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# Inclusive Growth in Andhra Pradesh:

Challenges in Agriculture, Poverty, Social Sector and Regional Disparities

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#### ABSTRACT

This paper deals with inclusive growth in Andhra Pradesh. Growth may be higher in the last two decades but inclusive growth or equitable development has been missing. It is like running a train with engine only without connecting bogies and people to the engine. According to us, important elements of inclusive growth are: agricultural growth, employment generation and poverty reduction, social sector (health and education) and reduction in regional and other disparities. In this paper, we concentrate on these four elements of inclusive growth.

There seems to be some 'turn around' in the gross state domestic product (GSDP) of A.P. in the last five years. The average annual growth rate was 6.9% during 2002-07 and 7.8% during 2003-07. However, there are problems in the four elements of inclusive growth. Growth of agriculture particularly crop sector is very low. Employment growth in the post-reform period (1993-94 to 2004-05) is the lowest in the country. The recent data shows that literacy levels are also low as compared to many other states. The National Family Health survey (NFHS III) indicate that A.P.'s rank for infant mortality is 11 out of 17 states in the year 2005-06.

Growth rates in district domestic product (DDP) and per capita DDP shows that 7 districts of Telangana (Ranga Reddy, Nizamabad, Khammam, Hyderabad, Mahbubnagar, Warangal and Medak) and 2 districts of North Coastal (Visakhapatnam and Srikakulam) recorded higher growth rates than that of state average. On the other hand, all the districts in South Coastal and Rayalaseema and three districts of Telangana and one district of North Coastal showed lower growth than that of state average. However, one has to see the quality of growth in Telangana and Rayalaseema districts.

We have examined whether A.P. can achieve Millennium Development Goals (MDGs). It is depressing to note that Andhra Pradesh will not meet MDGs in 10 out of 14 indicators. Thus, except in poverty, enrolment of boys and girls and drinking water, A.P. may not achieve millennium development goals in crucial indicators of education, health and sanitation at current rates of progress. The progress in MDGs for some regions and socially deprived sections like SCs and STs has been slower than the state average.

This paper suggests several policies for improving inclusive growth in A.P. Economic growth may be improving but A.P. is lagging behind in agriculture, employment, human development and in reducing regional disparities. There is a need to operationalize a plan for achieving inclusive growth during the 11th Five Year Plan period and beyond in Andhra Pradesh. The action plan should cover the priority areas like agriculture, employment and social sectors. It should have a plan for socially disadvantaged sections.

## **Inclusive Growth in Andhra Pradesh:**

Challenges in Agriculture, Poverty, Social Sector and Regional Disparities<sup>1</sup>

#### S. Mahendra Dev

Policies based on 'Washington Consensus' have been followed in many countries of the world in recent years. However, 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 or equitable development. Now there seems to be some consensus at international level that we should have policies that achieve inclusive growth<sup>2</sup>.

In India, economic growth improved significantly in the last two and half decades particularly in the post-reform period. However, the exclusion problems have not been seriously addressed by the government programmes and strategies. The experience of the economic reforms in the last 15 years indicate while there have been improvements in economic growth, foreign exchange, IT revolution, export growth etc, the income distribution has been unequal and only some sections of the population benefited more from higher growth and prosperity. Exclusion continued in terms of low agriculture growth with increasing visibility in farmers' suicides, low quality employment growth, inadequate development of women and children, concentration of poverty and low human development both geographically and in terms of social categories, increase in rural urban divides and regional disparities (Dev, 2006). There is now some concensus

<sup>&</sup>lt;sup>1</sup> C.V. Subba Rao Memorial Lecture delivered by the author at the Sliver Jubilee Conference of the Andhra Pradesh Economic Association, Acharya Nagarjuna University, Nagarjuna Nagar, Guntur, February 10-11, 2007. Thanks are due to Dr. C.Ravi and Mr. Venkatanarayana of CESS for their help in providing data for some sections of the paper.

<sup>&</sup>lt;sup>2</sup> In recent years, the development literature and the approach of international organizations like the UNDP, ILO and World Bank seem to be moving towards policies to achieve growth with equity. World Bank's World Development Report (2006) focuses on growth and equitable development. UNDP has been focusing on macro pro-poor policies.

that we should follow policies which improve inclusiveness. The Approach Paper of the 11<sup>th</sup> Five Year Plan advocates faster and more inclusive growth.

The objective of this paper is to examine the challenges in some elements of inclusive growth in Andhra Pradesh (A.P.) The above problems of exclusion in all India apply to Andhra Pradesh also. The state of A.P. was formed by combining regions with widely different endowments, historical legacies and institutional arrangements. The challenge of development policy in the period subsequent to the formation of the state was to integrate these diverse units into a single economic entity and to accelerate the growth of its productive sectors along with the promotion of adequate opportunities to ensure broad based participation by all sections of society<sup>3</sup>. Growth may be higher in the last two decades but inclusive growth or equitable development has been missing. It is like running a train with engine only without connecting bogies and people to the engine. According to us, important elements of inclusive growth are: agricultural growth, employment generation and poverty reduction, social sector (health and education) and reduction in regional and other disparities. In this paper, we concentrate on these four elements of inclusive growth.

The paper is organized as follows. Before going to inclusive growth, we examine briefly the performance of economic growth in A.P. in Section 1. We analyse the issues and challenges in agriculture, employment and poverty, social sector and regional disparities in Sections 2, 3, 4, and 5 respectively. Section 6 provides some suggestions for achieving inclusive growth in A.P. while the last section gives concluding observations

#### **1. ECONOMIC GROWTH**

It is well known that we have moved beyond 'Hindu Rate of Growth' at all India level in the last two and half decades. There is a debate on the turning point and structural breaks in economic growth in the country. A perusal of GSDP growth rates for Andhra Pradesh (A.P.) reveals that A.P. also moved beyond 'Hindu Rate of Growth' in the last two and half decades. The growth

<sup>&</sup>lt;sup>3</sup> See Rao et al, 1998. Some useful references on the historical factors and developments in A.P. in the earlier decades see Mukund (1990), Radhakrishna (1990), Parthasarathy (1995), Vithal (1998). Regarding performance of A.P. in post-reform period, see articles in Rao and Dev (2003)

rate of GSDP increased continuously from 1.8% in the 1960s to 2.8% in the 1970s and to 4.9% in the 1980s and to 5.2% in the 1990s (Table 1)<sup>4</sup>. It was 5.9% in the first five years of this decade. However, the growth of GSDP in the last ten years (1994-95 to 2004-05) was lower at 5.8% as compared to 6.4% during the decade 1984-85 to 1993-94. As compared to all India, the growth rate of GSDP was lower in A.P. in the 1990s and it was marginally lower during 2004-05.

ltem		1960-61 to 1969-70	1970-71 to 1979-80	1980-81 to 1989-90	1990-91 to 1999-2000	2000-01 to 2004-05	1984-85 to 1993-94	1994-95 to 2004-05
A A	GSDP Agrl Non-Agrl Per capita GSDP	1.81 -1.61 4.8 -0.03	2.8 0.7 4.6 0.8	4.9 2.1 6.6 2.8	5.2 2.1 6.4 3.9	5.9 0.9 7.4 4.8	6.38 3.69 7.76 4.32	5.81 2.76 6.8 4.3
A lugia	GSDP Agrl Non-Agrl Per capita GSDP	3.23 1.26 4.71 0.83	3.4 1.9 4.3 1.1	5.2 3.1 6.3 3.1	6.0 2.8 7.2 4.1	6.1 1.9 7.2 4.5	5.31 3.65 6.06 3.27	5.75 1.94 6.88 3.94

Table 1: Trend Growth of Overall GSDP and that of Agriculture, Non-Agriculture and Per Capita GSDP

Source: Department of Economics and Statistics, Government of AP, Hyderabad.

Growth rate in per capita GSDP increased significantly over time. It increased from 2.8% in the 80s to 3.9% in the 90s and to 4.8% during 2000-05. The growth rate in per capita GSDP was slightly higher in A.P. than all India in the last five years. This high growth was partly due to lower population growth in A.P. than all India.

<sup>&</sup>lt;sup>4</sup> The GSDP figures used were supplied by the Directorate of Economics and Statistics of Andhra Pradesh, Hyderabad. The data came along with the soft copy (electronic version) of Compendium on Land Use Statistics of the same agency. Whole series of data from 1960 to the latest is transformed into latest single base year: i.e. 1993-94 prices. While bringing GSDP figures at Constant prices with different base years into a single one, splicing method is used at the disaggregated level (i.e. Splicing is done at the each individual sector). All this is done by DES, Hyderbad and supplied the final data.

In fact the GSDP figures presented above and used for trend growth are little different from those figure that are published and used earlier (e.g. See Dev and Ravi, 2003). The difference in figures is observed only for Andhra Pradesh whereas there is no such difference for all-India figures.

Agricultural growth in the first four decades (1960s to 1990s) was lower in A.P. as compared to all India. It was higher than all India only during 1994-95 to 2004-05. Non-agricultural growth was lower in A.P. than all India in the 1990s. In other words, the benefits to A.P. from the reforms to non-agriculture were lower than some of the other states. However, the non-agricultural sector in the last five years seems to have grown similar to that of all India.

The per capita income in terms of net SDP in A.P. has always been lower than all India (Table 2). The ratio of A.P. to all India per capita net SDP was 95.7% in the triennium 1993-96. However, the ratio increased to 99.3% in the recent triennium 2002-05. Thus, A.P. seems to be catching up with all India in per capita income in recent years.

