

# ATUL GOSWAMI MEMORIAL LECTURE

Professor S. Mahendra Dev

*Inclusive Growth in India: Issues,  
Policies and Challenges*

OMEK KUMAR DAS INSTITUTE OF SOCIAL  
CHANGE AND DEVELOPMENT  
GUWAHATI

Atul Goswami Memorial Lecture No. 5

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## Preface

This Lecture Series was started in 2005 to commemorate Late Professor Atul Goswami who was the Director of the Institute from 1994-2000. The idea behind this has been to initiate a discussion on issues of contemporary economy among the intelligentsia as a mark of loving memory and remembrance of Late Professor Goswami who himself was a highly respected economist of the region. The First lecture in the Series was delivered by Professor Atul Sarma, former Director of the Indian Statistical Institute, New Delhi and the then Vice-Chancellor of Arunachal(now Rajiv Gandhi) University.

Professor S. Mahendra Dev delivered the fifth Atul Goswami Memorial Lecture on 15 July,2009 at the city's Vivekananda Kendra Institute of Culture, Uzanbazar.

Professor Dev recollects in his lecture that the present context related to economic reforms started in the early 1990s. He highlights the fact that in the post reforms period, India did well in service sectors such as exports, service sector and Information Technology (IT) and delineates that the exclusion continued in terms of low agricultural growth, low quality employment growth, low human development, rural-urban divides, gender and social inequalities, and regional disparities etc. Economics alone cannot be taken to do justice to inclusive growth; other social factors are equally responsible for an inclusive growth. While highlighting the role of democracy in governance Professor Dev stressed the need to strengthen democracy by decentralizing and inclusive growth.

I take this opportunity to thank Professor S. Mahendra Dev for kindly taking time out from his busy schedule to deliver the Lecture and hope that this will make an intriguingly pleasant reading. I also thank North East Economic Association (NEEA) for their cooperation in holding this lecture.

**Indranee Dutta**  
Professor and Director  
OKD Institute of Social Change and Development  
Guwahati

# **Inclusive Growth in India: Issues, Policies and Challenges**

## **1. INTRODUCTION**

I am grateful to OKD Institute of Social Change and Development particularly Dr. Indranee Dutta for inviting me to deliver the A.Goswami Memorial lecture. I am also happy to note that ICSSR and North Eastern Council are associated in organizing this lecture. Dr. A.Goswami was economist and director of this institute. It is my privilege to deliver this lecture in memory of late Dr. A.Goswami. Today, I will be speaking on inclusive growth.

The concept of inclusive growth is not a new or novel idea for the world in general and India in particular. Inclusive approach is a broader concept covering economic, social and cultural aspects of development. The approach of growth with equity has been followed in India since independence. We treat here 'inclusive growth' as synonymous with 'equitable development'. In this framework, there is complementarity between growth and equity. Economic growth can create opportunities for wider participation of people. On the other hand, equity is important in itself as well as for raising economic growth by harnessing physical and human resources on a broader scale.

There has been a lot of debate on the development strategies to be followed in developing countries. One of the main criticisms of globalization and economic reforms has been that they do not have 'human face' and have not achieved inclusive growth. Although economic growth has improved, bottom 40 per cent have not benefited much and inequality has not declined. In general, the international experience shows that reforms have not succeeded in Latin America and Africa in achieving equitable development. It may be noted that economic reforms *per se* may not lead to inequalities if initial conditions are good (Rao, 2009). The experience of South East and East Asia which had better initial conditions, poverty reduction

and equality has been much better with economic reforms.

The present context of inclusive growth in India relates to economic reforms started in the early 1990s. In the post-reform period, India has done well in some indicators such as economic growth, exports, balance of payments, resilience to external shocks, service sector growth, significant accumulation of foreign exchange, Information technology (IT) and stock market, improvements in telecommunications etc. In the first few years of this decade, there was a feeling that 'India was shining'. It was, however, realized that the 'feel good factor' was only in these indicators. However, exclusion continued in terms of low agriculture growth, low quality employment growth, low human development, rural-urban divides, gender and social inequalities, and regional disparities etc. Thus, social exclusion is taking place in terms of regions, social and marginal groups, women, minorities and children<sup>1</sup>. It may be noted, however, that economic reforms *per se* may not lead to insufficient inclusive growth. Initial endowments like infrastructure and social development are important.

The immediate context for inclusive growth in India is the 2004 general elections. It was argued that the verdict in the elections was against the urban-biased economic development policies pursued earlier. The UPA government included inclusive policies in their common minimum programme. The approach paper for 11<sup>th</sup> Five Year Plan acknowledges that the economic growth has failed to be sufficiently inclusive. 11<sup>th</sup> Plan (2007-12) advocates for faster and more inclusive growth. Of course now we have the problem of financial crisis impact on economy and employment. Growth came down to less than 7% in 2008-09 and the same is expected in 2009-10. It would adversely affect the employment and incomes. In order to come out of financial crisis also we need inclusive growth policies.

Recent high growth path of 7-9% also highlighted the rural-urban divide, rich-poor divide, regional and social divide. Some people object to the word 'growth' in the term 'inclusive growth'. They say we are still talking about growth and not development. Anyway, whether we use 'growth' or 'development' we mean 'equitable development' when we refer to 'inclusive growth'.

According to me, there are five inter-related elements of inclusive growth: (a) Agriculture (b) Employment generation and poverty reduction; (c) Social Sector Development; (d) Reduction in regional and other disparities; (e) Protecting the environment. In this lecture, I will be discussing issues, policies and challenges in these five elements and also offer suggestions for enhancing inclusive growth.

<sup>1</sup> More on this see Dev (2008)

## 2. AGRICULTURE

Agriculture plays a pivotal role in Indian economy and this sector's better performance is vital for inclusive growth. The performance at all India level shows that GDP growth in agriculture recorded the highest growth rate in the 1980s but declined in the post-reform period. Within post reform period, agriculture growth declined continuously in the 9<sup>th</sup> and 10<sup>th</sup> Plan periods. Agriculture sector has many problems. Growth decelerated from 3.5% during 1981-97 to 2% during 1997-2005.

Yield growth has also declined. Farmers' suicides have continued/increased in some states. Farming is becoming a non-viable activity. There are also other problems. Further scope for increase in net sown area is limited. Land degradation in the form of depletion of soil fertility, erosion and, water logging has increased. There has been decline in the surface irrigation expansion rate and reduction in ground water table. Risk and vulnerability increased. Disparities in productivity across regions and crops persisted. Long term factors like steeper decline in per capita land availability and shrinking of farm size are also responsible for the agrarian crisis.

The Steering Committee report on agriculture for 11<sup>th</sup> Plan (GOI, 2007) has identified the possible reasons for deceleration in agriculture since mid-1990s. According to the report, the major sources of agricultural growth are: public and private investment in agriculture and rural infrastructure including irrigation, technological change, diversification of agriculture and fertilizers. It looks like that the progress on all these sources slowed down in the 1990s particularly since mid-1990s (Table 1). There has been expansion only in the case of agricultural credit.

According to the report, the causes of slow down are: increase in subsidies crowding out investment in infrastructure, degradation of natural resources, failure in conservation and improvement of rain-fed land, knowledge gap with existing technology, low market infrastructure and too much regulation, institutions not geared to help women farmers, imperfections in land market and plight of small farmers.

Table 1. Trend growth rate in area, input use, credit and capital stock in agriculture during 1980-81 to 2005-06

	1980-81 to 1990-91	1990-91 to 1996-97	1996-97 to 2005-06
Technology	3.3	2.8	0.0
Public Invest.	3.9	1.9	1.4
Private Invest.	0.6	2.2	1.2
Irrigated Area	2.3	2.6	0.6
Area under Fruits and veg.	5.6	5.6	2.7
NPK Use	8.2	2.5	2.3
Credit	3.7	7.5	14.4

Source: GOI, 2007

There has been some revival in agriculture in recent years. Agricultural growth was more than 4% during 2003-04 to 2007-08. The total foodgrains production for the year 2008-09 is estimated at 233.88 million tonnes and stands out as record production ever achieved in India and the country has high bufferstocks of 55 million tonnes in May 2009. There were significant exports in cotton, rice and sugar. Cotton crop experienced a revolution due to adoption of BT cotton. Production of cotton increased from 99.97 lakh bales in 2000-01 to 258.84 lakh bales in 2007-08. There has been some increase in high value agriculture. Some of the lagging regions like Bihar showed relatively high growth in recent years. Similarly, Gujarat recorded high growth of 9% per annum during 2001-02 to 2007-08 (see Gulati, 2009).

There has been demand problem in the economy due to financial crisis. However, rural demand was higher due to increase in purchasing power due to several factors: increase in minimum support prices, National Rural Employment Guarantee Scheme (NREGS), loan waiver scheme and higher agricultural growth in recent years. In the year 2008-09, however, agricultural growth was only 1.6%. There is also a concern in 2009-10 due to drought conditions in several parts of the country.

