

**SOCIAL DIMENSIONS OF ECONOMIC
DEVELOPMENT : A COMPARATIVE
STUDY OF THE INDIAN
AND INTERNATIONAL
EXPERIENCE**

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CERTIFICATE

This is to certify that the dissertation entitled " **Social Dimensions Of Economic Development : A Comparative Study of the Indian and International Experience**" submitted by **Ms. Ishita Sengupta** in partial fulfilment of the requirements for the award of **Master of Philosophy (M.Phil)** of the University is a bonafide work to the best of our knowledge and may be placed before the examiners for evaluation.

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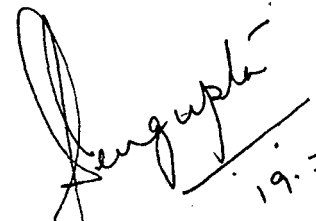
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ABSTRACT

Economic development is defined as a sustainable increase in living standards that encompass material consumption, education, health and environmental protection. It must enable all individuals to enlarge their human capabilities to the fullest and to put those capabilities to the best use in all fields - economic, social and political. Human beings are born with certain potential capabilities. The purpose of development is to create an environment in which all people can expand not only their own capabilities but also build opportunities for future generations.

It is, however, seen that we are living in a dualistic world. One end of the world lives in affluence but at the same time the other end lives in a poverty ridden society. All the countries which can now be called advanced passed through the stage which the underdeveloped countries are now experiencing. At the time the present day mature economies were developing there was no developed country and all the countries were in the same state. Only that some countries surged ahead. But now the existence of such advanced countries are making it difficult for the LDCs to develop fast. So, focus should be first to improve the socio-economic conditions of the countries. It is important to have human development along with economic growth.

The objective of the study is to find how human is the human development index, or is it mere imitation of economic growth. Is it really possible to have independent social human development without having economic growth, or are they simultaneous? The problem is not how to determine priorities between conflicting social objectives but of establishing conditions that would enable the simultaneous pursuit of both set of objectives.

To summarise it all, it can be said that measuring human development is not as easy as measuring economic growth. The latter can be calculated from GNP per capita but the former has to be measured with the help of many socio-economic indicators. The value of these indicators incorporates the preferences of the individual since all these indicate the quality of life and not its quantity.

This paper/thesis includes another measure of human development which is an extended human development index [EHDI]. Using so many indicators, EHDI has tried creating a more accurate measure of human development

The Indian states excepting few like Goa, Punjab and Kerala have low living standards. Among them, Kerala is the only state where its economic growth does not match social development but both Goa and Punjab are economically well off too. Maharashtra and Tamil Nadu are the states trailing just behind them.

Among the countries of the world more attention must be given to the brain drain problems faced by Africa, by creating opportunities for the free movement of people and by opening up sub-regional employment markets. The Arab region, on the other hand, must remove the gap between the rich and the poor. Education must be given the highest priority. As far as Asian countries are concerned, the major weakness of the planning process is its urban bias. The governments should first try to remove such barriers.

So all the developing countries need a heavy dose of investment in the social sector with special emphasis on education. The vital responsibility for development of human capabilities rests with these countries themselves. The other developed countries must also assist these developing nations to develop their capacities and capabilities to the fullest so that individuals become productive in their own society contributing to the well-being of the global community.

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CHAPTER 1

ECONOMIC GROWTH OR DEVELOPMENT : THE DEBATE

Introduction

Development is a multidimensional process. It is really hard task to give one precise meaning to economic development. Rather it is easier to say what is 'NOT'. Every nation strives after development. It is an objective usually that most people take for granted.

For a long period of time it was believed that economic growth and development were two synonymous things. But if the intricacies of development are brought into consideration, then a clear thread of difference can be registered. No doubt, economic progress can be considered as an essential component of development but the meaning of development loses its gravity if economic progress is considered the only component because development is nothing but a perfect blending of social development and economic growth.

There are some who claim development economics is nothing but an amalgam of many branches of economics like micro, macro, public finance and monetary economics. But Nobel laureates Sir Arthur Lewis and Theodore Schultz considered the status of economic development to be like that of a separate component of economics discipline.

Development in the '50s and '60s was always seen as an economic phenomenon in which rapid gains in the overall and per capita GNP growth would trickle down to the masses in the form of jobs and other economic and opportunities and it was assumed to create the necessary condition for wider distribution of the economic and social benefits of growth. Problems of poverty, unemployment and income distribution were viewed to be of secondary

importance then. Unfortunately, the experience of the '50s and the '60s when a large number of third world countries did achieve the growth targets but still the levels of living of the masses remained more or less unchanged indicated that this definition of development was indeed very narrow. This started a debate on development during the '70s. The debate concerning 'Economic development' as contrasted from "growth", started getting graver since then. This debate underlined the important point that economic development cannot be measured solely in terms of the level and growth of overall income or income per capita; one must also look at how that income is distributed among the population and who benefits from this development. Thus economic growth cannot be taken to be synonymous with social development. The growth experience in the '50s and '60s proved that GNP was an extremely inadequate indicator of development. The advocates of social development debate forcefully stated that higher GNP did not automatically result in an increase in social well-being and it should not be used as a measuring rod for assessing economic welfare. The GNP is basically a gross measure where the depreciation of existing assets is not taken into account. Hence this accounting system disregards a wide range of costs associated with the generation of income and is thus full of valuation deficiencies.

In view of the obvious limitations of the GNP measure, considerable research has been made in order to identify indicators to measure and quantify different dimensions of economic and social progress. This measurement of the quality of life leads to the concept of human development and, in turn, the concept of development remained no longer an economic concept and hence achieved an extra mileage after the inclusion of social dimension to it.

Several economists including Schultz have coined this process as socio-economic development.

The interactions between economic growth and social change are complex. Development now is taken to mean growth plus change; there are essential quantitative dimensions in the development process that may be absent in the growth or expansion of an economy through a simple widening process. Development is a dynamic process of change that transforms through time the economic, social, cultural and political life of the people. Therefore the job is not only to initiate development but also to sustain it over a long period of time. The process is a long and open ended one. And since development is a multidimensional process, a country at the most advanced stage of development may remain underdeveloped in some respects.

Thus economic development is defined as a sustainable increase in living standards that encompass material consumption, education, health and environmental protection. It must enable all individuals to enlarge their human capabilities to the fullest and to put those capabilities to the best use in all fields - economic, social and political. Human beings are born with certain potential capabilities. The purpose of development is to create an environment in which all people can expand not only their own capabilities but also build opportunities for future generations.

Human development and sustainability are thus essential components of the same ethic of universalism of life claims. Universalism defines a world where no child goes without an education, where no human being is denied health care and where all people can develop

their potential capabilities. Universalism advocates equality of opportunity and not equality of income. Human development is thus concerned with distribution of wealth and not simply its creation. It demonstrates that economic growth is vital to sustain the welfare of its own people. But economic growth is not the end of human development. It is one important means.

According to Rostow, the transition from underdevelopment to development can be described in terms of a series of steps or stages through which all countries must pass. However, the steps are not the same for all countries. Each country will have its own human agenda but the basic principle should be the same - to put people at the centre of development and to focus on their needs and potential.

It is, however, seen that we are living in a dualistic world. One end of the world lives in affluence but at the same time the other end lives in a poverty ridden society. All the countries which can now be called advanced passed through the stage which the underdeveloped countries are now experiencing. So one can argue that by simply initiating the steps to take-off which the developed country went through, the LDCs can advance. But this view point is highly one-sided. Because at the time the present day mature economies were developing there was no developed country and all the countries were in the same state. Only that some countries surged ahead. But now the existence of such advanced countries are making it difficult for the LDCs to develop fast.

So, focus should be first to improve the socio-economic conditions of the countries. It is important to have human development along with economic growth.

Objective

The objective of the study is to find how human is the human development index, or is it mere imitation of economic growth. Is it really possible to have independent social human development without having economic growth, or are they simultaneous? The issue here is not how much economic growth but what kind of growth. The problem is not how to determine priorities between conflicting social objectives but of establishing conditions that would enable the simultaneous pursuit of both set of objectives.

Review of Literature

Growth and development appear on two different pages in a dictionary but until a decade or so earlier appear to be synonymous. It was only recently that various studies have been made to measure these two differently. The trickle down effect of growth was assumed to be automatic but in fact it turned out to be the opposite as it tended to remain confined to the ruling elite. Social development is where people matter hence was coined accordingly as human development and rightly so.

Traditionally welfare was taken to be synonymous with what we now call material welfare and was measured by one's command over material resources. Accordingly welfare of an individual was measured by his income alone i.e., per capita GNP. In later years inadequacy of GNP as a measure of social welfare was realized and various improvements were suggested. This was so as GNP per capita fails to take into account of many other

factors which has bearing on the society. For example, a rise in average income is often accompanied by widening up the disparity in the distribution of income and thus fails in increasing the level of welfare of the all sections of the population.

The conventional economics equates economic development with industrialisation. Both mainstream economists and Marxian economists seem to have accepted the conventional definition of development which treats both as being reflected in an increase on national income. Paul Baran views development or economic growth as increase over time in per capita output of material goods. The mainstream economists believe in the efficiency of market forces in bringing about rapid development contrary to the Marxian economists who find socio-economic structure of the poor countries as a severe brake on the engine of development hence they demand social and structural change as a precondition for growth and development and believe in a planned economy. However, in practice, they both believe in acquiring more and more material goods for development. The only note of disagreement is in the role of the state. Rest the definition is similar regarding development. The neo-classical economists again are lusty supporters of market mechanism in bringing about growth. The Keynesian economists support the basic tenets of neo-classical economies but not with the same fervour. They believe in an interventionist role of the state.

The conventional measurement of growth rate is through the real per capita national income. But as was seen in the Indian context, we have a growth rate of nearly six per cent yet we are far away from what we call a developed state. This growth is and will be confined to the elite group if we don't plan for eradication of poverty and increase in

employment. This type of development can be called an elitist form of growth where the beneficiaries are only the rich and the super rich. Many countries of Africa and Latin America have this kind of growth. Countries which are newly industrialised like Taiwan, Singapore, Hong Kong and South Korea incomes have increased for majority of the people but simultaneously income, inequalities have increased and so also has environmental degradation. This is a type of development where people do not matter. Here development is more quantity-wise than quality-wise.

Marx had once commented that ruling ideas of the society were the ideas of its ruling class. This truly reflects that growth was elitist in nature and socialist countries while ensuring their survival from any attack from the capitalist countries also run towards maximization of profits (Charles,1990)

Thus this type of development paradigm resulted in a lot of criticism from various scholars and research scientists as it was damaging to the welfare of common man. So the concept of development underwent a radical change. A new definition of development was needed where human beings remain at the centre and his needs at the periphery. Development is now a multi-dimensional concept. Economists have now defined development as a process of empowerment of people. Development helps in changing the attitude of the people from that of apathy to one of self-confidence.

One of the earliest effort by UNRISD (1970) to construct a composite index of development was based on a set of seven indicators and included factors like circulation of newspapers , enrolment ratio, consumption of energy (electricity) and foreign trade.

Measurement of welfare

Efforts were also made to construct sophisticated indices using factor analysis by Adelman and Morris(1973) . They first used different techniques to measure development taking 35 social , political and economic indicators of development. They used Discriminant Analysis to best predict the development performance of individual countries , and intercountry variations to arrive at the socio-politico economic model of development. Their study found out that the beneficiaries of economic development as well as the process by which the poor are penalized by economic development vary with the economic development of the country .

A parallel set of efforts attempted to measure well-being by output variables alone like education, health and longevity , avoiding variables like per capita GNP whose estimation and international comparability have raised a number of controversies in recent years . Iserman in 1980 and Summers and Heston in 1988 have criticised the World Bank's procedure of converting countries GNP data to US dollars through official exchange rate. It has improved by presenting the time series national accounting data which are denominated in a common set of prices in a common currency . It enables real quantity comparisons to be made both overtime and between countries .

PQLI Index

One of the most popular composite measures of social development is the Physical Quality of Life Index (PQLI) developed by Morris 1979) and his colleagues at the Overseas

Development Council. It was an easily computed index based on a nation's infant mortality rate, literacy rate and life expectancy at age one. For each of the three indicators, the country with the highest value (lowest for infant mortality) was assigned a score of 100 and one with the lowest value (highest for infant mortality) was assigned zero. Scores for the remaining countries were linearly interpolated. Then these indices are summed up for the three indicators and divided by three. Thus the resultant index was scaled between zero to 100. Morris made international comparisons and concluded that there was no automatic link between per capita income and even the barest element of human well-being. The guiding force behind the development of this index was, as Morris argued, some countries with quite low average per capita incomes have relatively high literacy rates, long life expectancies and low infant mortality rates. Countries have achieved these different qualities of life for their population at almost any level of income and calorie consumption.

However, the PQLI has a lot of shortcomings (Holloway and Pandit, 1992). Firstly, it does not include a number of factors crucial to human welfare such as nutritioned intake and is computed with seemingly arbitrary equal weights for the three components. It was argued that PQLI measures at best the quantity of life not its quality. Then it is obvious that the two health indicators life expectancy and infant mortality would be highly correlated with each other.

In such a people centred development, a high growth rate of national income causes to matter. The major concern now becomes eradication of poverty, increasing job

opportunities, improving health facilities, equitable distribution of income, preservation of environment and democratic freedom.

Some Other Measures

This development is such that people matter. Hence this is aptly called human development. Human development is a process of enlarging people's choices as defined by the Human Development Report of the UNDP. One of the most pressing challenges is the utilization of the human capabilities (Bhanoji Rao, 1991). According to the HDR, growth with equity is the optimal combination for generating the macro conditions needed to achieve human development objectives. Development is nothing but

- (1) Economic growth accompanied by an equitable distribution of income, and
- (2) Well planned government expenditure on education and health.

The Third World countries have been making sustained efforts to achieve socio-economic development and transformation, However, even after prolonged efforts, many Third World countries not only remain poor but find their conditions worsening. This requires proper channelling of resources along with correct policy measures.

The foremost thing which was considered important was how to measure development. Various measures have been formulated to rank countries according to their level of development. Previously the most common measure of economic development was GNP per capita. The GNP per capita measure reflects the monetary value of all goods and services produced in a year. However, it was found to be inadequate to measure human

welfare. Many international agencies have tried various measures to measure welfare by gathering empirical data on various social indicators. But they were not universally accepted. Moreover, they had lots of methodological and conceptual problems.

Human Development Index

In 1954, a United Nations Expert Group chaired by V.K.R.V. Rao recommended that in addition to real per capita income, use should be made of quantitative measures in the fields of health, education, employment and housing for assessing the standard of living in a country. It has been a long time since then. Various criticisms have been made of the many measures tried since then. But now we may well be arriving at a consensus regarding the measurement. Per capita national income, life expectancy at birth, infant and child survival rates and literacy rates taken together form a comprehensive set of indices. Life expectancy and infant mortality rates reflect in a coarse way the state of health. Health not only reflects a person's well-being but it also shows a person's inherent capacity to do things. Literacy enhances the socio-economic freedom of the people. That is if people are literate, then they have the knowledge of their needs and are able to fight for a better existence.

The United Nations Development Program released the Human Development Report (HDR) 1990 which proposed a new index of human development that attempts to measure progress on human development concerns. HDI(human Development Index) assesses achieved development levels based on life expectancy, adult literacy and purchasing power adjusted GDP per capita(McGillivray, 1991).

Accordingly, the HDR classified 152 countries into three categories: one with low human development (value of HDI being less than 0.5) and those with medium human development (the value of the HDI ranging between 0.5 and 0.8) and those with high human development (with the HDI being more than or equivalent to 0.8). In this Niger is at the bottom of human development and Japan at the top, as given by the HDR. And India fares a little better than Pakistan in living standards, which in turn is a little better than Bangladesh which falls in low human development.

However, even the HDI is not free from shortcomings. Firstly if the composite index is sensitive to the weights attached to its various components then the rationale for the particular weighting system employed needs to be argued convincingly. Otherwise the crucial role played by the weighting system in deriving the measure will seriously undermine the usefulness of the index because of the arbitrariness of the weighting system. While constructing the HDI equal weights were given to its three components without suggesting any justification of doing so. Hence the ranking of countries according to HDI can at best be considered illustrative rather than evaluative(Human Development Report , 1990).

It was also seen that GNP per capita (one of the three indicators) is positively correlated with each of the individual component variables. Hence one can justifiably suggest that the HDI generally ranks countries in a manner not dissimilar from the way GNP per capita ranks them. As a consequence assessing inter-country development levels on any one of these variables yields similar results to those that the inter itself yields.

Another weakness of the HDI is the simple addition of the three indicators after

grading, to form a total that is then used to rank countries, but there is simply no a priori rationale to add life expectancy to literacy and that to GDP as all have different units. Therefore the likelihood of an widespread agreement on the HDI as there is for GDP is quite impossible. Hence the best way to obtain overall agreement is to have the best choice that is spending more resources for the accuracy of data than having arguments about the weights(O.H.Choudhary, 1991).

Lastly, it can also be argued that only three indicators are used to indicate human welfare. There may be various other indicators too which equally represent social development. Till we find another universally accepted measure for social development, HDI will continue to remain the most apt measure.

HDI as show by the HDR is only for countries of the world. Human Development Report has obviously undertaken no study to rank the various states of India according to HDI. But various studies have been carried out in India to construct an HDI for our states. However, this has been done for only 17 major states. Though India can boast to have a wide statistical base with data on various socio-economic indicators regionwise, still the task of presenting the socio-economic scenario of the Indian population over the decades becomes difficult. This is due to absence of uniformity in periodicity and such other issues because the official sources are scattered over various places and any standardisation of such key indicators is difficult (EPW,May 1994).

Secondly, there is a striking divergence between the absolute numbers and relative ratios of the set of social indicators due to differences in sources, reference points and in

concepts and compilations. For example, it is seen that in rural areas, female mortality is more or less same as male mortality but in urban areas, female mortality is more than male mortality. And the same report also suggests that at all India level the infant mortality rate for female children was lower than infant mortality for male children. So such data fail to capture the actual population characteristics of the nation. This happens when the indicators are compared intra-administrative unit. For easier interpretation, the whole state should be taken as a whole or just a subdivision of rural and urban areas of the whole country(EPW , May 94). But again, the data are not available for all the 25 states and Union Territories. They are available for only 17 states. However, it is argued that the 17 major states constitute nearly 97.2 per cent of the country's population(Tilak 1992).Tilak applied the UNDP methodology to Indian data and presented estimates of HDI for 17 Indian states taking three indicators of life expectancy literacy and per capita SDP. Thus ignoring the remaining very few states and the centrally administered union territories does not form a serious omission in an analysis of human development.

In my analysis/paper, I have tried to improvise on the human development index and have modified it regarding the countries of the world and also for the Indian states and the union territories. In my extended HDI (EHDI), I have taken indicators on housing, education and health. There are 13 social indicators and one economic indicator, i.e. SDP per capita for Indian states and GNP per capita for the world countries. But for the world countries there are only twelve social indicators. This is done in order to encompass more aspects of human welfare and to find out a composite index. Lastly, it is to be seen much difference

does it really make to have more indicators than the original three taken to find out the human development index.

But due to data non-availability, especially for Indian states and union territories, some data for certain indicators had to be interpolated. However, that is only for some small states. So the data for certain indicators give a rough estimate for some states. Then there are few indicators like life expectancy which are available for only 15 states and it is difficult to calculate life expectancy for other states. So in this case, we have taken crude death rate.

It can be seen that human development index forms a significant improvement over the earlier measures of development available so far. While there is a high correlation between human development and economic growth, there is hardly any between poverty and human development.

The countries today can be ranked in order to development. But this ranking is a new measure, called Human Development Index. It integrated life expectancy, adult literacy and income in an innovative way so as to produce a yardstick more comprehensive than GNP alone for measuring country's progress.

