News Analysis (04 Jun, 2021)

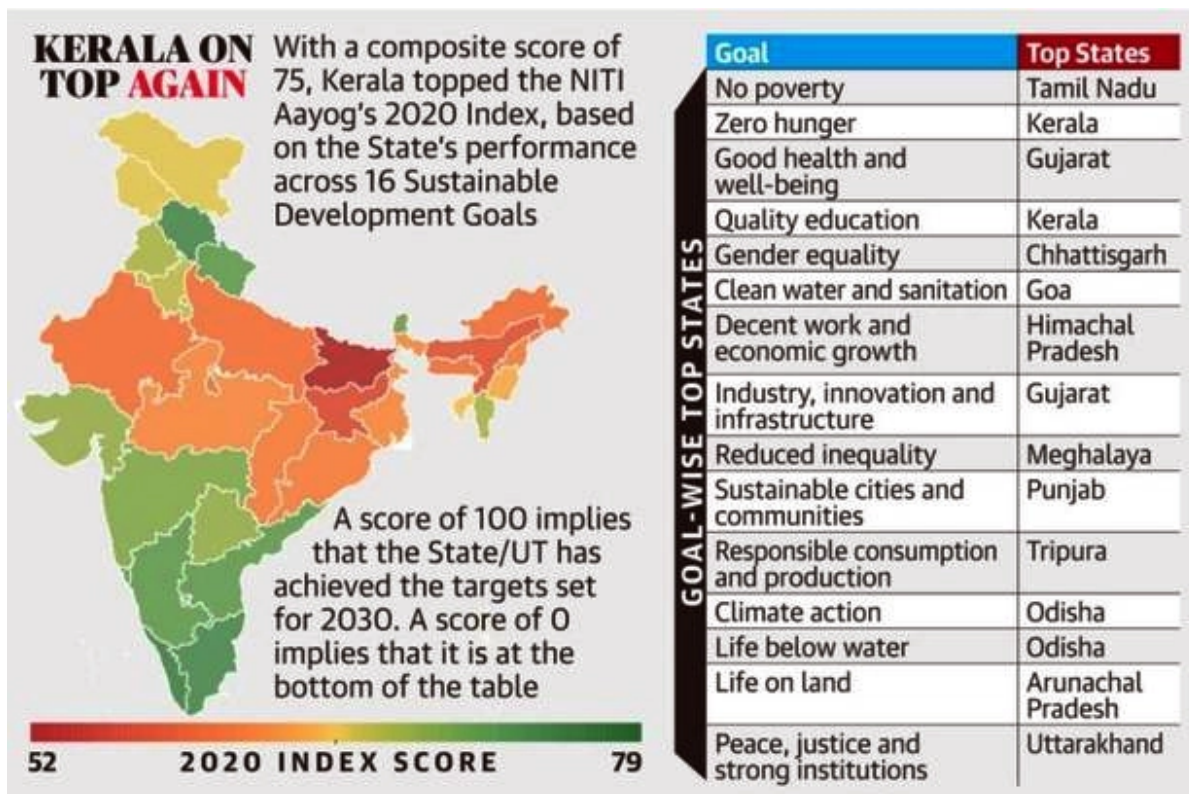drishtiias.com/current-affairs-news-analysis-editorials/news-analysis/04-06-2021/print

SDG India Index 2020-21: NITI Aayog

Why in News

Recently, the **third edition** of the **Sustainable Development Goals (SDG) India Index and Dashboard 2020–21** was released by **NITI Aayog.**

The SDG India Index 2020–21 is **developed in collaboration with the United Nations in India.**

KERALA ON TOP AGAIN

With a composite score of 75, Kerala topped the NITI Aayog's 2020 Index, based on the State's performance across 16 Sustainable Development Goals

A score of 100 implies that the State/UT has achieved the targets set for 2030. A score of 0 implies that it is at the bottom of the table

52 **2020 INDEX SCORE** 79

Goal	Top States
No poverty	Tamil Nadu
Zero hunger	Kerala
Good health and well-being	Gujarat
Quality education	Kerala
Gender equality	Chhattisgarh
Clean water and sanitation	Goa
Decent work and economic growth	Himachal Pradesh
Industry, innovation and infrastructure	Gujarat
Reduced inequality	Meghalaya
Sustainable cities and communities	Punjab
Responsible consumption and production	Tripura
Climate action	Odisha
Life below water	Odisha
Life on land	Arunachal Pradesh
Peace, justice and strong institutions	Uttarakhand

