India's Human Development Index: An Overview and Comparison

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ABSTRACT

India's HDI score has steadily increased, indicating advancements in the country's human development. States do, however, differ significantly from one another, painting a complicated picture. This study examines the trajectory of India's HDI, examining the elements that fueled its growth and the obstacles preventing further advancement. Furthermore, the efficacy of governmental initiatives targeted at enhancing HDI is assessed. Lastly, the study examines data analysis for each of the three HDI indicators from the 1960s to the present, as well as state-by-state HDI analysis using the most recent data (2023). The theoretical study of the India HDI and its three primary indicators are presented in the first section of the research. The state-by-state HDI of India is analyzed in the second section of the study paper, along with the factors that contribute to each state's high or low HDI. The final section of the report compares the HDIs of Zambia, Nepal, Switzerland, and the United States to India. The last part of the research paper also mentions about the impact of COVID-19 on HDI of India. Through an analysis of these facets, the present study endeavors to enhance the comprehension of Human Development Index (HDI) in India and pinpoint approaches for accomplishing just and enduring human development across the country.

Key words: Education, Human development, Life expectancy, Per capita income, Health, Lifestyle, Expected years of schooling.

INTRODUCTION

The Human Development Index (HDI) monitors three critical aspects of human development: availability of education, a reasonable standard of living, and a healthy life. It is designed as a single index measure. The Human Development Index (HDI) is a frequently used metric that assesses and ranks countries based on their citizens' well-being and development. The health component assesses a country's population's longevity and standard of life by calculating life expectancy at birth. In essence, it investigates how long people can expect to live in perfect health.

The education component assesses a country's level of knowledge and capacity by considering two key factors that is, the mean number of years of schooling for adults and the expected number of years for children entering school. Essentially, it symbolizes the opportunities to acquire and accumulate knowledge.

GNI per capita (gross national income) adjusted for purchasing power parity (PPP) is the measure used to assess the level of living of a nation's citizens. Understanding a culture's material richness and satisfaction of basic necessities is possible thanks to this component.

Importance of HDI:

- Comparative Analysis: The HDI facilitates cross-country comparisons, assisting policymakers and researchers in identifying best practices and areas for improvement.
- Poverty Assessment: It provides a holistic assessment of poverty, expanding beyond money to include health, education, and living conditions, thereby helping poverty reduction activities.
- Growth in Human Development: The Human Development Index (HDI) is a useful instrument for monitoring development objectives since it shows a country's advancement or regression in this area over time.
- Global Ranking: Nations compete to raise their HDI rankings, which promotes healthy rivalry and pushes investments in wellbeing and human capital.
- Focus on Human Well-Being: It replaces the narrow emphasis on economic growth with a more comprehensive strategy that places people's welfare as the ultimate goal of development.
- Data-Driven Decision Making: In order to guide development strategies, the Human Development Index depends on reliable data, which encourages the gathering and examination of precise information.

Limitation of HDI:

- Limited Coverage: It ignores crucial elements that are essential to progress, such as political liberties, cultural considerations, and environmental sustainability.
- Data Quality and Availability: The HDI calculations depend on the availability of data, which varies greatly between nations and may not always fairly reflect the actual level of development.
- Updates Every Year: The Human Development Index's values are updated every year; however, they might not reflect significant shifts in human development or longer-term patterns.
- Lack of Inclusivity: By concentrating on national averages and ignoring differences across areas or demographic groupings, it fails to take into account inequities within nations.

