

**HUMAN DEVELOPMENT IN INDIA  
IN A COMPARATIVE CONTEXT**

by

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## ABSTRACT

Human Development is both an end as well as means of growth and prosperity. It is a process which facilitates enhancing human choices as well as capabilities. Investment in human capital essentially involves improvements in the standards of nutrition, education, health, and habitat. Also UNDP's Human Development Index (HDI) has offered a better index of development than Income index.

An attempt has been made in this paper to study first, the level of achievements of human development in India in relation to the other countries. This will help to identify the gaps, suggest appropriate strategies including financial restructuring at the governmental level to be able to bring about perceptible improvements in the areas of human development in India and consequently create conditions for achieving sustained level of rapid growth with equity.

It appears that lack of adequate investment in human capital in India could be one of the principal reasons for perpetuation of low income, poor performance in population control, continuation of large-scale poverty, failures in tackling mounting trade gaps, practically no improvement in the total factor productivity growth, etc.

The country, therefore, needs much greater emphasis on human development.

### 1. INTRODUCTION

Human development is an end as well as means of growth and prosperity.

The World Development Report, 1980, of World Bank, has provided a comprehensive discussion on 'human development issues and policies'. This was done particularly with a view to provide a framework for effectively tackling the problems of poverty in the developing countries.

As early as in 1970s, it was realised both by ILO and the World Bank that growth alone will not reduce accumulated poverty in the poor countries at a reasonably good speed. Four main areas of human development, namely, education, health, nutrition, and fertility were identified as crucial for bringing about substantial progress in poverty eradication combined with a strong concern for growth.

The 'Human Development Report' of UNDP, introduced with effect from 1990, stated that 'The best way to achieve human development is to promote more equitable economic growth and more participatory development'. The report introduced presenting data on 'Human Development Index' (HDI) along with cross country data on profiles of human development every year since 1990. In its 1991 report it provided a framework for financing human development expenditure, discussed four different ratios for analysing public expenditure, and suggested ways of restructuring national budgets for mobilising additional resources for human development.

The role of human development in enhancing human capabilities and helping to improve the standard of living of the people has long been recognised by economists and policy makers in general.

Development depends on the **Capability, Desire and Drive** of the citizens of a nation to be able to organise themselves for this purpose. Investment in human capital then becomes very crucial for development.

Further, any disparity in human development across the different population groups and nations/regions creates interpersonal and inter regional income and wealth disparity, as well as acute poverty.

Prof. TW Schultz (1967) argued that, in the absence of large investment in human beings, the possibility of economic growth gets seriously limited. It has been widely observed that increases in national output have been large compared to the increases in land, man-hours, and physical reproducible capital. Investment in human capital is probably the major explanation for this difference.

High human development, according to Schultz, mostly account for the productive superiority of the technically advanced countries.

On the other hand, large differences in earnings reflect differences in health, education and nutrition levels across countries/regions and population groups. Low earnings can be explained by :

- virtually no schooling;
- in poor health;
- unskilled;
- suffering from acute malnutrition;
- little ability to do useful work; etc.

Investment in human capital will include investment  
in

- education;
- training;
- health facilities; and,
- facilitating internal migration.

This will also include current expenditures on

- food; and,
- shelter (including sanitation).

Proper training of mind is also an essential component of human capital formation. Difficulties of development like all difficulties of human actions *begin* and *belong* in the *mind*. Focus of education and training should simultaneously take care of, in addition to skill formation, appropriate training of mind for achieving meaningful all round development.

Important issues and choices that come to mind while pursuing development goals are :

- i) What means are used at individual levels to achieve development goals?
- ii) Is gain of some realised at the cost of others?
- iii) Social priority to be accorded to reduction of inequality and poverty over time.
- iv) Attitude towards :
  - value for education,
  - health,
  - nutrition,
  - hard work,
  - shouldering responsibility,
  - accountability,
  - quality improvements,
  - creativity,
  - development awareness in general,
  - helping the group (family, community, company) etc.

The recent experiences of the high developed countries of the Central, the East and the South-East Asian countries like China, Republic of Korea, Thailand, etc. indicate a very high correlation between the high level of investment in human capital and the achievement of high rate of growth of real per capita income sustained over a long period of time. The high growth rates of per capita incomes in these countries have in turn helped to fight out many long standing socio-economic problems of these countries. These include issues such as 1) population stabilisation, 2) reduction of unemployment to the extent of converting a labour surplus economy into a labour deficit economy, 3)

eradication of poverty, 4) reduction of inequality of income and wealth, 5) all round improvements in productivity, 6) elimination of trade gaps by increasing exports commensurate with increases in import demands, etc.

The World Bank (1993) Policy Research Report titled 'The East Asian Miracle' while investigating the causes of East Asia's success in achieving 'rapid growth with equity', highlighted that 'Private domestic investment and rapidly growing human capital were the principal engines of growth'. Among many other factors, the report also emphasised the importance of the role of 'The Principle of Shared Growth' as practised by these countries to win the support of the society at large. The leaders had to persuade the elites to share the benefits of growth with the middle class and the poor, and show them that they would indeed benefit from future growth.

Human development is thus considered crucial in pump priming the development process of an economy.

These developments were, however, not free from costs. New issues like 1) pollutions of various kinds, 2) nuclear threats, 3) increasing social tensions and disorders of various kinds, etc. have now cropped up which are seriously engaging the attention of policy makers and thinkers at all levels.

## **2 MEASURING HUMAN DEVELOPMENT.**

The UNDP has been bringing out, since 1990, **Human Development Index** (HDI) to provide a broader measure of development performance. Human Development Index (HDI), as estimated by UNDP, combines, i) Longevity, ii) Knowledge, and, iii) Income indicators, to give a composite measure of human development.

Life Expectancy at birth measures longevity as the sole unadjusted indicator.

Knowledge is measured by two educational stock variables, namely,

- a) Literacy Rate Index, and,
- b) Mean Years of Schooling.

The educational achievement is adjusted by assigning a weight of two-thirds to literacy and one-third to mean years of schooling.

For income, real income at PPP (Purchasing Power Parity) \$ is considered, and, HDI is based on the premise of diminishing utility of money. The higher the income relative

to the poverty line, the more sharply the diminishing utility affects the contribution of income to human development. Real GDP per capita (PPP \$) is suitably adjusted to take account of these factors. The exact formula used is as follows:

For any country,

$$HDI = 1/3 \cdot \sum_{i=1}^3 [(X_i - \text{Min } X_i) / (\text{Max } X_i - \text{Min } X_i)]$$

- i = 1 = Life expectancy
- = 2 = Educational attainment
- = 3 = Income

Details of calculation of HDI for India are shown as below:

| Item                           | Maximum | Minimum | India  |            |
|--------------------------------|---------|---------|--------|------------|
|                                |         |         | Actual | Normalised |
| Life expectancy at birth (yrs) | 78.6    | 42.0    | 59.1   | 0.467      |
| Educational attainment         | 3.0     | 0.0     | 0.93   | 0.31       |
| - Adult literacy (%)           | 99.0    | 18.2    | 48.2   | 0.37       |
| - Mean years of schooling      | 12.3    | 0.1     | 2.4    | 0.19       |
| Adjusted real GDP per capita   | 5075.0  | 367.0   | 1072.0 | 0.15       |
| HDI                            | 1.0     | 0.0     | ..     | 0.309      |

Table 1 provides HDI data for few selected countries. Out of the data provided for 173 countries, India ranks 134th. In all the three components, India is observed to be far behind compared to most of the countries.