### 2.1. How to Achieve Goals of Agricultural Development?

There are three goals of agricultural development. These are (a) achieve 4% growth in agriculture and raise incomes by increasing productivity (land, labor), diversification to high value agri. and rural non-farm by maintaining food security;

(b) sharing growth (equity) by focusing on small and marginal farmers, lagging regions, women etc. Share of women is increasing in agriculture. On lagging regions, focus on Eastern India and other rainfed areas; (c) third is to maintain sustainability of agriculture by focusing on environmental concerns.

What are the policies needed to achieve the above goals? The supply and demand side constraints have to be removed to raise overall growth in agriculture. It may be noted that more than 80% of India's farmers belong to the categories of small and marginal farmers with an area share of more than 40%. The support systems and policy changes have to be tuned in such a way that they improve the productivity and incomes of the small and marginal farmers. National Commission on Enterprises for Unorganized Sector (NCEUS, 2008) suggests for special programmes for small and marginal farmers. However, the Approach Paper for 11<sup>th</sup> Five Year Plan indicates that the entire agriculture sector is in crisis and not limited to small and marginal farmers. *Also second 'green revolution' should focus more on dry land areas.* Simultaneously, the domestic reforms have to be undertaken in certain areas to improve growth and compete in globalised world.

### Investment in Agriculture:

Rise in public and private investment is crucial for enhancing agricultural growth. Several studies have shown that public investment in rural infrastructure like roads, irrigation is more important than other factors. Fortunately, gross capital formation in agriculture has increased from 12% of agricultural GDP in 2004-05 to 14.2% of GDP in 2007-08 (Table 2). Public sector investment has increased significantly during this period. However, we need 16% of investment as per cent of agriculture GDP in order to get 4% growth in agriculture. In this context, the announcement of *Bharat Nirman* programme in 2005 by the Government of India in order to improve agriculture and rural infrastructure is in the right direction. However, the pace of this programme has to be improved.

Table 2 Gross Capital Formation in Agriculture

Year	Agriculture & Allied Activities (in Rs. Crores at 1999-2000 prices)		GCF/GDF in agri.&allied (%)
	Gross capital formation (GCF)	Gross Domestic Product (GDP)	
2004-05	57849	482446	12.0
2005-06	66065	511013	12.9
2006-07	73285	531315	13.8
2007-08	79328	557122	14.2

Source: Economic Survey, 2008-09

**Land Issues:** Some argue that small size of farm is responsible for low profitability of agriculture. Chinese and the experience of other East Asian countries show that it is not a constraint. On land market, the Report of the Steering Committee recommended the following. "Small farmers should be assisted to buy land through the provision of institutional credit, on a long term basis, at a low rate of interest and by reducing stamp duty. At the same time, they should be enabled to enlarge their operational holdings by liberalizing the land lease market. The two major elements of such a reform are: security of tenure for tenants during the period of contract; and the right of the land owner to resume land after the period of contract is over" (GOI, 2007). Basically, we have to ensure land leasing, create conditions including credit, whereby the poor can access land from those who wish to leave agriculture.

In order to improve the incomes of marginal and small farmers, there is a talk that we should promote cooperative farming. Andhra Pradesh has some experiences in cooperative farming particularly in the case of women. There are some emerging land issues such as increase in demand for land for non-agricultural purposes including special economic zones, displacement of farmers, tribals and others due to development projects. There is a need for careful land acquisition. Land alienation is a serious problem in tribal areas.

**Research and Extension:** The yield growth for many crops has declined in the 1990s. Technology plays an important role in improving the yields. The National Commission on Farmers also indicates that there is a large knowledge gap between the yields in research stations and actual yields in farmers' fields. There seems to be a technology fatigue in Indian agriculture. The yield gaps given by the Planning Commission (GOI, 2007a) are the following.

The 2003-05 data show very large yield gaps: Wheat: 6% (Punjab) to 84% (M.P.); Rice: Over 100% in Assam, Bihar, Chattisgarh and UP; Maize: 7% (Gujarat) to 300% (Assam); Jowar: 13% (M.P.) to 200% (Karnataka); Mustard: 5% (Haryana) to 150% (Chattisgarh); Soybean: 7% (Rajasthan) to 185% (Karnataka); Sugarcane: 16% (A.P.) to 167% (M.P.).

A fresh look at the priorities of Indian agricultural research system is necessary in light of emerging prospects. There is only marginal increase in the funds for research in the recent budgets. Of course states have to take a lead in research and extension. It is known that India spends only 0.5 per cent of GDP on agricultural research as compared to more than 1 per cent by other developing countries. There is considerable potential for raising the effectiveness of these outlays by reordering the priorities in agricultural research and redefining the relative roles of public and

private sectors in research and extension.

There is a need to shift away from individual crop-oriented research focused essentially on irrigated areas towards research on crops and cropping systems in the dry lands, hills, tribal and other marginal areas (see Swaminathan, 2007). Dry land technology has to be improved. In view of high variability in agro-climatic conditions in such unfavourable areas, research has to become increasingly location-specific with greater participation or interaction with farmers. Horticulture crops that are land-saving and water-saving should be encouraged in dry land areas. Research has to be improved on horticulture crops. Progress in post-harvest technology is essential to promote value addition through the growth of agro-processing industry. Private sector participation in agricultural research, extension and marketing is becoming increasingly important especially with the advent of biotechnology and protection being given to intellectual property. However, private sector participation tends to be limited to profitable crops and enterprises undertaken by resource rich farmers in well endowed regions. Moreover, private sector is not interested in research for better techniques of soil and water management, rainfed agriculture, cropping systems, environmental impact and long term sustainability. Therefore, the public sector research has to increasingly address the problems facing the resource-poor farmers in the less endowed regions. The new agricultural technologies in the horizon are largely biotechnologies. Effective research is needed to have biotechnologies suitable to different locations in India. Similarly, there is a need to strengthen extension. The returns to investment on research and extension will be much higher on agricultural growth as compared to other investments.

**Land and Water Management:** The decline in productivity growth is attributed, *inter alia*, to deterioration in soil quality and water shortages. Therefore, land and water management should be given **number one priority**. Water is the leading input in agriculture. Development of irrigation and water management are crucial for raising levels of living in rural areas<sup>2</sup>. Both investment and efficiency in use of water are needed. Investment in irrigation, watershed development and, water conservation by the community are needed under water management.

**Credit:** According to the expert group on Financial Inclusion (GOI, 2008) Only 27% of farmers have access to institutional credit. It is true that there have been some improvements in flow of farm credit in recent years. However, the Government has to be sensitive **to the four distributional aspects of agricultural credit**. These are: (a) not much improvement in the share of small and marginal farmers; (b) decline in credit-deposit (CD) ratios of rural and semi-urban branches;

<sup>2</sup> On land and water management, see Vaidyanathan (2006)

(c) increase in the share of indirect credit in total agricultural credit and; (d) significant regional inequalities in credit.

**Diversification to Hi-value Agriculture by Maintaining Food Security:** There has been diversification of Indian diets away from foodgrains to high value products like milk and meat products and vegetables and fruits. The increasing middle-class due to rapid urbanization, increasing per-capita income, increased participation of women in urban jobs and impact of globalization has been largely responsible for the diet diversification in India (Pingali, 2006). Hi-value products have caught the fancy of the expanding middle class and the result is visible in the growing demand for hi-value processed products. There is growing demand for non-foodgrain items in India. The expenditure elasticity for non-cereal food items is still quite high in India. It is thrice as high when compared to cereals in the rural areas and over ten times as high in urban areas. Per capita consumption of fruits and vegetables showed the highest growth followed by edible oils. Diversification to high value crops and allied activities is one of the important sources for raising agricultural growth. Since risk is high for diversification, necessary support in infrastructure and marketing are needed. Price policy should also encourage diversification. However, diversification should not be at the cost of food grains and other food crops. Efforts should be continued to improve the yields of food crops.

The Government wants to have second 'green revolution' by diversifying agriculture in crop sector and allied activities. Diversification is unlikely to be a feasible strategy all over the country if it is restricted only to agriculture related activities like shift from cereals to horticulture crops. The true benefit of diversification will come if more emphasis is given on allied activities like animal husbandry and fisheries. The livestock sector contributes to 5.4% to GDP and 22.7% to total output from agriculture sector. Value of milk group (Rs. 103804 crore) is more compared to paddy (Rs.73965 crore) and wheat (Rs.43816 crore). Rural women play a significant role in animal husbandry and are directly involved in major operations like feeding, breeding, management and health care. As the ownership of livestock is more evenly distributed with landless labourers, and marginal farmers, the progress in this sector will result in a more balanced development of the rural economy, particularly in the reduction of poverty ratio.

