

## Chapter IV

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## **Chapter IV**

### **Indian Economy – Demography and Developmental Imbalances and Causes**

#### **I. Introduction**

With a meagre 2.4 per cent of the world surface area and more than 17 per cent of the world population is the fourth largest economy of world in terms of purchasing power parity (PPP) – following America, China and Japan. Here 1.21 billion population is residing in 28 states and 7 union territories under a federal system structure. There are wide and vivid variations across these states and union territories in geographical terms, manpower, culture and other socio-economic conditions. India in phases has crossed the regime of growth rate of 2.5 to 3.5% of followed by 5.6% at the average in the eight decade and thereafter the new millennium saw the growth rate of 9% average just second behind China the world tiger. But this growth rate scenario do not give us the true picture of our economy as some states have maintained the growth rate of 10 per cent and more while others have been far behind.

#### **II. Administrative Units for Indian economy**

The number of states and union territories in 2001 were 35 which in 2011 remained the same. Number of districts rose from 593 in 2001 to 640 in 2011. Number of sub-districts or talukas in the same period rose to 5460 in 2001 from 5924 i.e. it rose by 8%. Number of towns rose to 7935 from 5161 i.e. 2774 more towns were created. Statutory towns rose by 242 in the same period.

Number of census towns rose up to 3894 from 1367 i.e. an increase by 2532 which shows that the number went up by 2.8 times. Interestingly number of villages rose from 638588 to 640,867 an increase of 2279 village which shows an increase of 3%. It appears that inhabited area or bunjar land has been transformed for residential

purposes or the forest land has been reduced giving way to a few new villages as the number suggests.

### **III. Economic Environment**

The world is seeing a two speed economy. After the shadows of the great recession in 2008, global economy has started expanding, however, with two speeds. In developed world the economic growth is much slower than expected; recovery seems to have stalled in major developed nations, amid declining business confidence hurting global trade as well as employment. The economic recovery appears to have come close to a halt in the major industrialized economies. Growth remains subdued, with unemployment numbers still high. High funding requirements of banks and sovereign in Europe remains a concern. In contrast, emerging markets are on a strong wicket; growing fast. However, increasing inflation pressure has emerged as a spanner in the growth saga but in the recent months developing countries have started facing a pinch of 2008.

### **IV. Indian Economy: 2010-11**

In spite of the slow-down caused by global financial crisis of 2007-09, downside risks of global events particularly movement in the prices of commodities like crude oil, the Indian economy has emerged with remarkable rapidity. Reflecting strong fundamentals and resilience, the Indian economy posted robust growth rate of 8.4 per cent during 2010-11, thereby emerging as one of the fastest growth economies among the developing countries. Strong performance of the agriculture sector along with continued robust growth of the industrial and services sectors have underlined the overall performance of the Indian economy. The growth rate of 8.4 per cent in the GDP during 2010-11 has been achieved due to high growth in transport, storage and communication (14.7%), financing, insurance, real estate and business services (10.4%), trade, hotels and restaurants (9.0%), and construction (8.0%). At constant prices, the primary sector i.e. agriculture, forestry & fishing has shown a high growth of 7.0 per cent during 2010-11 as against 1.0 per cent during the year 2009-10. The growth of secondary sector is 7.2 per cent and that of service sector is 9.3 per cent during 2010-11 but is at a landslide during 2011-12.

### **(A) Gross Domestic Product and Gross National Income**

Gross domestic product at factor cost at current prices in 2010-11 is estimated at Rs.71,57,412 crore as against Rs.60,91,485 in 2009-10, showing an increase of 17.5 per cent during the year.

The Gross National Income (GNI) at factor cost at current prices is estimated at Rs.70,78,512 crore during 2010-11, as compared to Rs.60,53,585 crore during 2009-10 showing a rise of 16.9 per cent during the year.

### **(B) Per Capita Net National Income**

The per capita income (per capita net national income at factor cost) in real terms, i.e. at 2004-05 prices, is estimated at Rs.35,993 for 2010-11 as against Rs.33,843 in 2009-10, registering an increase of 6.4 per cent during the year.

The per capita income at current prices is estimated at Rs.53,331 in 2010-11 as against Rs.46,117 for the previous year depicting a growth of 15.6 per cent.

### **(C) Private Final Consumption Expenditure**

Private Final Consumption Expenditure (PFCE) in the domestic market at current prices is estimated at Rs.43,59,792 crore in 2010-11 as against Rs.37,22,036 crore in 2009-10. At constant (2004-05) prices, the PFCE is estimated at Rs.30,87,047 crore in 2010-11 as against Rs.28,52,301 crore in 2009-10. In terms of GDP at market prices, the rates of PFCE at current and constant (2004-05) prices during 2010-11 are estimated at 56.8 per cent and 58.9 per cent, respectively, as against the corresponding rates of 57.6 per cent and 59.7 per cent respectively in 2009-10.

The per capita PFCE in the domestic market in 2010-11 is estimated to be Rs.36,760 at current prices and Rs.26029 at constant (2004-05) prices as against Rs.31812 and Rs.24379 respectively in 2009-10.

### **(D) Domestic Saving**

Gross Domestic Saving (GDS) at current prices in 2010-11 is estimated at Rs.2481931 crore as against Rs.3182970 crore in 2009-10, constituting 32.3 per cent of GDP at market prices as against 33.8 per cent in the previous year. The decrease in the rate of GDS has mainly been due to the decrease in the rates of financial savings of household sector from 12.9% to 10.0% and private corporate sector from 8.2 per

cent in 2009-10 to 7.9 per cent in 2010-11. However, the rate of savings public sector increased from 0.2 per cent in 2009-10 to 1.7 per cent in 2010-11. In absolute terms, the saving of the household sector has increased from Rs.1639038 crore in 2009-10 to Rs.1749311 crore in 2010-11, the saving of private corporate sector has gone up from Rs.532136 crore in 2009-10 to Rs.602464 crore in 2010-11 and that of public sector has gone up from Rs.11796 crore in 2009-10 to Rs.130155 crore in 2010-11.

#### **(E) Capital Formation**

Within the gross capital formation at current prices, the gross fixed capital formation amounted to Rs.2331382 crore in 2010-11 as against Rs.2041758 crore in 2009-10. At current prices, the gross fixed capital formation of the public sector has increased from Rs.543337 crore in 2009-10 to Rs.619923 crore in 2010-11, that of private corporate sector from Rs.697451 crore in 2009-10 to Rs.761107 crore in 2010-11 and the household sector from Rs.800971 crore in 2009-10 to Rs.950352 crore in 2010-11.

#### **(F) Agriculture**

Agriculture forestry and fishing sector is estimated to have grown by 7.0 per cent in 2010-11 as against 1.0 per cent registered in the previous year. The share of agriculture and allied sector in GDP in 2010-11 stood lower at 14.51 per cent as compared to share of 14.70 per cent in 2009-10.

After two consecutive years of subdued performance, agriculture turned into a significant driver of growth in 2010-11. The simultaneous occurrence of a normal and well distributed south west monsoon and excess north east monsoon, the first occasion in the last one decade, enable both Kharif and Rabi sowings to be above normal. Consequently, there was record foodgrain production in 2010-11.

As per the final estimates of foodgrain production for 2010-11, India has produced 241.56 million tonnes of foodgrains during 2010-11 compared 218.11 million tonnes in the previous year. This is highest ever foodgrain production, surpassing the earlier record of 234.47 million tonnes achieved in 2009-09. The production of wheat, estimated at 85.93 million tonnes, is an all-time record. Similarly, production of pulses, estimated at 18.09 million tones, is an all-time record.

The production of nine oilseeds estimated at 31.10 million tonnes is also an all-time record. Cotton production has increased from 24.23 million bales in 2009-10 to 33.43 million bales in 2010-11. The production of sugarcane, which had attained a record level of 355.52 million tonnes during 2006-07 and declined in subsequent years, has again started witnessing increasing trend with an estimated production of 339.17 million tonnes in the year 2010-11.