HDI is also made gender-sensitive incorporating appropriate modifications in the formula. Efforts have also been made to make HDI adjusted for income distribution. The formula is again modified to take account of progress over time.

**Table 1 : Human Development Index.**

| Rank       | Country.          | Life Expect. at Brt. (yrs) 1990 | Adult Lit. rate (%) 1990 | Mean Years of School. 1990 | Real GDP Per Cap. (ppp\$) 1990 | Human Development Index |
|------------|-------------------|---------------------------------|--------------------------|----------------------------|--------------------------------|-------------------------|
| 1          | Japan             | 78.6H                           | 99.0                     | 10.7                       | 17616                          | 0.983                   |
| 6          | USA               | 75.9                            | 99.0                     | 12.3                       | 21449                          | 0.976                   |
| 10         | United Kingdom    | 75.7                            | 99.0                     | 11.5                       | 15804                          | 0.964                   |
| 33         | Korea, Rep. of    | 70.1                            | 96.3                     | 8.8                        | 6733                           | 0.872                   |
| 57         | Malaysia          | 70.1                            | 78.4                     | 5.3                        | 6140                           | 0.790                   |
| 70         | Brazil            | 65.6                            | 81.1                     | 3.9                        | 4718                           | 0.730                   |
| 86         | Sri Lanka         | 70.9                            | 88.4                     | 6.9                        | 2405                           | 0.663                   |
| 101        | China             | 70.1                            | 73.3                     | 4.8                        | 1990                           | 0.566                   |
| 132        | Pakistan          | 57.7                            | 34.8                     | 1.9                        | 1862                           | 0.311                   |
| <b>134</b> | <b>India</b>      | <b>59.1</b>                     | <b>48.2</b>              | <b>2.4</b>                 | <b>1072</b>                    | <b>0.309</b>            |
| 138        | Tanzania, U. Rep. | 54.0                            | 65.0                     | 2.0                        | 572                            | 0.270                   |
| 147        | Bangladesh        | 51.8                            | 35.3                     | 2.0                        | 872                            | 0.189                   |

Source : Human Development Report, 1993, UNDP, OUP, 1993.

### 3. HUMAN DEVELOPMENT IN INDIA IN A COMPARATIVE CONTEXT

The data on different aspects of profiles of human development in India with the comparative figures for Korea (ROK), Brazil, China, as well as the world average figures are discussed below.

All these data, including the definitions provided, were abstracted from UNDP's Human Development Report, 1993.

The figures of ROK and China will be interesting to compare as these countries represent successful cases, able to achieve a very high per capita income growth (during 1980-90, China, 7.8%, and ROK, 8.7%) inspite of being under two entirely different political systems. On the other hand Brazil could achieve only a low 0.5% growth rate of annual per capita income during the same 10 year period. India's performance of average annual growth rate of percapita income during the 25 year period from 1965 to 1990 was 1.9%, it improved to 3.2% during the decade 1980-90, but estimated to have dropped down to an average of 0.73% during the three year period, 1990-1 to 1993-4 after the reforms.

#### Life Expectancy at Birth (1990).

This measures the number of years a new born infant would live if prevailing patterns of mortality at the time of

its birth were to stay the same throughout its life.

This measure has been widely accepted as one of the important indicators of development. Higher life expectancy is associated with higher income, & lower infant mortality rate. Further, higher life expectancy is a result of higher literacy levels, including those of women, and improvements in health, nutrition, sanitation, etc. standards.

Life expectancy at birth (years) in India, 1990 was only 59.1 years. Life expectancy is highest in Japan with a figure of 78.6 years, and lowest in Sierra Leone of 42 years, with the average of low human development countries being 56.5 years.

Life expectancy of women in India is slightly above that of the total population (Male + Female), and is 59.3 years. This figure also indicates similar patterns as in the case of the figure of life expectancy for the total population in the country when compared to the averages of all developing countries, and the world average. Table 2 presents the comparative figures.

**Table 2 : Life Expectancy, All Population, and the Females Separately.**

| Item   | India | ROK  | Brazil | China | World Average |
|--|-------|------|--------|-------|---------------|
| All Population,<br>Life expectancy<br>at birth (1990)<br>(years) | 59.1  | 70.1 | 65.6   | 70.1  | 64.7          |
| Female Life Exp.<br>at birth(1990),yrs                           | 59.3  | 73.1 | 68.4   | 71.8  | 67.3          |

#### Access to Health Services (1987-90)

Access to Health Services means the percentage of the population that can reach appropriate local health services on foot or by the local means of transport in no more than one hour. This data is not available for India. The highest figure is, however, 100% and the lowest is 13% for Central African Republic.



### Access to Safe Water (1988-90)

This is defined as the percentage of the population with reasonable access to safe water supply, including treated surface water, or untreated but uncontaminated water such as that from springs, sanitary wells, and protected boreholes. India's data is 75% compared to highest of 100% and lowest of 12% in Central African Republic with the average of low human development countries being 62%. Indian figure is, however, above the average of that of the developing countries.

### Access to Sanitation (1988-90)

This is defined as the percentage of population with access to sanitary means of excreta and waste disposal, including outdoor latrine and composting. India's figures is a low 13% against highest of 100% and the lowest of 9% in Niger, with the average of low human development countries being 20%. India's performance is even much lower than the average of the least developed countries. Table 3 presents data for India in comparison with ROK, Brazil, China and the World average.

**Table 3 : Population with access to Health, Safe Water & Sanitation**

| Item                          | India | ROK | Brazil | China | World Average |
|-------------------------------|-------|-----|--------|-------|---------------|
| Population with access to (%) |       |     |        |       |               |
| - Health Ser. (87-90)         | ..    | 100 | ..     | ..    | ..            |
| - Safe Water (88-90)          | 75    | 78  | 96     | 71    | ..            |
| - Sanitation (88-90)          | 13    | 99  | 78     | 96    | ..            |

### Adult Literacy (1990)

This is defined as the percentage of persons aged 15 years and above who can, with understanding both read and write a short simple statement on their everyday life. This figure is only 48% for India against highest of 100% and lowest of 18% in Burkina Faso, the average for the low human development countries being 49%. India's performance is slightly above that of the average of the least developed countries and much below the average of the developing countries.

The Adult Literacy for females in India is lower at 34% only against the highest of 100% and the lowest of 9% in Burkina Faso, the average of the low human development countries being only 39 years. India's figure is lower than the average of the low human development countries. The figure, however, is very close to the average of the least developed countries. Table 4 provides comparative data for India against those of ROK, China, Brazil and the World average.

**Table 4 : Adult Literacy Rate**

| Item                                      | India | ROK | Brazil | China | World Average |
|---|-------|-----|--------|-------|---------------|
| Adult Literacy Rate (1990) (% of age 15+) |       |     |        |       |               |
| - Total                                   | 48    | 96  | 81     | 73    | ..            |
| - Female                                  | 34    | 94  | 80     | 62    | ..            |

Illiterate Adults (15+), 1991 (millions).

This is defined as the number of adults (above 15 years age) who are illiterates. In India this figure during 1991 was as high as 281 millions, while the total for all the developing countries was 920 millions. The percentage of illiterates in India to the total of all the developing countries was as high as 31%.