### Marketing

For small and marginal farmers, marketing of their products is main problem apart from credit and extension. The contract farming arrangements are particularly useful in developing countries where small-scale agriculture is widespread. The small and marginal farmers have problems in getting inputs, credit, extension and

marketing. The services provided by the contract farming companies would thus be useful for small-scale agriculture. In recent years, there has been some form of contract arrangements in several agricultural crops such as tomatoes, potatoes, chillies, gherkin, baby corn, rose, onions, cotton, wheat, basmati rice, groundnut, flowers, and medicinal plants. The contract farming arrangements have to be strengthened in order to help the small farmers. There is a silent revolution in institutions regarding non-cereal foods. New production –market linkages in the food supply chain are: spot or open market transactions, agricultural co-operatives and contract farming (Joshi and Gulati, 2003).

The contract farming is spreading throughout India for several crops in states like Andhra Pradesh (Dev and Rao, 2005), Tamil Nadu, Karnataka, Punjab and Maharashtra. The contract farming arrangements are particularly useful in developing countries where small-scale agriculture is widespread. From the farmers' perspective, there are risks of market failure and production problems while growing new crops. The sponsoring companies may be unreliable, may exploit a monopoly position, and/or have inefficient management and marketing problems that could result in manipulation of quota and non-fulfillment of commitments. Contract farming in India is neither backed up by law nor by an efficient legal system. This is the single most constraint to widespread use of contract farming in India. The legal system can be improved with legislative measures like the model contract and code of practice, registration of contracts with marketing committees and tribunals for dispute resolutions.

Most important problem for the farmers is output price fluctuations. There is a big gap between producer prices and consumer prices. For example, some times farmers get 50 paise per Kg. of tomatoes while the consumers pay Rs.15 in urban areas. In order to protect farmers from national and international price volatility, price stabilization fund is needed. There are different models for marketing collectively by the small and marginal farmers. These are: self help group model, co-operative model, small producer co-operatives and contract farming. *Apni Mandi* in Punjab, *Rytu Bazars* in Andhra Pradesh, dairy co-operatives are some of the successful cases in marketing. The real challenge lies in organising the small and marginal farmers for marketing and linking them to high value agriculture.

**Regional Disparities in agriculture:** Growth rates in agriculture SDP were high for many states during the period 1984/85 to 1995/96. However, growth rates decelerated in all the states except in Bihar during the period 1995/96 to 2004/05 (GOI, 2007)<sup>3</sup>. The deceleration is the highest in the states with greater proportion

<sup>3</sup> Also see Bhalla (2006)

of rain-fed areas (Gujarat, Rajasthan, M.P., Karnataka and Maharashtra). Agriculture growth in these states was less than one per cent per annum in the decade 1995/96 to 2004/05. **Recent experience, however, shows that Gujarat recorded the highest growth of around 9 per cent during 2000/01 to 2007/08** (Gulati, 2009). During this period, six states viz., Gujarat, Rajasthan, Himachal Pradesh, Andhra Pradesh, Chattisgarh and Bihar recoded more than 4% growth per annum. Public investment in infrastructure like irrigation, power, roads, watersheds, check dams, technology like BT cotton and diversification in agriculture played crucial roles in raising agricultural growth in Gujarat. Other states can learn from the experience of Gujarat. **There is a need to shift rice cultivation to Eastern region from Punjab and Haryana for growth, equity and environment regions.**

**De-risking agriculture:** One of the differences between 'green revolution' benefits in the 1960s and 1970s and the present 'second green revolution' plan is that the risk is higher in the latter approach as it has to concentrate more on dry land areas apart from the problems in irrigated areas. Crop failures and distress sales are increasing.

Agriculture has two types of risks: Yield risk and price risk. Crop insurance is important for taking care of yield risk. Since major cultivated area is dependent on rainfall, crop insurance is important for farmers. In place of the Comprehensive Crop Insurance Scheme (CCIS), Government introduced a new scheme entitled 'National Agricultural Insurance Scheme' (NAIS) from Rabi 1999-2000 season. Field surveys also show that the insurance schemes are largely ineffective although some farmers got the benefits (Vyas and Singh, 2005).

There are some proposals that insurance based on rainfall should be considered instead of yields. Area based rainfall index insurance has some attractive features such as less adverse selection, less administrative costs, potential for a secondary market, can be sold non-farmers, can be linked to microfinance and can clear the way for innovation in mutual insurance (Hazell and Skees, 2006).

For taking care of price risks, futures markets are advocated. It is not, however, clear whether farmers are benefiting from futures markets. It looks like that there is a disconnect between futures markets and the farmers. The argument in favour of futures markets is that farmers in all other countries are benefiting from these markets. Indian farmers should not be denied this facility of futures markets.

It may be noted that de-risking agriculture through investments in infrastructure, land and water management and technology are important than relying on curative approaches through crop insurance.

To conclude, there are six deficits in Indian agriculture. These are: (a) investment, credit and Infrastructure deficit; (b) research and extension (technology) deficit; (c) market deficit; (d) diversification deficit; (e) institutions deficit and; (f) education/skill deficit.

There are many domestic and external trade liberalization challenges and small farmers can respond and benefit from the challenges. Apart from high growth, efficiency (cost reduction) is also needed in globalized world. India can benefit from international trade if developed countries reduce their subsidies.

Ultimately appropriate domestic and external policies depend on political will at both central and state levels<sup>4</sup>. Deficiency in agriculture and rural infrastructure is biggest problem for agricultural development. There is a need for massive increase in outlays for agriculture and rural infrastructure by simultaneously improving the delivery systems. Trilemma of keeping input prices low, farm level prices high and consumer prices low has always been a challenge for policy makers. 'Business as usual approach' may not help revival of agriculture. Declining profitability in Indian agriculture has to be reversed. The government is thinking of big push to education in 11th Five Year Plan. Such a big push is needed for agriculture. Given the short run and structural long term problems in agriculture, the government should give large push to core issues like public investment in infrastructure, land and water management including rain water conservation and watershed development, research and extension, price stabilization etc. to make cultivation viable and profitable. There is a need to concentrate on delivery systems also. India's large numbers of farmers and poor can benefit if there are right policies and effective implementation.

### **3. POVERTY, RIGHT TO FOOD AND EMPLOYMENT**

Poverty also includes inter related areas of food security and employment. Therefore, we examine in this section issues and challenges in these inter-related topics.

#### **3.1. Poverty and Inequality**

The official estimates show that income poverty declined from 55% in the early 1970s to 28% in 2004-05. Although there has been progress in decline still more than 300 million below poverty line. Apart from other factors, increase in inequality seems to have slowed down the rate of reduction in the post-reform period. However, changes in two sub-periods of post-reform period are interesting. The extent of decline in the second period (1999-05) seems to be higher than the

<sup>4</sup> Alagh (2006)

first period (1993-00) of the post-reform period. This result is surprising given that the second period witnessed the lowest growth in agriculture. Factors such as low relative food prices, higher growth in employment particularly in non-farm sector might have been responsible for higher reduction in poverty during 1999-05 period. This needs to be further investigated. However, there are three unambiguous conclusions. These are: (a) There is no evidence of higher rate of decline in poverty in the post-reform compared to pre-reform in spite of higher overall growth; (b) Inequality increased significantly in the post-reform compared to pre-reform; (c) Poverty is getting concentrated among some regions, some groups (SCs, STs). Higher inclusive growth that increases agriculture and rural non-farm sector growth, reduction in regional, rural-urban and social disparities is important for faster reduction in poverty. Low relative food prices seem to be an important variable that reduces income poverty. In this context, recent increase in food prices is a concern for the poor and very poor. There is also a need for focused intervention on the 115 million hard core poor.

There is a need to revise the poverty line by including expenditures on education and health. One of the criticisms of the official poverty line is that it does not capture the cost of basic necessities, particularly non-food components such as health and education. This issue gains importance due to an increase in household private expenditure on education and health services in recent years. Dev and Ravi (2008) estimate poverty ratios at the all India level and for the states in 2004-05 by including the minimum private expenditure on health and education. The estimated poverty ratios are substantially higher than the official poverty ratios. Total poverty rose from 27.5 to 35.8 per cent – an increase of 8.3 percentage points due to the inclusion of the minimum level of private expenditure on health and education. Expert Group appointed by the Planning Commission is expected to come out with new numbers on poverty shortly.

### 3.2. Right to Food

It is being increasingly recognized that rights approach would be useful to achieve food and nutritional security in the country. Rights approach puts pressures on public action and would lead to effective implementation of the policies and programmes<sup>5</sup>. Due to its enormous importance, we deal here with right to food and nutrition. Right to food can be analyzed in terms of availability, accessibility and adequacy (Dev, 2003)<sup>6</sup>. The progress on food and nutrition security indicates that there are serious concerns regarding food access and malnutrition. It is extremely

<sup>5</sup> Right to food is part of right to development. See Sengupta (2000)

<sup>6</sup> Also see Gaiha (2003) and Dreze (2004)

serious among women and children. Dev (2008) examined two programmes viz., PDS and child nutrition schemes to illustrate how rights approach can improve the effectiveness of these schemes. Basically we have to go beyond supply side and focus on demand side. Social pressures are needed for public action. Better monitoring systems have to be developed at Central, state, district and village levels to realize right to food. Justiciability is one aspect of right to food. In this context, recent Supreme Court Orders and the Right to Food to campaign are in the right direction. However, one (particularly the poor) can not go to court every time right to food is violated. It is the responsibility of citizens and NGOs to organize campaigns for better functioning of the programmes. Public accountability is crucial for the success of right to food.

