Lecture No. 27 India in a Globalising World Montek S Ahluwalia Chatham House, London; 20 April 2005

I feel greatly honoured at being invited to deliver the 27th Jawaharlal Nehru Memorial Lecture. Unlike my distinguished predecessors in this lecture series, I never had the privilege of a personal interaction with Jawaharlal Nehru. I was four years old when India became independent and twenty when he died, so few people of my generation can make that claim. But this is not to say that we did not know him. Panditji, as we called him, was a larger than life presence through our school and early college years and not just because he was the first Prime Minister of independent India, and a living link to the freedom movement. As the first post independence generation, we took independence for granted and were more interested in the future and he, more than anyone else, provided an inspiring vision of a future worthy of India's glorious past.

The subject of my lecture – India in a Globalising World – may appear at first glance to be an odd choice for a lecture in Jawaharlal Nehru's memory. Globalisation as we know it today did not exist when Jawaharlal Nehru was Prime Minister and it might even be said that it has elements somewhat alien to his world view. His politically formative years, between the two World Wars, were marked by a significant reversal of globalisation and a shrinking of world trade as the major industrialized countries resorted to protectionism to maintain domestic employment. This was also a period when the autarkic Soviet Union appeared to be gaining ground while the market economies were struggling to manage their economic problems.

Nevertheless, there are two reasons why I feel my choice of subject is appropriate. First, globalisation is a contemporary reality and presents India and other developing countries with new challenges, which call for new responses. Jawaharlal Nehru was unwavering on basic principles and fundamental values – secularism, democracy, modernisation, development with social justice - but he was not one to be tied down by dogma to particular instrumentalities. On the contrary, he recognised that India's future would pose new challenges which would need a fresh approach. He said exactly that in his celebrated "Tryst with Destiny" speech on the eve of India's Independence:

"The past clings on to us still in some measure and we have to do much before we redeem the pledges we have so often taken. Yet the turning-point is past, and history begins anew for us, the history which we shall live and act and others will write about."

Second, Panditji was a committed internationalist and he believed that independent India must participate fully in the world community. Given the reality of globalisation, I have no doubt that he would have wanted India to be in the forefront of a globalising world. As a man with a deeply scientific bent of mind, he would have wanted us to adopt the policies most likely to achieve our economic and social objectives, learning from the experience of others where relevant. For all these reasons, there can be no better way to honour his memory than a discussion of how India must deal with the new challenges posed by globalisation.

Ideally, I should discuss India in a globalising world covering economic, social, cultural and political dimensions, each of which is powerfully influenced by forces of globalisation and all of which interact with each other. However, as an economist, I am naturally inclined to observe the laws of comparative advantage, and therefore I will focus only on economic issues in the lecture and compensate for this narrowness by dealing with economic aspects as broadly as possible.

The problems posed by globalisation have been much discussed in recent years and it is interesting to recall briefly how perceptions about globalisation have changed in this period. The early 1990s were characterised by a highly positive assessment of globalisation especially in the West. The collapse of Communism in Russia and Eastern Europe, and the enthusiastic conversion of these countries to market economics, created an environment of triumphalist optimism which was reflected in Francis Fukoyama's premature pronouncement of "the end of history". Many in the industrialised world advocated a drastic reduction in the role of the state and freeing of markets – domestic and external, including liberalisation of capital markets - as a simple and tested formula for accelerated development. It was felt that countries only had themselves to blame if they failed to follow this recipe.

Experience did not validate this simplistic view. In some of the emerging market countries, especially in Africa and Latin America, it became evident that adoption of the conventional package of reforms did not always lead to rapid growth. The liberalisation of capital markets also proved to be a source of problems in certain circumstances as several emerging market countries experienced severe financial crises from which recovery proved to be a prolonged process, and where the poor were often the worst hit. The industrialized economies also saw growing opposition to globalisation arising from high unemployment rates and fears of lost job opportunities. Careful research repeatedly established that these losses had more to do with technological changes than competition from cheap imports, but public perception remained otherwise, and protectionist fears fanned anti-globalisation sentiments.