LITERATURE REVIEW

- 1) Chowdhury Human Development Index
- In order to represent the multifaceted aspect of human development, the UNDP has recently suggested the human development index (HDI), which will comprise numerous elements.
- There have been previous attempts to complement or replace per capita GNP with HDI. In actuality, the Physical Quality of Life is an older attempt to combine three human indicators into a single index.
- Indicators of both the quantity and quality of life are included in the HDI.
- Life expectancy, literacy, and the log of real per capita GDP are the three measures used to rank the countries in the framework used to create the HDI.
- 2) Sangita Kamdar and Asoke Basak Human Development Index
- Three fundamental choices for achieving human growth have been identified: gaining information; having access to resources necessary for an acceptable level of living; and leading a long and healthy life.
- The HDI is a linear indicator of poverty. A nation is therefore seen to have low human development if its accomplishments fall short of those of the highest achiever.
- The lowest performing nation's performance level will rise, which will lower the index for all other nations. When the top-performing nation raises its game, comparable things happen.
- The Maharashtra Human Development Index took other indicators of development like poverty, employment, dropout rate, nutrition and social factors.
- 3) Klugman, J., Rodríguez, F. & Choi, HJ. The HDI 2010: new controversies, old critiques
- This page explores the idea and major lessons discovered from the HDI, offers a thorough analysis of the main criticisms of the HDI both historically and currently, and explains the most recent adjustments made to the formula and indicators.
- Key global and regional insights are presented along with the advances to expand the measuring of deprivations and disparities in human development.
- The appeal of HDI can be ascribed to two factors: its underlying message that development is much more than economic progress, and its simplicity in characterizing development as an average of achievements in health, education, and income.
- 4) Ecological Indicators Towards a more 'Sustainable' Human Development Index: Integrating the environment and freedom
- This work aims to provide the Multidimensional Synthesis of Indicators (MSI)-based Sustainable Human Development Index (SHDI), a novel class of indexes that may be used for tracking Sustainable Human Development (SHD).
- There are still two primary concerns that academics are interested in exploring, even if the HDI has changed over time due to adjustments made to the indicators and computation mechanics. A technical problem with the new HDI is the first issue. The HDI's "original sin" of ignoring problems related to social and environmental sustainability is the subject of the second problem.
- We may carry out analyses that concentrate on particular dimensions thanks to the MSI aggregation method. One way to draw attention to environmental issues is to penalize nations who do poorly in this particular area.
- The capacity of the HDI to solve the SHD is significantly increased with the addition of the two environmental and freedom sustainability components.
- 5) Ecological Indicators The human development index and sustainability a constructive proposal
- According to the proposal in this paper, if a nation's manufactured and natural capital stock depreciates more than its
 investment, then that nation's human growth may not be considered sustainable.
- An examination of 155 countries concludes that 42 countries' human development levels are potentially unsustainable.

Each year, the Human Development Report (HDR) includes the release of the Human Development Index (HDI). This
is UNDP's one major chance to raise public awareness of its purpose of "putting people back at the center of
development."

RESEARCH GAP

The United Nations Development Program's publication of the first Human Development Report in the 1990s helped popularize the idea of human development. Due to this, the traditional paradigm of using economic growth as a gauge of development has been replaced with more focused metrics of human development. Thus, the researcher aims to examine what human development is, what its indications are, and what its concept is.

The Human Development Index (HDI) evaluates a country's social and economic progress. A country's social and economic characteristics are determined by its population's health, education level, and standard of life.

India's HDI score is 0.644 in 2022, which put the country in the medium human development category. India's was ranked 134 on the Human Development Index of UNDP in 2022. Despite being a developing country, India's ranking of 134 out of 193 countries implies that it has inadequate human development. As a result, the researcher intends to investigate the state of human development in India and the specific causes for India's low ranking.

METHODOLOGY

Research objective:

- 1) In order to explain how the idea of human development came into being
- 2) To provide a detailed description of the Human Development Indicators, such as livelihood, health, and education
- 3) To compare India's Human Development Index with those of a few other countries, such as Zambia, Nepal, the United States, and Switzerland
- 4) Examine the various Indian states' Human Development Indexes.
- 5) The effect of COVID-19 on India's Human Development Index

Data Collection Method: The research project's data is gathered from secondary sources, which include research papers from online journals like Springer, numerous online news articles from The Hindu, The Times of India, and Business Standard, research articles from Economic and Political Weekly, and statistics on human development provided by the United Nations Development Programme (UNDP).

DATA ANALYSIS EDUCATION

One of the key elements influencing the human development index is education. Due to its direct correlation with national economic growth, social progress, and individual well-being, education is a key component of this index. Due to its direct correlation with national economic growth, social progress, and individual well-being, education is a key component of this index. Indicators and metrics are used to measure many aspects of education systems in order to assess the quality of education. Depending on each nation's aims, policies, and educational institutions, these measures and indicators differ. One of the key indicators and metric used to measure the quality of education is the literacy rate.

A measure of literacy is the proportion of the population in each age group that can read, comprehend and write in any language. Adults who are 15 years of age or older, youth who are between the ages of 15 and 24, and senior citizens who are 65 years of age or older, have the highest literacy rates. The usual way to measure it is to take short, simple comments about everyday life and understand them. Generally speaking, literacy includes the capacity to compute, and simple calculation exams can be employed as measurements.

Till 1990 education was measured by literacy rates. But in from 1990 onwards mean years of schooling for adults aged 25 years or more along with the expected years of schooling for children of school entering age.

According to the world bank data, expected years of schooling is the number of years a child of school entrance age is expected to spend at school, or university, including years spent on repetition. It is the sum of the age-specific enrolment ratios for primary, secondary, post-secondary non-tertiary and tertiary education.

According to UNESCO, Average number of completed years of education of a country's population aged 25 years and older, excluding years spent repeating individual grades.