### Nutrition Security

The Presidential address to Parliament and the budget 2009 indicate that the Government would enact a law that will provide a statutory basis for a framework which assures food security for all. According to this proposed law, every family below the poverty line in rural as well as urban areas will be entitled by law, to 25 kilograms of rice or wheat per month at Rs. 3 per kilogram. It is felt that the statutory guarantee to food with fixed entitlements to the poor would be an important step in the direction of ensuring food and nutritional security of the country. It is argued here that right to food in terms of providing food and nutritional security to all is a much broader concept than the proposed national food security Act of providing 25 kgs of foodgrains at Rs.3. Many things have to be included in order to have genuine 'right to food. India is signatory to many international treaties and Indian Constitution also indirectly refers to right to food.

At the national and international levels it is recognized that the ultimate objective of the right to food is the achievement of nutritional well being of adults and children. Thus, the right to food needs to be understood in a much broader sense as the right to adequate food and nutrition. In India it is known that child malnutrition (weight for age) has declined only marginally from 47% in 1998-99 to 46% in 2005-06. On 15<sup>th</sup> August, 2008, The Prime Minister of India called malnutrition situation in India as 'national shame'. It is known that calorie intake is only one of the determinants of malnutrition. Therefore, giving foodgrains at subsidized prices would lead to only partial fulfillment of food and nutritional security<sup>7</sup>.

Malnutrition in India in particular and South Asia in general is much higher than that of Sub-Saharan Africa. This 'South Asian Enigma' can be partly explained with women's agency. Women in South Asia tend to have lower status and less

<sup>7</sup> On nutritional security, see Radhakrishna (2002)

decision-making power than women in Sub-Saharan Africa. As a result, women have less ability to take care of their own and their children's health and nutrition including low birth weight and poor child feeding behaviors in the first twelve months of life. As shown by NFHS III data, there is a strong association between child nutrition and women's health/well being. Women's and child specific interventions can reduce malnutrition. Measures like rise in child and maternal immunization, antenatal care coverage, nutritional supplementation (including breast feeding) and home based neo-natal services bring about significant reduction in both infant mortality and child malnutrition. In other words, **basic health services** for women and children have to be improved. Malnutrition can be reduced by enhancing women's health, promoting gender equality and, empowerment of women including female education.

The under nutrition in India across states varies from 21% in Mizoram to 60% in Madhya Pradesh in 2005-06. Under nutrition is relatively low in Kerala, Goa and North Eastern States. Women's health, education, empowerment played important role for the lower malnutrition in these States. In general, gender equality and the well-being of children go hand in hand. The rights of women and children are mutually reinforcing. Apart from these factors, hygiene, sanitation and clean drinking water play important part since sick children are not able to absorb essential nutrients.

India has government programmes such as TPDS including AAY, nutrition programmes like mid-day meals, ICDS to improve food and nutrition security. Similarly, there is a need for improvement in health services, empowerment programmes for women, programmes on sanitation, drinking water and hygiene. The effectiveness of these programs has to be increased in order to realize right to food. One of the major problems of TPDS is corruption and lack of public accountability. There are large scale exclusion and inclusion errors in TPDS. It may be noted that accountability is one of the important components of the principles involved in rights perspective. On large exclusion errors, the report of the Commissioner appointed by the Supreme Court says that who are poor and at risk of exclusion given the extent of misidentification, should get universal coverage under AAY/BPL. Regarding ICDS, in spite of its expansion in the last three decades, the impact on child nutrition and protecting the rights of the children is quite limited. Findings of FOCUS (Focus on children under six) survey conducted in May-June 2004 in six states bring out some of the problems and regional disparities in the working of ICDS. Tamil Nadu scores over Northern states in infrastructure, quality of pre-school education, immunization rates, mother's perceptions and, quality of *anganwadi* workers. These things have to be improved in other states along with focus on 0-3 age children.

International experience also shows that effective implementation of direct programmes have improved food and nutrition security. Thailand is considered as one of the most outstanding success stories of reducing child malnutrition in the post-1970s. The country launched large focused programmes on nutrition in 1977. The child malnutrition declined from 51% in 1979-82 to 17% in 1991. The success is attributable more to the direct nutritional programs by the govt. than only to rapid economic growth.

The practical implications of rights approach is that wherever possible legal sanctity can be achieved for realizing right to food. Demand based approach like social mobilization, public action is important here. Women's economic and social empowerment not only improves intra-household food distribution and health related matters but also improves the working of food and nutrition programmes.

### 3.3. Social Safety Nets

In order to alleviate poverty, India has adopted a holistic approach of combining pro-poor growth policies with directly targeted anti-poverty programmes. The latter is also termed as safety nets in the literature on poverty. The safety nets are basically non-contributory targeted transfer programmes to the poor and vulnerable groups. If we leave everything to market and growth, we cannot take care of risk and inequality. Certain redistributive policies can be good for growth. Presence of safety nets can maintain acceptable minimum floor for social cohesion and can prevent irreversible losses of human capital in hard times. The state has a role in helping the poor in times of insecurity and in ensuring minimum levels of provision to those unable to gain from the growth process. The poor in India suffer on account of several risks induced by the weather, technology, life cycle events and market forces. In order to reduce risks and achieve other benefits, India has introduced several safety net or anti-poverty programmes.

Major social safety net programmes in India are: self employment programmes, wage employment programmes, targeted public distribution system, nutrition programmes for children, old age pensions and maternity benefits.

The group approach to self employment has worked as compared to individual approach. So far (upto March 2009), 34 lakh self help groups have been formed in the country. There are two important models in the country. One is Kerala's Kudumbasree *Programme* which improved empowerment and reduced poverty. Second one is Andhra Pradesh model. The government of Andhra Pradesh is implementing a statewide rural poverty eradication programme based on social mobilization and empowerment of rural poor women. This programme is popularly

known as 'Indira Kranti Pathakam'. It is relatively successful in Andhra Pradesh. Social and economic empowerment of women improved.

*National Rural Employment Guarantee Act (NREGA):* The NREGA was notified in September, 2005. The objective is to enhance livelihood security in rural areas by providing at least 100 days of **guaranteed wage employment** in a financial year to every household. The primary objective is employment creation. The auxiliary objective is regenerating natural resource base and creating productive assets. Third one which is process objective is to strengthen grass root democracy by infusing transparency and accountability in governance. First time, a rights based approach for employment throughout India is introduced. **This is the largest ever public employment programme visualised in human history.** One of the important things in the programme is to have transparency and accountability. Gram Sabhas conduct social audits of all works taken up within Gram Panchayat. Social audit includes scrutinizing and verifying the authenticity of all records and procedures of the programme and expenditure. Social audit of all works in gram panchayat area is conducted by the Gram Sabha. The performance of NREGS is uneven. The problems and challenges where it is not working are the following: (a) awareness problems among workers; (b) implementation and administration problems; (c) monitoring and evaluation problems; (d) Lack of professionals and capacity building at various levels particularly at panchayat level.

However, most evaluations-official and non-official show that implementation has been more effective than any of its predecessor schemes. In particular, the leakages have been reduced significantly in many places. Significant rise in agricultural wage shows its success. In some places, migration has reduced. It created much needed relief during financial crisis even for the urban poor returning to rural areas. The 11<sup>th</sup> Five Year Plan indicates that NREGS is going to be one of the important programs for poverty reduction in India. NREGS can transform livelihoods of the poor but can also lead to revolution in **rural governance.**

Despite inefficiencies, the contribution of safety nets to the observed reduction in rural poverty has been significant although potential is much more. One can learn several lessons on safety nets based on Indian experience. These lessons are useful for effective implementation of these programmes.

A village level study in three states viz., Orissa, Karnataka and Madhya Pradesh provide some interesting findings on the working of safety nets (Dev et al, 2006). The study shows that in-kind transfer programmes like PDS, ICDS, mid-day meals, free text book, free uniform are doing well in terms of awareness and participation. However, these programmes have not done well in terms of targeting effectiveness.

On the other hand, cash transfers like IAY, NOAP, widow pensions show low awareness and participation rates, but the participating households are disproportionately from among the poor and, to this extent, their targeting performance is much better than for other programmes. Thus, there is inverse relationship between participation and targeting.

Regarding policy recommendations based on village studies, health risk is the most important individual risk. Currently we do not have good safety net programme to take care of this risk. There is a need to have good health programmes. Analysis of household data showed that factors like social capital and women's empowerment play important roles in promoting participation in safety net programmes.

### 3.4. Employment

Expanding productive employment is central for sustained poverty reduction and food security in low income countries, as labour is the main asset for majority of the poor. India faces many challenges on employment such as quality, working poor, structure of employment, new employment mainly in informal sector, low education and skills of workers etc.

