

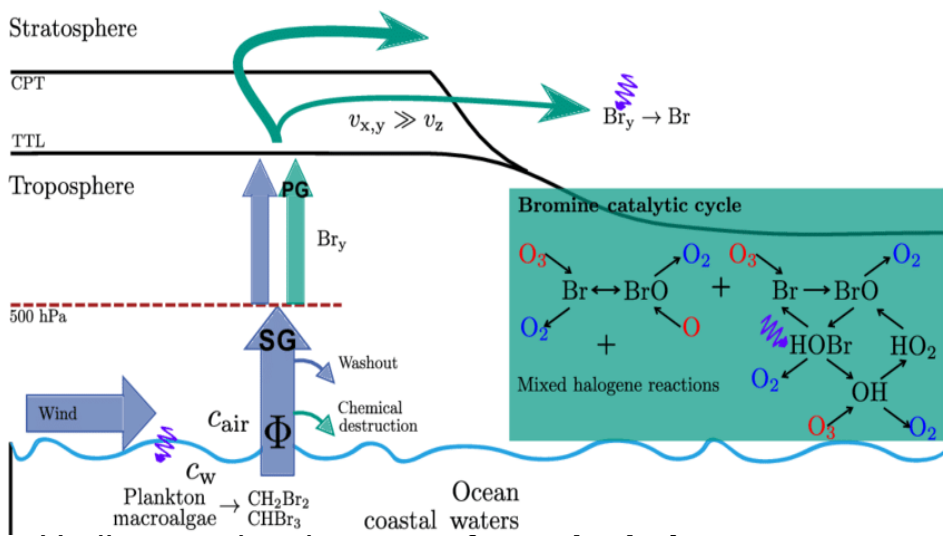
MOSAIC

❖ **Context**

➤ A ship-based 'Multidisciplinary Drifting Observatory for the Study of Arctic Climate (MOSAIC)' expedition over the Arctic has found that the iodine enhances springtime tropospheric ozone depletion in the Arctic.

❖ **Key Highlights**

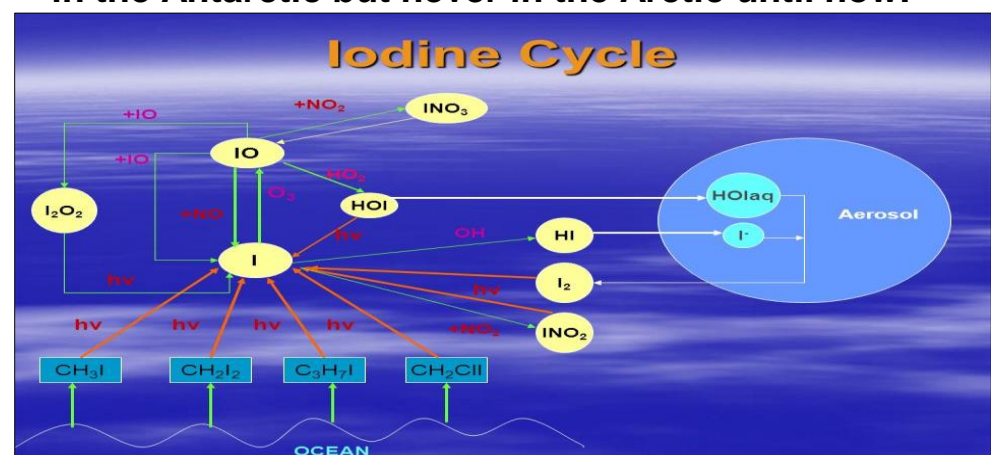
- Researchers from 20 countries, including from the Indian Institute of Tropical Meteorology (IITM), Pune, made observations between March and October 2020, onboard the German research icebreaker, Polarstern.
- They found that the chemical reactions between Iodine and Ozone were the **second highest contributor** to the loss of surface Ozone, after the loss initiated by **ozone photolysis**, and ahead of bromine.
- **Ground-level ozone** (or Tropospheric ozone or surface ozone) is a pollutant that forms when oxides of nitrogen (NOx) react with volatile organic compounds (VOC).
- Shorter-lived, ozone depletion events similar to those responsible for stratospheric ozone depletion, are seen close to the surface of the Earth.



- Until recently, these surface depletion events were thought to occur mainly because of catalytic depletion by a single type of halogen - bromine, which is emitted into the atmosphere from the sea-ice region.