The number of illiterate females was 174 millions in 1990. This constitutes about 29% of total illiterate females of all the developing countries taken together. Table 5 presents these comparable data.

**Table 5 : Illiterate Adults**

| Item                                 | India | ROK | Brazil | China | World Average |
|--------------------------------------|-------|-----|--------|-------|---------------|
| Illiterate Adults (15+) 1991 (Mls.)  | 281   | 1.2 | 18.4   | 224   | ..            |
| Illiterate Females (15+) 1991 (Mls.) | 174   | 1.1 | 9.9    | 156   | ..            |

### Literary Rate (1990)

This is defined as the percentage of literate people (Literacy defined as the percentage of people who can with understanding, both read and write a short simple statement on their everyday life) to the population in the age group 15 to 19 years.

India's figure is 66% against the highest of 100% and the lowest of 33% in Burkina Faso, while the average of low development countries is also 66%. This is above the average of the least developed countries but much below the average of all the developing countries.

Women literacy rate is low at 40% which is much lower than the world average of 69%. The figure is, however, slightly higher than the average of the least developed countries, but much lower compared to the average of all the developing countries.

The number of children who were not in primary or secondary schools during 1991 was 72.9 millions which is about 22% of such children in all the developing countries taken together. These data are presented in Table 6.

**Table 6 : Literacy Rate**

| Item  | India | ROK | Brazil | China | World Average |
|---|-------|-----|--------|-------|---------------|
| Literacy Rate (Male & Female)<br>1990<br>(as % of age<br>15-19) | 66    | 100 | 92     | 93    | ..            |
| Literacy Rate (Female)<br>(age 15-24)<br>1980-89                | 40    | ..  | 85     | 82    | 69            |

### Mean Years of Schooling (1990)

This is defined as the average number of years of schooling received by persons aged 25 years and over. India's figure is low at 2.4 years, the highest being 12.3 years in U.S.A and lowest 0.1 years in Niger and Burkina Faso. The average of low human development countries is 2.3 years. India's figure is much lower than the world average of 5 years and the developing countries' average of 2.7 years.

The same figure for females in India is low at 1.2 years with average of low human development countries being 1.3 years. The highest figure is 12.4 years for USA and the

lowest of 0.1 years only in number of countries like Somalia, Niger, Burkina Faso, etc. India's figure is much lower than the world average of 4.3 years and developing countries' average of 2.7 years. These data are presented in Table 7.

**Table 7 : Mean Years of Schooling**

| Item                               | India | ROK | Brazil | China | World Average |
|------------------------------------|-------|-----|--------|-------|---------------|
| Mean years of schooling (25+) 1990 |       |     |        |       |               |
| - Total                            | 2.4   | 8.8 | 3.9    | 4.8   | 5.0           |
| - Female                           | 1.2   | 6.7 | 3.8    | 3.6   | 4.3           |

Scientists and Technicians (1986-90)

Scientists are the persons with scientific or technological training, usually completion of third-level education in any field of science who are engaged in professional work on research and development activities, including administrators and directors of such activities.

Technicians are the persons who are engaged in scientific research and development activities who have received vocational or technical training for atleast 3 years after the first stage of second level education.

India has 3.6 persons per thousand population with highest figure, while for Sweden of 262 persons and the lowest is a very negligible figure, the average of the low human development countries being 2.9 persons. India's figure is much lower than the world average of 22.2 persons per 1000 population and all developing countries' average of 8.9 persons per 1000 persons. These data are presented in Table 8.

**Table 8 : Scientists & Technicians**

| Item  | India | ROK  | Brazil | China | World Average |
|---|-------|------|--------|-------|---------------|
| Scientists & Technicians (1986-90), per 1000 people | 3.6   | 47.3 | 29.5   | 8.5   | 22.2          |

### Daily Calorie Supply Per Capita (1988-90)

This is defined as the calorie equivalent of the net food supplies in a country divided by the population, per day. India's figure of 2229 is higher than the average of the least developed countries (2130), but, lower compared to that of all developing countries (2490). These data are presented in Table 9.

**Table 9 : Daily Calorie Intake**

| Item                                    | India | ROK  | Brazil | China | World Average |
|---|-------|------|--------|-------|---------------|
| Daily Calorie supply per cap. (1988-90) | 2229  | 2826 | 2730   | 2641  | ..            |

### Public Expenditures

This includes all central government offices, departments, establishments and other bodies that are agencies or instruments of the central authority of a country. It includes current and capital or developmental expenditures but excludes provincial, local and private expenditures. In India such public expenditures for the year 1988-90 for education is as low as 3.2% of GNP. The same for health is 3.2%. These figures are slightly above the level of the Least developed countries but they are lower than those of the averages of all the developing countries.

**Table 10 : Public Expenditure**

| Item                                   | India | ROK | Brazil | China | World Average |
|--|-------|-----|--------|-------|---------------|
| Public Exp. on (as % of GNP) (1988-90) |       |     |        |       |               |
| - Education                            | 3.2   | 3.7 | 3.9    | 2.4   | ..            |
| - Health                               | 3.2   | 6.4 | 3.9    | 3.1   | ..            |

### Annual Population Growth Rate

The Annual Population Growth Rate during 1960-91 in India was 2.2%. This growth rate is lower compared to the

average of the developing countries, but much higher compared to the average of the industrial countries of 0.8%. This figure is also higher compared to the World average of 1.9%. These data are presented in Table 11.

**Table 11 : Annual Population Growth Rates**

| Item                                 | India | ROK | Brazil | China | World Average |
|--------------------------------------|-------|-----|--------|-------|---------------|
| Annual Pop.Growth Rate (1960-91) (%) | 2.2   | 0.8 | 1.5    | 1.2   | 1.9           |

People In Absolute Poverty

The number of poor in India during 1991 is estimated as 423 millions with a rural component of 321 millions. Rural poor is about 76% of total poor in the country. India's total poor is about 33% of total poor of all the developing countries taken together. These data are provided in Table 12 below.

**Table 12 : Number of Poor in Absolute Poverty**

| Item                                    | India | ROK | Brazil | China | World Average |
|---|-------|-----|--------|-------|---------------|
| People in Absolute Poverty, 1991 (Mls.) |       |     |        |       |               |
| - Total                                 | 423   | 5.7 | ..     | ..    | ..            |
| - Rural                                 | 321   | 1.4 | ..     | ..    | ..            |

Mortality Rates

The Infant Mortality Rate is measured as the annual number of deaths of infants under one year of age per 1000 live births. Indian figure was as high as 90 in 1991. This is higher than the world average (64) as well as the average of all developing countries (71), but, slightly lower than the average of the least developed countries (114).

Under-five Mortality Rate is the annual number of deaths of children under five years of age per thousand live births average over the previous five years. This figure was as high as 142 in 1990. The lowest is 7 in Hong Kong among the developing countries and the highest is 297 in Mozambique. India's figure is higher than the world average of 93 as well as world developing countries' average of 104.

Maternal Mortality Rate is defined as the number of deaths of women from pregnancy related causes per one lakh live births. In India, this figure was very high at 550 during 1988. The same is very low of 26 only in the industrialised countries, 370 as the world average and 420 as the average of all the developing countries. The comparative figures of mortality rates are presented in Table 13 below.