Trends in employment and unemployment based on NSS data show the following patterns.

- (a) The employment trends show that after drastic decline during 1993-94 to 1999-00, work participation rates and employment growth picked up during the period 1999-00 to 2004-05. However, overall post-reform employment growth (2% per annum during 1983 to 1993-94) was lower than the pre-reform period (1.84% per annum during 1993-94 to 2004-05).
- (b) Employment growth in registered manufacturing sector declined while the share of informal sector in total employment increased.
- (c) Unemployment rate (current daily) has increased from 6.03% in 1993-94 to 8.2% in 2004-05
- (d) There has been an increase in the share of self employed workers while the share of casual workers declined. The share of self employed in agriculture increased from 58% in 1999-00 to 64% in 2004-05 while increase in non-agriculture increased from 45 to 46% only.
- (e) In India, working poor is the major problem rather than unemployment per se. Poverty among workers was around 20% in 2004-05. Casual workers have the highest incidence of poverty with 32 per cent followed by self employed with 11 per cent.
- (f) There are conflicting trends regarding wages. Some studies showed

increase in the growth of real wages while some others indicated lower growth in the post-reform period. Recent data, however, show low growth in real wages for casual and regular employees particularly for females.

- (g) Labour productivity growth in most of the sectors including agriculture was high in the post-reform period.
- (h) Increase in the share of rural non-farm employment was higher for males as compared to females.

*Mis-match between shares in GDP and Employment.* There is a mis-match between growth and employment. Growth is occurring in services and industry but they are not able to absorb employment. Agriculture with 18% absorbs 55% of employment while services sector has share of only 25% of employment with 54% in GDP.

*Need for rise in rural non-farm employment: Poverty can not be removed with 55% of workers in agriculture.* There is a need to promote rural non-farm sector<sup>8</sup>. India currently produces about 50 million tonnes of fruits and 90 million tonnes of vegetables. Only 2% of these fruits and vegetables are processed as against 23% in China, 78% in Phillippines, 83% in Malaysia. **Half of those engaged in agriculture are still illiterate and just 5% have completed higher secondary education. Even in 2004-05, around 60% of rural male workers and 85% of rural female workers are either illiterate or have been educated upto primary level** (Table 3). In other words, education and skills are constraints for diversification. If India wants to benefit from demographic dividend, education and skills of workers has to be improved.

Table 3. Distribution of Workers by General Education Category (%) (above 5)

Category	Rural Males		Rural Females	
	1977-78	2004-05	1977-78	2004-05
Illiterate	55.0	33.8	88.1	66.4
Literate & primary	30.8	29.4	9.1	18.4
Middle	8.5	18.1	1.6	8.7
Secondary & higher educ.	4.7	13.9	1.0	5.0
Gradu & above	1.0	3.8	0.2	0.9
Total	100.0	100.0	100.0	100.0

Source: NSS data on employment and unemployment

<sup>8</sup> On rural non-farm sector, see Chadha (2003)

India can learn from China which experienced a structural transformation in the last three decades. In China, the state's role has been decisive in building up the physical and social infrastructure (including land reforms). India should learn from China on reforms in agricultural growth, rural non-farm employment, public investment and human development. The impact of growth on poverty reduction is quite significant (Rao, 2005). China started with agricultural reforms. Agricultural growth was quite high. The economic and institutional reforms in the whole economy created space for Rural non-farm sector (TVEs and others). India leap frogged from agriculture to services without focusing on manufacturing sector. The share of employment in manufacturing in Malaysia is 50%, in Korea 62%, in China 31%. On the other hand, the share of employment in manufacturing in **India is only 12%**. Diversification towards rural non-form sector in China is one of the important factors responsible for rural poverty reduction (poverty 3% in China). This was partly due to agricultural productivity.

There has been a lot of debate on the impact of labour market reforms on employment in the economy. The Indian experience in the post-reform period shows that the Indian industry has been adjusting its work force more after liberalization. India can also go for labour flexibility by simultaneously providing social security to its vast number of workers.

### 3.5. Social Security for Unorganized Sector

There is a dualism in Indian economy divided into formal and informal sectors. India has about 456 million workers in 2004-05<sup>9</sup>. Around 92% of those employed are informal workers. They suffer from two sets of problems: (a) capability deprivation in terms of lack of basic facilities like food, education, health and housing; (b) the second one is adversity, no fallback mechanism to meet contingencies such as ill health, accident, death and old age.

The UPA government constituted National Commission on Enterprises for Unorganized Sector (NCEUS) to examine the problems faced by unorganized sector enterprises and workers and suggest solutions to address them. For decent employment and as a national floor, the Commission advocated three pronged strategy: (a) Minimum level of social security (b) Conditions of work (c) promotion of livelihood.

The minimum level of social security has three major components: (a) accident or death of the registered worker; (b) health cover to take care of sickness of the

<sup>9</sup> On informal sector from inclusive development perspective, see Kannan (2008)

workers and their family members, maternity benefits to the spouse or self ; (c) old age pension for those belonging to the poor households and provident fund to those outside this segment. Parliament has accepted a diluted version of social security proposals of NCEUS.

The second Bill which, deals with conditions of work and livelihood promotion addresses the issues relating to providing a basic minimum standard on hours of work, payment of minimum wages, bonded labour and child labour. The Bill also recognizes some minimum entitlements of the workers such as the right to organize, non discrimination in the payment of wages and conditions of work, safety at work place and absence of sexual harassment.

NCEUS also advocates programmes and policies for skill formation for the informal workers, strengthening NREGS and extending to urban areas, special programmes for marginal and small farmers, development of micro enterprises with a focus on credit, technology and development of clusters and growth poles.

Several social security programmes, introduced by Central and State Governments and NGOs cover only a small proportion of the unorganised workers. National Rural Employment Guarantee Scheme is one of the important components of social security.

The experience of India in protective programmes in the last few decades shows that there have been initiatives at three levels: Central Government, State Governments and NGOs. However, there has been unevenness in terms of coverage of states as well as workers. Kerala tops the list with a lot of welfare funds followed by Tamil Nadu. Many NGOs are also involved in providing a measure of protective social security to workers and their families in the unorganised sector. Although their coverage is low, NGOs have a variety of best practices through people's participation. Yashaswini Health Insurance Scheme in Karnataka is an example of successful case of such partnership.

The report of the NCEUS containing the bill on social security raised several issues regarding finance, benefits and implementation of the scheme. Health insurance is one of the major controversial subjects. These challenges have to be sorted out before implementing the scheme. The major challenge is to extend social security to around 400 million workers covering all states and all groups of workers.

#### **4. SOCIAL SECTOR DEVELOPMENT**

This Section looks at the performance, issues and policies relating to social

sector or human development. It also examines whether India can achieve Millennium Development Goals (MDGs). In spite of significant achievements, the levels of human development are much lower than China and other East Asian countries and countries like Bangladesh and Vietnam. India's rank in human development index is 127<sup>10</sup>.

The performance of social sector development indicates that there are basically six problems with the sector. These are: (a) low levels of human development indicators; (b) slow progress in these indicators; (c) significant regional, social and gender disparities; (d) slow growth in public expenditures in social sector particularly in the post-reform period; (e) poor quality delivery systems in both health and education; (f) privatization of health and education services.

In the 1990s, the achievements in literacy and primary education were significant. On the other hand, the achievements in health sector were not satisfactory. Illiteracy and low health status are high in rural areas and among socially disadvantaged sections like SCs and STs. There are also significant inter-state disparities in education and health indicators.

Social sector expenditure in India in the 1990s is low, as compared to other developing countries, and certainly as compared to East Asian countries, and it is low as compared to the UNDP recommended ratios. It is not always low as compared to what India spent in the 1980s; that depends on the particular indicator chosen to assess social expenditure trends. But what is clear is that the pace of growth in social sector expenditure has slowed down in the post-reform period – and that this is true with regard to all three indicators. The States have done much worse than the Centre. Since 2004-05, there has been some increase in social sector expenditures.

#### **Education:**

There have been significant achievements in education. In spite of the achievements, India has the largest number of illiterates and low levels of schooling to large number of population. Recently right to education bill was introduced in Parliament to guarantee universal education to the children in 6-14 age group. However, there are a number of challenges in attaining the objective of universal primary and secondary education. Quality of schooling is a major concern, especially in government schools in the rural areas. While several interventions as part of Sarva Shiksha Abhiyan (Education for All) are in place, their successes are contingent upon various factors like capacities, and institutions. There are significant disparities

<sup>10</sup> On economic growth and social development, see Rangarajan (2009)

in educational development in terms of regional, socio-economic groups and gender that need attention. Public and private participation in education and resultant 'dualism' is a major challenge. Gross enrolment ratio for higher education is 11% in India as compared to world average of 25%. The government policy for all levels of education is to fulfill the objectives of quantity, quality and access.