This is the background in which India, the world's largest democracy, has been charting her course in a globalising world. Democracies encourage debate and there is a great deal of it in India on issues connected with globalization. Politicians of all political parties in India know that globalisation is a reality. Many of them also know that all countries that have grown rapidly have done so by exploiting opportunities in world markets and this can only be done if the economy is globally competitive. But there are also the fears about the impact of globalisation which need to be addressed. These fears relate to two types of negative fallouts. First, there is apprehension that globalisation, and the policies of openness associated with exploiting the opportunities it offers may lead to negative effects on GDP growth. Second, there are concerns that even if aggregate growth is not adversely affected, indeed even if it increases, globalisation may have severely disruptive distributional affects hurting the economic interests of particular groups, sectors or regions causing a loss of income and an increase in poverty.

Let me first focus on India's growth prospects in a globalising world. India's experience certainly suggests that there is no reason to fear that globalisation will hurt India's growth prospects. On the contrary, India has experienced a distinct improvement in growth in the period when its policies reflected the compulsions of globalization, compared with the 1960s and 1970s, when the Indian economy grew relatively slowly at an average of around 3.5 percent per year. Growth accelerated to an average of around 5.8 percent per year in the 1980s and 1990s and the economy is currently growing at about 6.5 percent. The present government has targeted a growth rate of between 7 and 8 percent for the near future. Since population growth has slowed down from 2.2 percent prior to 1990 to around 1.8 percent at present, these figures imply that the projected acceleration in the growth of per capita incomes is greater than in the growth of GDP.

International agencies and independent scholars agree that the economy can achieve growth rates of 8 percent or so provided supportive steps are taken. A much quoted recent study by Goldman Sachs identified Brazil, Russia, India and China as the set of large emerging market countries projected to grow rapidly over the next thirty years. Within the group, India's potential growth rate was projected to be the fastest – around 8 percent per year – faster even

than China which is currently, and has been for many years, the fastest growing economy but is expected to slow down in future. According to this study, by 2040 India will become the third largest economy after the USA and China. This projection has been adopted by the US National Intelligence Council's 2020 report "Mapping the Global Future".

Are these projections credible? There are good reasons to believe that they are. Economics tells us that per capita income in an economy depends upon several key determinants and growth of per capita income depends upon changes in these determinants over time. The first is resource availability, i.e. capital per unit of labour and the quality of human capital. The level of technology available to a country is obviously an important determinant, and so is the set of policies and economic institutions which together determine the efficiency with which resources are used given available technology. In an open economy it is particularly important for the policies to be such that the country can take full advantage of the opportunities provided by interaction with the rest of the world and this aspect has become especially important in a globalising world, where technology has created new opportunities for trade and other interaction which simply did not exist earlier.

Based on these considerations I have no doubt that India is well positioned to accelerate from its present 6.5 percent growth rate of GDP to around 8 percent in the near future. As far as the availability of capital is concerned, this depends upon the rate of investment, which in turn is constrained by the rate of domestic savings and the sustainable level of foreign inflow. India's domestic savings rates have risen to a very respectable level of 27 percent of GDP, and could rise further reflecting the age composition of the population, which is at the stage where the dependency ratio is expected to keep falling. The weak spot in the savings picture is public savings, which is negative, though the latest figures show welcome improvement in this dimension.

In a globalising world, domestic savings can be supplemented by investment flows from abroad and India has reoriented policies towards foreign investment to welcome such flows. India at present attracts only about \$5 billion of FDI compared with \$60 billion for China. The government has set the target of raising foreign investment to three times its present level and is taking steps to remove policy impediments to such flows in several areas. With continuing improvement in domestic savings, and an increase in FDI from under 1 percent of GDP to say 2.5 percent, India can achieve rates of investment of close to 30 percent which should suffice to sustain 8 percent growth. Investment rates in China are much higher – around 40 percent of GDP – but there is reason to believe that China's very high investment rates reflect some degree of inefficiency in the use of capital.