❖ **Melting Arctic Sea Ice and Iodine**

- The global source of iodine is dominated by **O3-stimulated emissions of volatile inorganic iodine species** (i.e., hypiodous acid (HOI) and I2) from the ocean surface.
- The oceans also dominate the atmospheric sources of **organic iodine compounds**, primarily methyl iodide (CH3I), via biotic and abiotic processes.
- The **Arctic Sea ice is warming nearly four times faster** than the rest of the world in the last 43 years, exposing the oceans.
- As a result, ozone from anthropogenic emissions gets deposited in the water, releasing iodine from seawater into the atmosphere.
- Once in the atmosphere, it can destroy ozone in the presence of sunlight. On a per-atom basis, **iodine is about three orders of magnitude more efficient than chlorine at destroying O3**.
- This natural cycle occurs worldwide but is **relatively new in the Arctic**. Iodine's large concentrations are seen in the Antarctic but never in the Arctic until now.



East Asia Summit

❖ **Context**

➤ Minister of State for Commerce and Industry, attended East Asia Summit Economic Ministers' Meeting recently in **Siem Reap City** of Cambodia recently.



❖ **Key Highlights**

- The meeting saw representation from all **10 ASEAN** countries as well as 8 partner countries including Australia, China, India, Japan, New Zealand, South Korea, Russia & the US.
- The Ministers exchanged views on global and regional economic developments including the outcomes of the 12th WTO Ministerial Conference, post-pandemic economic recovery efforts, measures adopted to mitigate the impact of global supply chains disruptions and strong inflation pressure.

Association of Southeast Asian Nations

10 Member States:

- Brunei Darussalam (7 January 1984)
- Cambodia (30 April 1999)
- Indonesia (8 August 1967)
- Lao PDR (23 July 1997)
- Malaysia (8 August 1967)
- Myanmar (23 July 1997)
- Philippines (8 August 1967)
- Singapore (8 August 1967)
- Thailand (8 August 1967)
- Viet Nam (28 July 1995)

❖ **About East Asia Summit (EAS)**



- The EAS is the Indo-Pacific's premier forum for strategic dialogue. It is the only leader-led forum at which **all key Indo-Pacific partners** meet to discuss political, security and economic challenges facing the region, and has an important role to play in advancing closer regional cooperation.
- The EAS has 18 members.
- ASEAN leads the forum, and the chair position rotates between ASEAN Member States annually.

Face to Face Centres



National Logistics Policy

Context

➤ Prime Minister launched **National Logistics Policy** in New Delhi recently.

Key Highlights

The need for a national logistics policy was felt since the logistics cost in India is high as compared to other developed economies.



It is imperative to reduce the logistics cost in India for improving the competitiveness of Indian goods both in domestic as well as export markets.

- Reduced logistics cost improves efficiency cutting across various sectors of the economy, encouraging value addition and enterprise.
- A comprehensive effort to address issues of high cost and inefficiency by laying down an overarching interdisciplinary, cross-sectoral and multi-jurisdictional framework for the development of the entire logistics ecosystem, is yet another step in this direction.

- The policy is an endeavour to improve the competitiveness of Indian goods, enhancing economic growth and increasing employment opportunities.
- Ease of Logistic Services (E-Logs)**, a new digital platform will allow industry to directly take up operational issues with government agencies for speedy resolution.
- It aims to collapse all logistics and transport sector digital services into a **single portal**, thereby freeing manufacturers and exporters from the present tyranny of long and cumbersome processes.

The PM GatiShakti

NEW LOGISTICS POLICY

INTEGRATION OF DIGITAL SYSTEM (IDS):

Will integrate data from several ministerial departments to smooth cargo movement

UNIFIED LOGISTICS INTERFACE PLATFORM (ULIP):

Will display all modes of transport available to facilitate cargo movement

EASE OF LOGISTICS (ELOG):

Will simplify rules for logistics business

SYSTEM IMPROVEMENT GROUP (SIG):

Officers from ministries will monitor all logistics projects regularly to remove bottlenecks in a time-bound manner

FOCUS ON SKILLING:

Attention will be given to skilling. Generating employment will also be a key focus area

E-HANDBOOK:

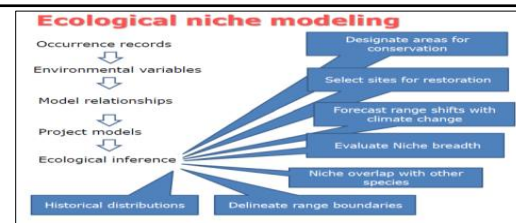
Will aim to standardise warehouses of physical assets

- National Master Plan for multi-modal connectivity, launched by the Prime Minister last year, was a pioneering step in this direction.
- PM GatiShakti will get further boost and complementarity with the launch of National Logistics Policy.