Methodology:

The objective of this study is to define an extended human development index on the basis of indicators which include indicators other than the above four indicators. A few more relating to health and education have been incorporated. The countries are classified according to their level of

GNP per capita and then ranked accordingly with the help of these indicators. The countries under case study are the advanced countries and Third World countries and a special reference to Indian states.

The purpose of this thesis is to prove which is more important economic growth or social development and which precedes the other. The analysis is carried over two time periods, to see whether economic growth of a country in one period was carried over to the other period without the accompaniment of human development.

The HDI is obtained by first computing the average of three deprivations and then subtracting the average from unity. The most relevant key indicators are identified as life expectancy, adult literacy and real per capita income in a logarithmic form (Human Development report, 1990). First a measure of deprivation (I) of each indicator (x_j) relating to the j^{th} country is defined as

$$I_j = \frac{(\max X_{ij} - X_{ij})}{(\max X_{ij} - \min X_{ij})}$$

Then an average deprivation indicator is estimated by simply taking the average of three deprivation indicators above:

And finally HDI is defined as one minus the average deprivation index:

$$(HDI)_j = (1 - I_j).$$

Structural reforms were undertaken by countries for a better global inter-linkage and also to enable the country adjust to internal as well as external shocks. These reforms also

became essential for the sustainable development of these economies which otherwise would soon have led to depletion and exhaustion of natural resources and a few years from hence we would have stagnated without any growth. These structural adjustment programmes had a heavy impact on human welfare and human development and gives way to the search for more growth oriented and human focussed adjustment policies. This type of adjustment had a distinct human face to it as it puts people in the forefront of development policies.

Economic growth is essential but along with it alleviation of poverty, better health conditions and improvement of the education system must also be combined. Such structural adjustments must be considered which are compatible with the goals of human development.

Here, the question may arise that why such importance on human development or on the physical quality of life index. It becomes necessary to mention here that the measure of GNP for international well-being is not a very adequate measure as a higher GNP does not ensure that the benefits of a higher GNP has trickled down to the lowest strata. And therefore to measure such state of human welfare, we need some more indicators regarding health, education and housing.

Human development is now seen as a process of human centred development which seeks to enhance the skills of human beings and make full use of their capacities. The UNDP's study on human development concluded that the largest part of the world output will be ensured because of improvements in people's capabilities. People armed with specialised education, skills and training and supported by new technological facilities of informatives and telecommunications will become the engine of growth.

More and more intense competition is setting in among three major poles of development, US, Europe and Japan. Japan is on its way to become a technological leader and Europe is pursuing its unity to make a better mark but the underdeveloped countries continue to be an object of serious concern.

The Human Development Report first carried out a detailed account of the measurement of Human Development Index in 1990. It made the study regarding 173 countries including three indices; one that of life expectancy, second of literacy rate and third is of adjusted real per capita. The adjusted real per capita income is taken to take into account the diminishing returns from income. These three were considered the key indicators of human welfare. These three indicators were combined in a three step process to arrive at an average deprivation index.

But this paper/study includes more indicators of housing, education and health on top of PCY to measure the status of human welfare.

Education

There are two methods to calculate the human development. One is PCA and the other is EHDI index.

First, we take the PCA. The countries are taken on the basis of the classification of the World Development Report. The countries are selected at a random. The study includes 77 countries of low income, lower-middle income, upper-middle income and higher income groups. 11 indicators are involved in this study.

There are two indicators on education,, one is adult literacy rate and the other is secondary enrollment ratio. Education is one of the key factors in human progress. To cope up with modernization, increase in primary and secondary education along with eradication of illiteracy appear to be urgently needed as is the extension and adaptation of the entire educational system to societal needs and changes.

Thus, eradication of illiteracy remains an absolute priority for many governments in developing countries. In spite of declining literacy rate, the number of illiterates has considerably increased. Education should be a primary contribution to development. It is the objective of both economic and social development and a means of achieving it. Education is a vital input for the development adaptation, absorption and application of technology. It increases an individual's employment potential and his productivity. It is significant that the literacy rate determines the level of education in a given society.

It is because there are still nearly 50 per cent illiterates in developing nations and in industrialised countries. In spite of having free primary education there are nearly 20 million illiterates. So eradication of literacy requires basic education for all adapted to the needs of the citizens of both present and future generation and to the social, economic and cultural environment. The degree of literacy i a society is only an approximate indication of the "level of access" to knowledge prevailing in a given society. Therefore, to fight illiteracy, primary education for all children especially for girls and for those living in rural areas should be made generally available but also that the efficiency and relevance of education should be improved and also the expenditure on education should be decreased.

It is usually seen that low literacy rates are generally the outcome of a large number of drop-outs from primary schools who become functionally illiterate by the time they become adults. For this; both secondary enrolment ratio and adult literacy rates must be taken, to give a true picture of the level of knowledge of the residents of the country and consequently, their ability to adapt new technology needed for growth.

The adult literacy rate as an educational indicator has invited a lot of criticisms from statisticians and sociologists. First, it requires different amounts of effort to acquire literacy in different languages. Hence it takes a Chinese or a Japanese more time and effort to be literates as it involves learning large number of alphabets. But it becomes necessary here to mention that literacy rates are country specific and there is no universal literacy rate. Therefore this difference in effort is appreciated in each country hence a person is also relatively literate compared to his own countrymen. Secondly, functional literacy rates are always lower than recorded literacy rate because an achievement of 99-100 per cent literacy rate in industrial countries is hard to believe.

So only literacy rate cannot be a sole indicator of educational achievement and for that other indicators should also be taken to remove such biases. To improve the quality of educational indicators, we need to take more variables to get an accurate picture. Hence this study involves secondary and primary enrolment ratio to judge the level of education. human Development Index is calculated on the basis of literacy rate and mean years of schooling. But mean years of schooling is a good indicator for industrialised countries where there may be some changes over and above literacy rate and primary enrolment ratios which are


generally excessively high. But as far as developing countries are concerned, this indicator has a very low value. Hence this paper substitutes primary and secondary enrolment ratios for mean years of schooling.

Another critic has raised the point that in order to capture the income generating capacity of the people or the productivity rate of skilled people variables such as vocational education, on-the job training should be incorporated into the EHDI. But it is really difficult to get such reliable data across countries. So indicators must be such that the data are readily available and are reliable and can be compared across countries. Moreover secondary school enrolment captures recent educational advance more than any other educational indicator.

Health

Enhanced education and better health for people are among the basic objectives and indicators of development. Inadequacies in both are gravely linked with poverty. Better health opportunities make individuals economically more productive and enable them to earn more and live better. A country pays heavily if its residents are suffering from ill-health. Therefore proper provisions for health is desired both as means and a goal for development.

Life expectancy at birth is usually the most popular variable for longevity to measure development. But infant mortality and under five mortality can also be considered alternatives to life expectancy. Many critics have even argued that life expectancy is explained by income and infant mortality. Hence if income is included in the human development index, infant mortality gives added information.

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Infant mortality, maternal mortality, under five mortality though are good indicators of public health, it is usually difficult to discriminate between the industrial countries in terms of development. Hence only those type of indicators should be taken which can show distinctive levels of development for each country. Moreover, life expectancy is not a characteristic of any particular individual. It is an average property of an entire group of people, as is per capita income. But life expectancy at birth varies very little across individuals within a country than per capita income. Therefore as a group average life expectancy is a better indicator than per capita income, but if taken as an indicator of health, it still remains a quantitative measure and not a qualitative one.

To measure the quality of health of the people of the economy, indicators other than life expectancy should be taken which can give us better information about the state of health. For this, infant mortality and maternal mortality are better variables of health for developing nations. Crude death rates give information about the state of health services in the country. It is not only necessary to spend on health but extremely essential too. For this the government must take proper actions such that the health services they are providing for is easily accessible to the poorest citizens too. Access to health services is also another indicator of development. As health condition of a nation improves population per doctor also increases. However, the data regarding these may not be the actual number of physicians in the economy specially in South Asia where ayurveda and other herbal methods of medications are very popular. But data regarding such traditional practices are impossible to attain. So population per registered physician can be taken as an approximate indicator for

health.

Living standards also includes facilities for disposal of waste and water supplies which in turn to a great degree determine the health of a population. Access to safe water is a very good indication of the conditions of health.

Good health condition contributes a lot to the improved economic status of the people. Firstly, improved health reduces production losses caused by worker unless increased productivity and longer working lives. Healthier workers also earn more because of higher productivity and hence exploit benefits of specialisation. It increases the better use of natural resources that had been nearly inaccessible because of disease. Prevention of disease has made many areas more accessible and hence more fertile. Better health conditions give rise to healthier children hence greater enrolment in schools, and better learning capabilities and hence lesser drop-outs in school. Lastly, healthier residents allow alternative uses of resources which would otherwise had been spent on treating illness. Spending on health hence is a productive investment as it raises income and productivity both.

Good health hence is a fundamental goal of development as well as a means of accelerating it. It also increases human welfare specially in low income countries and gradually leads to an economic growth.

The well-being of people can result in increasing the per capita income of an economy. If social conditions of a country improve then we can automatically deduce that the country's income will also improve. But the vice-versa cannot be said assertively. Health is an important indicator of development and consequently growth.

Income was previously considered the only indicator for economic growth used synonymously with social development. This indicator has been subject to a lot of criticism. Income is unequally distributed but still is misleading indicator of differences in well-being between people and households. A person's income level does not reveal what expectations of life the person has, whether he is healthy or not etc. Therefore, income level though instrumental in using standard of an individual, does not explain his well-being. Because a disabled person needs more income for free mobility, people in mountainous areas need more energy hence more food and hence income is not a true measure of well-being. A person living in a high price region needs more income than a person living in a low price region. Therefore income must be accompanied by other indicators of health and education to account for individual differences in mortality, morbidity or disability to measure the level of living standard.

Calculation of EHDI

EHDI index is calculated by making log of PCY and then poverty level is taken which is taken as cut-off income. Countries having PCY lower than this cut-off income, adjustment is made with respect to principal of diminishing marginal utility.

However, this process is necessarily arbitrary because such principal of marginal utility is also applicable to health education and housing too. It can be shown that without making such adjustments, the ranking among countries does change. EHDI is not particularly sensitive to such adjustments. Hence this study takes the real income per capita in absolute

terms without making any such adjustments. As income is only a means to achieve such human resource development making such changes hardly would make the country better-off than the next country. Such calculation would make only a change in the EHDI index. But since we are interested only in the ranking of the countries the variation in the index hardly matters if the ranking remains more or less same.

EHDI is calculated in the same way as HDI by the UNDP by taking all the indicators, subtracting from their maximum and dividing by the difference of their maximum and minimum. The only difference is that UNDP while calculating the HDI took the log of per capita income whereas EHDI has taken the absolute value of per capita income.

Plan Of Chapters

Chapter 1 includes literature survey of all articles and reports on the aspect of human development and economic growth with special reference to the HDI in Human Development Report. The present thesis attempts to make a modification on all earlier measures of human development.

In Chapter 2, EHDI and PCA (Principal Component Analysis) ranking for the Third World countries and advanced countries is constructed. This EHDI is an improvisation over the HDI given by UNDP report. It includes more indicators and hence it has been called Extended Human Development Index (EHDI). Further, the ranking of the countries has been compared with that of the PCA rankings. The countries are taken according to low, middle and high income classification of the World Development Report. Only seventy-seven

countries are taken since the required data are available only for these.

The 3rd chapter contains the EHDI for the Indian states and they have been ranked from 1 to 25 in case of states. It also consists of a comparison of the EHDI of Indian states and other Third World countries. Inference is drawn according to the EHDI calculated for countries of the world and Indian states and how far it is an improvement over the HDI given in the Human Development Report and whether at all it gives any extra information of human welfare.

Chapter 4 debates which should precede the other economic growth or social development. In this chapter the ranking of countries according to GNP per capita and according to EHDI is compared. And those countries with a lot of difference in the ranking between the two are studied. Then they are analysed as to why such a difference occur. This chapter also argues why GNP is not a very good measure of welfare yet why countries with high GNP per capita mostly have good social development.

A comparative study of the Indian experience and the international experience is done in Chapter 5.

Chapter 6 is the concluding chapter with policy prescriptions for social development.

CHAPTER 2

DEVELOPMENT : THE WORLD EXPERIENCE

Introduction

It has been observed that if a country was capable of pursuing one objective then it was often capable of pursuing other objectives and conversely when a country did badly on one count it did so on other counts too. Thus, if USA, Canada and many European countries have achieved rapid economic growth then it has undoubtedly been accompanied by good distributional results and high human resource developments. On the other hand, the Asian countries especially the South Asian countries had low economic growth and consequently poor human resource development and high income inequality. There are several reasons for this differential economic and social growth and among them the most important are infrastructural facilities and their past history. The countries with a successful record in human resource development generally started their development or growth process with a better base line than those with less enviable records. Secondly, if the country is rife with some inner ethnic troubles, development process takes time to pick up.

To depict current global scenario through an analytical framework this chapter is devoted to measuring the social development of different countries and their corresponding economic growth. The major concern of this analysis is to find out whether social development and economic growth have any one to one causal relationship or there are some other factors which also play a key role in the gradual process of development. For measuring

such a development, both the economic tools of Principal Component Analysis (PCA) and Human Development Index (EHDI) have been used.

This chapter is divided into two sections. In section I a comparative study has been undertaken between the PCA ranking of the countries and EHDI ranking of the 77 countries investigated in this study . And accordingly conclusions are drawn on the better method of analysis and the suitable one in arresting the intricacies of growth and development processes of different countries. Section II is devoted to an analysis of the relative position of different countries and the basic features behind their success or failure on the basis of superior method among these two.

PCA and EHDI are calculated for 77 countries with 12 social indicators on health, education and GDP. Respective ranks are given from 1 to 77 according to the factor components and EHDI. Countries are ranked as high ranking countries if they are ranked between 1 to 25, medium ranked if they are between 26 to 50 and low ranked countries if the rank ranges from 51 to 77 (Table 2.1 and Table 2.2). In this study ranking is done for two time periods : one is 1981 and the other is a decade later in 1991.

SECTION I: Disparity Between PCA and EHDI Ranking.

If we take PCA ranking in 1991 there are some differences in PCA ranking and EHDI rankings except for few discrepancies. the discrepancies are given in Chart 2.1.

If we glance through the exceptional cases then the following things become very clear :

- * Saudi Arabia is ranked as a high PCA ranked country whereas according EHDI ranking it is 47th i.e,as a medium ranked country.

* Argentina is ranked very low according to PCA but its EHDI rank is very high at 18.

If we look at **Table 2.8a and 2.10a** we find that the social condition of Argentina is better than that of Saudi Arabia but it can be seen that the GDP per capita for Saudi Arabia is very high at \$ 15359 whereas for Argentina it is \$ 2302 . Since PCA attaches proportional weights to each factor component it can be concluded that such weighting system sometimes distorts the truth. A very high per capita GDP overshadows all the other indicators which show very low social development in Saudi Arabia. All negative indicators of development like death rates, mortality rates, malnourished children have been incorporated in the form of their inverse. If we take life expectancy Argentina is at 71 and Saudi Arabia at 55. Similarly, adult literacy rate of Argentina is as high as 93 whereas for Saudi Arabia it is very low at 25. So is the case of secondary and primary enrolment ratios which are 56 and 119 for Argentina and for Saudi Arabia they are 30 and 64. Percentage of malnourished children is 14 for Saudi Arabia but it is only 3 for Argentina. So even empirical evidence proves that Argentina is more developed than Saudi Arabia yet the PCA ranking is very low for Argentina.

We can also take the case of Oman and Congo. PCA ranks Oman at 34 and EHDI ranks it very low at 55. ON the other hand PCA ranks Congo at 76 but EHDI ranks it at 32 but a close look at the data reveals that all major social indicators show evidence of high development which can be seen from Table 4. However, the gap between Oman and Congo is not that much as between Saudi Arabia and Argentina. It is because of the gap between the GDP per capita of Saudi Arabia and Argentina which is much higher than that of Oman and Congo. So, it can be deduced that if influence of one factor is very high it overshadows the impact of all other indicators in this case the GDP per capita while calculating

PCA. But the method of calculating EHDI takes the maximum and minimum value of each indicator and hence the influence of every indicator is normalised and so equal weights are attached to it. Even though the effect of equal weights have been criticised much by people even then such an weighting system can be considered valid if we take into account the method by which EHDI is calculated where each indicator is subtracted from the maximum value and its result is further divided by the difference between the maximum and the minimum values. This method incorporates the influence of each indicator with equal emphasis and hence, it is more popularly used today.

However, not all such discrepancies are very high. There are many border line cases also where PCA ranks them as high but EHDI ranks them as medium. The PCA and EHDI rankings of some exceptional cases for the year 1981 are as follows :

- * For Czechoslovakia PCA ranking is 22 and EHDI is 27.
- * For Mauritius PCA ranking is 23 and EHDI is 28.
- * For Jamaica PCA ranking is 24 and EHDI is 26.
- * For Hungary PCA ranking is 25 and EHDI is 33.
- * For Republic of Korea PCA ranking is 26 and EHDI is 24.

And also for Portugal, Uruguay, Algeria, Guatemala, Ghana, Philippines, Ireland and Paraguay. But it is those countries with major differences that we are interested in. We can make similar conclusion about EHDI being the superior method to measure development than PCA through the data of 1991 also.

If we take the case of Cameroon, Somalia, Ethiopia Niger and Congo and compare the PCA and EHDI ranking then the following exceptions are observed in the following chart 1:

Chart 1: Differences in Ranking Between PCA and EHDl

Country	PCA Ranking	EHDl Ranking
1. Cameroon	27	70
2. Somalia	32	77
3. Ethiopia	33	74
4. Niger	35	76
5. Congo	40	66
6. Kuwait	77	15
7. Algeria	68	49
8. Venezuela	67	40
9. Thailand	60	44

A closer look at the data reveals that the data for Somalia, Ethiopia, and Cameroon are much lower in value than that for Kuwait. Table 2.3a shows that the data for major indicators for 1991 which show that whereas life expectancy of Ethiopia and Somalia are 46.4 years and 45.5 years that of Kuwait is 74.6 years, according to table 2.10a, their population with access to health is 46 per cent and 27 per cent and that of Kuwait is 100 per cent, adult literacy rates of Ethiopia and Somalia is 50 and 27 and that of Kuwait is 74. If infant Mortality rate and percentage of malnutrition of children are taken then it is 122 and 184 and 40 and 39 respectively, where as for Kuwait it is only 22. And if GDP per capita is taken into account then we have Ethiopia at \$ 113 , Somalia at \$110 and Kuwait at \$ 15984. It can be clearly seen that Kuwait is much better off in all respects.

Moreover, if current scenario is considered though it can be argued that Kuwait has

experienced gulf war in recent times which has reduced its social condition drastically. The same can also be shown that even Somalia and Ethiopia have experienced severe drought in the last decade which has increased the mortality rate drastically and consequently, its health condition has deteriorated to the lowest minimum . So, under no circumstances Kuwait can be considered lower in human development than Somalia and Ethiopia or for that case from Cameroon and Niger.

Thailand and Venezuela are also medium ranked countries if we take EHDI but PCA ranks them very low even lower than that of Cameroon ,Niger, Chad,Yemen.But the data tells a different story. Therefore it can be aptly concluded that PCA does not always present a true picture of development scene. Sometimes it attaches too high a weight which makes it divert away from showing the true status of development. Whereas the EHDI takes into account the variation of each data and standardizes it.This makes EHDI universal and unique.Moreover the EHDI is much easier to calculate than the PCA.That is why EHDI is becoming more and more popular and it is the up-to- date method for measuring human development. Thus we can now study each country's development process over time by looking at the ranking of the countries by EHDI.

Section II: Levels of Development in Different Countries of the World.

