
UNIT 22 ALTERNATIVE RECENT INDICATORS OF SOCIAL DEVELOPMENT

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22.0 OBJECTIVES

After going through this unit, you will be able to:

- define the concept of social welfare;
- explain the need for alternative indicators of social welfare;
- describe the ideas behind New Economic Welfare and Physical Quality of Life Index measures;
- discuss the concept and meaning of human development and the evolution and measurement of the Human Development Index; and
- explain some recently developed indices about human welfare such as the Gender Development Index, the Gender Empowerment Measure and the Capability Poverty Measure.

22.1 INTRODUCTION

Economists have for long used, and continue to use, real gross domestic product (or its derivative national income) as an indicator of economic welfare. An increase in GDP implies availability of more goods and services of value, and to that extent the material welfare of the economy increases. Social development is something more than the material or economic welfare. GDP estimates fail to capture these and hence there is a need for alternative indicators of social development. This unit describes various measures of economic social and human development indicators that have been evolved in recent years in response to the perceived limitations of national income accounts in capturing the welfare of the people.

The unit carefully explains the concept of social development and how it is related to the concept of economic development. We see that social development and social welfare are related to the broader area of human development. The unit then goes on to discuss, one by one, several indices of welfare and development usually in terms of the time in which they were proposed.

22.2 CONCEPT OF SOCIAL DEVELOPMENT

What is social development? What is its relation to economic welfare? Why indicators of economic welfare are not sufficient indicators of social development? These and a few other questions come to our mind. Let us try to answer them.

22.2.1 Meaning of Social Development

Social development can more easily be defined as a process whereby society matures and advances from one stage to another. As a society matures, standard of living of its people, specially those at the bottom-end of the ladder, shows distinct sign of improvement, reflected in increasing consumption of more and new products. The weaker sections of the society, especially the women, gain empowerment, i.e., they gain access to services and facilities that they have been hitherto denied.: education, health, safe drinking water, sanitation, sewerage, job opportunities etc.

In the process of maturity and advancement, availability of more goods and services, i.e. increase in GDP, is an essential condition. Without an increase in availability of more goods and services, no society can lay claim to advancement. But an increase in GDP may be only a necessary condition; it may not be sufficient condition. Social development requires much more than that: trickle down of income to lower segments, spread of literacy, health services, job opportunities, better environment conditions etc.

22.2.2 Need for Alternative Indicators of Social Development

Need for alternative indicators of social development arises basically because GDP estimates fail to take into account different aspects of social life other than the economic aspect. These suffer from the following limitations:

- 1) GDP estimates are based only on the output of goods and services.
- 2) These are not concerned with the quality of goods and services produced.
- 3) GDP estimates are not affected by how the produced goods and services, and income generated thereby, get distributed among different sections of the society.
- 4) These do not reckon with distribution of factor and non-factor inputs among varied end users.
- 5) These fail to take into account the non-material costs inflicted on society during the process of production of material goods.

Because of the above limitations, the economists, and other social scientists have been making efforts to develop some alternative indicators of social development.

22.2.3 Alternative Indicators of Social Development

Over the last few years, as a result of sustained efforts by the economists and social scientists a few alternative indicators of social development have been evolved.

The process of evolution is an on-going activity. Some of the important indicators are as follows:

- 1) Net Economic Welfare;
- 2) Physical Quality of Life Index;
- 3) Human Development Index;
- 4) Gender-related Development Index;
- 5) Gender Empowerment Measure;
- 6) Capability Poverty Measure;
- 7) Human Poverty Index, etc.

Check Your Progress 1

- 1) Explain the concept of social development.

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2) Trace the relationship between growth in GDP and social development.

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3) Mention five limitations of GDP as an indicator of social development.