GOAL-WISE TOP STATES

Key Points

- **About:**
  - The NITI Aayog **launched its index in 2018** to **monitor the country's progress on the goals through data-driven assessment,** and foster a competitive spirit among the States and Union Territories in achieving them.
  - NITI Aayog has the **twin mandate to oversee the adoption and monitoring of the SDGs in the country,** and also **promote competitive and cooperative federalism** among States and UTs.
    - The index represents **the articulation of the comprehensive nature of the Global Goals under the 2030 Agenda** while being attuned to the national priorities.
    - In **2015,** the **UNs General Assembly adopted the 2030 Agenda** for Sustainable Development.
    - The 17 SDGs are a **bold commitment to finish what the Millennium Development Goals (MDGs)** started, and **tackle some of the more pressing challenges.**
  - The SDG India Index 2020–21 is also **live on an online dashboard,** which has cross-sectoral relevance across policy, civil society, business, and academia.
- **Methodology:**
  - The SDG India Index **computes goal-wise scores on the 16 SDGs** for each State and Union Territory.
  - These **scores range between 0–100,** and if a State/UT achieves a score of 100, it signifies it has achieved the 2030 targets.
    - The higher the score of a State/UT, the greater the distance to target achieved.
  - States and Union Territories are classified in **four categories** based on their SDG India Index score: **Aspirant** (0–49), **Performer** (50–64), **Front-Runner** (65–99), **Achiever** (100).
- **Comparison with Previous Editions:**
  - The SDG India Index 2020–21 is **more robust than the previous editions** on account of wider coverage of targets and indicators with greater alignment with the **National Indicator Framework (NIF).**
  - The 115 indicators **incorporate 16 out of 17 SDGs,** with a qualitative assessment on Goal 17, and cover 70 SDG targets.
  - This is an **improvement over the 2018–19 and 2019–20 editions** of the index, which had utilised 62 indicators across 39 targets and 13 Goals, and 100 indicators across 54 targets and 16 Goals, respectively.

- **National Analysis:**
  - The country's **overall SDG score improved by 6 points -** from 60 in 2019 to 66 in 2020–21.
    - Currently, there are **no states in the aspirant and achiever category;** 15 states/UTs are in the performer category and 22 states/UTs in the front runner category.
  - India saw significant **improvement in the SDGs related to clean energy, urban development and health in 2020.** However, there has been a **major decline in the areas of industry, innovation and infrastructure as well as decent work and economic growth.**
- **State Wise Performance:**
  - **Kerala retained its position at the top** of the rankings in the third edition of the index, with a score of 75, **followed by Tamil Nadu and Himachal Pradesh,** both scoring 72.
  - At the other end of the scale, **Bihar, Jharkhand and Assam were the worst performing States.** However, all States showed some improvement from last year's scores, with Mizoram and Haryana seeing the biggest gains.

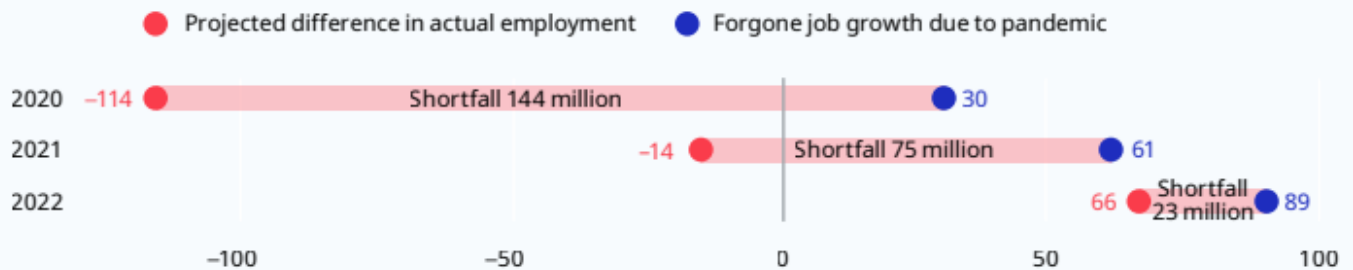# World Employment and Social Outlook Trends 2021 Report: ILO

Why in News

Recently, the **International Labour Organisation (ILO)** has released the **World Employment and Social Outlook: Trends (WESO) report** 2021.

Pandemic-induced global shortfall in jobs, relative to 2019 (millions)

● Projected difference in actual employment　　● Forgone job growth due to pandemic

- 2020 −114 (Shortfall 144 million) 30
- 2021 −14 (Shortfall 75 million) 61
- 2022 66 (Shortfall 23 million) 89

(Scale: −100, −50, 0, 50, 100)

Note: The red dots denote the projected difference in actual employment relative to 2019. The blue dots denote the development that would have been expected had there been no pandemic, hence showing forgone employment growth. The numbers inside the bars refer to the total pandemic-induced shortfall in jobs in a given year (that is, the shortfall due to the combination of actual employment losses and forgone employment growth).