Table 2: Per Capita Net State Domestic Product at Factor Co	st:
A.P. and All India (In Rs. at constant 1993-94 prices)	

	1993- 94	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 00	2000- 01	2001- 02	2002- 03	2003- 04	2004- 05
A.P.	7416	7711	8071	8514	8191	9144	9445	10195	10609	10875	11756	12352
India	7690	8070	8489	9007	9244	9650	10071	10308	10754	11013	11799	12416

Source: RBI, 2005-06

Table: 2a Growth Rate of	GSDP in A.P. in	n the Last Five	Years (%)
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Year	G.R. of GSDP
2002-03	3.4
2003-04	8.6
2004-05	6.9
2005-06	8.4
2006-07*	7.2
Annual Average of 2002-06	6.9
Annual Average of 2002-07	7.8

\*2006-07 growth is an estimate.

Source: Planning Department, GOAP

However, there seems to be 'turn around' in the GSDP of A.P. in the last five years. The average annual growth rate was 6.9% during 2002-07 and 7.8% during 2003-07. Growth rates for agriculture, industry and services respectively were 2.6%, 7 to 8% and, 8 to 9% per annum in the last four years.

One of the paradoxes of the Indian development experience relates slow structural transformation in the economy. Although the share of agriculture in GSDP has been falling, the decline in the share of employment has been slow. However, structural transformation has happened in four states viz., Kerala, Tamil Nadu, West Bengal and Punjab - the share of agriculture in employment being less than 50% in these states (Table 3). On the other hand, this share in A.P. is still high at 58.5% with a rank of 8 among the states. The shares in employment and GSDP are slightly higher than that of all India. It may take some more years for A.P. to achieve structural transformation.

States	Share of Agriculture in Total (Rural+Urban) Employment (%)	Rank based on employment share	Share of Agriculture in GSDP(%)	Ranks based on share in GSDP
Kerala	35.5	1	16.5	3
Tamil Nadu	41.3	2	12.5	2
West Bengal	45.7	3	23.5	7
Punjab	47.6	4	38.6	16
Haryana	50.3	5	29.3	12
Maharashtra	53.2	6	9.6	1
Gujarat	54.9	7	20.1	5
Andhra Pradesh	58.5	8	24.7	8
Karnataka	60.7	9	19.2	4
Uttar Pradesh	60.9	10	33.3	15
Rajasthan	61.7	11	27.6	9
Orissa	62.4	12	28.2	10
Himachal Pradesh	64.1	13	20.5	6
Assam	66.0	14	32.0	13
Bihar	68.8	15	32.7	14
Madhya Pradesh	69.2	16	28.3	11
All India	56.7		21.7	

Table 3. Structural Transformation Across States:Share of Agriculture in Employment and GSDP: 2004-05

Source : 61st Round of NSS Employment and Unemployment Survey and CSO data for GSDP.

To conclude, the economy of A.P. seems to be on a relatively high growth path of 7 to 8% in recent years. The fiscal performance is also satisfactory. The success of IT sector is well known. Population growth also declined significantly in the state. However, inclusive growth is important to reduce poverty and various types of inequalities in the economy and society. Structural transformation in terms of workers shifting from agriculture to nonagriculture is also important for poverty alleviation. As shown below, there are many challenges for achieving inclusive growth even if the economy records high growth of 7 to 8% per annum in GDP. In other words, achieving inclusive growth is much more challenging than achieving 7 to 8% in GDP.

#### 2. AGRICULTURE

Andhra Pradesh was among the very few states in the country which heralded green revolution, especially in respect of rice, in the 1970s. Agriculture sector recorded a modest growth of around 2.5% to 2.7% per annum in the last two decades. In the last five years (2000-05), growth of GDP in agriculture was less than one per cent per annum. As shown in Table 4, growth of NSDP in agriculture increased from 2.3% during 1980-93 to 2.7% during the period 1993-2006. It may be noted that crop sector in the post-reform period recorded only 0.6% growth per annum while live stock sector showed a growth of 8.4% per annum. Therefore, major growth in agriculture sector in the post-reform period was due to growth in livestock sector.

Sector	1980-81 to 1992-93	1993-94 to 2005-06
Crop Livestock	NA NA	0.59 8.38*
Total	2.30*	2.70*

Table 4: Growth of Net SDP from Agriculture in A.P.

\*Significant 1 per cent level

Source: Subrahmanyam (2007) computed fro, Economic Survey, 2005-06

The growth rates of crop output for 19 major crops based on Divisia index (Table 5) also indicate the deceleration from 2.66% per annum during 1980-1992 to 0.37% per annum during 1991-92 to 2004-05.

Table 5: Growth Rates of Aggregate Crop Output (per cent per annum)

Period	Growth Rate (%)	t-value
1955-56 to 1966-67	3.25	4.77
1967-68 to 1979-80	3.87	5.40
1980-81 to 1991-92	2.66	2.34
1991-92 to 2004-05	0.37	0.37

Note: Based on semi-logarithmic trend equations for the total of major 19 crops output based on the Divisia index

Source: Subramanyam (2007)

The NSS data on situation of farmers for the year 2003 provides useful insights on the conditions of the farm households<sup>5</sup>. The net income from farm business was not sufficient even for an average farmer. It would be much more difficult for small and marginal farmers. One study using cost of cultivation data shows that the growth of farm business income per cultivator declined drastically in the 1990s compared to the 1980s (Sen and Bhatia, 2004).

Other important findings showed that farmers spent major part of their loan for productive purposes although the proportions varied across social groups. The level of awareness of farm households about various institutions was very low. Diesel and electricity are being increasingly used by farm households. The proportion of small and marginal farmers using diesel was higher than for other farmers. The farmers got main source of information on modern technology from other progressive farmers, input dealers, radio and TV.

In last decade or so, farmers' suicides have increased in Andhra Pradesh, because of agrarian crisis. Short term and long term factors are responsible for farmers' suicides and agrarian crisis. Short term measures are important as relief to farmers but taking care of factors like sustainable land and water management practices, infrastructure in rural areas, increase in credit from formal institutions, research and extension, strengthening marketing etc. is important for reducing crisis in agriculture<sup>6</sup>.

<sup>5</sup> See Bhalla (2006)

<sup>&</sup>lt;sup>6</sup> On crisis in agriculture, see Vyas (2004), Reddy (2006)

Most of the problems of the farmers relate to credit and debt. The 59th Round Survey of NSS provides information on outstanding debt of farmers. Table 6 provides percentage of indebtedness households and by source of loan. At the all India level around 49% of the farmer hhs. were indebted (col.2 in Table 6). The levels of indebtedness vary from state to state. Andhra Pradesh has the highest percentage of indebtedness (82%) while Meghalaya has the lowest percentage (only 4% are indebted). However, we are more interested in the source of loan because institutional credit is important for farmers.

The percentage of indebted farmer hhs. by source of loan (cols.3 and 4 in Table 6) shows 56% of indebted farmer hhs. obtain loan from formal sources and 64% from informal sources. The total percentage is more than 100 (120%) because farmers take loans from multiple sources. The shares in formal and informal sources vary from state to state. In Andhra Pradesh, 54% of the indebted farmer hhs obtain loans from formal and 77% from informal sources (total is 130%).

Table 6 also gives another distribution by formal and informal sources (Cols.5 and 6). This gives distribution of outstanding loan by sources. Table indicates that if a farmer's outstanding loan is Rs.100, around Rs.57.7 is from formal sources and Rs.42.4 is from informal sources. These percentages provide interesting information at state level. For example, the percentage of loan from formal sources in Chattisgarh, Jharkhand, Orissa and Uttar Pradesh is more than 60% and higher than that of all India. On the other hand, only 31% of loan is obtained from formal sources in Andhra Pradesh.

Another issue is the inclusion of credit for small and marginal farmers. Table 7 shows that the share of formal source increases with the size of land. At all India level, the share of formal source varies from 22.6% to 58% for small and marginal farmers while it varies from 65 to 68% for medium to large farmers. Dependence of small and marginal farmers on informal sources is high in Andhra Pradesh. Small and marginal farmers of Andhra Pradesh have to depend on 73% to 83% of their loans on informal sources. The NSS data also shows that across social groups, the indebtedness through formal sources is lower for STs as compared to others.

State	Percentage of indebted farming hhs in the total rural hhs.	Indebted fa	tage of armer hhs. e of loan*	Percentage distri- bution of out standing loan by sources		
	(all sources)	Formal	Informal	Formal	Informal	
1	2	3	4	5	6	
Andhra Pradesh	82	54	77	31.4	68.5	
Bihar	33	23	84	41.7	58.5	
Gujarat	52	63	49	69.5	30.5	
Haryana	53	76	50	67.6	32.5	
Karnataka	62	57	55	68.9	31.2	
Kerala	64	96	40	82.3	17.6	
Madhya Pradesh	51	64	66	56.9	43.0	
Maharashtra	55	92	30	83.8	16.2	
Orissa	48	68	46	74.8	25.1	
Punjab	65	58	70	47.9	52.1	
Rajasthan	52	38	81	34.2	65.8	
Tamil Nadu	75	59	67	53.4	46.5	
Uttar Pradesh	40	47	70	60.3	39.7	
Uttaranchal	7	65	44	76.1	23.9	
West Bengal	50	51	73	58.0	42.1	
All India	49	56	64	57.7	42.4	

Table 6. Percentage of indebted farming hhs all sources of loan, by source of loanand distribution of outstanding loan by source of loan: 2003

Note: Formal and Informal is more than 100% because farmers borrow from multiple sources.

