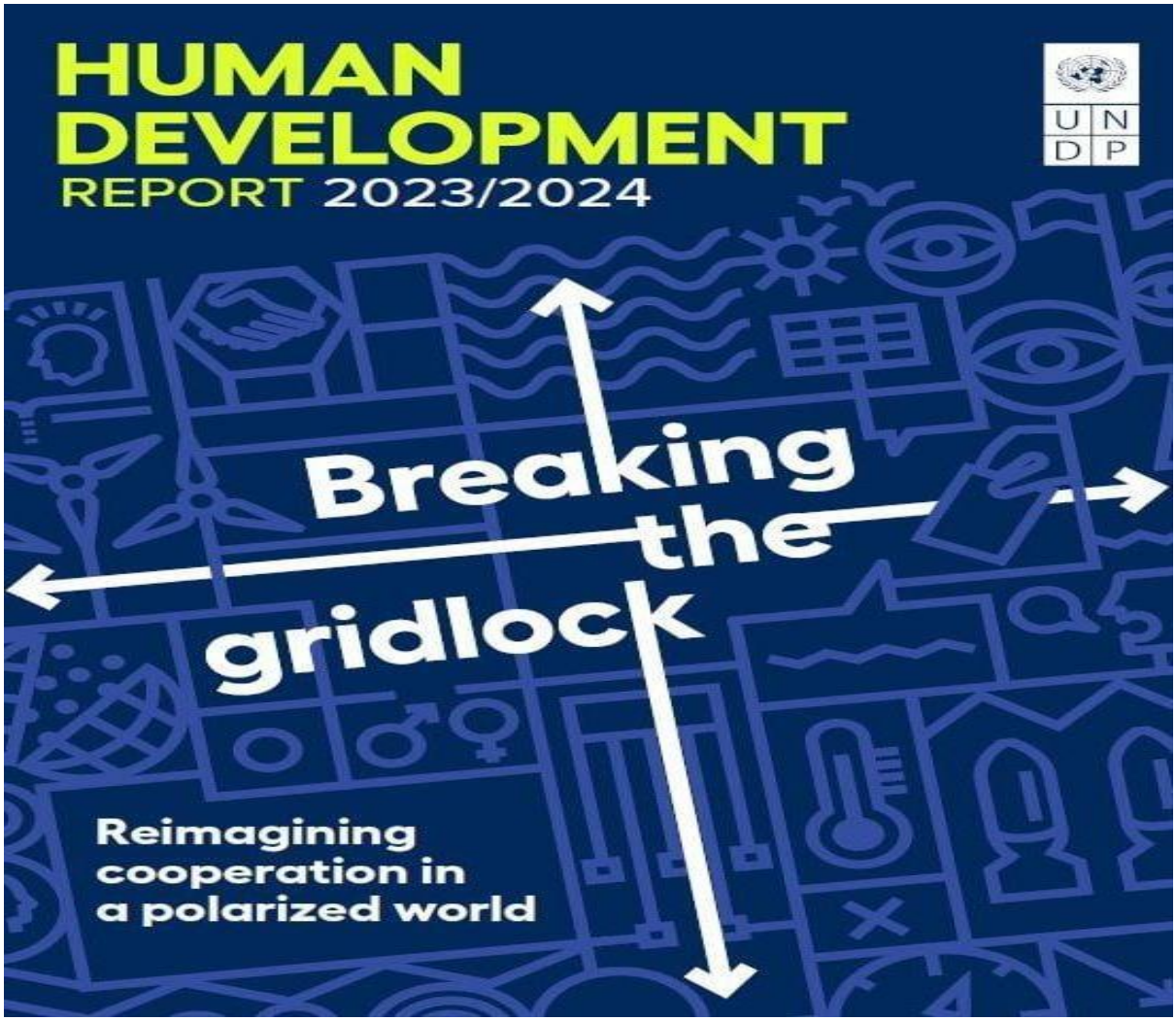
UPSC CURRENT AFFAIRS NOTES 15-03-2024

HDR REPORT 2023

Context: According to the 2023 Human Development Report, titled "Breaking the Gridlock: Reimagining Cooperation in a Polarised World," India's Human Development Index (HDI) rating has improved.