Key Points

- **Impact of Covid:**
  - It has pushed **over 100 million more workers into poverty** worldwide. The world would be **75 million jobs short** at the end of this year compared to if the pandemic had not occurred.
  - Relative to 2019, an estimated **additional 108 million workers are now extremely or moderately poor**, meaning that they and their family members are having to live on less than USD 3.20 per day (It is the **World Bank** poverty line for lower-middle-income countries) in **purchasing power parity terms**.
  - The sharp increase in poverty rates is **due to lost working hours as economies went into lockdown**, outright job losses, and a decline in access to good quality jobs.
  - Five years of **progress towards the eradication of working poverty have been undone**, as working poverty rates have now reverted to those of 2015.
- **Rising Inequality:**
  The pandemic has **exacerbated existing inequalities in the labour market**, with lower-skilled workers, women, young people or migrants among the most affected.
- **Loss of Working Hours:**
  - Many people have **held onto their jobs but have seen their working hours cut dramatically.**
  - In 2020, **8.8% of global working hours were lost** compared to the fourth quarter of 2019 -- the equivalent of **255 million full-time jobs.**
  - While the situation has improved, **global working hours have far from bounced back**, and the world will **still be short the equivalent of 100 million full-time jobs by the end of this year.**

- **Unemployment Rate:**
  - Unemployment rate of 6.3% **this year (2020-21)**, falling to **5.7% next year (2021-22)** but still up on the **pre-pandemic rate of 5.4% in 2019.**
- **Women's Unemployment:**
  - Women have **suffered disproportionate job losses** while seeing their unpaid working time increase.
  - The **burden of intensified childcare and homeschooling activities** has disproportionately fallen on them.
  - As a result, **women's employment dropped by 5% compared with 3.9% for men.**
- **Effect on Workers:**
  - There will be **pandemic's longer-term "scarring" effects** on workers and enterprises.
  - Looking ahead, the projected **employment growth will be insufficient to close the gaps opened up by the crisis,**
- **Recommendation:**
  - Concerted policy efforts are needed to prevent long-lasting damage.
  - It recommended among other things ensuring **worldwide access to vaccines** and **financial assistance for developing countries** – including through **debt restructuring, or enhancing social protection systems.**

International Labour Organisation

- **About:**
  - It was **created in 1919**, as part of the **Treaty of Versailles that ended World War I**, to reflect the belief that universal and lasting peace can be accomplished only if it is based on social justice.
    - It became a **specialized agency of the <u>United Nations</u> in 1946.**
  - It is **a tripartite organization**, the only one of its kind bringing together representatives of governments, employers and workers in its executive bodies.
- **Members:**
  - **India is a founding member** of the ILO with a total 1**87 member States.**
  - **In 2020 <u>India assumed the Chairmanship</u>** of the Governing Body of ILO.
- **Headquarter:**
  - Geneva in Switzerland.
- **Awards:**
  - In 1969, ILO received the **<u>Nobel Peace Prize</u>** for improving fraternity and peace among nations, pursuing decent work and justice for workers, and providing technical assistance to other developing nations.

Way forward

- **<u>Covid-19</u>** has not just been a public health crisis, **it's also been an employment and human crisis.**

- Without a **deliberate effort to accelerate the creation of decent jobs, and support the most vulnerable members** of society and the recovery of the hardest-hit economic sectors, **the lingering effects of the pandemic could be with us for years** in the form of lost human and economic potential, and higher poverty and inequality.
- There is an urgent need to build back better — **create productive employment opportunities and foster long-term labour market prospects** for the most vulnerable.

Crops Lost to Pests

Why in News

According to a recent report, as much as **40% of the world's agricultural crops** are lost to pests each year.

> The **United Nations** declared 2020 as the **International Year of Plant Health**, which has been extended until 1st July, 2021.

Key Points

- **Reasons for the Spread:**
  - Half of all **emerging plant diseases** are spread by **global travel and trade**, which have tripled in volume over the last decade.
  - **Weather** is the second-most important factor.
- **Impact of Climate Change:**
  > It will **increase the risk of pests spreading** in agricultural and forestry ecosystems, especially in **cooler Arctic, boreal, temperate and subtropical regions.**
- **Controlling Invasive Pests:**
  - A single, **unusually warm winter** can be enough to assist the establishment of **invasive pests.**
  - **Fall armyworm pests**, which feed on crops like maize, sorghum and millet and **Tephritid fruit flies** (that damage fruit and other crops) have already spread due to a warmer climate.
  - **Desert locusts (the world's most destructive migratory pests)**, are expected to change their migratory routes and geographical distribution because of climate change.
- **Impact of the Plant Pests:**
  - It leaves **millions of people without enough food to eat.**
  - It **adversely impacts agricultural activities** and thereby, the primary source of income for rural poor communities.
  - **Invasive pests** cost countries **at least USD 70 billion annually** and are one of the **main drivers of biodiversity loss.**