**Table 13 : Mortality Rates**

| Item   | India | ROK | Brazil | China | World Average |
|--|-------|-----|--------|-------|---------------|
| Infant Mortality Rate (per 1000 live births) 1991      | 90    | 22  | 59     | 29    | 64            |
| Under-Five Mortality Rate (per 1000 live births) 1990  | 142   | 30  | 83     | 42    | 93            |
| Maternal Mortality Rate (per 1 lakh live births), 1988 | 550   | 80  | 230    | 130   | 370           |

### Child Survival & Development.

#### Low Birth Weight

This is defined as the percentage of babies born weighing less than 2,500 grams. In India, this percentage is very high (30%). It is not only high compared to the average of all developing countries (18%), but it is even much higher compared to the average of all the least developed countries (16%).

#### Children Suffering from Mal-Nutrition (1980-91)

Three different indicators are provided in the Human Development Report of UNDP, 1993 for measuring this. They are:

- 1 Under Weight (under five)
- 2 Wasting (12-23 months)
- 3 Stunting (24-59 months)

Under Weight is defined as the percentage of children, under the age of 5, below minus two standard deviations from the median weight-for-age of the reference population.

Wasting is defined as the percentage of children, between 12 and 23 months, below minus two standard deviations from the median weight-for-height of the reference population.

Stunting is defined as the percentage of children between 24 and 59 months, below two standard deviations from the median height-for-age of the reference population.

All these three figures are much higher in India compared to even those of the average of the least developed countries. This indicates the severe level of mal-nutrition that the children below 5 years in India are suffering from.

The number of mal-nourished children under age 5 during 1991 was 73.1 million constituting about 37% of the total mal-nourished children of all the developing countries taken together. All these data are presented in Table 14 below.

**Table 14 : Child Survival & Development**

| Item  | India | ROK | Brazil | China | World Average |
|---|-------|-----|--------|-------|---------------|
| Child Survival & Development                                |       |     |        |       |               |
| - Low Birth Wt. Babies (%)                                  |       |     |        |       |               |
| 1986-90   | 30    | 4   | 15     | 6     | ..            |
| - Child Malnutrition (%), 80-91                             |       |     |        |       |               |
| a. Under Weight (under five)                                | 63    | ..  | 7      | 21    | ..            |
| b. Wasting (12-23 months)                                   | 27    | ..  | 2      | 8     | ..            |
| c. Stunting (24-59 months)                                  | 65    | ..  | 15     | 41    | ..            |
| Malnourished Children Under 5, 1991 (Mls.)                  | 73.1  | ..  | 1.2    | 25.3  | ..            |
| - Children not in Primary or Secondary Schools, 1991 (Mls.) | 72.9  | 0.2 | 3.5    | 28.4  | ..            |

The above data showing the profiles of human development covering important indicators, namely, Life Expectancy, Sanitation, Mean Years of Schooling, Population



Growth Rates and Infant Mortality Rates in India compared to ROK, China, Brazil definitely gives ROK, the highest rank, followed by China with the second rank, Brazil, the third rank and India the lowest rank. This ranking is in line with the achievement of average per capita income growth during the 25 year period between 1965 to 1990.

#### 4. GROWTH AND HUMAN DEVELOPMENT IN INDIA

Indian economy continues to suffer from number of longstanding problems. Four most important among them are i) low income and low rate of growth of per capita income, ii) high population growth, poverty and unemployment, iii) very low total factor productivity growth, and iv) mounting trade (foreign) gaps.

It will be useful here to first elaborate on each of these issues, and then discuss the possibility of bringing about improvements in them through higher emphasis on Human Development.

##### Income Growth

India's total income (Net National Product at factor cost) was only Rs.8574 crores at current prices in 1950-51, which increased to Rs.473246 crores (quick estimate) in 1991-92, indicating a growth rate of approximately 10.3% per annum.

The per capita income at current prices has increased from Rs.238.8 to Rs.5528.6 during the same period. The per capita income has increased approximately @ 8% per annum.

On the other hand, the population has increased @ 2.3% per annum during the 41 year period, 1950-51 to 1991-92.

The per capita income at constant 1980-81 prices has increased from Rs.1126.9 in 1950-51 to Rs.2174.5 in 1991-92, indicating an increase @ 1.62% per annum.

Comparing income growth at current & constant prices, an estimate of an average inflation rate of 6.38% per annum is obtained.

The World Development Report, 1993, provides data on GNP per capita in US dollars for 1991, for 127 countries of the World. Switzerland shows the highest income of US \$ 33610, and the lowest is Mozambique with US \$80. The average per capita incomes of different groups of countries for 1991 were as follows :

|                         |   |       |       |
|-------------------------|---|-------|-------|
| Low Income Countries    | : | US \$ | 350   |
| Middle Income Countries | : | US \$ | 2480  |
| - Lower Middle Income   | : | US \$ | 1590  |
| - Upper Middle Income   | : | US \$ | 3530  |
| High Income Countries   | : | US \$ | 21050 |
| World Average           | : | US \$ | 4010  |

India's figure is closer to the average of low income countries of US \$ 350, and is US \$330. If the country is to achieve a modest income target equivalent of average of the lower-middle-income countries of US \$1590 as on 1991 by 2000 AD, it will require an annual growth of per capita income of approximately 19% per annum. This high growth appears to be too ambitious, and cannot most possibly be achieved.

### Population

The low level as well as low growth rate of income is greatly responsible for perpetuation of unemployment and poverty as well as inability of the country to control its population growth and stabilise it at an earlier date.

The rate of growth of population is currently little over 2% per annum.

According to the Eighth Plan document (Vol.1, Ch.2. Development Perspective, pp 23) the population is expected to stabilise (achieve zero Population Growth, ZPG) only towards the end of the 21st century.

### Poverty and Unemployment

There are several important reasons why poverty alleviation in India should be given topmost priority in its development process.

Firstly, high poverty is a drag on the country's overall development. The country's average productivity level will be low so long as its large population remain poor, because the poor have a very low productivity. This explains low level as well as low rate of growth of per capita income.

Secondly, the country continues to lose huge potential output.

Thirdly, from the corporate point of view, poverty alleviation will help to expand domestic markets for industrial products.

Fourthly, poverty alleviation will help to ease high population growth.

Fifthly, poverty alleviation will help to ease many socio-political tensions.

It appears that poverty alleviation is not only an important development objective from the point of view of generation and distribution of fruits of development across all sections of population, but also essential as one of the most important preconditions for moving the economy to a higher growth path.

### Measurement of Poverty

Several different indicators are used to measure poverty levels. One of the most common index is poverty line. This is also called Head-Count Ratio. Poverty line or Head-Count Ratio is defined as that income level below which a minimum nutritionally adequate diet plus essential non-food requirements are not affordable. The poverty line income will be above the level of subsistence income. Subsistence income is a minimum level of income which is just sufficient to keep the labourer alive to be able to continue to be in the labour force. Obviously, the productivity of the labour force at the subsistence level will be extremely low, and therefore, earnings also will be very low.

One of the major defects of poverty line measure is that it does not give an idea of the extent to which the mean income/expenditure of the poor falls short of the poverty line income. To fill up this gap, the concept of poverty or income gap has been introduced. The poverty gap provides information on the additional income required to be generated to eliminate poverty, and is measured as follows:

$$PG = PLI - MIP$$

where, PG = Poverty Gap  
MIP = Mean Income of Poor, and  
PLI = Poverty Line Income.