### **(G) Industries**

The industrial sector recorded a growth of 8.4 per cent in 2009-10 as well as in 2010-11. Growth of real GDP originating from construction sector increased from 7 per cent in 2009-10 to 8 per cent in 2010-11, while manufacturing and electricity, gas and water supply sectors, recorded a contraction in growth rates from 9.7 per cent and 6.3 per cent respectively, in 2009-10 to 7.6 per cent and 3.0 per cent respectively in 2010-11.

The recovery was sustained in 2010-11, with growth accelerating to 8.2 per cent from 5.3 per cent in the preceding year. Of the twenty two industrial sub-groups in the manufacturing sector, during 2010-11, fifteen sub-sectors registered positive growth rates as compared to the previous year.

### **(H) Infrastructure**

The overall Index of the eight core industries viz., coal, crude oil, natural gas, petroleum refinery products, fertilizer, steel, cement and electricity generation, having a combined weight of 37.90 per cent in the Index of Industrial Production (IIP) with base 2004-05 registered a growth of 5.7% during 2010-11 compared to 6.6% registered in 2009-10. Infrastructure industries such as crude oil refinery products and steel recorded strong growth while natural gas, cement and electricity generation witnessed moderation in growth. Production of fertilizers was stagnant and coal output declined.

### **(I) Services**

Services sector growth decelerated to 9.35 per cent in 2010-11 from 9.98 per cent in the previous year, mainly reflecting deceleration in the growth of community, social and personal services from 10.03 per cent in 2009-10 to 4.52 per cent in 2010-11, which outweigh improvements in the growth of the sub-sectors viz. trade, hotels

and restaurants and financial, insurance, real estate, and business services". Growth in the GDP originating from trade, hotels and restaurants was estimated at 8.97 per cent in 2010-11 from 7.79 per cent growth recorded in 2009-10, while that of financing, insurance, real estate and business services grew by 10.41 per cent in 2010-11, as compared to 9.42 per cent recorded in 2009-10. The subsector of transport, storage and communication grew by 14.7 per cent in 2010-11 as compared to 14.8 per cent in 2009-10. The share of service sector in GDP in 2010-11 stood marginally higher at 57.7 per cent, as compared to a share of 57.2 per cent in 2009-10.

### **(J) Foreign Trade and Balance of Payments**

On the external front, exports have registered a rebound with a sharp rise of 37.5 per cent during 2010-11, boosted by enhanced exports to developing economies in Africa, Latin America and Asian regions. As regards imports, while rise in international oil prices has partly resulted in increase in oil imports, non-oil imports have also witnessed a rebound during the year, leading to a 22 per cent rise in overall imports during the year.

India's exports during 2010-11 amounted to US \$245.9 billion as compared to US\$178.8 billion recorded during 2009-10. India's imports during 2010-11 amounted to US \$350.7 billion as compared to US \$288.4 billion during 2009-10. Overall, trade deficit for 2010-11 amounted to US \$104.8 billion as compared to US\$ 109.6 billion during 2009-10. In line with the rebound in global economic activity and trade, India's exports have registered positive growth rates throughout 2010-11.

Foreign direct investment inflows into India stood at US \$27 billion in 2010-11 as against US \$37.8 billion recorded in 2009-10.

India's foreign exchange reserves increased to US \$304.8 billion as at end March 2011 from US \$279.1 billion as at end March 2010. India's external debt which stood at US \$261.2 billion at end-March 2010 increased to US\$ 297.5 billion as at end-March 2011.

### **(K) Fiscal Deficit**

Fiscal deficit ratios in 2010-11 turned out to be better than envisaged in the union budget. Centre's Gross Fiscal Deficit (GFD) was 4.7 per cent of GDP against 5.5 per cent budgeted. The GFD was 6.4 per cent GDP in 2009-10.

### **V. Outlook 2011-12**

There are several downside risks to global growth such as (1) sovereign debt problem in the euro area periphery (2) high commodity prices, especially of oil, impacting the global recovery, (3) abrupt rise in long term interest rates in highly indebted advanced economies with implications for fiscal path and (4) accentuation of inflationary pressures in emerging market economies.

In their report, World Economic Situation and Prospects 2012, UN economists forecast very low growth, warning that developed economies are on the brink of a downward spiral because of four factors; sovereign debt distress, fragile banking sectors, weak aggregate demand and policy paralysis. The United Nations has warned that the world is on the brink of another recession, projecting that global economic growth will slow down further in 2012 and even emerging powerhouses like India and China, which led the recovery last time, will get bogged down. The UN world economic situation and prospects 2012 report had cut the global growth forecast for the year to 2.6% from 4% in 2010. It has called 2012 a make or break year for the global economy, which will face a muddle through scenario and continue to grow at a slow pace. The UN report said warning that the risks for a double dip recession have heightened. Developing countries are expected to be further affected by the economic woes in developed countries through trade and financial channels. India's economy is expected to expand by between 7.7% and 7.9% in 2012, 2013 down from 9.0% in 2010. Notably, the UN has revised its 2012 prediction downward for every major country.

World Bank in the Global Economic Prospects (GEP) 2012 has projected that developing countries should prepare for further downside risks as Euro area debt problems and weakening growth in several big emerging economies are dimming global growth prospects.

The IMF expects global GDP to grow 3.3 per cent this year, down markedly from the 4.0 per cent predicted in September. Global GDP growth in 2013 has also been downgraded to 3.9 per cent, down from 4.5 per cent.

The base line projection of real GDP growth for the year 2011-12 is placed at 7 to 7.5 per cent from 8.4 per cent in 2010-11 by various agencies. At the same time, it is expected that the robustness of the service sector, which accounts for more than 57 per cent of GDP, would continue to support the growth process.(1) global financial conditions worsen, (2) global recovery weakens further or (3) food and non-food commodity price inflation remains high Indian economy put up a disappointing show during the second quarter of the current fiscal with the growth rate decelerating sharply to 6.9 per cent from 8.4 per cent during the same quarter of 2010-11. Sector-wise all the three broad segments of the economy had shown a loss in their growth momentum during the second quarter of the current year but the secondary sector had fared dismally with the real GDP rate plummeting to a dismal 3.2 per cent from 7.1 per cent in the previous year. This in turn, was a sequel to a very disappointing performance in manufacturing incremental increase being a mere 2.7 per cent as against 7.8 per cent and in mining and quarrying which saw a decline of 2.9 per cent in contrast to a spurt of 8 per cent. In construction, the GDP growth had slackened markedly to 4.3 per cent from the preceding year's 6.7 per cent. The overall economic growth for the first half of 2011-12 was estimated at 7.3 per cent as against 8.6 per cent for the first six months of the preceding year. In primary and tertiary sectors, the let up in real GDP growth was rather small.

As per the advance estimates of national income 2011-12, released by Central Statistics Office (CSO), on February 7, 2012, the growth of GDP during 2011-12 is estimated at 6.9 per cent as compared to the growth rate of 8.4 per cent in 2010-11. The growth rate of 6.9 per cent in GDP during 2011-12 has been due to the growth rates of over 8 per cent in the sectors of electricity, gas and water supply, trade, hotels, transport and communication, and financing, insurance, real estate and business services.

## VI. Child Sex Ratios since 1991 - 2011

In order to start a discussion of India's child sex ratio patterns, Table 1 has been compelled by drawing on both the earlier census figures and the provisional figures just made available the difference in successive decades has also been included for easy reference. The break-up of the country into the regions of the north-west, north-central, west, east and south offers a quick overview of the broad patterns in the last two decades.