Source: Calculated from NSS Report no.498 (NSSO, 2005)

Main problems of the farmers in the present context are: (a) spurious input supply viz., seeds, fertilizers and pesticides; (b) inadequate credit from institutional sources and dependence on money lenders for credit; (c) lack of water and drying up of ground water (d) farmers spend lot of money in sinking bore wells (e)lack of extension services particularly for commercial crops (f) lack of remunerative prices for many commodities (g)exploitation in marketing (h) lack of non-farm activities in rural areas (i) higher health expenditures of the farmers<sup>7</sup>.

<sup>&</sup>lt;sup>7</sup> For more details on the reasons for agrarian crisis in A.P. see report of the Farmers' Welfare Commission (headed Dr. Jayati Ghosh)

What are the challenges for raising higher growth in agriculture in A.P.? The supply and demand side constraints have to be removed to raise overall growth in agriculture. 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 and focus more on dry land areas.

The well known challenges in agriculture are: public and private investment in agriculture, land issues including land reforms, research and extension, irrigation and water management, credit, marketing, domestic and trade liberalization, diversification while maintaining food security and institutional reforms. All these issues have to be addressed for improving agricultural growth and incomes of the farmers.

		Size Class of Land owned						
	<0.01	0.0 l - 0.40	0.40 - 1.00	1.01 - 2.00	2.0 I - 4.00	4.01 - 10.00	10.00+	All sizes
State			Formal	Sources	3			
AP Bihar Maharashtra Orissa Punjab Tamil Nadu All India	16.9 36.5 58.3 64.7 24.8 19.1 22.6	19.3 20.8 83.2 62.4 29.2 37.4 43.3	25.1 47.0 80.2 77.1 65.6 46.0 52.8	26.6 66.1 78.8 72.1 49.1 61.5 57.6	41.5 63.4 83.8 88.4 61.2 65.2 65.1	48.6 19.6 88.7 96.9 47.5 74.3 68.8	49.5 70.1 91.1 13.2 30.1 82.9 67.6	31.4 39.2 83.8 74.8 47.9 53.4 57.7
			Informa	I Source	S			
AP Bihar Maharashtra Orissa Punjab Tamil Nadu All India	83.2 63.5 41.6 35.4 75.2 80.9 77.4	80.9 79.2 16.8 37.5 71.0 62.5 56.7	75.0 53.0 19.8 22.8 34.5 53.9 47.2	73.4 33.8 21.1 27.9 50.9 38.6 42.4	58.4 36.6 16.2 11.7 38.8 34.7 34.0	51.4 80.4 11.3 3.2 52.4 25.7 31.2	50.5 29.9 8.9 86.8 70.0 17.2 32.8	68.5 58.5 16.2 25.1 52.1 46.5 42.3

Table 7: Percentage Distribution of outstanding loans by formal and informal
source across size classes of land in selected states: 2003

Source: Calculated from NSS Report no.498 (NSSO,2005)

The Prime Minister of India Dr.Manmohan Singh mentioned four deficits regarding agriculture. These four deficits are: (a) public investment and credit deficit; (b) the infrastructure deficit; (c) the market economy deficit; (d) the knowledge deficit.

Irrigation development and water management is crucial. The green revolution in the 1960s and 1970s has been greatly facilitated by the availability of good irrigation infrastructure. However, the existing systems have deteriorated over time and addition to the capacity has been negligible due to the decline in public investment. According to the Planning Commission, nearly 35% of the ultimate potential from Major & Medium irrigation projects in the state is yet to be exploited. In the case of minor irrigation, about 40% of the ultimate potential remains unutilised.

In Telangana and Rayalaseema regions, well irrigation has become the dominant source replacing tanks. Tanks, which used to be traditionally managed by the village communities were being managed now by the irrigation department. With the neglect of maintenance and encroachment of tank beds by resourceful farmers, most of them became dysfunctional. In the absence of ground water replenishment, mainly through tanks, failure of wells has become common. Recent cotton farmer suicides in the state are attributed, among other factors, to well failure.

Major problems in irrigation sector in the state are: Inadequate allocation for Operation and Maintenance (O&M), inequitable distribution of water, lack of incentives for saving water and low recovery of water rates. The present government's emphasis on irrigation is in the right direction.

Institutional reform issues are important, particularly in inputs, marketing, land and water management. They are more important than price and trade policy reforms. On land issues, one priority is to provide credit to tenants and women farmers. Appropriate institutions have to be developed for delivery of inputs, credit and extension particularly for small and marginal farmers. There are different models of marketing: self help group<sup>8</sup>, co-operative model similar to dairy, small producer co-operatives and, contract farming. It is known that

<sup>&</sup>lt;sup>8</sup> Maize procurement by self help groups under Indira Kranti Padhakam is one example of successful marketing.

there is very little scope for further expansion of net sown area and land scarcity will become an acute feature of the rural economy. Water is a precious national asset and there are several concerns regarding water resources in the country. Therefore, a judicious use of land and water resources will have to be the central concern of agricultural growth policies.

### 3. POVERTY AND EMPLOYMENT

The official poverty ratios, based on the Lakdawala Committee methodology, show very low levels of rural poverty(11%) and high levels of urban poverty (26.6%) for A.P. as compared to all India (27% and 23.6% respectively) for 1999-2000. Thus the official estimates of poverty ratio for urban areas in A.P. are more than double those for rural areas in the 1990s. This is quite contrary to what one would expect on the basis of the rural-urban differences in per capita income and wages. However, alternative estimates by reputed scholars like Angus Deaton and Jean Dreze show that the poverty ratios in A.P. were closer to the all India pattern i.e., 26% for rural areas and 12% for urban areas (Deaton and Dreze, 2002). The very low level of official rural poverty ratios in A.P. were due to its base year poverty line in 1973-74 being the lowest among all the major states in India.. This in turn was due to low level of Consumer Price Index for Agricultural Labour (CPIAL) for A.P. The estimates by Deaton and Dreze, on the other hand, are based on the more realistic poverty line arrived at on the basis of the consumer prices computed from the National Sample Survey data.

Notwithstanding these differences regarding the levels of poverty, both the official estimates and those from Deaton and Dreze show a significant decline in the incidence of poverty in A.P. between the eighties and the nineties in line with the All India trends.

It may be, however, noted that 1999-00 is not comparable with earlier and later rounds of NSS. NSS has recently released 61st Round data on consumer expenditure for the year 2004-05. Fortunately, this Round provides results for uniform reference period which can be compared with that of 1993-94. This enables us to compute comparable poverty estimates for the year 2004-05. The 61st Round also gives mixed reference period (MRP) results for the year 2004-05 which are approximately comparable with 1999-00 data. Table 8 shows that rural poverty declined significantly from about 27% in 1983

to 11% in 2004-05. On the other hand, urban poverty declined from 37% to 25% during the same period. It may be noted that rural poverty was much lower while urban poverty was closer in A.P. as compared to all India.

	ŀ	Andhra Prades	sh	All India			
	Rural Urban Total		Total	Rural	Urban	Total	
1983 1993-94 2004-05	27.31 16.64 10.85	37.49 37.63 25.41	29.75 22.30 14.80	45.76 37.26 29.18	42.27 32.56 26.02	44.93 36.02 28.27	

Source: Dev and Ravi (2007)

The comparable estimates based on mixed reference period shows that rural and urban poverty ratios were much lower (7% and 19% respectively)than uniform reference period in 2004-05 (Table 9)

Table 9. Poverty Ratios Based on Official Methodology (Mixed Reference Period)

	A	ndhra Pradesł	ו	All India			
	Rural	Urban	Total	Rural	Urban	Total	
1993-94	12.42	34.00	18.24	31.60	28.51	30.79	
1999-00	11.28	27.91	15.78	27.50	24.33	26.62	
2004-05	6.9	19.10	10.17	21.90	20.68	21.52	

Source: Dev and Ravi (2007)

The alternative estimates based on Deaton's method shows that rural poverty was 20.8% while urban poverty was 8% in A.P (Table 10). These numbers are closer to those of all India. In both official and alternative estimates, the rate of reduction was faster in the second period (1999-2005) as compared to our first period (1993-94 to 1999-00).

Using NSS consumption data, the Sachar Committee Report (GOI, 2006) provides poverty ratios for Socio-religious categories. The Committee's estimates of poverty for total population in rural and urban areas are different from our estimates as the former uses different poverty lines. Their estimates for A.P. are given in Table 11. One can see the differential levels of poverty across socio-religious categories. The SCs/STs together are the most poor

Year	Andhra	Pradesh	All India		
	Rural	Urban	Rural	Urban	
1987-88 1993-94	35.0 29.2	23.4 17.8	39.0 33.0	22.5 17.8	
1999-00	26.2	10.8	26.3	12.0	
2004-05	20.9	8.4	23.1	10.2	

Table 10. Poverty Ratios: Alternative Estimates

Source: Deaton and Dreze (2002) for the period 1987-88 to 1999-00. Poverty ratios for 2004-05 are estimated by the author. Poverty lines for the year 2004-05 are estimated by updating the poverty lines of Deaton and Dreze for the year 1999-00. CPIAL and CPIIW for the year 2004-05 are used for updating the poverty lines of 1999-00.

in rural areas with a poverty ratio of 16% and 41% poverty in urban areas. This was followed by Muslims at 7% in rural and 35% in urban areas. The poverty of OBCs was closer to all population average rural areas. It is interesting to note that the incidence of poverty for Muslims was much higher than Hindus in urban areas.