Key Highlights of the Report

HDI Improvement: India's HDI value improved from 0.633 in 2021 to 0.644 in 2022, placing it in the medium human development category. This represents an improvement in India's position over previous years.

Indicators for Improvement: India indicated improvements in all HDI indicators, including life expectancy, education, and Gross National Income (GNI) per capita. Life expectancy climbed from 67.2 to 67.7 years, expected

years of schooling reached 12.6, mean years of schooling increased to 6.57, and Gross national income (GNI) per capita increased from $6,542 to $6,951.

Gender Inequality Progression: India made progress in reducing gender inequality, with a Gender Inequality Index (GII) value of 0.437, higher than the worldwide and South Asian averages. However, India still has one of the largest gender gaps in the labour force participation rate, with a 47.8% difference between women (28.3%) and men (76.1%).

Global Inequality Trends: The report reveals growing worldwide inequities, with the gap between the richest and poorest countries growing since 2020. The growth of India is part of a larger global trend in which unequal development is leaving the poorest behind and increasing inequality.

Global Economic Concentration and Inequality: The report highlights the compounding effect of global inequities, stressing that over 40% of world trade in products is concentrated in three or fewer countries.

In 2021, the market capitalization of the three top technology corporations surpassed the GDP of more than 90% of countries, reflecting economic concentration.

Comparison and Outlook: Even though India has advanced significantly, it still trails behind China, Bangladesh, Bhutan, and Sri Lanka. Despite continuous post-pandemic recovery efforts, the most recent assessment highlights the worldwide concerns of inequality, polarisation, and geopolitical tensions.

Human Development Report (HDR)

The Human Development Report (HDR) is an annual publication by the United Nations Development Programme (UNDP) that aims to place people at the centre of the development
process.

It was first launched in 1990 by Mahbub ul Haq, a Pakistani economist, and Amartya Sen, an Indian Nobel
laureate.

The report provides a comprehensive analysis of human development worldwide, focusing on issues such as health, education, and living standards.

The report highlights the need to evaluate progress beyond economic measures such as GDP, underlining the role of human development in expanding people's choices and increasing their quality of life.

DR CONGO

As fighting displaces thousands of people in North and South Kivu, concerns grow about the spread of disease due to overcrowded, unsanitary living conditions.

DR Congo

Capital: Kinshasa

Area: 2,345,409 sq km

Population: 108.4 million

Languages: French, Kituba, Lingala, Swahili, Tshiluba

Life expectancy: 59 years (men) 62 years (women)

Coastline: 37 km, territorial sea: 12 nm

Exclusive economic zone: since 2011 the DRC has a Common Interest Zone agreement with Angola for the mutual development of off-shore resources

Detail

The Democratic Republic of the Congo (DRC), is located in central sub-Saharan Africa, within the Congo Basin.

The DRC's territory straddles the Equator, with one-third of its land area to the north and two-thirds to the south.

It is the second largest country in Africa, with a total land area of 2,345,408 km2.

Border: The DRC shares borders with the Republic of Congo to the northwest, the Central African Republic to the north, South Sudan to the northeast, Uganda, Rwanda, Burundi and Tanzania (Lake Tanganyika) to the east, Zambia to the southeast and Angola to the west.

Climate : The DRC has a largely equatorial climate; however, this varies across the country's extensive land area. Generally, the country is hot and humid in the north and west, an area located within a significant portion of the Congo River Basin. The southern, central and eastern areas are generally cooler and drier.

Biodiversity: The DRC is home to an exceptionally high degree of diversity biomes, ecosystems, and habitats, notably dry rainforests (Muhulu), open woodland forests (Miombo), savannahs, as well as cloud and gallery forests.

A large network of protected areas, safeguarding this diversity, covers approximately 8% of the national territory.

The majority of the land area of the DRC is within the world's second largest area of tropical rainforest, which is documented to store 8% of global forest carbon stocks.

It is also characterized by mountain terraces, plateaus, savannahs, grasslands and mountains.

