

1. U.S. Bill On Climate Action

Topic: International Relations



In News: The S. Senate has approved a Bill titled the Inflation Reduction Act (IRA) 2022 with a focus on climate, healthcare and tax provisions to address inflation.

More on the Topic:

Enabling Provisions:

- The historic legislation invests in a variety of efforts, **including low-carbon technologies, environmental justice initiatives for disadvantaged communities, and tax credits to promote electric vehicle sales.**
- The bill will **invest in creating a green bank** to finance clean energy technologies and emission-cutting infrastructure, such as residential rooftop solar panels.
- It will also **invest in to climate-smart agricultural practices and clean-vehicle manufacturing facilities.**
- On the resilience side the bill will make available **grants to support fire-resilient forests, forest conservation, and urban tree planting.** The bill also allocates funding for drought resilience in western states.

Mitigation Provisions:

- The bill has provisions for **Tax on large and profitable companies** to meet the green investment.
- It also imposes a fee on **methane leaks from oil and gas drilling.** At the same time, the Bill also aims at more investments in fossil fuels.
- The bill has provisions for expanding oil and gas drilling, with the federal government offering land for onshore and offshore drilling with the prerequisite that the entity will develop renewable energy.
- Thus, it handcuffs the expansion of oil and gas with renewable energy development.

How does the Bill help the U.S. achieve its climate targets?

- The Bill being the largest-ever investment in addressing the climate crisis in U.S. history, will help the nation get closer to its climate target of reducing 50-52% emissions below 2005 levels by 2030.
- The investments in the Bill have the potential to reduce greenhouse gas emissions by 31 to 44% by 2030.

Similar climate packages been announced by other countries:

- In 2022, Japan announced its '**Invest in Kisida**' plan which aims for a \$1.1 trillion investment to bolster the Japanese economy.
- As part of the plan, the country aims **to transition to clean energy and achieve 46% reduction in greenhouse gas emissions by 2030.**
- In June 2021, **the European Union (EU)** proposed a similar '**Fit for 55**' plan to reduce emissions by 55% by 2030.
- The plan is expected to become law soon. Being the largest emitters, both the U.S. and the EU can play a significant role in taking responsibility for historical emissions.

Source: Indian Express

2. Tax Devolution

Topic: Economy



In News: The Ministry of Finance released two installments of tax devolution to State Governments.

More on the Topic:

- The changed devolution is part of Centre's commitment to ensure that States have enough money to accelerate their capital and development expenditure.
- Tax devolution is one of the core tasks of the 15th Finance Commission constituted under **Article 280 (3) of the Constitution**. The commission makes recommendations regarding the distribution of net proceeds of taxes between the Union and the States.
- **15th Finance Commission headed by N. K. Singh.**
- The share of states in the central taxes is recommended to be 41%.
- This is less than the 42% share recommended by the 14th Finance Commission.

Over the 2021-26 period, the following grants will be provided from the centre's resources:

- Revenue deficit grants: 17 states will receive grants worth Rs 2.9 lakh crore to eliminate the revenue deficit.
- Sector-specific grants of Rs 1.3 lakh crore will be given to states for eight sectors:
- Health
- School Education
- Higher Education
- Implementation of agricultural reforms
- Maintenance of PMGSY roads
- Judiciary
- Statistics
- Aspirational districts and blocks.
- A portion of these grants will be performance-linked.

The Finance Commission recommended state-specific grants of Rs 49,599 crore. These will be given in the areas of:

- Social needs
- Administrative governance and infrastructure.
- Water and sanitation.
- Preservation of culture and historical monuments.
- High-cost physical infrastructure.