- **Key Recommendations:**
    - Farmers should adopt and policymakers should encourage the use of **environment-friendly methods** such as integrated pest management.
    - To make trade safe, it is important to implement **international plant health standards and norms**, such as those developed by **the International Plant Protection Convention (IPCC)** and <u>**Food and Agriculture Organization (FAO)**</u>.
        - The IPPC is a **plant health treaty** signed by over 180 countries including India.
        - It aims to **protect the world's plant resources** from the spread and introduction of pests, and promote safe trade.
    - There is a need for **more research as well as investment** in strengthening national plant health systems and structures.
    - Policymakers and governments should ensure their decisions are based on **sound preparation and data.**
    - **Regularly monitoring plants and receiving early warning information** about emerging threats, helps governments, agricultural officers and farmers take preventive and adaptive measures to keep plants healthy.

Pest Controlling Methods

- The most popular methods of containing the pest include the use of <u>**Genetically Modified (GM) crops and pesticides**</u>, however, some armyworms have developed resistance to these tactics and are continuing to destroy crops.
- Natural approaches, including **breeding predators such as wasps**, to be released into fields when necessary, as well as developing a **"germ warfare"** that isolates diseases to which the caterpillar (armyworm) is prone, are being explored by the scientists.
- **A quarantine system**, under which imports of grains and plants that can host such insects are inspected at shipping ports, airports and land border crossings is the first line of defence taken by the countries across the world.
- **The quarantine system in India** is governed by the **Plant Quarantine (Regulation of Import into India) Order of 2003**, which is notified under the Destructive Insects and Pests Act of 1914.
    - **In India**, quarantine responsibility lies with **the Directorate of Plant Protection**, Quarantine & Storage (headquartered in Faridabad, Haryana). The short staffed directorate and the lack of a strong legislation have made the task of policing borders difficult in India.

<u>**Source: DTE**</u>

CEM-Industrial Deep Decarbonization Initiative

Why in News

Recently, India and the UK have launched a new workstream to promote **industrial energy efficiency** under **Clean Energy Ministerial's (CEM) Industrial Deep Decarbonization Initiative (IDDI)** coordinated by UNIDO (United Nations Development Industrial organisation).

It was launched in the **ongoing 12th CEM** (CEM12) **Meeting,** which is **virtually hosted by Chile.**

Key Points

- **About 12th CEM Meeting:**
    - The objective is **to infuse green technologies** and **stimulate demand for low-carbon industrial material.**
    - India is **committed to cut emissions intensity per unit of GDP by 33 to 35% by 2030** (stated in **Nationally Determined Contributions**).
    - The commitment hinges on **effective deployment of low carbon technologies in Energy Intensive Sectors** like Iron & Steel, Cement and Petrochemicals.
    - Government policies have resulted in **substantial savings in energy at the demand side** such as **AgDSM** (Agriculture Demand Side Management programme), **MuDSM** (Municipal Demand Side Management) etc.
- **About Clean Energy Ministerial (CEM):**
    - **Establishment:**
        - It was established **in December 2009 at the UN's Framework Convention on Climate Change conference of parties** in **Copenhagen.**
        - The **Framework for the Clean Energy Ministerial,** adopted at the **seventh Clean Energy Ministerial in 2016,** defines the CEM governance structure and outlines the mission statement, objectives, membership, and guiding principles.
    - **Purpose:**
        CEM is **a high-level global forum to promote policies and programs that advance clean energy technology,** to share lessons learned and best practices, and to encourage the transition to a global clean energy economy.
    - **Focus Areas:** The CEM is focused on **three global climate and energy policy goals:**
        - Improve energy efficiency worldwide.
        - Enhance clean energy supply.
        - Expand clean energy access.
    - **Members:**
        - 29 countries are part of CEM.
        - **India is also a member** country.
    - **11th Clean Energy Ministerial:**
        The CEM11 was **hosted by the Kingdom of Saudi Arabia in 2020** that was convened at a critical moment to consider the role of clean energy in supporting a rapid, sustainable recovery, and the role of the CEM community in shaping the next clean energy decade.