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22.3 NET ECONOMIC WELFARE (NEW)

Paul A. Samuelson and William D. Nordhaus formulated an alternative measure of social development and called it Net Economic Welfare (NEW)

22.3.1 Concept of NEW

NEW is based upon GNP but makes two major changes:

- 1) GNP includes many components that make no obvious contribution to individual well being. NEW excludes them.
- 2) Some key satisfaction producing consumption items are omitted from GNP. NEW includes them.

Thus a few components are included in GNP and a few exclude, to compute NEW.

- 1) **Items to be Added to GNP:** The Important items to be added to GNP are as follows:
 - i) **Value of Leisure Time:** If at a higher level of income, a person begins to put lesser hours to work, and begins enjoy to more leisure, the value of the Psychic satisfaction of leisure generated thereby need to be added to the GNP.
 - ii) **Do-it-yourself activities:** The value of the satisfaction generated by the performance of such activities need to be added to the GNP.
 - iii) **The Underground Economy:** Underground activities are of two kinds (a) activities that are illegal (such as smuggling, extortion, etc.) and (b) activities that are legal but unrecorded for tax purposes. Illegal activities, by definition, are not included in national accounts. Legal activities, since they are not reported and no records are maintained, also escape the net of national output statisticians.

For the computation of NEW, the imputed values of such activities need be added to GNP.

2) Items to be

- i) In the production of goods and services that add up to the national output, a large amount of intermediate goods supplied by the government are consumed up; these are not accounted for on the cost side. The value of such intermediate goods need be subtracted from the GNP.
- ii) Adjustments for congestion of urban life. These take away some pleasure and happiness from urban living; These values need be deducted from the value of the GNP to arrive at NEW.

22.3.2 Results

Economists have made calculations of NEW and NNP (which is considered the most appropriate measure from the national income accounts) for a long period of time, from 1930 to 1990. These comparisons bring out that NEW grows more slowly than does NNP. This difference may be inevitable in a world that is becoming more congested and relies ever more heavily on large scale power plants and sophisticated organic chemicals.

22.4 PHYSICAL QUALITY OF LIFE INDEX (PQLI)

The Physical Quality of Life Index has been formulated by Morris D. Morris. It was published for the first time in 1979 as an alternative indicator of social development and has generated much interest since then.

22.4.1 Concept and Construction of PQLI

PQLI is a composite index of three indicators, viz., (i) life expectancy at age one; (ii) infant mortality; and (iii) literacy.

For each indicator, the performance of individual countries is rated on a scale of 1 to 100, where 1 represents the “worst” performance by any country and 100 the “best” performance.

For life expectancy, the upper limit of 100 was assigned to 77 years (achieved by Sweden in 1973) and the lower limit of 1 was assigned to 28 years (the life expectancy of Guinea-Bissau in 1950). Within these limits, each country’s life expectancy figure is ranked from 1 to 100.

Similarly, for infant mortality, the upper limit was set at 9 per 1,000 (achieved by Sweden in 1973) and the lower limit at 229 per 1000 (Gabon 1950).

Literacy rates being measured as percentages of from 1 to 100, provide their own direct scale.

Once a country performance in life expectancy, infant mortality, and literacy has been rated on the scale of 1 to 100, the composite index (PQLI) for the country is calculated by averaging the three ratings, giving equal weight to each.

22.4.2 Results

Morris's study brought to light the following facts:

- 1) More generally, but not always, countries with low per capita GNPs, tended to have low PQLIs, and countries with high per capita GNPs, tend to have high PQLIs.
- 2) The correlations between GNP and PQLI were not substantially close. Some countries with high per capita GNPs had very low PQLI s
 - even below the average of the poorest countries.

Conversely, some countries with very low per capita GNP, had PQLIs, that were higher than the average for the upper-middle-income countries.

Table 22.1 below provides a sample of developing countries ranked both by per capita incomes and PQLIs in the early 1980s.

