PRABHAT

INDIAN ECONOMY

For Civil Services Examination

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by Ajit Kumar

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Preface

The Economic structure of Indian country is changing fast under the forces of Liberalisation, Privatisation and Globalisation. The book is primarily designed to explain how each sector of Indian economy is changing under these forces. The book is comprehensive in span but precise and systematic in presentation. The book has been presented after going through several standard books on each topic, research papers, newspapers, magazines and journals.

This book caters the needs of all Indians who want to have a general understanding of the structure and dynamism of economy of India. The book is particularly for the students preparing for UPSC Civil Services Exam. and State Civil Services Exams. It fulfils the needs of both Preliminary and Main Exams.

The book begins with understanding of economics and economy, types of economy, economic growth vs economic development, measures of economic development, sustainable development, United Nations Sustainable Development Goals – Post-2015 Agenda, inclusive growth, and sectors of economy.

The economic reforms measures undertaken in India have been dealt elaborately. The book contains banking sector and other financial institutions passing through structural changes. It encompasses the role of capital market in economic development of India.

The agriculture sector is the backbone and crucial for Indian economy which provides the basic ingredients to mankind and makes available raw material for rapid industrialisation. The book has minute detail of problems faced by this sector and the policies, programmes and steps taken to solve the problems.

The industrial sector in India, including construction, is an important contributor to the growth of India. Manufacturing is a major potential sector for providing employment. The book highlights the key challenges faced by the sector and the policies and programmes initiated by the Government of India.

The book says that the service sector in India is expanding at a faster rate. For the last three decades there has been a substantial shift of economic activities from the primary and secondary sector to the service sector. Now it has become a largest sector of the economy.

As per the book, infrastructure provides services that support economic growth by increasing the productivity of labour and capital thereby reducing the costs of production and raising profitability, production, income and employment. The book highlights the international transactions that both the private and public sector of India conduct with the other economies of the world.

Under Public Finance, the book describes and analyses government services, subsidies, welfare payments and the methods by which the expenditures to these ends are covered through taxation, borrowing, foreign aid and the creation of money.

The book elaborates that the social sector is an important sector of the Indian economy and includes those components which play an important role in the contribution of human resource development i.e. education, health and medical care, water supply and sanitation, housing conditions etc. Policies and programmes related to these areas have found justifiable space in this book.

Topics like National Income, Inflation, Planning in India, Black Money, and Climate Change have updated information with suitable conceptual clarity. New developments including Goods and Services Tax (GST), Economic Survey (2017–18), and Budget (2018–2019), have been elaborately presented.

This book would not have been possible without the support of my wife, Saroj Kumari who provided me strong mental support and spared her valuable time to manage the children and the home when I was busy in writing.

I am especially grateful to Mr. Ajay Anurag (Director, Wisdom IAS) who expanded my understanding on socio-economic issues. I take this opportunity to acknowledge the help of my learned friends Mr. K. Mukesh, Manoj Kumar Verma, Mr. Subodh Mishra, Mr. Bhutnath Mishra, and Mr. Parimal Kumar (Director, Radiant IAS).

I devote this book to my two daughters, Apoorva and Anushka.

AJIT KUMAR

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CHAPTER
Introduction

ECONOMICS AND ECONOMY

❖ Economics

Economics is concerned with the efficient use or management of limited productive resources to achieve maximum satisfaction of human material wants.

J. S. Mill defined economics as 'the practical science of the production and distribution of wealth'. Alfred Marshall said that, 'economics is a study of mankind in the ordinary business of life'. In the words of Marshall, 'Economics is on the one side a study of wealth, and on the other and more important side, a part of the study of man'.

Lionel Robbins said, 'Economics is the science which studies human behaviour as a relationship between ends, and scarce means which have alternative uses'.

Basic assumptions of Robbins contains that the ends are various. The term 'ends' mean wants. Human wants are unlimited. Means are limited. Means like time, money and resources are limited. We can put time and money to alternative uses. For example, though time is limited, we can use it for different purposes. We can use time for earning money, or we may enjoy it as leisure. All wants are not of equal importance.

In fact, economics is a social science that deals with the creation of wealth from scarce resources: the production and distribution of goods and services for consumption; the behaviour, interaction and well-being of the groups involved in the above activities; there is a trade-off involved in production and in consumption.