Human capital is another resource that determines growth and there are two somewhat different dimensions that are relevant. One is the availability of skilled manpower and the other relates to entrepreneurial ability. India has a large pool of technical and higher skilled manpower, reflecting long established socio-cultural biases in favour of education and also the emphasis placed on higher education almost immediately after independence. The country produces about 170,000 graduates in engineering and technology annually; not a large number in relation to the population but very substantial as an absolute flow. While quality varies, the best institutions such as the Indian Institutes of Technology and the Indian Institutes of Management, all part of the Nehruvian legacy, are truly world class. Familiarity with English has proved to be an important advantage, especially in some of the new growth areas created by globalisation such as IT enabled services. These endowments make India a potentially attractive production base offering high level skills at a fraction of the cost in the industrialised world. The picture is less encouraging when it comes to basic education of the labour force, and I will have more to say on this later in the lecture.

The other dimension of human capital relates to private entrepreneurship and this is one of India's major strength. India has a long tradition of private enterprise which flourished even in the period when economic policy strongly favoured the public sector. In those years, businessmen operated in a domestic market where government control limited domestic competition and high protective barriers limited foreign competition, clearly not an environment that encouraged genuine entrepreneurship. Industry profited more from its ability to "manage" the bureaucracy and obtain benefits of one kind or the other from a system of control that was highly discretionary and non transparent. There has been a major change in the business environment in the past two decades thanks to economic reforms and this has had a powerful impact on the private sector. Indian firms have reoriented themselves to deal with both domestic and foreign competition and many have begun to establish or acquire subsidiaries abroad to compete more effectively in a globalised world. Earlier fears that lowering of tariff barriers would lead to a flood of imports that would swamp Indian industry have been dissipated and Indian industry today is confident about its ability to compete in a globalising world. Some of the best Indian firms have even listed on foreign stock exchanges and now have substantial foreign institutional stakeholders, who are an important force pushing for greater transparency and better corporate governance. These changes are not easily quantified, but they are real nonetheless and they are an important reason for being optimistic about faster growth in the years ahead.

Economic policies and institutions also play a central role in determining growth prospects. Economists, probably focus too much on the role of policies, and tend to underplay the importance of institutions, because policies can be changed over relatively shorter periods while institutions take much longer to create and to mature. I will touch on institutions also, but for the moment let me emphasise that India has seen major changes in economic policies over the past two decades which will help it to perform more effectively in a globalising world.

The process of economic reforms began in the mid-1980s, following a recognition that India's performance in the 1960s and 1970s was below its potential. Mr. Rajiv Gandhi was the Prime Minister at the time, and he was keenly aware that East Asian countries were outpacing India and a restructuring of economic policies was necessary if India was to realise her growth potential. This was the period when the extensive government controls which existed earlier on private investment and technology decisions began to be liberalised. Indian private companies were encouraged to expand in scale and induct contemporary technology. Access to foreign technology was made easier and foreign investment began to be viewed as a mechanism for injecting new technology into the economy. Prime Minister Rajiv Gandhi was also personally convinced of the importance of telecommunications and paid special attention to the modernisation of this sector. He also encouraged the application of computers and the development of the software industry. These policy initiatives paid rich dividends ten years later, when India emerged as the most globally competitive emerging market country in software and IT services.

Economic reforms were intensified in the 1990s following a serious balance of payments crisis in 1991. The present Prime Minister, Dr. Manmohan Singh, was the Finance Minister at the time, and was the architect of those reforms. The internal liberalisation begun in the 1980s was carried further, and was combined with a gradual process of external liberalization, including lowering of import duties, removal of quantitative restrictions on imports and a major liberalization of foreign direct investment. The 1990s also saw the start of a process of financial reforms aimed at introducing greater competition and tightening prudential norms in the banking sector, stock exchanges and capital market institutions and the insurance sector.

These reforms were accompanied by efforts to strengthen institutions appropriate for the functioning of a market economy. India is fortunate in this area because it already had commercial and legal institutions necessary for functioning as a market economy in a globalising world. The institutions I have in mind are an independent judiciary and the rule of law, the prevalence of acceptable accounting standards, functioning stock exchanges and corporate practices. In a globalising world, these institutional characteristics, sometimes called "soft infrastructure" to distinguish them from the traditional "hard infrastructure" of roads, ports, railways, etc. are an important positive factor, especially for attracting foreign investment. India's institutions were broadly patterned on those in the industrialized countries though their functioning certainly needed to be improved. Several steps were taken in this direction, including especially in the area of modernising stock exchange practices and introduction of corporate governance rules. Gaps remain in certain areas such as bankruptcy laws, where procedures take far too long, but the basic structures are in place and they are increasingly being pushed to conform with best practices internationally.