- **Industrial Deep Decarbonization Initiative (IDDI):**
    - **About:**
        - IDDI is an **initiative of CEM.**
        - It is a global **coalition of public and private organisations** who are working to stimulate demand for low carbon industrial materials.
        - In collaboration with **national governments,** IDDI works to standardise carbon assessments, establish ambitious public and private sector procurement targets, incentivise investment into low-carbon product development and design industry guidelines.
    - **Supporting Countries:**
        Coordinated by UNIDO, the IDDI is **co-led by the UK and India** and current members include Germany and Canada.
    - **Goals:**
        - Encouraging governments and the private sector to buy low carbon steel and cement.
        - Sourcing and sharing data for common standards and targets.

United Nations Development Industrial Organisation

- **About:**
    UNIDO is the **specialized agency of the United Nations** that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.
- **Members:**
    - There are 170 Member countries as of 1st April 2019.
    - **India is also a member** country.
- **Discussion:**
    Members regularly discuss and decide UNIDO's guiding principles and policies in the sessions of the Policy Making Organs.
- **Mission:**
    The mission of UNIDO, as described in the **Lima Declaration adopted** at the fifteenth session of the **UNIDO General Conference in 2013,** is to promote and accelerate **inclusive and sustainable industrial development (ISID)** in Member States.
- **Mandate:**
    UNIDO's mandate is fully recognized in **SDG-9**, which calls to **"Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation".**
- **Headquarters:** Vienna, Austria.

Source: PIB

Satellite Internet

Why in News

According to an estimate, 1,250 satellites will be launched annually this decade, with 70% of them for commercial purposes.

- Various private companies are **aiming to deliver broadband satellite Internet** around the world **through** their fleet of **Low Earth Orbit (LEO) satellites.**
- The idea of a **space internet** system is not new. It is being used through **Geostationary Satellite** for selective users.

Key Points

- **Satellite Internet and LEO Technology:**
  - **Positioning of Satellites:** LEO satellites are **positioned around 500km-2000km from earth, compared to stationary orbit satellites** which are approximately **36,000km away.**
  - **Latency:** Latency, or the time needed for data to be sent and received, is contingent on proximity.
    - As LEO satellites orbit closer to the earth, they are able to **provide stronger signals and faster speeds** than traditional fixed-satellite systems.
    - Additionally, because signals travel faster through space than through fibre-optic cables, they also have the potential to rival if not exceed existing ground-based networks.
  - **Higher Investment:** LEO satellites **travel at a speed of 27,000 kph** and complete a full circuit of the planet in 90-120 minutes.
    - As a result, individual satellites can only make direct contact with a land transmitter for a short period of time thus requiring massive LEO satellite fleets and consequently, a **significant capital investment.**
    - Due to these costs, of the three mediums of Internet – fibre, spectrum and satellite – the latter is the most expensive.

- **Geostationary Satellite Internet:**
  - **Positioning of Satellites:** Geostationary orbit is **located at a height of 35,786 km over the Earth's surface**, directly **above the Equator.**
    - Most of the existing space-based Internet systems use satellites in geostationary orbit.
    - Satellites in this orbit **move at speeds of about 11,000 km per hour,** and **complete one revolution of the Earth at the same time that the earth rotates once on its axis.**
      > To the observer on the ground, therefore, a satellite in a geostationary orbit appears stationary.
  - **Coverage:** The signals from one geostationary satellite can **cover roughly a third of the planet** — and three to four satellites would be enough to cover the entire Earth.
  - **Easier Connectivity:** As satellites appear to be stationary, it is easier to link to them.
  - **Latency Issues:** The transmission from a satellite in geostationary orbit has a **latency of about 600 milliseconds.** The geostationary satellites are located at higher altitudes compared to LEO, thus the longer the distance that needs to be covered results in greater latency.
- **Related Initiatives:**
  - **'Five to 50' service (OneWeb):** OneWeb, a private company, has successfully launched constellations of 218 satellites in LEO.
    - The company only has one more launch to complete before it obtains the capacity to enable its **'Five to 50' service** of offering internet connectivity to all regions **north of 50 degrees latitude.**
    - The Five to 50 service is expected to be switched on by June 2021 with global services powered by 648 satellites available in 2022.
  - **Starlink:** It is a venture of SpaceX.
    - **Starlink** currently has 1,385 satellites in orbit and has already started beta testing in North America and initiating pre-orders in countries like India.
    - However, Starlink's satellites fly closer to the earth and therefore, the company requires a larger fleet to provide global connectivity than OneWeb.
  - **Project Kuiper:** It is **a project of Amazon** announced in 2019.
  - **Loon Project:** Google launched its 'Loon' project in 2013, using high-altitude balloons to create an aerial wireless network.
    > After testing the service in rural Kenya, Google's parent company, Alphabet, abandoned the project in 2021.