Both poverty line and poverty gap measures provide only partial information about poverty measures, and do not give any idea about the distribution of income among the poor which is also important to know the severity of poverty among the poor. AK Sen has, therefore, proposed an alternative measure known as Sen's P Index. This index combines the elements of poverty line, poverty gap, and the income distribution among the poor. This is measured as follows:

$$\text{Sen's P Index} = \text{NOP/TP} * (1/\text{PLI}) * [\text{PLI}-\text{MIP} (1-\text{IDP})]$$

Where, NOP = Number of Poor  
TP = Total Population  
IDP = Income Distribution among Poor as measure by Gini Co-efficient.

The Sen's P index shows that if head count ratio (NOP/TP) decreases, poverty will decrease. It will also show that if the mean income of the poor (MIP) increases, poverty will decrease. Finally, if income distribution among the poor (IDP) improves that is, its value decreases, poverty will decrease. It is also possible that these three factors may simultaneously change. In that case the impact on poverty reduction will be substantial.

EPW Research Foundation has provided data (EPW August 21, 1993) on various measures of poverty for rural India as estimated by various authors in the past. These data are reproduced below for the year 1977-8 (Rural):

|   |   |           |
|---|---|-----------|
| Poverty Line (Rs.per head per month), (PLI)             | = | Rs. 57.89 |
| Percentage of Poor (NOP/TP)                             | = | 57.78%    |
| Mean Income of the Poor (Rs. per head per month) (MIP)  | = | Rs. 41.08 |
| Poverty Gap (PLI-MIP) (Rs.per head per month)           | = | Rs. 16.81 |
| Gini Co-efficient of distribution income of poor, (IDP) | = | 0.16      |
| Sen's Poverty Index                                     | = | 0.23      |

The latest available estimates of poverty line and the percentage of poor for rural and urban areas separately are provided below in Table 15.

**Table 15 : Poverty Line & Percentage of Poor, 1987-88**

| Item                 | Rural  | Urban  | Combined |
|----------------------|--------|--------|----------|
| Poverty Line (Rs.)   | 112.83 | 162.15 | 126.06   |
| No. of Poor (Crores) | 22.1   | 8.1    | 30.2     |
| % of Poor            | 37.6   | 38.9   | 38.0     |

Source : Report of the Expert Group on Estimation of Proportion and Number of Poor, Planning Commission, 1993.

## Ultra Poor

Kakwani and Subba Rao (EPW March, 31, 1993) have provided estimates of Head Count Ratio and Poverty Gap for Ultra Poor. The cut-off income of Ultra Poor is considered as Rs.40 per capita per month against that of poor of Rs.50. While the Head Count Ratio and the Poverty Gap figures for rural India for 1983 were 48.8% and 13.8% respectively, the same figures for Ultra Poor households were lower at 30.3% and 7.3% respectively.

## Relative Poverty

Poverty measure is also provided in relation to income levels and is known as relative poverty. One way of measuring relative poverty is to work out the ratio between poverty line income and the average per capita income. For rural India for the year 1987-88, this figure has been estimated as 0.56. This means that the poverty line income is little over half the mean income of the rural population in India.

The other measure of relative poverty is to compare mean income of the poor (in place of poverty line income) to the mean income of the entire population. This measure is expected to be lower than the previous measure of relative poverty. During 1983-84, when the ratio of poverty line income to mean income of rural India was 0.61, the ratio between the mean income of the poor and the mean income of entire population was 0.52.

All the above measures of poverty assume only a modest rise in income of the poor sufficient only to meet minimum nutritional requirement plus a very bare amount to meet other non-food expenses. According to Planning Commission estimate (SR Hashin, 1990, 40 years of Indian economy - structure and dimensions of growth, 73rd Conference of the Indian Economic Association) while the share of food items in total household expenditure in rural area for 1987-88 for the people above poverty was 61.1% only, the same figure for the people below the poverty line was 78.5%. The same figure for the urban area relating to share of food items in household expenditure for the people above poverty and below poverty respectively were 54.2% and 73.7% only.

The International Agencies like ILO, World Bank, et ., have been talking of provision of basic needs as the criteria for poverty alleviation. Basic needs include food, clothing, housing, health, education, and certain minimum entertain facilities.

The World Bank and UNDP have also been talking quite emphatically the need for higher emphasis on Human

Development as an important pre-condition for poverty alleviation.

### Productivity

Table 16 provides data on comparative figures of productivity levels of the manufacturing sectors of a few developed and the developing countries. In all the countries the growth rates of value added are found to be higher compared to the weighted (income shares used as weights) average growth rates of the aggregate of labour and capital inputs. The residue figures indicate the contributions of growth rates of total factor productivity (TFPG). The contributions of TFPG in the developed countries (average) as expected, are high at 49%, while for the developing countries' average is slightly lower at around 31% only. India's figure is not only low, but negative at -2.9%. This means that India has not been able to achieve growth rates of value added as much as the growth rates of combined labour and capital inputs.

**Table 16 : The Growth of Output, Inputs, and Total Factor Productivity (TFP) in Manufacturing Sector**

(All figures are in percentages)

| Economy                 | Years             | Growth<br>of<br>Value<br>Added | TFP            |       | Growth<br>of<br>Capital<br>Input | Growth<br>of<br>Labour<br>Input | Labour<br>Income<br>Share |
|-------------------------|-------------------|--------------------------------|----------------|-------|----------------------------------|---------------------------------|---------------------------|
|                         |                   |                                | Growth<br>Rate | Share |                                  |                                 |                           |
| -----                   |                   |                                |                |       |                                  |                                 |                           |
| Developed<br>Countries  |                   | 5.4                            | 2.7            | 49.0  | 5.2                              | 1.1                             | 61.5                      |
| USA                     | 60-73             | 4.3                            | 1.3            | 30.2  | 4.0                              | 2.2                             | 58.6                      |
| Japan                   | - " -             | 10.9                           | 4.5            | 41.3  | 11.5                             | 2.7                             | 58.5                      |
| Developing<br>Countries |                   | 6.3                            | 2.0            | 31.0  | 5.5                              | 3.3                             | 54.7                      |
| Brazil                  | 60-74             | 7.3                            | 1.6            | 21.9  | 7.5                              | 3.3                             | -"-                       |
| India                   | 59-60 to<br>78-79 | 6.24                           | -0.18          | - 2.9 | 4.77                             | 1.65                            | 47.5                      |
| Korea,<br>Rep.of        | 60-73             | 9.7                            | 4.1            | 42.3  | 6.6                              | 5.0                             | 63.3                      |
| Centrally<br>Planned    |                   | 8.2                            | 2.5            | 35.0  | 8.0                              | 4.5                             | 60.0                      |
| -----                   |                   |                                |                |       |                                  |                                 |                           |

Source: Chenry, Robinson & Syrquin (1986), Table 2.2

### Trade Gaps

India's imports which was only US \$ 1.3 billions in 1949-50 went up to US \$ 16.6 billions by 1992-3. The

corresponding figures for exports were US \$ 1.016 & 13.08 billions respectively. India has always been having negative trade balances (barring the current years of import compression due to recession).