The response of the economy to the reforms that have already taken place gives some grounds for optimism about the future. The reforms of the 1980s produced a distinct improvement in economic performance as the growth rate of GDP, which had earlier averaged only around 3.5 per cent accelerated to an average of 5.8 percent per year in the 1980s. This was not only much better than in earlier years, it was also better than growth rates in Latin America and Africa in the 1980s which decelerated in the period later described as "the lost development decade". However, India's growth remained well below growth rates achieved in China, which grew at about 8.5 percent in the 1980s, or even Malaysia and Thailand, which grew at 6 percent and 7.4 percent respectively.

The intensification of reforms after 1991, including especially the external liberalization, was expected to push the economy to a distinctly higher growth path. It appeared to do so initially, as GDP growth averaged 7.5 percent per year between 1994-95 and 1996-97. India appeared ready to transit to a faster rate of growth and the government even targeted growth at 8 percent for the Ninth Plan period (1997-2001), but this was not achieved. Growth slowed down in the second half of the 1990s and the average growth rate for the 1990s was not very different from that in the 1980s. More recently, the growth rate has accelerated to around 6.5 percent but this is well below the growth rate targeted.

The fact that the reforms of the 1990s did not produce significantly faster growth than observed in the 1980s has led some critics to question whether the reforms of the 1990s, including especially the liberalization of trade policy and foreign investment, were appropriate or even necessary. I do not have the time to deal with this issue at length, but let me just say that in my view, the reforms initiated in the 1990s were indeed essential and the reason why growth did not accelerate as much as expected was because the reforms were incomplete in some important respects.

The reforms of the 1990s were essential because the earlier reforms initiated the process of internal liberalization, but they did not address the issue of international competitiveness, which required extensive liberalization of trade policy and liberalisation of foreign investment. In the absence of action in this area, there was not enough improvement in export competitiveness. India's share of world exports had been declining steadily from 2 percent in 1950 to 0.4 percent in 1980. This decline began to be reversed in the 1980s but the share increased only marginally to 0.5 percent in 1990. The balance of payments remained under pressure and the economy resorted to external borrowing, leading inevitably to a deterioration in external debt ratios. Not surprisingly, a loss of confidence in 1990 precipitated a reversal of debt flows and produced a crisis.

The reforms of the 1990s including the shift to a flexible largely market determined exchange rate succeeded admirably in correcting this weakness. India's export share in world trade increased from 0.5 percent in 1990 to 0.8 percent in 2002. This is still a modest figure, but I should add that it does not include earnings from software exports and from business process outsourcing, which have become very important in recent years and are themselves indisputably the outcome of the liberalisation of the 1990s. Higher export earnings in the 1990s have been supplemented by larger flows of foreign direct investment and investments by foreign institutional investors (FIIs) in the stock market. The total inflow from both these sources was around \$6 billion until 2002-03 and then shot up to \$16 billion in 2003-04, mainly because of a surge in FII inflows.

The disappearance of the "foreign exchange constraint" is major benefit of the economic reforms of the 1990s. It has enabled successive governments to take a number of steps essential for enabling India to compete in a globalising world. Most important of these has been the reduction in import duties, implemented by successive governments albeit at a very gradual pace. There was a brief reversal in this process in the late 1990s, but it was soon resumed, indicating a reasonable consensus on this issue. Indian import duties are still too high – nearly three times higher than in China – but the present government is committed to bringing them down to levels comparable to East Asia and significant reductions were implemented in each of the two budgets presented by the government thus far. Interestingly, Indian industry is no longer alarmed at the prospect and representative industry organisations have publicly recommended a gradual process of duty reduction.