**Table (1): Child Sex Ratio (0-6 years) Census 1991, 2001, 2011, selected states**

State	(Females per 1,000 males)				
	1991	2001	Difference 2001-1991	2011	Difference 2011-2001
India	945	927	-18	914	-13
North-west Himachal Pradesh	951	896	-53	906	+10
Punjab	875	798	-77	846	+48
Haryana	879	819	-40	830	+11
Chandigarh	899	845	-46	867	+ 22
Delhi	915	868	-47	886	+ 2
North-central Uttar Pradesh	928	916	-12	899	-17
Madhya Pradesh	952	932	-20	812	-20
West Gujarat	928	883	-45	886	+3
Rajasthan	916	909	7	883	-16
Maharashtra	946	913	-33	883	-30
Goa	964	938	-26	920	-18
East Bihar	959	942	-17	933	-9
Jharkhand	NA	965		943	-22
West Bengal	967	960	7	950	-10
Nagaland	993	964	-29	944	-10
Orissa	967	953	-14	933	-19
south Andhra Pradesh	975	961	-14	943	-14
Karnataka	960	946	-14	943	-3
Tamil Nadu	948	942	-6	946	+4
Kerala	958	960	+2	959	-1

Source Compiled from Census of 2001 and Census of 2011

Difference between decade 2001-1991 and 2011-2001 compiled by researcher

At the national level, the decline of 18 points in 2001 has now been followed by a further decline of 13 points. As more families are having fewer children (registered by the reduced fertility rates) there is therefore an ongoing gendering in their sex composition. To put it briefly, practices leading to fewer girls in the 0-6 age group have been spreading more thinly over the last decade over a much larger proportion of the country. The circle is widening.

The figures from 1991 have been included in order to recall why Census 2001 made such headlines a decade ago. This was when the child sex ratio (CSR) first dropped below that of the overall sex ratio: While the child sex ratio fell from 943 in 1991 to 927 in 2001, that of the overall sex ratio rose from 927 to 933 in the same period (a clear sign that life expectancy among women was increasing significantly). It was in 2001 that several states in north-west India witnessed plunges in their child sex ratios - with Punjab leading the way by dropping below the 900 mark, while other states such as Himachal Pradesh experienced huge declines for the first time. Secondly, 2001 made history (especially at the district level) because of evidence of child sex ratios falling below the 950 mark (taken as the general norm the world over) in other parts of the country outside the north-west, such as Goa, urban Orissa, and even pockets in the north-east. In the north-west, these patterns were put down to the intensification of practices of sex selection at birth in regions with known prior histories of female infanticide and higher female mortality; elsewhere, a smaller proportion of families was now resorting to similar practices probably for the first time.

## **VII. North-West vs. Rest of India**

Moving on to Census 2011, the state figures point to a clear difference between the north-west and the rest of India. It would appear that there has been a peaking of the practice of sex selection in states like Gujarat, Haryana, Delhi and Himachal Pradesh, with small improvements from very low levels in Chandigarh and Punjab. (Notice that none of the north-western states have fallen further, though they have by no means come back to 1991 levels, which were themselves well below the 950 mark) Punjab's rise from 798 to 846 (48 points) according to 2011 figures makes it now look more like its neighbours, but only a district-wise analysis would reveal where the real changes are. In states like Delhi and Gujarat roughly the same propor-

tion of families is resorting to sex selection as was true a decade ago (since this is a comparison of the number of girl children born and alive between 1996-2001 and 2006-2011). In Punjab the severity of the practice has thus only eased slightly. According to a news report mentioning district level data for the state of Haryana, the district of Kurukshetra (which had the worst CSR of 771 in 2001) now has a CSR of 817 similar to the trend for Punjab. However, many more districts (Jhajjar, Mahendragarh, Rewari, Bhiwani, Faridabad, among others) have worse CSRS than in 2001.

Whatever the "improvements" (if that is the right word) in north-west India, CSRS are falling in large parts of western, central and eastern India - Maharashtra, Goa, Rajasthan, Madhya Pradesh, Uttar Pradesh and even Andhra Pradesh has joined the ranks from among the southern state-s. (Of course, Tamil Nadu is well known for its history of female infanticide and sex selection in districts like Salem and Dharmapuri - so it remains to be seen what a more disaggregated picture of that state would reveal). In other words, the state wise figures demonstrate a widening of the circle - even if the numbers are not dramatic - well beyond the so-called prosperity belt of north-west India, to the poorer states. A recent news report on UP, for instance, highlights the spread of sex selection to eastern towns and districts where it was hardly known before. (The only state whose figures are so strange that there is every reason to doubt them is Jammu and Kashmir (J&K), where the census was undertaken after a gap in 1991, in 2001 and 2011. According to the provisional figures, the CSN has plummeted from 941 to 859 - 82 points - along with this J&K is the only state in the whole country to have registered a positive increase in its fertility during this period. Whatever the form that the ongoing conflict is taking such figures are hard to make sense of and require further investigation.

It is likely that the "improvements" in the north-west are related to efforts at monitoring the use of sex determination testing, in contrast with its spread elsewhere. But it would be wrong to equate the two, since the picture is more complex than that. The very fact that the CSNS are falling in such a wide variety of states (from Goa in the west, which is not associated with high levels of poverty, to poor states like Rajasthan, and Madhya Pradesh) and then again in a heterogeneous state like Maharashtra, which has witnessed one of the steepest declines in 2011 of 30 points,

makes it absolutely necessary to wait for the time when a more contextual micro level understanding can be undertaken.

To give an example of such contextual analysis during the previous decade, in a study conducted by a group of researchers (John et al 2008) during 2003-05 in five of the lowest CSN districts of north-west India, it became evident that within this broad belt where child sex ratios had dropped severely, local contexts were nonetheless extremely significant. Thus, for instance, while Fatehgar Sahib in Punjab demonstrated the presence of families with just one son (especially among Jat Sikhs and urban upper castes), and families in Kangra and Rohtak strived for two children (but very few with only girls), in the districts of Dholpur and Morena significant forms of child neglect leading to high rates of mortality among girls in larger families went hand in hand with the growing practice of sex selection.

### **VIII. The Debate So Far**

In order to get a better perspective on adverse sex ratios, let us recall the decade of the 1980s when practices of amniocentesis for sex selection became the subject of the first campaigns by women's groups and health activists in Maharashtra, Delhi and Punjab. At that time, this issue garnered little public support. Indeed, it was not even clear to most people what the problem was. Today we might be in the opposite situation, where the sex ratio has become the symbol of gender discrimination as such, and few are interested in anything beyond it. One must underscore, therefore, the extent of activism and analysis both in India and abroad, and the variety of organisations (local groups, the state, religious organisations).

In a more self-critical vein, the child sex ratio has become a veritable academic and advocacy industry in its own right.

Some scholars have offered predictions of likely patterns, drawing from the National Family Health Surveys (the most recent being NFHS 2005-06), as well as the Sample Registration at Births (SNSS) made available every year. Significant differences have also been crystallizing. Has there been too great or too little a focus on the Preconception and Prenatal Diagnostic Techniques (RCNRYOR) Act of 1994? Counter-intuitively could there be reduced son preference even though the numbers

are skewed? Is the problem one of "mindsets" out of synch with modern values of equality or does modernity itself has a lot to do with what is happening?

#### **(A) Confluence of Processes**

There is something curious about much of this debate and the positions that have been taken. On what basis would we, after all, expect change to happen? Planning the size and sex composition of one's children is surely at the confluence of a range of processes, from stretching limited resources, wanting the "best" for one's children with the effect of heightening the burden of having them, extreme socio-economic volatility, varying individual morality, the kinds of technologies available, and the nature of gender disparities across classes in contemporary society. Much has been said about signs of reduced son preference as more and more families say that they want a girl and a boy. But what if this preference actually translates into the statement "at least one boy, and at most one girl"? Moreover, what kind of structural changes are we witnessing such that expectations of a turnaround could have a genuine basis?