India's debt burden went on increasing. The debt accumulated to about US \$ 85.4 billions by 1992-3 and, the debt servicing as percentage of exports became as high as 36% during 1991-2. The oil imports to exports during 1992-3 was as high as 30.4%. Hardly 1/3rd of export earnings is left for uses as maintenance and project imports.

This is a very critical situation. India's future growth depends on high export performance. Here again, productivity improvements are very essential for export performance and need higher emphasis on human development.

Table 17 presents data on external transactions of the Indian economy during the last 3 years after reforms.

**Table 17 : External Transactions**

| Item                         | (US \$ billion) |        |        |
|------------------------------|-----------------|--------|--------|
|                              | 1990-1          | 1991-2 | 1992-3 |
| Exports                      | 18.1            | 17.9   | 18.4   |
| Oil Imports (net)            | 5.5             | 4.9    | 5.6    |
| % Oil Imports to Exports     | 30.4%           | 27.4%  | 30.4%  |
| Imports                      | 24.1            | 19.4   | 21.7   |
| Trade Balance                | -6.0            | -1.5   | -3.3   |
| External Debt                | 81.9            | 82.2   | 85.4   |
| Debt Service Payments        | 6.43            | 6.44   | ..     |
| Debt Service as % of Exports | 35.5            | 36.0   | ..     |

Source : Annual Report, RBI, 1992-3.  
Economic Survey, MOF, GOI, 1992-3

## 5. HUMAN DEVELOPMENT STRATEGIES

The above discussions undisputedly point to a very low human development as well as a very low growth performance in India. Further, the growth in India has been concentrated in selected areas and have benefitted a very tiny section of the population who were fortunate to have access to adequate human development.

The twentieth century witnessed all over the world growth concentrated in selected regions and created disproportionate amount of inter regional and interpersonal disparity in the distribution of income and wealth.

The twenty first century is likely to reverse this trend. The new trend will be 'Rapid Growth with Equity'. The East Asian countries have already taken the lead. The other developing countries are definitely going to follow.

India has always been propagating for 'growth with equity'. But the country could not achieve so far any visible success in this endeavour. The country's development strategies and priorities thus need revamping.

Recently, India has undertaken series of reform measures. The country is currently busy adjusting to these changes and good results are expected in due course. But the above findings about the miserable state of human development in India compared to the other developing countries very forcefully indicate that equal emphasis has to be put on human development as much as in reform measures for the country to move to a higher growth path.

The most important strategy should be to improve the standard of nutrition of the entire population. This will require higher emphasis on agricultural production.

India's food production, as on 1993, reached a level of about 181 million tonnes against China's figure of about 400 million tonnes.

India's land productivity is very low. Food production can be increased to 300 million tonnes with only about 100 million hectares, against the 1990-91 level of area under food of about 128 million hectares.

Universal Primary Education of a reasonably good standard all over the country will be the second most important strategy.

The country has already adopted 'Health for all Strategy'. This needs to be speeded up.

Housing, including sanitation needs a very high emphasis. It should be possible to adopt a policy of minimum housing with sanitation for all.

All these strategies will help to improve human developemnt standard of all and simultaneously create great demands for industrial products like cement, steel, etc., as it actually happened in China.



Much needs to be improved in the attitudes of the elites towards sharing the fruits of development with the poor and the middle class. The distribution of income and wealth should be in proportion to each person's contribution to income and wealth generation. Any income and wealth sharing disproportionate to one's contributions create suspicions and lowers productivity. Growth should take priority, and distribution system adopted should promote highest growth. East Asian countries have been very successful in this area also.

The availability of social priority items like nutrition, primary education, primary health care, housing, water and sanitation should get priority over other semi-luxury and luxury items. Sufficient priority should be given to financing these items by the government.

Finally, these plans and their implementations should be done at the regional levels for better management.

## **6. FINANCING HUMAN DEVELOPMENT**

Finance for Human Development will partly come from private sources and partly from public expenditures.

### Private

Table 18 provides estimated data on per capita consumption for a few broad groups of consumption items for the poor and total (poor + non-poor) population separately.

Data on per capita consumption expenditure for the total population for the latest year, 1991-2 have been estimated from NAS (National Accounts Statistics) data as published by CSO, 1993.

The estimates of per capita consumption of the poor have been obtained from NSS (National Sample Survey) data, 42nd Round, July 86 - June 87. Cut off per capita expenditure for rural poor has been taken as Rs.100 covering the lowest 36.8% of population. The similar cut off for the urban population is taken as Rs.150 covering the lowest 38.5% population.

The rural urban data were aggregated considering the proportion of rural population to total as 74% as in 1991 census. For each consumption category the proportions of consumption of poor to the total of that category for the total population as obtained for 1986-87 have been used, without any adjustment, to estimate the share of the poor for 1991-92 from the total as obtained from NAS as mentioned above.

As expected, the per capita consumption of the poor was very low compared to that of the entire population. The per capita consumption of poor was only Rs.2090 against that of the average of the entire population of Rs.4550. The per capita consumption of the poor was thus only 46% of the average of the total population.

The major expenditure of the poor is on food which is about 69% of the total expenditure. Even the per capita consumption on food is much lower compared to that of the average of total population. The per capita expenditure of poor is only Rs.1440 which is about 57% of that of the entire population of Rs.2505.

The per capita expenditure of the poor on non-food items is little over 30% of that of the average of the entire population. Expenditure of the poor on Clothing and Footwear was only Rs.70 against that of the entire population of Rs.455. The per capita consumption of the poor on durable goods was only a negligible figure of Rs.5 against Rs.130 of the entire population. The per capita consumption of the poor on fuel is Rs.125 against Rs.180 of the entire population.

**Table 18: Per Capita Consumption Expenditure, Total Population, and Poor, 1991-92**  
(In Rs./annum, current prices)

| Item                  | Total Population | Poor   |
|-----------------------|------------------|--------|
| 1.Cereals & Pulses    | 720              | 560    |
| 2.Other Food          | 1785             | 880    |
| 3.Total Food          | 2505             | 440    |
|                       | (55.0)           | (68.9) |
| 4.Clothing & Footwear | 455              | 70     |
| 5.Fuel                | 180              | 125    |
| 6.Durable Goods       | 130              | 5      |
| 7.Other Non-food      | 280              | 450    |
| 8.Total Non-food      | 2045             | 650    |
|                       | (45)             | (31.1) |
| Total Consumption     | 4550             | 2090   |
|                       | (100)            | (100)  |

Source: National Accounts Statistics, 1993, Statement 14, pp.38. NSS, 42nd Round, July 86 - June 87, Tables 1.OR, 3.OR, 1.OU & 2.OU

The figures in brackets indicate percentages to the total of each population group.

The expenditure on Medical and Health for that year was about 2.3% of the total, Education 3.4%, and Recreation

and Cultural Services 0.4%. The private expenditure on social services covering Health, Education, Recreation and Cultural activities together covered about 6% of total private consumption expenditure. In per capita terms, it is about Rs.280.

### Central Government

Against the figures of private final consumption on social services, the Central Government expenditure both plan and non-plan as provided in budget estimate for 1993-94 was little over 8,000 crores or a per capita expenditure of Rs.91.

### State Government

The real per capita social expenditure by the State Governments for the year 1990-91 at 1982-83 prices was estimated to be Rs.187.37. Table 19 presents data on per capita expenditures of major states for 1990-1 at 1982-3 prices.

