

1. PARTNERSHIP FOR GLOBAL INFRASTRUCTURE AND INVESTMENT

Topic: International Relations



In News: The G7 countries have officially launched the Partnership for Global Infrastructure and Investment (PGII) recently.

More on the Topic:

- It is a joint initiative to fund infrastructure projects in developing countries.
- The project, is being seen as the bloc's **counter to China's 'Belt and Road Initiative'**.
- The stated purpose of both the PGII and the BRI is **to help secure funding for countries to build critical infrastructure** such as roads, ports, bridges, communication setups, etc. to enhance global trade and cooperation.
- Unlike BRI initiative, proposed G7 funding would depend largely on private companies.

Specialty of PGII:

- G7 informed the PGII is meant to be transparent, focused on building climate change-resilient infrastructure, and help in achieving objectives of gender equality and health infrastructure development.

Location of The Project:

- Apart from India, projects have been announced in countries across West Africa, Southeast Asia, and South America.

About China's BRI?

- China began the Belt and Road Initiative in 2013. It aims **to revive the ancient trade routes crossing to and from China—from Rome in Europe to East Asia.**
- Under this, the Chinese government helped in **providing loans for infrastructure projects to various countries**, and in many cases, Chinese companies were awarded contracts for carrying out the work. This helped China mark its footprints at a global level.
- However, China was criticised **for providing unsustainable debts** to countries that will be unable to repay them.

Source: Indian Express

2. ASSAM FLOOD

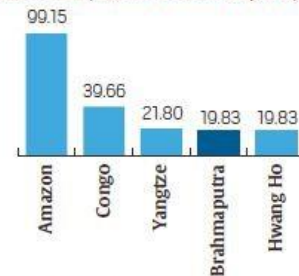
Topic: Disaster Management

AREA OF INFLUENCE

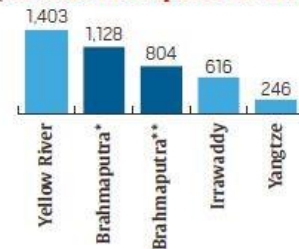


STRONGEST & SILTIEST

AVERAGE DISCHARGE AT MOUTH (1,000 CUBIC m/sec)



SEDIMENT YIELD (TONNES PER sq km PER YEAR)



*at Bahadurabad, Bangladesh; **at Pandu, Guwahati

In News: In recent years the extent of devastation due to floods has increased significantly in the state of Assam.

More on the Topic:

- According to the National Commission on Floods, around 40 per cent of Assam's land is prone to floods. It amounts to around 10 per cent of the total flood-prone area of the country.
- The State suffers an annual loss to the tune of Rs 200 crore on an average due to floods.
- According to Central Water Commission data from 1953 to 2016, **26 lakh people are affected every year in Assam on an average**, while 47 persons and 10,961 animals die and the State incurs damage of up to Rs 128 crore.

- For a population of over 3 crores, this leaves a huge impact on the economy of Assam.

Why Assam is Flood Prone?

Natural causes:

- Assam, situated at the foothills of the Himalayas, comprises two valleys, **Brahmaputra and Barak**, named after the respective rivers and two hill districts, along with a huge network of **over 20 large rivers and 50 tributaries**. This make the state naturally prone to flood when it rains and river overflows.
- Brahmaputra river flows through Assam. As it is coming from the Kailash range at an elevation of over 5,000 m, **the river gets highly sedimented and this sediment are deposited at the river beds. Thus elevating the river beds and reducing it's water carting capacity.**
- Additionally, **the monsoon is intense in the Northeast**. During monsoon, highly sedimented river water from the Himalayas combines with rain-fed water bodies in India, resulting in water spilling over land in the narrow valleys, leading to floods.
- Assam lies in a seismically active zone. **An increase in construction activities in the recent area has resulted in frequent landslides.**
- As sedimented rivers move through the state along with their tributaries, they take with them soil and sediment from banks. This is known as river bank erosion.
- **Soil erodes and rivers expand as it gets more area and this results in flooding.** The width of Brahmaputra has increased up to 15km due to bank erosion at some places in Assam.