Ecological Niche Modelling (ENM)

Context

➤ A recent paper highlights the uses that ecological niche modelling can be put to within the context of India's geographies and agricultural economics.



Key Highlights of the Study

- Researchers used modelling strategies to examine the economically important spice, **saffron (*Crocus sativus*)**.
- Iran grows nearly 90% of the world's saffron while India produces 5%.**
- The temperate climate of **Jammu and Kashmir** is well-suited with a well-drained soil of high pH value (6.3 to 8.3), summer temperatures (when flowers develop) of around 25°C and good soil nutrient availability.
- The study used big data from **Global Biodiversity Information Facility & WorldClim web portal**, to identify identified **4,200 square kilometre** of new areas suitable for saffron cultivation in places in **Jammu and Kashmir, Himachal Pradesh, North Sikkim, Imphal, Manipur and Udagamandalam, Tamil Nadu.**

What is an Ecological Niche?

- An ecological niche is the **right set of environmental conditions** under which an animal or plant species will thrive.
- A range of ecological niches can occur within an ecosystem.
- Biodiversity is the result of these niches** being occupied by species that are uniquely suited to them.

Climate Change and Niche

- As the world's climate undergoes change, the ability of existing species to hold on to their biogeographic niches may be altered.
- This has an important bearing on agriculture as well.

What is Ecological Niche Modelling?

- It is a **predictive tool for identifying new possibilities** - new inhabitants for an existing habitat, or new geographical locations where a desirable plant may grow well.
- The modelling involves the use of computer algorithms to compare data about the environment and to make forecasts about what would be ideal for a given ecological niche.
- It can be used to examine economic feasibility within the context of changing ecological scenarios.

Varanasi : Nominated as First-ever SCO Tourism & Cultural Capital

Context

➤ Varanasi has been nominated as the first-ever **Shanghai Cooperation Organization (SCO) Tourism and Cultural Capital** during the period 2022-2023 at the **22nd Meeting of SCO Council** of Heads of State in Samarkand, Uzbekistan recently.

Face to Face Centres

❖ Key Highlights



- The nomination of Varanasi as the first ever SCO Tourism and Cultural Capital will promote tourism, cultural and humanitarian exchanges between India and the SCO member Countries.
- It also underlines country's ancient civilizational links with Member States of SCO especially the Central Asian Republics.

- Under the framework of this major cultural outreach program, a number of events will be hosted in Varanasi during 2022-23, for which guests will be invited to participate from SCO Member States.
- These events are expected to attract Indologists, scholars, authors, musicians and artists, photo journalists and travel bloggers.

News in Between the Lines

'INSPIRE' Awards



❖ Context

- Union Minister presents 'INSPIRE' awards to 60 Start-Ups, financial support to over 53,000 students recently.

❖ Key Highlights

- The award is instituted by the **Department of Science and Technology** and these innovators will be extended complete incubation support for their entrepreneurship journey.
- The scheme touched an unparalleled level of inclusivity by representing ideas and innovations of 702 districts of the country.

International Treaty on Plant Genetic Resources



❖ Context

- India is going to host 9th session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture .

❖ Key Highlights

- The Treaty is a **legally binding** comprehensive agreement adopted in November 2001 at Rome during the 31st session of Food and Agriculture Organization of the United Nations, which entered into force in June 2004.
- Deliberation will also be held on how to exchange and share the tolerant germplasm through a multilateral system.
- The event will also witness a discussion on farmers' and breeders' rights.

State level institution on lines of NITI Aayog



❖ Context

- A state level institution on the lines of NITI Aayog will be established in Maharashtra.

❖ Key Highlights

- It will help to bring drastic changes in sectors like agriculture, health, education, employment, environment etc. in the state.
- Chief executive officer of NITI Aayog and other experts made a presentation on how Maharashtra will be assisted by the Aayog for bringing about changes in various sectors.
- Skilled human resource and infrastructural facilities are available in the state and stress is being given on successful implementation of various schemes of the central government in the state.
- State government is planning to achieve target one trillion dollar economy by 2030.