Table 11. Poverty Incidence by Socio-Religious Categories in A.P.: 2004-05

	All		Hin	Muslims	Other Minorities
		All	SCs/STs		
Rural Urban	8 26	8 25	16 41	7 35	4 16

Source: Prime Minister's High Level Committee (Headed by Rajindar Sachar) on Social, Economic and Educational Status of the Muslim Community of India, GOI (2006)

Inequality in consumption represented by gini coefficient seems to have increased significantly for both rural and urban areas in the post-reform period - the rate of increase being much higher for urban as compared to rural areas (Table 12). This is true for both A.P. and all India.

The adverse impact of increase in inequality is reflected in the decomposition exercise undertaken for the post-reform period. We examine here sources of growth in poverty by decomposing poverty changes due to growth and distribution<sup>9</sup>. As shown in Table 13, growth was an important factor for

<sup>&</sup>lt;sup>9</sup> See Dev and Ravi (2007) for methodology

reduction in poverty in the post-reform period. However, adverse distribution (increase in gini coefficient) seems to have halted the reduction in poverty. If distribution had remained the same, poverty would have been reduced by additional 1 percentage points in rural areas and additional 5.46 percentage points in urban areas in A.P. in the post-reform period.

Table 12. Gini Ratio of Consumption Expenditure: Rural and Urban, A.P. and All India

Year	Andhra	Pradesh	All India		
	Rural	Urban	Rural	Urban	
198329.66	33.25	30.79	34.06		
1993-94	28.93	32.31	28.55	34.31	
2004-05	29.40	37.43	30.45	37.51	

Source: Dev and Ravi (2007)

States	Head Coun States		io % change in (1993-94/2004-05)		Decomposition of Change in Poverty		
	1993-94	2004-05	MPCE	Gini	Total	Growth	Inequality
1	2	3	4	5	6	7	8
			RURAL				
Andhra Pradesh All India37.26	16.64 29.18	10.85 13.57	12.72 6.65	1.62 -8.08	-5.78 -10.88	-6.77 2.80	0.98
			URBAN				
Andhra Pradesh All India32.56	37.63 24.48	25.41 23.55	31.12 9.33	15.85 -8.08	-12.22 -12.40	-17.68 4.32	5.46

Table 13: Decomposition of Head Count Ratio : Rural and Urban areas

Source: Dev and Ravi (2007)

Inflation is one of the important factors that adversely affect the poor. The average annual inflation rates presented in Table 14 show that inflation in rural areas was around 8.0% during 1983-94 period and 8.3% during 1993-00 period. But, it drastically declined to 2.2% in the period 2000-05. Similar trends can be seen for urban areas.

The faster decline in poverty during 1999-2005 in A.P. as well all India could be due to low inflation and low relative food prices.

		Rural (CPIAL)		Urban (CPIIW)			
	1983/94	1994/2000	2000/2005	1983/94	1994/2000	2000/2005	
A.P.	8.00	8.29	2.21	9.58	8.64	2.94	
All India	8.26	8.05	1.90	8.67	8.31	2.87	

 Table 14. Average Annual Inflation rates

Source: Monthly Abstract of Statistics, CSO, September 2005

The literature on determinants of poverty show that factors like agricultural growth represented by per capita agriculture GDP, land and labour productivities, land distribution, non-agricultural GDP growth, relative food prices, inflation rate, food stocks, fiscal deficit, development expenditure, rural non-farm employment, infrastructure, human development, gender equity, decentralization etc. explained the temporal and spatial variations in rural and urban poverty<sup>10</sup>. Almost all urban population and more than 50% of rural population are net purchasers of food. The policy of increase in terms of trade may not help increase in agricultural growth. Increase in agriculture price would increase wages with a lag only. There is a need to protect the poor from increase in relative price of food during reform period.

Some policies in the post-reform period had adverse impact on poverty reduction. Several policies such as measures to improve agricultural growth, macro pro-poor policies, development of industrial sector and rural non-farm sector, planned urban growth, rise in the effectiveness of anti-poverty programmes, reduction in personal, social and regional disparities, acceleration in human development and physical infrastructure, gender development, decentralization and improvement in governance are needed for reduction in both rural and urban poverty and decline in inequality. Inclusive growth also should frame appropriate policies to improve the conditions of socially disadvantaged sections like Scheduled Castes and Scheduled Tribes.

<sup>&</sup>lt;sup>10</sup> See Tendulkar et al (1996), Sen (1996), Ravallion (1998). Also see Radhakrishna and Ray (2005) for policies needed for poverty alleviation.

#### **Employment : Trends and Challenges**

Expanding productive employment is central for sustained poverty reduction as labour is the main asset for majority of the poor. Over time it has also been recognized that high growth does not necessarily create employment. Labour absorption depends more on the pattern of growth (i.e.labour intensive or capital intensive).

Basically, there are four issues in Employment. First one is the rate of growth in employment. Second one is the quality of employment in terms of real wages Third, related to second one is the diversification in terms of structure of employment. Fourth one is the needed policies for improving quantity and quality of employment. Labour market reform is also an important issue in the policies.

The long term total (rural+urban) employment growth of A.P. was around 1.8% per annum during 1983 to 2004-05 (Table 15). This long term period has two periods viz., pre reform (1983-1994) and post-reform period (1993-2005). The growth of employment in A.P. declined from 2.72% in pre-reform to 0.95% in post-reform period. It declined both in rural and urban areas. In the post-reform period, growth in employment in urban areas was almost twice to that of rural areas. Within the post-reform period, the two sub-periods showed fluctuation in employment growth.

S. No	Growth Period	Rural	Urban	Rural and Urban
1	1983 to 2004-05	1.53	2.88	1.79
2	1983 to 1993-94	2.44	4.01	2.72
3	1993-94 to 2004-05	0.72	1.87	0.95
4	1993-94 to 1999-2000	0.29	0.27	0.29
5	1999-2000 to 2004-05	1.24	3.82	1.76

Table 15: Growth of Employment (Usually Status -Principal and Subsidiary Status) in A.P.

Note: the NSSO ratios are applied to Interpolated and Projected Census Population; CAGR

Source: Computed based various rounds of NSSO Employment and Unemployment Survey data

It is a concern that Andhra Pradesh recorded the lowest growth in employment (0.95%) among all the states in the country in the post-reform

period (1993-05) (Table 16). The employment growth in all India was almost twice to that of A.P. during 1993-05. Six states recorded employment growth of more than 2% per annum. The growth rates for two sub-periods in A.P. in comparison with other states are also given in Table 16.

Sno	States		Rural			Urban		Rura	I and Urt	ban
		1993- 00	1999- 05	1993- 05	1993- 00	1999- 05	1993- 05	1993- 00	1999- 05	1993- 05
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	0.29	1.24	0.72	0.27	3.82	1.87	0.29	1.76	0.95
2	Assam	1.30	3.65	2.36	3.55	3.32	3.45	1.56	3.61	2.48
3	Bihar & Jharkand	1.87	2.06	1.96	-0.56	3.79	1.39	1.59	2.26	1.89
4	Gujarat	2.02	1.85	1.94	7.17	4.40	5.90	3.34	2.61	3.01
5	Haryana	0.76	5.68	2.97	1.94	5.33	3.47	1.06	5.59	3.09
6	Himachal Pradesh	-0.12	2.26	0.96	1.59	9.94	5.30	-0.01	2.82	1.27
7	Karnataka	0.13	3.06	1.45	3.31	3.39	3.35	0.94	3.15	1.94
8 9	Kerala MP &	1.27	1.62	1.43	1.20	0.62	0.93	1.25	1.37	1.31
	Chattisgarh	0.68	2.15	1.35	2.87	4.57	3.64	1.06	2.62	1.76
10	Maharashtra	0.39	2.54	1.36	2.05	4.78	3.28	0.93	3.32	2.01
11	Orissa	0.59	2.37	1.39	-0.20	3.44	1.44	0.49	2.49	1.40
12	Punjab	1.96	2.22	2.08	5.13	3.54	4.40	2.85	2.62	2.74
13	Rajasthan	0.50	2.64	1.46	1.11	3.94	2.38	0.61	2.88	1.63
14	Tamil Nadu	-1.36	-0.35	-0.90	6.84	4.58	5.81	1.12	1.56	1.32
15	UP & Uttaranchal	0.61	3.64	1.98	0.65	4.40	2.34	0.62	3.79	2.05
16	West Bengal	0.37	2.96	1.54	0.53	3.43	1.84	0.42	3.10	1.63
	India	0.71	2.45	1.50	2.36	4.14	3.16	1.09	2.86	1.89

Table 16: State-wise Growth of Employment in India

Note: 1. Principal and Subsidiary Workers; 2. Workers estimations are as on 1st January of 2005, 2000, 1994, 1988,1978 and 1st July 1983; 2. Compound Annual Growth Rate (CAGR); 3. For the year 2004-05 we have merged the three newly formed states viz., Jharkand, Chattisgarh and Uttaranchal into their former states ie. Bihar, MP and UP respectively.Source: NSSO Report No. 516

Table 17 provides growth of employment for different sectors in both rural and urban areas. The table clearly shows that was no growth in employment in agriculture in the post-reform period. On the other hand, non-agriculture grew more than 3% during the same period. Manufacturing sector recorded a growth of around 2.5%. Sectors like construction, financial and transport and communication registered a high growth of more than 5% per annum.