Table 22.1: A Comparison of Per Capita GNP and the PQLI for Selected Developing Countries

Country	Per Capita GDP (\$)	PQLI
Gambia	348	20
Angola	790	21
Sudan	380	34
Pakistan	349	40
Saudi Arabia	12720	40
India	253	42
Iraq	3,000	48
Qatar	27,790	56
Tanzania	299	58
Zimbabwe	815	63
Brazil	2,214	72
China	304	75
Sri Lanka	302	82
Singapore	5,220	86
Taiwan	2,503	87
Costa Rica	1,476	89

The data seem to indicate that significant improvements in the basic quality of life can be achieved before there is any great rise in per capita GNP, or conversely that a higher level of per capita GNP is not a guarantee of a better quality of life.

22.4.3 Evaluation

PQLI appears to be free of the major problems associated with usng GNP as a measure of development.

- i) It aims directly at incorporating welfare considerations through measuring the ends of development in terms of the quality of human life.
- ii) PQLI also incorporates distributional considerations by using three indicators that reflect distributional characteristics in the sense that countries cannot achieve high national averages of life expectancy, infant mortality, and literacy unless the majorities of their population are receiving the benefits of progress in each of these areas.
- iii) There is general agreement that improvements in these areas are an important part of development progress.
- iv) Like GNP, the PQLI can be used to make inter-country comparison. It has the major advantage of being a simple measure with data being easily available.

However, the PQLI has also invited criticism:

- i) It is limited a measure; It fails to incorporate many other social and psychological characteristics suggested by the term “quality of life”—security, justice, human rights and so on.
- ii) A much more serious criticism is the lack of a rationale for giving equal weight to each of the indicators used in forming the index and the possibility that measures such as life expectancy and infant mortality are both reflecting similar phenomena.

Nevertheless, despite the limitations, the PQLI appears to be a useful indicator of development.

Check Your Progress 2

1) In what ways is NEW different than GNP?

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2) Briefly state the concept of PQLI?

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3) What type of relationship is found between GNP and PQLI?

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4) In what ways is the PQLI considered a better indicator than GNP?

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22.5 HUMAN DEVELOPMENT INDEX (HDI)

Human Development Index was presented for the first time in the Human Development Report published by the United Nations Development Programme (UNDP) in 1990.

22.5.1 Concept of HDI

The HDI attempts to capture as many aspects of human development as possible in one simple, composite index and to produce a ranking at human development achievements. The concept of human development is much deeper and richer than what can be captured in any composite index or even by a detailed set of statistical indicators. HDI attempts to simplify this complex reality.

The HDI is a composite index of achievements in basic human capabilities in three fundamental dimensions – a long and healthy life, knowledge and decent standard of living. Three variables have been chosen to represent these three dimensions: (i) life expectancy; (ii) educational attainment; and (iii) income.

22.5.2 Significance of HDI

The HDI value for each country indicates how far the country has to go to attain certain defined goals: an average life span of 85 years, access to education for all and a decent standard of living. The HDI reduces all three basic indicators to a common measuring rod by measuring achievements in each as the relative distance from the desirable goal. The maximum and minimum values for each variable are reduced to a scale between 0 and 1, with each country at some point on this scale.

The HDI shows the distance a country has to travel to reach the maximum possible of 1 and also allows inter-country comparisons. The difference between the maximum value of the HDI and the HDI value achieved by a country shows the country’s shortfall in HDI. A challenge for every country is to find ways to reduce this shortfall.

22.5.3 Method of Construction of HDI

The HDI is based on three-indicators, (i) longevity as measured by life expectancy at birth; (ii) educational attainment, as measured by a combination of adult literacy (two-third weight) and combined primary secondary and tertiary enrolment ratios (one-third weight); and (iii) standard of living as measured by real GDP per capita PPP (\$).