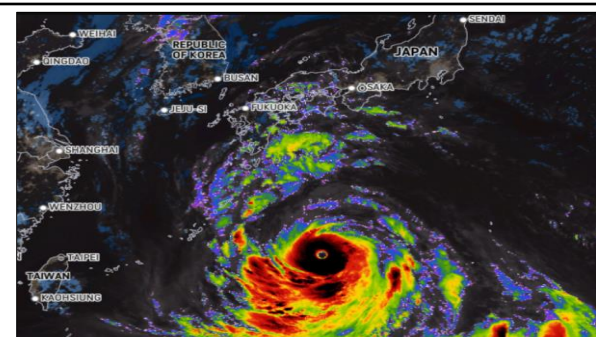
Nanmadol

❖ Context

- People in southwestern Japan have been ordered to evacuate as a powerful typhoon is set to hit the region.

❖ Key Highlights

- The super typhoon is forecast to hit southern Kyushu, one of Japan's southwest islands.



Face to Face Centres

Placoderms



❖ Context

- Scientists in Australia have unearthed preserved fossilised hearts and other organs of ancient fish (called placoderms) who inhabited a tropical reef about 380 million years ago during the Devonian Period.

❖ Key Highlights

- Placodermi is a class of armoured prehistoric fish, known from fossils, which lived from the Silurian to the end of the Devonian period.
- The discovery provides insight into the evolution of the bodies of vertebrates - including humans. The discovered fossils were 250 million years older than any previously known fish heart.

Hungers in Heating World Report



❖ Context

- The report was released by Oxfam International.

❖ Key Highlights

- Extreme hunger rose 123 % in six years (2017-2021) among 10 of the world's climate hotspots. The hunger in countries - Afghanistan, Burkina Faso, Djibouti, Guatemala, Haiti, Kenya, Madagascar, Niger, Somalia and Zimbabwe - is related to major weather extremes since 2000.
- As many as 18 million people in these countries are on the brink of starvation.
- Collectively, these 10 climate hotspots are responsible for just 0.13 per cent of global carbon emissions.

Net Direct Tax Collections



❖ Context

- India's net direct tax collections have crossed ₹7 lakh crore so far this year i.e in 2022.

❖ Key Highlights

- Personal Income Tax and the Securities Transaction Tax (STT) have yielded ₹3.3 lakh crore.
- Direct tax collections continue to grow at a robust pace, a clear indicator of the revival of economic activity post pandemic, as also the result of the stable policies of the Government, focusing on simplification and streamlining of processes and plugging of tax leakage through effective use of technology.
- It is 23.33% higher than the same period last year.

❖ Direct Tax

- Direct taxes are those that are levied directly on taxpayers - the income-tax, wealth tax, corporation tax, etc. In other words, it is a type of tax where the impact and the incidence fall under the same category.
- Direct taxes in India are overseen by the Central Board of Direct Taxes (CBDT).

UN General Assembly Session



[Daily Current Affairs](#)

[Daily Pre PARE](#) [Daily MCQ Quiz](#)

❖ Context

- External Affairs arrived in New York recently to participate in the 77th Session of the United Nations General Assembly.

❖ Key Highlights

About UN General Assembly (UNGA)

- The UNGA is the main policy-making organ of the Organization.
- Comprising all Member States, it provides a unique forum for multilateral discussion of the full spectrum of international issues covered by the Charter of the United Nations(UN).
- Each of the 193 Member States of the UN has an equal vote.
- The UNGA also makes key decisions for the UN, including:
 - appointing the Secretary-General on the recommendation of the Security Council
 - electing the non-permanent members of the Security Council.
 - approving the UN budget
- The Assembly meets in regular sessions from September to December each year, and thereafter as required.

- The theme of the 77th UNGA is 'A Watershed Moment : Transformative Solutions to Interlocking Challenges'.
- In keeping with India's strong commitment to reformed multilateralism, the Minister will host a Ministerial meeting of the G4 - India, Brazil, Japan, and Germany - as well as participate at the High Level Meeting of the L-69 Group on 'Reinvigorating Multilateralism and Achieving Comprehensive Reform of the UN Security Council'.
- The L-69 Group consists of developing countries from Asia, Africa, Latin America, Caribbean and Small Island Developing States, focused on reforms of the UN Security Council.

Face to Face Centres

