# Human Development in Sync with Planetary Pressures

This editorial is based on **"Treating The Planet Well Can Aid Progress"** which was published in The Hindu on 12/01/2022. It talks about including 'Planetary Pressures' as a criteria of ranking countries in the UNDP Human Development Index (HDI).

**For Prelims:** Human Development Index (HDI), United Nations Development Programme (UNDP), Planetary Pressures-Adjusted Human Development Index (PHDI), Multidimensional Poverty Index, Chipko movement and Silent Valley movement

**For Mains:** Need of addressing environmental concerns while considering human development.

Human-induced environmental change can irrevocably destabilise the long-term dynamics of the earth system, thereby disrupting the life-supporting system of the planet. Therefore, the environment is now being considered as an essential component to be factored in to measure human development.

The 2020 Human Development Report of the **United Nations Development Programme (UNDP)** proposed a **Planetary pressures-adjusted Human Development Index (PHDI).**

However, the concept of the planetary boundary was introduced by a group of scientists across the world, led by **J. Rockström of the Stockholm Resilience Centre in 2009.**

## Planetary pressure-adjusted HDI

- **About:** The PHDI adjusts the standard HDI by **a country's level of carbon dioxide emissions and material footprint**, each on a **per capita basis.**
  - The purpose of the PHDI is to communicate to the larger society the risk involved in continuing with existing practices in the global resource use and environmental management, and the **retarding effect that environmental stress can perpetuate on development.**
  - It succinctly **brings out the nature of planetary pressure generated by the developed countries** and indirectly indicates their responsibility in combating the situation.
- **Decline in Global Average HDI:** When planetary pressure is adjusted, the world average of HDI **in 2019 came down from 0.737 to 0.683.**
  - This adjustment has been worked out by factoring per capita carbon dioxide ($CO_2$) emission (production), and per capita material footprint.
  - The average per capita global **$CO_2$ emission (production) is 4.6 tonnes and the per capita material footprint is 12.3 tonnes.**
- **Individual Impact on Countries:** The global ranking of several countries was altered, in a positive and negative sense, with adjustment of planetary pressure.
  - **Switzerland is the only country** in the group of High HD countries whose **world rank**

**has not changed** with adjustment of planetary pressure.
    - Although the HDI value of 0.955 came down to 0.825 after the necessary adjustment.
- Among 66 Very High HD countries, 30 countries recorded a fall in rank values ranging from **minus 1 for Germany and Montenegro** to **minus 131 for Luxembourg.**
    - Norway, which topped the HDI, fell 15 places, the **US (17) and Canada (16) fell 45 and 40 places** respectively and **China (85) dropped 16 places.**
- In the case of **India,** the **PHDI is 0.626 against an HDI of 0.645** with an average per capita $CO_2$ emission (production) and material footprints of 2.0 tonnes and 4.6 tonnes, respectively.
    - India **gained in global rankings by eight points** (131$^{st}$ rank under HDI and **123$^{rd}$ rank under PHDI**), and its per capita carbon emission (production) and material footprint are well below the global average.

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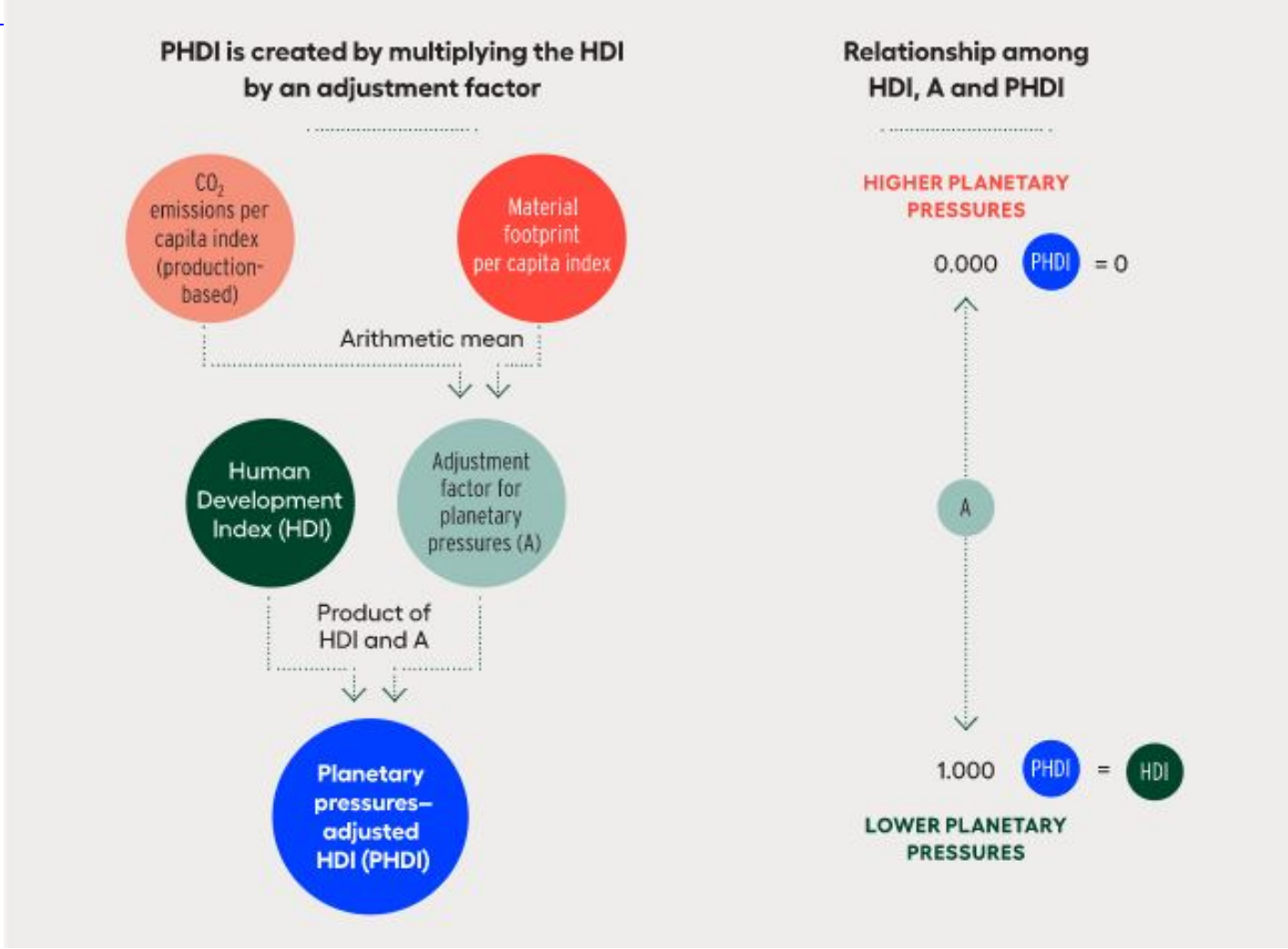