For the construction of the index, fixed minimum and maximum values have been established for each of these indicators:

- Life expectancy at birth: 25 years and 85 years.
- Adult literacy: 0% and 100%.
- Combined gross enrolment ratio: 0% and 100%.
- Real GDP per capita (PPP \$): \$ 100 and \$ 40,000 (PPP \$)

For any component of the HDI individual indices can be computed according to general formula:

$$\text{Index} = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

If, for example, the life expectancy at birth in a country is 65 years, then the index of life expectancy for this country would be

$$\frac{65 - 25}{85 - 25} = \frac{40}{60} = 0.667$$

The HDI is a simple average of the life expectancy index, educational attainment index and adjusted real GDP per capita (PPP \$) index and so is derived by dividing the sum of these three indices by 3, that is

$$\text{HDI} = \frac{\text{Life Expectancy Index} + \text{Education Attainment Index} + \text{Adjusted Real GDP Per Capita}}{3}$$

Illustration

The construction of the HDI is illustrated with the help of data from India

Life Expectancy (Years)	Adult Literacy Rate (%)	Combined Enrolment Ratio (%)	Real GDP Per Capita (PPP \$)
61.3	51.2	56	1,348

$$1) \text{ Life Expectancy Index} = \frac{61.3 - 25}{85 - 25} = 0.60$$

$$2) \text{ Education Index} = \frac{\text{Adult Literacy Index} + \text{Combined Primary, Secondary and Territory Enrolment Index}}{3}$$

$$\text{Adult Literacy Index} = \frac{51.2 - 0}{100 - 0} = \frac{51.2}{100} = 0.512$$

$$\text{Combined Primary Secondary, and Tertiary Index} = \frac{56 - 0}{100 - 0} = \frac{56}{100} = 0.56$$

$$\text{Educational Index} = \frac{0.512 + 0.56}{3} = 0.53$$

$$3) \text{ Adjusted Real GDP Per Capita Index} = \frac{1348 - 100}{6154 - 100} = \frac{1338}{6054} = 0.221$$

$$\therefore \text{HDI} = \frac{0.60 + 0.51 + 0.221}{3} = 0.446$$

22.5.4 HDI Rankings for Different Countries

TOP TEN		BOTTOM TEN	
1	Canada	166	Mozambique
2	France	167	Guinea
3	Norway	168	Eritrea
4	USA	169	Burundi
5	Iceland	170	Ethiopia
6	Netherlands	171	Mali
7	Japan	172	Burkina Faso
8	Finland	173	Niger
9	New Zealand	174	Rwanda
10	Sudan	175	Sierra Leone

India: HDI: 0.446 Rank 138.

Results

The rankings of countries by their HDI value leads to the following conclusions:

- 1) Of the 175 countries for which the HDI has been calculated for the Human Development Report 1998, 64 are in the high human development category, 66 in the medium category and 45 in the low category. Thus, of the world's 5.6 billion people, 1.3 billion (22%) are in the high human category; 2.6 billion (45%) in the medium category and 1.8 billion (32%) in the low category.
- 2) The HDI ranking of different countries differs significantly from their ranking by real GDP per capita. It means that the countries can have similar income but different human development achievements – or similar HDIs but very different incomes.

22.5.5 Usefulness and Limitations of the Concept

- i) The HDI provides an alternative to GNP, for assessing a country's standing in basic human development or its progress in human development over time. It does not displace economic measures but can serve as a simple composite complement to other measures like GNP.
- ii) The HDI has been used in many countries to rank districts or region as a guide to identifying those most severely disadvantaged in terms of human development. Several countries have used the HDI as a planning tool.

- iii) The HDI has been used especially when a researcher wants a composite measure of development. For such user, other indicators have sometimes been added to the HDI.

Limitations

The HDI has also invited serious criticism; these point out the limitations of HDI as an effective indicator of social development. Some of the questions raised can be briefly reviewed as follows:

- i) Why only three indicators? Are these too many or too few?
- ii) Are the variables (indicators) chosen to measure the development adequate? And for each dimension, are the associated variables too many or too few?
- iii) Are the measures subject to measurement errors, and, if so, do such errors invalidate the results? A subsidiary question is how up to date are the data used to construct the index?
- iv) Is the choice of the minimum and the maximum justifiable, or is it arbitrary? In any case, how robust is the measure to alternative maximum and minimum values?
- v) Why choose equal weights? How sensitive is the measure to other weighting schemes?

