituted the NITI Aayog to replace the Planning Commission instituted in 1950. This was done in order to better serve the needs and aspirations of the people of India.

At the core of NITI Aayog's creation are two hubs – Team India Hub and the Knowledge and Innovation Hub. The Team India Hub leads the engagement of states with the Central government, while the Knowledge and Innovation Hub builds NITI's think-tank capabilities. These hubs reflect the two key tasks of the Aayog. NITI Aayog is also developing itself as a State of the Art Resource Centre, with the necessary resources, knowledge and skills, that will enable it to act with speed, promote research and innovation, provide strategic policy vision for the government, and deal with contingent issues.

NITI Ayog v/s Planning Commission

Planning Commission was an advisory body, and so is Niti Ayog. But the key difference between them is that while the former had powers to allocate funds to ministries and states; this function will be now of finance ministry. Niti Ayog is essentially a think tank and a truly advisory body.

The role of states in the planning

How NITI Aayog is different from planning commission

	NITI Aayog	Planning commission
Planning	Bottom up approach	Top down approach
Financial powers	Advisory (powers finance ministry)	Enjoyed financial powers
States role	More significance role– Part of governing council	Limited to National development council
Type of plan	More of qualitative	Quantities plan

commission era was limited. The states annually needed to interact with the planning commission to get their annual plan approved. They had some limited function in the National Development Council. Since Niti Ayog has all chief ministers of states and administrators of UT in its Governing Council, it is obvious that states are expected to have greater role and say in planning/ implementation of policies.

The provision of regional council is there in Niti Ayog to address local / regional development issues. One of the new functions of Niti Ayog is to address the need of the National Security in the economic strategy. How this is to be done – is yet to be watched. While the planning commission formed Central Plans, Niti Ayog will not formulate them anymore. It has been vested with the responsibility of evaluating the implementation of programmes. In this way, while Niti Ayog retains the advisory and monitoring functions of the Planning commission, the function of framing Plans and allocating funds for Plan assisted schemes has been taken away.

Aims and Objectives of Niti Ayog

- NITI Aayog is essentially an advisory body that seeks to provide critical directional and strategic inputs across spectrum of key elements of policy to the centre as well as states.
- It also seeks to put an end to the slow and tardy implementation of the policy by fostering inter-ministry, inter-state and centre-state coordination.
- Strong states make a strong nation, is the core idea; and the Ayog will foster cooperative federalism by evolving a shared vision of national development priorities.
- It has been envisaged to follow the bottom-top development approach whereby, it would develop mechanisms to formulate credible plans to the village level and aggregate these progressively at higher levels of government.
- It would also pay attention to the weaker sections of the society that may not have benefitted from economic progress.
- It would create a knowledge, innovation and entrepreneurial support system via a community of national and international experts, practitioners and partners.
- It would serve as a platform for resolution of inter-sectoral and inter-departmental issues in order to accelerate the implementation of the development agenda.
- It will also monitor and evaluate the implementation of programmes, and focus on technology upgradation and capacity building.

History of Planning

d. 5 year plans started immediately after independence on the pattern of Soviet Union
e. First 5 year Plan (1950-51 to 1955-56):
    i. At the time of first plan, country was facing:
        1. Influx of refugees
        2. Severe food shortage forcing import of grains
        3. Mounting inflation
        4. Economic imbalances as a result of 2nd World War
    ii. Objectives of first 5 years plan:
        1. Increasing national income and raising the standard of living of people
        2. Increasing the pace of industrialisation
        3. Increasing employment potential of various sectors
        4. Narrowing both vertical and horizontal inequalities
        5. Achieving self reliance and reduced dependence on foreign aid
        6. Rapid development of agriculture and irrigation
        7. Refugee settlement
        8. Multipurpose Power Projects

    iii. Growth Rate in first 5 years plan – 3.7% per annum

f. Second 5 year Plan (1955-56 to 1960-61):
    i. Focus:
        1. Rapid industrialisation and establishing basic and heavy industries
        2. Increased production of iron and steel and chemical fertilizers
        3. Increase in National Income by 25%
        4. To create more employment opportunities
        5. To reduce inequalities in income and wealth

g. Third 5 year Plan (1960-61 to 1965-66):
    i. This phase was the 'take off' stage
    ii. Top priority to Agriculture and basic Industries
    iii. Objectives:
        1. To achieve 5% increase in National Income
        2. Self sufficiency in food grain production
        3. Expansion of basic industries like iron and steel, chemicals, fuels and power
        4. To utilize fully the human resource of the country and to expand employment opportunities
        5. Reduction in income disparities
        6. Balanced regional development
    iv. Because of War with China and War in 1962 with Pakistan in 1965, focus later shifted to defence production and development

h. Annual Plans:
    i. Annual Plans of 1966, 1967 and 1968-69 described as Plan Holiday because of some exceptional circumstances like:
        1. War with Pakistan 1965
        2. Severe droughts in successive years
        3. Devaluation of currency

i. Fourth 5 year Plan (1969-1974):
    i. Objectives:
        1. Accelerating the tempo of development
        2. Reducing fluctuations in agricultural production
        3. Managing the impact of uncertainties of foreign aid and developing self reliance
    ii. The plan laid special emphasis on improving condition of weaker section through the provision of employment and education
    iii. Growth rate – 3.4%

j. Fifth 5 year Plan (1974-1979):
    i. Severe inflationary pressure on economy at this time
    ii. Objectives:
        1. Removal of poverty
        2. Attainment of self reliance through higher growth rate, better distribution of income and raising domestic savings rate
    iii. Growth rate – 5%

k. Janta Party Sixth 5 year Plan (1978-80):
    i. Objectives:
        1. Enlargement of employment opportunities in agriculture and allied activities
        2. Encouragement to household and small industries producing consumer goods

3. Minimum needs program for low income level classes

l. New Sixth 5 year plan (1980-85):
   i. Objectives:
      1. Direct attack on poverty
      2. Strengthen agricultural and industrial infrastructure
      3. System based approach rather than compartmental approach
      4. Intensive monitoring and involvement of people
   ii. Growth Rate – 5.4%

m. Seventh 5 year plan (1985-90)
   i. Focussed on rapid growth in food grain production, increase in employment opportunities and productivity
   ii. Growth rate –5.6&

n. Annual Plans:
   i. There were many significant political and economic developments in this phase
   ii. Economic reforms took place in 1991 in response to the severe BoP crisis brought about by fiscal profligacy of the past
   iii. The overall focus of this program was on maximisation of employment generation and social transformation

o. Eight 5 year plan (1992-97):
   i. Objectives:
      1. Faster economic growth
      2. Faster growth of manufacturing, agriculture nd allied sectors
      3. Higher growth rates in exports
      4. Improvement in trade and current account deficit
      5. Consolidation of fiscal deficit
   ii. Strategies:
      1. Generation of adequate employment
      2. Population control through people's participation
      3. Universalisation of elementary education and eradication of illiteracy in the age group 15 -35 years
      4. Provision of safe drinking water and primary health care
      5. Growth and diversification of agriculture
      6. Strengthening of infrastructure – energy, transport, communication, irrigation
   iii. The objectives were however not met due to shortfall in revenue because of BoP crisis andmounting non plan expenditure

p. Ninth 5 year plan(1997-2002):
   i. Objectives :
      1. Growth with social justice and equality
      2. Priority to agriculture and rural development
      3. Boosting growth while managing inflation
      4. Ensuring food and nutrition security for all
      5. Ensuring basic minimum services to all – safe drinking water, primary health, universal primary education, shelter and connectivity
      6. Ensuring environmental sustainability
      7. Population control
      8. Women empowerment
      9. Promoting Panchayati Raj Institutions, coo-operatives and Self Help Groups

10. Strengthening foreign trade

ii. Growth Rate – 7%

q. Tenth 5 year plan (2002 – 2007)

i. Objectives:

1. Doubling per capita income in ten years and achieving growth rate of 8% for GDP
2. Reduction in poverty ratio from 26 to 21 percent
3. Bringing down decadal growth of population to 16.2%
4. Growth in gainful employment
5. Universal access to primary education
6. Increase in literacy rate to 75%
7. Reduction in maternal mortality ratio to 2% and Infant Mortality Rate to 45 per 1000 live births
8. Potable drinking water to all villages
9. Increasing forest and tree covers to 25%
10. Cleaning major polluted rivers
11. Creation of 50 Million jobs
12. Reducing regional inequalities

r. Eleventh 5 Year Plan:

i. Objectives:

1. 'towards faster and more inclusive growth'
2. Priority areas were Agriculture, irrigation, water resources, education, health, infrastructure and employment
3. The plan stressed on taking the fruits of economic growth to the masses

s. Twelfth 5 year Plan:

i. <u>Objectives:</u>

- Twelfth Five Year Plan focuses on Growth which is Faster, Inclusive & Sustainable.
- **Economic Growth**
    1. Agriculture growth at 4%.
    2. Manufacturing growth at 10%.
    3. Real GDP growth at 8%.
    4. Every state must attain higher growth rate than the rate achieved during 11th plan.
- **Poverty and Employment**
    1. Poverty rate to be reduced by 10%.
    2. 5 Crore new work opportunities and skill certifications in non-farm sector.
- **Education**
    1. End gender gap in school enrollment.
    2. Primary years of schooling to increase up to 7 years.
    3. Allocations of 20 lakh seats for each age group in higher education.
- **Health**
    1. Infant Mortality Rate to be reduced to 25.
    2. Reduce Total Fertility Rate to 2.1
    3. Maternal Mortality Rate to be reduced to 100.
    4. Reduce under nutrition of children.
    5. Increase in child sex ratio to 950.
- **Infrastructure**
    1. Minimum 2 lane of National and State highways.
    2. All Weather Roads to connect villages.

3. enhance Infrastructure investment to 9% of GDP
4. Gross Irrigated area should be expand form 90 million hectare to 103 million hectare.
5. All villages to be electrified.
6. Complete Eastern and Western Dedicated Freight Corridors.
7. Rural Tele-Density to 70%.
8. Drinking water to 50% of rural population (40 Liters per capita per day)
9. Nirmal Gram Status to 50% of all Gram Panchayats.

- **Environment and Sustainability**
  1. Target of achieving 30,000MW renewable energy during a period of Five year.
  2. Increase green cover by 1 million hectare every year.
  3. Emission intensity of GDP to be reduced to 20-25% of 2005 levels by 2020.
- **Service Delivery**
  1. Banking Services to 90% of Indian Households.
  2. Subsidies and Welfare related payment to be routed through Aadhar based Direct Cash Transfer Scheme.