The economics as a subject has been divided into two main parts: (i) Microeconomics and (ii) Macroeconomics. Microeconomics is the study of the choices that individuals and businesses make, the way these choices interact in markets and the influence of governments. Macroeconomics is the study of the performance of the national economy and the global economy.

❖ Economy

The economy is, according to the Oxford Learner's Dictionary, 'the relationship between production, trade and the supply of money in a particular country or region'. It is effective management of the resources of a community or system. The economy covers all activities related to production, consumption and trade of goods and services in an area performed by economic agents. Economic agents can be individuals, businesses, organizations or governments. A given economy is the result of a set of processes that involves its culture, values, education, technological evolution, history, social organization, political structure and legal systems, geography, natural resource endowment, ecology, etc. That is why no two economies are the same. The scientific study of the economy and the factors affecting the economy are called economics.

TYPES OF ECONOMY

Based on the criterion of degree of individual freedom and profit motive, economies are classified as:

(i) Capitalist or free enterprise economy
(ii) Socialist or centrally planned economy
(iii) Mixed economy

❖ Capitalist Economy

A capitalist economy is an economic system in which the production and distribution of commodities take place through the mechanism of free markets. Hence, it is also called as market economy or free-trade economy. Each individual be it a producer, consumer or resource owner has considerable economic freedom.

The right to private property is an important feature of capitalism. Individuals have the right to buy and own property. There is no limit, and they can own any amount of property. They also have legal rights to use their property in any way they like. Profit is the only motive for the functioning of capitalism. There is freedom of choice to both producers and consumers. Market forces like demand, supply and price are the signals to direct the system. As most of the basic economic problems are expected to be solved by market forces, the government has minimal role in the economy.

In a capitalist economy, every farmer, trader or industrialist can increase the productivity to meet his own self-interest. This in turn leads to increase in income, saving and investment.

However, capitalism may create extreme inequalities in income and wealth. The inequality may lead to monopoly. Mega corporate units replace smaller units of production. They ultimately emerge as multinational corporations (MNCs) or transnational corporations (TNCs). They often hike prices against the welfare of consumer. Capitalism encourages mechanization and automation. This results in unemployment particularly in labour surplus economies. Stringent labour laws are enacted for the exclusive profit-motive of capitalists. Fire and hire policy becomes the order of the day. As the profit margin in basic social sectors, like literacy, public health, poverty, drinking water, etc., is low, capitalists do not want to invest in them.

❖ Socialist Economy

In a socialist economy, the means of production are owned and operated by the State. All decisions regarding production and distribution are taken by the central planning authority. Hence, the socialist economy is also called as planned economy or command economy. The government plays an active role. Social welfare is given importance, and equal opportunity is given to all.

The right to private property is limited. All properties of the country are owned by the State. Most of the economic policy decisions are taken by a centralized planning authority. There is stability in the system because the production and consumption of goods and services are well regulated. The State provides free education, cheap and congenial housing, public health amenities and social security for the people. There is a state monopoly, but it produces quality goods at reasonable price. There is no concentration of wealth.

However, people in socialist economic system work out of fear of higher authorities. The system does not give any initiative for the people to work hard. There is no freedom of occupation. The consumer's choice is very limited. Everything is rigid and technological changes are limited. Gradually in the absence of competition the system may become inefficient.

❖ Mixed Economy

In a mixed economy, both public and private institutions exercise economic control. The public sector functions as a socialistic economy and the private sector as a free enterprise economy.

A mixed economy possesses the freedom to hold private property, to earn profit, to consume, produce and distribute and to have any occupation. However, if these freedoms affect public welfare adversely, they are regulated and controlled by the State.

Mixed economy is expected to retain only the merits of the two systems. For instance, the government is expected to allow private investment, but the government also controls monopolies. Planning of government directs the relative roles of public and private sectors and their respective jurisdictions.

However, it has been seen that the coordination between the public and private sectors remains poor in a mixed economy. This lack of policy coordination results in economic fluctuations. Again, there is every chance that the public sector works inefficiently. There is too much of red-tapism and corruption leading to delays in decision-making and project implementation.

ECONOMIC GROWTH VS ECONOMIC DEVELOPMENT

Economic growth refers to an increase over time in a country's real output of goods and services (GNP) or real output per capita income. It is a quantitative measure that shows the increase in the number of commercial transactions in an economy. Growth relates to a gradual increase in one of the components of gross domestic product (GDP): consumption, government spending, investment and net exports. Economic growth is a more relevant metric for progress in developed countries. But it's widely used in all countries, because growth is a necessary condition for development.