**Table 19 : Real Per Capita Expenditures of Major States, 1990-91**

Rupees at 82-83 prices

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| States               | Total<br>Exp. | Social<br>Exp. | Edun.<br>Exp. | Medical<br>PH,FW,WS,<br>and Sanitary |
|----------------------|---------------|----------------|---------------|--------------------------------------|
| Andra Pradesh        | 505.74        | 176            | 83            | 34                                   |
| Assam                | 609.86        | 185            | 106           | 46                                   |
| Bihar                | 356.08        | 119            | 72            | 24                                   |
| Gujarat              | 699.89        | 215            | 114           | 43                                   |
| Haryana              | 755.38        | 218            | 107           | 43                                   |
| Karnataka            | 576.85        | 188            | 94            | 37                                   |
| Kerala               | 594.39        | 227            | 131           | 49                                   |
| Madhya Pradesh       | 447.71        | 151            | 71            | 35                                   |
| Maharashtra          | 702.09        | 217            | 117           | 45                                   |
| Orissa               | 489.54        | 157            | 79            | 34                                   |
| Punjab               | 943.52        | 250            | 144           | 58                                   |
| Rajasthan            | 539.24        | 182            | 94            | 60                                   |
| Tamil Nadu           | 594.83        | 234            | 113           | 50                                   |
| Uttar Pradesh        | 428.53        | 125            | 75            | 29                                   |
| West Bengal          | 430.90        | 166            | 92            | 36                                   |
| All India<br>Average | 578.30        | 187            | 99            | 42                                   |

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Source: Social Sector Expenditure and Human Development, Seetaprabhu and Chatterjee, Table 3, pp.48.

## International

The Official Development Assistance (ODA) received by India during 1991 was US \$ 2 per capita with an Aid Social Allocation Ratio during 1988-90 of about 10.3%. The data on per capita expenditure on social services from the private, government, and international agencies are summarized as under :

|                      |            |
|----------------------|------------|
| - Private            | Rs. 280    |
| - Central Government | Rs. 91     |
| - State Government   | Rs. 187.37 |
| - International      | Rs. 60     |
|                      | -----      |
| Total                | Rs. 618.37 |
|                      | -----      |

Table 20 presents cross-country data on public social spending for 1988.

**Table 20 : Cross Country Analysis of Public Social Spending, 1988**

| Country          | GNP Per Capita (US \$) | Human Exp. Per Capita (US \$) | Human Exp. Ratio (%) (5+6+7) |
|------------------|------------------------|-------------------------------|------------------------------|
| 1                | 2                      | 3                             | 4                            |
| 1.Korea          | 3600                   | 133                           | 3.7                          |
| 2.Porazil        | 2160                   | 90                            | 4.2                          |
| 3.Malaysia       | 1940                   | 123                           | 6.3                          |
| 4.Indonasia      | 440                    | 3                             | 0.6                          |
| 5.Sri Lanka      | 420                    | 10                            | 2.5                          |
| 6.Pakisthan      | 350                    | 3                             | 0.8                          |
| 7.India          | 340                    | 9                             | 2.5                          |
| 8.China          | 330                    | 7                             | 2.1                          |
| 9.Tanzania       | 160                    | 4                             | 2.4                          |
| Weighted Average | 570                    | 17                            | 2.9                          |
| UNDP norm        | -                      | -                             | 5                            |

Source: Human Development Report, 1991, Tables 3.1, & 3.2.

In a poor and developing country, the drive for increasing the share of expenditure on social services should come primarily from the government, and the international agencies. The UNDP is of the view that it is possible to increase the share of both government and international agencies in social service expenditures by suitable restructuring of the expenditure programmes.

## Restructuring National Budget.

Nearly 5.5 % of GNP of the developing world are spent on defence. It is estimated that nearly \$50 billion a year or 2% of GNP of the developing countries can be released for more productive purposes by freezing military expenditures. In India, defence expenditure increased by about 12% per year at current prices between 1984-85 to 1993-94.

In India, the expenditure on defence in the 1993-94 budget was Rs.19180 crores. This is 14.6% of total expenditure or, Rs.215 per capita. The expenditure on social services (plan as well as non-plan) was Rs.8102 crores during the same year constituting about 6.2% of total expenditure or, Rs.91 per capita. If real defence expenditure is allowed to grow at a lower rate of 2.5% per annum between 1993-94 and 2000-01, the per capita expenditure on defence will be only Rs.222, with the total real expenditure to grow by only 7% per annum. This strategy will substantially help to increase per capita expenditure on social services.

Another important strategy will be reforming public enterprises. If public enterprises are allowed to raise resources more from the market instead of depending largely on budget support from the government, and if simultaneously public enterprises are allowed to divest part of its existing assets currently held by the government to the market, lot of resources can be released for spending on social services.

In this way, many other expenditures like expenditure on general services and subsidies can be rationalised to be able to release larger resources for social services.

It is also possible to increase the share of state's resources (plan as well as non-plan) out of the central budget to enable the states to spend more on human expenditure.

Table 21 presents the data of central budget for 1984-5 (actual), budget estimates for 1983-4, and budget projections for 2000 A.D. at 1993-4 prices.

## Financial Ratios.

UNDP has defined 4 different financial ratios to be able to monitor public expenditure for human development purposes.

### Public Expenditure Ratio (PER)

Public expenditure ratio is the percentage of

national income that goes into public expenditure.

### Social Allocation Ratio (SAR)

Social Allocation Ratio is the percentage of public expenditures earmarked for social services. Social services include expenditures on Education, Health, Housing and Sanitation, and various welfare expenditures.

### Social Priority Ratio (SPR)

This is the percentage of social expenditure on human priority concerns like Elementary Education, Preventive Health Care, Water Supply and Sanitation and Nutrition.

**Table 21 : Central Budget, 1984-85 (actual), 1993-94 (BE), & 2000-01 (Estimated), Rs. crores at current prices, except 2000-01 at 1993-94 prices**

| Item                                 | 1984-85 | 1993-94 |                  | 2000-01 |                  |
|--------------------------------------|---------|---------|------------------|---------|------------------|
|                                      |         | Total   | per capita (Rs.) | Total   | per capita (Rs.) |
| 1. Total Expenditure                 | 43632   | 131324  | 1471             | 210878  | 2055             |
| 1.1 Plan of which                    | 16606   | 41251   | 462              | 63568   | 620              |
| - Budget support for Central Plan    | 11517   | 23241   | 260              | 32702   | 319              |
| - Central Assistance for State Plans | 4554    | 16520   | 185              | 28312   | 276              |
| - Central Assistance for UT Plans    | 535     | 1490    | 17               | 2554    | 25               |
| 1.2 Non-Plan of which                | 27026   | 90073   | 1009             | 147309  | 1436             |
| - Interest                           | 5974    | 38000   | 426              | 65125   | 635              |
| - Defence                            | 7061    | 19180   | 215              | 22799   | 222              |
| - Grants to States & UTs             | 1027    | 2254    | 25               | 3739    | 36               |
| - Loans to States & UTs              | 3272    | 4429    | 50               | 7348    | 72               |
| - Subsidies                          | 4038    | 8376    | 94               | 14611   | 142              |
| - General Services                   | 2051    | 8807    | 99               | 13896   | 135              |
| - Economic Services                  | 1406    | 2549    | 29               | 4229    | 41               |
| - Social Services                    | 2262    | 8102    | 91               | 29281   | 285              |
| a) Plan                              | 1593    | 5730    |                  | 20532   |                  |
| b) Non-plan                          | 669     | 2372    |                  | 8749    |                  |
| - Other Non-plan Expenditure         | 1528    | 4106    | 46               | 6812    | 66               |
| Population (crores)                  | 73.9    | 89.3    |                  | 102.6   |                  |

Figures in brackets indicate % to total expenditure

### Human Expenditure Ratio (HER)

This measures the percentage of national income devoted to social priority sectors. This in fact is derived by multiplying the other three ratios, namely, PER, SAR and SPR.