As already mentioned, the secretary to the home ministry went on record to say that, in the face of this further decline in the child sex ratio the state should re-examine its policies. There has been far too much focus on the need to restore "balance" to the skewed numbers. What is forgotten is that in a growing population like ours with its hyper famous marriage market, male privilege has benefited over generations from an excess of marriageable women in any given cohort. In other words, there has been an invisible structural imbalance at work in most parts of the country outside the north-west, but which was never considered to be a problem to be "corrected". Indeed, the peculiar case of Kerala with its positive sex ratio but highly discriminatory practices against women is a case in point. In all the focus on sex ratios, fertility and literacy, little attention is given to what is arguably the most critical indicator of the status of gender in our country. The most recent round of the National Sample Survey (66th Round, 2009-10) has the stunning revelation that, after 20 years of unprecedented economic growth, the total proportion of women in any kind of paid work is no more than 15%. Another way of putting this would be to say that 85% of all women are destined to find their future through structural forms of

dependency. This does not even begin to discuss the nature of the work that constitutes the 15%. Therefore, rather than keep playing the manipulation game of balancing numbers, what is required are state policies that actually seek to create the conditions for meaningful life-chances, beginning with those of girls and women.

### **(B) Population and Development**

The pace at which India's population is growing is slowing, but not as rapidly as expected; India will become the largest country in the world sooner than earlier forecast. Literacy rates have increased sharply between 2001 and 2011; some of the low performing rates have shown rang improvements, the others have not. The dismal picture in the 2011 Census is that even as the overall sex ratio has improved due to better adult female mortality that of the child sex ratio has further deteriorated. High mortality among girl children and sex selective abortions have pushed the child sex ratio down in all but three states.

### **(C) Population Growth**

Between the census years 2001 and 2011, the absolute addition to the population was 181 million. The average annual exponential growth rate during 2001-11 was 1.64%, 0.33 percentage points less than the rate observed during 1991-2001 (Table 2). If the fall in the growth rate over the last two decades continues, and there is every reason to believe that this will be the case, the rate of growth of population would be much lower in the coming decades.

Though the growth rate has declined compared to the previous decade of 1991-2001, there was only a marginal decline in the absolute number of people added to the population total. This is not unexpected as there are still a growing number of women entering the reproductive ages the result of high fertility in the past. This inbuilt tendency for India's population to grow will continue at least until the middle of this century. A comparison of crude population growth rate and crude rate of natural increase computed from the Sample Registration System (sRs) data also indicates a net in-migration rate of around 0.55% during the decade 2001-11.

When the final population totals are released, India's population would certainly be larger. There would be an addition of about two million to the final population total if the same patterns as in the previous census are repeated. Although

the final total is not adjusted, the "true" total is likely to exceed 1210 million by several millions as censuses around the world and the developed countries are no exception suffer from under-enumeration. In the past, post-enumeration surveys in India indicated that the levels of under-enumeration varied between 1.5% and 2.0% (Nanda 1992; Bhat 1998, 2002; Dyson 1981, 2001). A conservative assumption of 1.0% under-enumeration in the 2011 Census would add at least 12 million more to the final total. This may mean that the decline in growth rate during 2001-11 is even smaller than what the provisional population totals yield.

The average annual growth rate of population declined in all major states except in Tamil Nadu (Table 2). The Tamil Nadu exception may be the result of growth in net in-migration into Tamil Nadu during 2001-11. The relatively larger difference between the crude growth rate and the crude rate of natural increase in Tamil Nadu (Figure 1) during 2001-11 than that observed during 1991-2001 indicates that the increase in net in-migration was responsible for stability rather than any decrease in its growth rate. The other notable in-migration major states are Haryana, Maharashtra and Gujarat. In contrast, Kerala continues to be a net exporter of people to elsewhere in India and overseas. Figure 1 also indicates under-enumeration in the states of Jammu and Kashmir, Bihar, Chhattisgarh and Jharkand.

#### **(D) Literacy**

The provisional population figure of the 2011 Census shows a marked improvement in the literacy rate. The effective literacy rate (literacy rate in population aged 7+ years) increased from 64.8% to 74% over the decade 2001-11.

Although the improvement was significant for both males and females an increase from 75.3% to 82.1% for males and from 53.4% to 65.46% for females, females gained more than males.

Two such standardized indices known as the "achievement" and "improvement" indices were constructed for the states and the results are presented in Table-3. These indices show that, although Bihar, Arunachal Pradesh, Uttar Pradesh and Jammu and Kashmir had a lower achievement level in literacy in 2001, ranking at the bottom, they all stood at higher ranks with respect to improvement in literacy during the decade 2001-11. On the other hand, Madhya Pradesh and Rajasthan which

also had a low achievement level in 2001, performed poorly relative to other states with comparable base levels in improving their literacy level during 2001-11.

As should be expected the southern states which already had higher levels of literacy were not ranked high with respect to achievement progress during 2001-11. Interestingly, smaller states did better in terms of improvement even though they had higher levels of literacy in 2001.

#### **(E) Gender Composition: Sex Ratio**

China and India have the dubious distinction of having the most unfavourable population sex ratios among the 10 most populous countries in the world, with India being marginally better than China: 940 vs. 926 females per 1,000 males. In contrast, in almost all of India's south Asian neighbours (Nepal, Myanmar, Bangladesh and Sri Lanka) women fare better in the sex ratio. Pakistan too has a marginally better sex ratio.

The sex ratio in 2011 is almost equal to what was observed in 1961. In between, India's sex ratio hovered around 930 the lowest recorded since systematic and regular decennial census collections began in the late 19th century.

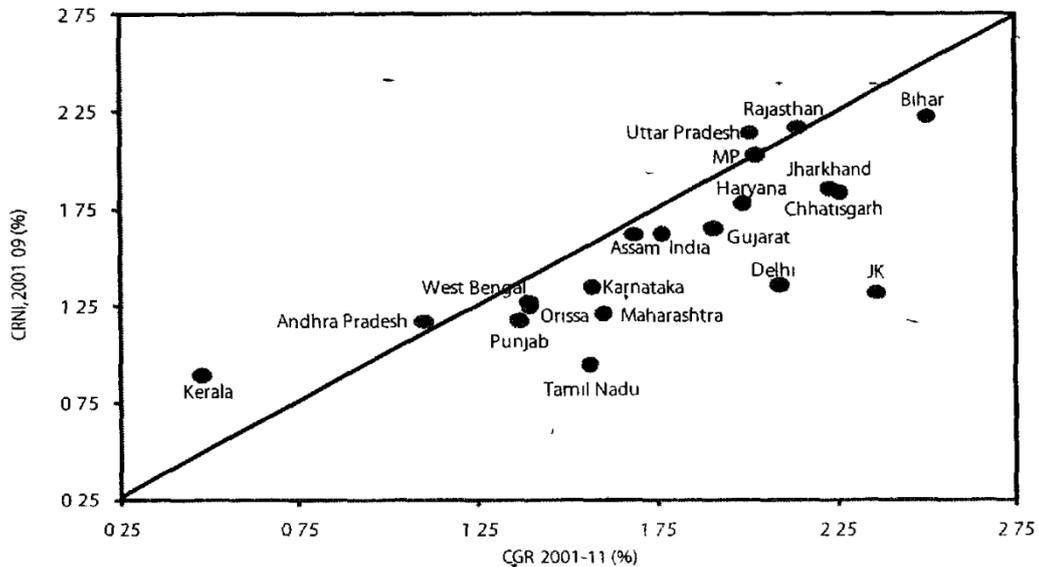
The regional pattern in sex ratios in 2011 is along the long-established contours: relatively less "masculine" sex ratios in the south and east compared to the north Indian states. Likewise, the improvement in population sex ratio since 2001 is not uniform across the country. Between 2001 and 2011, sex ratios have worsened in only three major states: Bihar, Gujarat and Jammu and Kashmir (Table 4). Despite the poor performance in three major states, the sex ratio at the national level improved thanks to noticeable gains in Punjab, Haryana, Himachal Pradesh and Maharashtra (and Chandigarh and Delhi). These states experienced an increase in sex ratios during the first decades of the 21st century compared to a decrease in the 1990s. Gujarat is the only major state where the sex ratio declined both in the 1990s and thereafter, although the decline in the past decade (only 3 points) was much less than that in the 1990s (over 10 Points).