12TH FIVE YEAR PLAN

Basic objective of XII Plan: "Faster, More Inclusive, and Sustainable Growth". The full Planning Commission meeting chaired by Prime Minister Manmohan Singh agreed to work towards a growth target of 9-9.5% for the 12th Plan (2012-17). Objectives of the 12th Plan include 100% literacy, inclusive growth and development of physical and social infrastructure within the overall target of fiscal consolidation. Target at least 4% growth for agriculture. Cereals are on target for 1.5 to 2% growth.

- According to the Commission's presentation, for aiming at 100% adult literacy, the 12th Plan (2012-17) would have to increase expenditure on health from 1.3% to at least 2.0-2.5% of GDP (gross domestic product).
- Manufacturing to grow at 11-12% per year to create 2 million additional jobs per year. Must aim at universalization of secondary education by 2017. Must aim at raising the Gross Enrolment Ratio (GER) in Higher Education to 20% by 2017 and 25% by 2022
- Expenditure on health by Centre and States to increase from 1.3% of GDP to at least 2.0%, and 2.5% of GDP by end of 12th Plan.
- Target of 100,000 MW capacity in 12th Plan (against likely achievement of 50,000 MW in Eleventh Plan)
- Railways' Western and Eastern Dedicated Freight Corridors (DFC) must be completed by the end of the Twelfth Plan.
- High Speed Rail link between Delhi-Mumbai and Delhi-Kolkata in the Twelfth Five Year Plan.
- India's urban population is expected to increase from 400 million in 2011 to about 600 million or more by 2030. Investment required in urban infrastructure is estimated at 60 lakh crore over the next 20 years.
- Health, Education and Skill Development together in the Centre's Plan will have to be increased by at least 1.2% point of GDP
- Infrastructure, including irrigation and watershed management and urban infrastructure, will need additional 0.7 %age point of GDP over the next 5 years
- Distinction between plan and non-plan being reviewed by Rangarajan Committee

Prospects and Policy Challenges in the Twelfth Plan

The Indian economy will enter the Twelfth Plan period in an environment of great promise, but the next five years will also be a period of major challenges. The economy has done well on the growth front during the Eleventh Plan, but, going by the information that is at least currently available, not so well on inclusion. Much of what needs to be done to accelerate GDP growth during the Twelfth Plan will be done by the private sector, but the central and state governments have a crucial role to play in providing a policy environment that is seen as investor-friendly and is supportive of inclusive growth.

Four critical challenges facing the economy in the Twelfth Plan, which are perhaps more serious than they were at the start of the Eleventh Plan, are those of (a) managing the energy situation, (b) managing the water economy, (c) addressing the problems posed by the urban transformation that is likely to occur, and (d) ensuring protection of the environment in a manner that can facilitate rapid growth. In addition, the efficiency in implementation of projects on the ground needs to be greatly improved.

PLANNING 2017 ONWARDS

With an aim to transform India, the NITI Aayog has envisioned an ambitious agenda for the country to be achieved by 2032. The five year plan will now be replaced by a three year action plan which will be part of a 7 year strategy that would in turn help realize a 15 year long term vision. The targets set by NITI Aayog for the next 15 years include a threefold rise in GDP, Rs. 2 lakh increase in per capita GDP and facilities for people such as housing with toilets, electricity and digital connectivity for all, a fully literate population with unhindered access to healthcare and a clean India with clean air and water.

The framework will predict growth indicators that will be synced with the 14th Finance Commission recommendations. It will also be coterminous with the UNDP's 2030 sustainable development goals to which India is committed to meet broader social objectives. The 15-year vision document will also include defence and internal security. They were not been a part of five-year plans. The NITI Aayog will also create a dashboard for monitoring, evaluation and review of the implementation of vision document.

Analysis:

The job of NITI Aayog should have been to identify the immediate challenges that the country faces to realize a vision set rather than writing a manifesto for coming years such as global environment, consistent poverty in the country, regional inequalities among many others. NITI Aayog should mobilize the country to address real challenges.

An 8% growth rate is achievable because in last 25 years, the average growth rate was 6.7%. economy is consistently increasing. Few things need to be brought into focus:

1. **Inclusiveness** by providing health facilities, education for all, expenditure in rural infrastructure, skill development etc.
2. **Resilience** by strengthening public institutions, banking system, regulatory environment, management of natural resources.

Though these things have to be focused upon but it is even more important to understand that **why there is a lag in education, healthcare etc even in a high growing economy.** The government **promises clean and quality air** in the agenda but this goal might run into contradiction from the aspiration to ensure a private car or two-wheeler for every citizen. This kind of a vision is being given when the world is moving towards maximizing environment friendly public transport options and **eco-friendly methods like huge promised investment on solar power.**

Agricultural development needs to be planned on five key issues as:

1. Enhancing productivity
2. Land leasing reforms

3. Remunerative prices
4. Risk management
5. Second Green Revolution in eastern India

According to Niti Aayog estimates,

1. The combined expenditure of Centre and State would rise by Rs 92 lakh crore to reach Rs 130 lakh crore by 2031-32.
2. By 2031-32, India's urban population would rise by 22 crore and reach around 60 crores.
3. Niti Aayog also projects that per capita income in the country would rise by Rs 2 lakh up to Rs 3,14,667.
4. Economy is expected to grow three-fold in 15 years. If economy grows at an 8 percent average rate for the next 15 years, our GDP will be Rs 469 lakh crore by 2030 (around USD 7.25 trillion).

NITI Aayog also **came up with indices** for measuring states' performance in health, education and water management to help states gauge the results of social programmes and compete with each other and share best practices and innovations. It also suggested **clubbing various social programmes and centrally-sponsored schemes under 28 umbrella projects.** The panel suggested changes in Swachh Bharat Abhiyan, skill development, poverty measurement, Atal Innovation Mission.

Conclusion: Yearly targets and their monitoring can help the Government to better monitor and streamline its performance for the goals set which is perfectly placed. Unwavering political will and public support will help in realizing these goals.

REVIEW OF RECENT PERFORMANCE

The Eleventh Plan aimed at delivering faster and more inclusive growth and it is logical to assess performance against this dual objective. Growth and inclusiveness were presented as coequal objectives in recognition of the fact that GDP growth can never be an end in itself. However, faster growth, especially of a particular type, accompanied by economic and social support programmes, which are themselves made more feasible by high growth and buoyant revenues, can bring about an improvement in incomes and living standards for the bulk of the population, which is the end objective.

India's Growth Performance

There is no doubt that the economy has done very well on the growth front, and this is best appreciated when viewed in a long- term perspective. For two decades in the 1960s and 1970s, India's GDP growth rate averaged only 3.5% per year at a time when other developing countries were growing much faster. The 1980s saw the beginning of a reorientation of policies to achieve higher growth and indeed growth accelerated to 5.6% in that decade. A much broader effort at "systemic reform" was initiated in 1991, based on a wider play of market forces, gradual liberalisation of the financial sector, and opening of the economy to world trade and capital flows. The growth rate of the economy accelerated significantly in the first half of the 1990s, but then slowed down in the second half, averaging 5.7% over the decade as a whole, which was not very different from that in the 1980s.

India's performance improved significantly in the first decade of the 2000s, spurred by favourable global conditions and the cumulative effect of the systemic reforms initiated in 1991. The Tenth Plan (2002-03 to 2006-07) had targeted a growth rate of 8% and achieved an average growth rate of 7.8%. The Eleventh Plan (2007-08 to 2011-12) aimed at 9% growth, the economy achieved 9.3% growth in the first year, but this momentum was interrupted by the global financial crisis of 2008 when GDP growth dropped to 6.8% for the year 2008-09.

However, thanks to contra-cyclical stimulus measures, the economy recovered quickly to record 8% and 8.6% growth, respectively, in the next two years. Growth in 2011-12 was initially projected at 9% in the central government budget but is likely to be lower at around 8.5%. Even so, the average for the Eleventh Plan would be 8.2%, a remarkable performance considering that this period saw the greatest economic crisis the world has faced since the Great Depression.

Performance on Inclusiveness

It is more difficult to assess performance on inclusiveness than on growth for three reasons. First, inclusiveness is a multidimensional concept and progress therefore needs to be assessed in many different dimensions. Second, the data relating to various aspects of inclusiveness become available only after a considerable lag, and information for the Eleventh Plan period is often not available. Third, most policies aimed at inclusiveness have an impact only over a relatively long term, and this means that even when policies are moving in the right direction, the results may only be evident much later. For example, steps taken to improve education for the poor will improve their earning ability in future, but this impact will only be reflected in actual income earning much later.

Multidimensionality of Inclusion

The multidimensional nature of inclusiveness is best illustrated by listing some of the many dimensions that are relevant. The extent of reduction in the %age of the population below the poverty line is clearly a very important indicator of progress. However, many families that are above the poverty line in terms of per capita consumption may lack access to basic services such as education, health, clean drinking water and sanitation. Inclusiveness must obviously include progress in delivery of these essential services. Inclusiveness must also extend to addressing concerns about inequality. It is sometimes argued that inequality should not matter as long as the poor are getting better off and it is probably true that a rapid rate of improvement in incomes for the poor may make them willing to accept some increase in inequality. However, large increases in inequality, accompanying only modest improvements in levels of living of the poor, are unlikely to be acceptable.

Inequality in this context relates not only to the distribution of income or consumption across individuals, but also inequality across states, and in some cases, even across regions within states. Inclusiveness in the Indian context also requires a special focus on particular social groups such as the scheduled castes (SC) and scheduled tribes (ST), and also the minorities. Since these groups are concentrated in the lower ranges of the income distribution, it may be thought that an effective strategy for reducing poverty or inequality addresses the concerns of these groups. However, if inclusiveness is defined as bringing these groups at par with the rest of the population, it has to address the issue of achieving a fair representation for these groups along the entire income distribution.

This is conceptually very different from reduction in overall poverty or inequality, in the sense that it can be achieved leaving the incidence of poverty and the level of inequality unchanged. The Eleventh Plan explicitly recognized the multidimensional nature of inclusiveness by enumerating 27 monitorable targets of which GDP growth was only one. The others focused on different aspects of inclusion such as growth in agriculture, reduction in poverty, growth of employment opportunities, etc. One consequence of multidimensionality is that the extent of progress in different dimensions will vary. For example, it is perfectly possible for poverty to decline while inequality increases. Similarly, inequality among households in the country as a whole may decrease, or remain unchanged, while inequality across states increases.