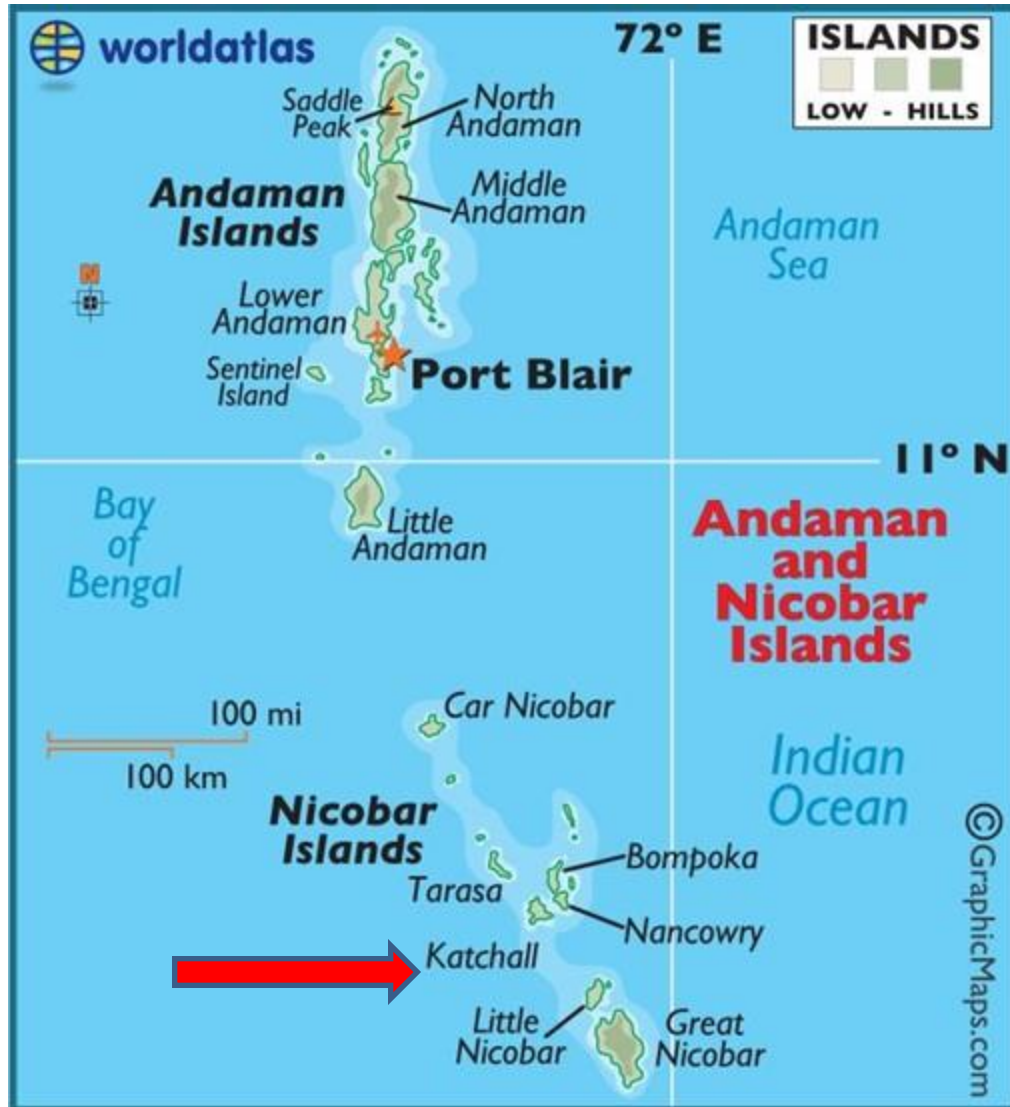
The total grants to local bodies will be Rs 4.36 lakh crore (a portion of grants to be performance-linked) including:

- Rs 2.4 lakh crore for rural local bodies.
- Rs 1.2 lakh crore for urban local bodies.
- Rs 70,051 crore for health grants through local governments.

Source: Indian Express

3. Mangrove cover of Katchal island

Topic: Environment and Ecology



In News: NASA has recently highlighted the loss of mangrove cover on Katchal island, a part of India's Nicobar archipelago.

More on the Topic:

- Katchal Island was previously known as Tihanyu.
- Katchal is inhabited by Nicobari Tribes and Migrated Tamilians (For Rubber plantation workers under Sastri-Srimao Bandaranayaka Pact of 1964).

About Mangroves:

- Mangroves are plants that grow in inter-tidal areas. They are halophytes ('salt-loving'). Most plants can not survive in salty conditions.
- Mangroves live in a unique environment-between land and sea.
- Mangroves represent a characteristic littoral (near the seashore) forest ecosystem.

- These are mostly evergreen forests that grow in sheltered low-lying coasts, estuaries, mudflats, tidal creeks backwaters (coastal waters held back on land), marshes, and lagoons of tropical and subtropical regions.
- Mangroves grow below the high water level of spring tides.

Threats Faced by Mangroves:

- Destroying of Mangroves for **agriculture purpose, industry use etc.**
- **Sea level rise, cyclones and tsunami, coastal erosion, oil spills**
- **Polluted water** also can cause destruction of mangroves.

Significance of Mangroves:

- Mangroves are highly productive ecosystems, and the trees may vary in height from 8 to 20 m. They protect the shoreline from the effect of cyclones and tsunamis.
- They are breeding and spawning ground for many commercially important fishes.
- Mangroves **moderate monsoonal tidal floods** and reduce the inundation of coastal lowlands.
- They **prevent coastal soil erosion**. Mangrove roots hold sediments back and prevent erosion.
- They provide numerous employment opportunities to local communities and augments their livelihood.

Mangroves in India:

- The major mangroves in India are found at:
- Sundarban Groves (The mangroves of Sundarbans are the largest single block of tidal halophytic mangroves in the world.
- This mangrove forest is famous for the Royal Bengal Tiger and crocodiles.
- Mahanadi Mangroves
- Krishna Godavari Mangroves
- Mangroves of Gujarat
- Ratnagiri Mangroves
- Goa Mangroves
- Cauvery Deltaic Mangroves
- Andaman Nicobar Mangroves

Source: Hindu

4. International Telecommunication Union's (ITU)

Topic: International Relations



In News: Ministry of Communications hosted the International Telecommunication Union's (ITU) RSF for Asia and Oceania region.