This study has divided the countries according to high human development , medium human development and low human development index. The countries which rank from 1 to 25 fall in high human development regions . Other two groups of countries having the ranking of 26 to 50 and 51 to 77 have been classified as the medium and low human development regions.

HIGH HUMAN DEVELOPMENT

A: Developed Countries

From the index calculated it is seen that Canada, Switzerland, Japan, U.K, Denmark, Germany, France, Australia, Ireland, Israel, Italy, Spain and Greece have maintained their positions more or less. They have remained among the top in terms of human development. Even their indices have also remained more or less same. Their GDP per capita ranges between \$ 2,000 to \$ 27,000. The life expectancy of these countries ranges around 70 to 78, access to health services is above 90 per cent and so is access to safe water with the exception of Argentina. Kuwait has a literacy rate of 74 per cent and the rest have above 90 per cent. The population per doctor of these countries range between 210 to 1850. The highest is in Argentina followed by U.A.E. and the lowest is Italy. Maternal mortality rate is below 15 (per '00,000 births) other than Argentina and U.A.E. which are at 140 and 130 respectively. Infant mortality rate is very low. So, it can be deduced from the data given by the World Bank that these countries have reached great heights regarding human development with Kuwait, Argentina and U.A.E slightly trailing behind. They are still among the top 20 countries in development. It is so because their government have aptly invested in health, education and housing. These countries GDP is quite high and their GDP have been proportionately invested in human development.

In spite of this there are a few countries which have gone down in ranks as shown in table 2.1 and table 2.2. Unemployment and homelessness have been plaguing U.K for the last few years. This has made it go down to 14 in 1991 from 8 in 1981. Italian people have remained prosperous in spite of political upheavals. Each new government has worked for the benefit of Italy making its human development very high. Hence it is ranked 10 in

1991 where as it was ranked 16th in 1981. Italy has thrived in the world making it one of the most wealthy countries in the world. Czechoslovakia has improved its condition especially after the break down of the communist regime and opening up of the economy to the world.

B: Newly Industrialised Countries

Newly industrialised countries like Hongkong, Singapore and Republic of Korea have become fantastic examples of high development as well as economic growth especially in South East Asia. Hongkong experienced an average annual growth rate of 7 per cent through out 80s, and was one of the fastest growing economy of the world. This growth rate was not only due to expansion of international trade but also due to the adoption of suitable development strategy. Hongkong has closed trading relationship with southern China and has become the link between China and the rest of the world. Specially since the process of economic reform began in China since 1979. However Hongkong's growth rate had slowed down in the late 80s and this was due to the change in world economic environment. When the world economy slowed down in 1989-90 there was an adverse effect in the Hongkong's trade which was further enhanced by China's civil and political disturbances and gulf situation in 1990. These effects were reflected in the low GDP growth rate of Hongkong. But this did not affect its social development programme since it has a long standing development strategy.

Therefore inspite of a fall in GDP, its social development was not adversely affected. It is so because GDP has been properly channelised into social institutions and educational facilities. In 1991 the life expectancy of Hongkong was 77 years and nearly 100 per cent of its population had access to health services and safe water (table 2.9a). Its infant and maternal mortality rate were 10 and 6 respectively. Primary and secondary enrolment ratios were 108

and 75 respectively and adult literacy rate was 100 percent. So, we can conclude that Hongkong's tigerish growth has been achieved only because it was accompanied by its social development.

Second is the case of Korea. Economic development had enhanced the well being of the Korean people and their overall quality of life has been considerably improved. Though it had remained among the well developed nations of the world still it has refused to pick up its growth rate and neither has it been able to improve its EHDI ranking. During the period of high economic growth the speed of social development was relatively slow which had created social and political tension which often threatened economic and social stability of the country. Economic growth did not give sufficient attention to some important social needs and so, social progress couldn't keep pace with economic growth. More and more income generated in the economy was invested in the manufacturing sector neglecting the social sector. This has distorted the distributional structure of income and wealth and adversely affected the provision needs of health care and education. Though Korea has experienced an economic boom during 1986-88 it was not successful in promoting investment in social sector. Social development in Korea was not given its due priority rather it was considered that economic growth would automatically boost social development by employing more labour and increasing productivity. Once the government realised that this would not help them achieve social development, increased attention began to be paid to social policies. That too it was not till late 80s that social development was paid such importance. As new government came to the fore more and more resources were allocated for social welfare programme. The health status of the Korean people has made good progress over the past decade. For example, life expectancy has improved from 66 to 70 years, population with access to health services has remained at 100 per cent and population with access to safe

water (table 2.9a and table 2.9b) has improved from 77 to 79 per cent. Population per doctor has declined from 1440 to 1370, so has the infant mortality rates from 32 to 13. However, maternal mortality rate has increased from 34 to 80 which apparently is quite high. Percentage of malnourished children has declined from 20 to 18. Empirical evidence shows a good development status with the exception maternal mortality condition but GDP per capita has increased from \$ 1754 in 1981 to \$ 6581 in 1991. This fantastic increase in GDP is not accompanied by an equal growth and social development.

Last comes the case of Singapore which has kept its position at 17 in both the years. Singapore has achieved remarkable growth after gaining self government in 1960s. It has achieved a growth of 8.2 per cent in 80s. Its GDP per capita has increased from \$ 4883 to \$ 13328. This increase is followed by a major transformation in the social sector. Economic growth has vastly increased the well being of the average Singaporean. Singapore is also a successful case of achieving both high rate of economic growth and a high level of social development. Most indicators of Singapore today actually pertain to the level that are characteristic of a developed country. Its life expectancy in 1991 was 74 years (table 2.9a and table 2.9b). Population with access to health services and safe water have increased to 100 percent where as literacy rate have increased to 90 per cent from 83 per cent in 1981. Primary and secondary enrolment have improved from 104 and 55 to 108 and 91 percent. Population per doctor has declined from 1150 to 920 and the maternal and infant mortality rates each have declined from 11 to 7 and 5. For a state with no natural resources human resource development is the most important factor for economic growth. So education and health both are of high standards in Singapore which is comparable to that in many developed countries. It can be said that Singapore's economic growth has trickled down to the lowest strata. It is so because of its social development programme in terms of provision of basic needs which

was indeed creditable. Growth in Singapore has been broad based and on the whole equitable because of their adherence to development strategy that emphasizes growth with redistribution.

MEDIUM HUMAN DEVELOPMENT

A: Latin American Countries

Panama the Latin American country has shown remarkable progress both economically and socially (table 2.8a and table 2.8b). It is so because its GDP per capita has increased from \$2095 to \$ 2772 and its life expectancy has increased from 58 to 72 years, a remarkable feat within a span of 10 years. Similarly population with access safe water and health services have increased from 81 and 75 per cent to 97 and 84 per cent which is equally creditable. Although adult literacy rates have only increased from 85 to 90 percent. primary and secondary enrolment ratios have decreased from 111 and 65 to 106 and 59. In terms of education this is the only setback faced by Panama. As far as health is concerned its population per doctor has declined from 980 to 840 and its maternal and infant mortality rates have declined from 70 and 33 to 60 and 21 respectively. Even its death rates have remained as low as 5. Panama can be considered one of the most developed economies of Latin America.

The Latin American countries of Ecuador, Peru, Chile, Paraguay, Brazil, Columbia, Uruguay, Venezuela, Bolivia and Mexico are escalating their social development (table 2.8a and table 2.8b). Their GDP per capita is moderately good which is nothing remarkable. It ranges between \$ 1,000 to \$ 5,000. In spite of Brazil having the highest per capita income among them its human development is still trailing behind. Life expectancy, adult literacy

rates and infant mortality rate are at 65 years, 82 percent and 57 per thousand live births respectively. Its maternal mortality rates have increased from 152 to 230 even though population per doctor has declined from 1,700 to 670. This is so because its provision for education is not up to the mark. Its secondary enrolment has increased from 32 to 39 per cent which is quite low. Venezuela, Peru and Ecuador have a per capita GDP of \$2672, \$ 2199, \$1054 respectively. Their life expectancy are 70, 63 and 66 years. Adult literacy rates are at 89, 86 and 87 per cent. Infant mortality at 33, 52 and 45 (per thousand live birth) all of which show moderate human welfare. Even the access to health services is quite good at 90,95 and 88 per cent , the population per doctor are at 650, 970 and 960 which is again nothing impressive. Bolivia's empirical data also reveals human development progress in the lines of Venezuela, Peru and Ecuador only its GDP per capita is even lower at \$ 717 which has further declined from what it was in 1981. Mexico has a per capita income of \$3404 which is commendable so are its life expectancy rate and infant mortality rates which are at 70, 89 per cent and 35 per thousand live birth. Population per doctor and maternal mortality rates are at 1850 and 150 which is a depressing figure so is its percentage of mal-nutritious children which is at 14 and only 55 per cent of its population is enrolled in secondary school and the rest 45 percent are drop-outs from primary school. Mostly all Latin American countries with the exception of Argentina are nations with medium social progress.

The Caribbean country like Jamaica have also made moderate progress in both the facets of development. It was ranked 26 in 1981 and 27 in 1991.

B: Oil Exporting Countries

Among the medium developed countries Saudi Arabia is a classic example where growth has taken place without redistribution and social

development (table 2.7a and table 2.7b). Its GDP per capita has declined from \$15359 to \$7543. This is so because if we consider its social indicator then there has been a drastic fall in them. For example adult literacy rate has fallen from 78 to 64, secondary enrolment has declined from 55 to 46. Its maternal mortality rate is as high as 220 and its population per doctor is 660 and its literacy rate is only 64 per cent which is quite low if we consider its per capita income and for this reason it could no longer sustain its high income in 1991. This is a very good example to show that when economic growth is not accompanied by social development the economic growth in long term tends to decline. •

Oman is a similar case. According to table 2.7a and table 2.7b, where as its GDP per capita has declined from \$ 7110 to \$ 5118. its population with access to health services and safe water is as low as 87 and 79. Adult literacy rates only 35. Secondary enrolment is only 57 though its infant mortality rate has decreased from 108 to 20. But still its maternal mortality rate is as high as 220. So, it can be easily seen that the benefits from high income has remained confined within the hands of few. Similar is the case of Jordan.

C: South East Asian Countries

Thailand with Bangkok as its capital as well as important business and trade centre is another upcoming country (table 2.6a and table 2.6b). Its per capita income is \$ 1637 which has increased from \$ 750. Even though its social development has improved but it is at a gradual rate. Its life expectancy has improved from 63 to 68, population with access to safe water has increased to 76 from 63 but its access to health services has declined from 80 to 70. Adult literacy has increased from 86 to 94, secondary enrolment has increased from 29 to 33. Population per doctor has declined from 7100 to 5,000 which exhibits quite good progress, although not remarkable. The maternal and the infant mortality rates have declined

Indonesia is the only country different amongst them. Indonesia is a borderline case. It was ranked 58 in 1981 & 51 in 1991. It has a per capita income of \$644 which has marginally increased from \$589 in 1981 as can be seen from table 2.6a and table 2.6b. Its life expectancy is at 62 years, adult literacy rate at 84 percent, a remarkable improvement from 62 percent in 1981. Infant mortality rates too have improved from 104 in 1982 to 257 in 1992. Population with access to health services and safe water have improved from 64 and 23 per cent to 80 and 51 per cent. Water supply have further scope for improvement there. Population per doctor and maternal mortality rates are 7140 and 300 (per hundred thousand births) which are lagging behind if we consider other southeast asian countries like Malaysia, Philippines and Thailand. The secondary enrolment ratio is also very low at 48 per cent considering the fact that primary enrolment is at 116 per cent. It can be said that the social development of Indonesia does not match with its economic growth. Its human welfare condition leaves much to be desired and that may be the reason that its per capita income is not evenly distributed. There is a lot of gap between the rich and the poor. This income inequality, if it is not immediately cared for may cause a severe set back to the nation's increasing growth rate and gradually development.

D: African Countries

If we take the case of African countries Egypt and Tunisia are better developed than the other African countries (table 2.5a). They have a GDP of \$ 3027 and \$1449 respectively. Their life expectancy are 61 and 67 years. Adult literacy rates are 50 and 68 per cent. Infant mortality rates are 57 and 48 respectively. Maternal mortality rates are 330 and 220 respectively. Access to health services, safe water are at 99 and 88 percent for Egypt and

91 and 99 per cent for Tunisia. Population per doctor is at 1320 and 1870 which, considering African standard, is quite good. Tunisia and Egypt have had better human development than other African countries.

Tunisia was ranked 45 in 1981 but is ranked 41 in 1991. Whereas Egypt was ranked 43 in 1981 and is ranked 48 in 1991. Their progress can be attributed to proper channelizing of investment in the social sector by their respective governments. Even though Algeria and Mauritius have a development better than the other African countries but still Egypt has a better human development than the former ones.

E: South Asian Countries

Among the South Asian countries the country to have a good rate of human development is Srilanka, which, inspite of having a low GDP per capita at \$ 482 has been able to sustain its human development process. It is because of its past history. Even before its independence they had a very good social framework. Health care and educational facilities were extended to the rural communities as early as then i.e before independence. They had the capacity to deliver social services extensively as early as 1948 which included universal free education, a health care system with a wide network of hospital and treatment facilities. This not only led high literacy rates but rapid reduction of mortality rates. Life expectancy is at 71 years, literacy rates at 89 per cent , population with access to health services and safe water are at 90 and 71 per cent respectively. Infant mortality rate is at only 18, maternal mortality rate is at 130, population per doctor is at 7140 which is quite impressive if we take the other South Asian countries whose figures are above 50,000. Srilanka's succeeding government have also made policies which has further strengthened their social framework.

China is another country whose human development is worth a mention. Its life expectancy, literacy rates and GDP per capita is at 70.5 years, 80 per cent and \$ 321 respectively. Secondary enrolment ratio is at 48 per cent. Infant and maternal mortality rate is at 31 (per thousand live births) and 700 (per 100,000 births). Population per doctor is at 730, which is quite impressive. China's good progress can be attributed to the fact that its government insures that all policies are implemented such that the provision for social need is met and is provided to all. All investment in such sectors are made by the government. Even the rural sectors are provided with such facilities. However, geographically and demographically being such a large country many a times it becomes difficult to reach out to each individual to provide medical services and so arises the problem of high mortality rates. Education is yet to be provided to all. There are large number of secondary school drop-outs and functional illiterates. Even then China's effort to improve its economic as well as social conditions is creditable.

LOW HUMAN DEVELOPMENT

A: African Countries

The African countries of Zimbabwe, Lesotho, Madagascar, Cameroon, Nigeria, Zambia, Ghana and others within the same bracket of low human development, the low status of the health condition of these countries is a serious matter of concern (Table 2.7a and table 2.7b). As a result of the poor working condition in Africa there is an exodus of workers and all skilled personnel seek job else where. This has reduced the number of doctors, nurses and other health workers. It is the inability of the government to absorb them has caused these drain of workers. Moreover, the recurring epidemics and endemics have

claimed thousands of lives and leave millions debilitated. This is a serious detriment to their economic performance. In spite of continuing occurrence of epidemics there are still no proper health personnel to deal with it so that such diseases are prevented. Development is further impeded by the existence of severe malnutrition which has fatal effects on the health of children. Maternal and infant mortality rates in Africa range from 180 to 900 (per 100,000 births). With the maximum been in Somalia and Ethiopia and lowest in Zimbabwe. The percentage of malnourished children under five range between 14 to 44 per cent being highest in Niger and lowest in Zimbabwe. Life expectancy ranges between 42 to 58 years putting Uganda at the bottom and Lesotho at the top. The health situation in the region has worsened with the advent of AIDS which is spread to unknowing residents and reduces the most productive and scarce human resources. Literacy rates range between 27 to 78 per cent. It is highest in Lesotho and lowest in Somalia. Health services is as low as 27 per cent in Somalia and quite high in Lesotho and Malawi. Population per doctor is 50,000 in Mozambique and 8,330 in Madagascar which are any way depressing figures. The expansion of education facility is very slow. There is hardly any public investment in primary education. Secondary enrolment ratio range between 4 to 26. The lowest being in Malawi and highest in Lesotho and even this highest is also very low by world standards. So, one can realise how poor is the condition of the African people.

B: Latin American Country

Guatemala is the only Latin American country with very low human development. Its per capita income is at \$1,039 in 1991 which has declined from \$ 1091 in 1981. Its life expectancy, adult literacy rates and infant mortality rates are at 64 years, 41 per cent and 62 (per thousand live births). Access to health services and safe water is at 50 and 60 per cent respectively. Population per doctor is as high as 2270 and secondary ratio is only

at 28 per cent. With this data it is not surprising that the people of Guatemala have such a low standard of living.

C: South Asian Countries

The other countries of South Asia with high levels of poverty and mortality rates and poor education facilities are the countries of Nepal, Bangladesh, India, Pakistan and Yemen. The South Asian countries of Bangladesh and Nepal can be said to have the lowest human development. As can be seen from table 2.3a and table 2.3b, the life expectancies of these countries range between 52 and 60 years, lowest in Bangladesh and highest in India. Adult literacy rates range between 27 to 84 per cent, highest being in Myanmar and lowest in Nepal. Infant mortality rates range between 72 and 106 (per thousand live births), lowest being in Myanmar and highest being in Yemen. Maternal mortality rates range between 550 and 850 (per 100,000 live births), lowest in India and highest in Nepal. Secondary enrolment ratio is as low as 19 per cent in Bangladesh and as high as 44 per cent in India. Population per doctor being high at 50,000 in Bangladesh and as low as 2440 in India. Access to health services in Nepal is only 15 per cent and in Pakistan it is 90 per cent. As high as 66 per cent of the children within the age group of 5 years are malnourished in Bangladesh and only 27 per cent of them in Yemen. Even GDP per capita, ranges between \$ 161 (Nepal) and \$ 858 (Myanmar). The slow rate of human development in south Asia is due to continuous pressure of population and poverty. There is a vast gap in income differentials. The rich are very prosperous and the poor live in abject poverty. Moreover, in South Asia the lack of education and scarce health services is mainly felt on women and children. They always bear the brunt whenever there is any cut in social sector expenditure. The status of women is very poor in these countries. The female literacy is very low here.

Both economically and socially these countries are backward.

Summary

In conclusion we can easily summarise and say that the worst development is faced by the countries of Africa and South Asia .The situation of these countries have turned from bad to worse .Though figuratively speaking they have improved but if we account for the fact other countries have improved their lot too, then relatively these countries have done badly .These countries are in a debt trap and so their economic status have gone down , taking along with it the social development.

A little better off are the middle order countries with medium human development .They are still striving to do better and in the process have pushed up their countries development.They may not have very high per capita income but they have spent judiciously and the respective governments have paid due attention to the social services sector.

The countries which are doing very well are the advanced European and American countries, somatimes even at the cost of Third world countries . For example they have banned cigarettes from many places yet tobacco is still exported to the third world countries . They have now, stopped the production of CFCs (chlorofluorocarbons) used in refrigerators when the harm is already done and facing the brunt of it is the Third World countries .Environmental degradation is also affecting the human development negatively in these regions. So these two group of countries, the developed and the developing are at two extreme ends of development.

So human development as it stands is highest in the advanced countries and lowest in the Third World countries.The only countries to make some progress on their own are the middle order countries.