Inflation and Macro Balance

A weak spot of recent economic performance, which is relevant for both growth and inclusiveness, is the build-up of inflationary pressure over the past three years. A modest rate of inflation is tolerable, and may even be necessary to accommodate relative price changes that have become unavoidable. However inflation beyond this tolerable level – usually put at 5% to 6% by the government and 4% to 5% by the Reserve Bank of India (RBI) – is regressive and also

distortionary, damaging both inclusion and growth. Inflation has been well above this level in the past two years and while India is not the only emerging market country experiencing this problem – the resurgence of inflation is a concern in most emerging markets – the rate of inflation in India has been higher than in most other countries. The GDP deflator is perhaps the best measure of overall inflation and the average inflation rate on this measure has averaged about 7.4% in the first four years of the Eleventh Plan whereas it averaged at 5.3% in the Tenth Plan.

High rates of inflation in food prices, especially vegetables, fruits, milk, eggs, etc, have been a matter of special concern, and this is reflected in double digit rates of inflation as measured by the Consumer Price Index (CPI) in the past two years. Inflationary pressure in India has been variously attributed to (a) the rise in global prices of crude oil, foodgrains and metals, (b) domestic supply constraints in the food economy other than foodgrains, and (c) overheating caused by the fiscal expansion initiated in response to the global crisis. All these factors have probably been at work, but whatever the specific factors that triggered the inflationary upsurge, once inflation becomes broad based and that seems to be happening– it becomes a macroeconomic phenomenon, and must be tackled through a suitable combination of fiscal and monetary policy combined with efforts to remove specific supply constraints which are identifiable.

Monetary policy is the traditional instrument for dealing with overall inflation, and it has been tightened gradually, but it can be effective only if it is supported by appropriate fiscal policy. Fiscal stimulus policies led to the fiscal deficit of the centre and the states taken together increasing from 4% of GDP in 2007-08 to 9.4% in 2009-10. While the stimulus succeeded in countering the effects of the recession, it has clearly raised the fiscal deficit to an unsustainable level. A process of correction was initiated in 2010 and the combined fiscal deficit was reduced from 9% in 2009-10 to 7.7% in 2010-11. These policies will need to be pursued further to bring the fiscal deficit back to pre-crisis levels.

GROWTH PROSPECTS IN INDIA

This section presents a macro-level assessment of the prospects for rapid growth in India. In making such an assessment, it is important to avoid the complacent view that since growth has been accelerating it will continue to remain high, as long as the policies which generated this growth in the past continue. This approach is overly simplistic because there are examples of countries that grew rapidly for a while and then slowed down. This can happen for two reasons. First, the economy may come up against new internal constraints, themselves often emerging from structural changes produced by rapid growth. Continuing the old policies without addressing these constraints is not enough in these circumstances. Second, the external environment may have changed, necessitating a different approach.

Demand-side Constraints on Growth

The most important demand-side constraint on future growth arises from the change in the global environment in the post- crisis period, whereby the industrialized countries are expected to grow more slowly. The pace at which exports can increase to the US and Europe will therefore be lower. It is often pointed out that although India has become a more open economy in the post-reform period. It is still less dependent on export demand than other emerging market countries, and its growth prospects should therefore be less affected. Nevertheless, it is relevant to ask how India can actually expect to grow faster in an environment in which export demand will be weaker. One part of the answer is that even if export demand from industrialized countries is weaker, many emerging market countries are projected to grow more rapidly, and our export performance could be improved by targeting the faster growing markets. It is sometimes argued that India is much more dependent on domestic demand and in this context domestic consumption can be a strong driver of growth in India.

This particular argument ignores the fact that since savings ratios are projected to increase – and indeed this is often listed as one of India's strong fundamentals – consumption is not expected to grow faster than GDP. The real solution to the demand deficiency resulting from slower growth of exports lies in ensuring higher levels of domestic investment, particularly investment in infrastructure. Poor infrastructure is a critical weakness in India and an

expanded investment programme in this area will not only bolster demand in the short run, it will also increase competitiveness and thereby boost the supply-side of growth in the medium run. Higher levels of investment in an environment where export growth may be subdued may lead to a widening of the deficit in the balance of payments and this strategy therefore depends critically upon our ability to finance the higher deficit. Traditionally, we have viewed current account deficits of around 2% of GDP as comfortable. The current account deficit in 2010-11 was already around 2.5% of GDP. An aggressive effort to push investment could take the current account deficit to say around 3% of GDP for some years.

The key issue therefore is whether a deficit of this order can be financed through long-term capital flows, including especially FDI. It can be argued that India has only recently begun to attract global capital and given the size of the economy, and its perceived high growth potential, it will remain an attractive investment destination as long as policy towards investment in general and FDI in particular is seen to be supportive and the macroeconomic environment is judged to be sound. This positive assessment needs to be qualified by noting that the external environment is vulnerable to growing concern about the fiscal situation in some industrialized countries. Worries about fiscal unsustainability, especially in the US, could lead to higher long-term interest rates globally and also greater volatility in capital flows to emerging markets. However, India's relative attractiveness as an investment destination could offset this effect if the policy environment is viewed as macro-economically sound and investor-friendly.

Supply-side Constraints on Growth

Supply-side constraints on India's growth potential at the macro level are best examined using the traditional growth accounting framework which explains growth of GDP in terms of growth of capital and labour inputs and the growth of total factor productivity. There are good reasons to be optimistic on all three counts.

Growth of Capital

The growth of capital inputs depends on the rate of investment, which in turn depends on the investment climate and the scope for financing the investment from domestic savings and foreign capital inflows. Although a great deal of attention is rightly focused on the financing constraint, we need to keep in mind that in a dominantly private sector led development process, a favorable investment climate is an essential precondition for potential investors to undertake new investment or expand capacity. One can envisage a situation in which resources to finance investment are available, but investment does not take place simply because entrepreneurs do not find investment opportunities attractive, i.e. "animal spirits" are missing. Private investment in India was very buoyant prior to the crisis.

Private corporate fixed capital formation increased from 9.1% of GDP in 2004-05 to a peak of 14.3% in 2007-08 just before the crisis. Thereafter, it declined to 10.4% in 2008-09, and was only slightly higher at 10.8% in 2009-10. Data for 2010-11 are not yet available, but this percentage is likely to have increased further, though not back to the previous peak. The decline in private corporate fixed investment after 2008-09 has been partly offset by higher investment by the household sector and by the public sector. As a result, gross fixed capital formation (GFCF) in the household, private corporate and public sector combined increased from 28.7% of GDP in 2004-05 to a peak of 33% in 2007-08 after which it fell to 32% in 2008-09 and declined further to 30.8% in 2009-10.

It is difficult to predict what will happen to private investment in the short run. However, allowing for a continuing recovery in fixed investment from the post-crisis trough, we could end the Eleventh Plan with GFCF somewhere around 33% of GDP. Allowing for some further increase in the Twelfth Plan period, including especially a return of private corporate investment to the peak level observed in 2007-08 and some improvement beyond that level, the average rate of GFCF in the Twelfth Five-Year Plan could be around 36%, which should suffice to generate sustained GDP growth of 9% per year. The gross domestic capital formation rate consistent with this projection is around 40% of GDP. The ability to finance this level of capital formation depends largely on what happens to domestic savings and foreign capital inflows.

Prospects on both fronts are positive. The average gross domestic savings rate increased

to a peak of 36.9% in 2007-08, declining thereafter to 32.2% in the crisis year 2008-09. The deterioration of 4.7 percentage points of GDP is very largely accounted for by the deterioration of as much as 3.8 percentage points in government savings, reflecting the fact that the contra-cyclical expansion in India was largely on account of an increase in subsidies because petroleum and fertiliser prices were not adjusted. The savings rate recovered to 33.7% in 2009-10 reflecting an improvement in all categories, including government administration, though the public sector enterprises savings rate continued to be low.

With further improvement expected in 2010-11, and hopefully also in 2011-12, as fiscal consolidation takes hold we could end the Eleventh Plan with a gross domestic savings rate of around 35%. Allowing for some further improvement during the Twelfth Plan, particularly in government savings, we can reasonably plan for an average saving rate in the Twelfth Plan period of around 37%. This together with a current account deficit of around 3% of GDP should be able to finance a gross capital formation rate of around 40%. The macroeconomic parameters presented above are tentative at this stage, and their internal consistency will be more rigorously tested through various models used by the Planning Commission in the formulation of the Twelfth Five-Year Plan. However, they do suggest that with some effort, there is scope for increasing both domestic savings and investment to levels broadly consistent with 9% growth, or even a little more.

Labour Inputs

Labour supply prospects are also favourable for high growth. It is well known that the working age population in India is expected to increase over the next 20 years, whereas in the industrialized countries, and also in China, it will be going down. While this is sometimes presented as a potential demographic dividend, it is worth cautioning that a growing workforce is an advantage only if (a) sufficient investment is taking place to generate the GDP growth needed to absorb labour productively, and (b) if the education and skill level imparted to the new entrants is consistent with employability. In the absence of these two conditions, a growing number of young entrants to the labour force could as easily be a recipe for unemployment and consequent unrest. The prospects for achieving a high level of investment are good, for the reasons outlined above. The task of ensuring that the new entrants to the labour force have employable skills is more challenging.

Mean years of schooling in India increased from 3.45 in 1990 to 4.20 in 2000 and 5.12 in 2010. This compares with 5.62 in China in 1990, 7.11 in 2000 and 8.17 in 2010. India clearly lags significantly behind China in terms of the average education level of the labour force. However, India's position today is roughly comparable to China's in the 1985, and starting from that position, China achieved an average growth of GDP over 10% per annum for 30 years. There is no reason why India cannot do the same, especially because efforts to expand enrolment and reduce dropout rates over the past several years will ensure that the quality of the new addition to the labour force will be much higher than the present average. The Eleventh Plan period saw several important initiatives including near universalization of primary education, the passage of the Right to Education Act, the initiation of a massive programme for expansion in secondary education, combined with several steps in higher education.

The Eleventh Plan placed considerable emphasis on quantitative expansion to improve access and this will have to continue in the Twelfth Plan. In addition, greater emphasis will have to be placed on quality. Initiatives in these areas have to be taken by the centre and states and also by the private sector. Skill development has been neglected in the past and needs much faster expansion. Over 90% of our labour force at present has received no formal training prior to employment and skills are typically acquired only on the job.

This is simply not consistent with 9% growth in GDP per year in an increasingly modernizing economy. The Eleventh Plan had set a target of having 500 million individuals in the labour force with some formal training by 2020. Several initiatives have been launched in pursuit of this objective, including the establishment of a National Skill Development Council under the chairmanship of the prime minister, with parallel state level councils chaired by the chief ministers. A Skill Development Corporation has been established with government

funding to support private sector-led skill development initiative. Involving the private sector in skill development is extremely important as it increases the likelihood that the skills imparted are marketable.

