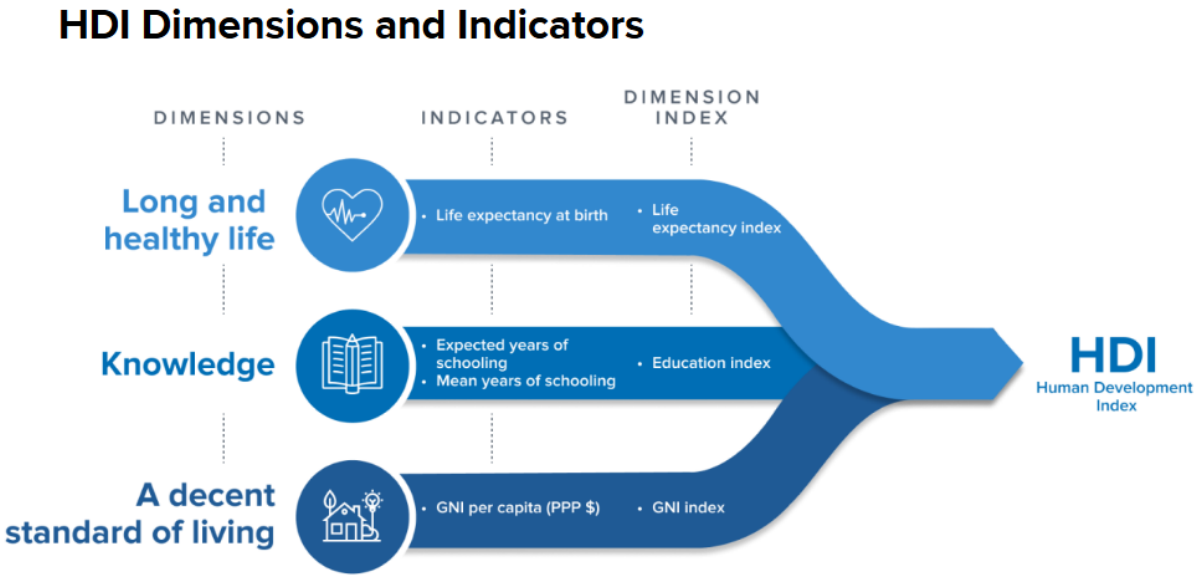
Inadequacy of Human Development Index

Why in News?

Recently human development index was released by United Nations Development Program(UNDP).

What is Human Development Index (HDI)?

- **HDI** - The Human Development Index is a summary measure of average achievement in key dimensions of human development
  - Long and healthy life
  - Being knowledgeable
  - Having a decent standard of living.
- **HDR report** – The index was released by the United Nations Development Program as part of its annual Human Development Report.
- **Objective** - It was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone.



- **Sub-Indices** - HDI figure is an aggregate of the Life Expectancy Index (LEI), the Education Index (EI) and the Income Index (II).
- Each of the indices are classified into Low, Medium, High and Very High grades.
- **Categorization of development** – The index subdivides performances of countries into four category tiers - very high, high, medium and low human development.

Cutoff Score	Performance Tier
Below 0.600	Low Human Development
0.600 to 0.699	Medium Human Development
0.700 to 0.799	High Human Development
0.800 to 1.000	Very High Human Development

- **India's score** - India currently has a reported HDI of 0.644 in 2023-24 report with medium human development category.

How are the sub-indices measured ?

- **Life Expectancy Index** - It is a scaled expression of life expectancy at birth of a country, as a fraction of the age range 20 to 85 years.
- A life expectancy of 20 years or below means the index is 0.000 and 85 years or more means 1.000.

Life Expectancy Index (LEI) = (Life Expectancy - 20) / (85 - 20)

Life Expectancy	LEI Performance Tier
Below 59 years	Low Human Development
59 to 65.4 years	Medium Human Development
65.5 to 71.9 years	High Human Development
72 years or more	Very High Human Development

- **Education Index** - It is an unweighted mean of two parameters - mean years of schooling, and expected years of schooling.
  - **Mean of years of schooling** – It is an aggregate measure of the average years of education received by a country's adult population of aged 25 years and above.
  - It is expressed as a scaled index that saturates at 15 years of education.

Mean Years of Schooling Index (MYSI) = (minimum(15,MYS) / 15)

  - Thus a country with 0 years of average education for its adult population scores 0.000 and it scores 1.000 if it achieves 15 or more years of schooling for its adult population.

Mean Years of Schooling	Performance Tier
Less than 9 years	Low Human Development
9 to 10.4 years	Medium Human Development
10.5 to 11.9 years	High Human Development
12 years or more	Very High Human Development

- **Expected years of schooling** - It is measured from current enrollment data in primary, secondary and tertiary education tiers relative to the total population of each of those age groups.
- It is expressed as a scaled index that saturates at 18 years of education.

$$\textit{Expected Years of Schooling Index (EYSI)} = \textit{minimum}(18, MYS) / 18$$

Expected Years of Schooling	Performance Tier
Less than 10.8 years	Low Human Development
10.8 to 12.5 years	Medium Human Development
12.6 to 14.3 years	High Human Development
14.4 years or more	Very High Human Development

- **Education Index**- It is the unweighted mean of MYSI and EYSI.

$$\textit{Education Index (EI)} = (MYSI + EYSI) / 2$$

- **Income Index** - It quantifies the economic prosperity of an entity as a logarithmic scale expression of gross national income in purchasing power terms, per capita (GNI PPP per capita).
- It ranges between the range of $100 and $75000 international dollars.

$$\textit{Income Index (II)} = (\log(\textit{minimum}(75000, GNIPPPperCapita)) - \log(100)) / (\log(75000) - \log(100))$$

GNI (PPP) per capita	Performance Tier
$5308 or less	Low Human Development
$5309 to $10292	Medium Human Development
$10293 to $19954	High Human Development
$19955 or more	Very High Human Development

- **Final GDI –** The actual human development index is the geometric mean of the LEI, EI and II figures. Thus,

$$HDI = GeoMean\ (LEI,EI,II)$$

What are the inadequacies of HDI?

- **Over simplification** - The HDI simplifies complex human development inequality, poverty, human security, and empowerment aspects into a single composite index.
- **Unrepresentative data** - The principal failure of the UNDP HDI score in the context of India is unrepresentative data.
- **Inconsistent data** – The data used by UNDP for measuring life expectancy is inconsistent with the health ministry data.

India's Life Expectancy	
As per UNDP	National Data
67.7	72.5

- **Backward looking of MYSI** - Mean years of schooling measures the historical educational attainment over at least half a century ago.

Expected year of schooling	
As per UNDP	National Data
12.6	13.75

- **Undermeasurement of GNI** – UNDP number measured the Covid 19 period value and did not took account of the growth since the covid period.

National Income	
As per UNDP	National Data
$ 6951	$12000

- **Neglects Inequality** - Two countries with the same HDI score can have vastly different levels of inequality.

- **Exclusion of Other Factors** - The HDI does not consider other important factors such as environmental sustainability, political freedom, and cultural diversity.

What lies ahead?

- To address these issues, alternative indices such as the Inequality-Adjusted HDI and the Augmented HDI can be used.

Reference

Swarajya | Hacking the Human Development Index

For Mains practice question, Click here