Factors Influencing Literacy Rates:

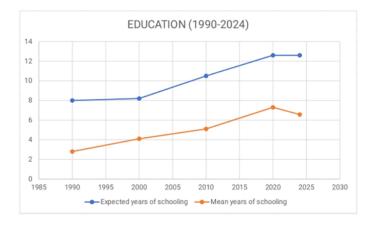
- Socio-economic status: States with higher per capita income and better economic status tend to invest more in education, resulting in higher literacy rates. In contrast, economically disadvantaged states often struggle to allocate sufficient funds to education.
- Gender Parity: Gender disparity in literacy remains a serious issue in many states. While the gender gap in education is narrowing, the female literacy rate, especially in rural areas, continues to lag behind the male literacy rate.

- Education Infrastructure: States with well-established education infrastructure, including schools, colleges, and vocational training centers, have higher literacy rates. On the other hand, states with limited access to education facilities face challenges in raising literacy levels.
- Cultural and Social Norms: Education and literacy rates can be influenced by social attitudes and traditional beliefs. Literacy rates may be impacted in places where cultural norms prevent some people from receiving an education.

Government Initiatives and Educational Reforms:

- Sarva Shiksha Abhiyan (SSA): Established in 2001, the SSA sought to give all children between the ages of 6 and 14 free and compulsory education. Its main objectives were to construct schools, prepare teachers, and advance inclusive education.
- The Right to Education (RTE) Act: Passed in 2009 and gave children between the ages of six and fourteen the fundamental right to an education. It reinforced attempts to raise the literacy rate by making free education mandatory for everybody.
- Beti Bachao, Beti Padhao (BBBP): Launched in 2015, the campaign aimed to promote girls' education and address
 the issue of gender disparity in literacy.
- Rashtriya Madhyamik Shiksha Abhiyan (RMSA): Focusing on secondary education, RMSA aims to increase the enrollment rate in schools, especially in rural and remote areas.
- National Literacy Mission (NLM): The program targeted illiteracy among adults, especially those from disadvantaged communities, through adult education and skill development initiatives.

Year	Expected years of schooling	Mean years of schooling
1990	8	2.8
2000	8.2	4.1
2010	10.5	5.1
2020	12.6	7.3
2024	12.6	6.57



Analysis - The aforementioned data indicates that since 1990, when they were introduced, the expected and mean number of years of education have been rising. The government's emphasis on education, demonstrated by higher primary and secondary school enrolment rates, and greater budgetary expenditures for education, which resulted in improvements to infrastructure, teacher preparation programs, and instructional materials, could be the causes of this growth. Improvements in socioeconomic conditions, such as increased income and a decline in child labor, may also occur. Additionally, there were advancements in the accessibility of education, such as the building of additional school facilities and a stronger emphasis on female education.

HEALTH

One of the most important factors used for determining the health of a country's individuals is its life expectancy. Life expectancy is an estimate of the of the average number of additional years that a person of a given age can expect to live. In simple words, life expectancy refers to the number of years a person can expect to live. It is an important way of assessing the health of a population and is used to inform health policy and initiatives that impact everyday life. India's life expectancy (for a child born in 2021) is 69 years and 4 months, which is less than the world's average lifespan of 72.81 years.

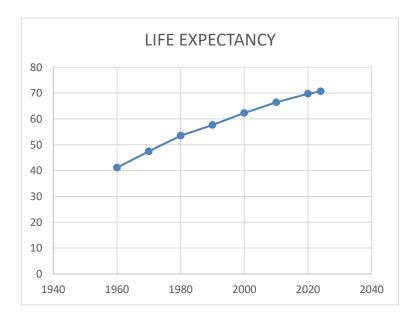
Reasons behind India's low life expectancy:

- High disease burden: The burden of infectious diseases, including respiratory infections, malaria, diarrheal illness, and tuberculosis, present serious issues for India. High death rates are a result of these diseases, especially for newborns, kids and vulnerable groups.
- Poor access to healthcare: Access to high quality healthcare remains a challenge for many Indians, even with attempts
 to upgrade healthcare services and infrastructure. Adequate healthcare facilities, physicians, drugs and diagnostic
 equipment are sometimes lacking in rural locations. For many people, accessibility to healthcare services and pricing
 can also be major obstacle.
- Malnutrition and Poor Nutrition: Malnutrition, including undernutrition, micronutrient deficiencies, remain a
 widespread problem in India, particularly among children and women. This contributes to higher rates of morbidity
 and mortality, stunting growth and development, and increasing susceptibility to infectious diseases.
- Limited sanitation and clean water access: Cholera, typhoid, and diarrheal illness are among the waterborne illness that are spread by inadequate access of clean water and poor sanitation. Unsanitary conditions, open defecation and trained water sources contribute to avoidable diseases and increased death rates.
- Socioeconomic disparities: Low life expectancy and poor health outcomes are caused by socioeconomic issues such
 unemployment, income disparity, inadequate housing, and a lack of education. Vulnerable groups, such as
 underprivileged neighbourhoods, tribal communities, and slum dwellers, frequently suffer increased health risks and
 obstacles to receiving treatment.