## Challenges for India

- **Lack of Environmental Concern Prevails:** India's **natural resource use is far from efficient**, environmental problems are growing, and the onslaught on nature goes on unabated with **little concern about its fallout** as evident from a **number of ongoing and proposed projects.**
- **High Multidimensional Poverty Rates:** India has **27.9% people under the** Multidimensional Poverty Index ranging from 1.10% in Kerala to 52.50% in Bihar, and a sizable section of them **directly depend on natural resources for their sustenance.**
    - It is quite **difficult to play a proactive role** in addressing the environmental concerns when India is **already underperforming in more primary indicators of human**

**development.**

- **Unattended Issues:** The **twin challenges of poverty alleviation and environmental safeguarding** India articulated in the 1972 Stockholm conference on the human environment, still remain unattended.
    - Fifty years have passed but there is little change in the scenario. In fact, the situation is much more complex now.
- **Standalone Actions are Insufficient:** The **Chipko movement in Uttarakhand** and the **Silent Valley movement in Kerala** are among the most well-known environmental protection movements in India that inspired several other such movements during the last five decades.
    - However, **standalone environmental safeguarding actions** are **not sufficient to navigate the Anthropocene** (most recent period in earth's history when human activity started to have a significant impact on the planet's climate and ecosystems).

## Way Forward

- **Intertwining Environmental and Social Development**: It is now well established that there are **interdependencies of earth system processes** including social processes, and their relationships are non-linear and dialectic.
    - Therefore, it is necessary to **nest human development including social and economic systems into the ecosystem,** and build a biosphere on a systematic approach to **nature-based solutions that put people at the core.**
- **Local Level Involvement:** It is now essential to consider people and the planet as being a part of an interconnected social-ecological system.
    - Social and environmental problems cannot be addressed in isolation anymore; an integrated perspective is necessary.
    - This can be conceived and addressed at the local level, for which India has constitutional provisions in the form of the **73$^{rd}$ and 74$^{th}$ Amendments.**
- **A Collaborative Efforts of Government, Institutions and Technology:** The remarkable advances in earth system science and sustainability research along with **enabling technology of remote sensing** and **Geographic Information System (GIS)** have helped to document and explain the impact of human activities at the ground level and stimulate new interdisciplinary work encompassing the natural and social sciences.
    - They also provide insights into how to mitigate these impacts and improve life.
    - What is required is a **reorientation of the planning process,** adoption of a **decentralised approach,** a plan for **proper institutional arrangements**, and steps to **enable political decisions** to efficiently address the environmental stress.
- **Recommendations by the HDR Report:** The 2020 HDI report outlines three mechanisms for collective change:
    - **Social Norms and Values:** As the world seeks to expand agency and empower people through human development, it must also establish new norms that give **greater weight to planetary balance** and sustainability.
    - **Incentives and Regulation:** Incentives and regulations can be used to promote or deter action, helping to **bridge the gap between behaviours and values.**
    - **Nature-based Solutions:** These can create a virtuous cycle between human development and planetary health by generating and supporting **actions that protect, sustainably manage and restore ecosystems.**

***Drishti Mains Question***

"Advancing human development is impossible if we continue to create planetary pressures for others". In the context of Planetary pressures-adjusted Human Development Index (PHDI), analyse the statement.