Natural resource: The DRC has over 80 million hectares of arable land and over 1,100 listed minerals and precious metals. The country has a significant natural resource base of timber, energy, minerals and gemstones.

Population distribution:

Urban clusters are spread throughout the country, particularly in the northeast along the boarder with Uganda, Rwanda, and Burundi; the largest city is the capital, Kinshasha, located in the west along the Congo River; the south is least densely populated.

Natural hazards:

Periodic droughts in the south; Congo River floods (seasonal); active volcanoes in the east along the Great Rift Valley

Volcanism

Nyiragongo (3,470 m), which erupted in 2002 and is experiencing ongoing activity, poses a major threat to the city of Goma, home to a quarter million

people; the volcano produces unusually fast-moving lava, known to travel up to 100 km /hr.

Nyiragongo has been deemed a Decade Volcano by the International Association of Volcanology and Chemistry of the Earth's Interior, worthy of study due to its explosive history and close proximity to human populations; its neighbor, Nyamuragira, which erupted in 2010, is Africa's most active volcano; Visoke is the only other historically active volcano

Recent Issue

A resurgence of violence between armed groups in eastern Democratic Republic of Congo (DRC) has displaced more than 1.6 million people over the last two years, in a region already devastated by 30 years of conflict.

For two years, the armed group M23 (March 23 Movement) has been fighting the Congolese army and its allies in North Kivu province, and the violence began to intensify in late January. Now, the fighting has reached the border with South Kivu province.

This new escalation of the conflict has once again caused entire communities to flee. Armed clashes forced over 70,000 people to flee to South Kivu and 200,000 people to Goma, where more than half a million displaced people had already settled over the past two years.

The current situation has raised major health concerns. First, the influx of newly displaced people arriving in Goma is exacerbating the critical health situation and urgent needs in camps and increases the risk of epidemics, especially cholera.

Private Placement

Sebi recently decided to repeal certain circulars that provided relaxation in cases involving the allotment of securities through a private placement route.

About Private Placement

A private placement is the sale of stock shares or bonds to pre-selected investors and institutions rather than publicly on the open market.

Investors invited to participate in private placement programs include wealthy individual investors, banks and other financial institutions, mutual funds, insurance companies, and pension funds.

One advantage of a private placement is its relatively few regulatory requirements.

By opting for private placements, companies can maintain closer relations with investors, negotiate flexible terms, and potentially retain greater control over the company's direction and growth strategies.

There are two kinds of private placement: preferential allotment and qualified institutional placement.

Preferential allotment:

It is a method of private placement where a company issues new shares to a select group of existing shareholders or to a specific group of investors, often at a price lower than the prevailing market price.

Purpose: This method is especially common when the company wants to reward or retain existing shareholders, such as promoters, by offering them the opportunity to purchase additional shares.

SEBI regulations and the Companies Act govern preferential allotment in India.

A company must take permission from its shareholders to carry on with preferential allotment.

Qualified Institutional Placement (QIP):

QIP is a private placement exclusively available to listed companies.

Under QIP, a listed company can issue shares or other securities to qualified institutional buyers (QIBs), such as mutual funds, banks, insurance companies, and foreign institutional investors, without making a public offering.

Purpose: Companies use QIP to raise capital from institutional investors quickly and efficiently. Companies choose this option when they require funds for expansion, reducing debt, or other corporate purposes.

SEBI has established guidelines for QIP issuances in India.

A bond is a fixed-income instrument that represents a loan made by an investor to a borrower (typically corporate or governmental) for a set period of time in return for regular interest payments. The time from when the bond is issued to when the borrower has agreed to pay the loan back is called its 'term to maturity'. The bond issuer uses the money raised from bonds to undertake various activities, such as funding expansion projects, refinancing existing debt, undertaking welfare activities, etc.

Sagar Parikrama

The Union Minister for Fisheries, Animal Husbandry, and Dairying will release a book and video on “Sagar Parikrama”.

About Sagar Parikrama

It is an outreach program intended to reach out fishermen community across the entire coastal belt of the country through a predetermined sea route.