It would be seen that most of the questions raised relate to the methodology of HDI. The UNDP is continuously engaged in the task of refinement of this methodology.

Check Your Progress 3

- 1) Explain in brief the concept of Human Development Index.
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- 2) State a few important uses of Human Development Index.
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- 3) State a few limitations of Human Development Index.
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22.6 GENDER RELATED DEVELOPMENT INDEX (GDI)

The Gender – Related Development Index (GDI) has also been introduced by the Human Development Report, published annually by the United Nations Development Programme. It was published for the first time in the year 1995.

22.6.1 Concept and Construction of GDI

The GDI measures achievements in the same dimensions and variables as the HDI does, but takes account of inequality in achievement between women and men. The greater the gender disparity in basic human development, the lower a country’s GDI compared with its HDI. The GDI is simply the HDI discounted, or adjusted downwards, for general inequality.

The GDI uses the same variables as the HDI. The difference is that the GDI adjusts the average achievements of each country in life expectancy, educational attainment and income in accordance with the disparity in achievement between women and men

The GDI adjusts the maximum and minimum values for life expectancy to account for the fact that women tend to live longer, than men. For women the maximum value is 87.5 years and the minimum value is 27.5 years ; for men the corresponding values are 82.5 and 22.5 years.

Similarly, before income is indexed, the average adjusted real GDP per capita of each country is discounted on the basis of the disparity in the female and male shares of earned income in proportion to the female and male population shares.

The indices for life expectancy, educational attainment and income are added together with equal weight to derive the final GDI value.

GDI in Some Selected Countries

TOP TEN	BOTTOM TEN
1 Canada	137 Chad
2 Norway	138 Gambia
3 Sweden	139 Mozambique
4 Iceland	140 Guinea
5 USA	141 Burundi
6 France	142 Ethiopia
7 Finland	143 Mali
8 New Zealand	144 Burkina Faso
9 Australia	145 Niger
10 Denmark	146 Sierra Leone

India: GDI: 0.419 Rank :118

22.6.2 Results

Several conclusions can be drawn from the GDI rankings.

First, no society treats its women as well as its men. This is evident from the fact that the GDI value for every country is lower than its HDI value.

Second, gender inequality is strongly associated with human poverty. The four countries ranking lowest in the GDI also rank lowest in the human poverty index.(HPI).

Third, gender inequality is not always associated with income poverty.

Fourth, gender equality can be achieved across a range of culture and political ideologies.

22.7 GENDER EMPOWERMENT MEASURE (GEM)

The gender empowerment measure indicates whether women are able to actively participate in economic and political life. It focuses on participation, measuring gender inequality in key areas of economic and political participation and decision- making. It thus differs from the GDI, an indicator of gender inequality in basic capabilities.

22.7.1 Construction of GEM

The GEM is computed on the basis of three indices relating to:

- 1) Economic participation and decision-making;
- 2) Political participation and decision-making;
- 3) Power over economic resources.

To reflect economic participation and decision-making two variables are chosen: (a) women's and men's percentage shares of administrative and managerial positions, and (b) their percentage shares of professional and technical jobs. These are broad, loosely defined occupational categories. Because the relevant populations for each is different, a separate index for each is calculated and then the two are added together.

Women's and men's percentage shares of parliamentary seats is chosen to reflect political participation and decision making power.

An income variable is used to reflect power over economic resources. It is calculated in the same manner as for the GDI except that unadjusted rather than adjusted real GDP per capita is used. The maximum value for income is thus PPP \$ 40,000 and the minimum PPP \$ 100.

The three indices are added together to derive the real GEM value.