ABBREVIATIONS USED IN THE TABLES

AHS	: Access to Health Services
ALR	: Adult Literacy Rate
ASW	: Access to Safe Water
CDR	: Crude Death Rate
GDP	: Per Capita GDP
IMR	: Infant Mortality rate
LEAP	: Average of Life Expectancy
MC5	: Mal-nourished Children under 5
MMR	: Maternal Mortality rate
PDOC	: Population Per Doctor
PER	: Primary Enrolment Ratio
SECER	: Secondary Enrolment Ratio (for World)

**Table 2.1a Comparative Ranking of Countries According to PCA and EHDI, 1991
(High PCA Ranking)**

Countries	PCA Ranking	EHDI Ranking
Denmark	1	4
Ireland	2	5
Switzerland	3	2
France	4	1
Australia	5	7
Japan	6	3
Germany	7	7
U.S.A.	8	6
Italy	9	10
Canada	10	8
Spain	11	11
U.K.	12	14
Greece	13	28
Hongkong	14	14
Israel	15	13
Czechoslovakia	16	21
Poland	17	19
New Zealand	18	16
Porgugal	19	18
Singapore	20	17
Hungary	21	29
Argentina	22	22
Chile	23	26
Uruguay	24	23
Rep. of Korea	25	25

Table 2.1b

Comparative Ranking of Countries According to PCA and EHDI, 1991

(Medium PCA Ranking)

Countries	PCA Ranking	EHDI Ranking
Panama	26	20
Cameroon	27	70
Jamaica	28	27
Mauritius	29	32
U.A.E.	30	24
Malaysia	31	34
Somalia	32	77
Ethopia	33	74
Saudi Arabia	34	37
Niger	35	76
Egypt	36	48
Brazil	37	39
Sri Lanka	38	35
Oman	39	42
Congo	40	66
Colombia	41	31
Morocco	42	58
Bolivia	43	56
Ghana	44	61
Paraguay	45	54
Chad	46	73
Jordan	47	33
China	48	38
Turkey	49	36
Rep. of Yemen	50	69

**Table 2.1c Comparative Ranking of Countries According to PCA and EHDI,1991
(Low PCA Ranking)**

Countries	PCA Ranking	EHDI Ranking
Mexico	51	30
Nigeria	52	67
Pakistan	53	65
Phillipines	54	47
Zambia	55	62
Peru	56	43
Tunisia	57	41
Ecuador	58	46
Iraq	59	45
Thailand	60	44
Malawi	61	68
Mozambique	62	75
Madagascar	63	63
Indonesia	64	51
India	65	55
Uganda	66	72
Venezuela	67	40
Algeria	68	49
Nepal	69	71
Kenya	70	57
Bangladesh	71	64
Myanmar	72	59
Guatemala	73	60
Lesotho	74	53
Iran	75	50
Zimbabwe	76	52
Kuwait	77	15

**Table 2.2a Comparative Ranking of Countries According to PCA and EHDI, 1981
(High PCA Ranking)**

Countries	PCA Ranking	EHDI Ranking
Canada	1	1
Switzerland	2	3
Japan	3	2
U.K.	4	8
Denmark	5	4
Hongkong	6	11
Germany	7	6
France	8	5
Australia	9	9
Ireland	10	7
U.A.E.	11	20
U.S.A.	12	14
New Zealand	13	12
Israel	14	15
Spain	15	10
Singapore	16	17
Italy	17	16
Greece	18	21
Saudi Arabia	19	47
Kuwait	20	22
Poland	21	13
Czech	22	27
Mauritius	23	28
Jamaica	24	26
Hungary	25	33

**Table 2.2b Comparative Ranking of Countries According to PCA and EHDI, 1991 (Medium
PCA Ranking)**

Countries	PCA Ranking	EHDI Ranking
Rep. of Korea	26	24
Portuga'	27	25
Venezuela	28	30
Uruguay	29	23
Malaysia	30	38
Panama	31	28
Jordan	32	34
Egypt	33	43
Oman	34	55
Chile	35	19
Brazil	36	39
Colombia	37	31
Turkey	38	41
Iraq	39	46
Iran	40	49
China	41	35
Sri Lanka	42	36
Algeria	43	51
Morocco	44	53
Tunisia	45	45
Peru	46	40
Mexico	47	37
Guatemala	48	54
Ghana	49	56
Ecuador	50	42

**Table 2.2c Comparative Ranking of Countries According to PCA and EHCI, 1981
(Low PCA Ranking)**

Countries	PCA Ranking	EHCI Ranking
Phillipines	51	44
India	52	60
Thailand	53	50
Zambia	54	59
Pakistan	55	68
Bolivia	56	57
Niger	57	76
Paraguay	58	48
Indonesia	59	58
Zimbabwe	60	52
Bangladesh	61	69
Malawi	62	70
Rep. of Yemen	63	72
Mozambique	64	63
Myanmar	65	62
Somalia	66	73
Madagascar	67	65
Ethopia	68	75
Uganda	69	72
Chad	70	77
Nigeria	71	67
Kenya	72	61
Lesotho	73	64
Cameroon	74	66
Nepal	75	74
Congo	76	32
Argentina	77	18

Table 2.3a South Asian Countries with Low & Medium Human Development (1991)

	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SE CER	PER	MC5
LOW HUMAN DEVELOPMENT:												
Bangladesh	211	52.2	60	80	6670	650	11	91	37	19	77	84
India	256	59.7	79	73	2440	550	10	79	50	44	98	71
Myanmar	858	56.9	48	31	12500	600	10	72	82	24	102	41
Nepal	161	52.7	15	42	16670	850	13	99	27	30	86	63
Pakistan	347	58.3	90	56	2940	750	10	95	36	21	46	47
Rep. of Yemen	203	51.9	90	48	6100	800	15	106	41	23	76	33
MEDIUM HUMAN DEVELOPMENT:												
China	321	70.5	90	83	730	700	8	31	80	123		26
Sri Lanka	482	71.2	90	71	7140	130	6	18	89	108		58

Sources for tables (2.3a to 2.10a)

1. Human Development Report 1992, 1993, 1994
2. World Bank Development Report 1984 to 1994
3. Social Indicators of Development 1994

Table 2.3b South Asian Countries with Low & Medium Human Development (1981)

	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
LOW HUMAN DEVELOPMENT:												
Bangladesh	118	48	45	39	10990	3000	17	133	26	15	62	66
India	210	52	75	42	3690	460	13	94	36	28	79	63
Myanmar	169	54	48	21	4660	150	13	96	66	20	96	33
Nepal	167	45	10	11	30060	1250	19	145	19	21	91	51
Pakistan	283	50	64	35	3480	600	15	121	24	15	56	42
Rep. of Yemen	1605	46	36	24	11670	330	22	140	40	5	47	27
MEDIUM HUMAN DEVELOPMENT:												
China	258	67	81	75	1810	44	7	67	69	34	118	21
Sri Lanka	293	69	90	28	7170	90	6	32	85	51	103	42

Table 2.4a

African Countries with Low Human Development (1991)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
Bolivia	1193	51	53	36	1850	480	16	126	63	36	84	17
Cameroon	819	50	20	34	13990	430	15	92	42	18	107	19
Chad	80	43	30	31	47530	700	21	161	15	3	35	34
Congo	1085	60	75	20	5510	830	10	68	50	69	156	43
Ethiopia	122	46	44	16	58490	452	18	122	15	11	46	45
Ghana	209	54	64	45	7630	413	13	86	53	36	69	35
Kenya	297	56	19.3	49	7890	510	12	77	47	18	109	25
Lesotho	300	52	50	15	18640	400	15	94	52	17	104	20
Madagascar	322	48	65	21	10170	300	18	116	50	12	100	30
Malawi	189	44	54	41	40950	250	23	137	25	4	62	19
Morocco	735	57	93	59	10750	327	15	20	28	24	78	19
Mozambique	182	79	40	15	39110	300	16	105	33	6	90	44
Niger	195	45	48	33	38790	420	20	132	10	4	23	50
Nigeria	788	49	40	36	12550	1500	16	109	34	16	98	30
Somalia	246	39	20	32	14290	1100	25	184	60	6	30	47
Uganda	616	48	42	11	26810	300	19	120	52	5	54	28
Zambia	638	51	70	46	7670	151	16	105	44	17	96	17
Zimbabwe	737	55	71	36	6580	145	12	83	69	13	126	25

Table 2.4b African Countries with Low Human Development (1981)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SE CER	PER	MC5
Bolivia	717	60.5	63	53	2320	600	10	82	53	34	85	11
Cameroon	972	55.3	41	54	12500	550	12	61	57	28	101	17
Chad	206	46.9	43	57	33330	800	18	122	33	7	65	31
Congo	1455	51.7	81	21	8330	900	16	114	21	44	70	28
Ethiopia	113	46.4	46	28	33330	900	18	122	50	12	25	40
Ghana	428	55.4	60	54	25000	600	12	81	63	38	77	27
Kenya	285	58.6	77	50	71430	550	10	66	71	29	95	17
Lesotho	289	59.8	80	48	18610	350	9	46	78	26	107	18
Madagascar	207	54.9	65	21	8330	600	15	93	81	18	92	38
Malawi	221	44.6	80	53	50000	500	20	134	45	4	66	24
Morocco	1064	62.5	63	73	4840	270	8	57	52	34	66	12
Mozambique	76	46.5	39	24	50000	800	21	162	34	8	63	47
Niger	286	45.9	30	55	33330	850	19	123	31	7	29	44
Nigeria	345	51.9	72	50	66670	400	14	84	52	20	71	35
Somalia	110	46.4	27	60	14290	900	17	132	27	10	21	39
Uganda	149	42.6	70	15	25000	700	22	122	51	14	71	26
Zambia	489	45.5	74	48	11110	600	17	107	75	20	92	26
Zimbabwe	103	56.1	83	36	62500	180	8	47	69	50	117	14

Table 2.5a African Countries with Medium Human Development (1991)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
Algeria	1257	65.6	90	70	2320	210	6	55	60	60	95	12
Egypt	302	60.9	99	88	1320	330	9	57	50	81	101	10
Mauritius	2253	69.6	100	89	1640	130	7	18	95	53	106	17
Tunisia	1449	67.1	91	99	1870	200	7	48	68	46	117	9

Table 2.5b African Countries with Medium Human Development (1981)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
Algeria	2247	56	80	69	2630	129	13	111	35	32	94	23
Egypt	600	57	99	84	970	266	11	104	44	52	76	17
Mauritius	1800	65	100	99	1899	130	7	25	83	51	100	32
Tunisia	1013	61	91	60	3690	1000	9	65	62	27	106	17

Table 2.6a South-East Asian Countries with Medium Human Development (1991)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
Indonesia	644	62	80	51	7140	300	10	66	84	45	116	38
Malaysia	2610	70.4	90	86	670	120	5	14	80	56	93	18
Philippines	607	64.6	75	82	8330	250	7	40	90	48	110	34
Thailand	1637	68.7	70	76	5000	180	6	26	94	33	113	13

Table 2.6b South-East Asian Countries with Medium Human Development (1981)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
Indonesia	589	54	64	23	11530	450	13	102	62	28	100	51
Malaysia	1725	65	85	63	7910	120	6	29	60	53	92	31
Philippines	781	63	52	45	7970	80	7	51	75	63	110	39
Thailand	751	63	30	63	7100	270	8	51	86	29	96	36

Table 2.7a OEC Asian Countries with Medium Human Development (1991)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MCS
Iran	1672	66.6	87	61	3140	250	7	65	56	52	112	39
Iraq	3510	65.7	99	91	1810	250	7	65	62	48	111	12
Oman	5118	69.1	87	79	1060	220	5	20	35	57	107	5
Saudi Arabia	7243	68.7	98	98	580	220	5	28	64	46	77	13
Turkey	1680	66.7	100	92	1260	200	7	54	82	48	110 97	11
Jordan	881	67.3	97	99	770	200	5	28	82	63		13

Table 2.7b OEC Asian Countries with Medium Human Development (1981)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MCS
Iran	3844	58	67	66	6090	200	10	102	50	44	95	43
Iraq	2558	57	94	86	1800	117	11	73	50	57	113	19
Oman	7110	52	92	54	1900	220	15	123	20	22	74	18
Saudi Arabia	15359	55	90	90	1670	220	12	108	25	30	64	25
Turkey	1063 1167	62	92	76	1630	207	9	83	60	37	102	15
Jordan		62	80	86	1700	306	8	65	70	79	103	18

Table 2.8a Latin American and Caribbean Countries (1991)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
LOW HUMAN DEVELOPMENT:												
Guatemala	1039	64	50	60	2270	250	7	62	41	28	79	25
Paraguay	1564	67.2	63	36	1610	200	6	36	91	30	109	4
MEDIUM HUMAN DEVELOPMENT:												
Brazil	4989	65.8	80	100	1180	230	7	57	82	39	106	7
Chile	2409	71.9	97	88	2170	67	10	17	94	72	101	2
Colombia	1263	69	100	93	1150	150	6	21	87	55	111	7
Ecuador	1954	66.2	88	54	960	200	7	45	87	56	118	13
Jamaica	1749	73.3	90	100	2040	120	6	14	99	62	106	7
Mexico	3404	69.9	90	85	1850	150	5	35	89	55	114	7
Peru	2199	63.6	95	56	970	300	7	52	86	67	126	13
Venezuela	2672	70.1	90	72	2700	130	5	33	89	34	99	6
HIGH HUMAN DEVELOPMENT:												
Panama	2772	72.5	80	84	840	60	5	21	90	59	106	11
Uruguay	3160	72.4	90	98	340	50	10	20	98	81	108	6

Table 2.8b Latin American and Caribbean Countries (1981)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MCS
LOW HUMAN DEVELOPMENT:												
Guatemala	1091	59	59	46	8610	300	9	66	70	16	69	30
Paraguay	1950	71	56	21	1710	260	7	45	84	26	102	9
MEDIUM HUMAN DEVELOPMENT:												
Brazil	1956	64	70	87	1700	230	8	73	76	32	93	18
Chile	2012	68	94.7	84	1930	55	7	27	90	55	115	2
Colombia	1295	63	87.6	86	1710	130	7	54	81	46	130	10
Ecuador	1541	62	73	50	760	220	8	78	81	40	107	20
Jamaica	1590	71	87	51	2830	100	6	10	90	57	99	14
Mexico	2346	66	50.7	73	1260	150	7	53	83	37	121	14
Peru	1272	58	85	50	1390	1650	11	83	80	56	112	17
Venezuela	4087	68	80	86	990	130	6	31	82	39	105	14
HIGH HUMAN DEVELOPMENT:												
Panama	2095	65	75	81	980	90	5	33	85	65	111	14
Uruguay	3263	71	85	81	540	50	9	34	94	60	122	7

Table 2.9a Newly Industrialised Countries with High Human Development (1991)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MCS
Hongkong	11259	77.4	99	100	1080	6	6	6	95	75	108	10
Rep. of Korea	6581	70.4	100	79	1370	80	6	13	97	87	107	20
Singapore	1578	74.2	100	100	920	14	6	5	90	70	108	5

Table 2.9b Newly Industrialised Countries with High Human Development (1981)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MCS
Hongkong	4888	75	85	100	1210	4	5	10	90	62	106	15
Rep. of Korea	1754	66	100	75	1440	80	6	32	93	85	107	18
Singapore	4883	72	100	100	1150	11	5	11	83	55	104	14

Table 2.10a Countries with High Human Development (1991)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
Argentina	3465	71.1	87	77	330	140	9	29	96	71	107	1
Australia	15779	76.7	100	100	440	5	8	7	100	91	107	2
Canada	18920	77.2	100	100	440	7	7	7	99	101	107	3
Czechoslovakia	2073	72.1	90	92	310	7	11	10	99	86	90	10
Denmark	22417	75.3	100	100	350	4	12	7	99	91	96	2
France	21040	76.6	100	100	350	13	9	7	99	106	107	1
Germany	19679	75.6	100	100	370	8	11	6	99	123	107	9
Greece	5790	77.3	90	92	580	7	10	8	94.8	98	97	15
Hungary	3080	70.1	100	90	650	21	14	15	98	96	89	10
Ireland	9757	75.0	100	92	630	3	9	5	99	112	103	6
Israel	12537	76.2	100	97	350	6	6	9	99	85	95	9
Italy	19836	76.9	100	100	210	6	10	8	99	88	94	7
Japan	27115	78.6	100	96	610	16	7	5	99	99	102	2
Kuwait	15984	74.6	100	100	550	30	2	28	74	90	96	5
New Zealand	14287	75.3	100	100	580	18	8	7	99	79	104	9
Poland	2053	71.5	100	88	490	15	10	14	94	79	98	1
Portugal	6510	74.4	100	93	660	14	10	9	85	79	122	2
Spain	13516	77.4	100	100	280	7	9	8	98	91	109	4
Switzerland	33143	77.8	100	100	630	6	9	6	99	107	103	3
U.A.E.	21233	70.8	100	100	1020	130	4	20	65	48	115	15
U.K.	15117	75.8	100	100	710	11	11	7	99	100	104	9
U.S.A.	22177	75.6	100	100	420	13	9	9	99	89	104	1

Table 2.10B Countries with High Human Development (1981)

Countries	GDP	LEAP	AHS	ASW	PDOC	MMR	CDR	IMR	ALR	SECER	PER	MC5
Argentina	2302	71	55	54	430	140	9	44	93	56	119	3
Australia	10947	74	98.6	99	560	11	8	10	100	56	110	10
Canada	11582	75	100	98	550	2	7	10	99	89	106	5
Czechoslovakia	1500	72	88	85	360	21.1	12	16	90	44	90	18
Denmark	11400	75	100	100	480	24	11	8	99	87	97	7
France	9949	76	100	98	580	12.9	11	10	99	85	110	6
Germany	10693	73	100	100	450	11	12	12	99	94	100	15
Greece	3395	74	80	75	420	7	9	14	90	81	103	20
Hungary	1883	71	62	97	400	21	14	20	71	40	99	12
Ireland	4295	73	100	96	780	7	9	11	98	93	102	9
Israel	5123	73	100	96	370	5	7	16	88	71	95	12
Italy	6153	74	100	90	340	13	11	14	98	73	101	10
Japan	8999	77	100	100	780	15	7	7	99	91	100	5
Kuwait	10030	70	100	87	570	18	3	32	60	75	94	14
New Zealand	7940	74	100	100	650	13.8	8	12	99	81	102	15
Poland	1500	73	100	89	570	15	9	14	98	77	100	3
Portugal	2129	72	100	58	540	14	10	26	78	55	103	5
Spain	4770	74	95	90	460	10	9	10	95	87	110	10
Switzerland	16121	76	100	98	410	5	9	8	99	55	100	7
U.A.E.	29870	63	96	92	900	12.9	3	50	56	52	127	25
U.K.	8450	74	100	99	650	7	12	11	99	82	103	16
U.S.A.	2972	75	100	100	520	9	9	11	99	90	100	5

CHAPTER 3

INDIAN DEVELOPMENT EXPERIENCE

Introduction:

In this chapter, we study the Indian experience regarding the possible connection between economic and social development. An attempt has been made to prepare a human development index for 25 Indian states with the help of various indicators which reflect different aspects of development. However, it is difficult to choose between numerous indicators as to which exactly reflect the well-being of a nation. Since the concept of well-being is subjective in nature, identification of the factors that affect it is fraught with value judgements. It is a matter of debate and perhaps cannot be resolved by inclusion or exclusion of a few among the factors likely to affect the quality of life of individuals in a society.

There is, however, little disagreement with the fact that every individual wants an access to income and assets so as to have a decent standard of living, to be knowledgeable and to lead a healthy life. The Human Development Report of UNDP has brought to focus three areas of social concern viz material well-being (per capita income), acquisition of knowledge (literacy rate) and long and healthy life (life expectancy). However, the individuals may aspire for many other things for a decent quality of life. Here we have included some indicators of health, education and housing.

The objective of the Indian economy has been to establish a socialistic pattern of society. According to Indian plans, the basic criterion of development strategy should be such that not only there is increase in national income and employment but also in greater equality in incomes and wealth. The plans also emphasized that the 'benefits of economic development must accrue more and more to the relatively less privileged classes of society and there should be progressive reduction in the concentration of incomes, wealth and economic power'. Thus, the basic goal of the Indian economy has been the rapid increase in the standard of living of the people through measures which also promote equality and social justice.