Factor Productivity Growth

It is well recognised that a high rate of growth of GDP requires not only rapid growth of primary inputs such as capital and labour, but also high rates of total factor productivity growth (TFPG). TFPG itself is a combination of pure technical progress and the ability to utilise factors more efficiently, the latter often being made possible by economic and institutional reforms which enhance productivity. Much of the rationale of the reform agenda pursued since 1991 was that it will enable realisation of higher TFPG. Studies of TFPG focusing on the manufacturing sector alone have yielded mixed results. Early studies focusing on the 1990s found a slowdown in TFPG compared to the previous decade. Studies of TFPG at the aggregative level of the economy as a whole have been generally more positive. Whereas TFPG contributed only 0.1% to the annual growth rate in the period 1965-66 to 1979-80, this increased to 2.9% in the period 1980-81 to 1991-92 and finally to 3.6% in the period 1992-93 to 2003-04.

SOME CRITICAL POLICY CHALLENGES

Financing the Plan with Macroeconomic Balance

The combined fiscal deficit of the centre and the states had expanded because of the stimulus, and has to be brought back to sustainable levels. This process has begun, and the centre's fiscal deficit is projected to fall from 5.1% of GDP in 2010-11 to 4.6% in 2011-12 followed by further reduction of 0.5% point, per year in the next three years, to reach 3% by 2014-15. Adding a fiscal deficit of around 2.5% for the states, the combined deficit of the centre and the states is therefore projected at about 5.5% by 2014-15. The proposed reduction in the combined deficit from 7.7% in 2010-11 to 5.5% in 2014-15 involves an improvement of 2.2% of GDP over four years. This is not too onerous. In fact, the proposed deficit for 2014-15 would still be higher than the 4.8% achieved in 2007-08, eight years earlier. However, the real challenge is that the reduction in the fiscal deficit has to be achieved while also achieving an increase of at least around 1.5% of GDP in Plan expenditure of the centre and states combined.

This order of increase is the minimum necessary if we are to provide adequately for the essential requirements of education, health and public financing ofcritical infrastructure, including especially in rural and other backward areas. Plan expenditure on education and health taken together may have to be increased by about 2% of GDP and expenditure on critical infrastructure, by at least 0.5% of GDP taking the total increase on these accounts to 2.5%. If total Plan expenditure is increased by only 1.5%, it implies a considerable moderation in the demands of other Plan schemes. Reducing the fiscal deficit by 2.2%, while also increasing Plan expenditure as a ratio of GDP to around 1.5%, requires an improvement of around 3.7% of GDP which has to be achieved through some combination of increased revenues and reduced non-Plan expenditure, as a %age of GDP.

A reasonable expectation would be to aim for an increase in revenues as a %age of GDP by a little over 2%age points and a reduction in non-Plan expenditure as a %age of GDP by about 1.5%. As far as revenues are concerned, the aim should be to achieve higher tax ratios without resorting to distortionary taxation. We can count on some increase in the tax ratio on account of buoyancy, but a substantial part of the targeted improvement must come from tax reforms. The most important initiative in this context is the Goods and Services Tax (GST), for which a Constitution Amendment Bill has been introduced. The GST, once implemented, will convert the present regime in which the central and state governments levy multiple indirect taxes separately on different tax bases, into a more rational system with separate central and state taxes, but applied on a common base, preferably with a single common rate (subject to a few exceptions).

Since taxes on the input stage in each of the central and state streams will be netted out at the next stage, the GST would be a true value added tax, contributing hugely to both economic efficiency and revenue collection. Because implementation of the GST involves a

constitutional amendment, a successful outcome may take time, but once achieved, it will be a major achievement. Progress of this legislation in Parliament will be closely watched by analysts and potential investors and credible signs of progress will be widely welcomed.

Some reduction in non-Plan expenditure as a ratio of GDP will happen automatically if there is high growth, because government employment is not expected to increase significantly, and no new pay commission impact is expected in the Twelfth Plan period. However, progress in this area will also depend on whether subsidies, which have grown in scale in both the central government and the states, can be curtailed. The major subsidies in the centre are on food, fertilizers and on petroleum products, which together account for around 2% of GDP.

State budgets also have subsidy elements, but the major "subsidy" is the very large losses of the state power utilities, which has now touched almost 1% of GDP. Food subsidies, which amount to about 0.7% of GDP, will be difficult to contain in view of the commitments on National Food Security. The focus of attention for subsidy control by the centre should therefore be on the subsidy on fuel and fertilizers. In the case of the states, the principal focus must be on the large losses in the power sector.

The latter reflects a combination of very substantial under-pricing of electricity to farmers (with free electricity in some cases) combined with inefficiency and competition in billing and collection. Reducing subsidies will not be easy and a conscious effort is needed to build public and political support for a significant reduction in inefficient and non-targeted subsidies as a percentage of GDP, in order to finance the much needed additional Plan expenditure in health, education and agriculture-related infrastructure.

Policies for Better Agricultural Performance

The 4% target for growth in agriculture, which will be missed in the Eleventh Plan, must be achieved in the Twelfth Plan as it is critical for inclusiveness. Fortunately, this is technically feasible as there is ample evidence that productivity per hectare can be increased by 80% to 100% for many crops in large areas by applying modern agronomic practices based on existing technology. However, achieving these increases in productivity requires action on several fronts, most of which lie in the domain of state governments. Water is a key input, and better systems of water management, including especially the ability to control timing and quantity of water application, are critical. This must be combined with availability of better quality seeds, and adoption by farmers of optimal levels of seed replacement.

Much greater attention also needs to be paid to soil health, focusing particularly on micro-nutrients and carbon content. Since micronutrient deficiencies are area-specific, a system of soil health cards issued to farmers, with periodic soil testing, must be put in place. Carbon content can be increased by shifting from the traditional practice of burning crop residue to leaving it in the field. Shifting to more efficient use of water requires new practices such as land leveling, use of drip irrigation, zero till cultivation, raised seedbed planting, and in the case of rice, adoption of the System of Rice Intensification (SRI), etc. State governments must act on several fronts to present a package of interventions tailored to the requirements of particular agro-climatic zones. Delivering only a few elements of the package will not produce optimal results.

The farmer has to be persuaded of the importance of the complete package, and both physical and knowledge inputs needed to implement the package, have to be made available. Since most of the growth in agriculture in future will come not from foodgrains, but from sectors such as horticulture, dairying and fisheries, where the produce is perishable, much greater attention needs to be paid to the logistics of transporting produce from the farm to the consumer, with minimum spoilage. This requires active involvement of the private sector. To facilitate such involvement, state governments must amend the Agricultural Produce Marketing Committee (APMC) Acts which at present prevent private sector buyers from dealing directly with producers. There is an overwhelming case for exempting horticultural produce entirely from the APMC Act.

Much of the reluctance to make these changes reflect the operation of vested interests who control the mandis. Establishing better road connectivity in rural areas helps market

access and the Pradhan Mantri Gram Sadak Yojana is an important intervention in this regard. Another area for policy intervention by state governments is the reform of laws relating to leasing of land. As holdings are subdivided and become uneconomic, very small and marginal farmers may be better off leasing out their land to more viable farmers, while seeking paid employment themselves. They would be more willing to do this if they felt that they could lease out their land and get it back when they want.

Yet, leasing is not legal in some states. Where it is allowed, the law is biased towards the tenant, whereas the need of the hour is to protect the interest of the small farmers leasing out land. Unfortunately, despite the importance of agriculture for rural prosperity very few state governments have taken up the challenge of bringing about the multifaceted transformation that is needed. There is too much focus on delivering a variety of subsidies in power, seeds, and credit, and not enough on bringing about a change in farming practices and adoption of new technology that would actually raise land productivity and enable farmers to become less dependent on subsidies in the long run.

Employment Generation

A key challenge in the Twelfth Plan is how to ensure creation of a sufficient number of productive jobs in the non-agricultural sector to absorb the expected increase in the labour force and also absorb surplus labour that must be shifted out of agriculture. The need to shift labour out of agriculture follows from the fact that productivity in agriculture is relatively low and if agriculture is not expected to grow at more than 4%, the only way labour productivity in agriculture can rise at a rate higher than 4% is for employment in agriculture to shrink. This is actually necessary to reduce the present underemployment in agriculture and a steady improvement in real wages in this sector. Needless to say, the proposed shift out of agriculture should occur not as distress migration, but as a natural movement to higher paid employment in non-agricultural activity, some of which could be in rural areas itself.

Agricultural development will itself give rise to new demands for non-agricultural services and generate employment in agriculture-related sectors such as modernized marketing and agro-processing activity. A large part of the job opportunities we need must come from a more rapid expansion in manufacturing. The industrial sector was targeted to grow at an average rate 10% to 11% per year in the Eleventh Plan, but the actual achievement is unlikely to exceed 8%. Most economic simulations suggest that if the economy is to grow at 9% in the Twelfth Plan, and agriculture, which now accounts for only 15% of GDP, is constrained to grow at 4%, then services should grow at around 10% and industry at 11%. Industry must not only grow faster than it has thus far, it must also be more able to absorb labour with relatively simple skills of the type which migrants from rural areas can acquire.

Micro, small and medium enterprises, are generally more labour absorbing, and are also potential seedbeds for innovation and entrepreneurship. The policy environment must encourage the growth of these industries and this does not mean sops and subsidies. Rather, the main effort should be to provide these smaller industrial units with first class infrastructure which includes both reliable power supply at reasonable cost, good transport connectivity, a pool of skilled labour to draw upon and a financial sector capable of making resources available to potentially successful entrepreneurs. Expansion of industrial activity must also be regionally balanced since demographic projections suggest that the growth of labour supply in future will be much greater in the northern states that are industrially backward at present.

Migration will take care of some of the regional mismatch but there is a strong case for doing more to ensure that employment opportunities expand in states that are expected to generate larger growth of labour. This is best achieved by state governments paying much greater attention to the infrastructure needs and skilled labour requirements of industry that could locate in those states. State governments must also be more active in reducing the transactions cost of doing business and this means making regulatory bodies, tax authorities, and utilities more business friendly. Finally, some consideration has to be given to the long-standing issue of the need to rationalize our labour laws to give employers more flexibility to shed labour when faced with a downturn. This is not to advocate policies of hire and fire, but

only to say that more flexibility needs to be built into the labour laws than exist at present.

Infrastructure Development

The Eleventh Plan recognized the importance of investing more in infrastructure sectors such as power, roads, ports, airports, and railways, and sought to raise investment in these sectors from about 5.6% of GDP in the base year of the Eleventh Plan 2006-07 to around 9% by the last year, i e, 2011-12. The actual achievement is likely to be around 8.5%, with some sectors, e.g. telecommunications, achieving higher levels of investment than projected, while others achieved significantly less. The task begun in the Eleventh Plan has to continue in the Twelfth Plan, which should aim at increasing the rate of investment in infrastructure to around 10.5% by 2017-18.