GEM in Selected Countries

TOP TEN		BOTTOM TEN	
1	Norway	85	Papua New Guinea
2	Sweden	86	India

3	Denmark	87	Sudan
4	Finland	88	Congo
5	New Zealand	89	Zaire
6	Canada	90	Central African Republic
7	USA	91	Solomon Islands
8	Austria	92	Pakistan
9	Germany	93	Togo
10	Netherlands	94	Mauritania

India: GEM 0.228. Rank 86.

22.7.2 Results

Several conclusions can be drawn from the GEM rankings:

- 1) Countries in the top order in GEM rankings are not only good at strengthening the basic capabilities of women, they have also opened many opportunities for them to participate in economic and political fields.
- 2) Some developing countries outperform much richer industrial countries in gender equality in polit.

22.8 CAPABILITY POVERTY MEASURE (CPM)

The UNDP in its Human Development Report 1996 introduced a new measure of social development and called it the Capability Poverty Measure (CPM).

The CPM focuses on human capabilities. It considers the lack of three basic capabilities. The *first* is the capability to be well-nourished and health—represented by the proportion of children under five years of age who are underweight. The *second* is the capability for healthy reproduction – proxied by the proportion of births unattended by trained health personnel. The *third* is the capability to be educated and knowledgeable – represented by female literacy.

The three measures are added together and divided by three to give a simple arithmetic mean. The lower this mean, the less the capability poverty.

In most of the countries in South Asia, capability poverty is more widespread than income poverty, for example, the HRD 1996 estimates 25.4 percent of the total population in India as poor by the income poverty index, whereas by CPM this has been estimated at 61.5 percent.

The lesson is simple: poverty cannot be eradicated merely by boosting income. It will also take a broad expansion of basic human capabilities and the productive use of these capabilities.

22.9 HUMAN POVERTY INDEX (HPI)

The UNDP further build upon the CPM and in its annual Human Development Report 1997 formulated the Human Poverty Index (HPI).

22.9.1 Concepts and Components

The HPI measures deprivation in basic human development in the same dimensions as the HDI – longevity, knowledge and a decent living standard.

The first deprivation relates to survival – the vulnerability of death at a relatively early age – and is represented in the HPI by the percentage of people expected to die before age 40.

The second dimension relates to knowledge—being excluded from the world of reading and communication—and is measured by the percentage of adults who are illiterate.

The third aspect relates to a decent standard of living, in particular, overall economic provisioning. This is represented by a composite of three variables—the percentage of people with access to health services and to safe water and the percentage of malnourished children under five.

A composite HPI is computed by taking a simple average of the three measures discussed above.

22.9.2 HPI-II

Introduced in the HRD 1998, the HPI II measures human poverty in industrial countries. Because human deprivation varies with the social and economic conditions of a community, this separate index has been devised for industrial countries, drawing on the greater availability of data. It focuses on deprivation in the same three dimensions as HPI-I and one additional one, social exclusion. The variables are the percentage of people likely to die before the age of 60, the percentage of people whose ability to read and write is far from adequate, proportion of people with disposable income of less than 50% of the median and the proportion of long-term unemployed (12 months or more).

22.10 OTHER INDICATORS OF SOCIAL DEVELOPMENT

22.10.1 Social Development Index (SDI)

The SDI was constructed by the United Nations Research Institute on Social Development (UNRISD) In 1970. The SDI incorporates 16 core indicators. These indicators were selected on the basis of their high intercorrelation to form a development index using weights derived from their various degrees of correlation.

The SDI was found to correlate more highly with individual social and economic indicators than per capita GNP correlated with the same indicators.

22.10.2 International Human Suffering Index (IHSI)

This index was formulated by the Washington-based Population Crisis Committee and was published in 1987. The index was created to measure, in a single figure, differences in living condition among countries. Each country index was compiled by adding 10 measures of human welfare related to economics, demography, health and governance.