India is one of the few countries that can take pride in possessing a fairly decent statistical base on different socio-economic indicators. Nevertheless the task of presenting a consistent picture of the socio-economic condition of the Indian population over the periods is not an easy one. First, the statistics put by the official agencies are scattered over a number of sources and second, the absence of uniformity of periodicity makes the standardised presentation of the social indicators difficult. Here only 25 states are taken while taking the EHDI. Firstly, the 25 states constitute 98.66 per cent of the total population and hence is sufficient to state the social development of India. Secondly, due to data non-availability of Union territories, presentation of the social indicators becomes impossible. Even then effort has been made to rank the states according to Extended Human Development Index with the help of available data.

India is a union of 25 states and 7 union territories in which sixteen per cent of the world's population live. It is a country with diverse set of people following different religions, speaking various languages living in different socio-economic conditions. At the time of Census of 1991, there were 466 districts in all. Uttar Pradesh had 63 districts while states like Goa and

Tripura had only two or three districts. The population of India is 846 million; where males outnumber females. There are 927 females for every 1000 males. This population is scattered in the urban and the rural areas. However, this chapter includes data for both rural and urban areas combined.

Disparity Between EHDI and PCA Ranking

The comparative EHDI and PCA ranking of the Indian states is given in table 3.1 and table 3.2 for 1991 and 1981. The major disparities in 1991 is given below :

Chart 3.1 : Disparity between EHDI and PCA ranking for the Indian States

States	PCA	EHDI
Mizoram	4	12
Manipur	5	11
Tripura	7	20
Assam	10	24
Meghalaya	12	22
Orissa	13	23
Punjab	14	2
Jammu and Kashmir	20	7

First if we take the case of Punjab, it been one of the most prosperous states india had faced an agricultural boom right after Green Revolution. So, its economic position has strengthened after so many years since the advent of Green Revolution. This economic condition has been reflected in the status of human development. So, it is ranked second according to EHDI. PCA has ranked it 14th which can be certainly considered erroneous.

Second if we take the case of north eastern states of Mizoram, Manipur, Meghalaya and Tripura. They have most of their population living in mountainous and backward areas whose economic and social condition are quite poor. Hence, it is clear that it should be correctly ranked at 12th, 11th, 20th and 22nd (EHDI) respectively instead of 4th, 5th, 7th and 12th.

Assam's poor living quality is not unknown to us and it can never be ranked 10th(PCA). It is aptly ranked 25th by EHDI.

As in the previous chapter it can be reiterated again that PCA has been abandoned for Human Development Index only because of the former's faulty method of calculation . If any one of the indicators has a very high or low value it distorts the ranking of the state drastically. On the other hand, EHDI, in our study, EHDI includes the efect of each indicators by taking into consideration their maximum and minimum values. EHDI includes effect of each indicator individually on the states' social development PCA clubs everything into one standardised index then gives them the rank.

Till date EHDI/HDI can be considered most up-to-date method of measuring human development inspite of many faults till a better estimate is found.

The Indian states are ranked according to human development index. According to Table 3.1 and 3.2, the EHDI and respective ranks for the 25 states are given. It can be seen that Goa, Punjab, Maharashtra, Kerala and Gujarat are among the top five states both economically as well

Table 3.1 Comparative PCA & EHDI Ranking of Indian States in 1991

States	PCA Ranking	EHDI Ranking
Kerala	1	4
Nagaland	2	8
Goa	3	1
Mizoram	4	12
Manipur	5	11
Gujarat	6	6
Tripura	7	20
Himachal Pradesh	8	5
Maharashtra	9	3
Assam	10	24
Haryana	11	14
Meghalaya	12	22
Orissa	13	23
Punjab	14	2
Tamil Nadu	15	9
Sikkim	16	13
West Bengal	17	15
Andhra Pradesh	18	16
Karnataka	19	10
Jammu and Kashmir	20	7
Uttar Pradesh	21	25
Madhya Pradesh	22	18
Arunachal Pradesh	23	17
Rajasthan	24	19
Bihar	25	21

as socially. Among them, Goa tops the list. It is one of the most developed states. Its human development index is at 0.549. On the other hand, Assam, Bihar, Orissa and Uttar Pradesh are

amongst the lowest in social development, the lowest being in Uttar Pradesh whose EHDI is at 0.194. On the whole human development is very low barring few states of Goa , Kerala and Punjab.

Health

The states also have different conditions of health, education and housing. If we take the status of health in the states, then it shows that better health conditions improve the productivity and consequently the economic performance of the individuals. Health is also a basic necessity to make one able to participate in various social activities and share achievements. Individual health status has multiple dimensions and this health profile of any population includes:

- Crude Death Rate measured by the number of deaths per thousand population
- Infant Mortality Rate indicating the number of deaths before age one, out of one thousand live births.

Access to Health services is measured by:

- Primary Health Care Centres available per lakh population
- Hospitals built per lakh population
- Population at the disposal of one doctor and one nurse.

Death rate is highest in Madhya Pradesh (Table 3.5) followed by Arunachal Pradesh and Orissa. In 1981, highest was in Madhya Pradesh at 16.60 followed by Uttar Pradesh (16.30) and

Arunachal Pradesh at 15.90. Even the lowest, i.e. Nagaland, it is 3.30 whereas it was 6.3 in 1981. So it can be seen that the population growth in the 1990s has been arrested only because of the declining rate of the crude death rate. Death rates are indicative of general mortality and fertility conditions. However, child mortality accounts for a substantial proportion of death in India and many of the developing countries. Mortality conditions of children are often taken as a barometer for health status of any society.

Infant deaths account for one-third of the total deaths at all ages. Despite reducing infant mortality rate to half of what it was at the time of independence, India still ranks among the countries with very high infant mortality rate which is traced to high fertility and unhealthy conditions surrounding pregnancy and child birth. A reduction in infant mortality rate is feasible with improved health practices at the time of pregnancy and birth as also with better nutrition, pre and post-natal care and immunization against prevailing major of infant diseases. A reduction in infant mortality rate not only reduces the burden of excess mortality and ill-health but, combined with female education, is also known to bring about a reduction in crude birth rate with a lag. Therefore, infant mortality rate needs special scrutiny.

Infant mortality is lowest in Nagaland at seven (per '000 live births) as shown in Table 3.5 followed by Kerala at 13 (per '000 live births) and then Goa whose infant mortality rate is at 20. States with high infant mortality rate include Orissa (115 per '000 live births), Orissa, Madhya Pradesh at 104 (per '000 live births) and Uttar Pradesh at 98, followed by Sikkim and Rajasthan. Nagaland and Kerala's infant mortality rates are comparable to the advanced countries of US, UK, Switzerland, Denmark, Japan and Canada. The infant mortality rates, however, have improved from what it was in 1981. Uttar Pradesh was at 150 (per '000 live births), Madhya

Pradesh at 142, Orissa at 135, Gujarat at 116. On the other hand, Nagaland was at 25, Goa at 30, Kerala at 37 and Manipur was at 38. It is clear from the data that infant mortality rates have definitely improved. It was due to increase in literacy rates in these states and also because of higher per capita income. The highest decline in the infant mortality rates was for Uttar Pradesh. It was from 150 in 1981 to 98 in 1992 followed by Arunachal Pradesh from 110 in 1981 to 58 in 1992. These states are among the states with high mortality rates. So a large decline in mortality rates shows that development has certainly taken place.

Health Care Services

Health care facilities have also shown a definite improvement over the years. However, still the available health service infrastructure is in short supply relative to the needs and is unevenly distributed across space with considerable urban concentration. The data for overall health care facilities provided by public authorities are available. A large part of the health care facilities is supplied by private sector on which no agency seems to collect information. Not much is known about private practice in health care in the country from secondary sources. Health care facilities provided by the government and by the private sector are more likely to be supplementary to each other - in areas where public health care centres lack, private practitioners thrive. It is difficult to make any realistic assessment of the available facilities in the absence of any information about private practice in health care.

The National Health Policy (1993) under Health For All by 2000 A.D. programme have provided primary health care centres and community health care centres for the rural areas but still even after its implementation, it has shown poor performance in crucial areas. Even the

Planning Commission has given up the hope of achieving the goals regarding rural health care service. The backlog of primary and community health care centres in many states is staggering and the resources required to meet the targets are astronomical and as such unachievable in the near future. Still, undoubtedly, there has been some improvement in 1991 from what it was in 1981.

As can be seen from table 3.5, the rate of primary health care centres per lakh population was high in Arunachal Pradesh (7.12), Sikkim (4.14), Mizoram (2.84), Manipur (2.18), Nagaland (2.19), Meghalaya and Himachal Pradesh (1.80) in 1981. It is easily discernible that states with more rural villages than urban cities have more primary health care centres than those with more cities. The states with low PHC - population ratio were West Bengal (0.61), Haryana (0.69), Kerala (0.70) and Maharashtra (0.72). There is a definite improvement in the status of primary health care centres in 1991. It is 10.04 in Punjab, 5.07 in Mizoram, 5.41 in Sikkim, 4.45 in Meghalaya and Himachal Pradesh at 3.89. On the other hand, states like Tamil Nadu (0.77), Goa (1.71), Madhya Pradesh (1.79) and Tripura (1.78) whose number of primary health care centres did not make any improvement in the last decade.

However, there is no such improvement in the number of hospital per lakh population and also number of hospital beds. Goa has the highest ratio of hospitals per lakh population at 9.57, Kerala is at 7.00, Gujarat at 4.32, Maharashtra at 2.67 and Nagaland at 2.56. The states with very low ratio are Bihar (0.35), Meghalaya (0.45), Rajasthan (0.49) and Uttar Pradesh (0.53). The same is the ratio with hospital beds. In 1981, the number of hospital beds per lakh population in Nagaland was 4.39, Arunachal Pradesh was 3.48, Kerala was 2.98, Gujarat 2.43. A look at table 3.5 shows that the hospitals - population ratio has definitely declined in the

years. Except for few states of Assam, Bihar, Goa, Gujarat, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Mizoram and Tripura, rest others have shown really poor performance health wise. Even amongst them, Bihar, Jammu and Kashmir, Karnataka, Tripura, Madhya Pradesh have shown such a marginal improvement that it cannot be considered a betterment. If we consider the absolute number of hospitals over the decade, then their number has definitely increased, but then that is just an eye-wash because in relative terms, its situation is nothing less than worse. This is because of the demographic factor that is population increase.

Medical services indicated by the number of doctors and nurses are also an important indicator of health care. Population served per doctor and per nurse also has not shown any significant change either. Population served per doctor has increased in Arunachal Pradesh from 2841 to 3536, in Goa from 1042 to 2523, Gujarat from 2603 to 3976, in Haryana from 4675 to 11705 which is the largest increase, in Karnataka from 6873 to 7213, in Nagaland from 4095 to 5401, in Sikkim from 3115 to 4297. Since population served per doctor should decline as development occurs, an increase in them is considered to be against development. The state which has shown huge improvement is Rajasthan, Tamil Nadu, Madhya Pradesh, Karnataka, Jammu and Kashmir, Himachal Pradesh and Andhra Pradesh. Population served per nurse improved in states like Jammu and Kashmir, Karnataka, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. In most of the major states, there is decline in medical services.

This dearth of medical services can be attributed to lack of education and also because of increase in private practice and decline of doctors in government hospitals, which has no account whatsoever till now. Another reason can be lack of implementation of such facilities. Number of doctors have increased, so has the number of hospitals but in relative terms of

population, both of them have had no significant change. Kerala is the only state worth mentioning whose health status can be reckoned with. It is mainly because of their effectiveness of utilization of public funds as well as complementary role played out by especially female education and the family and community habits regarding sanitation, hygiene and health awareness in general that possibly explain Kerala's success. Although at the aggregate level public expenditure on health sector has increased from 1.2 per cent of GDP in 1976-77 to 1.6 per cent GDP in 1986-87, yet improvement of health services is not at the same rate.

Education

The availability of well-educated and skilled workforce is considered a necessary condition for the smooth functioning of the society and the economy. It is also necessary for bringing about socially desirable changes in the attitudes and beliefs of the population. The Indian situation presents a multi-dimensional paradox in this context.

Level of knowledge acquired is another valid indicator of human development. This level of an individual has been traditionally measured by the input of formal education he has received. Relevant social indicators thus would include percentage of literates and proportion reaching various levels such as primary and secondary in the ladder of female education. This again does not present a true picture of literacy in the country. As major part of our population lives in rural areas, hence most of the education is imparted informally. The number of schools in rural areas is less and informal education does not have any data. So rural areas any way or the other shows a very low literacy rate. Moreover, there is no way to measure the functionally literate who have no formal degree. So it can be said that literacy rate generally shows a higher value

than it is in actual. As such, informal acquisition of knowledge is omitted from the purview of measurement because it is operationally difficult to measure it. So only formal education is considered while measuring literacy rate.

At the time of the first census enumeration in 1951 after independence, about one-fourth of male population could read and write. Female literacy was lower at 8.83 per cent. Literacy both among males and females has increased considerably after that. According to the latest census figures (1991), 64 per cent of males and 39 per cent of females are literates. Literacy, however, is higher among residents in urban areas (73 per cent) than those among residents in rural areas (45 per cent). Disparities in literacy rate between females and males and between rural and urban areas are still quite high though showing a decreasing trend in recent years. Adult literacy rate, primary and secondary enrolment ratios statewise is shown in Table 3.4.

Primary Enrolment

It is evident from the data that primary education has formally expanded in terms of the number of schools being set up. The primary enrolment ratio is more or less uniform throughout the country except for few backward states. However, it is also true that drop-out rate is also quite high especially for the rural children and much more for girls than for boys. Drop-out rates at the primary level is 46 per cent for boys and 50 per cent for girls. Primary enrolment ratio is highest in Tamil Nadu (0.69) followed by Sikkim (0.67), Assam (0.65), Gujarat (0.63), West Bengal (0.61), Mizoram (0.59), Maharashtra (0.57) and Goa (0.56). Kerala's primary enrolment ratio is at 0.53. Lowest enrolment rate is in Meghalaya (0.34) and Bihar (0.37). This ratio was higher in 1981 than it is in 1991. In 1981, highest ratio was in Mizoram at 0.72 followed by

Sikkim and Nagaland at 0.70. Lowest was in Goa at 0.31,. Primary enrolment ratio has shown a distinct decline. Though number of formal primary schools being set up has increased, enrolment ratio has certainly declined. Therefore it is not the non-availability of school facilities that has caused enrolment ratio to decline, there are many other socio-economic reasons for such decline in enrolment ratios, e.g. since in the rural areas people are so poor that they need as many earning hands as possible hence children are made to work ; secondly girls are not allowed to go to schools etc.

Secondary Enrolment

On the other hand, secondary enrolment is not only less than primary enrolment but it has also declined in the last decade. In 1981, 87 per cent were enrolled in secondary schools. In Kerala, it was 53 per cent, 47 per cent in Himachal Pradesh, 42 per cent in Mizoram and 40 per cent both in Tamil Nadu and Manipur whereas Bihar had only 19 per cent enrolled in secondary schools and 20 per cent in Meghalaya. The data of 1991 reveal that Kerala recorded maximum enrolment at 40 per cent, 37 per cent in Goa, 36 per cent in Himachal Pradesh and only 10 per cent in Bihar, 13 per cent in Madhya Pradesh and six per cent in Sikkim. Secondary education has had a very poor performance. It may be due to the number of drop-outs from schools. The increasing number of drop-outs is because of many children in the age group of 5-14 years have a positive opportunity cost associated with joining formal school because of their use in releasing the elders for farm, non-farm work by looking after their siblings or their direct participation in economic activity. Hence the school facilities remain unutilized. Effective universal primary and

secondary education therefore would require not just improvement of the existing institutional infrastructure, better teaching facilities relevant syllabus and reducing the drops.

Literacy Rates

Literacy rate is highest in Kerala at 90.59 per cent in 1991. It was 81.56 per cent in 1981. Mizoram has a literacy rate of 81.23 per cent in 1991 which has increased from 74.26 in 1981. Following them is Goa at literacy rate of 76.96 per cent and Tamil Nadu at 63.72 per cent in 1991. Low literacy rates are in states like Bihar (38.54 per cent), Rajasthan (38.81), Jammu and Kashmir (40.47 per cent), Arunachal Pradesh (41.22), Uttar Pradesh (41.71) in 1991. The overall average literacy rate in India is 52.2 per cent which is low by all standards. Kerala's is the only state whose literacy rate is impressive. India can be placed very low if we rank all the countries according to literacy rates.

Housing

In India, this indicator is an important one. As most of the population is homeless, their well-being can be indicated by the type of house they live in. How many of the households have electricity, or how many of them have access to safe water or the question may be how many of them live in pucca or semi-pucca houses? The answers to them determine the prosperity of the population or the status of human development.

As seen in Table 3.3, Punjab, West Bengal, Himachal Pradesh, Haryana, Sikkim and Karnataka have high percentage of their households with access to safe water - all above 70 per cent in 1991. On the other hand, Kerala, surprisingly, has only 19 per cent of its households with access to safe water and Mizoram has only 16 per cent of its households with access to safe

water. Jammu and Kashmir's 97 per cent of its households have electricity, in Himachal Pradesh, it is 87 per cent, in Punjab, 82 per cent and Haryana it is 70 per cent. Rest in all states very low percentages of their households have electricity. In Kerala, only 48 percent of its households have electric connection. The lowest is in Bihar with only 12 per cent and Uttar Pradesh with 21 per cent in 1991.

It is evident from above that Jammu and Kashmir, Haryana, Punjab and Himachal Pradesh have high percentage of their households with safe water and electricity. However situation has certainly moved for better in 1991. In 1981, it was worse. In Mizoram only five per cent and Kerala only 12 per cent of its households had electricity in 1981. The highest was in Punjab with 84 per cent and West Bengal with 70 per cent, On the other side, Assam had only seven per cent, Bihar only nine per cent and Uttar Pradesh had only 12 per cent of its houses having electricity. It can be said with emphasis that there is a certain improvement in housing facilities.

Kerala has 56 per cent and 19 per cent of its households pucca and semi-pucca. Punjab has 77 per cent living in pucca houses and only 11 per cent in semi-pucca houses. In Maharashtra 52 and 36 per cent lived in pucca and semi-pucca houses in 1991 which is a good figure . Goa has 50 per cent living in pucca houses, 44 per cent in semi-pucca houses. On the other hand, Manipur has only five per cent living in pucca houses and 40 per cent in semi-pucca houses. So it can be said the rest live in kutcha houses. Tripura has five per cent in pucca houses, only 21 per cent in semi-pucca and a large percentage living in kutcha houses. It is seen from the data that the north-eastern states have poor housing conditions whereas states like Punjab, Kerala, Goa, Gujarat and even to some extent Maharashtra have comfortable living conditions.

An Overview

Tables 3.6 and 3.7 present the human development index for 25 Indian states. It ranges between 0.549 for Goa to 0.194 for Uttar Pradesh in 1991, and 0.573 for Goa in 1981 and 0.104 for Assam in 1981. There is not much reduction between the maximum and minimum values of EHDI in the last decades, just a mere reduction of 0.108 . It shows that there is hardly any change in inequality position among the states. This proves the fact that distribution of income as well as investment in social sector has remained unequal as it was a decade ago, with a mere change for betterment which can be considered negligible.

Goa, Maharashtra and Kerala have more or less retained their human development condition which can be envied by other states.

Goa, Daman and Diu was a Union Territory in 1981 but during 1991 census Goa had already gained the status of a state and even then it maintained its social development. Though Goa consists of many villages they are not really rural as we mean for other states. Moreover being invaded by tourists all the year round along with its nearness to the sea has made the area communicable and so its people are not backward. Another factor which has worked towards its development was its European\Portugese influence .This influence has being instrumental in their social upliftment if we take the case of adult literacy and women literacy.