Let me now turn to the question why the reforms of the 1990s did not lead to significantly higher rates of growth of GDP than achieved in the 1980s. I believe there are two reasons for this. First, the reforms in India have been deliberately implemented in a gradualist fashion, a gradualism that reflects the compulsions of India's highly pluralist and participative democracy. It has the obvious disadvantage that the benefits of reforms take time to surface and this may account to some extent for the less than expected acceleration in growth. It also tries the patience of investors from around the world who worry about the endless debates and controversies and their impact on the process of economic change. However, it has the distinct advantage that it builds a broad consensus in favour of the reforms being attempted, thereby giving them greater political sustainability. This is evident from the fact that the Congress government in the first half of the 1990s which initiated the reforms was succeeded by a short lived left of centre coalition which was followed by a right of Centre coalition, and despite these changes the broad direction of economic reforms was continued.

A second reason for the lack of a significant acceleration is that the reforms were incomplete, in some important respects. The most important shortcoming is the inability of the reforms to ensure adequate expansion in infrastructure. Rapid growth in a globalizing world requires good infrastructure to attract investment and ensure competitiveness. India's infrastructure is distinctly poorer than in most of the competing countries of East Asia and this has discouraged investment in manufacturing, which in turn has led to inadequate growth in this sector. The Ninth Plan (1997-98 – 2002-02) had targeted a growth rate of 8.2 percent in the industrial sector against which the actual achievement was only 4.6 percent. The Tenth Plan (2001-02 to 2006-07) targeted industrial growth at 10 percent but the achievement in the first three years is only 7 percent per year.

The slow growth of industrial production in the second half of the 1990s is a major cause of concern about the growth process because of its implications for employment. Employment in the organised sector – which is basically the modern sector which generates high quality jobs – has actually fallen in recent years. Indian firms, facing the pressure of domestic and external competition, are downsizing the labour force in their effort to improve productivity

and cut costs. This process of improving productivity is unavoidable but it underscores the need to achieve higher growth. Had industrial sector grown not at 6.7 percent, as it did in the first three years of the Tenth Plan, but at 10 percent which was the target, the economy would have seen expansion in organised sector jobs notwithstanding the improved productivity. The failure of the economy to generate rapid growth in the industrial sector stands in sharp contrast to the performance in IT enabled services which have grown very rapidly albeit from a low base and where India has been able to penetrate world markets. It is interesting to note that global competitiveness in these services depends not on hard infrastructure as much as upon telecommunications connectivity, where India has done well.

Inevitably, the growth witnessed over the past fifteen years is continuously evaluated in terms of its impact on poverty. Critics often argue that the growth produced in the period of reforms has not reduced poverty, but this is not true. Poverty has declined from 40 percent in 1987 to around 23percent in 2003. While the decline is welcome, the performance falls below expectations and targets. India still has a very large number of around 250 million below the poverty line, and the poverty line is very minimal, only \$ 1 per day.

Another dimension in which the growth witnessed in the 1990s is less than satisfactory relates to regional balance. Available evidence suggest that even in the first half of the 1990s, when growth accelerated compared with the 1980s, there was an increase in regional disparity in growth, with some of the poorer states actually growing more slowly than in the 1980s. It is not true that the rich got richer and the poor poorer. Two of the richest states, Punjab and Haryana, actually slowed down while some of the poorer states, especially Rajasthan and West Bengal, did better than in the 1980s. None of the poorer states experienced an actual decline in per capita GDP. However, some of the largest low income states, especially Uttar Pradesh, Bihar and Orissa grew more slowly than they did in the 1980s. None of this is surprising. In the pre-liberalised world of industrial licensing, investments were deliberately directed to the more backward states and the resulting inefficiencies in production were sustainable because of protection. With liberalisation of industrial licensing, investment could be expected to flow where productivity was higher and some states would have lost out in this process.

Regional imbalances in growth combined with lower than expected growth and insufficient growth in employment were bound to cause tensions, especially in a functioning democracy where globalisation has raised awareness and expectations. Failure to meet expectations leads to electoral defeat and that is what happened in India in May last year. I do not mean to suggest that election outcomes depend on any single factor and there were other important social issues also involved. But in so far as economics was an issue, the previous government went into the election under the slogan "India Shining", suggesting that its economic policies had produced results which justified re-election. The electorate clearly thought otherwise.