As far as financing is concerned, it is clear that public sector resources will be scarce and, as noted above, the first priority for these resources must be education and health, which are crucial for inclusiveness and are currently underfunded. Critical infrastructure in rural areas and backward areas is another priority. Both the central and state governments must therefore follow an infrastructure strategy which consists of a combination of public investment and public-private partnership (PPP). Public investment would have to be directed to areas where the private sector is unlikely to come, with the rest of infrastructure being developed as far as possible through PPP. Valuable experience has been gained in this area and many of the teething problems related to procedures for structuring PPP projects have been overcome. We need to build on this experience and launch a renewed effort in which the role of PPP in infrastructure investment may have to increase from around 30% in the Eleventh Plan to as much as 50% in the Twelfth Plan.

The second major challenge in infrastructure development relates to implementation. Infrastructure projects are often delayed due to difficulties in land acquisition, and where land has been acquired, due to other difficulties such as dealing with encroachments and lack of coordination with other utilities.

Reforms in the Financial Sector

Rapid growth needs to be supported by an efficient financial system capable of mobilizing the savings in the system and using them to support economically efficient units. By financial system in this context we mean the whole range of institutions such as banks, non-bank finance companies, microfinance institutions, efficient and well-regulated capital markets, mutual funds, insurance companies, pension funds and venture capital funds, each of which has an important role to play. In one sense, India's financial sector can be said to be in a strong position having benefited from a process of carefully calibrated liberalization, combined with steps to strengthen the regulatory framework. The system certainly proved resilient during the global financial crisis, and this was a very strong positive factor in maintaining growth. However, while the financial system scores high on stability, there is room for improving the efficiency of financial intermediation and increasing innovation, both of which are necessary.

This calls for a continuation of the process of calibrated financial reform. Stopping the process of liberalization because it was excessive liberalization with weak regulation which produced the financial crisis in industrialized countries would be a serious misreading of the situation. Several important initiatives related to financial sector reform are already in the pipeline. These include (a) announcement of the road map for new private sector banks and foreign investment in banks, (b) deregulation of the savings rate offered by banks which remains regulated, though it was recently raised from 3.5% to 4%, (c) legislation increasing the limit on FDI in insurance from 26% to 49%, (d) passage of the Pension Fund Regulatory and Development Bill, (e) passage of the legislation allowing shareholders to vote their equity share in banks instead of being limited to 10% as at present, and (f) passage of the Company Laws Amendment which will modernize bankruptcy proceedings.

The creation of a vibrant and liquid corporate bond market should have particularly high priority, especially in view of the need to finance large private investments in infrastructure. Several of the regulatory changes recommended by various expert committees

to help develop bond markets have been implemented, but the response thus far remains limited. One reason is the very high fiscal deficit, which effectively crowds out corporate borrowing and the fiscal consolidation programme discussed above will clearly help.

Improved access to liquidity for primary dealers in the bond market is another important step. Investment policies of LIC, EPFO,etc, are very conservative at present, leading these institutions to prefer lower yielding government debt to higher yielding corporate debt, except of the very highest investment grade. A possible reason could be the absence of efficient mechanisms for debt recovery in the event of default. Unlike banks, which benefit from SARFAESI, bond holders can only have recourse to liquidation and bankruptcy procedures which are hopelessly time consuming. The passage of the Company Law Amendment Bill mentioned above, which contains provisions to modernise bankruptcy proceedings, is an important step in this context. Proposals for establishing infrastructure debt funds based on investors abroad investing in long-term debt issued by infrastructure project companies are currently being examined by the finance ministry.

The establishment of such funds would help infrastructure companies to refinance shorter term bank debt with longer term debt while freeing banks to finance new projects. A positive decision on this proposal would be an important signal to investors. The size of Indian banks is another important issue. Even the largest Indian bank, the State Bank of India, is actually quite small by global or even Asian standards. Since banks will continue to be the source of medium-term capital in India for some time, until the capital market becomes a credible source for corporate long-term debt, the capital of the banks has to be increased greatly to allow larger exposures to individual projects and also to sectors. Public sector banks must therefore have a larger capital base.

This could be done by allowing them to issue additional capital in the market and reducing government equity below 51% to some lower level which would in no way reduce effective government control. If this is not politically feasible at present, then government must be willing to increase its capital contribution paripassu with fresh issue of capital, so that the government share of equity in these institutions remains at 51%. A more flexible policy for allowing existing private sector banks to grow more rapidly is also urgently needed. While branch expansion is now more freely allowed, it remains linked to opening rural branches. With the growing scope for bringing banking to the rural areas through the system of banking correspondents, insistence on opening rural branches may not be as necessary as it once was.

Managing the Energy Challenge

The global supply of fossil fuels is expected to become much tighter in the years ahead, and prices of these fuels are therefore likely to remain high, with a possible upward trend. Achieving high growth in this situation requires reducing the energy intensity of GDP while simultaneously taking steps to limit dependence on imports by increasing the domestic supply of energy from both conventional and non-conventional resources.

Reducing Energy Intensity

Reducing the energy intensity of GDP calls for rationalizing energy prices and adopting non-price measures to improve energy efficiency. Action is necessary on both fronts and the agenda is large. As far as rationalization of energy prices is concerned, our energy prices at present are significantly below world prices and unless this is corrected, it is difficult to believe that energy efficiency can be sufficiently incentivised. The Integrated Energy Policy, adopted by the government in 2009, endorsed the principle that prices of imported energy inputs must be aligned with world prices, but this policy has yet to be fully implemented. Prices of motor spirit have been successfully decontrolled. However, diesel, which is four times larger than motor spirit, has only been decontrolled in principle. The decision is yet to be implemented. LPG and kerosene prices remain under administrative control and are currently set well below global levels.

It is necessary to implement diesel decontrol as quickly as possible and to bring about a phased alignment of kerosene and LPG prices with world prices, while at the same time protecting the poor. There is an understandable reluctance to raise kerosene and LPG prices

because of the impact on vulnerable groups, but it must be recognized that the subsidy implicit in the present low prices of kerosene and LPG is completely untargeted. In the case of kerosene, it also leads to large-scale black marketing, adulteration and criminalization. The best way of helping the poor to cope with higher prices of kerosene and LPG would be to shift to a targeted direct subsidy delivered to deserving groups linked to the implementation of a unique identification number. This option is being explored. Coal is technically not under price control, but the nationalized coal companies have set domestic coal prices well below world prices, even after adjusting for the lower quality of Indian coal.

The discrepancy between domestic coal prices and much higher import prices leads to an unwillingness on the part of power producers to import coal and keep lobbying for domestic coal linkages. This problem would not arise if domestic coal prices are equated with import prices. If that is not immediately feasible, the second best option is for Coal India to import coal to meet demands from the power sector, while also introducing a system of pooled pricing whereby the higher cost of the coal it imports is absorbed in a higher price charged by Coal India for coal supplied to all power plants based on the overall mix of domestic and imported coal. Over time, domestic coal prices must be adjusted in time with global coal prices reducing the need for price pooling. Electricity prices are set by supposedly independent state regulators, but there is strong political pressure on regulators in many states to hold back price increases, even when these are justified by economic costs.

This only leads to financial unviability of distribution system, which is under strain in any case. The system must be allowed to function properly so that electricity prices are not artificially depressed, especially as coal prices are expected to rise. Rationalizing energy pricing along the lines spelt out above will encourage energy efficiency, but prices alone will not suffice to promote efficiency. Action on prices needs to be supported by a proactive use of non-price mechanisms. Regulation can be used to push major energy using industries to achieve internationally benchmarked levels of energy efficiency. We should also resort to standard setting and labeling for appliances, equipments, transport vehicles and buildings to encourage energy efficiency. Standards for buildings are particularly important because India has a leap-frogging advantage in this area since most of the commercial buildings likely to be in place by 2030 are yet to be built!

Finally, energy efficiency for the economy as a whole would be greatly helped by intra-sectoral shifts in the transport sector that would economize on energy. The most notable shift in this context is shifting freight from road to rail, and shifting from private to public transport in urban areas. These shifts can be facilitated by appropriate tax and tariff policies. In the case of the Railways, it requires a shift away from the current practice of overcharging freight to subsidize passenger traffic. India's passenger fare to freight tariff ratio is 20% of what it is in China suggesting that freight tariffs should be lowered and passenger fares raised. These price changes need to be supported by action to build necessary freight carrying capacity in the Railways. The capacity has to be created urgently, in anticipation of increased financial strength from tariff reforms. A more proactive stance is also needed to promote PPP in railways, especially in container traffic movement.

Increasing Domestic Energy Supply

Steps to reduce energy demand have to be accompanied by strong action on the supply side to expand domestic production of petroleum, natural gas and also coal to avoid excessive import dependence. There are a number of policy gaps that need to be addressed. Both petroleum and natural gas are open for investment by the private sector, including foreign investment, and private sector investors have a good record in discovery of new sources. However, the public sector oil companies currently bear a large part of the burden of keeping domestic petroleum prices low, because they are not given the full benefit of high oil prices. This reduces the potential surpluses available for investment by these companies. Rationalization of energy price as discussed above will help the domestic effort to enhance energy supply. Coal production is constrained by the fact that the industry is nationalized, although private investment is allowed in captive coal mines (i e, coal mines linked to power plants or steel and cement plants).

This window for private investment provides some flexibility and there is significant investor interest in this area. However, looking ahead, the policy for the coal industry should be liberalized – allowing private investment in non-captive mining subject to appropriate regulation for safety and environment standards. There are obvious political sensitivities here, but it has to be kept in mind that what is being proposed is not privatization of Coal India but only allowing private sector mining. On present projections of likely domestic production, we will need to import about 250 million tonnes of coal by 2016-17. Considering that the total world trade in coal at present is around one trillion tonnes, we should do everything possible to remove domestic impediments to production. There cannot be any rationale for allowing private investment in petroleum and natural gas, as we do, but not in coal.

We must also take steps to exploit the full potential of other energy sources notably nuclear, solar and wind power. The share of these sectors is small and will remain modest in the medium term but in the longer term they could become substantial. Expansion of nuclear power is an important element of India's long-term energy strategy and this has been facilitated by the recent agreement with the Nuclear Suppliers Group which gives India access to imported uranium, and also opens windows for other cooperation in this area. Plans for nuclear power all over the world are being reviewed in light of the recent Japanese experience at Fukushima, and lessons learnt will have to be incorporated in our own strategy. We should avoid knee-jerk reactions that might derail the nuclear power programme though we must clearly recognize the need to undertake a thorough review of our safety standards and benchmark them against evolving best practice.