Maharashtra and Tamilnadu both are states which are industrially developed. Even though trickle down effect has not worked very well for them, their economic condition has influenced their social services to some extent, at least better in than the other states. Kerala's economic condition is quite poor but with a literacy rate of over 90 percent it has achieved something

which many states , inspite of having a better economic condition, have not being able to achieve. Women's literacy rate has played a crucial role in reducing birth and death rates thus containing population growth.

The middle order states including Karnataka, Gujarat, West Bengal , Haryana, Himachal Pradesh and the North Eastern states of Nagaland , Mizoram , Manipur and Sikkim have hardly improved their positions. Their improvement may not be worthwhile in relative context but if we take each of them individually then some improvement is evident.

However if one takes the lower order states like M.P. Rajasthan , Andhra Pradesh, Bihar, Assam , Orissa and Uttar Pradesh then these states have deteriorated in their condition. They have neither improved socially nor economically. Their environment has worsened so has their living condition. Population explosion is at full growth. Policies take a long time to be implemented . Development has affected only the elite few . Inequality in these states is higher than in the states of higher or middle order.

It can be concluded that in India majority of the population, nearly 55 percent of them ,live in the states of the lower EHDI ranking with pathetic living conditions with mass illiteracy , poverty and unemployment . Thus special attention must be given to these states with decentralised planning at local level to help them improve their condition.

India does not have to live with so much poverty, unemployment and poor quality of life. It can easily satisfy the basic needs of its population. The resources are there. All that is lacking is the right political will and commitment to follow the goods of Indian constitution.

Table 3.2 Comparative PCA & EHDI Ranking of Indian States in 1981

States	PCA Ranking	EHDI Ranking
1. Kerala	1	4
2. Goa	2	1
3. Mizoram	3	12
4. Nagaland	4	3
5. Manipur	5	14
6. Karnataka	6	10
7. Maharashtra	7	5
8. Tripura	8	18
9. Sikkim	9	9
10. Himachal Pradesh	10	7
11. Tamil Nadu	11	8
12. Meghalaya	12	19
13. Punjab	13	2
14. Gujarat	14	6
15. Jammu and Kashmir	15	13
16. West Bengal	16	15
17. Haryana	17	11
18. Andhra Pradesh	18	20
19. Orissa	19	24
20. Assam	20	25
21. Madhya Pradesh	21	21
22. Rajasthan	22	22
23. Uttar Pradesh	23	23
24. Bihar	24	17
25. Arunachal Pradesh	25	16

Table 3.3 Housing Amenities for Indian States

States	% Distribution of households living in pucca houses		% Distribution of households living in semi-pucca houses		% of households having access to safe water		% of households having electricity	
	1981	1991	1981	1991	1981	1991	1981	1991
1. Andhra Pradesh	26.22	38.41	24.18	22.58	25.89	55.08	21.41	46.30
2. Arunachal Pradesh	7.48	14.91	11.64	11.72	43.89	70.02	15.15	40.85
3. Assam	7.33	14.62	15.12	15.16	28.69	45.86	6.95	18.74
4. Bihar	23.64	30.18	40.10	36.00	37.64	58.76	9.20	12.57
5. Goa	32.45	50.70	57.44	44.47	22.50	43.41	58.08	84.69
6. Gujarat	48.96	56.93	42.12	39.01	52.41	69.78	44.81	65.93
7. Haryana	39.82	50.14	35.85	35.73	55.11	74.32	51.53	70.35
8. Himachal Pradesh	43.94	53.03	45.14	40.99	44.50	77.34	54.86	87.01
9. Jammu and Kashmir	26.20	31.67	40.01	36.27	40.28	69.68	60.87	96.68
10. Karnataka	29.33	42.55	44.89	40.90	33.87	71.68	32.98	52.47
11. Kerala	38.80	55.97	20.33	19.13	12.20	18.89	28.78	48.43
12. Madhya Pradesh	25.02	30.47	66.30	64.87	20.17	53.41	17.11	43.40
13. Maharashtra	39.63	52.20	40.22	36.14	42.29	68.49	40.65	69.40
14. Manipur	3.42	5.40	18.89	40.65	19.54	38.72	20.06	50.92
15. Meghalaya	11.29	13.30	26.87	33.72	25.11	36.16	16.84	29.16
16. Mizoram	7.30	19.10	22.72	42.52	4.88	16.21	16.27	59.20
17. Nagaland	10.18	12.62	21.92	36.47	45.63	53.37	26.12	53.42
18. Orissa	13.00	18.71	18.53	22.06	14.58	39.07	17.75	23.54
19. Punjab	58.12	76.97	16.11	11.07	84.56	92.74	60.90	82.31
20. Rajasthan	49.08	56.13	25.14	22.94	27.14	58.96	20.54	35.03
21. Sikkim	18.16	26.95	35.51	39.11	30.33	73.19	23.11	60.66
22. Tamil Nadu	36.62	45.54	18.15	18.03	43.07	67.42	37.21	54.74
23. Tripura	3.61	5.50	8.41	20.71	27.33	37.18	25.05	36.93
24. Uttar Pradesh	29.29	41.03	35.07	30.34	33.77	62.24	12.91	21.91
25. West Bengal	28.40	32.61	26.03	29.38	69.65	81.98	21.09	32.90

Source : Housing and Amenities , Census of India , 1991

Table 3.4 Extent of Education in India

States	Adult Literacy Ratio		Primary Enrolment Ratio		Secondary Enrolment Ratio	
	1981	1991	1981	1991	1981	1991
1. Andhra Pradesh	35.66	45.11	0.46	0.51	0.25	0.20
2. Arunachal Pradesh	25.54	41.22	0.45	0.51	0.22	0.19
3. Assam	33.17	53.42	0.64	0.65	0.39	0.26
4. Bihar	32.03	38.54	0.39	0.37	0.19	0.10
5. Goa	65.71	76.96	0.31	0.56		0.37
6. Gujarat	52.21	60.91	0.54	0.63	0.32	0.27
7. Haryana	43.85	55.33	0.43	0.40	0.31	0.32
8. Himachal Pradesh	51.17	63.54	0.55	0.53	0.47	0.36
9. Jammu and Kashmir	32.68	40.47	0.39	0.50	0.28	0.30
10. Karnataka	46.20	55.98	0.49	0.53	0.87	0.27
11. Kerala	81.56	90.59	0.56	0.53	0.53	0.40
12. Madhya Pradesh	34.22	43.45	0.45	0.47	0.25	0.13
13. Maharashtra	55.83	63.05	0.57	0.57	0.36	0.34
14. Manipur	49.61	60.96	0.62	0.55	0.40	0.30
15. Meghalaya	42.02	48.26	0.34	0.34	0.20	0.16
16. Mizoram	74.26	81.23	0.72	0.59	0.42	0.26
17. Nagaland	50.20	61.30	0.70	0.52	0.36	0.18
18. Orissa	40.96	48.55	0.46	0.51	0.24	0.30
19. Punjab	48.12	57.14	0.49	0.44	0.33	0.32
20. Rajasthan	30.09	38.81	0.38	0.45	0.23	0.19
21. Sikkim	41.57	56.53	0.70	0.67	0.35	0.06
22. Tamil Nadu	54.38	63.72	5.96	0.69	0.40	0.31
23. Tripura	50.10	60.39	0.66	0.54	0.32	0.19
24. Uttar Pradesh	33.33	41.71	0.40	0.41	0.28	0.21
25. West Bengal	48.64	57.72	0.54	0.61	0.32	0.28

Source : 1. Statistical Abstracts, 1984 and 1991

2. Census of India 1981 and 1991 (Final Population Totals)

Table 3.5a Health Status in Indian States

States	Infant Mortality Rates (per 1000 Live Births)		Death Rates	
	1981	1991	1981	1991
1. Andhra Pradesh	86	71	11.1	9.7
2. Arunachal Prd.	110	58	15.9	13.5
3. Assam	106	76	12.6	11.5
4. Bihar	118	73	13.9	9.8
5. Goa	30	20	6.8	7.5
6. Gujarat	116	67	12.0	8.8
7. Haryana	101	78	11.3	8.2
8. Him. Pradesh	82	68	11.1	8.9
9. Jammu & Kashmir	73	60	9.0	7.9
10. Karnataka	69	73	9.1	9.0
11. Kerala	37	13	6.6	6.0
12. Madhya Pradesh	142	104	16.6	13.8
13. Maharashtra	79	59	9.6	8.2
14. Manipur	38	22	6.6	5.4
15. Meghalaya	66	53	8.2	8.8
16. Mizoram	38.6	23.45	7.0	5.5
17. Nagaland	25	7	6.3	3.3
18. Orissa	135	115	13.1	12.8
19. Punjab	81	56	9.4	7.8
20. Rajasthan	108	90	14.3	10.1
21. Sikkim	45	92	8.9	7.5
22. Tripura	91	58	11.8	8.8
23. Tamil Nadu	65	49	8.0	7.6
24. Uttar Pradesh	150	98	16.3	11.3
25. West Bengal	91	65	11.0	8.3

Source : 1. Economic Survey, 1992-93 2. Year Book of Family Welfare Programme in India 1991.

3. Sample Registration System, 1991 and 1992.

Table 3.5b Health Care Services in Indian States

States	Primary Health Care Centres (per '00,000 population)		No. of Hospi-tals (per lakh popula-tion)		Population served per doctor		Population served per nurse	
	1981	1991	1981	1991	1981	1991	1981	1991
1. A.P	0.79	1.93	1.14	1.74 3.48 2.08	12986	1924	1933	2215
2. Am' Prdesh	7.12	3.7	0.56	1.2	2841	3536	1421	884
3. Assam	0.73	1.97	0.32	0.35	11879	8750	3886	5129
4. Bihar	0.87	2.89	1.01	9.57	4746	3411	4466	4827
5. Goa	1.38	1.71	2.43	4.32	1042	2523	347	
6. Gujarat	0.74	2.12	0.67	0.48	2603	3979	2504	1613
7. Haryana	0.69	2.40	1.26	1.14	4675	11705	3275	2217
8. H.P	1.80	3.89	0.58	0.84	7514	5350	3938	1342
9. J& K	1.50	3.64	0.63	0.65	6996	1884	3498	471
10. Karnataka	0.82	2.52	2.98	7.00	10114	1457	1909	939
11. Kerala	0.70	3.13	0.53	0.61	6873	7213	1145	1191
12. M.P	1.27	1.79	1.73	2.67	11546	6803	2264	4338
13. M' rashtra	0.72	2.09	1.48	1.36	2045	1179	886	1661
14. Manipur	2.18	3.7	0.82	0.45	3463	2629	1732	657
15. Meghalaya	1.80	4.45	2.03	2.03	6155	5357	3078	4339
16. Mizoram	2.84	5.07	4.39	2.56	5255	5123	2628	1281
17. Nagaland	2.19	2.73	1.15	0.89	4095	5401	2048	1350
18. Orissa	1.19	3.23	1.52	1.13	9377	6985	4882	1882
19. Punjab	0.77	10.04	0.67	0.49	5705	5642	471	590
20. Rajasthan	0.68	3.01	1.58	1.23	11118	3295	2255	2286
21. Sikkim	4.74	5.41	0.78	0.73	3115	4297	1558	1074
22. Tripura	0.84	0.77	0.78	0.83	7677	1165	805	1385
23. Tamil Nadu	1.36	1.78	0.66	0.53	5466	3822	2733	955
24. U.P	0.84	2.62	0.74	0.61	15880	15438	3666	5562
25. W.Bengal	0.61	2.27			2231	2148	2054	2431

Source : 1. National Family and Health Survey, 1992 and 1993. 2. Health Monitor, Vol. No. 1.
3. Statistical Abstract 1992.

Table 3.6 Human Development Index for Indian States in 1991

Ranking	States	EHDl
1	Goa	0.5485
2	Punjab	0.5157
3	Maharashtra	0.4932
4	Kerala	0.4582
5	Himachal Pradesh	0.4418
6	Gujarat	0.4416
7	Jammu and Kashmir	0.4404
8	Nagaland	0.4348
9	Tamil Nadu	0.4221
10	Karnataka	0.4160
11	Manipur	0.3950
12	Mizoram	0.3921
13	Sikkim	0.3761
14	Haryana	0.3630
15	West Bengal	0.3529
16	Andhra Pradesh	0.2990
17	Arunachal Pradesh	0.2644
18	Madhya Pradesh	0.2627
19	Rajasthan	0.2503
20	Tripura	0.2467
21	Bihar	0.2243
22	Meghalaya	0.2089
23	Orissa	0.2071
24	Assam	0.2058
25	Uttar Pradesh	0.1944

Table 3.7 Human Development Index for Indian States in 1981

Ranking	States	EHDI
1	Goa	0.5734
2	Punjab	0.4506
3	Nagaland	0.4219
4	Kerala	0.4099
5	Maharashtra	0.3994
6	Gujarat	0.3681
7	Himachal Pradesh	0.3571
8	Tamil Nadu	0.3487
9	Sikkim	0.3361
10	Karnataka	0.3229
11	Haryana	0.3168
12	Mizoram	0.3151
13	Jammu and Kashmir	0.2975
14	Manipur	0.2961
15	West Bengal	0.2799
16	Arunachal Pradesh	0.2480
17	Bihar	0.2170
18	Tripura	0.2086
19	Meghalaya	0.2056
20	Andhra Pradesh	0.1926
21	Madhya Pradesh	0.1859
22	Rajasthan	0.1750
23	Uttar Pradesh	0.1454
24	Orissa	0.1297
25	Assam	0.1042

CHAPTER 4

ECONOMIC GROWTH VS SOCIAL DEVELOPMENT

The economies of the world today have realised that economic growth pursued solely without the expansion of human capability would, in the long run, ultimately lead to a skewed development. This type of development accrues only to the upper class leaving the common man far behind. This sort of vertical upgradation is highly undesirable and disadvantageous for the country as a whole. More recently, greater emphasis has been placed on the distribution of goods among people and to considerations of need and equity. Although there is some relationship between income per head and human well-being or social development, the statistical association is not close and the divergences from the general tendency are at least as striking as the general tendency itself.

Human fulfillment is about whether people eat well or are malnourished, whether women lead healthy lives or are burdened with annual child-bearing, a high risk of maternal mortality, whether people have the education or are illiterate. These are all aspects of the standard living, but they are loosely included or not included at all in the measure of GNP per capita. The general rise in average incomes could be a misleading guide to the income gains of the poor. This is so because there is a high degree of inequality in the distribution of income, in most of the countries. It cannot be assumed, therefore, that basic human capabilities have risen to the same extent as average incomes.

It is for the government to successfully pursue distributive equity objectives as well as growth objectives. It is within their power to promote the enhancement of human capabilities by means of their policies regarding education, health and housing. If left to itself, it is difficult for the GNP to be evenly distributed without the intervention of government policies.

The inter-correlation between the per capita income and socio-economic indicators is given in Table 4.3a for the countries of the world, and Table 4.4a for the Indian states.

Inter-Relation Among Indicators:

Inter-relationship among variables indicators have often been studied by computing correlation co-efficient. A low value of correlation co-efficient between two variables would normally indicate lack of mutual influence while a high value would suggest that changes in one of these is associated with change in the other. High correlation, however, suggestive only and does not necessarily imply presence of any causal relation. Causal relations are to be supported by plausible evidence.

Table 4.3 contains the correlation between the socio-economic indicators of the 77 countries of the world.

A look at these tables reveals that education measured by adult literacy rate is highly correlated to primary enrolment ratio and secondary enrolment ratio which is quite obvious as higher the enrolment ratios in primary and secondary schools, higher will be the literacy rates. Adult literacy rates is also highly correlated to life expectancy and inverse of infant mortality rates, i.e., more educated the people are better will be their access to health services and knowledge about hygiene and sanitation and higher will be their life expectancy. More educated

the women are lower will the rate of infant mortality, because then the knowledge about pre and post natal care increases so does their child bearing capacity and child health care.

Primary enrolment ratios are also highly correlated to life expectancy which is an obvious relation. Secondary enrolment ratios have also a positive correlation to life expectancy, over and above to access to health services, access to safe water, inverse of maternal mortality and infant mortality rates. Plausible causal relationships can be drawn among these indicators which shows that strategies are so developed that aiming at higher secondary education also raises the level of literacy which makes them aware of better health services and resort to drinking safe water thus improving the hygienic conditions surrounding them. Increasing the level of knowledge specially of mothers improves the rate of mortality of infants.

Life expectancy has a very good relationship with access to safe water and health services and also to inverse of infant mortality rates. Their causal relationship can be seen in this way - as life expectancy increases, the condition of health of the people improves and this can be seen from higher access to health services. As people become health conscious, government too works towards keeping them fit and so provides safe drinking water to all as far as possible. With the same reasoning, it can be said decline in infant mortality and maternal mortality (whose inverse also has positive correlation with life expectancy) will automatically increase the average age of an individual.

Access to safe water and access to health services are also highly connected. This is because the policies and programmes of the government are so directed so as to provide health services to all its citizens which automatically means providing safe water too. Access to safe water also has a high value of correlation to inverse of infant mortality rate. It is evident that

if the infants and children have access to safe drinking water, they are less prone to diseases specially communicable diseases. Hence their rate of survival increases.

Inverse of maternal mortality rate and inverse of infant mortality rate, again, are highly correlated. If the mother is healthy, the health of her infant is obviously guaranteed.

Arguments for the Interrelationships

From the above intercorrelations, it is obvious that as level of knowledge increases, individual's awareness about his surroundings and environment increases. He becomes conscious about health and hygiene. They tend to lead a healthy life and their level of prosperity increases. It can be seen from table 4.3 that primary enrolment and adult literacy rates do not have a very high correlation with all other indicators of social welfare. But secondary enrolment has a positive and high correlation with many indicators because as far as primary education is concerned, it is more or less free and universal in almost all countries. So it is evident from Tables given in chapter 2 that primary enrolment in all countries is very high yet having a very low rate of development.

It is clear from Tables in chapter 2 that in all low developed countries of Africa and South Asia, primary enrolment is quite high but at the same time, infant mortality rate, maternal mortality rates, life expectancy, or access to safe water or health services are comparably low. On the other hand, the countries of Europe or North America have their citizens quite educated and accordingly, this has improved their level of welfare. So higher the level of education higher is the level of development. So secondary education captures the intricacies of development than any other indicator of education.

Secondary education is also highly correlated to per capita income. So it can be deduced as level of income increases, it is spent on higher education and level of knowledge increases which indirectly helps in development. The countries cited above also prove true to this correlation. The countries of Africa and South Asia also have low level of income whereas the European and American countries have high level of per capita income. Though high levels of income are not directly correlated to high levels of development, but they are related indirectly through the level of education. In countries which depend on oil for their income have a huge per capita income, but their level of secondary education is quite low so is inverse of maternal and infant mortality rates though not as bad as South Asian or African countries. This was so as this income from oil is only in the hands among the owner class. So indicators for higher levels of education would have cover the intricacies of development and welfare more than primary education.

Next, if we take life expectancy which is an indicator of health is positively correlated to the per capita income. As income increases people first and foremost try to keep themselves fit by investing in health services. This is reflected in higher life expectancy. Similarly, inverse of infant mortality rat and maternal mortality rates are also correlated to a high degree with per capita income. This again reinforces the fact that as income of an individual increases, his expenditure on health increases. As health condition improves, his productive capacity rises which in turn again would help him to earn more income. An improved health status also encompasses that of his child. A country with high per capita income tends to spend more on education specially women as it is seen in most higher income countries. This automatically

results in improved conditions of maternal mortality. As level of knowledge specially among women increases, it increases their awareness of post natal care.

Interrelationships among Indicators in India

However, if we take the correlation between the indicators in India, there is hardly any significant relationship. There are very few positive and significant correlations. For example, households with pucca houses and houses with safe drinking water and having electricity have a significant relationship which is quite obvious. People build pucca houses when they have the money, i.e. when their incomes are high. Such people obviously will build houses only in that area where electricity and safe drinking water is available. That is why households having pucca houses have a positive relationship with per capita SDPs too.