The election results were described in some quarters as a vote against reforms. This is, in my view, a misreading. The truth is that while the previous government had not reversed the process of reforms initiated by the Congress in 1991, and had even carried it forward in several areas, they had not delivered the high growth rates that were expected and were necessary to create high quality jobs for the new entrants to the labour force. Such growth that occurred was also seen as benefiting only a few. The software and business process outsourcing sectors were clearly "shining", but performance in critical areas such as agriculture was unforgivably poor. Between 1980 and 1996, agricultural GDP in India grew at about 3.2 percent per year, but after 1996 it decelerated massively to 1.5 percent per year. With sixty percent of the population depending upon agriculture as their primary source of income, the deceleration of agricultural growth to 1.5 percent clearly showed that the economic reforms had by passed the rural population.

The critical message of the last election is that the process of economic reforms must generate a wider spread of benefits to be politically sustainable. This calls for a faster pace of growth including in the industrial sector and a better sectoral balance in growth, with much greater attention to the agricultural sector. The present government has read this message clearly. It has indicated that the reforms will be pushed ahead to accelerate growth to 7-8 percent in the short term. It will also work to make this growth more "inclusive" and distributionally fairer.

The general strategy of pushing forward with economic reforms involves action on many fronts. It includes continuing with the process of opening up the economy by reducing customs duties, reducing bureaucratic hurdles which make the investment climate less attractive, continuing with the process of reducing the list of items reserved for production by the small scale sector, and continuing with financial sector reforms. A sensitive area which is important for promoting expansion in labour intensive sectors, but where it is necessary to build a consensus, is the need for greater flexibility in labour laws.

Three areas which are crucial for achieving a more inclusive growth and are receiving priority attention are health and education levels especially in rural areas, revival of momentum in agriculture, and improving the quality of infrastructure. Let me comment briefly on each of these.

India's primary education and health indicators lag behind other East Asian countries, not only in comparison with the levels prevailing in these countries today, but even compared to the levels thirty years ago when they began to grow more rapidly. China in particular invested heavily in these areas in the early stages of development, with the result that when economic reforms were introduced in the early 1980s, adult literacy was already 85 percent. In contrast, adult literacy in India in 1991 was only 49 percent. It can be argued that a base level of literacy of 49 percent is not enough to generate 8 percent growth. In a globalising world, which places a high premium on skills and knowledge, improving these indicators should be a matter of the highest priority. As Amartya Sen has pointed out, this will not only improve human welfare directly, it will also contribute to economic growth over a longer period and furthermore, it will improve the ability of the poor to participate more fully in the growth process.

The government has embarked on a major programme to strengthen primary education, especially in rural areas. The aim is to ensure that 100 percent of children complete 5 years of primary schooling by 2007. The programme also includes training teachers to improve the quality of instruction, and the provision of mid-day meals to all primary school children. This will improve the nutrition status of children from poorer families and also encourage school attendance thereby helping to reduce drop out rates, which are too high. The cost of these programs is being met by imposing a cess of 2 percent on all taxes earmarked for this purpose.

A parallel effort is being made in the area of health, concentrating initially on rural areas where public health facilities are grossly inadequate. A new National Rural Health Mission has been launched which aims at expanding the availability of public health centres at the village level combined with strengthening of referral health facilities for groups of villages. Improving facilities for assisted childbirth is a critical area where more needs to be done. India's total health expenditure as a percentage of GDP is around 5 percent, which is comparable with that in other countries, but public expenditure on health is less than 1 percent of GDP, much lower than in other countries. The government proposes to raise this to 2 percent of GDP over the next seven years.

I must emphasise that while it is necessary to increase public spending in both health and education, this is only one part of what is needed. Equally important, and probably more difficult, is the need to ensure that the money made available is spent well. This is best done by involving the local communities in supervising and monitoring public agencies which provide these services. This function should be performed by the elected bodies at village, district and intermediate levels which provide the third level of democracy, supplementing elected legislatures at the state and national level.

Constitutional Amendments were introduced in 1994 making it mandatory for States to constitute these elected councils and this was a major step in bringing democracy to the grassroots. What has been achieved is impressive; at any given time there are 3 million elected representatives of whom 30 percent are women. A great deal remains to be done to strengthen the capacity of these bodies and empower them to supervise local functionaries, but I have no doubt that, in due course, these bodies will take on larger responsibilities and contribute greatly to good governance and increased accountability.