22.10.3 Quintile Income and Quintile Growth

In a background paper for UNDP’s Human Development Report, 1996, Kaushik Basu has argued that in evaluating human well being one should look at the per capita income of the poorest 20 percent (quintile income); and that one should assess progress by looking at the growth rate of per capita income of the poorest 20 percent (quintile growth). This move away from per capita income and growth to quintile income and quintile growth changes the ranking of societies drastically. In 1993 Switzerland with a per capita income of \$ 35,760 was the richest country, followed by Japan with \$ 31,490; then came Denmark, Norway and U.S. Once we turn to quintile income, Japan with \$13,698 ranks first by an enormous margin. No other country exceeds \$ 10,000; the U.S. drops to 12th position.

22.10.4 Genuine Progress Indicators (GPI)

A San Francisco based group called *Redefining Progress* has evolved the concept of “Genuine Progress Indicators”. It takes into account various social and ecological factors. According to this criteria the U.S. economy shows a steady decline since the seventies. Similarly, in U.K., Germany and Austria also, although GDP per capita has gone up, GPI per capita has fallen. In other words, as material wealth has gone up, relational wealth has gone down. People in fact are worse off.

22.10.5 Green Index

The World Bank’s environmentally Sustainable Division has developed what has come to be known as “Green Index”. Green Index measures a nation’s *wealth* by using a new system of measurement, as contrasted to the prevalent system which measures wealth according to the GNP per capita. The new system attaches a dollar value to each of the three components, viz (i) produced assets, (ii) natural resources, and (iii) human resources. It puts a price tag on produced assets, the sum of all machinery, factories, roads and other infrastructure. It assigns an economic value to land, water, timber, minerals and all other natural resources. It looks at the human resources available, the education level, and the range of skills. It then calculates the true estimates of a country’s wealth, taking into account all such resources which do not always show up on traditional economic indicators.

Check Your Progress 4

- 1) How is GDI different from HDI?

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- 2) What conclusion can we derive from the country rankings on GEM?

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3) Explain in brief the concept of Human Poverty Index?

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22.11 LET US SUM UP

The problems associated with using per capita GNP as a measure of development are well known. Among the major objectives of this measure are the failure to indicate non-marketed (and, therefore, non-priced) subsistence production, and to incorporate welfare and income distribution considerations. As a result there have been numerous efforts both to remedy its defects and to create other composite indicators that could serve as complements or alternatives to this traditional measure. Some of these indicators measure development in terms of the quality of life, whereas the others seek to measure development in terms of interaction among social, economic and political factors.

22.12 KEY WORDS

- Social Development** : A process whereby a society matures and advances from one stage to another.
- Human Development** : A process of widening people’s choices and the level of well-being they achieve.
- Human Development Index** : Measures the average achievements in a country in three basic dimensions of human development-longevity, knowledge and standard of living.
- Human Poverty Index** : Measures deprivation in basic human development in the same dimensions as the HDI.
- Gender-Related Development Index** : Measures achievements in the same dimensions and variables as the HDI does, but takes account of inequality in the achievements between women and men.
- Gender Empowerment Measure** : Indicates whether women are able to actively participate in economic and political life.
- Quintile Income** : Per capita income of the poorest twenty per cent.
- Quintile Growth** : Growth rate of the per capita income of the present income of the poorest twenty per cent.

22.13 SOME USEFUL BOOKS

UNDP: (2005) Human Development Report (Annual) Oxford University Press.

I. C. Dhingra, (2005) : *Indian Economic Environment*, Sultan Chand & Sons, New Delhi.

Paul A. Samuelson and William D. Nordhaus : *Economics (Sixteenth Edition)*.

22.14 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

- 1) See section 22.2 and explain the meaning of social development
- 2) See section 22.2.2
- 3) See section 22.2.3

Check Your Progress 2

- 1) See sub-section 22.3.1
- 2) See section 22.4
- 3) See sub-section 22.4.2
- 4) See sub-section 22.4.3

Check Your Progress 3

- 1) See sub-section 22.5.1
- 2) See sub-section 22.5.5
- 3) See sub-section 22.5.5

Check Your Progress 4

- 1) See section 22.6
- 2) See section 22.7
- 3) See section 22.9