India is also engaged in developing solar-based generation using both photovoltaic and thermal solar technology and a programme has been initiated to install 20,000 MW of solar power by 2020. This programme needs to be nurtured and supported in the hope of building a substantial domestic industry in this area. India has the potential to be a significant supplier of equipment to other countries. Both nuclear and solar power are more expensive than conventional thermal generation and this means that while increased reliance on these sources will contribute to energy security, and also mitigation of climate change, it does imply higher energy costs. Costs can be expected to come down as technology develops further, but in the next decade at least all indications are that unit cost of energy will rise.

The energy challenge in the Twelfth Plan is how to deal with a situation in which global energy prices will be high and the cost of alternative energy sources will also be high. Our ability to grow rapidly in this environment depends critically on our ability to transmit the high energy prices to energy users in the economy, rather than keep the prices artificially low. Only then will users be incentivized to reduce energy intensity and energy producers will have the resources they need to expand investment in these sectors. Making this transition is not easy. It will be argued that energy prices should not be raised in a situation where inflationary pressure is high, but the need to control inflation is not a valid reason for holding back relative price changes which contribute to efficiency. In fact, raising energy prices will reduce the pressure of demand for other products and thus help moderate price pressures elsewhere. The poor certainly need help to handle the impact of higher energy prices, but it is better to do this through an income transfer rather than keeping energy prices artificially low.

Managing Water Resources

Managing water scarcity in the Twelfth Plan period is in some ways even more daunting than the challenge posed by energy. India's available supply of fresh water is the same as it was 5,000 years ago, and the population has grown and so has the GDP, with a concomitant increase in demand for water. Until recently, official estimates showed the available supply of water to be well above total demand, albeit with areas of regional scarcity. More recent studies indicate that the demand for water at present is roughly equal to supply for the country as a whole and this near balance at a national level hides wide regional variations with acute shortages in many parts. Since growth in GDP implies expanded water use, the water situation can be expected to worsen rapidly. Already, there is evidence of excessive drawal of groundwater in many parts of the country leading to lowering of the water table and increasing salinity, which makes the water less usable for agriculture and harmful for health.

Regulating Groundwater

There is also a case for revisiting the various laws in place to regulate the use of groundwater. The present laws only provide for banning new tubewells in areas where the water table has fallen too far. This only confers a monopoly on existing tubewell owners who can pump as much water as they wish and sell it to other farmers. Free power or very cheap power for agriculture provides a wholly unjustified incentive for such activity. At the very least, state governments should consider imposing a cess on electricity for agricultural use in all areas where the water level has sunk too low, and earmark the proceeds for groundwater recharge.

Managing the Urban Transition

Managing the urban transition will pose special challenges in the years ahead. India has been slow to urbanize, but this is expected to change with faster growth. The urban %age of the population is currently around 30%, and is expected to reach 40% by 2030, implying an increase in numbers from 350 million today, to around 600 million. This will require a massive expansion in urban infrastructure, especially since only about half of those currently in urban areas are adequately served even by the current very low standards. The resources needed to achieve this expansion in urban infrastructure are much larger than what the cities or local urban bodies can mobilize on their own. Most of the revenue generated from economic activity in the country occurs in urban areas, but the revenue generated from this activity accrues to the central or state governments, and there is much less devolution to city governments than there should be.

Cities and urban local bodies in India also have limited capacity to raise their own resources. It is possible to generate revenue through user charges for some services such as water, sewerage and urban transport, but a long tradition of fixing low user charges has limited the flow of revenues from these sources. High land values in urban areas could be used to leverage resources to finance urban infrastructure, particularly through PPP projects, but this opportunity has not been adequately exploited although the recent decision of the Andhra Pradesh government to adopt the PPP route for a metro in Hyderabad may provide a model for the future. Even in the industrialized world, cities have rarely financed the entire infrastructure they need themselves and national governments have contributed in various ways. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) introduced in the Eleventh Plan is a mechanism for channeling resources from the centre to the states linked to specific reforms in urban governance and finances.

The results thus far are mixed, partly because of inadequate implementation capacity at the city level and also because of reluctance to pursue reforms. The JNNURM initiative will have to be expanded in the Twelfth Plan but it is also true that the cities and the states have to take on a much larger share of the burden than they do today the former through user charges and the latter through stronger devolution of resources. Steps to close the financing gap for urban infrastructure have to be accompanied by improved governance structures at the city level. The system of city government at present is such that city governments are not effectively empowered to plan for infrastructure development. Critical decisions on the infrastructure needs of the metropolitan cities are typically made by the state governments, which necessarily respond to the electorate in the state as a whole. This has to change so that city government is in the hands of elected representatives responsible to their local electorate.

Environment Protection and Sustainability

A difficult issue which has to be addressed in the Twelfth Plan is how to achieve the transition to higher growth without inflicting unacceptable damage to the environment. The qualification “unacceptable” is important since some stakeholders take an extreme position in which no damage must be done. That would rule out an enormous range of developmental activity, since all such activity alters the environment in some way. There is merit in taking an uncompromising approach in certain cases, e g, tiger reserves and very select biospheres, but the general approach must be one of balancing conflicting objectives. The threat to the environment posed by high growth arises from many different sources.

These include (a) the need to meet the energy requirements of growth and the consequent demand for coal and hydropower, both of which could run into forest clearance problems even if we ignore for the present the longer term effect of carbon emissions, (b) the impact of industrialization upon industrial effluents which leads to water pollution and of gaseous and particulate emissions which lead to air pollution, (c) the effect of expanding urbanization and the consequent need to treat 100% of the sewage generated instead of only 30%, as at present, in order to avoid damage to our rivers and water bodies, and (d) the challenge of managing the large quantities of solid waste generated in cities in a manner that is environmentally benign. In addition to these endogenous sources of environmental stress, we also have to deal with external threats to the environment arising from climate change. This will require proactive steps to increase aforestation and to harness and manage our water resources better.

The measures related to price rationalization in energy and water, and the various non-price initiatives in these areas, designed to increase energy efficiency and water use efficiency are critical for economic efficiency and will also help to moderate the environmental stress. These measures need to be supplemented by transparent and scientifically based environmental regulations which are strictly enforced. It must be emphasized that environmental protection is not cost less. The problem arises because economic agents do not take into account the external costs of their actions, some of which fall on future generations. Such actions must be discouraged as far as possible and the residual damage must be repaired or compensated. This is best done by enforcing the “polluter pays principle”. However, though often asserted in theory, this principle is largely ignored in practice.

Tax policies often fail to reflect this principle – the total tax burden on commercial vehicles for example is higher than on private vehicles. The regulatory mechanisms for enforcing pollution controls in the states are also extremely weak. We need a comprehensive review of tax policies (including state taxes) and also our pollution control mechanisms to ensure that the total impact is environmentally benign. A new initiative introduced in the Budget for 2010-11 is the imposition of a cess of 5% on coal (both domestic and imported), the proceeds of which are earmarked to a separate fund to promote green energy. Mechanisms of this sort can be used to meet the cost of environment protection and are justified by the principle that the polluter must pay. Another environmentally supportive measure is the imposition of a cess on electricity for agricultural use to be imposed in areas where the groundwater has sunk too low, with the proceeds being earmarked for use in groundwater recharge in the same area.

Market Manipulation, Crony Capitalism and Corruption

Greater reliance upon market forces was a key element of the economic reforms and it has yielded tangible benefits in terms of higher growth and efficiency. However, it is also seen to have produced an increase in manipulative crony capitalism, and the corruption it brings in its wake. Corruption and corporate wrongdoing is obviously not a problem unique to India. In recent years there has been a great deal of attention internationally on corporate corruption and various types of illegality as exemplified by high profile cases such as Enron, Worldcom, Parmalat and Bernie Madhof. The financial crisis has also drawn attention to various instances of conflicts of interest and regulatory capture which call into question the notion that markets always promote efficiency. Two areas in India which are especially vulnerable to the charge of crony capitalism need special attention. These are land-related development and those areas where other scarce resources such as minerals or spectrum are to be allocated by the government through licensing.

Non-transparency in land related issues has become a major problem which needs urgent attention. The problem surfaces in two different types of situations. First, land values in the major cities are hugely inflated because of highly non-transparent controls on land and there are large rents to be enjoyed by those who can obtain the relevant permissions to develop land. Non-transparent mechanisms for grant of such permissions inevitably lead to suspicion of corruption and cronyism.

These areas of discretionary policy need to be comprehensively reviewed and more

transparent mechanisms put in place. Second, acquisition of agricultural land for industrial development and for creating infrastructure presents many problems. Non-transparency in methods of allocating scarce resources such as minerals and spectrum has also given rise to criticism from many quarters. Allegations of corruption and cronyism have surfaced in both these areas, and they call for a thorough review of existing procedures.

As a general rule, competitive bidding among qualified bidders provides the most transparent way of allocating scarce resources such as mining rights in known mineral bearing areas or spectrum. The absence of competitive bidding in the allocation of 2Glicences has evoked intense criticism. In sharp contrast, the 3G auction, conducted in 2010, evoked no criticism at all, and is in fact a model which deserves careful study. There are circumstances where competitive bidding may not be the best method but the alternatives require very complex methods of evaluating the choices that have to be made, that invariably bring in discretionary decision-making, which can always become a matter of controversy ex post. Similar problems arise in allocating mining rights. A new Mines and Minerals Development Bill is currently under consideration in the government which must address those issues satisfactorily.

Government procurement procedures also need to be thoroughly modernized and made much more transparent as a means of reducing the probability of corruption and cronyism. OECD reports show that introducing such changes cuts costs by up to 25% in industrialized countries. Many countries have a public procurement law whereas in India government procurement is governed by rules. The government has appointed a committee to make recommendations in this area. Early action to modernize government procurement and make the procedures transparent, including through the adoption of e-procurement, would be a major step forward. It needs to be kept in mind that under the Right to Information Act, all these issues are available to the public ex post. There is no reason why the transparency should not be introduced ex ante.

Implementation of Government Programmes

In addition to influencing the pace and pattern of growth, and including especially its employment generating capacity, the strategy of inclusiveness also relies heavily on government programmes designed to promote inclusiveness. Programmes for health and education are particularly important in this context, and have been discussed earlier. In addition, there are a number of programmes which together constitute a structure of social security and provision of direct benefit for the poor.