Economic development is a normative concept, i.e., it applies in the context of people's sense of morality. The definition of economic development given by Michael Todaro is an increase in living standards, improvement in self-esteem needs and freedom from oppression as well as a greater choice. According to Professor Todaro, economic development is a multi-dimensional process involving major changes in social structures, popular attitudes and national institutions, as well as the acceleration of economic growth, the reduction of inequality and the eradication of absolute poverty.

Economic development implies an upward movement of the entire social system in terms of income, savings and investment along with progressive changes in socioeconomic structure of country (institutional and technological changes). Development relates to growth of human capital indexes, a decrease in inequality figures and structural changes that improve the general population's quality of life. Economic development is more relevant to measure progress and quality of life in developing nations. Development must be conceived for as a multi-dimensional process involving major change in social structures, popular attitudes and national institutions as well as the acceleration of eco-growth, the eradication of poverty and reduction of inequality of wealth.

It is also worth pointing out that between economic growth and economic development there are similarities and differences. The similarities between them are: (i) growth and development are continuous processes, with stimulating effects in economy; (ii) both processes involve the allotment and utilization of resources and the increase of efficiency; (iii) the aim of growth and development is the improvement of the standard and quality of life and (iv) growth and development are cause and result of the general trend, influencing its rhythm and ensuring passages from one level to the other level.

Economic growth is a narrower concept than economic development. The fundamental differences between economic growth and development are: (i) economic growth is the positive change in the real output of the country in a particular financial year. Economic development involves a rise in the level of production in an economy along with the advancement of technology, improvement in living standards and so on; (ii) economic growth is one of the features of economic development; (iii) economic growth is an automatic process. Unlike economic development, which is the outcome of planned and result-oriented activities; (iv) economic growth enables an increase in the indicators like GDP, per capita income, etc. On the other hand, economic development enables improvement in the life expectancy rate, infant mortality rate, literacy rate and poverty rates; (v) economic growth can be measured when there is a positive change in the national income, whereas economic development can be seen when there is an increase in real national income; (vi) economic growth is a short-term process which takes into account yearly growth of the economy. But if we talk about economic development it is a long-term process; (vii) economic growth applies to developed economies to gauge the quality of life, but as it is an essential condition for the development, it applies to developing countries also. In contrast, economic development applies to developing countries to measure progress; and (viii) economic growth results in quantitative changes, but economic development brings both quantitative and qualitative changes.

Growth of an economy can be measured through the increase in its size in the current year in comparison to previous years, but economic development includes not only physical but also non-physical aspects that can only be experienced like improvement in the lifestyle of the inhabitants, increase in individual income, improvement in technology and infrastructure, etc.

Human Development Index (HDI) is the appropriate tool to gauge the development in the economy. Based on the development, the HDI statistics rank countries. It considers the overall development in an economy regarding the standard of living, GDP, living conditions, technological advancement, improvement in self-esteem needs, the creation of opportunities, per capita income, infra-structural and industrial development and much more.

MEASURES OF ECONOMIC DEVELOPMENT

The term economic development is a multifaceted concept, embodying not just national income and its growth, but also achievements on other fronts such as reductions in infant mortality, higher life expectancy, advances in literacy rates, widespread access to medical and health services and so on. Per capita income is sometimes used as an (incomplete) indicator for overall economic development, but should not be identified conceptually with development in the broader sense.

Apart from GDP and per capita income, there are several different measures of economic development, such as:

1. Human Development Index (HDI)
2. Physical Quality of Life Index (PQLI)
3. Quality of Life Index (QLI)/Where-to-be- born Index
4. Gross National Happiness (GNH)
5. World Happiness Report (WHR)
6. Human Poverty Index (HPI)
7. Inequality-adjusted Human Development Index (IHDI)
8. Gender Development Index (GDI)
9. Gender Inequality Index (GII)
10. Good Country Index (GCI)

1. **Human Development Index (HDI):** Human development focuses on improving the lives people lead rather than assuming that economic growth will lead, automatically, to greater well-being for all. Income growth is seen as a means to development, rather than an end in itself.