Initiatives taken by the Government of India to increase life expectancy at birth:

- National Health Mission (NHM): The NHM was established in 2013 with the goal of giving everyone access to high-quality medical care, with a focus on underprivileged and rural populations that are particularly at risk. It includes a range of initiatives centred around family planning, immunisation, non-communicable diseases, and maternal and child health.
- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY): Launched in 2018, PMJAY is a nationwide health
 insurance programme that covers more than 500 million low-income individuals and families. It seeks to lower
 financial barriers to healthcare services, enhance access to high-quality healthcare, and lower out-of-pocket healthcare
 costs.
- National Rural Health Mission (NRHM): NRHM was established in 2005 and later merged into NHM. Its main
 objectives are to provide basic healthcare services in rural regions, train healthcare personnel, and build the
 infrastructure for rural healthcare. It seeks to raise life expectancy in rural areas, lower infant mortality, and enhance
 maternal and child health.
- Expanded Immunisation Programme: To offer free vaccines against a range of avoidable diseases, such as polio, measles, tetanus, and hepatitis, the government has extended its immunisation programme. The goals of the Universal Immunisation Programme (UIP) are to lower morbidity and death from diseases that can be prevented by vaccination while also raising vaccination coverage.
- National Nutrition Mission (Poshan Abhiyan): This initiative was introduced in 2018 with the goal of reducing
 malnutrition and enhancing nutritional outcomes for kids, expectant mothers, and nursing moms. Its main objectives
 are to support nursing, increase nutritional awareness, improve dietary diversity, and provide nutritional supplements.
- Measures to Control Tobacco: In an effort to reduce tobacco usage, the government has imposed a number of
 regulations, such as pictorial health warnings on tobacco products, a ban on tobacco advertising, higher tobacco
 charges, and the promotion of programmes for quitting smoking. These programmes address a significant risk factor
 for non-communicable diseases with the goal of lowering the prevalence of tobacco-related illnesses and raising life
 expectancy.

YEAR	LIFE EXPECTANCY
1960	41.13
1970	47.41
1980	53.47
1990	57.66
2000	62.28
2010	66.43
2020	69.73
2024	70.62



Analysis – The graph above shows that India has made significant progress in increasing the life expectancy since the 1960s, with the average lifespan of its population steadily rising over the decades. However, challenges such as healthcare disparities, regional variations and the burden of non-communicable diseases remain, underscoring the need for continued efforts to improve health outcomes and ensure access to healthcare for all citizens.

INCOME

The per capita income is one of the indicators of HDI that affects the human development of the country. The average income received by each person in a nation over a given time frame is referred to as per capita income. It is computed by dividing the entire net national income (NNI) of the nation by the total population. Per capita income can be expressed in two different ways. Firstly, on the basis of Current Prices which shows the income for the year at the going rates which helps in comprehending transient variations in revenue. Secondly, on the basis of constant Prices (Base Year) which eliminates the impact of inflation by utilizing a predetermined base year.

India's per capita NNI in constant (2011–12) prices for 2022–2023 is Rs. 98,374, based on the Ministry of Statistics and Programme Implementation's most recent provisional estimates (May 2023) [Per Capita Income – PIB]. This is a 35.12% increase over the Rs. 72,805 that was earned in 2014–15.

Factors causing India's low Per Capita Income:

- Huge Population: With more than 1.3 billion citizens, India is the second most populated nation in the world. Even though the economy has grown significantly in the last few decades, the large population reduces per capita income. A larger population shares in the advantages of economic expansion, which lowers the average income per person.
- Income Inequality: Income inequality is a major issue in India, with a large disparity between rich and poor. A small minority of the population owns a considerable share of the country's wealth, while the majority of the population lives in poverty and has poor incomes. This inequality leads to a lower average per capita income.
- The informal economy: which includes small-scale and unregistered businesses, self-employment, and casual labour, accounts for a sizable component of India's GDP. These informal enterprises typically yield lower revenues and are not fully recorded in official economic data, resulting in an underestimating of per capita income.
- Agricultural Dominance: Agriculture is an important part of India's economy, employing a huge proportion of the
 people. However, agricultural production and incomes are lower than in other sectors. Many farmers confront obstacles
 such as fragmented land holdings, a lack of access to modern technologies and credit, and exposure to weather-related
 risks, all of which limit revenue development in the sector.
- Infrastructure Constraints: Inadequate power supplies, telecommunications, and transportation networks can all impede economic growth and productivity. Inadequate infrastructure, especially in rural and isolated places, raises transaction costs, lowers efficiency, and limits options for producing money.