			incipal Sta	tus	Principal	Principal and Subsidiary Status		
	Activity		2000-05	1993-2005	1993-00	2000-05	1993-2005	
Rural	Agriculture Non-Agriculture Mining and Quarrying Manufacturing Electricity Construction Trade Transport, Communication Financial Community Services AII	1993-00 0.57 1.08 2.68 -2.76 0.68 4.88 1.05 9.99 0.68 1.82 <b>0.68</b>	-0.61 6.92 7.20 9.75 1.20 9.43 8.78 11.01 16.25 -0.87 <b>1.20</b>	5.03 3.69 4.71 2.74 0.92 6.92 4.49 10.45 7.48 0.59 <b>0.92</b>	0.19 0.69 2.55 -3.14 0.29 4.70 0.66 9.57 0.29 1.45 <b>0.29</b>	-0.63 7.18 9.79 10.31 1.24 9.79 8.82 10.22 16.29 -0.87 <b>1.24</b>	-0.18 3.59 5.78 2.76 0.72 6.98 4.29 9.86 7.27 0.39 <b>0.72</b>	
Urban	Agriculture Non-Agriculture Mining and Quarrying Manufacturing Electricity Construction Trade Transport, Communication Financial Community Services AII	-7.23 <b>1.69</b> -13.65 0.95 -11.79 6.89 4.55 1.14 7.01 -1.96 <b>0.60</b>	5.1 <b>3.9</b> 17.9 3.9 -13.4 -1.3 3.8 7.9 7.3 3.5 <b>4.0</b>	-1.81 <b>2.68</b> -0.50 2.28 -12.53 3.10 4.23 4.14 7.12 0.47 <b>2.13</b>	-8.45 <b>1.60</b> -11.47 0.62 -12.08 6.74 4.59 1.21 7.28 -2.19 <b>0.27</b>	4.9 <b>3.70</b> 13.4 3.9 -13.6 -1.4 3.2 8.0 6.6 3.8 <b>3.82</b>	-2.61 2.55 -0.92 2.11 -12.76 2.98 3.93 4.23 6.98 0.50 1.87	
and	Agriculture Non-Agriculture Mining and Quarrying Manufacturing Electricity Construction Trade Transport, Communication Financial Community Services <i>AII</i>	0.29 <b>1.38</b> -2.01 -1.20 -7.50 5.96 2.94 4.29 5.77 0.04 <b>0.66</b>	-0.44 <b>5.43</b> 9.43 7.25 -5.68 4.05 6.07 9.25 8.95 1.13 <b>1.77</b>	-0.04 <b>3.20</b> 3.03 2.56 -6.68 5.09 4.35 6.51 7.20 0.53 <b>1.17</b>	-0.15 <b>1.15</b> -1.86 -1.55 -7.80 5.80 2.77 4.29 5.87 -0.25 <b>0.29</b>	-0.45 <b>5.48</b> 10.60 7.59 -5.69 4.17 5.73 8.98 8.48 1.28 <b>1.76</b>	-0.29 <b>3.09</b> 3.62 2.50 -6.85 5.06 4.11 6.39 7.05 0.44 <b>0.95</b>	

Table 17: Growth of Employment by Activity in Andhra Pradesh

**Note:** the NSSO ratios are applied to Interpolated and Projected Census Population CAGR **Source**: Computed based various rounds of NSSO Employment and Unemployment Survey data.

Rural diversification is important for reduction in poverty. There has been some improvement in the share of rural non-agricultural employment in Andhra Pradesh particularly during 1999-00 to 2004-05 (Table 18). The share increased from 21% to 28% in rural areas during this period. It indicates, however, that still 72% of workers in rural areas depend on agriculture for rural livelihood. The share of non-agricultural sector in overall employment also increased from 34.6% in 1999-00 to 42% in 2004-05.

		Rural			All		
		1993-94	1999-00	2004-05	1993-94	1999-00	2004-05
1	Andhra Pradesh	20.70	21.2	28.2	32.9	34.6	41.5
2	Assam	20.80	32.3	25.7	29.0	39.8	34.0
3	Bihar	15.70	19.4	24.3	24.9	26.9	31.2
4	Gujarat	21.30	20.2	22.7	37.7	40.5	45.1
5	Haryana	28.10	31.5	35.9	43.4	47.2	49.7
6	Himachal Pradesh	19.70	26.4	30.4	23.4	30.4	35.9
7	Karnataka	18.80	17.9	19.0	34.3	37.5	39.3
8	Kerala	43.60	51.7	58.0	51.5	61.5	64.5
9	Madhya Pradesh	10.20	12.9	16.4	22.3	26.1	30.8
10	Maharashtra	17.40	17.4	20.0	40.8	43.7	46.8
11	Orissa	19.10	21.8	31.0	26.9	29.3	37.6
12	Punjab	25.30	27.4	33.1	42.6	46.7	52.4
13	Rajasthan	20.10	22.3	27.1	31.3	34.0	38.3
14	Tamil Nadu	29.50	32.1	34.6	44.8	53.6	58.7
15	Uttar Pradesh	20.00	23.8	26.9	32.2	36.5	39.1
16	West Bengal	36.70	36.4	37.3	52.8	53.3	54.3
	All India	21.60	23.7	27.3	36.0	39.6	43.3

Table 18: Percentage of Workforce in Non-Agricultural Activities in India

Note: 1. Principal and Subsidiary Workers Source: NSSO

However, one worrying factor is that unemployment growth increased and growth of real wages declined during 1999-2005 period as compared to the period 1993-2000. Five states viz., Assam, Bihar, Kerala, Madhya Pradesh and Punjab recorded much higher real wages than A.P.

	G.r. of Une	mployment	G.r. of real wages for male casual workers			
	1993-2000	1999-2005	1993-2000	1999-2005		
Andhra Pradesh	4.9	8.2	4.3	1.5		
Assam	0.4	0.8	2.4	3.5		
Bihar	4.6	1.5	5.1	3.4		
Gujarat	-0.8	-1.4	3.4	1.1		
Haryana	-5.2	12.2	2.8	0.8		
Karnataka	-0.3	13.3	3.8	0.8		
Kerala	9.6	6.2	5.5	3.6		
Madhya Pradesh	7.5	13.7	0.9	3.4		
Maharashtra	8.0	10.9	3.1	-0.5		
Orissa	1.1	10.9	1.7	5.9		
Punjab	7.6	25.7	0.2	0.0		
Rajasthan	17.8	12.8	3.4	0.6		
Tamil Nadu	0.6	2.3	6.5	0.0		
Uttar Pradesh	3.2	4.3	2.9	1.5		
West Bengal	13.0	-6.5	2.8	0.2		

#### Table 19 Growth Rate of Unemployment and Real Wages

Source: Himanshu (2007)

There are concerns about quantity and quality of employment in Andhra Pradesh. An analysis on macro policies has shown that on balance the mix of policies have not been pro-employment in the post-reform period (Dev, 2006). The policies such as fiscal, monetary, trade, financial liberalization should have been more employment friendly and pro-poor.

Insufficient public investment in infrastructure is one of the biggest failures in the post-reform period.

It is difficult to remove poverty with 60% of workers in agriculture. Need for development of rural non-farm sector is obvious. Agricultural growth of around 4 per cent and manufacturing growth more than 10 per cent are necessary for this purpose.

Another challenge is to provide livelihood and security to the vast low productive and low wage informal/unorganized sector. For improving their productivity and reduce risk and vulnerability, cluster approach, training and skill improvement, credit and technology and social security are needed. The problem of 'working poor' is the major problem in A.P..

#### **Direct Employment Programmes**

In A.P., self employment and wage employment programmes are the most important direct employment schemes. Despite their problems and inefficiency in terms of targeting and cost-effectiveness, these programs have contributed significantly to limit the severity of poverty and to counter an increase in poverty.

The self help group movement in general, has been spreading all over the country. For example, we now have 22 lakh SHGs under NABARD's SHG-bank linkage programme and more than 3 crores are accessing credit. A.P. accounts for bulk of the self help groups in the country.

There are two important models in the country on poverty alleviation. One is Kerala Model and the other is Andhra Pradesh model. *Kudumbashree* programme in Kerala has made significant progress in reducing absolute poverty among its members. This programme's interventions and processes have resulted in a sustained process of empowerment of its women members (GOI, 2006).

Similarly, 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 'Velugu' or Indira Kranthi Pathakam(IKP). This project aims at enhancing assets, capabilities and the ability of the poor to deal with shocks and risks. The programme has contributed to the improvement in the women's empowerment at the household and community level.

The National Rural Employment Guarantee Scheme (NREGS) is an important scheme in wage employment programmes. Initial reports on the working of NREGS have been positive although there are problems at the ground level. In Andhra Pradesh, there is some evidence of containing migration in Mahbubnagar district. NREG is relatively better implemented in A.P. because of tracking the progress with IT, social audit, post-office involvement etc. If there is political will, it is possible to implement NREGS effectively with a new approach. The delivery systems in all the direct programmes can be improved with the new approach of participatory development, social mobilization, right to information, involvement of civil society and panchayati raj institutions.

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<sup>11</sup>. India has to provide social security to its vast number of workers in the unorganized sector before going for labour flexibility<sup>12</sup>.

### 4. SOCIAL SECTOR

There have been improvements in education and health in A.P. However, the state is backward in human development with a rank of 10 for Human Development Index.

There are basically five problems in social sector in A.P<sup>13</sup>.

First, the levels of social sector indicators in A.P. are much lower and progress has been slow than many other states particularly Southern states. The 61<sup>st</sup> Round NSS Survey provides literacy rates at state level for the year 2004-05. It shows that Andhra Pradesh literacy levels are very low as compared to other states in India. Among 20 states, A.P. has the lowest literacy level for rural males (Table 20). The ranks of A.P. for rural females, urban males and urban females were respectively 16<sup>th</sup>, 17<sup>th</sup> and 17<sup>th</sup> ranks among 20 states. On the other hand, the rank of Tamil Nadu for rural females and urban females were respectively 5<sup>th</sup> and 6<sup>th</sup> ranks.