- **Issues in LEO Satellites Launch:**
    - **Regulation Issues:** During the days of the Sputnik and Apollo missions, governments dominated and regulated space-based activities.
        - However, today, the balance of power has shifted from countries to companies.
        - As a result, there are questions related to who regulates these companies, especially given the large number of nations that contribute to individual projects.
        - It makes the regulatory framework complicated.
    - **Logistic Challenge:** There are logistical challenges with launching thousands of satellites into space as well.
    - **Difficulty in Space Observation:** Satellites can sometimes be seen in the night skies which creates difficulties for astronomers as the satellites reflect sunlight to earth, leaving streaks across images.
    - **Interruptions:** Satellites travelling at a lower orbit can also **interrupt the frequency** of those orbiting above them.
    - **Space Junk:** There are already almost 1 million objects larger than 1cm in diameter in orbit, a byproduct of decades of space activities.
        - Those objects, colloquially referred to as 'space junk,' have the **potential to damage spacecraft** or collide with other satellites.

<u>Source: IE</u>

China's 'Artificial Sun' EAST

Why in News

Recently, China's **Experimental Advanced Superconducting Tokamak (EAST)** achieved a peak temperature of **288 million** degrees Fahrenheit, which is over **ten times hotter** than the sun.

> **China is not the only country** that has achieved high plasma temperatures. In 2020, **South Korea's KSTAR (Korea Superconducting Tokamak Advanced Research) reactor** set a new record by maintaining a plasma temperature of over 100 million degrees Celsius for 20 seconds.

Tokamak

- The tokamak is an **experimental machine** designed to harness the **energy of fusion.**
- Inside a **tokamak**, the energy produced through the fusion of atoms is absorbed as heat in the walls of the vessel.
- Like a conventional power plant, a **fusion power plant uses** this heat to produce steam and then electricity by way of **turbines and generators.**

Key Points

- **About:**
  The EAST reactor is **an advanced nuclear fusion experimental research device** located at the Institute of Plasma Physics of the Chinese Academy of Sciences (ASIPP) in Hefei, China.
- **Establishment:**
  EAST first became operational in 2006.
- **Purpose:**
  - The purpose of the artificial sun is **to replicate the process of nuclear fusion, which is the same reaction that powers the sun.**
  - This is part of the **International Thermonuclear Experimental Reactor (ITER)** facility, which will become the world's **largest** nuclear fusion reactor when it becomes **operational in 2035.**
    - The **ITER Members** include China, the European Union, **India**, Japan, Korea, Russia and the United States.
- **Working:**
  - It is **based on the Nuclear Fusion Process** that is carried out by the Sun and the Stars.
  - For nuclear fusion to occur, **tremendous heat and pressure are applied on hydrogen atoms** so that they fuse together. The **nuclei of deuterium and tritium** - both found in hydrogen - are **made to fuse together** to **create a helium nucleus**, a neutron along with a whole lot of energy.
  - The gaseous hydrogen fuel **is heated to temperatures of over 150 million degrees Celsius** so that it **forms a hot plasma** (electrically charged gas) of **subatomic particles.**
  - With the help of a strong magnetic field, the plasma is kept away from the walls of the reactor to ensure it does not cool down and lose its potential to generate large amounts of energy. The **plasma is confined for long durations for fusion to take place.**
- **Other Tokamaks in China:**
  - Apart from the EAST, China is currently operating the **HL-2A reactor** as well as **J-TEXT.**
  - In **December 2020, HL-2M Tokamak**, China's largest and most advanced nuclear fusion experimental research device, was successfully **powered up for the first time** — a key milestone in the **growth of China's nuclear power research capabilities.**
- **Significance:**
  - It is significant as far as **China's Green Development** is concerned.
  - **Nuclear fusion** is a process through which **high levels of energy are produced without generating large quantities of waste.** Unlike fission, fusion **also does not emit greenhouse gases** and is considered a safer process with lower risk of accidents.

Nuclear Reactions

- **Description:**
  - A nuclear reaction is the process in which **two nuclei, or a nucleus** and an **external subatomic particle**, collide to produce **one or more** new nuclides.
  - Thus, a nuclear reaction must cause **a transformation** of at least one nuclide to another.
- **Types:**
  - **Nuclear Fission:**
    - The nucleus of an **atom splits** into **two daughter nuclei.**
    - This decay can be **natural spontaneous splitting** by radioactive decay, or can actually be simulated in a lab by achieving necessary conditions (bombarding with neutrons, alpha particles, etc.).
    - The resulting fragments tend to have a combined mass which is less than the original. The **missing mass** is usually converted into **nuclear energy.**
    - Currently **all commercial** nuclear reactors are based on **nuclear fission.**
  - **Nuclear Fusion:**
    - Nuclear Fusion is defined as the **combining of two lighter nuclei** into a **heavier one.**
    - Such nuclear fusion reactions are the source of energy in the Sun and other stars.
    - It takes considerable energy to force the **nuclei to fuse.** The conditions needed for this process are extreme – **millions of degrees** of temperature and millions of pascals of pressure.
      > The **hydrogen bomb** is based on a thermonuclear fusion reaction. However, a nuclear bomb based on the fission of uranium or plutonium is placed at the core of the hydrogen bomb to provide initial energy.