#### **Health:**

In the 10<sup>th</sup> and 11<sup>th</sup> Five Year Plans, several policies have been introduced to raise the levels of health. The Common Minimum Programme of UPA government also gives emphasis to social sector. In the case of health, National Rural Health Mission (NRHM) is supposed to improve health services in rural areas. As Kumar (2005) says, the success of NRHM depends on three factors: adequate finances, dedicated and well trained health workers and improving the accountability and efficiency of health services. Community health services and public-private partnerships in health should be encouraged to expand health services.

There are five problems in health. These are: (1) India's health record absolutely and relatively is poor compared to China, Bangladesh; (2) Equity and quality considerations are neglected; regional, rural-urban, social groups; (3) Progress and improvement in health has been slow; (4) There have been glaring failures in the management and delivery of quality health care; most of the government operated rural health sub-centres and primary health care centres are on the verge of total collapse; growth in large private sector; Amartya Sen says that there is 'Quackery and crookery' in health sector; (5) India's health sector is grossly underfunded. There are only four countries of the world Nigeria, Sudan, Indonesia and Myanmar which spend less than India.

The progress on millennium development goals (MDGs) shows that if India follows the current rate of progress (business as usual scenario), it can not achieve millennium development goals in crucial indicators of human development like health and education and sanitation. It may achieve MDG in case of poverty. But, in key indicators like infant mortality, maternal mortality and malnutrition India can not achieve MDGs at current rate of progress.

In order to improve human development indicators and attain MDGs, more efforts are needed than now. There is a need to concentrate on backward regions, social disadvantaged groups and women. Sector specific interventions and institutions are needed for better delivery systems particularly in rural areas. To achieve this, rights based approach is useful. Education and health are important for their own sake and for improving rural economic growth. Apart from the supply side factors

like infrastructure for education and health, there is a need to focus on demand side for better accountability. Social pressures are needed for public action. Better monitoring systems have to be developed at Central, state, district and village levels for better performance. It is the responsibility of citizens and NGOs to organize campaigns for better functioning of the programmes on education and health. Involvement of Panchayati Raj Institutions (PRIs) will improve the participation of people.

India can learn lessons from the experience of Bangladesh in raising the levels of human development. Bangladesh is looking beyond MDGs while India is struggling to achieve some of the MDGs. Large NGO's presence is responsible for 'creative tensions' and upward and downward accountability. Institutional delivery systems are better because of this accountability. Female secondary education due to stipends to girls in secondary education also improved human development in Bangladesh.

#### **5. REGIONAL AND OTHER DISPARITIES**

Divides in the economy and society in India are significant. These divides are in terms of regional, social, rural-urban and gender. In some areas there are signs of improvement while in some other areas the divides are widening. Bridging these divides should be one of the priority areas for Indian Government.

*Rural-urban divides:* In the post-reform period, rural-urban disparities have increased. Of course inter-regional disparities are related to these divides. Development and the quality of life are improving more rapidly in urban areas than in rural areas. This is partly due to the relatively lower growth in agriculture. On the one hand, the growth of GDP is between 7-9 per cent per annum. On the other hand, the share of agriculture in GSDP has dropped below 20 per cent without any appreciable shift in the proportion of population still dependent on agriculture for livelihood. This has resulted in a large disparity in output per worker between rural and urban areas and the relative impoverishment of rural areas. The government has to take necessary steps to bridge the rural-urban divide. Basically, agriculture and the rural non-farm sector have to be developed further. The former President of India Dr. A.P.J. Abdul Kalam has advocated implementation of the scheme 'PURA' -Providing Urban Amenities in Rural Areas. 'PURA' is a scheme to enhance physical, economic, knowledge, societal and electronic connectivity in rural areas. Generally, the performance of many basic services like drinking water, health, education, sanitation, electricity, transport are weak in rural areas.

*Gender Divide:* There are significant disparities in socio-economic development

between men and women in the country. Although we have constitutional commitment to equality and rise in the emphasis on equality of women, it had only a limited impact in reducing disparity and discrimination of women. There is a need to focus on reducing the divides between males and females.

*Social Inequalities:* Another divide is the disparities in socio-economic development between marginalized sections (SCs & STs) and other groups. There have been various programmes and legal provisions for improving accessibility of these groups to cultivable land, education, health care and basic amenities in the context of 'inclusive development strategies'. Though there has been progress in many development indicators across the SC and ST communities in the state, they still lag behind the 'other' social groups. The gaps between social groups are becoming narrower in education. Health conditions among these communities have been improving at a very slow pace. The situation is alarming with respect to economic well-being of STs as the poverty level among the STs has, in fact, increased during the last decade or so. Moreover, landlessness is increasing among these communities, especially STs. It may be noted that without effective steps to enhance access to productive assets including land and, most importantly, employment opportunities through 'affirmative policy action', their lot can not be improved in a sustainable manner. Apart from general approach for the disadvantaged, specific measures have to be taken for the upliftment of SCs and STs.

*Regional Disparities:* The existence of wide inter-regional variations in a vast country like India is well recognized. All the Five Year Plans stressed the importance of balanced regional development. Plans and policies were designed to provide more investments to the relatively backward areas. In spite of these policies, regional disparities is a serious problem in India. In the post-reform period, the degree of control of Central Government declined in many areas due to deregulation in many sectors of the economy. State governments can take more initiatives for economic development now than before. Also, the role of private sector is becoming more important as compared to the public sector. In this context, apart from central government interventions, state level policies are crucial for attracting both domestic and foreign direct investment. The role of public policy is also vital for reducing regional disparities.

The growth rate in SDP across states seems to be more uneven in the post-reform period as compared to pre-reform period. Poorer states like Bihar, Orissa, M.P. and U.P. suffer from high population growth and low economic growth. As a result, variations in per capita SDP growth are much higher than those for SDP growth. The per capita income of Bihar as ratio of Punjab was 30% in 1993-94 but

the ratio declined to 22% in 2004-05. Female infant mortality varies from 12 in Kerala to 88 in Madhya Pradesh. Female literacy varies from 33.6% in Bihar to 88% in Kerala. Regional disparities increased in respect of poverty, inequality, underweight children and infant mortality. The poorer states seem to be catching up with other states in social development, particularly in education, compared to economic growth and poverty. Human development and nutritional levels are better in North Eastern States. Poverty among STs is lower in NE region as compared to STs in other regions.

Poverty is getting concentrated in a few states in India. The poor among SCs in rural areas are concentrated in Uttar Pradesh (58 per cent), Bihar and West Bengal while the poor among SCs in urban areas are concentrated in Madhya Pradesh and Uttar Pradesh (41 per cent). Regarding poor among STs, Bihar, Gujarat, Madhya Pradesh and Maharashtra together accounted for 75.5 per cent of the poor among STs in 2004-05.

Millennium Development Goals for many states may achieve the goal of halving poverty by 2015. On the other hand, many states may not achieve MDG in the case of malnutrition at the current rate of progress. Therefore, reduction in malnutrition is a bigger challenge than reducing poverty. Even if poverty is removed malnutrition may remain.

Apart from inter-state disparities, intra-state disparities seem to be widening in poverty. This is a cause for concern because of social unrest due to disparities within states.

What are the policies needed for reduction in regional disparities in economic and social development?

Important issue is that some states benefited from reforms while some others lagged behind. The answer for this issue lies partly in the initial or pre-reform level of social and economic infrastructure conducive to growth and partly in the rate of capital formation, physical as well as human, in the post-reform period. Historical factors and initial endowments explain only part of the reasons for regional disparities. The experience of different states shows that the group of some western and southern states has done better than some eastern and northern states. For example, Tamil Nadu and Southern states could do better than poorer states because of better infrastructure, fiscal management, investment in social sector and institutions including governance.

However, central government role is equally important in reducing regional

disparities. The shares of the per capita plan outlay for the poorer states have declined in the post-reform period. The Central Government including the Planning Commission should help poorer states in getting investments for infrastructure and social sector. Mid-term Appraisal of Tenth Plan indicated some measures like Backward Regions Grant Fund to help the poorer states. It also hints at the need for revision of Gadgil formula to suit the present requirements.

For North East Region, two pronged growth strategy of creation of critical infrastructure and creation of employment opportunities is needed. Similarly, security, law and order and governance has to be improved. In farm-based economic activities, horticulture, animal husbandry, fisheries, poultry etc. are important. The region should be made attractive destination for private investment and also follow look East policy.

Finally, to improve accountability and development, there is a need to devolve more finances, functions and powers for panchayats in order to make these institutions self sustaining. Overtime decentralization would increase accountability. Governance has to be improved in less developed regions.

## 6. ENVIRONMENT

Protection of environment is an important component of sustainable inclusive growth strategy. Population growth, urbanization, development with energy intensive technologies etc. have resulted in large quantities of pollutants in the environment. Natural resources such as water and land are limited and their per capita availability is actually diminishing because of rising population and irrational exploitation of common pool resources (GOI, 2009). The degradation of natural resources reduces the well being of people, and the poor and women suffer more, as they depend much more on natural common property resources for fuel and water, and also have fewer resources to take defensive actions. There are also new challenges for environment in the form of climate change.