   Human development is about giving people more freedom to live lives they value. In effect, this means developing people's abilities and giving them a chance to use them. For example, educating a girl would build her skills, but it is of little use if she is denied access to jobs, or does not have the right skills for the local labour market. Three foundations for human development are to live a long, healthy and creative life, to be knowledgeable and to have access to resources needed for a decent standard of living. Many other things are important too, especially in helping to create the right conditions for human development. Once the basics of human development are achieved, they open up opportunities for progress in other aspects of life.

   Human development is, fundamentally, about more choice. It is about providing people with opportunities, not insisting that they make use of them. No one can guarantee human happiness, and the choices people make are their own concern. The process of development –human development–should at least create an environment for people, individually and collectively, to develop to their full potential and to have a reasonable chance of leading productive and creative lives that they value.

As the international community seeks to define a new development agenda post-2015, the human development approach remains useful to articulating the objectives of development and improving people's well-being by ensuring an equitable, sustainable and stable planet.

The HDI is defined as the composite statistics used to rank countries by levels of human development. The first HDI was published in 1990 by the United Nations Development Programme (UNDP). The HDI is a composite statistic of life expectancy, education and income per capita. These indicators are used to rank countries into four tiers of human development. A country scores higher HDI when the life expectancy at birth is longer, the education period is longer and the income per capita is higher. The HDI was developed by the Pakistani economist Mahbub ul Haq working alongside Indian economist Amartya Sen, often framed in terms of whether people are able to 'be' and 'do' desirable things in their life, and was published by the UNDP. The HDI embodies Amartya Sen's 'capabilities' approach to understanding human well-being, which emphasizes the importance of ends (like a decent standard of living) over means (like income per capita). Presently, it ranks 188 countries of the world.

Three Dimensions of HDI

(i) **Long and healthy life:** The long and healthy life dimension uses life expectancy at birth as its indicator, defined as 'the number of years a new-born infant could expect to live, if prevailing patterns of age-specific mortality rates at the time of birth were to stay the same throughout the child's life'. The life expectancy index is calculated using a minimum value of 20 years and a maximum value of 85 years. These maximum and minimum values are fixed goalposts adopted in the 2014 HDI.

(ii) **Knowledge:** The education component of the HDI is measured by two indicators: (i) mean years of schooling for adults aged 25 years and older and (ii) the expected years of schooling for children of school entering age. Estimates for mean years of schooling are based on the duration of schooling at each level of education. Expected years of schooling estimates are based on two factors: (i) enrolment by age at all levels of education and (ii) the number of children of school age in the population for each level of education. It is important to note that the duration of each level of education may differ from country to country, and this is taken into account when calculating mean and expected years of schooling. The two indicators are first normalized using a minimum value of 0 and maximum value of 15 for mean years of schooling and aged 18 for expected years of schooling. As societies can exist without formal education, the minimum value of 0 years is used for both education variables.

(iii) **Decent standard of living:** The decent standard of living component is measured using an income based measure. Income is, of course, not an outcome measure reflecting a person's capability or human development directly. Yet income is an important means and can proxy aspects of living standard that are provided by markets. The income component is measured using the natural logarithm of gross national income (GNI) per capita adjusted by PPP. For this component, the minimum value is PPP $100, this low value is justified by the considerable amount of unmeasured subsistence and nonmarket production in economies close to the minimum, which is not captured in the official data. The maximum value is set at PPP $75,000.

Kahneman and Deaton (2010) have shown that there is a virtually no gain in human development and well-being from annual income above $75,000. Assuming an annual growth rate of 5 per cent, only three countries are projected to exceed the $75,000 ceiling in the next 5 years, at which point the income index will be capped at 1.

The HDI takes the natural logarithm of income to reflect the diminishing importance of income among richer countries (an extra dollar of income is worth much more to a poor person than a rich one – that is, the ability to transform additional income into equivalently valuable functioning declines as incomes rise). Thus, the index is computed by normalizing the natural logarithm of GNI with respect to the natural logarithm of the minimum and maximum values.

Aggregation and weights– After calculating the indices for the three dimensions, the scores are aggregated into a composite index using a geometric mean, which is the cube root of the product of the three dimension indices. The global HDI assigns equal weight to all three dimension indices, as it has since 1990. The two education 'sub-indices' (the indices for each indicator) are also weighted equally. The choice of equal weights is based on the normative judgement that all three dimensions are equally important.