Similarly, literacy rates are highly correlated to primary enrolment and secondary enrolment ratios, because the latter two together form a part of the literacy rates. Primary and secondary education both are part of the education indicator. These effect together incorporates the literacy rates. The correlation between inverse of death rate and literacy rates can be explained that as literacy increases, they become aware of the cure of various diseases. India is a country ridden with superstitions. These superstitions many a times are responsible for many a death. Such deaths can be reverted if we educate the masses. And that is why there is a positive correlation.

Hospitals per lakh population though is significantly related to literacy rate, has an indirect relationship. It is seen that the places where literacy rates are high, the hospital population ratio is also quite high, e.g. states like Kerala, Mizoram, Goa, Maharashtra. Their

literacy rates are 91, 81, 77 and 63 per cent respectively in the year 1991. Similarly, hospitals per lakh population is 7, 5.07, 9.57 and 2.67 respectively in the same year. As explained earlier, as people become more knowledgeable, their awareness about health increases and so they may demand health services from the government which in turn builds hospital in the area. Similarly, literates also tend to be more aware of their children's health and so the decline in infant mortality rates.

The more number of hospitals in the area, the number of infant deaths declines. This is because they can avail of health services. This is the reason why inverse of infant mortality and hospital population ratio as positively related.

Nurses per population and primary health care centres are also related positively. Primary health care centres in rural areas have more midwives, ayahs and nurses than doctors. This is firstly because it caters to only primary health care dealing with coughs, colds, contagious diseases specially of children and child-births and these are most common health problems in rural areas. These centres are built in places where hospitals may not be viable. So these centres have experienced nursing staff than doctors in large numbers.

Per capita SDP and households with pucca houses only have significant correlation. Rest none of the socio-economic indicators have such significant correlation with per capita income. India itself is a diverse country with very low human development, along with very low per capita income, i.e., GNP in \$ 330 which are of lowest in the world. Thus it can be expected that the correlations do not show a very significant relationship. Moreover, the data also reveal that all the social indicators for each Indian state are very low except two or three.

Comparative EHCI and GNP Ranking: World

Table 4.1a and 4.1b reveal the difference in EHCI and GNP ranking for the countries of the world, whereas Table 4.2a and 4.2b reveal the difference in the ranking between EHCI and SDP for the Indian states. The measure of economic growth is GNP per capita calculated in dollars and social development is measured in terms of Extended Human Development Index.

A look at Table 4.1a and 4.1b reveals that there are some discrepancies between the two ranking. In Table 4.1a (1991), it can be seen that Poland's EHCI ranking is 19 but its GNP per capita ranking is 39th. The reason can be given that it being a socialist country previously, has been able to distribute social goods equitably and income inequality has been curbed. However, these measures being qualitative, is not reflected in a quantitative measure like GNP per capita. Similarly, UAE's per capita income is among the top in world ranking 5th. However, its income basically from oil is not equally distributed and benefits from such high income did not trickle down to the lowest strata. These benefits are reaped by only few hence its human development is ranked much below at 24. Panama and Chile are ranked 20 and 26 respectively in human development but their per capita income is ranked at 36 and 35. Here is another case where human development has far exceeded its increase in per capita income. There are other cases similar to them like Colombia, Jordan and Jamaica where human development has made much progress compared to per capita income.

However, there are two striking cases where human development is more stressed upon than their economic growth. The countries are China and Sri Lanka. Their per capita income are ranked 63 and 59 respectively, but their human development is ranked as high as 38 and 35. It is because these countries have believed that once social development is achieved, increase in

per capita income will automatically be attained as all its healthy citizens will work hard for better production.

Oman, Iraq and Iran and to some extent Jordan are cases similar to UAE with high per capita income from oil but suffer from high income inequality and consequently low human development. Similarly for Brazil, Algeria and Cameroon.

However, there are many countries whose GNP ranking matches with the EHDI ranking. This is because the per capita income is equitably distributed and their citizen's social development is looked after by the government. In these, GNP measures can be said to reflect their social development. But it is the exceptions which prove the GNP measures wrong that economic growth simultaneously means social development. Economic growth pursued by itself is sure to bring down the per capita income if social/human development is neglected. Examples can be cited of UAE, Saudi Arabia and Oman. Their respective GNP ranking in 1981 was 1, 7 and 15; and EHDI rankings were 20, 47 and 55. Their income ranking in 1991 came down at 5, 19 and 22. This is because developing human capabilities were not considered a priority in its country's development strategy. This has resulted in a downfall in their economic growth because unhealthy or weak citizens cannot contribute much to country's productive capacity, and ultimately, the country is at a loss. On the other hand, there are countries like Mexico and Hungary whose GNP ranking in 1981 was 34 and 31 and EHDI ranking was 33 and 37, whereas in 1991, their GNP ranking was 24 and 27 and EHDI ranking at 29 and 30. Similarly, for Sri Lanka whose GNP and EHDI ranking in 1981 was 66 and 36 respectively, but in 1991 ranks were 59 and 35. Even if marginal, it still improved. Once the human development is looked

after, economic growth certainly improves. However, if only social development is pursued, then economic growth fails to pick up. So both goals must be pursued together.

Comparative GNP and EHDI ranking: Indian States

Next, a glance at tables 4.2a and 4.2b reveals that Indian states too have similar discrepancies in the ranking of EHDI and SDP as the countries of the world.

First is the case of Bihar whose per capita income in 1991 tops the list but human development is fourth from last. Then comes Haryana whose SDP ranking is 3 but human development rank at 14. Meghalaya's SDP ranking is 10 and EHDI ranking is 22, Andhra Pradesh's SDP ranking is 7 and EHDI ranking is 16. In all these states, respective governments have not invested their income in an equitable way. States like Bihar and Andhra Pradesh have a huge population some living in real backward areas and it is not possible for the government to reach out to every individual. On the other hand, we have states like Kerala whose SDP ranking is 15 yet its EHDI is ranked 4th. Similarly, Jammu and Kashmir, Nagaland, Manipur and Mizoram whose SDP rankings are 21, 13, 19 and 17 respectively, yet their EHDI ranking are 7, 8, 11 and 12. It is because of their government's development strategy that their human development has progressed much more than their per capita income.

States like Bihar and Haryana have had their economic growth concentrated upon and hence have lost out on human development. It again reinforces the fact that growth pursued in an isolated manner does not result in development.

Disparity Between Economic Growth and Human Development:

Critics have responded to the observed disparities between economic and social development in various ways. One has proposed using measures of human welfare as alternatives to measures of GNP for economic growth. Others have tried to create composite development indices that captures salient aspects of both the economy and well being of the nation. However, there are many factors responsible for such disparity.

One factor affecting such disparity is the inequality in the distribution of personal income. A country with high per capita income may on average experience lower levels of social well being of the income distribution is less equitable. It is seen that in middle income countries, income equalities tend to be higher than low or higher income countries. In these countries, difference in human welfare and GNP growth is quite high.

Another factor for such disparity is due to the dependency of the economy on one export or production for income. For example, oil exporting countries. This income fails to be translated into welfare for the masses because of the control exerted by an elite class.

It is further argued that presence of a large traditional sector with low wages tends to depress wages in the productive sector on the general level of welfare as is common in most low income economies where agriculture is the main occupation(as observed by Holloway and Pandit in '92).

Many low income economies have a higher welfare than those with higher per capita income, i.e., Sri Lanka and Iran. It is because in Sri Lanka, government expenditures are

channeled into programs such as health, education and social welfare which is not so in countries like Iran, Iraq or Oman.

However, such conclusions drawn on the disparity level should not be taken as ultimate because the human welfare measure on which we estimate development is still debated upon. Moreover, there is also a dynamic element in the relationship between economic development and human welfare, i.e., the impact of an increase in income may not be immediately felt in the measures of literacy and life expectancy because these measures reflect the conditions of the adult population which were determined in an earlier period when national income was lower. This is specially true for newly industrialized countries and to some extent for oil exporting countries whose per capita income has escalated during the recent years. The welfare improvements in these countries may take several years to be reflected in the official data. So it may be wrong to brand them as countries with low or medium human development absolutely in spite of a good per capita income because these countries are in the transition stage. It is very difficult to incorporate such a temporal dimension.

It can still be mentioned that this gap and economic growth and social development can be tackled by attending firstly to the income inequalities and concentration of economic power in the hands of few; secondly, this gap can be eliminated by channelising the government expenditure into appropriate activities for human welfare.

Economic growth is indeed vital because no society in the long run has been able to sustain the welfare of its people without injections of economic growth. But again growth on its own is not sufficient. It has to be converted into improvements in people's lives. Economic growth is not the end of human development. It is one important means. Human development

and economic growth are highly connected. People contribute to growth and growth contributes to human well being.

It is very important to see the way how GNP influences human development. The statistical correlation between GNP per head and human development works through the effect of higher GNP in raising public expenditure and in lowering poverty. It basically depends on how the benefits of economic growth are shared - particularly on what the poor get and how much of the resources are used to enhance primary health and basic education. It is not the level of income that matters, what matters is the use that is made of this income. Growth in income will enhance the living conditions of the poor only if they get a share of the additional income. What is essential is to make the benefits of growth serve the interests of the least privileged. Each nation has its own development strategy to follow because each has its own peculiar conditions which are not found in any other country.

Thus, it can be inferred that growth and development are closely connected and at many times are inseparable. But this is true only if the governments in respective countries intervene to invest in public services. Even in the most advanced capitalist countries, the governments control the resources and investment in public services and social services such as primary health care, basic education, nutrition level, safe drinking water. They have many times sought the help of local committees but their intervention was always there.

Economic growth left to itself can grow without the interference of the government if each individual pursues profit yet it can be definitely said that social development can be achieved only if there is certain amount of government intervention.

ABBREVIATIONS USED IN THE TABLES

AHS	: Access to Health Services
ALR	: Adult Literacy Rate
ASW	: Access to Safe Water
DPOP	: Doctor Per Population
GDP	: Per Capita GDP
HE	: Households with Electricity
HPH	: Percentage of Households living in pucca houses
HSLP	: Hospitals per lakh Population
HSPH	: Percentage of Households living in semi-pucca houses
ICDR	: Inverse of Crude Death Rate
IDRT	: Inverse of Death Rate
IIMR	: Inverse of Infant Mortality rate
IMCS	: Inverse of Mal-nourished Children under 5
IMMR	: Inverse of Maternal Mortality rate
LEAP	: Average of Life Expectancy
LIT	: Literacy Rates
NPOP	: Nurses per Population
PCY	: Per Capita Income
PER	: Primary Enrolment Ratio
PHCLPOP	: Primary Health Care Centre Per Lakh Population
SECER	: Secondary Enrolment Ratio (for World)
SER	: Secondary Enrolment Ratio (for India)

Table 4.1a Comparative Ranking of Countries According to EHDI & GNP (\$) (1991)

Countries	EHDI Ranking	Human Development Index (Ext.)	GNP Ranking	GNP (\$) Per Capita
France	1	0.7162	8	20460
Switzerland	2	0.7134	1	33710
Japan	3	0.6984	2	26840
Denmark	4	0.6939	3	23760
Ireland	5	0.6864	17	11150
USA	6	0.6846	4	22340
Australia	7	0.6805	10	17120
Canada	8	0.6726	6	20510
Germany	9	0.6651	6	20510
Italy	10	0.6475	9	18580
Spain	11	0.6407	15	12480
Hongkong	12	0.6186	13	13580
Israel	13	0.6109	14	13460
UK	14	0.6058	11	16600
Kuwait	15	0.5884	23	5900
New Zealand	16	0.5878	16	12360
Singapore	17	0.5788	12	14140
Portugal	18	0.5740	18	9450
Poland	19	0.5703	39	1690
Panama	20	0.5422	36	2130
Czechoslovakia	21	0.5355	26	3140
Argentina	22	0.5131	25	3790
Uruguay	23	0.5064	29	2880
UAE	24	0.5035	5	22180
Republic of Korea	25	0.4985	21	6350
Chile	26	0.4931	35	2360
Jamaica	27	0.4896	42	1490
Greece	28	0.4855	20	7680
Hungary	29	0.4812	24	4180
Mexico	30	0.4618	27	3080
Colombia	31	0.4542	44	1250

contd./-

Table 4.1a contd...

Countries	EHDI Ranking	Human Development Index (ExC)	GNP Ranking	GNP (\$) Per Capita
Mauritius	32	0.4516	34	2380
Jordan	33	0.4435	46	1060
Malaysia	34	0.4423	31	2520
Sri Lanka	35	0.4316	59	500
Turkey	36	0.4185	38	1790
Saudi Arabia	37	0.4178	19	7900
China	38	0.4175	63	370
Brazil	39	0.4102	28	2920
Venezuela	40	0.4094	30	2720
Tunisia	41	0.4067	41	1500
Oman	42	0.4056	22	6140
Peru	43	0.4043	45	1070
Thailand	44	0.3943	40	1650
Iraq	45	0.3927	32	2500
Ecuador	46	0.3884	49	1010
Philippines	47	0.3806	52	740
Egypt	48	0.3700	55	610
Algeria	49	0.3567	37	1990
Iran	50	0.3403	33	2410
Indonesia	51	0.3319	55	610
Zimbabwe	52	0.3025	53	670
Lesotho	53	0.3022	57	570
Paraguay	54	0.3010	43	1270
India	55	0.2923	66	330
Bolivia	56	0.2845	54	650
Kenya	57	0.2781	65	340
Morocco	58	0.2683	48	1030
Myanmar	59	0.2443	72	200
Guatemala	60	0.2424	50	940
Ghana	61	0.2373	60	420
Zambia	62	0.2282	60	420

contd./-

Table 4.1a contd...

Countries	EHDI Ranking	Human Development Index (Ext)	GNP Ranking	GNP (\$) Per Capita
Madagascar	63	0.2220	70	210
Bangladesh	64	0.2117	69	220
Pakistan	65	0.2078	62	400
Congo	66	0.2061	47	1040
Nigeria	67	0.2024	64	350
Malawi	68	0.1669	68	230
Republic of Yemen	69	0.1657	58	520
Cameroon	70	0.1600	51	860
Nepal	71	0.1368	74	180
Uganda	72	0.1333	75	170
Chad	73	0.0980	70	210
Ethiopia	74	0.0956	76	120
Mozambique	75	0.0922	77	80
Niger	76	0.0849	67	310
Somalia	77	0.0806	72	200

Table 4.1b Comparative Ranking of Countries According to EHDI & GNP (\$) (1981)

Countries	EHDI Ranking	Human Development Index (Ext)	GNP Ranking	GNP (\$) Per Capita
Canada	1	0.6750	10	11400
Japan	2	0.6249	11	10080
Switzerland	3	0.6110	3	17430
Denmark	4	0.5954	5	13120
France	5	0.5904	8	12190
Germany	6	0.5660	4	13450
Ireland	7	0.5633	19	5230
UK	8	0.5617	12	9110
Australia	9	0.5571	9	11080
Spain	10	0.5537	17	5640
Hongkong	11	0.5477	21	5100
New Zealand	12	0.5474	13	7700
Poland	13	0.5339	24	3900
USA	14	0.5308	6	12820
Israel	15	0.5271	20	5160
Italy	16	0.5258	14	6960
Singapore	17	0.5098	18	5240
Argentina	18	0.5077	27	2560
Chile	19	0.5067	27	2560
UAE	20	0.4960	1	24660
Greece	21	0.4886	22	4420
Kuwait	22	0.4698	2	20900
Uruguay	23	0.4548	26	2820
Republic of Korea	24	0.4462	38	1700
Portugal	25	0.4379	29	2520
Jamaica	26	0.4331	44	1180
Czechoslovakia	27	0.4325	16	5820
Panama	28	0.4228	36	1910
Mauritius	29	0.4198	35	2000
Venezuela	30	0.3989	23	4220
Colombia	31	0.3930	43	1380

contd./-

Table 4.1b contd...

Countries	EHDI Ranking	Human Development Index (Ext)	GNP Ranking	GNP (\$) Per Capita
Congo	32	0.3856	48	1110
Hungary	33	0.3851	34	2100
Jordan	34	0.3829	40	1620
China	35	0.3500	66	300
Sri Lanka	36	0.3449	66	300
Mexico	37	0.3448	31	2250
Malaysia	38	0.3446	37	1840
Brazil	39	0.3363	32	2220
Peru	40	0.3351	46	1170
Turkey	41	0.3348	41	1540
Ecuador	42	0.3213	44	1180
Egypt	43	0.3167	55	650
Philippines	44	0.3127	53	790
Tunisia	45	0.3107	42	1420
Iraq	46	0.3073	25	3020
Saudi Arabia	47	0.3001	7	12600
Paraguay	48	0.2875	39	1630
Iran	49	0.2830	30	2300
Thailand	50	0.2768	54	770
Algeria	51	0.2659	33	2140
Zimbabwe	52	0.2553	50	870
Morocco	53	0.2407	52	860
Guatemala	54	0.2334	47	1140
Oman	55	0.2334	15	5900
Ghana	56	0.2206	62	400
Bolivia	57	0.2186	56	600
Indonesia	58	0.2165	59	530
Zambia	59	0.2045	56	600
India	60	0.1937	69	260
Kenya	61	0.1937	61	420
Myanmar	62	0.1934	73	190

contd./-

Table 4.1b contd...