The second area where corrective steps are needed relates to agriculture. We need to more than double the growth rate in agriculture from 1.5 percent observed in recent years to around 4 percent, and this requires much more than a business as usual approach. The present government is undertaking a comprehensive review of policies in agriculture and related areas such as irrigation, water management and conservation, agricultural research and extension, rural roads, etc. Large investments are needed in these areas, as also policy changes, including policies on sensitive issues such as the pricing of irrigation water and pricing of electric power to agriculture. The government has already announced a major Food for Work Programme (soon to be converted into an Employment Guarantee Act) aimed at providing at least 100 days of employment at the minimum wage to one member of each poor household in designated rural areas. This is designed as a measure of income support for the rural poor but the programme can also be dovetailed with plans for creation of rural infrastructure by the wage costs of infrastructure development being met though the programme.

Indian agriculture will also have to expand its focus beyond producing foodgrains towards agricultural diversification, including especially dairying, poultry and horticulture. The scope for development of food processing industries is very large. At present only about 2 percent of horticulture production in India is processed compared with 20 percent or more in many countries. Wastage due to poor handling and spoilage from the farm to the consumer is as high as 25 to 30 percent and this is reflected in low prices paid to farmers. The development of modern agro-processing would help increase farm incomes but it is currently hampered by outdated laws governing the marketing of agricultural produce which make it difficult for corporations to enter into contract purchase arrangements with groups of farmers. Contract farming would enable farmers to grow the specific varieties needed for agro-processing, with the buyer providing the planting material, extension services, advice on appropriate pesticides and a cold chain from the farm to the processing plant. The laws governing the food processing industry also need to be modernised.

Agricultural modernisation will present new challenges to Indian farmers. India is climatically well suited to the production of high value horticulture, including organically grown crops, which can be marketed in Europe, but this will require compliance with phytosanitary standards and European food laws. Biotechnology has the potential of greatly increasing yields of crops tailored to the soil and moisture conditions prevailing in India. However, there are apprehensions and environmental concerns as the development of genetically modified crops faces challenges from NGOs internationally and domestically.

India is actively engaged in the WTO negotiations looking for larger market access for its products and it will have to do its part in the process of opening up. However, opening agriculture creates legitimate fears because of the persistence of heavy subsidisation of agriculture in industrialised countries. Opening up the agricultural sector also exposes farmers to risks when international prices fall. Farmers need to have access to instruments of risk management to deal with such situations such as liquid forward markets and these require institutional development which takes time.

The third area where a complete overhaul of policies is needed relates to infrastructure development. Any visitor to India also familiar with East Asia is immediately struck by the fact that India's infrastructure services, by which I mean the availability and quality of electric power from the utilities, the road network, ports, airports, rail transport etc., are far behind East Asia. I have already mentioned that inadequate progress in this area is probably the most important reason why the reforms introduced in the 1990s did not accelerate growth as much as was expected. The government is paying special attention to this area. The Prime Minister has established a Committee on Infrastructure, under his Chairmanship, to systematically review policy issues in each of the infrastructure sectors, and to determine an agenda for policy change and monitor implementation.

The investment required to upgrade India's infrastructure is massive and cannot possibly come entirely from the public sector. The strategy being adopted is to increase public resources directed towards infrastructure development and to use them in a manner which most effectively leverages private investment in these areas. In some areas, such as telecommunications, private investment in infrastructure has already taken off. There are a handful of strong private sector service providers, investing aggressively and competing for market share with the erstwhile public sector telecom companies. The government has recently increased the limit on foreign investment in this sector from 49 percent to 74 percent. At the other end of the spectrum are rural roads, where also large investment is necessary, but will have to come entirely from the public sector.

Between these two extremes are a number of sectors where private investment is possible, but there are sector specific problems and policy constraints that need to be overcome. Private investment in ports is relatively easy. Several minor ports are being developed entirely in the private sector, and in the major ports, expansion of new capacity has been successfully privatised. The private sector can also play a major role in airport development. A private sector airport in Kochi has been in operation for some years, and two more have been approved recently for Bangalore and Hyderabad. Bids have also been invited from private investors interested in the development of Mumbai and Delhi airports as joint ventures, with management control in private hands, and the concession is expected to be awarded later in the year.