More on the Topic:

- The International Telecommunication Union (ITU) is the United Nations specialized agency for information and communication technologies – ICTs.
- Founded in **1865 to facilitate international connectivity in communications networks.**
- It allocates global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.
- **RSF is a platform for exchange of ideas, discussing standardization topics** like Sustainable Digital Transformation and Role of ITU Standards, Harnessing Technologies for Digital and Financial Inclusion in Emerging Markets, evolving Data Value Chain and Digital Health

Source: Indian Express

5. Porcupine strategy

Topic: International Relations



In News: Taiwan is focusing on Porcupine strategy.

More on the Topic:

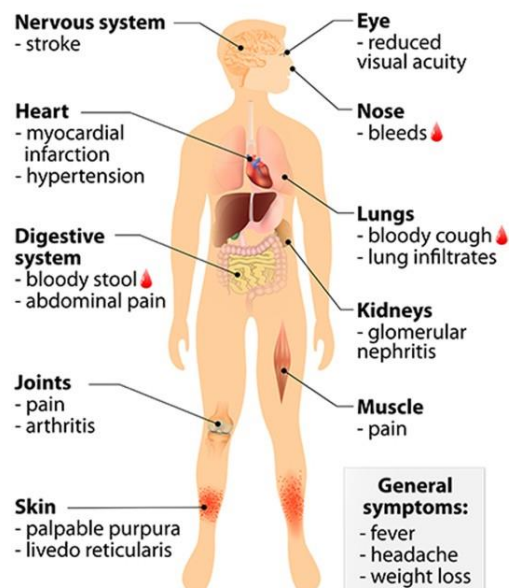
- This strategy focuses on solidifying a state's defences to exploit the enemy's weaknesses rather than taking on its strengths.
- It was first propounded by US Naval War College research professor William S Murray in 2008. the world marks International Lion Day, India has 674 Asiatic Lions in the country,.
- it is about building defences to ensure that Taiwan "could be attacked and damaged but not defeated, at least without unacceptably high costs and risks".
- It has two defensive layers.
- The outer layer is about intelligence and reconnaissance to ensure defence forces are fully prepared. Behind this come plans for guerrilla warfare at sea with aerial support from sophisticated aircraft provided by the US.
- The innermost layer relies on the geography and demography of the island.

Source: Business Standard

6. Vasculitis Disease

Topic: Science and Technology

VASCULITIS



In News: An actor has suffered from Vasculitis.

More on the Topic:

- Vasculitis involves inflammation of the blood vessels.
- The inflammation can cause the walls of the blood vessels to thicken, which reduces the width of the passageway through the vessel. If blood flow is restricted, it can result in organ and tissue damage. There are many types of vasculitis, and most of them are rare.

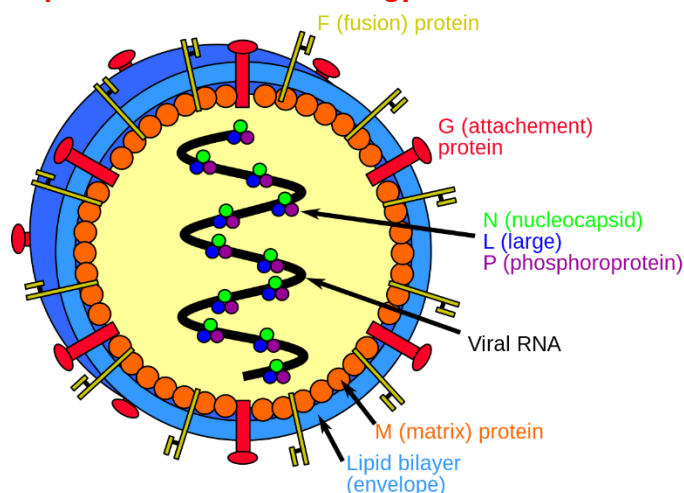
Causes:

- Infections, such as hepatitis B and hepatitis C.
- Blood cancers.
- Immune system diseases, such as rheumatoid arthritis, lupus and scleroderma.
- Reactions to certain drugs.

Source: Hindu

7. Langya Henipavirus

Topic: Science and Technology



In News: Langya henipavirus has infected nearly three dozen farmers and other residents in China.

More on the Topic:

- it is a zoonotic virus.
- It may have spread directly or indirectly to people from shrews -- small mole-like mammals found in a wide variety of habitats.
- It is also detected among domestic goats and dogs.
- Symptoms include Fever, fatigue, cough, loss of appetite etc. with health impacts such as Renal and Liver Failure.

Source: Hindu