**Table (2): Population and Growth Trends among Major States (1991 to 2011)**

States	Population (000)		Percentage Decadal Growth		Average Annual Geometric Growth Rate	
	2001	2011	1991-2001	2001-11	1991-2001	2001-11
Andhra Pradesh	76210	84666	14.59	11 10	1.37	1.06
Bihar	82999	103805	28.62	25 07	2.55	2.26
Gujarat	50671	60384	22.66	19 17	2.06	1.77
Haryana	21145	25353	28.43	19 90	2.53	1.83
Himachal Pradesh	6078	6857	17.54	12 81	1.63	1.21
Jammu and Kashmir	10144	12549	29.43	23 71	2.61	2.15
Karnataka	52851	61131	17.51	15 67	1.63	1.47
Kerala	31841	33388	9.43	4 86	0.90	0.48
Madhya Pradesh	60348	72598	24.26	20 30	2.20	1.87
Maharashtra	96879	112373	22.73	15 99	2.07	1.49
Orissa	36805	41947	16.25	13 97	1.52	1.32
Punjab	24359	27704	20.10	13 73	1.85	1.30
Rajasthan	56507	68 621	28.41	21.44	2.53	1.96
Sikkim	541	608	33.06	12 36	2.90	1.17
Tamil Nadu	62406	72 139	11.72	15 60	1.11	1.46
Uttar Pradesh	166198	199581	25.85	20 09	2.33	1.85
West Bengal	80176	91348	17.77	13 93	1.65	1.31
India	1028737	1210193	21.54	21.54	1.97	1.64

Source: Census 2001 and 2011 contribution by researcher

**Figure 1: Relationship between crude growth rate (CGR) and Crude Rate of Natural Increase (CRNI) among Major States (2001-11)**



Source: Compiled from the table above

**Table (3): Achievement and Improvement Index in Literacy Level (2001-11)**

States	Effective Literacy Rate		2001		2011		2001-11	
	2001	2011	Achievement index	Rank	Achievement index	Rank	Achievement index	Rank
Andhra Pradesh	60.47	67.66	0.78	19	0.82	2	0.04	15
Arunachal Pradesh	53.34	66.95	0.73	73	0.82	23	0.09	2
Bihar	47.00	63.82	0.69	24	0.80	24	0.11	1
Goa	82.01	87.40	0.91	3	0.93	4	0.03	22
Gujarat	69.14	79.31	0.83	10	0.89	11	0.06	10
Haryana	67.91	76.64	0.82	13	0.88	14	0.05	13
Himachal Pradesh	76.48	83.78	0.87	5	0.92	5	0.04	19
Jammu & Kashmir	55.52	68.74	0.75	22	0.83	20	0.08	4
Karnataka	66.64	75.60	0.82	14	0.87	15	0.05	12
Kerala	90.86	93.91	0.95	1	0.97	1	0.02	23
Madhya Pradesh	63.74	70.63	0.80	16	0.84	18	0.04	16
Maharashtra	76.88	82.91	0.88	4	0.91	6	0.03	21
Manipur	69.93	79.85	0.84	8	0.84	10	0.06	11
Meghalaya	62.56	75.48	0.79	18	0.87	16	0.08	7
Mizoram	88.80	91.58	0.94	2	0.96	2	0.01	24
Nagaland	66.59	80.11	0.82	15	0.90	9	0.08	6
Orissa	63.08	73.45	0.79	17	0.86	17	0.06	9
Punjab	69.65	76.68	0.83	9	0.88	13	0.04	18
Rajasthan	60.41	67.06	0.78	20	0.82	22	0.04	17
Sikkim	68.81	82.20	0.83	11	0.91	7	0.08	8
Tamil Nadu	73.45	80.33	0.86	6	0.90	8	0.04	20
Tripura	73.19	87.75	0.86	7	0.94	3	0.08	5
Uttar Pradesh	56.27	69.72	0.75	21	0.83	19	0.08	3
West Bengal	68.64	77.08	0.83	12	0.83	12	0.05	14
India	64.83	74.04	0.81		0.86		0.06	

Achievement index for literacy =  $(1 - (\max - x_i) / (\max - \min))^{0.5}$ , max = 100, a maximum level it can reach, min=0

Improvement index = Achievement index 2 - Achievement index 1

Source: Census 2001 and 2011 figures. Compiled by the researcher

**Table (4): Sex Ratio of Total Population, Child Population and Population Age 7+ (2001 and 2011)**

India/States	Sex Ratio (Females per 1,000 Males)					
	Total Population		Child Population in the Age Group 0-6		Population Aged 7 and Above	
	2001	2011	2001	2011	2001	2011
India	933	940	927	914	934	944
Andhra Pradesh	978	992	961	943	981	997
Arunachal Pradesh	893	920	964	960	878	913
Assam	935	954	965	957	929	953
Bihar	919	916	942	933	914	912
Chhattisgarh	989	991	975	964	992	995
Goa	961	961	938	920	964	973
Gujarat	920	918	883	886	927	923
Haryana	861	877	819	830	869	885
Himachal Pradesh	968	974	896	896	980	983
Jammu & Kashmir	892	883	941	859	884	887
Jharkhand	941	947	965	943	93s	948
Karnataka	965	968	946	943	968	971
Kerala	1058	1084	960	959	1072	1099
Madhya Pradesh	919	930	932	912	916	933
Maharashtra	922	925	913	883	924	931
Orissa	972	978	953	934	976	985
Punjab	876	893	798	846	888	899
Rajasthan	921	926	909	883	923	935
Sikkim	875	889	963	944	861	883
Tamil Nadu	987	995	942	946	993	1000
Uttar Pradesh	898	908	916	899	894	910
West Bengal	934	947	960	950	929	946

Source: Census 2001 and 2011, Government of India, Delhi

The increase in sex ratio between the 1991 and 2001 censuses was interpreted with guarded optimism. This was because some of the increase during the 1990s was likely to have been due to substantial improvement in census enumeration. In fact, it was suggested that there may not have been any change in the sex ratio during the 1980s and 1990s (Dyson 2001). There are grounds to believe that part of the increase

in the overall sex ratio during 2001-11 is also due to further improvements in census enumeration. The preparation for the 2011 Census comprised special efforts to gender sensitize everyone involved including the general public: gender sensitivity was integrated into the entire process of census taking (Registrar General of India 2011: 14). Specifically, about 26 districts were identified as having an abnormally low sex ratio (below 900), low female literacy and low labour force participation at 2001 Census. These gender critical districts were given special attention in order to improve census coverage and data quality.

While an improvement in the enumeration is certainly a factor, the most important contributor to the overall increase in sex ratio is improvement in survival rate among women. In countries where social institutions are gender neutral, the female mortality level is expected to be less than that of males. Consequently an average female is expected to live longer than an average male. Unsurprisingly, this was not the case in independent India until the 1980s. Only during the 1990s, did female life expectancy exceed male expectancy by one year; the gap increased to two years during the first half of the first decade of this century. In the western countries, the gender gap in life expectancy is in the range of three to five years in favour of females. It is very likely that declining mortality among females relative to males in the last 10 to 20 years is the major driver of increase in population sex ratio.