The 2010 Human Development Report introduced an IHDI. While the simple HDI remains useful, it stated that the IHDI is the actual level of human development (accounting for inequality), and the HDI can be viewed as an index of 'potential' human development (or the maximum IHDI that could be achieved, if there were no inequality).

2. **Physical Quality of Life Index (PQLI):** In 1979, D. Morris constructed a composite PQLI. He found that most of the indicators were inputs to development process rather than result of the development process. These indicators reflected that economically less developed countries are simply underdeveloped versions of industrialized countries.

   He, therefore, combines three component indicators of infant mortality, life expectancy and basic literacy to measure performance in meeting the basic needs of the people. All components are equally weighted on a 1–100 scale, where 1 represents the worst performance by any country and 100 is the best performance. For life expectancy, the PQLI is relatively neutral. It measures results, not inputs.

   The choice of indicators are: (i) Life Expectancy Indicator (LEI); (ii) Infant Mortality Indicator (IMI) and (iii) Basic Literacy Indicator (BLI).

   Physical Quality of Life = (LEI + IMI + BLI)/3

   These three indicators can be improved in a variety of ways. However, Professor Morris used Life Expectancy (LE) at birth as the indicator. Infant mortality implies deaths before age one instead of life expectancy at birth.

3. **Quality of Life Index (QLI)/Where-to-be- born index:** It has long been accepted that material well-being, as measured by GDP per person, cannot alone explain the broader quality of life in a country.

   The Economist Intelligence Unit's (an independent business) where-to-be-born index (previously called the QLI) attempts to measure which country will provide the best opportunities for a healthy, safe and prosperous life in the years ahead. It is based on a method that links the results of subjective life-satisfaction surveys to the objective determinants of quality of life across countries along with a forward-looking element.

   Determinants of Quality of Life

   The nine quality-of-life factors and the indicators used to represent these factors are as follows:

   (i) **Material well-being:** GDP per person, at ppp in $.

   (ii) **Health:** Life expectancy at birth in years.

   (iii) **Political stability and security:** Political stability and security ratings.

   (iv) **Family life:** Divorce rate (per 1,000 population), converted into index of 1 (lowest divorce rates) to 5 (highest).

   (v) **Community life:** Dummy variable taking value 1, if country has either high rate of church attendance or trade-union membership; zero otherwise.

   (vi) **Climate and geography:** Latitude, to distinguish between warmer and colder climes.

(vii) **Job security:** Unemployment rate in percentage.

(viii) **Political freedom:** Average of indices of political and civil liberties. Scale of 1 (completely free) to 7 (unfree).

(ix) Gender equality Ratio of average male and female earnings, latest available data.

4. **Gross National Happiness:** The phrase Gross National Happiness (GNH) was coined in 1972 by Bhutan's fourth Dragon King, Jigme Singye Wangchuck. Originally, the phrase represented a commitment to building an economy that would serve Bhutan's culture based on Buddhist spiritual values, instead of western material development gauged by GDP.

   GNH is a much richer objective than GDP or economic growth. In GNH, material well-being is important, but it is also important to enjoy sufficient well-being in things like community, culture, governance, knowledge and wisdom, health, spirituality and psychological welfare, a balanced use of time and harmony with the environment. The GNH is to achieve a balanced development in all the facets of life that are essential for our happiness.

   Thus, the GNH is a holistic and sustainable approach to development, which balances material and non-material values with the conviction that humans want to search for happiness.

   From an economic perspective, critics state that because GNH depends on a series of subjective judgments about well-being, governments may be able to define GNH in a way that suits their interests. Economics professor Deirdre McCloskey criticizes such measurements as unscientific.

5. **World Happiness Report:** The **World Happiness Report** (WHR) is a measure of happiness published by the United Nations Sustainable Development Solutions Network. The WHR is edited by John F. Helliwell, Richard Layard and Jeffrey Sachs.

   In July 2011, the UN General Assembly passed a resolution inviting member countries to measure the happiness of their people and to use this to help guide their public policies.

   On 2 April 2012, the first UN High Level Meeting called 'Happiness and Well-Being: Defining a New Economic Paradigm', chaired by Prime Minister Jigme Thinley of Bhutan decided to launch the WHR.