Environmental concerns are among the policy priorities in Indian agriculture. Particularly degradation of land and water is alarming. Watershed development under the new guidelines, in general, has an overall positive impact on environment. However, groundwater tables are depleting at an alarming rate. The *de facto* privatization of groundwater and subsidized power supply are the main culprits. There has been a neglect of minor irrigation sources like tanks. Shortage of drinking water has accentuated and quality of water has declined over time.

An integrated approach is needed for water resources management in the

country. An appropriate strategy should integrate institutional approaches with market principles. Since institutional innovation (water user associations) is already in place for canal irrigation, it is time now to implement volumetric pricing. There is a need to de-link water rights from land rights in order to ensure equity and sustainability.

Institutions like the water user associations (WUAs) and watershed committees are important for water management. In the case of land and forestry, watershed approach and Joint Forest Management are crucial for protecting the environment. The critical issue is sustainability of these programmes. Although watersheds have shown positive economic impact, the social issues are missing. More participatory approach and involvement of women would lead to sustainability of watershed development approach. In the case of JFM, the focus is more on high income areas like timber. Low value products constituting sources of livelihoods for the poor have low priority. Customary rights of the tribals on *podu* (shifting cultivation) have to be recognised.

Awareness and involvement of the civil society is a precondition for checking environmental degradation. Environmental movements would have a discerning impact in this regard.

Another concern is the land degradation due to excessive use of fertilizers and pesticides. Government has programmes such as Integrated Pest Management (IPM) and Integrated Nutrient Management (INM). Keeping in view the ill effects of pesticides and also National Policy on Agriculture, Integrated Pest Management Approach (IPM) approach has been adopted as a cardinal principle and main plank of plant protection in the country in the overall crop production programme. Integrated Nutrient Management (INM) advocates the integrated use of all sources of plant nutrients like chemical fertilizer, bio-fertilizer and locally organic manures like farm yard manure, compost, vermi-compost, green manures, edible and non-edible oil cakes to maintain soil health and its productivity. Focusing on improving soil quality should be one of the priority areas in raising agricultural growth. Organic farming is also being encouraged in the country due to demand for these products all over the world.

### Climate Change, Food Security and Livelihoods

Climate change is a reality. It has impact on food security and livelihoods of the people. It is known that the greenhouse gas emissions are not reversible in the foreseeable future. The greenhouse gases we send in today may last more than 100 years. This peculiarity makes climate change problem more difficult than other

policy challenges.

There are some indications that world temperatures are increased by 0.7 degree C since the advent of industrial era and the rate of increase is quickening. Many of the world's poorest people and most fragile ecological systems are already being forced to adapt to dangerous climatic change. However, beyond a threshold of 2°C the risk of large scale livelihood set backs and irreversible ecological catastrophes will increase sharply.

It is the production and consumption of developed countries that are responsible for the deterioration of the earth's ecological conditions. Since the start of industrial era few rich countries like the US and U.K. account for 7 out of 10 tonnes of CO<sub>2</sub>. Cumulative per capita emissions are 1100 per capita for US and Britain as compared to 66 tonnes per capita per China and 23 tonnes per capita for India (UNDP, 2008).

It does not mean that developing countries should not reduce CO<sub>2</sub>. Recently, G8 countries told developing countries to take more mitigating actions. Indian Prime Minister assured the rich countries that India will restrict its per capita emissions to the average per capita emissions of the developed world. Another thing is that the rich countries worry more about energy security (oil etc.) whereas developing countries like India worry more about food security and livelihoods.

Agriculture is part of the problem and part of the solution. Food security and livelihoods depends on sustainable agriculture in many developing countries. Climate change will worsen the living conditions of farmers, fisheries and forest-dependent people who are already vulnerable and food insecure. Hunger and malnutrition will increase. Rural communities, particularly those living in already fragile environments, face an immediate and ever-growing risk of increased crop failure, loss of livestock, and reduced availability of marine, aquaculture and forest products. More frequent and more intense extreme weather events will have adverse impacts on food availability, accessibility, stability and utilization, as well as on livelihood assets and opportunities in both rural and urban areas. Poor people will be at risk of food insecurity due to loss of assets and lack of adequate insurance coverage. Rural people's ability to cope with climate change impacts depends on the existing cultural and policy context, as well as on socio-economic factors like gender, household composition, age, and the distribution of household assets.

**Mitigation in Agriculture Sector:** Agricultural mitigation in developing countries can make farming more resilient to the vagaries of climate change and can also reduce hunger and poverty. But this requires massive investments and information — to change unsustainable farming methods and to train farmers in

mitigation practices.

Current global funding arrangements such as the Kyoto Protocol's Clean Development Mechanism are not reaching farmers in poor countries, New and more flexible financing mechanisms are needed that offer incentives to farmers, including smallholders, so that they may participate in greenhouse gas emission reductions and removals.

The scope of the Clean Development Mechanism, for example, could be expanded in order to include reduction of emissions from deforestation and forest degradation, wetlands, croplands and grasslands, in order to realize the high potential for sequestering carbon in soils and above ground biomass.

**Impact on India and Strategies for adaptation and mitigation:** India has reasons to be concerned about climate change. Vast majority of population depends on climatic sensitive sectors like agriculture, forestry and fishery for livelihood in the country. The adverse impact of climate change in the form of declining rainfall and rising temperatures and thus the increased severity of drought and flooding, would threaten food security and livelihood in the economy.

India has prepared a document namely the National Action Plan on Climate Change. It provides a direction for changes at the national level in policy, planning and public-private partnerships but also because it lays out a global vision for modifying longer time trends for sustainable development.

The action plan deals with ideas like increasing solar energy, renewed thrust on energy efficiency, an effort to promote integrated water resource management, and a focus on restoring degraded forest lands, joint forest management committees, reduction in electricity and fertilizer subsidies etc.

11<sup>th</sup> Five Year Plan document also provides India's approach to climate change. The government's effort will be towards creating energy and carbon efficiency in public and private sectors and towards internalizing climate change concerns in development planning.

The serious consequences of climate change, including especially the consequences for India, lead naturally to the question of what should be our response. Two types of responses need to be considered. The first relates to adaptation, i.e., measures that have to be taken given the very high likelihood that climate change will occur and will have adverse effects. The second relates to mitigation, i.e., steps

to be taken that might reduce the extent of climate change.

Recognizing the importance of climate change issues, the Prime Minister established a Council on Climate Change under his chairmanship in June 2007 to co-ordinate national action for assessment, adaptation, and mitigation of climate change.

An action plan for adaptation to climate change would require (i) action in the area of agricultural research to evolve varieties that can cope with likely climate changes, (ii) action to cope with likely increases in water stress, (iii) action to be able to cope with a greater frequency in natural disasters. The institutional network created at the time of preparation of India's initial National Communication to United Nations Framework Convention on Climate Change (UNFCCC) exists and is currently engaged in the preparation of information on India's second National Communication.

With a share of just 4% of global emissions, any amount of mitigation by India will not affect climate change. A substantial commitment to reduce emissions by the major industrialized countries will be required. Nevertheless, as contribution to the global emissions reduction effort, the Eleventh Plan would focus on efforts to ensure that the emissions intensity of India's GHG continues to decline.

To conclude, climate change is a reality and would affect the poor and vulnerable and future generations. Successful adaptation coupled with mitigation holds the key to food security and livelihoods for the 21<sup>st</sup> century and beyond. International cooperation is important. Environmental objectives can only be achieved if environmental concerns are internalized in policymaking in a large number of sectors. This would require sharing of responsibility at all levels of government and across sectors with respect to monitoring of pollution, enforcement of regulations, and development of programmes for mitigation and abatement. Sustainable use of natural resources also requires community participation with a responsible role assigned to the communities for conservation.

## 7. HOW TO IMPROVE INCLUSIVE GROWTH?

There is some sort of consensus now that growth should be shared by all sections of the society rather than limiting to few categories of population. This is important to reduce poverty and various types of inequalities in the economy and society. The following policies have to be followed in order to improve economic growth.

First, equity matters for development. Equity is important for its own sake and

for higher growth. If we reduce personal, rural-urban and regional disparities, growth will increase. Growth and equity are complements rather than trade-offs. The policies for growth and equity should be followed simultaneously rather than 'growth first and equity next' approach. Economic growth is important. It improves tax/GDP ratio and one can spend on agriculture and social sector. Of course, growth is necessary but not sufficient for inclusiveness.

Second, agriculture development should be given priority for more inclusive growth. As mentioned above, there are six deficits in agriculture. These are: There are six deficits in Indian agriculture. These are: (a) investment, credit and infrastructure deficit; (b) research and extension (technology) deficit; (c) market deficit; (d) diversification deficit; (e) institutions deficit including land and water management and ; (f) education/skill deficit. There have been some improvements in agricultural investments in the last few years. Agricultural growth has been more than 4 per cent per annum during 2003-04 to 2007-08. This has to be sustained over time. Technology has to be given more focus than before. Land and water management should be given top priority.