Initiatives taken by the Government of India to increase life expectancy at birth:

Made in India: This 2014 programme intends to increase industrial production, foster manufacturing, and create jobs.
 The initiative's main goals are to make doing business easier, draw capital to the manufacturing sector, and encourage technological adoption and innovation to boost competitiveness and productivity.

- Digital India: The goal of the 2015-launched initiative is to make India a knowledge economy and society that is
 empowered by technology. The program's main objectives are to increase digital literacy, build up the digital
 infrastructure, and employ technology to support equitable economic growth and development that can raise income
 and productivity levels.
- Pradhan Mantri Jan Dhan Yojana Policy (PMJDY): All residents, especially those from underprivileged and marginalized groups, will have access to insurance, pensions, and banking services through PMJDY, which was introduced in 2014. This will help to promote financial inclusion. With the ability to save, invest, and obtain credit, people with formal financial services can lower their poverty and increase their income.
- The Goods and Services Tax (GST): GST is a significant indirect tax reform that was put into effect in 2017. Its goals include streamlining the tax code, decreasing tax evasion, and fostering ease of doing business. In order to improve productivity, competitiveness, and income levels, the Goods and Services Tax (GST) promotes a single national market, simplifies tax compliance, and removes cascading consequences.
- Investment in Agriculture: To encourage agricultural growth and rural development, the government has put in place a number of policies. These include raising irrigation investment levels, encouraging the use of new technologies, and establishing market connections. Enhancing farmer incomes and agricultural production can have a cascading effect on rural incomes and GDP growth in general.

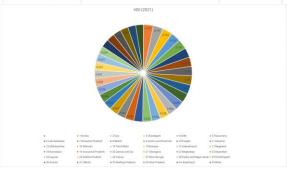
Years	Current prices	Constant prices
1960-61	384	16004
1970-71	806	18702
1980-81	1995	19925
1990-91	6126	27319
2000-01	18667	38515
2010-11	56971	62170
2020-21	126855	85110
2022-23	170620	96522



Analysis – The graph above shows that India in the beginning showed a static linear curve but since the year 1990-91 it has started showing an upward curve. A few key factors driving this growth are economic growth, favorable demographics, rise of service sector, government reforms. Income inequality remains a challenge in India. While the average income is rising, a significant portion of the population still lives below the poverty line. All these are inclusion of the LPG programme introduced in India by the government of India. A more open and competitive market resulted from LPG reforms. This enhanced exports, drew in foreign investment, and improved industry efficiency as a result of less government regulation. Average per capita income rises when the economy grows because more jobs are created and overall wealth is increased.

STATE WISE HDI ANALYSIS

Rank	State/Union Territory	HDI (2021)
	Warrala.	2.750
1	Kerala	0.752
2	Goa	0.751
3	Chandigarh	0.744
4	Delhi	0.730
5	Puducherry	0.726
6	Lakshadweep	0.715
7	Himachal Pradesh	0.703
8	Sikkim	0.702
9	Jammu and Kashmir	0.699
10	Punjab	0.694
11	Haryana	0.691
12	Maharashtra	0.688
13	Mizoram	
14	Tamil Nadu	0.686
15	Manipur	0.678
16	Uttarakhand	0.672
17	Nagaland	0.670
18	Karnataka	0.667
19	Arunachal Pradesh	0.665
20	Daman and Diu	0.661
21	Telangana	0.647
22	Meghalaya	0.643
23	Rajasthan	0.638
24	Gujarat	0.638
25	Andhra Pradesh	0.630
26	Tripura	0.629
27	West Bengal	0.624
28	Dadra and Nagar Haveli	0.620
29	Chhattisgarh	0.605
30	Assam	0.597
31	Odisha	0.597
32	Madhya Pradesh	0.596
33	Uttar Pradesh	0.592
34	Jharkhand	0.589
35	Bihar	0.571



From the above data it can be seen that in the year of 2021, Kerala among the other states has the highest HDI of 0.752 followed by Goa (0.751) and Chandigarh (0.744). Kerala has a high HDI because social welfare initiatives are prioritized there, which has resulted in high literacy rates and a strong public healthcare system. Stressing the need of social equality and women's education is also very important. Goa's tourism sector raises possibilities and incomes, which raises living standards all around. There is a sophisticated infrastructure, medical amenities, and educational establishments in the planned metropolis of Chandigarh.