The most important of the other programmes relevant for inclusiveness are (i) the supply of subsidized foodgrains through the PDS, (ii) the Mid-Day Meal Scheme for schoolchildren, (iii) the Integrated Child Development Services (ICDS) which provide nutrition and pre-school education for the zero to six-year age group and also for adolescent girls, (iv) the National Social Assistance Programme (NSAP) which provides an old age pension, plus a pension for widows and disabled persons, (v) the Mahatma Gandhi National Rural Employment Guarantee, which provides assured employment for 100 days at the notified minimum wage, (vi) the National Rural Drinking Water Programme which aims at covering villages which do not have an assured supply of potable water, (vii) the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) which extends electricity to all uncovered villages and provides free connection to all BPL families, and (viii) the Indira Awas Yojana (IAY) which provides assistance to the rural poor to build pucca homes. The total provision for these programmes in 2010-11 was Rs 1,55,000 crore or about 1.9% of GDP.

There is broad agreement that these programmes are aimed at desirable objective but there is a great deal of scepticism about whether these programmes are being implemented in a manner that will ensure that these objectives are actually realized. Complaints of leakages, inefficiency and corruption are widespread and while these are sometimes advanced by those who do not sympathize with the welfare objectives of the programmes, there is no doubt that there is also a genuine problem of implementation. It is important to note that the central government only finances these programmes and actual implementation is carried out by state government agencies. As one would expect, the effectiveness of implementation varies greatly

from state to state, with many examples of good implementation but also examples of abject failures.

These failures can be traced to one or all of three problems: poor design ab initio, underfunding and poor implementation. In practice all three are probably present to some degree. Problems of poor design and inadequate funding can and should be addressed by the central government. Central government guidelines are often inflexible and not tailored to the requirement in particular states. Furthermore, many areas involve cooperation between different arms of government, e.g. of agriculture, irrigation and rural development or the departments of health, education and women and child development. Unfortunately, government typically works in silos which make effective interdepartmental cooperation very difficult. As far as adequacy of funding is concerned, scarcity of resources is a genuine problem. The solution lies in better prioritization. It is much better to fully fund schemes that are working well and squeeze other rather than spread resources thinly.

However, this is easier said than done and enforcing prioritization in this way will be a major challenge in the Twelfth Plan. Improving implementation on the ground has to be a major objective in the Twelfth Plan. Opinions vary on how this can be achieved. A committed political leadership at the state level, working with an effective administration, can obviously make a big difference. Devolution of decision-making and accountability to panchayati raj institutions (PRIs) is also a potential instrument improving accountability. This is in line with the 74th Amendment which provided for devolution of functions, finances and functionaries from the state government to the PRIs. Some progress has been made in devolution, but most state governments have devolved functions with very little devolution of either funds or functionaries.

The central government can perhaps help in this area by structuring its schemes of assistance in a way which increases the role of the PRIs. For this to work, it will also be necessary to build capacity at the PRI level. Earmarking some portion of central funds for capacity building may be necessary. Greater participation by civil society organisations promoting greater involvement of the community, with a greater awareness of its rights, will also help. The Right to Information Act is an important new initiative which empowers civil society and individual stakeholders to hold government at all levels accountable.

Conclusions

As stated at the outset, the purpose of this paper was not to present firm conclusions, but rather to pose the issues we need to address in preparing the Twelfth Plan, in the hope of provoking a wider debate. However some broad conclusions can be drawn. The economy will enter the Twelfth Plan period in an environment of great promise but also one that presents major challenges. We have done well on the growth front, but not so well on inclusion, though it is possible that when the data for the entire period become available, we may find that the situation is better than currently envisaged. Much of what needs to be done to accelerate GDP growth to 9% or so will be done by the private sector, but the central and state governments have a crucial role to play in providing a policy environment that is seen as investor friendly and is supportive of inclusive growth. A credible time path for bringing the fiscal deficit under firmer control must have top priority.

This must be accompanied by continued progress on reforms that are in the pipeline in many areas, especially those that are likely to generate an early investment response. A financial sector capable of mobilizing and deploying resources efficiently is extremely important and there are many steps that can be taken in this area that are entirely in the domain of the central government. The government's own resources have to be deployed with a clear sense of priority. In this context, health and education and critical infrastructure development, especially in water management and rural infrastructure, and infrastructure development in backward areas must have top priority. For other infrastructure areas the maximum use must be made of PPPs both by the central government and by the states. Impediments in the implementation of large projects should be speedily removed.

Four critical challenges facing the economy in the Twelfth Plan, which are perhaps more serious than they were at the start of the Eleventh Plan, are the challenges of (a) managing the energy situation, (b) managing the water economy, (c) addressing the problems posed by the

urban transformation that is likely to occur, and (d) ensuring protection of the environment in a manner that can facilitate rapid growth. Difficult choices have to be made in each of these areas and both the central government and the states have an important role in bringing about a successful outcome. The prize, if we succeed, is that we will have put India in the small group of countries that have achieved the transition to sustained high growth and elimination of poverty.

Finally, the efficiency in implementation of projects on the ground needs to be greatly improved. Most of what needs to be done in this context rests with state governments but the central government must find ways of improving project design, prioritizing resources to fund well designed interventions that work, devolving resources to lower levels and helping build capacity. Evidence-based evolution is critical for redesign and prioritization. We need to greatly strengthen capacities in the area and the proposed Independent Evaluation Office which is expected to be set up during 2011-12 will be a major step in this direction.

WHAT IS THE NEED FOR PUBLIC SECTOR NOW (RELEVANCE OF SOCIALISM)

The goals of socialism and establishment of a welfare state are still to be achieved totally. Public sector has still to play a vital role if not the commanding role in their achievement. Markets are not well-developed, regulated and promoted in developing countries due to slow pace of reforms and volatile political scenarios. Market failures in the fragile economic environments of developing countries may cause severe consequences as experienced in South East Asian countries. The dependence over market could lop side the production of goods and services in favour of inessential needs of rich while depriving even the very essential needs of the poor. Protection of environment is the most important ecological concern of humanity today.

RECENT INITIATIVES OF NITI AAYOG:

Atal Innovation Mission (AIM)

AIM is a flagship Innovation Promotion Platform of NITI Aayog, the think tank of Union Government for promotion of innovation and entrepreneurship in India. It involves academics, entrepreneurs and researchers from national and international levels to foster a culture of innovation, R&D and scientific research in India.

Self Employment and Talent Utilisation (SETU)

Government has announced the setting up of a Self- Employment and Talent Utilisation (SETU) mechanism. Presenting the General Budget 2015-16 in the Lok Sabha here today, the Union Finance Minister Shri Arun Jaitley stated that SETU will be a Techno-Financial, Incubation and Facilitation Programme to support all aspects of start up businesses, and other self-employment activities, particularly in technology-driven areas. An amount of Rs.1000 crore is being set up initially in NITI Aayog for SETU.

India Innovation Index

The National Institution for Transforming India (NITI) Aayog and Confederation of Indian Industry (CII) jointly launched India Innovation Index. Besides country's first innovation index portal was also launched. The index has been jointly developed by NITI Aayog, DIPP and CII in consultation with World Economic Forum (WEF), World Intellectual Property Organization (WIPO), Cornell University, UNIDO, ILO, OECD, UNESCO, ITU etc.

Lucky Grahak Yojana and Digi Dhan Vyapar Yojana

The Union Government has launched Lucky Grahak Yojana to encourage consumers and Digi Dhan Vyapar Yojana to encourage merchants for transition to digital payments. These award based schemes were launched by the NITI (National Institution for Transforming India) Aayog, government's policy think-tank. These schemes aim to give cash awards to consumers and merchants who utilize digital payment instruments for personal consumption expenditures. They will specially focuses on bringing the poor, lower middle class and small businesses into the digital payment fold. National Payment Corporation of India (NPCI) will be the implementing agency for these schemes. Transactions using USSD, UPI, RuPay and AEPS will only be covered under these schemes. Digital payments made through credit cards and e-wallets won't be covered.

Pact with US EIA to set up portal on energy data

The NITI Aayog has inked a pact with US Energy Information Administration (EIA) in a step to set up a portal to host all the data related to energy sector in the country. The web portal will host all the data related to energy sector including oil and gas, coal, solar and thermal energy etc. It will be developed as part of NITI Aayog's efforts to set up India's energy data agency, which would take three-four years to develop. Besides, NITI Aayog also inked an SOP with US Agency for International Development (USAID) and UK's Department of Energy & Climate Change (DECC) for collaboration in the area of energy research.

Women Transforming India initiative

Union Government's premier think-tank NITI Aayog has launched the 'Women Transforming India' initiative. The initiative was launched on the eve of International Women's Day (8th March) in partnership with the United Nations and MyGov. Through this initiative NITI Aayog seeks to directly engage with women leaders from across urban and rural areas of India. It will collect entries in the form of written essays/stories, preferably accompanied by photographs that set a context to the narrative. These stories will be reflecting new ground broken by women in empowering themselves and others or challenging stereotypes.

ARTICLE _ **The economy in the recent past has shown that it has the resilience to do so. But to overcome the current phase of declining investment rate, political and social cohesion is imperative.** C. Rangarajan

The Indian economy is currently passing through a phase of relatively slow growth. However, this should not cloud the fact that over the nine-year period beginning 2005-06, the average annual growth rate was 7.7 per cent. Against this background, the relevant question is whether India has the capability to grow at 8 to 9 per cent in a sustained way. In short, what is the potential rate of growth of India?

Normally, potential growth is measured using trends with some filters. In one sense, these are backward-looking measures, since they depend on historically observed data. In the case of measuring capacity utilisation in manufacturing, the maximum capacity is very often taken as the maximum output achieved in the recent period. Perhaps, in the case of determining the potential rate of growth of the economy also, one can take the maximum growth rate achieved in the recent past as the lowest estimate of the potential. However, this assumption will be valid only if there is reason to believe that the maximum growth rate achieved in the recent past was not a one-off event and that the growth rate achieved was robust and replicable.

High-growth phase

India achieved a growth rate of 9.5 per cent in 2005-06, followed by 9.6 per cent and 9.3 per cent in the subsequent two years. After declining a bit in the wake of international financial crisis, the growth rate went back to 8.9 per cent in 2010-11. In many ways the growth rate achieved in the high phase period of 2005-06 to 2007-08 was robust**. The domestic savings rate during this period averaged 34.9 per cent of GDP. Similarly, the gross capital formation rate averaged 36.2 per cent.** The current account deficit (CAD) remained low with an average of 1.2 per cent of GDP.

Agricultural growth during this period averaged 5 per cent, and the annual manufacturing growth rate was 11 per cent. The capital flows were large but as the CAD remained low, the accretion to reserves amounted to $144 billion.