Third, it should be recognized women as agents of sustained socio-economic growth and change. Gender is a cross-cutting theme and should not be confined to one department. The policies regarding women should cover all sectors of the economy and society. Agriculture is one area where women's role is very important. Similarly, the participation of women in labour market is increasing. There are significant gender disparities in indicators like education, malnutrition and infant and child mortality rates. Reduction in gender disparity in these indicators itself will achieve the relevant Millennium Development Goals. Thus, there is a need to focus on reducing the divides between males and females.

Fourth, one of the important areas for priority is enhancement of physical and social infrastructure. Greater public investment in infrastructure in rural and urban areas to create more employment is needed. Development of physical infrastructure and its quality have not been commensurate with the recent growth in aggregate output (Reddy, 2009). In other words, GDP growth is not sustainable if physical infrastructure is not improved. Government has to play major role in providing education and health care facilities..A sustained emphasis on education and health are needed in the next decade in many states for equitable development.

Fifth, macro pro-poor policies are more important than having only safety nets for poverty reduction. The macro policies such as fiscal, trade, financial, monetary policies have to be more pro-poor. The experience in several countries during the reform period shows that , public expenditure as percentage of GDP is low and

declining. As a result, public investment in rural development has declined sharply in most of the Asian countries. Consequently agricultural growth slowed down in most countries in the 1990s. Average annual rate of growth of gross capital formation also slowed down in many countries. Trade liberalization has been associated with increased ratio of trade to GDP, improved export performance, and diversification towards manufactured exports. However, linkages to employment are not so well established (Palanivel, 2009). Financial sector has historically had an urban bias<sup>1</sup>. On balance, the macro policies have not been pro-employment and pro-poor in the post-reform period in many developing countries including India. Therefore, there is a need to have pro-poor macro policies.

Sixth one is that structural change in economy should follow agriculture-industry-service sequence. In GDP shares, India jumped from agriculture to services without concentrating on manufacturing. Also in many South East Asian countries, there has been a shift of employment from agriculture to manufacturing. The share of employment in manufacturing in Malaysia is 50%, in Korea 62%, in China 31%. On the other hand, the share of employment in manufacturing in India is only 11% while the share of agriculture is more than 55%. Therefore, there is a need to develop industry in order to improve employment. Jumping to services is not the solution. High agriculture growth of 4% and industry growth of more than 10% are needed for better structural change. In India, growth acceleration has been significant in service sectors. These include, trade, hotels, transport, communication services, financing, insurance, real estate and business services. Importance should have been given first to agriculture, manufacturing, rural infrastructure etc. in the reforms for better employment, incomes and equity.

Employment (both quantity and quality) should be the focus of inclusive approach. Skill improvement and youth employment need to be the focus areas. Otherwise you can not shift people from agriculture to non-farm sector.

Seventh, equality of opportunities is important. Even if we do not follow equitable distribution of assets, every one should get equal opportunity for better education and health. The Indian economy is on a high growth track. While the Indian government has implemented policies that unleashed the country's growth potential, it should also embark on a process of social transformation that ends discrimination on the basis of caste, class and gender. We also need to pay more attention to provide clean water, access to health care and high quality education to all. At national level, public action should see that states such as Bihar, M.P.,

<sup>1</sup> On financial sector reforms see Nachne (2009)

Chattisgarh, Jharkhand, U.P. and Orissa and the poor in other states enhance opportunities for improving education, health and incomes. A comparison of Andhra Pradesh and Rajasthan in education shows that Rajasthan has done exceedingly well in the 1990s. According to a study, Andhra Pradesh may join the rank of BIMARU states in education if you go by the current progress. A sustained emphasis on education and health are needed in the next decade in many states for inclusive growth.

Eighth, South East Asian and East Asian experience shows that globalization with better initial conditions have increased employment and incomes for workers and led to equitable development. Developing countries should learn from China on agricultural growth, rural non-farm employment, public investment and human development. The impact of growth on poverty reduction is quite significant. Elements of Chinese experience such as high and labor-releasing agricultural growth, favourable income distribution through broad-based agricultural growth, availability of infrastructure, higher levels of literacy and skills, inducements for the location of enterprises in rural areas, and easy access to credit and inputs are extremely relevant for developing countries. Those who support liberalization say that China's high economic growth and impact on poverty is due to economic reforms since 1978. However, initial conditions before introduction of reforms are important. China's success is due to these better initial conditions. China introduced land reforms and invested in infrastructure, health and education before reforms. This led to high agriculture growth, better human development. In other words, reforms work better in a more egalitarian (equality) society. It may be noted that Investment rate in China is 35 to 44% compared to 30% in India. Infrastructure investment is 19% of GDP in China as compared to 2% in India in the 1990s. The foreign direct investment also plays an important role in improving investment in China. One important debate in India relates to the impact of FDI particularly on retail chains on employment.

Ninth, development of technology is important for inclusive growth. For example, the spread of green revolution to the poorer states in India shows its potential for reducing regional disparities in development. Also, small farmers benefited from technology. This is because gains from technology are widely distributed. Therefore, stepping up agricultural growth through the use of biotechnology holds considerable prospects for reducing regional and inter personal disparities. Similarly, the experience with information technology is equally encouraging and holds the prospect for raising productivity in agriculture and industry. There is a need to exploit the potential from these emerging technologies for equity across households and regions. There is lot of knowledge gap in agriculture. Even with existing technology, productivity can be improved.

Tenth, **inclusive governance** is important. **The focus of reforms can now be shifted to more efficient delivery systems of public services.** It has been recognized that better governance is very important for inclusive development. This is important for better implementation of sectoral policies and poverty alleviation programmes. Social mobilization, community participation and decentralized approach are needed. It may, however, be noted that governance has to be contextualized in relation to socio-economic environment. Appropriate institutions are needed for better implementation of policies and programmes. For example, rural institutions in areas like land, water, marketing of agricultural and non-agricultural products, credit, technology and infrastructure are needed for better governance. Similarly, people's centric programmes and institutions are needed for poverty alleviation. Collective approach is gaining importance in the country. Self help group approach for livelihoods is relatively successful. For example, small and marginal farmers can get better services if they are organized through collectives like self help groups or cooperatives.

Eleventh, all over the world it is recognized that decentralization in terms of transferring power to local councils is important for development. For many state governments in India, decentralization means devolution of power from Centre to states. The experience of decentralization in terms of greater devolution of functions, finances and powers to PRIs and urban local bodies in many states has not been satisfactory. The PRIs have to be strengthened for achieving growth with equity.

Twelfth is the need to have economic reforms in relation to socio-economic environment. Calibrated approach is needed (Reddy, 2009). The rationale for the ongoing economic reforms in India, their consequences and prospects has generally been discussed in the parlance of economics. However, these 'economic' phenomena represent largely a superstructure, which is profoundly influenced by the underlying socio-political factors. The economic reforms may not be sustainable if the burden falls disproportionately on the poorer sections of the population. Therefore, there may be a need for meaningful economic reforms that is in line with socio-political factors. Also, we have to tackle structural inequalities rooted in caste, religion and gender.

Lastly, rights approach plays an important role in improving implementation for development programmes. Right to food, right to health and right to education, right to employment and right to information etc. puts pressures on governments to deliver the services to citizens. Basically we have to go beyond supply side and focus on demand side. Social pressures are needed for public action. Better monitoring systems have to be developed at central, state, district and village levels

to realize rights. Justifiability is one aspect of rights. However, one (particularly the poor) can not go to court every time right is violated. It is the responsibility of citizens and NGOs to organize campaigns for better functioning of the programmes. Public accountability is crucial for the success of right to food. Also you can not have legal aspect for every right. For example, rights of a girl child to have a food within a household can not have legal aspect. It is the responsibility of the parents to treat boys and girls equally.

## 8. CONCLUSION

There is a need for inclusive growth in India for reduction in deprivation and disparities and for sustainable equitable development. Bridging the divides in Indian economy and society should be one of the priority areas for Indian Government. It is more challenging to achieve inclusive growth than getting 9% growth in GDP. Public policy should give priority to 'inclusive sectors' rather concentrating on policies to improve lop-sided growth benefiting few sections of the population. The role of state as facilitator and provider is much more important for attaining inclusive growth. Basically, we have to achieve freedom from food and nutrition insecurity, illiteracy, ill-health, low quality employment, regional, gender and social disparities remain one of the biggest challenges in a democratically free India. As Sen (2009) says that injustice in the society should be reduced as far as possible. The road map should consist of improving physical infrastructure, social sector/human development and improving inclusive governance. **It is often mentioned that when things were not working, democracy was responsible for lack of governance. There is a need to strengthen democracy by decentralizing and inclusive governance.** In a democracy we debate more before implementing policies. There are strong social, economic and political reasons for achieving broader and inclusive growth. India will be a running tiger if inclusive growth is achieved.

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