On the other hand, Bihar has the lowest HDI of 0.571 followed by Jharkhand (0.589) and Uttar Pradesh (0.592). The reason for low HDI in the states of Bihar and Jharkhand is due to Historical neglect, social issues like caste systems, and

limited job opportunities which further hinder the progress. In the state of Uttar Pradesh, High population density can be one of the reasons that has put a strain on resources and infrastructure, impacting service delivery.

WORLD COMPARISON SWITZERLAND

According to the United Nations Development Programme (UNDP), Switzerland is ranked 1 out of 193 countries in the world as of the most recent report from 2022. Switzerland scored highly on the HDI Index, with a score of 0.947 according to the most recent available data. Switzerland boasts a high standard of living with high income levels, which contribute significantly to its HDI score. The country has a strong economy and leads in sectors such as finance, pharmaceuticals, manufacturing and tourism. It further has a well-developed education system that emphasizes on both academic and vocational training. The country's healthcare system provides universal access to healthcare services for its residents. Switzerland is renowned for its robust institutions, neutral stance and stable political climate. Political stability fosters economic growth, social development, and investment in areas such as education, healthcare, and infrastructure, all of which contribute to a high HDI. They give environmental conservation and sustainability a lot of importance by investing in environmental research and innovation, support renewable energy sources, and maintain strict environmental regulations. This benefits human growth and general well-being.

While Switzerland ranks 1st, India stands 134th in the world's HDI rank. Switzerland has a significantly higher life expectancy compared to India. Life expectancy at birth in Switzerland is typically around 83 years, while in India, it is around 69 years. Access, cost and quality healthcare are issues in India's healthcare system, especially in the rural areas, that the government must take steps to resolve. Switzerland has a highly developed education system with high levels of enrollment in primary, secondary, and tertiary education. Mean years of schooling are typically higher in Switzerland as compared to India being 12.6 and 6.57 respectively. Strong economic growth and high per capita income characterize Switzerland as a high-income nation. On the other hand, India has substantially lower per capital income and is categorized as a lower-middle income country. In comparison to India, where poverty and inequality persist despite recent economic growth and development initiatives, Switzerland has lower rates of both. Switzerland generally has better infrastructure, including transportation, utilities, telecommunication, reliable utilities and public services, compared to India, hence providing greater connectivity and amenities. The overall quality of life, as measured by factors such as access to clean water, sanitation, housing, and public safety, tends to be higher in Switzerland.

USA

As of the most current assessment from 2022, USA is ranked 20th out of 193 nations in the world by the United Nations Development Programme (UNDP). Based on the latest available data, USA's HDI Index score was 0.927, which is high. Strong performance in all three of the HDI's dimensions is reflected in this high score. A long and healthy life, as indicated by the birth weight. When looking at life expectancy worldwide, the US has a higher average. The expected years of schooling for children and the mean years of schooling for adults serve as indicators of access to knowledge. The US has a high rate of literacy and a well-developed educational system. Gross National Productivity (GNI) per capita is a good indicator of a reasonable standard of living. The US enjoys a high average level of life due to its sizable and established economy. It's crucial to remember that the HDI is a national average and does not account for regional disparities. Racial inequities, limited access to healthcare for some communities, and wealth inequality are some of the issues the US faces. These may have an impact on certain citizens' general well-being.

India is ranked 134th in the world and the United States is placed 20th in the HDI rating. The fact that the USA's HDI is substantially higher than India's shows that the US has reached a far higher degree of human development. According to UNDP Human Development Reports, the USA has a very high human development score of 0.927, whereas India has a medium human development score of 0.644. Compared to India, the US has a longer life expectancy at birth. Comparing the US to India, the US has more years of education on average and a higher literacy rate. In comparison to India, the US has a far larger economy and a greater GNI per capita, which translates to a higher average level of life. India's adult literacy rate is growing, at about 77%, although it still lags behind the USA's nearly 100% [World Bank]. The USA has a very high percentage of literacy. People in the US often complete more years of education than people in India, despite the country's improvements, widespread access to high-quality education—especially higher education—remains a difficulty. In the USA, the average lifespan is approximately 79 years, whereas in India, it is approximately 70 years. The US healthcare system is widely regarded as sophisticated, featuring a high concentration of technology and specialists. Nevertheless, there are problems with it, such as excessive prices and restricted access for specific groups. India offers both public and private healthcare options, however there are issues with accessibility, pricing, and availability of specialists, especially in rural areas. The United States of America gets a better HDI score because, on average, its healthcare system is more developed. However, managing chronic diseases and providing fair access to inexpensive healthcare present issues for both nations. The Per Capita Income (PPP - Purchasing Power Parity) estimates for the United States and India are \$69,000 and \$7,200, respectively, as of 2023 (International Monetary Fund). The US's high per capita income contributes to its residents' generally higher level of living. Better access to housing, food, healthcare, education,

and other needs and luxuries are among them. However, India's lower per capita income suggests that many people there have a more modest level of living. However, there is room for development given the size and growth of India's economy.