The general education level of population in A.P. indicates that 74% of rural males and 86% of rural females were either illiterate or literate or educated upto primary level only (Table 21). Only 7% of rural females were educated upto secondary and above.

<sup>&</sup>lt;sup>11</sup> See Deshpande et al (2004).

<sup>&</sup>lt;sup>12</sup> On social security for unorganized workers, see Kannan et al (2006)

<sup>&</sup>lt;sup>13</sup> For a discussion on the problems at all India level see Dev (2006)

	Rural Males	Rural Females	Urban Males	Urban Females
Andhra Pradesh	55.8	39.1	76.7	62.5
Assam	75.1	63.5	85.6	78.8
Bihar	53.7	32.6	75.6	60.2
Chattisgarh	64.7	43.4	82.4	68.7
Gujarat	69.3	46.9	84.7	73.6
Haryana	68.1	47.3	79.6	66.9
Himachal Pradesh	79.1	64.1	81.0	78.9
J&K	67.1	46.4	80.0	65.0
Jharkhand	59.8	34.2	83.6	68.7
Karnataka	62.2	46.7	82.0	69.4
Kerala	85.0	80.6	87.4	83.9
Madhya Pradesh	59.1	36.0	78.8	65.1
Maharashtra	71.8	55.1	84.3	69.8
Orissa	62.5	45.0	77.3	66.4
Punjab	67.5	58.8	80.6	73.1
Rajasthan	58.8	31.3	72.2	54.9
Tamil Nadu	72.4	54.5	85.6	75.6
Uttaranchal	70.8	50.3	82.2	69.8
Uttar Pradesh	58.0	36.0	71.0	59.4
West Bengal	67.9	53.9	84.5	76.1
All India	63.6	45.0	80.5	69.3

Table 20. Literacy Levels at State Level: 2004-05

Source: 61st Round Employment and Unemployment Survey, 2004-05

		Andhra	Pradesh			All I	ndia	
	RM	RF	UM	UF	RM	RF	UM	UF
Not Literate Literate & upto primary Middle Secondary& above	44.2 30.0 12.5 13.3	60.9 25.0 7.4 6.6	23.3 28.9 13.5 34.3	37.5 28.6 12.1 21.8	36.4 36.1 14.0 13.4	55.0 29.3 8.9 6.7	19.5 30.0 16.0 34.5	30.7 29.4 14.4 25.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: 61st Round NSS Survey, Report no.515

Regarding health indicators, infant mortality declined from 70 per 1000 in 1992-93 to 53 per 1000 in 2005-06. Inspite of decline, the rank of A.P. in infant mortality is only 11 among 17 states in the year 2005-06. The level of infant mortality in A.P. (53) is much higher than Kerala (15), Tamil Nadu (31) and Karnataka (43). In fact, the progress in Karnataka is much faster than A.P.

	NFHS I (1992-93)	NFHS II (1998-99)	NFHS III (2005-06)	Rank based on 2005-06 (NFHS III)
Andhra Pradesh	70	66	53	11
Assam	89	70	66	14
Chattisgarh		81	71	16
Gujarat	69	63	50	10
Haryana	73	57	42	6
Himachal Pradesh	56	34	36	3
J&K		65	45	8
Karnataka	65	52	43	7
Kerala	24	16	15	1
Madhya Pradesh		88	70	15
Maharashtra	51	44	38	4
Orissa	112	81	65	13
Punjab	54	57	42	5
Rajasthan	73	80	65	12
Tamil Nadu	68	48	31	2
Uttar Pradesh		89	73	17
West Bengal	75	49	48	9
All India	77	67	55	

Table 22. Table Infant Mortality at State Level 2005-06

Source: Compiled by the Author from Fact Sheets of NFHS-3 at State Level, Ministry of Health and Family Welfare, Government of India

In the case of malnutrition among children, the percentage of underweight children declined from 45% in 1992-93 to 37% in 2005-06. Similarly there was some decline in stunting also. But the progress has been slow. The rank of A.P. in malnutrition among children is 6th out of 17 states. Regarding malnutrition, the levels of A.P. are lower than Karnataka but higher than Tamil Nadu and Kerala.

Second, there are significant regional, social, rural-urban and gender disparities in social sector indicators. For example, female literacy rate varies from 32.8% in Mahboobnagar district to 70% in West Godavari district. Infant mortality is very high in Vijayanagaram as compared to low levels in Krishna and Guntur. Similar disparities can be seen among social groups. Progress in human development among women is lower than men.

Third one is low public expenditures in health and education. Allocation of funds to social sector expenditure is lower in the post-reform period as compared to pre-reform period. The Approach paper argues for more resources in health and education and improvement in efficiency of

institutions. Finance Ministry argues that 'you do not repair a leaking water supply pipe by simultaneously stepping up the water pressure'. It says that enhanced public financing must be preceded by reform of the delivery mechanism. It looks like the Finance Ministry is against increasing expenditures on social sector. They should understand that inspite of leakages, something is going to the poor. In the name of leakages, one should not stop enhancement of funds to social sector.

	Underwei	ght (weight	for age)	Stunting (Height for Age)		
	1992-93	1998-99	2005-06	1992-93	1998-99	2005-06
Andhra Pradesh	45	38	37		39	34
Assam	49	36	40	50	50	35
Chattisgarh		61	52		58	45
Gujarat	48	45	47	44	44	42
Haryana	35	35	42	43	50	36
Himachal Pradesh	44	44	36		41	27
J&K		35	29		39	28
Karnataka	51	44	41	40	37	38
Kerala	27	27	29	25	21	21
Madhya Pradesh		54	60		49	40
Maharashtra	51	50	40	41	40	38
Orissa	52	54	44	45	44	38
Punjab	46	29	27	38	39	28
Rajasthan	44	51	44	42	52	34
Tamil Nadu	46	37	33		29	25
Uttar Pradesh		52	47		56	46
West Bengal	55	49	44		42	33
All India	51	47	43		46	37

Table 23. Percentage of Children under age 3 suffering from Malnutrition:Underweight and Stunting , 1992-93 to 2005-06

Source: Compiled by the Author from Fact Sheets of NFHS-3 at State Level, Ministry of Health and Family Welfare, Government of India

The social sector expenditure as per cent of GDP in A.P was between 6 to 7% the last four years (2002-06) (Table 24). Similarly, social sector expenditure as per cent of total expenditure was between 30 to 35% in A.P. during the same period (Table 25). In both these cases, A.P. is the median states in India.

Range (per cent)	2002-05 (Average)	2005-06 (RE)
Below 5	Haryana, Punjab, Delhi, West Bengal	Punjab
5-6	Maharashtra, Gujarat	Gujarat, Haryana, West Bengal, Delhi
6-7	Karnataka, Tamil Nadu, U.P., A.P.	Maharashtra
7-8	Goa, Kerala, M.P.	A.P., Karnataka, Tamil Nadu,
Above 8	Bihar, Jharkhand, Orissa, Rajasthan, Chattisgarh	Goa, Kerala, M.P Bihar, Jharkhand, Orissa, Rajasthan, Chattisgarh

Note1: Social Sector expenditure includes :(a) education, sports, arts and culture; (b) medical and public health; (c) Family Welfare; (d) water supply and sanitation; (e) housing; (f) urban development; (g) welfare of SCs, STs and OBCs; (h) labour and labour welfare; (i) social security and welfare; (j) nutrition; (k) relief on account of natural calamities; (l) others.

Note2: Bold indicates the median state

Source: RBI (2006)

Table 25 Social Sector Expenditure as per cent of Total expenditur	Table 25 Soc	ial Sector	Expenditure as	s per cent of	Total expenditure
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Range (per cent)	2002-05 (Average)	2005-06 (RE)
Below 30	Goa, Haryana, Punjab, U.P., West Bengal, Gujarat, Karnataka, Orissa	Punjab, West Bengal
30-35	A.P., M.P., Delhi, Tamil Nadu, Kerala, Bihar, Maharashtra	Andhra Pradesh, Goa, Gujarat, Haryana, Karnataka, M.P. Orissa, U.P.
35-40	Rajasthan, Chattisgarh	Bihar, Maharashtra, Tamil Nadu, Delhi
Above 40	Jharkhand	Chattisgarh, Jharkhand, Kerala, Rajasthan

Note: Bold indicates the median state Source: RBI (2006)

The expenditure on education and health has been lower in Andhra Pradesh as compared to that of all states average. For example, the expenditure on education hovered between 10 to 13% in A.P as compared to 12 to 17% for all states's average during 2000-07 (Table 26). Similarly, the expenditures are lower in A.P. than average of all states in the last two years.

Fourth, it is true that delivery systems are in bad shape in both education and health. Infrastructure and the quality of services are poor in both the sectors. The most difficult thing is to ensure good quality of instruction. A recent study facilitated by NGO Pratham has found 38% of the children who have completed four years of schooling at all India level can not read a small paragraph with short sentences meant to be read student of class II. About 55% of such children can not divide a three digit number by a one digit number (GOI, 2006). Similar problems can be seen in A.P. also. Also quality of secondary and higher education have to be improved<sup>14</sup>.