Roads have been traditionally built only in the public sector but it is proposed to entrust significant portions of future National Highway development to private investors on a BOT basis. The revenue model envisages the investor receiving earnings from tolls, with a capital subsidy to make the project financially remunerative. One such project has recently been completed. Thirty more private sector BOT projects are expected to be awarded in the course of the year.

The most difficult area of course is electric power. The power utilities in most states are financially unviable thanks to a combination of large electricity losses in distribution, arising from stealing of power, usually in connivance with the distribution staff, and unrealistically low electricity tariffs for certain categories of consumers. The solution clearly lies in setting rational power tariffs and improving the operational efficiency of the distribution segments.

The initiative in this area lies largely with the state governments and some progress is being made. Regulators have been set up in almost all states and have started prescribing electricity tariffs. Two states have privatised electricity distribution, but it is too early to tell whether this shift to private ownership will succeed in reducing losses. Most states have adopted a more limited strategy of separating generation, transmission and distribution into separate companies, and then trying to improve the performance of the distribution company through better management systems. The net result is that despite false starts in the past, some private investment in electric power generation is taking place but not as much as is needed. This can be expected to increase as the distribution companies become financially more viable.

I have listed only some of the major initiatives in the area of infrastructure to give an idea of what is being done. This is a complex area where the reforms needed often require deeper institutional change. Progress will be uneven across states, but I have no doubt that there will be success stories and these will be rapidly replicated, if not in all states, certainly in many. Better infrastructure is central to achieving larger inflows in foreign investment in manufacturing and generating faster growth in this sector which is critical for expanding employment.

Finally, I must emphasise that reforms need to be pursued in a framework of macro-economic stability. India's macro-economic parameters are stable, but some of them are not at comfortable levels. There is concern that India's fiscal deficit is too high, and this has been so for quite some time. The government recognises this as a problem and hopes to correct it over time, working within the framework of the Fiscal Responsibility and Budget Management Act, which prescribes a time path for reducing the fiscal deficit of the Central Government. The states are also being encouraged to adopt similar legislation. As an incentive, they have been offered restructuring of their outstanding debt liabilities to the Centre on favourable terms if they agree to enact fiscal responsibility legislation.

Fiscal balance requires action on both expenditure and revenues. On the expenditure side, the government must contain the growth of public expenditure as much as possible by withdrawing from areas where public spending is not essential or effective, while actually expanding it in other areas where it is necessary and presently inadequate. On the revenue side, there is need for steady pursuit of tax reform, especially reform of tax administration, which should permit larger resources to be raised even at the existing tax rates. An important development in this area is the recent adoption by 19 out of 27 states of a VAT system for sales taxes (which are levied by the States) under which credit will be allowed for sales taxes paid at earlier stages. Experience suggests that this will have a very favourable effect on revenue collection.

I hope the picture that emerges from my lecture is one of an India grappling earnestly with the challenges posed by globalisation, and finding solutions to these challenges within the framework of her democratic polity. As in the past, policy reform in India will continue to be a gradualist process. The present government is a Congress led coalition, with outside support from the left parties. The partners of the coalition have all subscribed to a consensus document, the National Common Minimum Programme (NCMP). This document outlines a credible framework to push the reform forward in a manner which takes care of the deficiencies in past policies and prescribes important corrective steps. The document indicates transparently some important constraints on policy. For example, the government will not privatise profit making public sector companies, though it can sell minority equity in such companies. Similarly, the government is against 'automatic hire and fire' policies, but it will work together with labour to determine desirable changes in the labour laws to give greater flexibility. I recognise that many investors want stronger action in precisely these areas, but democracy is about working within constraints defined by political acceptability. I

have no doubt that it is possible to define a reform programme within these constraints, which makes sufficient progress in many important areas to enable India to achieve 8 percent growth per year, and a much more "inclusive" and socially just growth than in the past.

If we succeed, India could emerge within ten years as an economy well on the way to achieving middle income status, with a much broader middle class whose economic well being is more directly linked to the growth process than is the case today. In Nehru's memorable phrase, we will have brought about India's second tryst with destiny.