NEPAL

Nepal moved up one spot to 143rd place in the Human Development Index (HDI), although the COVID-19 pandemic's ongoing instability caused the index's value to slightly fall from 0.604 to 0.602. Nepal is ranked 113th out of all countries in the world in the Gender Inequality Index. Nepal's HDI score decreased by 50.9 percent, from 0.399 to 0.602, between 1990 and 2021. Nepal saw changes in the mean number of years of schooling (2.8 years), predicted years of schooling (5.4 years), and life expectancy at birth (13.6 years) between 1990 and 2021. Between 1990 and 2021, there was a roughly 146.0 percent change in Nepal's GNI per capita. According to the report, Nepal's persistent inequality has resulted in a significant loss of human development. Nepal has lost more than 25% of its human development as a result of disparities in gender, caste, geography, and other categories. Human development is lost in proportion to the level of inequality in a nation. Nepal's 2021 female HDI score is 0.584, while the male score is 0.621. With a GDI value of 0.942, Nepal falls into Group 3, which is made up of nations with a medium level of equality in the HDI accomplishments of men and women.

India's HDI is generally higher than Nepal's HDI. According to the latest reports, India shows progress in Human development and ranks 132nd in comparison to Nepal's HDI rank position. India and Nepal are both regarded as having "medium human development," however India is somewhat ahead of Nepal. Although both countries are still in the process of development, India's GDP per capita is probably bigger than Nepal's. Compared to Nepal, India may have a higher average schooling rate. India may have a slightly higher birth rate.

ZAMBIA

As of the most current assessment from 2022, Zambia is ranked 153rd out of 193 nations in the world by the United Nations Development Programme (UNDP). Based on the latest available data, Zambia's HDI Index score was 0.569, which is poor. Approximately 67 years is the life expectancy at birth in Zambia, which is less than the average for Sub-Saharan Africa [World Bank]. Numerous factors contribute to this, such as the high prevalence of malaria, HIV/AIDS, and other infectious diseases. Despite improvements in life expectancy, communicable diseases and malnourishment continue to be major health concerns in Zambia. Zambia has an approximate adult literacy rate of 60% [World Bank]. This indicates that a sizable section of the populace lacks reading and writing skills, which restricts their access to jobs and educational opportunities. One issue plaguing the educational system is the limited availability of high-quality education, especially in rural areas. However, there have been encouraging advancements in recent years. The GDP per person in Zambia is approximately \$1,210 (PPP) [World Bank]. This is among the lowest globally, suggesting that most Zambians have a low standard of living. Zambia's income level is in the lower middle. Poverty remains widespread despite recent economic growth. The poor HDI score of Zambia is a result of all of these. Although the Zambian government is making efforts to raise the HDI of the nation, there are still numerous obstacles to be addressed.

In the world's HDI ranking, India is ranked 134th, while Zambia is ranked 154th. India has 0.644, or medium human development, according to UNDP India, and Zambia has 0.569, or low human development, according to the World Bank. This demonstrates that India is ranked higher than Zambia and has a substantially higher HDI score. This suggests a higher degree of human development in India, as evidenced by the country's generally higher life expectancy, educational attainment, and standard of living. Zambia and India are both regarded as developing nations, although during the past few decades, India's HDI has improved more quickly than Zambia's. Issues like gender inequality and wealth inequality continue to be problems for both nations. According to the International Monetary Fund, Zambia's per capita income is estimated to be \$1,470 in 2023, while India's is approximately \$7,200(2023 estimate) [International Monetary Fund]. Purchasing Power Parity, or PPP, compares income between nations while accounting for variations in living expenses. India's per capita income is far higher than Zambia's, even when taking PPP into account. This suggests that Zambia's average level of living is lower. Zambia's educational system is ranked lower on the HDI than that of India. According to the World Bank, Zambia's adult literacy rate is approximately 60%, whereas India's adult literacy rate is approximately 77%. A larger economy in India makes it possible to invest more in teacher training programs and educational facilities, while the country's more developed higher education system provides access to a greater variety of educational options. Malnutrition, infectious diseases (HIV/AIDS, malaria), and poor access to healthcare, particularly in rural areas, are the two countries' worst health issues. When it comes to HIV/AIDS and malaria, Zambia can have a greater rate of infection than India. India benefited from having a larger population since it can offer healthcare at a lower cost and maybe have more resources for public health programs and medical experts. India may have a higher ratio of physicians to patients than Zambia.