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Education							
A.P. All States	13.3 17.4	12.5 16.1	11.7 15.0	11.6 12.6	10.0 12.7	13.1 14.3	11.7 14.4
Health							
A.P. All States	4.7 4.7	4.4 4.4	4.0 4.1	3.7 3.5	3.2 3.5	3.5 4.2	3.4 4.4

Table 26 Expenditure on Education and Health as Ratio to Total Expenditure (%)

Source: RBI (2006)

Fifth, privatization in both education and health is causing problems for the poor. The NSS data shows that the role of private sector in health care has been increasing in A.P.. The 42nd (1986-87) and 52nd (1995-96) rounds of NSS provide estimates on the private and public sources of inpatient as well as outpatient treatment. At the all India level, 60 per cent of inpatient care was provided by the public sector in 1986-87. By 1995-96, the share of public sector was reduced to about 45 per cent. However, the private sector was very predominant in A.P. even during 1980s. It accounted for about 70 per cent inpatient care in rural areas and 62 per cent in urban areas. By mid-1990s, its share further increased to 77.5% in rural areas. In the case of outpatient care, the share of private sector was high in all the states including A.P. Similar developments can be found in education sector also. Some of the farmers' suicides were also due to higher private expenditures on health and education in A.P.

The above problems have to be tackled in order to improve human development in A.P.

<sup>&</sup>lt;sup>14</sup> On higher education in A.P. see Reddy, K.C.(2007)

#### **5. REGIONAL DISPARITIES**

One of the important elements of inclusive growth is reduction in regional disparities. The Directorate of Economics and Statistics provides domestic product for each district in the state. These are available for the recent period 1993-94 to 2003-04. Growth rates in district domestic product (DDP) and per capita DDP are provided in Table 27. It shows that 7 districts of Telangana (Ranga Reddy, Nizamabad, Khammam, Hyderabad, Mahbubnagar, Warangal and Medak) and 2 districts of North Coastal (Visakhapatnam and Srikakulam) recorded higher growth rates than that of state average. On the other hand, all the districts in South Coastal and Rayalaseema and three districts of Telangana and one district of North Coastal showed lower growth than that of state average.

	G.r. in District Domestic Product(%) 1993-2004	Rank based on g.r. in DDP 1993-2004	G.R. in per capita DDP (%) 1993-2004	Per capita DDP(in Rs.) 1993-94	Rank based on per capita DDP (in Rs. 1993-94	Per capita DDP (in Rs.) 2003-04
Hyderabad	8.4	1	6.4	906	8	1758
Visakhapatnam	7.9	2	6.3	962	3	2026
Ranga Reddy	7.4	3	4.0	1109	1	1667
Mahbubnagar	7.2	4	5.9	538	23	976
Warangal	6.6	5	5.2	611	21	1045
Medak	6.0	6	4.4	1068	2	1636
Khammam	6.0	7	4.5	909	7	1505
Nizamabad	6.0	8	4.6	707	19	1137
Srikakulam	6.0	9	5.1	550	22	969
Andhra						
Pradesh	5.7		4.3	840		1300
East Godavari	5.4	10	4.6	887	9	1422
West Godavari	5.4	11	4.6	883	10	1427
Prakasam	5.4	12	4.4	836	14	1220
Karim Nagar	5.3	13	3.9	816	16	1248
Adilabad	5.3	14	3.5	821	15	1094
Chittoor	5.0	15	3.6	872	11	1179
Krishna	4.9	16	3.7	944	5	1360
Nellore	4.8	17	3.7	947	4	1280
Nalgonda	4.6	18	3.3	714	18	1028
Cuddapah	4.4	19	3.0	838	13	1050
Kurnool	4.4	20	2.7	811	17	1057
Guntur	4.1	21	3.3	936	6	1317
Vijayanagaram	3.9	22	3.3	635	20	904
Anantapur	3.8	23	2.4	847	12	1047

Table 27. Growth Rates of District Domestic Product (DDP): 1993-94	4 to 2003-04
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Note: Per capita DDP is in 1993-94 prices

Source: Estimated from the data provided by Department of Economics and Statistics, GOAP

In terms of per capita income, the distance between the poorest 4 districts and the richest 4 districts has increased between 1993-94 and 2003-04. The ratio of 4 poorest districts (Srikakulam, Warangal, Mahbubnagar and Vijayanagaram)

Is there any relationship between the levels of per capita income in the base year and growth rates of DDP and per capita DDP? One can say that the high growth rates could be due to low base in some of the districts. However, if we see the per capita income, out of the 9 districts which recorded high growth rates than the state average, only four districts (Mahbubnagar, Nizamabad, Warangal and Srikakulam) have low base.

It may be noted that the quality of growth is important. Some of the Telangana districts may be showing higher growth rates but we are not sure about the quality of growth. We are also not sure whether it is inclusive growth in this region. Further research is needed to understand the impact of growth in Telangana and some other regions. Secondly, there are significant disparities in social development.

Despite some favourable trends in district domestic product, the regional disparities in the levels of development are still significant in the state<sup>15</sup>. For example, South Coastal Andhra, because it tops in respect of assured sources of irrigation, continues to occupy the top position in regard to agricultural output per hectare, followed by North Telangana and North Coastal Andhra. Rayalaseema and South Telangana are at the bottom because of insufficient irrigation coupled with low and erratic rainfall. Moreover, well irrigation is predominant in Telangana and Rayalaseema, entailing high cost of power for pumping water, besides exposing them to weather shocks and shortages of drinking water.

The literacy rates for Telangana (excluding Hyderabad) and North Coastal Andhra were well below that for South Coastal Andhra. Female literacy is the lowest in Telangana districts. The level of female literacy in All the districts in Telangana except in Ranga Reddy and Hyderabad is lower than

<sup>&</sup>lt;sup>15</sup> See Rao (2007) on successive government's failure to address the regional imbalances in the state.

the state average. The drop-out rates at primary education in 2000-01 for boys and girls were quite high in Telangana, especially for S.C.s and S.T.s. In respect of health care, private sector is concentrated mainly in the developed districts, so that the state policy aimed at encouraging privatisation has benefited the developed districts accentuating the regional inequalities in the availability of medical facilities. The Child mortality rates are quite high in North Coastal Andhra, Rayalaseema and South Telangana.

Now we turn to the progress of Millennium Development Goals in A.P. at a disaggregate level. There is little understanding of whether A.P. will be able to attain all of the MDGs. Centre for Economic and Social Studies (CESS) has recently undertaken a study on the achievement of MDGs in A.P and submitted to the government. This study tracks progress at the state level (both rural and urban) and disparities across regions, social and economic groups in rural areas. It considers 14 indicators covering poverty, education, health, gender equity, Based on this study, we examine here whether A.P. can achieve MDGs in few important indicators. It is important to examine if the progress towards MDGs is on track to identify the challenges involved. There are large Variations among the regions and social groups. Achievement of Goals is possible only if laggards are taken care of. The poverty ratio in rural areas varies from 47% in Rayalaseema to 18% in Coastal Andhra. Similarly, percentage of Underweight Children varies from 56% in Rayalaseema to 38% in Coastal Andhra. Regarding social groups, poverty ratio varies from 43% among STs to 13% among Other Castes. Underweight children constitute 46% among SCs and 34% among Others. Infant mortality varies from IMR varies from 93 for SCs to 64 for OCs.

Given these variations, which regions, which social groups and which occupational groups can achieve the MDGs?

In the case of income poverty, all regions, social groups and occupation groups are on-track and meet the MDG at current progress rates. However, even in 2015, around 13.% in Rayalaseema and 5% in Telangana remain Poor. Together these regions will have 80 % of 4.5 million rural poor. By 2015, around 12% among ST, 7% among SC and 5% among the BCs will remain poor. In the case of malnutrition among children, the results show that this goal can not be achieved by any region/social group and occupation groups. Andhra Pradesh is one of the slow moving states towards this goal.

In the case of education, the MDG is to ensure that, by 2015, all children are in school, the net primary enrollment ratio is 100%, and all the students entering grade 1 are retained until grade 5. A.P. made considerable progress in enrolment. However, total rural A.P., Telangana and Rayalaseema, agricultural labourers, SCs, STs and OBCs will not achieve MDG on enrolment ratio. The goal of 100% completion rates is not likely to be met by all the groups in the state. Gaps in 2015 vary from as high as 53 percentage points for STs to 18 points of Self-Employed in Agriculture. Retaining enrolled children is a major challenge. Similarly, except in urban areas, the goal of gender equality in education will not be achieved by all the groups.

The rate of decline of infant mortality considerably slowed down in rural AP in the nineties-to less than one percent per annum from 2.2 in the eighties. The goal of reducing the IMR by two-thirds is not achievable at the present trend. The gap between required and projected for IMR by 2015 varies from 21 percentage points for STs, 24 for SCs to almost 18 for Agricultural Labor. In the case of maternal health, percentage of safe deliveries is taken as a proxy. The projections show that except in urban areas, the goal of 100% safe deliveries will not be achieved for all the groups in A.P.

Regarding safe drinking water and sanitation, the goal is to halve the proportion of people without access safe drinking water and basic education. There are problems with data on drinking water as they provide only by source but not quality. If we take Tap and Bore well (public/private)- more than three fourths will have access to safe drinking water. All regions/social and occupational groups will meet goal. The entire population without access to safe drinking water will be located in Rural AP. Nearly one-fourth of Rural Population remains without access to safe drinking water. In the case of sanitation, the goal is nearly met at AP average level. Gaps persist for different groups and regions. Nearly half of the 63 million rural population will continue to have no access to sanitation facilities. The progress is slowest among the ST households- will remain around 90% even in 2015.