   Each variable measured reveals a populated-weighted average score on a scale running from 0 to 10 that is tracked over time and compared against other countries. These variables currently include: real GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity, and perceptions of corruption.

   It is to be noted that Bhutan is the first and so far only country to have officially adopted GNH instead of GDP as their main development indicator.

   The Sustainable Development Solutions Network (SDSN) was commissioned by UN Secretary-General Ban Ki-moon in 2012 to mobilize scientific and technical expertise from academia, civil society, and the private sector to support practical problem solving for sustainable development at local, national, and global scales.

6. **Human Poverty Index (HPI)/Multidimensional Poverty Index:** The Human Poverty Index (HPI) was an indication of the standard of living in a country, developed by the United Nations (UN) to complement the HDI and was first reported as part of the Human Development Report in 1997. It was considered to better reflect the extent of deprivation in developed countries compared to the HDI. In 2010, it was supplanted by the UN's Multidimensional Poverty Index.

   The HPI concentrates on the deprivation in the three essential elements of human life already reflected in the HDI: longevity, knowledge and a decent standard of living. The HPI is derived separately for developing countries (HPI-1) and a group of select high-income OECD countries (HPI-2) to better reflect socio-economic differences and also the widely different measures of deprivation in the two groups.

   HPI-1

   The Human Development Reports website summarizes this as 'A composite index measuring deprivations in the three basic dimensions captured in the HDI – a long and healthy life, knowledge and a decent standard of living'.

   HPI-2

   The Human Development Reports website summarizes this as 'A composite index measuring deprivations in the four basic dimensions captured in the HDI – a long and healthy life, knowledge and a decent standard of living – and also capturing social exclusion'.

   The MPI can help the effective allocation of resources by making possible the targeting of those with the greatest intensity of poverty. It can help address MDGs strategically and monitor impacts of policy intervention. The MPI can be adapted to the national level using indicators and weights that make sense for the region or the country, it can also be adopted for national poverty eradication programs, and it can be used to study changes over time.

7. **Inequality-adjusted Human Development Index (IHDI):** According to the 2010 HDR Report, 'the IHDI is the actual level of human development (accounting for inequality)' and the unadjusted calculations for the HDI 'can be viewed as an index of potential human development (or the maximum IHDI that could be achieved if there were no inequality)'.

   The IHDI combines a country's average achievements in health, education and income with how those achievements are distributed among country's population by 'discounting' each dimension's average value according to its level of inequality. Thus, the IHDI is distribution-sensitive average level of HD. Two countries with different distributions of achievements can have the same average HDI value. Under perfect equality, the IHDI is equal to the HDI, but falls below the HDI when inequality rises.

The difference between the IHDI and HDI is the human development cost of inequality, also termed – the loss to human development due to inequality. The IHDI allows a direct link to inequalities in dimensions; it can inform policies towards inequality reduction and lead to better understanding of inequalities across population and their contribution to the overall human development cost. A recent measure of inequality in the HDI, the Coefficient of human inequality, is calculated as an average inequality across three dimensions.

While the HDI can be viewed as an index of average achievements in human development dimensions, the IHDI measures the level of human development when the distribution of achievements across people in the society is accounted for. The IHDI will be equal to the HDI when there is no inequality, but falls below the HDI as inequality rises. The difference between the HDI and IHDI, expressed as a percentage of the HDI, indicates the loss in human development due to inequality.

8. **Gender Development Index (GDI) – UNDP:** The Gender Development Index (GDI) is an index designed to measure the gender equality.

   GDI together with the Gender Empowerment Measure (GEM) was introduced in 1995 in the Human Development Report written by the United Nations Development Program. The aim of these measurements was to add a gender-sensitive dimension to the HDI.

   The GDI measures differences between male and female achievements in three basic dimensions of human development: health, measured by female and male life expectancy at birth; education, measured by female and male expected years of schooling for children and female and male mean years of schooling for adults ages 25 and older and equitable command over economic resources, measured by female- and male-estimated earned income.

   To calculate the GDI, the HDI is calculated separately for females and for males using the same methodology as in the HDI. The same goalposts as in the HDI are used for transforming the indicators into a scale between zero and one. The only exception is life expectancy at birth where calculations are adjusted for the average of 5 years biological advantage that women have over men.

   The GDI provides insights into gender disparities in achievements in three basic capabilities: health, education and command over economic resources. It helps further understanding of the real gender gap in human development achievements and is useful for navigating policies to close the gap.