Inflation during the period averaged 5.2 per cent. The combined fiscal deficit of the Centre and States was 5.2 per cent of GDP, well below the stipulated 6 per cent. Thus on many dimensions the growth rate was robust. Unlike in the 1980s when the pick-up in growth was accompanied by deterioration in fiscal deficit and current account, the sharp increase in growth between 2005-06 and 2007-08 happened with the stability parameters at desired levels. Also, a booming external environment provided good support.

To assess whether the high growth phase can be replicated, we need to understand the factors that led to the slowdown since 2011-12. Complicating the analysis of this period is the revision of national income numbers with a new base. The two sets of numbers present a somewhat differing picture.

According to the earlier series, the growth rate of the Indian economy fell below 5 per cent in 2012-13 and 2013-14. But the new series shows a decline below 5 per cent only in 2012-13. For 2013-14, the new series records a growth rate of 6.6 per cent, as against 4.7 per cent according to the earlier estimate. For 2014-15 and 2015-16, there is only one set of numbers, that is, according to the new series. For both the years the growth rate is above 7 per cent. These are good growth rates under any circumstance, let alone the current global

situation. Anyway, we have come down from the growth rate of 9-plus per cent which we had seen earlier.

Three sets of reasons are attributed for the slowdown. **First, the external environment** had deteriorated sharply. The recovery from the crisis of 2008 was tepid. One country after another in the developed world came under pressure. **Strangely, however, international commodity prices including crude oil prices remained high until a couple of years ago.** All this had an adverse impact on developing countries, including India.

However, it would be wrong to attribute the slowdown in India primarily to external factors. The domestic factors are the key. **Second, there were severe supply bottlenecks**. **Agricultural production** fell sharply in 2009-10 because of a severe drought. This triggered an inflation which lasted for several years thereafter**. Coal output** fell. **Iron ore output** fell, partly because of **court decisions**.

The third set of reasons is basically non-economic which led collectively to a weakening of investment. A multitude of issues relating to **scams** and perceived delays in decision-making created an element of **uncertainty in the minds of investors**. New investments began to fall.

Productivity of capital

An analysis of the data of the period since 2012-13 reveals two trends. First, there has been a **decline in investment rate.** Second, the decline in growth rate is greater than the decline in investment rate indicating a rise in the incremental capital-output ratio (ICOR). In 2007-08, India's investment rate was 38 per cent of GDP. It declined steadily to touch 34.8 per cent in 2012-13. This is according to earlier National Income estimates. However, according to the revised estimates, the investment rate began to fall only from 2013-14. The declining trend continues into 2015-16.

With an ICOR of 4, which was what it was in the high growth phase, even the lower investment rate should have given us a higher growth than what the economy has seen since 2011-12. **The rise in ICOR can be attributed to the delay in completion of projects or the lack of complementary investments. In some cases, it can also be due to non-availability of critical inputs. The delay in completion of projects can be due to internal reasons as well as policy constraints. It is here questions relating to land and environment enter**.

About two years ago, it was estimated that there were around 750 "stalled" projects with a total value of Rs.8.8 lakh crore. What then are the lessons that we can draw from this experience? Even with the existing level of investment rate, it should be possible to grow at 7.5 per cent in the short run, provided ways are found to speedily complete projects. However, only a return to higher levels of saving and investment can take us back to 8-9 per cent growth seen earlier. **Thus what is needed to achieve the "potential" is to raise the investment rate and improve the productivity of capital (lessening ICOR).**

The emphasis on the level of investment and productivity of capital as key to achieve the "potential" raises another issue of **whether the Indian economy is "supply constrained" or "demand constrained". Most developing economies are generally "supply constrained". India is no exception. But there can be occasions such as the current phase in India where demand deficiency can be a critical factor.** In fact, in the current situation, weakening of external demand has had an impact on manufacturing**.** There is no doubt that a **buoyant external environment** will play an important part in boosting domestic economy.

Gazing into the future

The rise in investment rate must be supported by a rise in the domestic saving rate. An increase in investment rate supported by a widening current account deficit is not sustainable and is fraught with serious consequences. Only a current account deficit in the region of 1 to 1.5 per cent is sustainable.

Incremental capital output ratio is a catch-all variable which is influenced by a host of factors. Obviously, it depends on **technology**. It also depends upon the **skill of the labour force** which in turn depends on the **quality of the education system**. Another catch-all expression "**ease of doing business**" is also relevant. **Bureaucratic hurdles** which impede speedy execution of projects need to be removed. Thus improving the productivity of capital needs action on several fronts.

Making a prediction about the future is always hazardous. Many things can go wrong. The Indian economy in the recent past has shown that it has the resilience to grow at 8 to 9 per cent. Therefore achieving the required investment rate to support such a high growth is very much in the realm of possibility. However, we need to overcome the current phase of declining investment rate. Investment sentiment is influenced by non-economic factors as well. An environment of political and social cohesion is imperative. Equally, we can get the ICOR back to a lower level. Raising the productivity of capital will require **policy reforms** including **administrative reforms** as well as **firm-level improvements**. The "potential" to grow at 8 to 9 per cent at least for a decade exists. We have to make it happen.

(C. Rangarajan is former Chairman of the Economic Advisory Council to the Prime Minister and former Governor, Reserve Bank of India.)

ECONOMIC REFORMS IN INDIA

Strategies adopted to find a better state-market mix to promote growth and development. It entails opening up of the economy. Many countries like China, East Asian countries and India went for economic reforms. Each had different strategies and different outcomes. Reforms have not been very popular in India.

1. Washington Consensus
    a. Ideologically opposite to 'strong state intervention' as proposed by Keynes
    b. Initially prescribed for crisis ridden Latin American Countries by IMF and WB
    c. 10 prepositions :
        i. Fiscal discipline
        ii. Orientation of public expenditure towards public goods like health education
        iii. Tax reform – broad tax base, low rates
        iv. Interest rate liberalisation
        v. Competitive exchange rate
        vi. Trade liberalisation
        vii. FDI inflows
        viii. Privatisation
        ix. Deregulation – remove barriers to entry and exit
        x. Property rights
    d. Criticised by some as promoting interests of western capitalist economies
2. Economic Crisis 1991
    a. Events leading upto Balance of Payment crisis
        i. Early reforms of 1980s under Washington Consensus --> Liberal policies --> market borrowings --> foreign indebtedness
        ii. First Gulf War 1991 --> High oil prices and falling of private remittances from Indians in Gulf countries
        iii. Fiscal deficit>8%
        iv. Hyperinflation (>13%)
3. Obligatory Reforms
    a. To mitigate BoP crisis, Extended Fund Facility of IMF used
    b. This puts an economy under obligation to fulfil some conditions
    c. IMF conditions
        i. 22% devaluation of rupee
        ii. Peak import tariff reduced from 130% to 30%
        iii. Excise increased by 20% to neutralise the loss from custom
        iv. Government expenditure to be cut down annually by 10%
4. Economic reforms launched by India includes Macroeconomic Stabilisation Measures and Structural reforms
5. Macroeconomic Stabilisation Measures
    a. To boost demand
    b. Increasing purchasing power of people
    c. Employment generation
6. Structural Reforms
    a. To boost the supply of G&S
    b. Promote markets
7. LPG
    a. Liberalisation

        i. Direction of reform process
        ii. Laissez-faire
        iii. Pro-market and pro-capitalist bent in economy
    b. Privatisation
        i. Path of reform process
        ii. De-nationalisation of state assets – UK under Thatcher in 1980s
        iii. Disinvestment
        iv. Other strategies like de-licensing, de-reservation, foreign investment etc
    c. Globalisation
        i. Goal of reform process
        ii. Unrestricted cross border movement of G&S, capital, labour and ideas
        iii. Started from Uruguay round of GATT and ends with the replacement of GATT by WTO

8. Generation of Economic Reforms
   No formal distinction among various generations, classified for convenience
    a. First Generation
        i. 1991-2000
        ii. Promotion to private sector
            1. De-reservation and de-licensing of industries
            2. Abolition of MRTP limit
            3. Conversion of loans into shares
            4. Simplification of environmental laws
        iii. Public Sector Reforms
            1. Token disinvestment
            2. Corporatisation
        iv. External Sector Reforms
            1. Abolition of import restrictions
                a. Floating currency regime
            2. Full current account convertibility
            3. Capital account reforms
            4. FDI and FII
            5. FEMA replaced FERA
        v. Financial Sector Reforms
            1. Banking, Insurance, Mutual funds and capital markets reforms
        vi. Tax Reforms
            1. Simplification, broad-basing, modernisation of tax structure
    b. Second Generation
        i. 2000-01 onwards
        ii. Factor Market Reforms
            1. Dismantling of Administered Price Mechanism for petroleum, sugar fertiliser etc making their production and sale profitable for the private sector
        iii. Public sector reform
            1. Disinvestment
            2. Functional autonomy, international tie-ups and capital to PSUs
        iv. Legal Sector Reforms
            1. Abolishing outdated and contradictory laws in IPC, CrPC, Labour laws, Company Laws
        v. Critical Areas Reforms
            1. Infrastructure eg Telecom
            2. Agriculture

3. Health and education

vi. Other strategies

1. Fiscal Consolidation – FRBM Act by centre and Fiscal Responsibility Act FRA by the states
2. Greater tax devolution to the states
3. Focus on social sector

c. Third Generation (Currently India is under 3rd generation of reforms.)

i. PRIs to be made fully functional
ii. increase GDP per capita and Tax/GDP ratio
iii. creation of world class infrastructure
iv. nurturing the spirit of entrepreneurship
v. Capital easing norms for start-ups or entrepreneurs through Mudra Bank
vi. GST (Goods and Service Tax)
vii. Demonetisation
viii. Exit Policy/ Insolvency & Bankruptcy Code

d. Fourth Generation

i. Vision of a fully IT enabled India

Major Steps of Economic Reforms Taken by Government

- New Industrial Policy
    1. Abolition of Licensing
    2. Freedom to Import Technology
    3. Contraction of Public Sector
    4. Free Entry of Foreign Investment
    5. MRTP Restrictions Removed
    6. FERA Restrictions Removed by more liberal FEMA
    7. Increase in the Importance of Small Industries
- **New Trade Policy**
    1. Reduction in Restrictions of Export-Import
    2. Reduction in Export-Import Tax
    3. Easy Procedure of Export-Import
    4. Establishment of Foreign Capital Market
    5. Full Convertibility on Current Account
    6. Providing Incentive for Export
- **Fiscal Reforms**
    1. Fiscal Deficit to be reduced
    2. Gross Domestic Product (GDP) to be increased
- **Monetary Reforms**
- **Capital Market Reforms**
- **Phasing out Subsidies**
- **Dismantling Price Control**