The initiative has been launched to understand the issues, experiences, and aspirations of fishermen and also to create awareness of various schemes and programs of the Government available to fishermen in coastal areas.

Nodal Ministry: Ministry of Fisheries, Animal Husbandry, and Dairying.

The Sagar Parikrama Yatra spanned over 12 captivating phases in just 44 days. The Yatra meticulously navigated the diverse coastal tapestry of India, covering an impressive coastal length of 7,986 Kilometres out of 8,118 Kilometres, touching 3,071 fishing villages in 80 coastal districts of all the Coastal States/UTs.

During the Sagar Parikrama events, certificates and sanctions related to the Pradhan Mantri Matsya Sampada Yojana (PMMSY) and Kisan Credit Card (KCC) were awarded to progressive fishermen, fish farmers, and young fishery entrepreneurs.

Literature on various schemes, including PMMSY, KCC, and others, was disseminated through print media, electronic media, videos, and digital campaigns to raise awareness among fishers.

Key Facts about India’s Fisheries Sector

India has a coastline of 8,118km, covering nine maritime states and four UTs, and provides livelihood support to 2.8 million coastal fishermen.

The country contributes 8% of the global share of fish production and is ranked third-largest fish producer in the world.

The total fish production of India is 162.48 lakh tonnes (2021-22), of which 121.21 lakh tonnes are from inland and 41.27 lakh tonnes from marine, with exports of over Rs 57,586 crore contributing to about 17% of agriculture exports.

PMMSY was launched in September 2020 with an aim to double the income of fish farmers and fishers in the country. It focuses on sustainable development of India’s fisheries sector and is a part of the Atmanirbhar Bharat scheme. The

scheme focuses on activities with potential to generate employment such as seaweed and ornamental fish cultivation. It also emphasises on the breeding technique for quality brood, seed & feed and species diversification.

Darien Gap

The treacherous Darien Gap route that spans parts of Central and South America has seen an increasing number of people attempting to pass on their way to claiming asylum in the US.

About Darien Gap

It is a stretch of densely forested jungle across northern Colombia and southern Panama. Roughly 60 miles (97 kilometres) across, the terrain is muddy, wet and unstable.

It has become a major route for global human migration.

It is the geographic region of the easternmost Isthmus of Panama that extends into northwestern Colombia, around the Gulf of Urabá (a section of the Gulf of Darién).

It forms the physiographic link between Central and South America.

A hot, humid area typified by tropical rainforests, mangrove swamps, and low mountain ranges with cloud forest vegetation, Darién has always been sparsely populated.

Key facts about Isthmus of Panama

It links Central and South America.

It borders Costa Rica to the west, Colombia to the southeast, the Caribbean Sea to the north, and the Pacific Ocean to the south.

This strategic position allows it to be a natural conduit for international maritime trade, especially through the well-known Panama Canal.

LYME DISEASE

Kerala has reported its first confirmed case of Lyme disease, a tick-borne bacterial infection, which if left untreated, can cause a range of health problems, potentially affecting the nervous system, heart, and joints.

About Lyme Disease

Lyme disease, commonly known as Lyme borreliosis, is caused by Borrelia bacteria that are transmitted to people by the bites of infected ticks of the genus Ixodes.

The most common first symptom is a growing red rash called erythema migrans (EM) at the site of the tick bite. Other early signs may include fever, headaches, fatigue, and muscle or joint pain.

Lyme disease, if left untreated, can cause neurological consequences like facial paralysis.

Lyme disease is endemic all over the Northern Hemisphere, with infections peaking in the spring and early summer.

The diagnosis is made using a combination of symptoms, a history of tick contact, and blood tests for particular antibodies. However, during the early stages of the condition, blood testing may provide false-negative results.

Wearing protective clothes, utilising picaridin-based insect repellents, and applying insecticides to reduce tick populations are all examples of prevention techniques. Quick removal of connected ticks with tweezers can help prevent transmission.

Prophylactic antibiotics may be explored if a tick is removed immediately and is engorged with blood, but they are not normally suggested.

Antibiotics like doxycycline, amoxicillin, and cefuroxime are beneficial in treating Lyme disease.