Source: IE

Mega Food Park Scheme

Why in News

Recently, the Union Minister for Food Processing Industries virtually inaugurated the **Indus Best Mega Food Park at Raipur, Chhattisgarh.**

It is built under the **Mega Food Park Scheme.** By this food park, about **5000 people will get employment and about 25000 farmers will be benefited.**

Key Points

- **About:**
    - It was launched in **2008-09** to give a major **boost to the food processing sector** by adding value and reducing food wastage at each stage of the supply chain with a particular focus on perishables.
        - The **Ministry of Food Processing Industries** is implementing the Mega Food Park Scheme in the country.
    - Mega Food Parks **create modern infrastructure facilities for food processing along the value chain** from farm to market with strong forward and backward linkages through a cluster-based approach.
- **Aim:**

    To provide a **mechanism to link agricultural production to the market** by bringing together farmers, processors and retailers so as to **ensure maximizing value addition, minimizing wastage, increasing farmers income** and creating **employment opportunities** particularly in the rural sector.
- **Approach:**

    The Scheme is **based on the "Cluster" approach** and envisages creation of state of art support infrastructure in a **well-defined agri/horticultural zone** for setting up of **modern food processing units** in the industrial plots provided in the park with a **well-established supply chain.**
- **Components:**

    A Mega food Park typically consists of supply chain infrastructure including **collection centers (cc), primary processing centers (ppc) central processing centers (cpc), cold chain** and around **25-30 fully developed plots** for entrepreneurs to set up food processing units.
- **Financial Assistance:**
    - The **central government provides financial assistance upto Rs. 50 Crore** per Mega Food Park (MFP) project.
    - The MFP project is **implemented by a Special Purpose Vehicle (SPV)** which is a Body Corporate registered under the **Companies Act, 2013.**
        - SPV is a subsidiary company that is formed to **undertake a specific business purpose or activity.**
- **Present Status:**

    Presently, **22 Mega Food Parks are operational.** It is in line with the '**Make in India**' and '**Atma Nirbhar Bharat**' vision of the Government of India.

Mega Food Park Model: An Illustration
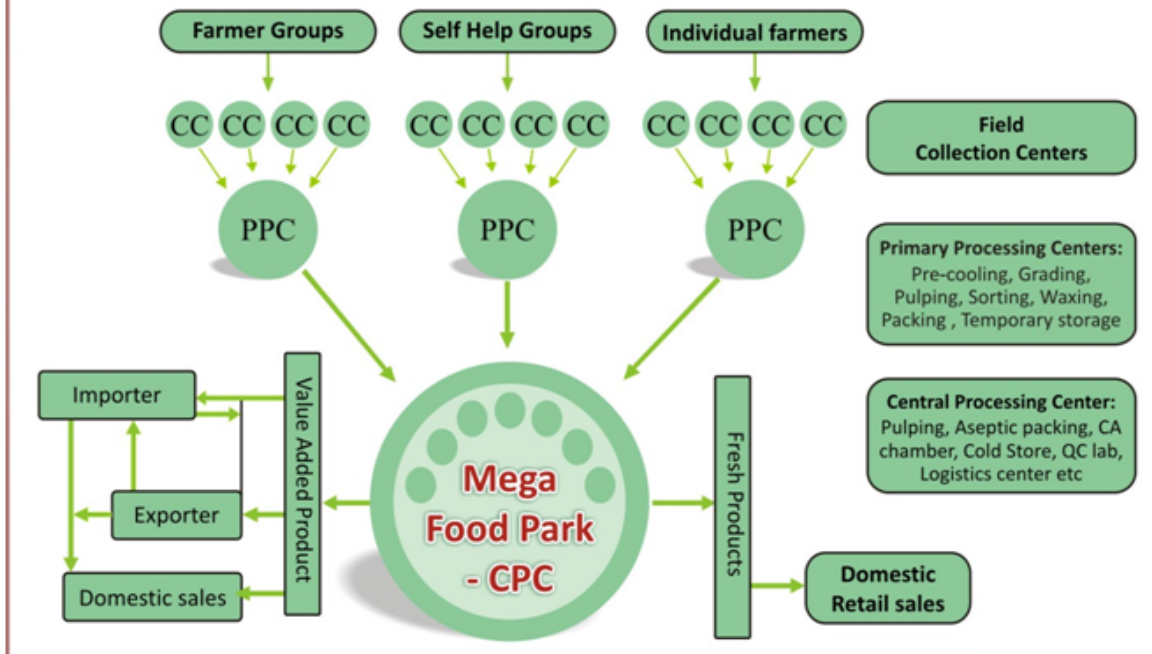
Devika River Project: J&K