9. **Gender Inequality Index (GII):** The **Gender Inequality Index (GII)** is an index for measurement of gender disparity that was introduced in the 2010 Human Development Report 20th anniversary edition by the UNDP.

Gender inequality remains a major barrier to human development. Girls and women have made major strides since 1990, but they have not yet gained gender equity. The disadvantages facing women and girls are a major source of inequality. All too often, women and girls are discriminated against in health, education, political representation, labour market, etc. – with negative repercussions for development of their capabilities and their freedom of choice.

The GII is an inequality index. It measures gender inequalities in three important aspects of human development – reproductive health, measured by maternal mortality ratio and adolescent birth rates; empowerment, measured by proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education and economic status, expressed as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older. The GII is built on the same framework as the IHDI – to better expose differences in the distribution of achievements between women and men. It measures the human development costs of gender inequality, thus the higher the GII value the more disparities between females and males and the more loss to human development.

There is no country with perfect gender equality – hence all countries suffer some loss in achievements in key aspects of human development when gender inequality is taken into account. The GII is similar in method to the IHDI. It can be interpreted as a combined loss to achievements in reproductive health, empowerment and labour market participation due to gender inequalities. Since the GII includes different dimensions than the HDI, it cannot be interpreted as a loss in HDI itself. The GII ranges between 0 and 1, and higher GII values indicate higher levels of inequalities.

10. **Good Country Index:** For the first time in history, this is an index that measures what each country contributes to the common good of humanity and to the planet.

The idea of the Good Country Index (GCI) is pretty simple: to measure what each country on earth contributes to the common good of humanity, and what it takes away, relative to its size.

Using a wide range of data from the U.N. and other international organizations, GCI gives each country a balance sheet to show at a glance whether it's a net creditor to mankind, a burden on the planet or something in between.

GCI do not make any moral judgments about countries. What it means by a Good Country is something much simpler: it's a country that contributes to the greater good of humanity. A country that serves the interests of its own people, but without harming – and preferably by advancing – the interests of people in other countries too.

The GCI is one of a series of projects that Simon Anholt and his friends are launching to start a global debate about what countries are really for. Do they exist purely to serve the interests of their own politicians, businesses and citizens, or are they actively working for all of humanity and the whole planet?

SUSTAINABLE DEVELOPMENT

❖ Definition

More than one hundred definitions of sustainable development exist, but the most widely used one is from the World Commission on Environment and Development (WCED), presented in 1987. It states that sustainable development is 'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. Sustainable development promotes the idea that social, environmental and economic progress are all attainable within the limits of our earth's natural resources.

It contains two key concepts:

1. the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given and
2. the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

The sustainable development requires that there is need to see the world as a system – a system that connects space and a system that connects time. When one thinks of the world as a system over space, one grows to understand that air pollution from North America affects air quality in Asia, and that pesticides sprayed in Argentina could harm fish stocks off the coast of Australia. On the flip side, clean air practices on one continent will positively impact air quality across the ocean.

The earth's connection to time is demonstrated in how we, today, are either benefitting or suffering from the choices of our grandparents and other ancestors. Their decisions about how to farm their land, for example, continue to impact the agricultural practices of today. Looking to the future, the economic choices we make and policies we endorse today will be the ones affecting our children and grandchildren as adults.

The concept of sustainable development is rooted in this sort of systems thinking. It helps us understand ourselves and our world. The problems we face are complex and serious—and we can't address them in the same way we created them. However, we *can* address them. Sustainable development approaches everything in the world as being connected through space, time and quality of life.

Sustainable development constantly seeks to achieve social and economic progress in ways that will not exhaust the earth's finite natural resources. The needs of the world today are real and immediate, yet it's necessary to develop ways to meet these needs that do not disregard the future. The capacity of our ecosystem is not limitless, meaning that future generations may not be able to meet their needs the way we are able to now.

❖ Three Pillars of Sustainable Development

At the core of sustainable development is the need to consider 'three pillars' together: **society, the economy and the environment**.

No matter the context, the basic idea remains the same – people, habitats and economic systems are interrelated. We may be able to ignore that interdependence for a few years or decades, but history has shown that before long we are reminded of it by some type of alarm or crisis.