In the study, we have considered 14 indicators. It is depressing to note that Andhra Pradesh will not meet MDGs in 10 out of 14 indicators. Thus, except in poverty, enrolment of boys and girls and drinking water, A.P. may not achieve millennium development goals in crucial indicators of education,
health and sanitation at current rates of progress. Similarly, out of 14 indicators, 11 for Telangana, 9 for coastal Andhra, 12 for STs, 11 for SCs, 12 for agricultural labourers will not meet MDGs by 2015. There are significant rural and urban disparities. In the case of rural areas 11 out of 14 will not meet MDGs while in the case of urban areas only 4 indicators will not meet the goal. These results on MDGs thus show that there is a cause for concern for A.P.

The above analysis clearly brings out significant regional disparities in economic and social development in the state. The development experience of A.P. clearly brings out that stepping up public investment in physical and social infrastructure has an immense potential for reducing regional disparities in the levels of development. The gap between the ultimate irrigation potential from major and medium irrigation projects, which can be undertaken only through public investment, and the potential actually created so far is quite high for the drought prone regions of Rayalaseema and Telangana.Public investments for undertaking the remaining projects and for the speedy completion of the on-going ones together with rehabilitation of existing tanks by involving Water Users' Associations and watershed development holds a great promise for further development and for mitigating the severity of droughts in these regions. Public expenditure on health and education needs to be stepped up substantially focusing on the less developed areas.

## 6. HOW TO IMPROVE INCLUSIVE GROWTH?

One of the criticisms of economic reforms and globalization is that they do not have 'human face'. Although economic growth increased in A.P., inclusive growth has to be improved. We suggest following measures for enhancing inclusive growth in A.P.

First, inclusive growth is important for raising growth and development. If we reduce rural-urban and regional disparities, growth will increase. If we define equity in terms of empowerment and increase in the participation of the poor, there is no trade-off between inclusive growth and economic growth.

Second, agriculture development should be given priority for more inclusive growth. Agriculture has been an area of strength for A.P. but has not received adequate priority in the last two decades. Stepping up agricultural growth

is essential for raising the growth rate in GSDP and for reducing poverty. Apart from IT (information technology) Andhra Pradesh is in the news for farmers' suicides. Land issues, irrigation and water management, credit, research and extension, marketing etc. have to be improved in the next decade to reduce farmers' suicides and improve agricultural growth. Land and water management (including watershed development) are crucial for agriculture. The government is giving importance to irrigation but it has to take a holistic view of agriculture rather than only concentrating on irrigation. Short term and long term measures are required to come out of agrarian crisis and avoid farmers' suicides.

Third, investment in infrastructure is important for inclusive growth. For this, sequencing of reforms or phasing of public policy is important. The experience has shown that inspite of higher growth in several countries, several regions and sections of society have been excluded in the growth process. 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 (which includes both private and public investment) also slowed down in many countries. Thus, sequencing of reforms is important. Priority should, therefore, be given to the policies that improve quality and quantity of employment growth. Priority to public investment in physical (irrigation, roads, communications, transport, electricity etc.) and human infrastructure (health, education etc.) is considered one of the important factors responsible for inclusive growth. Also, priority to rapid growth in agriculture and rural non-farm sector are important for poverty reduction.

Fourth one which is related to second one is that structural change in economy should follow agriculture-industry-service sequence. For example, in GDP shares, like other states in India, A.P. jumped from agriculture to services without concentrating on manufacturing. Also in many South East Asian countries, there has been 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 Malaysia is 50%.

is more than 58%. 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 A.P., 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 inclusive growth..

Fifth, equality of opportunities is important<sup>16</sup>. Even if we do not follow equitable distribution of assets, every one should get equal opportunity for better education and health. While the A.P. government has implemented policies that unleashed the state'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. According to a study Andhra Pradesh may join the rank of BIMARU states in education if you go by the current progress<sup>17</sup>. A sustained emphasis on education and health and improvement in delivery of public services are needed in the next decade in many states for inclusive growth.

Sixth, in order to improve to improve MDGs for Andhra Pradesh and reduce regional disparities, there is a need to concentrate on the following five areas.

(a) Economic growth particularly pro-poor growth in terms of concentrating on agriculture and employment are important in order to reduce poverty. However, economic growth alone will not be sufficient to lift some people above poverty. Despite achieving the MDG on poverty, a large number of SC, STs will remain poor even if the growth rate is hiked. Women and children constitute significant proportions of poor. The paradigm shift in poverty eradication through women empowerment can provide a solution to this problem of poverty. There is a need to link between livelihoods and social sector. The ongoing women empowerment models in AP may be of high value. The recent study conducted to evaluate the contribution

<sup>&</sup>lt;sup>16</sup> On inequalities in human development, see Rao, Bhanoji (2006)

<sup>&</sup>lt;sup>17</sup> See Tilak (2006)

of this ongoing program indicated that this program has contributed to rapid decline in poverty and inequality, expansion of economic resource at household level. The ongoing *Velugu* programmes can be sharply focused towards the women belonging to the vulnerable sections. Under which they can be provided with land.

- (b) The study of CESS mentioned above also shows that although one can achieve at state level, there are significant disparities across regions, groups, gender etc. Reduction in gender disparity itself will achieve the relevant MD goal. Similarly, there is high level of geographical concentration of poverty and low human development in many districts of North Coastal Andhra, Telangana and Rayalaseema. Within developed districts also, there are many backward mandals. It indicates the need for geographical targeting of resources for poverty reduction. For example, improving the MDG indicators in the above poor regions will increase levels for A.P.. Similarly, there is a need to concentrate on social groups such as SCs and STs to improve their MDG indicators.
- (c) There is a need to increase public expenditure on health and education. Effectiveness of these expenditures has to be improved.
- (d) Carefully targeted, sector specific interventions (particularly on health and education) are needed to achieve MDGs. For example, expanded child and material immunization, antenatal care coverage, nutritional supplementation (including promotion of exclusive breast feeding) and home based neo-natal services (including treatment of pneumonia) is likely to bring about significant reduction in both infant mortality and child malnutrition. In HIV/AIDS is another problem to be tackled in AP.
- (e) Last, development of institutions and strengthening the present institutions of service delivery are important. Several institutions seem to have failed in delivering better services particularly in health and education in rural areas. Institutions seem to be responsive when women are empowered. Decentralization in terms of strengthening PRIs has to be improved in AP in order to have better delivery systems.

The regional disparities can be reduced by speedy completion of ongoing irrigation projects, investments in remaining irrigation projects and rehabilitation of tanks etc. in drought prone regions of Telangana and Rayalaseema. Public expenditure on health and education needs to be stepped up substantially focusing on less developed areas.

Seventh, South East Asian and East Asian experience shows that globalization with better initial conditions have increased employment and incomes for workers and lead 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. Infrastructure investment is 19% of GDP in China as compared to 2% in India in the 1990s. Therefore, A.P. should also learn from Chinese experience.

Eighth, development of technology is important for inclusive growth. For example, the spread of green revolution in A.P. showed that 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 knowledge gap in agriculture. Even with existing technology, productivity can be improved. Ninth, 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, to 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.

Tenth, all over the world it is recognized that decentralization in terms of transferring power to local councils is important for rural 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 A.P. has not been satisfactory. Andhra Pradesh needs to make a significant progress towards financially and administratively strengthening these institutions making them self-sustaining. The last fourteen years experience shows that there have been significant achievements and failures.

Eleventh suggestion is the need to have economic reforms in relation to socio-economic environment. 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. Some political space is needed in implementing policies.

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. Justiciability is one aspect of rights. In this context, recent Supreme Court Orders in India to have midday meals in schools is in the right direction. 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 give treat boys and girls equally.

Rights are complementary. For example to achieve right to food, you need to achieve right to health, education and employment. It may be noted that health facilities and drinking water would improve the food absorption by people and in turn nutrition. Also, gender aspects of food security should be given importance in realizing right to food. 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.

To conclude, there is a need to operationalize a plan for achieving inclusive growth during the 11th Five Year Plan period and beyond in Andhra Pradesh. The action plan should cover the priority areas like agriculture, employment and social sectors. It should have a plan for removing economic and social deprivation across all regions. Also it should have a plan for socially disadvantaged sections.

## 7. CONCLUDING OBSERVATIONS

Andhra Pradesh seems to be improving its economic growth. The growth rate of GSDP in the last four years has been 7 to 8% per annum. However, the post-reform period witnessed increase in disparities across regions and social groups and between rural and urban areas. There is a need to have a broad based and inclusive growth to benefit all sections of the society.

We have discussed challenges in most important elements of inclusive growth: agriculture, poverty and employment, social sector and, regional

disparities. Improving decentralisation and governance are also part of inclusive growth. It is more challenging for the state to achieve this inclusive growth than getting 8 to 9 per cent growth in GSDP.

We have written earlier on the reasons for the need to achieve inclusive growth<sup>18</sup>. There are strong social, economic and political reasons for achieving broader and inclusive growth. Socially, lack of inclusive growth leads to unrest among many people. There is also economic argument. The measures which raise equity also promote economic growth. In other words, there is no trade-off between equity and growth. Lastly, the political argument is that no government in a democracy can afford to ignore large sections of workers and non-working population. It is increasingly clear that the process of development in A.P. must become more socially and economically inclusive. This is important for reducing exclusion, social tensions, inequality and improve overall economic development. Therefore, focused government interventions, enlightened civil society including NGOs are important for the success of macro pro-policies, sectoral interventions, targeted poverty alleviation programmes and to go beyond Millennium Development Goals.

The state has to learn lessons from the failures in the last 50 years and focus on the above priority areas in the next decade or so in order achieve 'Swarna Andhra Pradesh' and reach the state to one of the top performing states in the country. Otherwise the state may lag behind many other states in achieving broad based inclusive growth.

<sup>18</sup> See Dev (2006)

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