Standard treatment typically lasts two to three weeks; however, some people may have lasting symptoms.

There is currently no human Lyme disease vaccine available. LYMERix, a previously developed vaccine, was discontinued in 2002 due to insufficient demand. However, vaccinations to prevent Lyme disease in dogs are available.

WATER-STRESSED REGIONS

Over half of the 21st century irrigation expansion has been in water-stressed regions; India accounts for 36%: Study

The expansion of irrigated agriculture has increased global crop production but resulted in widespread stress on freshwater resources.

Ensuring that increases in irrigated production occur only in places where water is relatively abundant is a key objective of sustainable agriculture and knowledge of how irrigated land has evolved is important for measuring progress towards water sustainability.

A spatially detailed understanding of the evolution of the global area equipped for irrigation (AEI) is missing.

In this study, researchers used the latest subnational irrigation statistics (covering 17,298 administrative units) from various official sources to develop a gridded (5 arcmin resolution) global product of AEI for the years 2000, 2005, 2010 and 2015.

They found that AEI increased by 11% from 2000 (297 Mha) to 2015 (330 Mha), with areas of both substantial expansion, such as northwest India and northeast China, and decline, such as Russia.

It was found that more than half (52%) of the irrigation expansion has taken place in areas that were already water-stressed in the year 2000, with India alone accounting for 36% of global unsustainable expansion.

These findings provide new insights into the evolving patterns of global irrigation with important implications for global water sustainability and food security.

Changing patterns of global irrigation

Through a spatially detailed understanding of the evolution of the global area equipped for irrigation (AEI), since the start of 21st century, , showed that from 2000 to 2015, this area increased by 11 per cent – from 297 million hectares in 2000 to 330 million hectares by 2015.

This included areas of both substantial expansion, such as northwest India and northeast China, and decline, such as Russia.

This net increase was the result of a 65 mha gross increase in some areas and a 32 mha gross decrease in other areas.

The countries in which irrigation expanded (on net) the most were China (12.8 mha) and India (8.5 mha) and a major reason behind this was the increasing investment in irrigation projects to maintain food self-sufficiency.

The research classifies water stress as the result of either green water stress (GWS), when rainfall is insufficient to meet a crop's water requirement and supplementary irrigation is needed, or blue water stress (BWS), when renewable surface and groundwater availability (that is, total availability after accounting for environmental flows) is insufficient to meet irrigation water demand.

Of the countries with the largest AEI in 2015, India and Pakistan have seen the most unsustainable expansion, with 86 per cent (12.1 mha) and 87 per cent (1.53 mha) of the gross expansion in AEI, respectively, taking place in locations that were already experiencing BWS.

In the case of BWS, expansion of irrigation infrastructure can lead to enhanced depletion of aquifers and streamflow.

In the case of GWS, expansion of irrigation infrastructure can be a valuable strategy for buffering against variations in rainfall, provided that blue water resources are sufficiently available.

There were also countries in which most of the AEI expansion was sustainable (from the perspective of water resources), such as Brazil (3.4 mha, 96 per cent of the total expansion was sustainable), Indonesia (0.9 mha, 76 per cent), Peru (0.8 mha, 94 per cent), Italy (0.3 mha, 85 per cent) and France (0.2 mha, 88 per cent).

Need for sustainable Irrigation

The global population is projected to increase to over 10 billion people by 2050 and food production will need to increase substantially to meet the associated food demand of the growing population.

Because increasing the amount of cropland area would mean the conversion of forests and other ecosystems, intensifying agriculture on existing croplands by sustainably increasing irrigation and other inputs is a promising potential alternative.

While irrigated areas account for 24% of croplands, roughly 40% of global food production is from irrigated croplands.

In addition, over 90% of humanity's consumptive water use is used for irrigated agricultural production.

Depending on the relative water demand and availability in a location, this extensive water use can alter the water cycle, deplete aquifers and surface water bodies, increase water stress and escalate competition for freshwater resources.

Given the critical role that irrigation will probably play in meeting future food demand and the highly heterogeneous nature of water availability and demand.