Countries	EHDI Ranking	Human Development Index (E×I)	GNP Ranking	GNP (\$) Per Capita
Mozambique	63	0.1856	70	230
Lesotho	64	0.1806	58	540
Madagascar	65	0.1786	64	330
Cameroon	66	0.1626	49	880
Nigeria	67	0.1610	50	870
Pakistan	68	0.1452	63	350
Bangladesh	69	0.1285	75	140
Malawi	70	0.1254	72	200
Uganda	71	0.1151	71	220
Republic of Yemen	72	0.1027	60	460
Somalia	73	0.0822	68	280
Nepal	74	0.0806	74	150
Ethiopia	75	0.0799	75	140
Niger	76	0.0711	64	330
Chad	77	0.0596	77	110

Table 4.2a Comparative EHDI and SDP Ranking of Indian States (1991)

States	EHDI Rank- ing	(Human De- velopment Index (Ext)	SDP Rank- ing	State Domestic Product (Per capita) Rs.
1. Goa	1	0.5485	2	9667
2. Punjab	2	0.5157	4	8373
3. Maharashtra	3	0.4932	5	7997
4. Kerala	4	0.4582	15	4607
5. Himachal Pradesh	5	0.4418	9	5355
6. Gujarat	6	0.4416	6	6306
7. Jammu and Kashmir	7	0.4405	21	4051
8. Nagaland	8	0.4348	13	5006
9. Tamil Nadu	9	0.4221	12	5047
10. Karnataka	10	0.4159	8	5898
11. Manipur	11	0.3950	19	4180
12. Mizoram	12	0.3921	17	4451
13. Sikkim	13	0.3761	11	5063
14. Haryana	14	0.3630	3	8722
15. West Bengal	15	0.3529	14	4753
16. Andhra Pradesh	16	0.2990	7	5965
17. Arunachal Pradesh	17	0.2644	16	4594
18. Madhya Pradesh	18	0.2627	18	4383
19. Rajasthan	19	0.2503	20	4113
20. Tripura	20	0.2467	23	3420
21. Bihar	21	0.2243	1	11650
22. Meghalaya	22	0.2089	10	5231
23. Orissa	23	0.2071	24	3077
24. Assam	24	0.2058	25	2886
25. Uttar Pradesh	25	0.1944	22	3516

Table 4.2b Comparative EHDI & SDP Ranking of Indian States (1981)

States	EHDI Rank- ing	Human De- velopment Index (Ext)	SDP Rank- ing	State Domestic Product (Per capita) Rs.
1. Goa	1	0.5735	2	3145
2. Punjab	2	0.4506	3	2674
3. Nagaland	3	0.4219	15	1448
4. Kerala	4	0.4099	13	1508
5. Maharashtra	5	0.3994	4	2427
6. Gujarat	6	0.3681	6	1948
7. Himachal Pradesh	7	0.3571	8	1704
8. Tamil Nadu	8	0.3487	14	1498
9. Sikkim	9	0.3361	10	1571
10. Karnataka	10	0.3229	12	1527
11. Haryana	11	0.3168	5	2370
12. Mizoram	12	0.3151	20	1289
13. Jammu and Kashmir	13	0.2975	7	1776
14. Manipur	14	0.2961	16	1429
15. West Bengal	15	0.2799	9	1612
16. Himachal Pradesh	16	0.2480	24	1200
17. Bihar	17	0.2170	1	3759
18. Tripura	18	0.2086	19	1323
19. Meghalaya	19	0.2056	17	1361
20. Andhra Pradesh	20	0.1926	11	1561
21. Madhya Pradesh	21	0.1859	18	1349
22. Rajasthan	22	0.1750	23	1222
23. Uttar Pradesh	23	0.1454	21	1278
24. Orissa	24	0.1297	22	1231
25. Assam	25	0.1042	25	917

Table 4.3: Correlation Between Various Indicators - 1991 (World)

INDICATORS	GDP	ALR	PER	SECER	LEAP	AHS	ASW	DPOP	IMMR	ICDR	IIMR	IMC5
GDP	1.0000											
ALR	0.4881	1.0000										
PER	0.2593	0.6507	1.0000									
SECER	0.6981	0.7425	0.5350	1.0000								
LEAP	0.6303	0.7975	0.6532	0.8648	1.0000							
AHS	0.4402	0.5697	0.5559	0.6282	0.6300	1.0000						
ASW	0.5816	0.5660	0.4507	0.7429	0.8293	0.6207	1.0000					
DPOP	0.3872	0.4018	0.2593	0.4773	0.5116	0.3368	0.4574	1.0000				
IMMR	0.6557	0.5240	0.1946	0.6976	0.5736	0.3212	0.5007	0.3753	1.0000			
ICDR	0.2130	0.2311	0.3878	0.2719	0.4857	0.3614	0.4250	0.3752	0.0380	1.0000		
IIMR	0.7602	0.6593	0.3402	0.8181	0.7495	0.4618	0.6564	0.3996	0.8260	0.0849	1.0000	
IMC5	0.4773	0.4203	0.2423	0.4763	0.4533	0.3146	0.3720	0.2393	0.3218	0.0178	0.4294	1.0000

Table 4.4: Correlation Between Indicators - 1991 (India)

INDICATORS	PCY	HSW	HE	HPH	HSPH	LIT	PER	SER	IIMR	PHCLPOP	HSLP	DPOP	NPOP	
PCY	1.0000													
HSW	0.3067	1.0000												
HE	0.2769	0.3351	1.0000											
HPH	0.4692	0.4848	0.4821	1.0000										
HSPH	0.1819	-0.0675	0.2576	-0.0662	1.0000									
LIT	0.0648	-0.4132	0.3746	0.1794	0.0597	1.0000								
PER	-0.2953	0.0127	0.2057	-0.0603	-0.0513	0.4699	1.0000							
SER	-0.0275	-0.0139	0.5432	0.4935	-0.1645	0.5956	0.2603	1.0000						
IIMR	-0.0179	-0.3785	0.1263	-0.1835	0.0707	0.4977	0.0757	0.1325	1.0000					
PHCLPOP	0.1119	0.1994	0.2811	0.1983	-0.1961	0.0288	-0.2342	-0.0077	-0.01492	1.0000				
HSLP	0.2728	-0.3381	0.3480	0.2829	0.0741	0.6622	0.2488	0.4514	0.4577	-0.1391	1.0000			
DPOP	0.17738	0.2678	0.2499	0.1631	-0.0086	0.0398	0.3815	0.2168	-0.1386	-0.3263	0.0033	1.0000		
NPOP	-0.1752	0.1560	0.5268	-0.0551	-0.0434	0.0047	0.0152	0.1852	0.0651	0.5230	-0.1258	0.1646	1.0000	
IDRT	0.0149	-0.2388	0.2623	-0.1869	0.1382	0.4909	0.1450	0.1080	0.9122	0.1131	0.2698	-0.0394	0.2185	1.0000

CHAPTER 5

A COMPARATIVE STUDY OF THE INDIAN AND INTERNATIONAL

EXPERIENCE OF WELL-BEING

India is a country with diverse conditions having 25 states and seven Union Territories each experiencing conditions of its own peculiar kind. On the other hand, the third world countries and middle order countries have a totally different set of data measuring well-being. Therefore the two sets of data, one of the Indian states and the other of the different countries of the world, are based on two dissimilar background. The direct and absolute comparisons of these two are not feasible. However, one can make a comparative study of these two keeping in mind their contrasting nature. It is argued that since the data set in the countries of the world are collected and compiled from varied sources which is different from that of the Indian states, both have a different basis from where data are collected.

We must allow for the fact that with entirely different political and economic systems, one cannot and should not compare the various economies with each other, and the experience

of one country can only be partially applicable to the other. Yet there do remain clear lessons in regard to both, what to emulate and what not to emulate.

Indian Development Strategy as Compared to Others:

The main reason for India to remain a low developed country still is because of a faulty development strategy. This strategy robbed the poor, while professing to serve them in the name of a socialistic pattern of society and self reliance. This strategy made an economy grow at a very slow rate and bottled about 75 per cent of the rural labour force in agriculture. The advanced countries like USA, UK, Canada and the likes did not proclaim to have any such "egalitarian principles" with great fanfare and have achieved faster and more homogenous growth than India. This is because of a better development strategy which aimed at benefit for all proved to be their success.

India, on the other hand, can be compared to the newly industrialising economies (NIES) namely Hongkong, Korea and Singapore, who, with their outward looking strategies, have recorded high growth rates. In contrast, the resource rich Southeast Asian countries, namely Indonesia, Philippines, Malaysia and Thailand have had varied experiences with the latter two showing the promise of joining the ranks of the NIES in the near future. The success of these NIES had led to a rethinking of development policies in many Asian countries.

It can be argued that since all the NIEs are very small and if India were to be divided into a thousand parts, certain sections of it could doubtless record a rate of growth faster than say Hongkong or Singapore. But then, that is a silly argument because there are hundred countries

smaller than Singapore but few of them can claim to have achieved the sustained or egalitarian development of Singapore. If anything India with its large internal market should have been an advantage rather than an obstacle to development. Our development strategy definitely failed to exploit this. Our planning process favoured high cost industries with sheltered competitions in the process creating inefficient industries. India has tried creating a self-sufficiency in everything instead of self-reliance. What is important is that India should generate enough foreign exchange from its exports to meet the import demand. But the self-sufficiency strategy has rendered many small scale industries into sick units and the exports hence generated not upto international standards. This has increased unemployment in large leading to poverty and reduction in social development. Our self-sufficiency in many areas has been bought at a very high cost.

Many argue that the authoritarian regimes of Korea has lot to do with their success to some extent that of China's. However, it is wrong even to assume that India's democracy proved to be its failure. There are many countries in the world with authoritarian regimes but cannot claim to have a success rate of that of Korea. Their government has intervened in the policy making which has resulted in the betterment of the people unlike that of India which has resulted in distorted resource allocation. Therefore it cannot be said that socialist or authoritarian governments or a small-sized economy can achieve success at a faster rate than a democratic and a large country like India. Such comparisons are irrelevant. It should be obvious that under these circumstances, the prospects for the poor depend on how fast the economy grows and raises the demand for and the returns on the assets with which the poor are endowed. Since in our economy, the basic assets of the poor are essentially their labour, successful egalitarian development strategy would have emphasized the rapid growth of productive employment

opportunities. And, the Indian government has failed miserably in these counts. Our socio-political system has been unable to redistribute assets and has further enhanced income inequalities (ref :T.N.Srinivasan '91).

Therefore, comparisons across countries and over time within a country can be misleading even if problems of aggregation, price deflation and exchange rate conversion were absent. After all, one could sustain growth for a while by simply using more and more inputs in the face of declining productivity as the Soviets did. Such comparisons have to be supplemented by resource use efficiency comparisons.

Human Welfare and Comparisons of the Relative Positions Between Countries and the Indian States:

In India, among the states, Goa's development rate can be compared to that of Panama which is ranked 20th, i.e. a country with high human development. Goa tops the list in human development in India. The social indicators of Goa show that had it been placed internationally, its social development would have been nothing less than that of Argentina or Poland or Czechoslovakia. Its human development condition can be even said to be better than Korea which is ranked 25th. Goa's literacy rates and health facilities are as good as those countries of high human development. Punjab is another state in the Indian economy which has a comparably very high human development coming next only to Goa. Punjab's human development index is at par with Argentina which is ranked 22nd among the countries of the world. Goa has 57 countries below it in terms of human welfare whereas Punjab has 55 countries below it in terms of human development.

If we take the case of Maharashtra, then it is evident from the table 4.2a that though it is ranked third among the Indian states in terms of welfare, it still falls under the category of medium human development. There are about fifty-one countries which come after Maharashtra in terms of human development. In total there are 10 states with very low human development.

The only two states of Goa and Punjab having quite higher human development comparable to that of newly industrialising countries of the world and also to some extent to some advanced countries has only 2.54 per cent living in them. The success of these two states can be due to successful tourism industry in Goa and prosperous farmers of Punjab who have done very well especially after the advent of Green Revolution. It is a matter to be noticed that only 2.5 per cent of our population live in states with high human development.

The thirteen states with medium human development from Maharashtra to West Bengal has 41.57 per cent of the population living in them, i.e., nearly 42 per cent of our population live in condition that can be considered of medium type. Among them, Maharashtra and Kerala are states with a better standard of living than the other states. Rest of the states progress are of medium type.

The last ten states ranging from Andhra Pradesh to Uttar Pradesh having very low human development has 55 per cent of the population living in them, i.e., majority of our population live in very poor conditions. Most of the people suffer from ill-health and hence cannot give way to productive work. If more than fifty per cent of our population live in pathetic conditions, then it is clear as to why our country is called a low developed country.

Conclusion:

To conclude , one can say that the advanced European countries of US and Canada have surged far ahead than the South Asian or African countries who have remained poor rather their conditions have worsened relatively speaking. Better off are those countries which come under the category of middle human development.

The greatest malaise of the third world countries including India especially is their adherence to a western model of development. They initiate the process of change followed by advanced countries in their earlier stage for development. In India, the development strategy, however, irrelevant in the Indian context, is followed so as to suit the elite. The third world countries were predominantly rural societies and many of them still are, with 80 per cent of Indian population living in rural areas. Yet the strategy of development was so followed so as to suit the urban societies and not the rural ones. These countries originally had planning at the local level, each area having its own path to development . With central planning with same degree of attention to all areas destroyed their basic socio-economic conditions. The third world borrowed tools, techniques and programmes of development from the west and imposed them on their own people living in entirely different conditions without taking into account the progress of these people working under so many problems and constraints in their own environment. Technology was just transferred from the west without considering the effects of these technology on native environment.

In the Indian context, the low and middle development states remained as they were a decade ago - still worsened in many states unlike the middle human development countries of the world. This was due to the diverse conditions faced by India. For the different countries of

the world since their whole nation was of the same condition and so they could give in extra fund and develop it altogether. But in India, different states and regions needed attention and hence needed decentralized planning instead of a central plan. In the Indian case, little if anything has trickled down and for most life conditions have deteriorated enormously and much damage has been done to people and environment.

India has amassed such a huge debt that even the future of our country will not be able to develop on its own. Poverty has become more and unemployment situation has worsened. To top it all, India is facing so many crises politically and socially like in Jammu and Kashmir, Assam and Punjab that it is doubtful for India to overcome all these within the next decade.

Though the gap between rich and poor has considerably narrowed, nevertheless the relentless growth of population has meant that despite a diminishing proportion of the world's population living in absolute poverty, the absolute number of poor people continues to increase.

So it can be expected that when we step into the 21st century, we will still be one of the most undeveloped nations of the world.

CHAPTER 6

CONCLUSIONS

To summarise it all, it can be said that measuring human development is not as easy as measuring economic growth. The latter can be calculated from GNP per capita but the former has to be measured with the help of many socio-economic indicators. The value of these indicators incorporates the preferences of the individual since all these indicate the quality of life and not its quantity. Therefore it cannot be easily declared that such and such state has achieved so much human development. The debate of growth versus development is not quantifiable, because we are unable to number growth and development absolutely. Whatever is the level of both, it is an overall measure calculated by an appropriate method. This appropriateness is again different for different scholars, because there are many views, regarding the best measure. Some use PCA, some have used PQL1 index and some use HDI. The best measure to date has been the HDI. Though there have been lots of criticisms against this measure, but till a better one is found, this will continue to be the best measure.

Extended Human Development Index:

This paper/thesis includes another measure of human development which is an extended human development index [EHDI]. Human Development Index as used by Human Development

Report has used three indicators - one of economic growth, i.e. GDP per capita and two, measuring quality of life - life expectancy and adult literacy rate. EHCI includes many indicators:-

For education indicators:

It is adult literacy rate, primary and secondary enrolment ratios for both world countries and Indian states;

For health indicators:

It includes life expectancy, access to health services, population per doctor, maternal and infant mortality rates and death rates and for hygiene, it is access to safe water for the world countries;

and infant mortality rates, primary health care centres, number of hospitals population per doctor and per nurse and death rates for Indian states.

For housing:

It is households living in pucca and semi-pucca houses, and households with electricity and safe drinking water for the Indian states;

For nutrition:

It is mal nourished children under five for different countries.

Using so many indicators, EHCI has tried creating a more accurate measure of human development. According to the human development report, the per capita GDP is highly correlated to adult literacy and life expectancy and so is adult literacy and life expectancy with respective rank correlation at 0.9, 0.80 and 0.89. Even GNP is highly correlated to human development. Therefore it can be deduced that GNP incorporates a good measure of human

development and hence can be substituted for it. But country experiences show that there may be countries ranked quite low in economic terms but with high human development.

EHDI, on the other hand, has various indicators of health, education and housing all of which are not very highly correlated either to each other or to GDP or SDP. Another point of importance is that rank correlation is different for different countries and also for Indian states. Hence EHDI is a more comprehensive measure than standard HDI.

As seen in Chapter 4, the additional indicators, e.g., secondary education is highly correlated to GDP; however, death rate and doctor per population is not. So we can say that these indicators do not reflect human development to a great extent. Again, arguments can be put forward against it that these are independent of the per capita income and must be treated differently, i.e., for number of doctors to increase, planned investment must be made otherwise with increase in income there is no direct injection of investment into improving education facilities for medical staff including nurses. Therefore, regarding EHDI, it can be said that it gives a more detailed account of human development but the method of calculation becomes tedious since so many indicators are taken. That is the reason why HDR uses only three indicators which best represent the quality of life to make this measurement of development index as simple as possible.

As is the case with HDI, EHDI gives equal weights to all its indicators and this weighting system has been much criticised since there is no justification for it. Therefore the ranking of countries according to EHDI can at best be considered illustrative rather than evaluative. Another major criticism of this human development index very relevant today is that it does not include

human freedom and environmental conditions. But both of these are highly qualitative and it is difficult to enumerate them.

Development Experience:

Among the countries of the world though it is evident that the gap between the rich and poor countries has decreased, still the rate at which the poor countries are progressing is not worth mentioning. The advanced countries when they passed the stage, the poor countries are going through, they made faster progress. The reason behind this is the fact that when these countries were developing, they did not have any advanced country whose development process it could emulate. This demonstration effect has also retarded the rate of development in these countries. However, the middle order countries have done much better than these countries with low human development. Though in middle human development countries like Iran, Iraq, Jordan, Saudi Arabia and Oman income inequalities have shown no decline yet these countries are putting in a lot of effort for development.

On the other hand, the Indian states excepting few like Goa, Punjab and Kerala have low living standards. Among them, Kerala is the only state where its economic growth does not match social development but both Goa and Punjab are economically well off too. Maharashtra and Tamil Nadu are the states trailing just behind them. Liberalisation along with industrialisation have affected these states' social development. But it will take some years for the official statistics to show it. Most of the other states are immersed in poverty and unemployment, specially the states of Bihar, Orissa, Rajasthan and Assam. Growth has not trickled down to the lowest strata here. Development benefits is only concentrated in the hands

of few. This is so as India is troubled with too much of bureaucratic control which prevents the benefits of growth to trickle down to the grass-root level.

Quality and Reliability of Data Used:

As regards the data on economic development, i.e., GNP per capita, there is no problem as such in data collection as it involve figures in absolute, i.e. in per capita amounts of goods and services produced, sold or consumed. But social indicators tend to be more distributional and involves figures on the per cent of the population and of various sub-populations having a given quality or characteristic. These indicators have no common quantitative medium like money and also are generally more indirect than economic indicators. Thus it is not possible to define and measure social indicators directly and various indirect measures have to be attempted. These measures naturally give rise to problems of interpretations.

Naturally, there is a great deal of variation in the quantity and quality of information available on social indicators in different countries. This is dependent on such factors as the stage of development , the financial, human and technical resources available, the strength of the research community and the priority attached to different types of information. Given the scarcity of resources and of skills and the high cost of data collection, each country would need to weigh carefully the costs and benefits of collecting different types of information and then to establish priorities.

Secondly, there is a major problem of collecting data for social indicators in developing countries. Though it is true that various international publications issue data on important social indicators for every country in the world but the figures given in these publications for most

developing countries are not observed data but estimates made in national on the basis of various assumptions and models. These estimated figures differ markedly from one estimator source to another in the same country.

However, since we have to work with data which is available, these measures are the best with what we can estimate human development.

Policy Prescriptions:

The role of human beings in the development process has passed through different stages. In earlier periods, it was regarded as social welfare or as poverty alleviation and basic needs provision. But now in the 90s, it is the most urgent and pressing need. Now enhancement of human capabilities is both an end in itself and a means to higher production and income.

Improvement of living standards should be the basic objective of development plans, along with reduction of poverty and unemployment increase of productivity, reduction in malnutrition and mortality rates and increase in provision of access to social services specially in the low developed countries of Africa. Most of the Africans live in rural areas. Therefore more investment must be diverted towards rural areas which are really backward. Appropriate policies should be introduced to encourage the creations of productive employment and incomes in this sector. Another basic reason for Africa's backwardness is discrimination against minorities and vulnerable groups. Therefore equitable distribution of income and social justice must be the norm of planning. More attention must be given to the brain drain problems faced by Africa, by creating opportunities for the free movement of people and by opening up sub-regional employment markets.

The Arab region, on the other hand, must remove the gap between the rich and the poor. At present literacy rate is 50 per cent in the region. Education must be given the highest priority. Universities in the region must be modernized so that more and more students can be given higher education and illiteracy reduced to a great extent. Health conditions in this region is also inadequate. Environmental health should be promoted to put an end to pollution related diseases. Housing conditions also need to be improved drastically. The Arab countries lack the freedom of democracy as press is censored and human rights often violated. The only way human development can be ensured is through participation of people in the process of decision making.

As far as Asian countries are concerned, the major weakness of the planning process is its urban bias. The governments should first try to remove such barriers and work for basic education to all and all political interference must be withdrawn from the provision of basic education. Like Africa, the Asian region must create more jobs because supply of labour force much exceeds its demand and population is still growing. Yet its economic growth is low.

So all the developing countries need a heavy dose of investment in the social sector with special emphasis on education. The vital responsibility for development of human capabilities rests with these countries themselves. The other developed countries must also assist these developing nations to develop their capacities and capabilities to the fullest so that individuals become productive in their own society contributing to the well-being of the global community.

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