Why in News

Recently, the Minister of State for Development of North Eastern Region has asked for suggestions for the **Devika River project in Udhampur, J&K.**

This project is compared with the **Namami Gange Project.**

Key Points

- **About:**
  - This is a **Rs. 190 crore Project.**
  - The work on the project was **started in March 2019 under the National River Conservation Plan (NRCP).**
  - Under the project, bathing **"ghats"** (places) on the banks of the Devika River will be **developed, encroachments** will be **removed, natural water bodies** will be **restored** and **catchment areas will be developed** along with **cremation ground.**
  - The project includes the **construction of three sewage treatment plants, sewerage network** of 129.27 km, development of two cremation ghats, protection fencing and landscaping, **small hydropower plants** and **three solar power plants.**
  - On completion of the project, the rivers will see **reduction in pollution and improvement in water quality.**
- **About Devika River:**
  - Devika river **originates from the hilly Suddha Mahadev temple in Udhampur district of Jammu and Kashmir** and flows down towards **western Punjab** (now in Pakistan) where it **merges with the Ravi river.**
  - The river holds **religious significance** as it is revered by Hindus as the **sister of river Ganga.**
  - In June 2020, **Devika Bridge** was inaugurated in Udhampur. Apart from taking care of traffic congestion, the Devika Bridge was also meant **to help smooth passage of Army convoys and vehicles.**

National River Conservation Plan

- **About:**
  - National River Conservation Plan (NRCP) is **a centrally funded scheme launched in 1995** aimed at **preventing the pollution of rivers.**
  - Programs for river conservation are being implemented under National River Conservation Plan (NRCP) and NGRBA (National Ganga River Basin Authority).
- **Activities under NRCP:**
  - Interception and Diversion works to capture the raw sewage flowing into the river through open drains and divert them for treatment.
  - Sewage Treatment Plants for treating the diverted sewage.
  - Low Cost Sanitation works to prevent open defecation on riverbanks.
  - Electric Crematoria and Improved Wood Crematoria to conserve the use of wood and help in ensuring proper cremation of bodies brought to the burning ghats.
  - River Front Development works such as improvement of bathing ghats.
  - Public awareness and public participation.
  - Human Resource Development (HRD), capacity building, training and research in the area of River Conservation.
  - Other miscellaneous works depend upon location specific conditions including the interface with human population.

Source: PIB

Blue-finned Mahseer

Why in News

Recently, the <u>International Union for Conservation of Nature (IUCN)</u> has moved **Blue-finned Mahseer** from **Endangered to the Least Concern' status** on its **Red List.**

Key Points

- **About:**
  - The Mahseer belongs to the genus *Tor*, of which there are **several subspecies to be found in India** and in other range countries in South Asia.
  - The Blue-finned Mahseer or *Tor Khudree is one of the subspecies of the Mahseer.*
- **Habitat:**
  - Mainly found in the **Mota Mola river east of Pune.** This species is also found in other **rivers of the Deccan Plateau.**
  - The species is migratory; **moving upstream during rains. It prefers clean, fast flowing and well oxygenated waters.**
- **Threats:**
  Threatened by **habitat manipulation, over harvesting and competition from other fish species.**
- **Significance:**
  - **Freshwater Ecosystem Indicator:**
    It is very **sensitive to dissolved oxygen levels, water temperature and sudden climatic changes.** It just cannot bear pollution.
  - **Cultural:**
    They have cultural and religious significance as well as they are **protected in 'temple sanctuaries' across India.**
- **Conservation Initiatives:**
  Tata Power (private company) is involved in **conservation of the blue-finned for 50 years in Lonavala (near Pune), Maharashtra.**
- **Protection status:**
  IUCN Red List: Least Concern

International Union for Conservation of Nature

- **About:**
  - IUCN is a **membership union uniquely** composed of both government and civil society organisations.
  - Created in 1948, **it is the global authority on the status of the natural world and the measures needed to safeguard it.** It is headquartered in **Switzerland.**
- **The Red List:**
  - The IUCN Red List of Threatened Species, is the **world's most comprehensive inventory of the global conservation status** of plant and animal species.
  - It **divides species into nine categories:** Not Evaluated, Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild and Extinct.
  - It is recognized as the **most authoritative guide to the status of biological diversity.**

<u>**Source: IE**</u>