The fact of the matter is that we depend on ecosystems and the services they provide in order to do what we do: run businesses, build communities, feed our populations and much more. Whether we consider the more obvious, immediately vital examples – the need for soil that can grow food or for clean water to drink – or the less obvious but equally significant things like oxygen production during photosynthesis or waste processing by bacterial decomposers, we cannot avoid the conclusion that we depend on the environment for our existence. If we damage or destroy the capacity of the environment to provide these services, we may face consequences for which we are completely unprepared.

In the same way, the long-term stability and success of societies rely on a healthy and productive population. A society (or communities within a larger society) that faces unrest, poverty and disease will not develop in the long term: social well-being and economic well-being feed off each other, and the whole game depends on a healthy biosphere in which to exist.

Understanding the complex connections and interdependence of the three pillars requires some effort, and the effort has to be constant. Whether we're talking about the duration of political cycles or the length of time the media focuses on a particular issue, the question of our collective attention span is an important one for sustainable development.

❖ Some of the Common Sustainable Development Practices

1. **Solar and wind energy:** Energy from these resources is limitless, meaning we have the ability to eliminate dependence on non-renewable power sources by harnessing power from renewable resources.
2. **Sustainable construction:** Homes, offices and other structures that incorporate recycled and renewable resources will be more energy efficient and stand the test of time.
3. **Crop rotation:** Many farmers and gardeners are using this method as a chemical free way to reduce diseases in the soil and increase growth potential of their crops.
4. **Water fixtures:** Water conservation is critical to sustainable development, and more and more products are available that use less water in the home, such as showers, toilets, dishwashers and laundry systems.

❖ Twelfth 5-Year Plan on Sustainable Development

The Twelfth Plan strategy suggests that there are significant 'co-benefits' for climate action with inclusive and sustainable growth. India, as a large responsible player with very low income, has also to ensure that these efforts are matched by equitable and fair burden sharing among countries, taking into account the historical responsibilities for emissions.

India's approach to a lower-carbon growth strategy explicitly recognizes that policies have to be inclusive and differentiated across sectors according to national priorities, so as to lower the transaction costs of implementing the policy, and conform with a nationally fair burden-sharing mechanism.

An Expert Group on Low Carbon Strategies appointed by the Planning Commission has outlined the lower carbon strategies for major potential carbon mitigation sectors:

1. **Power:** On the supply side, adopt super-critical technologies in coal-based thermal power plants; use gas in combined heat and power systems; invest in renewable technologies and develop hydropower in a sustainable manner. On the demand side, accelerate adoption of super-efficient electrical appliances through market and regulatory mechanisms; enhance efficiency of agricultural pump sets and industrial equipment with better technology; modernize transmission and distribution to bring technical and commercial losses down to world average levels; universalize access to electricity and accelerate power-sector reforms.
2. **Transport:** Increase the share of rail in overall freight transport; improve the efficiency of rail freight transport; make it price competitive by bringing down the levels of cross-subsidization between freight and passenger transport; complete dedicated rail corridor; improve share and efficiency of public transport system and improve fuel efficiency of vehicles through both market-based and regulatory mechanisms.
3. **Industry:** Greenfield plants in the iron and steel and cement sectors adopt best available technology; existing plants, particularly small and medium ones, modernize and adopt green technology at an accelerated pace, with transparent financing mechanisms.
4. **Buildings:** Evolve and institution-alize green building codes at all levels of government.
5. **Forestry:** 'Green India Mission' to regenerate at least 4 million hectares of degraded forest; increase density of forest cover on 2 million ha of moderately dense forest; overall increase the density of forest and tree cover on 10 million hectares of forest, waste and community lands.

❖ United Nations Sustainable Development Goals (SDGs) – Post-2015 Agenda

Seventeen Sustainable Development Goals (SDGs) are:

1. **End poverty in all its forms everywhere:** End extreme poverty in all forms by 2030. Yes, it's an ambitious goal – but we believe it can be done. In 2000, the world committed to cutting the number of people living in extreme poverty by half in 15 years and we met this goal. However, more than 800 million people around the world still live on less than $1.25 a day – that's about the equivalent of the entire population of Europe living in extreme poverty.
2. **End hunger achieve food security and improved nutrition, and promote sustainable agriculture:** In the past 20 years, hunger has dropped by almost half. Many countries that used to suffer from famine and hunger can now meet the nutritional needs