### Official Development Assistance (ODA)

This includes net disbursements of loans and grants made on concessional financial terms by official agencies of the member of the Development Assistance Committee (DAC), the Organisation for Economic Cooperation and Development (OECD), the Organisation of Petroleum Countries (OPEC), and so on to promote economic development and welfare, including technical co-operation and assistance.

### Aid Social Allocation Ratio

This indicates the percentage of ODA that goes to the social sector. Social sector includes Health, Education, Social Services, Rural and Urban Development and Water Supply and Sanitation.

### Aid Social Priority Ratio

This indicates the percentage of social sector ODA that are meant for human priority areas. The human priority areas include elementary education, preventive health care, water supply and sanitation, and nutrition.

### Aid Human Expenditure Ratio

This indicates the amount of ODA received for human priority areas expressed as percentage of the recipient country's GNP.

The per capita ODA received during 1990 by India is a low US \$2 compared to US \$11 for all the developing countries together.

Aid Social Allocation Ratio in India during 1988-90 was low at 10.3% against 16.9% for all the developing countries taken together.

The Aid Social Priority Ratio for 1988-90 was, however, comparable to the average of all the developing countries, and was of the level of 44.6%.

Aid human expenditure ratio in India during 1988-91

was low at 0.026% compared to the figure of 0.114 of all developing countries taken together.

### UNDP norms of Financial Ratios.

The UNDP has prescribed certain norms for each of these expenditure ratios based on the experience of a number of developing countries in respect of human development. These norms are as under:

PER 25%

SAR 40%

SPR 50%

and, therefore, HER works out as 5%

The UNDP has also suggested, instead of HERs as percentage of GNP, human development spending per person in absolute terms. UNDP has also suggested restructuring of Aid Programmes to make it more effective in the human priority areas. UNDP is of the view that "if 1/3rd of today's aid is committed to human priority area, the aid allocation to these areas would increase fourfold". The aid budget is also like government expenditure, can be analysed using the following ratios:

Aid Expenditure Ratio

Aid Social Welfare Ratio

Aid Social Priority Ratio, and

Aid Human Expenditure Ratio

The ODA for all countries currently represents about 0.3% of their combined GNP in 1989. Of this, only 23% went to social sectors, and of the social sector spending 37% went to human development priority areas. Thus the aid human expenditure ratio works out to a very low 0.026% ( $.003 \times 0.23 \times 0.37 \times 100$ ). Among the human development priority areas 7% was for primary education, 27% for primary health care, and the balance in water supply, sanitation and rural development.

One of the major areas for mobilising additional resources for human development could be met from cutting military spending. UNDP argues that if industrial countries reduce their military spending by 3% a year, this could provide \$ 25 billion a year. UNDP further argues that if developing countries merely freeze their military spending at the current levels, this would save potential future increases over \$ 10 billion a year. The developing and the industrial countries may like to share the total human development expenditure in 1990s in the ratio of 2/3rds for the developing countries and 1/3rd for the industrialised countries.

Table 22 presents data on ODA and the various expenditure ratios for India, ROK, Brazil, China and the world average figures.



## 7. CONCLUSIONS

Human Development is considered both as an end as well as means of prosperity and growth. It is a process of enlarging people's choices. These choices can be infinite and change over time, but the most essential ones are :

- to lead a long and healthy life;
- to acquire knowledge; and
- to have access to resources needed for decent standard of living.

If these choices are not available, many other opportunities will remain inaccessible.

The role of Human Development is also to enhance human capabilities. Human capabilities along with desire and drive brings about development of a nation.

**Table 22 : International Development Assistance**

| Item  | India | ROK   | Brazil | China | World Average |
|---|-------|-------|--------|-------|---------------|
| Official Deve.<br>Asstt.Recd.<br>(ODA), 1991              |       |       |        |       |               |
| - US \$ Mil.  | 1657  | 64    | 196    | 2166  | ..            |
| - as % of GNP   | 0.6   | ..    | ..     | 0.5   | ..            |
| - Per Capita<br>US \$                                     | 2     | 1     | 1      | 2     | ..            |
| - Per Poor<br>Person US \$                                | 4     | ..    | 6      | 18    | ..            |
| Aid Social<br>Allocation<br>Ratio(%)<br>1988-90           | 10.3  | 27.5  | 35.8   | 14.7  | ..            |
| Aid Social<br>Priority<br>Ratio(%)<br>1988-90             | 44.6  | 16.8  | 25.4   | 19.3  | ..            |
| Aid Human<br>Expenditure<br>Ratio(%)<br>1988-91           | 0.026 | 0.001 | 0.004  | 0.015 | ..            |
| Social Prio-<br>rity Aid (as<br>% of Total<br>Aid)1988-90 | 4.6   | 4.6   | 9.1    | 2.8   | ..            |

The Human Development Index (HDI) calculated for about 173 countries by UNDP ranks India as 134th with the HDI of 0.309 ( $0 < \text{HDI} < 1$ ).

The data showing the profiles of Human Development covering important indicators, namely, Life Expectancy, Sanitation, Mean Years of Schooling, Population Growth Rates and Infant Mortality Rate in India with comparable figures for ROK, China and Brazil ranks ROK as the top followed by China, then Brazil, and India is found to be far below the levels of these three countries. This ranking is in line with the rankings of achievements of rate of growth of per capita incomes in these countries during the last 25 years from 1965-1990.

India continues to carry the burden of high population growth, perpetuation of large scale poverty and unemployment, huge foreign debts with annual debt service payments exceeding US \$ 6 billions, practically no improvement in total factor productivity growth and so on and so forth in addition to low level and growth of income. The countries like China and ROK, particularly, have been largely successful in fighting out most of these long standing socio-economic problems.

During the course of development of the major developing countries of the world, the growth has been uneven both across the regions as well as among the different human groups with the exception of major east-asian countries. In the east-asian countries, the achievement is termed as 'Rapid Growth with Equity'. It is expected that the trend of growth of the developing countries during the 21st century will most likely be also 'Rapid Growth with Equity' as in the case of east-asian countries. Already international agencies like World Bank, UNDP, etc. have started emphasising this aspect of growth which has largely been neglected till now.

India has always been emphasising growth with equity. However, not much success could be achieved so far. Considering the large gaps in the performance of Human Development in India it appears that the country must put much greater emphasis on human development if the objective of rapid growth with equity is to be achieved.

The current economic reforms will have to be strengthened with greater emphasis on human development, together with appropriate reforms in the political and bureaucratic framework to be able to successfully guide the economy in this endeavour.

The goal of India during the 21st century must be to achieve 'Rapid Growth with Equity' to be able to really offer better standard of living for the largest number of

neglected citizens of the country. Highest emphasis on human development will be absolutely essential for this.

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