IMPACT OF COVID-19

It is a stark testimony to the medium-term havoc caused by the Covid pandemic that many countries, including India, have suffered a setback during 2020 and 2021 to their human development index (HDI)—a composite of indicators for health,

education and income. The aim of this study is to examine and analyse the impact of Covid-19 on all the three indicators of India.

EDUCATION - Students' access to education was impacted by disruptions to educational activities, such as switching to online learning, and school closures. Around the world, closure of schools, colleges, universities and cancellation of classes due to the coronavirus led to uncertainty and anxiety. According to UNESCO (The United Nation Education, Scientific and Cultural Organisation), 157 million students worldwide were affected by the closure of the education system due to COVID-19. According to the survey on impact of higher education in India, the Ministry of Human Resource Development observed 993 universities, 39,931 colleges and 10,725 independent institutions contributing to the expansion of higher education, and the density of students enrolled in education in India had nearly 37.4 million affected annually. UNESCO conducted a survey of the Indian education system and found that 32 million students were disabled in schools and colleges in India. Already-existing educational disparities have been exacerbated by differences in access to digital resources and internet connectivity. Loss of learning and lower educational attainment are expected to have long-term effects on the development of human capital and future earning capacity.

HEALTH - Global healthcare systems were under strain due to the pandemic, which had raised disease and death rates. Policies like lockdowns and social isolation had affected general health outcomes by interfering with healthcare services, such as regular immunizations and treatments for other ailments. The first wave had low contagion rates since the lockdown was imposed and individuals practiced social distancing. During March 2021, the country witnessed the most dangerous wave, causing havoc as individuals began to take precautions rather informally due to "pandemic fatigue". This was characterized by an increasing number of cases between 25 and 50 years, a lack of basic medicines, equipment and medical professionals. India's healthcare system could not cover daily oxygen consumption, intensive care unit (ICU) beds, and oxygen beds, forcing many hospitals to turn away patients, resulting in higher mortality.

INCOME - The sharp decline in GDP has been the largest in India's history. From April to June 2020, India's GDP shrank by a massive 23.9%. According to the latest national income estimates, the economy contracted by a further 7.4% in the second quarter of the 2020-21 financial year (July to September 2020). The recovery in the third and fourth quarters (October 2020 to March 2021) was still weak, with GDP growing by 0.5% and 1.6%. This means that the overall rate of contraction in India was (in real terms) 7.3% for the entire financial year 2020-21. India's national income had declined only four times before 2020 – with the largest decline in 1980 (5.2%). This means that 2020-21 is the worst year of economic decline in the country's history and far worse than the overall decline in the world. The decline has been solely responsible for the reversal of the trend in global inequality.

CONCLUSION

The study emphasizes how the country's HDI is influenced by the three combined indices of income, health, and education. It also emphasizes how human development is crucial for any nation since its citizens are its greatest asset and every government should make investments to ensure their well-being. According to the most recent data available, India's HDI score in 2022 was 0.644, placing it in the "medium human development" category. India is now ranked 134th out of 193 nations. India's HDI has gradually increased over the years, however recently the rate has slowed down. There are notable differences between Indian states. The highest HDI in the nation is found in Kerala, Goa, and Chandigarh, while the lowest is found in Bihar, Jharkhand, and Uttar Pradesh. The HDI has risen as a result of increases in life expectancy, literacy rates, and GNI per capita. Continued poverty, unequal resource distribution, and barriers to high-quality healthcare and education, especially in rural regions, prevent the HDI from growing further.

REFERENCES

- 1. GeeksforGeeks. (n.d.). GeeksforGeeks | A computer science portal for geeks.
- 2. Zambia | United Nations Development Programme. (n.d.)
- 3. Education, Human Development and Quality of Life: Measurement issues and implications for India on JSTOR. (n.d.).
- 4. 3-Decade trend in Human Development Index in India and its major States on JSTOR. (n.d.).
- 5. Human Development Index: A critique on JSTOR. (n.d.).
- 6. Mangin, V. (2024, January 28). Switzerland tops UN Human Development Index for first time. SWI swissinfo.ch
- 7. Biggeri, M., & Mauro, V. (2018). Towards a more 'Sustainable' Human Development Index: Integrating the environment and freedom. Ecological Indicators, 91, 220–231.
- 8. United Nations. (n.d.). Data center. Human Development Reports.
- 9. Statista. (32 B.C.E.).
- 10. 3-Decade trend in Human Development Index in India and its major States on JSTOR. (n.d.-b).