#### **(F) Child Sex Ratio**

As was the case during the 1990s, the increase in population sex ratio was almost entirely due to the increase in sex ratio among the population aged 7 and over, But the sex ratio for the population aged 0-6 years continued to decline from 945 females per 1,000 males in 1991, to 927 in 2001 and further down to 914 in 2011 (Table 4). This is despite concerted efforts to improve coverage and age-misreporting in the 2011 Census. In spite of an increase between 2001 and 2011, Punjab and Haryana have the lowest sex ratio (less than 850) among the 0-6 year olds in 2011. All the major states with the exception of three in the south (Tamil Nadu, Kerala and Karnataka) recorded increasing masculinity in their underseven population sex ratios. The largest decrease was in Maharashtra and Rajasthan (Jammu and Kashmir experienced too large a decline in its sex ratio by 82 points to be plausible).

## **IX. Causes of Decline**

The worsening of the child sex ratio in the last 10 years point to: (i) a further widening of the gender mortality gap, and (ii) a decrease in the sex ratio at birth through sex selective abortion.

The two major underlying causes for discrimination against female children in India are son preference and the low status of women (**Arnold** et al 1998, 2002; **Arokiasamy** 2002; **Basu** 1989; **Bhat** and **Xavier** 2003; **Caldwell** et al 1982; **Clark** 2000; Das Gupta 1987; Kishore, 1995; Osmani and Sen 2003; Pande and Astone 2007).

The increasing mortality risk for newborn female children is borne out by findings from the National Family Health Surveys (NFHS). During the period 1993-97, the sex ratio of children who died under five was 1011 females per 1000 males. This increased to 1045 during 2000-04 (**Kishore** and **Gupta** 2009). In the first decade of the 21st century a girl child is about 40% more likely to die than a male child in her first year of life, and 61% more likely to die between her first and fifth birthdays. It is argued that the gender imbalance in mortality in the first five years of life is large enough to explain almost all the difference in sex ratio at birth showed 2009. The mortality gap is, in turn, largely accounted for by differential access to food, parental care and healthcare utilization (**Miller** 1981, 1997; **Mishra** et al 2004; **Pande** 2003; **Pande** and **Yazbeck** 2003; **Sen** and **Sengupta** 1983). Some estimates indicate that as much as 50% of excess female mortality in the 1-4 year age group is likely to result from gender disparity in vaccinations and nutritional status (**Oster** 2009). The findings from NRUS surveys show that while full-immunization rates have been increasing since the early 1990s for both male and female children, they are still less than 50%. More importantly there is no evidence of narrowing of the gender gap in full immunization; rather there may be a slight widening of the gap (**Kishore** and **Gupta** 2009). The role of sex selective abortion in the deterioration of the child sex ratio is a hotly debated and intensively researched area in India (**Patel** 2007). Both historical and current analyses have shown that excessive preference for sons among a well-equipped burgeoning middle class and relatively easy access to modern technologies have the potential to prevent an "unwanted" girl child at conception rather than

at or after birth (**Arnold** et al 2002). Indeed the richer classes in India do seem to treat their female children better than their poorer counterparts. The NRUS-3 of 2004-05 showed that early childhood gender differential is lower among the wealthier households than among the poorer ones (**Kishore** and Gupta 2009).

It is estimated that during 2001-05 as many as one female foetus may have been aborted for every 20 female live births. This was an increase from less than one abortion per 30 female births during 1996-2000. These rates amount to over half a million sex selective abortions per year during 20001-05 (Kulkarni 2001). Even if it is assumed that these estimates are at the high end of the possibilities, they do indicate the widespread and intensified nature of the issue. That there indeed was a further decline in the sex ratio at birth is also backed up by the findings from the NFHS surveys. The sex ratio at birth of live births (as opposed to births that died in the first five years of life) decreased from 936 females per 1000 males in 1987-91 to 931 in 1993-97 and then to 910 in 2000-04. NFHS-3 data further showed that pregnancies receiving an ultrasound test were more likely to lead to a much lower sex ratio than the biologically normal sex ratio. And sex selective abortion behaviour goes hand-in-hand with increased wealth. Women in the top wealth quintile have about 60% chance of receiving an ultrasound pregnancy test compared to less than 10% chance among women in the bottom two wealth quintiles (Kishore and Gupta 2009).

Although there is no state specific estimate for sex selective abortion it can be inferred that most states with abnormally low sex ratios in the 0-6 age group are likely to have higher levels of sex selective abortions than the rest. These states are also known to exhibit a much stronger gender bias against female children in providing food and healthcare. And there is a clear regional pattern in gender bias, sex selective abortion, and child health: north-western states vs. southern and eastern states **Agnihotri** 2000, 2003; **Bhat** 2002; **Kulkarni** 2007; **Patel** 2007; **Patra** 2008. While sex selective abortion and female neglect jointly contributed to low sex ratios in some states such as Punjab and Haryana, sex selective abortions may have contributed proportionately more than female neglect in Gujarat, Delhi and Chandigarh. This speculative inference needs to be confirmed by well-designed research and appropriate data.

## **X. Growing Regional Disparities in Development (Post Reform Experience)**

It is now well established that the inter-state disparities in the growth of Gross State Domestic product (GSDP) have increased in the post-economic reform period beginning from the early nineties when compared to the eighties.

Although these disparities have accentuated in the post-reform period, they have been building up in the pre-reform period itself. For example, in the early 1960s the per capita GSDP of the richer states like Punjab, Maharashtra and Gujarat was, on an average, about 80 per cent higher than the average per capita SDP of the bottom four states viz., Bihar Uttar Pradesh, Orissa and Madhya Pradesh.

States whose per capita GSDP is below the national average together account for over 60 per cent of the country's population and as high as 75 per cent of the country's population below the poverty line. Further, these states account for nearly 60 per cent of the population belonging to the socio-economically disadvantaged sections like Scheduled Castes and Scheduled Tribes. There is thus a large potential for growth which needs to be exploited for sustaining development in the country over a long period. This is necessary for improving regional and social equity and for strengthening national integration.

### **(A) Sectoral Composition of Growth**

How does one explain the accentuation in inter-state disparities in development in the post-reform period in the country and, indeed, the tendency of a gradual build-up in these disparities over the plan period? One way to study is to decompose by looking at the emerging regional disparities with respect to the individual sectors, i.e., the Primary, the Secondary and the Tertiary. The inter-state variation in per capita GSDP originating from the Primary Sector, measured by the coefficient of variation, has always been lower than that of the Secondary Sector GSDP. There is also no evidence of an increase in its variability across regions in the post-reform period when compared to the eighties. This is understandable because agriculture is based essentially on land and labour which are widely distributed across the country. There are, no doubt, significant regional disparities in the availability of physical and institutional infrastructure for agriculture like irrigation, rural electricity

and institutional credit. However, despite these constraints, technological changes in Indian agriculture represented by Green Revolution were adopted widely in the country, including especially the eastern region, by the end of the eighties.

The GSDP per capita from the Secondary Sector, on the other hand, shows much higher variability across regions and this variability rose significantly in the post-reform period. The Tertiary Sector which has been the prime mover of GDP growth in the post-reform period has generally grown faster in the industrially advanced states and shows a significant rise in its variability across states during this period. We know that there has been a steep reduction in the share of the Primary Sector in the overall GDP a modest rise in that of the Secondary Sector and a big rise in the share of the Tertiary Sector. Thus, the decline in the relative importance of the Primary Sector—which shows lower disparities and the rise in the importance of the other two sectors showing higher variability explain, at the compositional level, the rise in inter-state disparities in per capita GSDP in the post-reform period.

Whereas inter-state disparities in per capita GSDP have increased significantly in the post-reform period, the corresponding disparity in Human Development Index has declined. The coefficient of variation in HDI declined from 22.6 in 1981 to 19.0 in 1991 and 16.3 in 2001. This is because investment requirements in primary education and primary health care are not as heavy as in the capital-intensive physical infrastructure, and the results in terms of improving literacy rate and the life expectancy at birth are relatively quick. However, the rise in public expenditure in these sectors has been very slow especially in the poorer states, in the post-Reform period (Dev and Mooij, 2003). This is reflected in the smaller decline in regional disparities in HDI in the post-reform decade. Since human development has a positive impact on GDP growth, inadequate attention to this sector in the poorer states in the post-reform period could also be responsible for the rise in regional disparities in ' per capita GSDP.

## **XI. Causal Factors**

### *A. Investment*

#### **(i) Planning and Public Investment**

Investment in physical and human capital, technical change and institutions, including those of governance, are the three key variables usually invoked for understanding the growth performance. A glaring feature of the investment scene in the post-reform period is the steady decline in the rate of public investment and a steep rise in the share of private investment with stagnation in the rate of total investment. According to the estimates by the Central Statistical Organisation, gross capital formation by the public and private sectors were roughly equal at, around 10 per cent of GDP each in the early 1980s. Public sector investment declined to a little over 5 per cent of GDP in recent years whereas private sector investment rose to a little over 17 per cent of GDP. Total investment has barely recovered to the peak level of 26 per cent of GDP reached in 1990-91.

The decline in public investment is even more glaring at the state level where bulk of the public expenditure on irrigation, power and social sectors is incurred. This is indicated by the fact that the share of the states declined from around 50 per cent of total plan expenditure in the country in the eighties to 40 per cent towards the close of the nineties.

Within the states, the per capita plan outlays of the poorer states have always been much lower than those of the better-off states. These disparities have widened in the post-reform period. For instance, during the Sixth Plan period (1980-1985) the actual per capita plan expenditure for the poorest four states, on an average, was a little over half of the average per capita plan expenditure of the better-off states like Gujarat, Maharashtra and Punjab. But during the Ninth Plan period (1997-02) this proportion came down to around 40 per cent.

Central assistance for state plans (including assistance for externally aided projects), which is a major component of state plan resources, has been progressive in that the per capita assistance for the poorer states has been higher than for the richer

states. The poorer states have been handicapped basically by their own weaker resource position. The per capita own plan resources of the poorer states, including market borrowing, constituted around 40 per cent of own per capita plan resources of some of the better-off states, *viz.*, Punjab, Maharashtra, Haryana and Kerala during the Sixth Plan period. This ratio deteriorated to 28 per cent in 2003-04 and further to less than 20 per cent in 2004-05. An important factor responsible for this deterioration in the financial position of the poorer states is the decline in the tax-GDP ratio of the Centre in the post-reform period and the consequent decline in the transfers to the states through devolution as recommended by the Finance Commissions. The loss to the states, that is, the difference between the devolution estimated by the Finance Commissions and the actual devolution, amounts to Rs. 100,000 crores for the decade 1995 to 2005 (Reddy, 2005). The decline in per capita transfers to the poorer states was even greater because the formula for devolution by the Finance Commissions is quite progressive. Therefore, the 12th Finance Commission has done well by raising the tax devolution by 1 percentage point (Government of India, **Report of the Twelfth Finance Commission**, 2004).

As expected, among states, there is a strong positive correlation -between the per capita income and tax-GDP ratio. For richer states because of their higher tax-GDP ratio, their own tax revenues per capita are much higher than those for the poorer states. This is so even when, the tax effort of some of the richer states is lower, and that of some of the poorer states higher than the desirable norm considering their per capita income, rate of urbanization, *etc.* Although the tax devolution by the Finance Commissions has been progressive for the last 25 years, this couldnot offset the weaker resource position of the poorer states so far as resources for plan are concerned. Higher tax devolutions from the Finance Commissions have helped them basically to reduce their dependence on grants-in-aid for meeting their deficits on non-plan revenue account. In the absence of progressive devolution of tax revenue, the Finance Commissions would have had to take greater recourse to grants-in-aid for filling up the non-plan revenue gaps of such states. However, it must be said to the credit of the 12th Finance Commission that they have raised the proportion of grants

in the total devolution and earmarked a significant portion of these grants to the poorer states for the development of social sectors like education and health.

The debt-GDP ratios of the poorer states are higher. Because of their lower credit worthiness they have not been able to access borrowings from the market to the same extent as the richer states. The per capita market borrowings of the four poorest states which were almost equal to the market borrowings of certain better-off states, *viz.*, Punjab, Maharashtra, Haryana and Kerala during the Sixth Five Year Plan declined to 72 per cent of such borrowings by these states in 2004-05. The inability of the less developed states to access sufficient resources for the development of infrastructure through higher plan outlays has thus emerged as a critical constraint in redressing regional imbalances in development.

Among states, the correlation between per capita GSBP growth rate in the post-reform period of nineties and the index of Social and Economic Infrastructure in 1995 as well as positive and significant. Clearly the states whose initial or pre-reform conditions were favourable in respect of infrastructure could benefit more from the opportunities opened up especially in the service sector, by economic reforms and register higher growth rates in GSDP (Rao and Dev, 2003).

#### **(ii) Private Investment**

This is because private investment has been flowing basically to the high income states where per capita plan outlays have been higher and where, therefore, infrastructure is well developed. For example, according to the IDBI data, the per capita cumulative disbursements by the All India Financial Institutions up to March, 2004, were Rs. 15 lakhs for Maharashtra, 14 lakhs for Gujarat and 7 lakhs for Tamil Nadu, as against less than 3 lakhs for Madhya Pradesh, less than 2 lakhs for Uttar Pradesh, and less than a half lakh for Bihar. Similarly, in 2003, Investment plus Credit-Deposit Ratios of Scheduled Commercial Banks were high for western (75%) and Southern Regions (79%) and quite low for the Eastern (54%) and Central Regions (50%). As to the amount of Foreign Direct Investment & FTC (Foreign Technical Collaboration) approved from August 1991 to December 2000, a few advanced states, *viz.*, Maharashtra, Gujarat, Tamil Nadu, Karnataka and Delhi together accounted for

half the share as against the combined share of less than 10 per cent by the four poorest states (Government of India, 2001).

### *B. Technical Change*

The issue of technical change does not seem to figure prominently in the debate on regional disparities in development in India. This could be partly because much of the technology is embodied in capital equipment and hence is highly correlated with such investment. Also, this may be attributed to the speedy diffusion of frontier technologies like biotechnology and information Technology across regions and even among income groups with large differences in asset endowments, when adequate support services are provided. The success of green revolution in India provides a classic Illustration of this process. After the initial success with wheat in the North-Western India for a decade beginning from the mid-sixties, it soon spread to different parts of the country by the eighties covering rice even in the poorer eastern genetic plains because of its inherent profitability and relatively low investment requirements.

The experience so far with information technology is equally encouraging and holds the prospect for raising productivity enormously in millions of farms and factories of varying sizes and the government offices throughout the country. This experience underlines the need to exploit the potential offered by these emerging technologies as well as human development for giving a fillip to the catching-up process in the less developed areas of the country.

### *C. Institutions and Governance*

Historically, the developed states are, in general, characterised by progressive land tenures like the *Ryotwari* or the *Mahalwari* systems, whereas most of the less developed states were under the exploitative tenures like the *Zamindari* and the *Jagirdari* systems. Many of these areas were under the princely states for a long period. The social structure evolved under progressive land tenures has been conducive to the growth of enterprise and generated incentives for work, whereas the social structure perpetuated by the exploitative land tenures has been inimical to enterprise and bred apathy. Also, historically, the developed states have had relatively more efficient systems of governance in terms of skills, responsiveness and the

quality of delivery systems. Unlike capital -which is highly mobile across regions and continents - good governance cannot be transplanted in an area, as it evolves basically within the prevailing socio-political structure over a long period. An outmoded social structure can never bring about or sustain good governance in the modern sense. On the contrary, it can frustrate exogenous attempts at good governance by its debilitating and corrupting influence.

The current debate on 'good governance' in India is largely divorced from the nature of the prevailing social structure and the need to generate socio-economic impulses for its transformation. As such, it comes out essentially with technocratic prescriptions regarding good governance in the poorer states as a prerequisite for attracting greater investment flows and for stepping up growth through the efficient use of resources. It underplays the role of factors like investment in infrastructure, technical change for raising the profitability of investment and empowerment of the people in triggering off the desirable changes in the prevailing socio-economic structure, which is the root cause of poor governance and inefficient delivery systems in the less developed areas.

For understanding the causes of backwardness and for formulating appropriate development strategies one has to go deeper into the history. For example, for over a century and half before independence, the rate of taxation was very high in the eastern zone and the extraction of surplus was much higher than in many other parts of the country. We know that there has been a significant drain of resources from the country in the colonial period. But there was also a significant interregional flow of resources within the country. There was a large net outflow of resources from the eastern region which was partly frittered away in conspicuous consumption and partly invested in other regions in infrastructure like irrigation and transport (Rao, 2005). This is how the less developed regions inherited poor infrastructure and outmoded institutions at the time of independence.

Even after independence, the per capita transfer of resources from the Finance Commission as well as the Planning Commission were lower for many of the less developed states for at least two decades when the cost of building infrastructure was relatively low (Rao, 2005). The transfer of resources, especially from the Finance

Commissions, has become progressive after the seventies. But in a federal democratic polity there are limits to such statutory transfers, particularly because many of our 'developed' states too are poor in absolute terms.

## **XII. The Way Ahead**

It is clear from the foregoing discussion that for reducing regional disparities in development, improving social and economic infrastructure in the backward unions through greater public investment needs to be given the highest priority in the development strategy. The other two areas of priority action for these regions are: speeding up social transformation through the empowerment of the common people and measures for good governance. In this presentation I have chosen to focus mainly on the inter-state disparities in levels of development. However, growing regional disparities within certain states, especially the bigger ones, is a matter of equal concern. It is clear from the development experience and the simmering unrest in several less developed parts of the country that without major initiatives at the national level, the regional disparities in development may accentuate further to crisis proportions threatening social harmony and national integrity, apart from depriving the nation of the opportunities for higher and sustainable development.

Unfortunately, precisely at this moment when imaginative and decisive initiatives are needed towards this end by the Centre, there are conflicting signals emanating from the policy-making levels, and a clear and coherent policy is yet to emerge. The 12th Finance Commission, while linking the debt write-off scheme for states with the quantum of reduction in their revenue deficits, fixed norms, targets and the time frame that are uniform across all states regardless of their initial levels of revenue deficit, income levels and debt-GSDP ratios. The permissible level of fiscal deficit under the Fiscal Responsibility and Budget Management Act is uniform across all states. Further, the recommendation of the 12th Finance Commission to dispense with the loan component of central assistance for state plans and leaving the states to directly access the market for loans can adversely affect the development of the poorer states whose credit worthiness is lower, unless, as suggested by the Finance Commission, the Centre volunteers to intermediate on behalf of the poorer states. Therefore, an alternative framework for enabling the poorer states to step up their

developmental expenditure needs to be quickly put in place by the Planning Commission.

The Mid-Term Appraisal of the Tenth Five Year Plan, by the Planning Commission, recognizes the growing regional disparities, and states that; the objective of bringing about greater regional balance must be the overriding consideration for determining the use of Central funds that flow as Central assistance to State Plans (Government of India, 2005, p.512). The Commission notes the inadequacy of the existing pattern of central assistance for state plans, through the Gadgil Formula, for making progress towards mitigating these imbalances and suggests that "The actual flow of funds to backward areas resulting from the operation of the Formula till date needs to be analysed and the Formula may need to be revisited in the present day context" (P.508). But with the acceptance of the recommendation of the 12th Finance Commission to dispense with the loan component of plan assistance, there is not much left for revisiting, except the grant component! At the same time, the Commission expresses helplessness in modifying the Formula and gives up any hope when it says that the recent proposals for modification have not been able to generate the required consensus among states. It appears that the normal Central assistance is likely to continue in its present form in the near term (P.512).

Such constraints notwithstanding, there is a strong case for renewing efforts at revising the **Gadgil** Formula, if only for making the grants component of Plan assistance more favourable to the less developed states. This is especially necessary if the quantum of grants has to be raised substantially to help such states in view of the constraints in accessing loans in the market. It is indeed ironical that Central assistance for state plans, whose avowed purpose is to ensure speedy development of the poorer states, is less progressive than the devolution from the Finance Commissions. This is because the latter has been left to be decided by a few experts whereas in the case of the former, consensus among states is indispensable (Vithal and Sastry, 2002).

Even so, before making their recommendations, the Finance Commissions have been holding extensive discussions with state governments as well as with various sections of our population. It speaks highly of the trust that our people have

reposed in the constitutional arrangements of our federal democratic polity that the recommendations of the Finance Commissions have been received, by and large, favourably. This suggests that a far-sighted leadership can still generate consensus among states and people at large on the need for a more progressive Formula for Central assistance for state plans in the interests of preserving social harmony and strengthening national integration.

The predominant weight now given to population (60%) in the Gadgil Formula needs to be brought down substantially to the level assigned in the Finance Commission Formula (25%), which has become acceptable. The latest figures of population should be used for the distribution of this amount among states. The existing practice of using 1971 population is iniquitous as it penalizes .populous states for their lower level of socio-economic development arising from their weaker resource position which is indeed the basic cause for their high population growth (Rao, 2005).

Certain criteria presently used, viz., tax effort, fiscal management, population control, female literacy, on-time completion of externally aided projects and success in land reforms which together claim 7.5 per cent of resources for distribution need to be revisited. For one thing, the measures of 'tax effort' and 'fiscal management' currently used, being different from those used by the Finance Commissions, are far from satisfactory. Besides, the contribution of allocations, based on these criteria, towards fulfilling the avowed objectives is dubious. This is because several other factors are far more important in improving the indicators chosen. They are also iniquitous because the allocations on the basis of these criteria benefit mainly the better-off states who, in any case, have the requisite resources for improving these indicators. The amount saved by modifying or dispensing with the above criteria (42.5%) may be distributed among states on progressive criteria like the deviation and the distance methods, as used now under the Gadgil Formula for the distribution of 25 per cent of Central assistance.

While mediating on behalf of the poorer states to access market loans, Centre should ensure that the resultant resources for plan are distinctly more progressive than hitherto under the existing Formula. Unlike the Tenth Plan's original proposals, the

Mid-Term Appraisal does not seem to favour rigidly linking Central assistance with the implementation of reform packages or other measures concerning good governance. It may, nevertheless, be desirable to put in place mechanisms for ensuring that the additional resources so accessed are in fact utilised for the development of social and economic infrastructure.

The Mid-Term Appraisal also projects several proposals to strengthen the resource position of the backward states, such as raising the royalty for the poorer states which are rich in forests and minerals; helping them through better project preparation etc. for accessing the Additional Central Assistance for the Externally Aided Projects; Backward Regions Grants Fund (BRGF) to address regional balance concerns; and refocusing Bharat Nirman project for rural infrastructure development as well as central sector expenditure from various ministries for the development of the poorer states.

At the end, it is heartening to note that the Planning Commission would like to "see itself in a more proactive role in championing the cause of states with the Central ministries in key policy issues that have strong equity and regional balance dimensions. In a liberalized, market-driven policy environment, the responsibility of the Commission is greater in that it has to ensure a level playing field for less developed states and regions" (**Government of India**, 2005, p. 513).

Indian Economy with the existing liberal financial policies and the global scenario, it has been the role of states like Gujarat, Maharashtra, Andhra Pradesh, Karnataka, Chennai, Punjab, and Haryana which have been moving with the trend of higher growth specially in the sectors they are embedded i.e. natural resources, mines and or taking advantage of skill and higher education. Likewise as this study is on Gujarat and its districts, the next chapter to follow is on Gujarat Economy Review.