Man Made Causes:

- **Embankments are constructed** to confine the course of a river. This has evolved to be an added challenge over time in Assam.
- Other man-made factors like **deforestation, hill cutting, encroachments and destruction of wetlands** have also worsened the flood situation.
- Embankments led to encroachment of river banks with an increasing number of people building houses and setting up establishments close to the river.
- There has also been **a population boom** in the State which has put more pressure on the State's ecology.
- Climate change is set to lead to more frequent and severe floods in Assam, as per a report on climate change by the State government.

Way Ahead:

- The State's unique topography, climate and socio-economic conditions make it more vulnerable to disasters like floods, with over one-third of the population living below the poverty line.
- In a master plan on the river in 1982, the Brahmaputra Board suggested that dams and reservoirs should be built to mitigate floods.
- A flood hazard atlas for Assam proposes **non-structural measures to mitigate the impact of floods like flood forecasting and warning, flood profiling, and regulation of reservoirs**. These measures, however, are yet to be translated on the ground.

- **Wetlands and local water bodies should be revived in Assam** to improve the drainage system, which can act as an exit for excess water and prevent waterlogging

Source: The Hindu

3.EU's ambitious draft law to restore nature

Topic: Environment and Ecology



In News: The European Commission (EC), the European Union's executive arm, unveiled a landmark legislation to restore nature and mitigate climate change on the European continent.

More on the Topic:

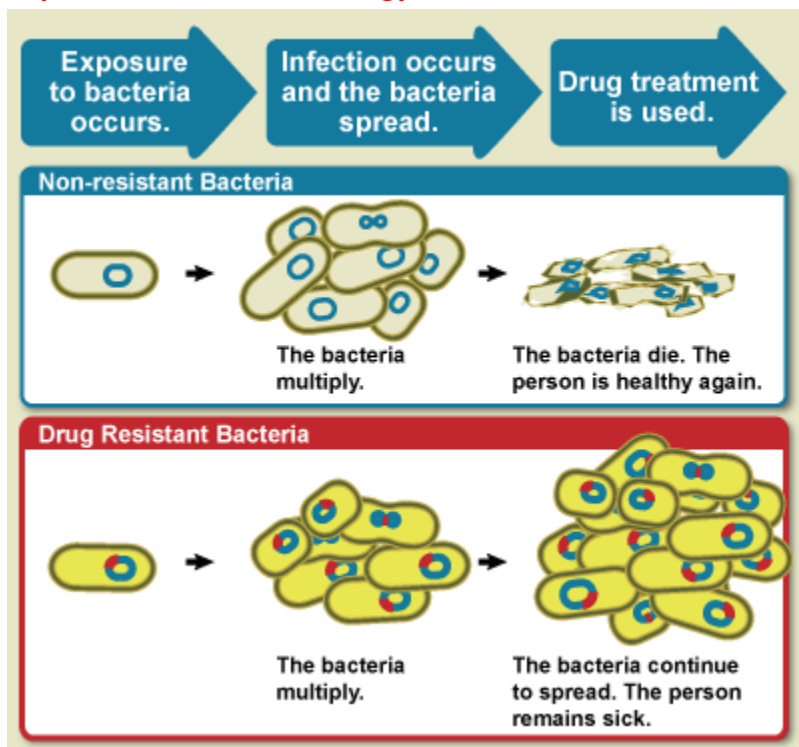
- The draft law calls for halving pesticide use across Europe by 2030 and dismantling big dams to make rivers free-flowing, among other things. The proposal is aimed at contributing to the continuous, long-term and sustained recovery of biodiverse and resilient nature across the EU's land and sea areas by restoring ecosystems.
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- It is also expected to contribute to achieving the EU's climate mitigation and climate adaptation objectives.

- The Intergovernmental Panel on Climate Change in its sixth assessment has called for urgent restoration of degraded ecosystems to mitigate climate change.
- The Glasgow climate pact too had underlined the significance of natural ecosystems for climate mitigation and adaptation.

Source: Hindu

4. DRUG-RESISTANT TYPHOID STRAINS

Topic: Science and Technology/ Health



In News: According to a large genome sequencing study, the effectiveness of antibiotics for typhoid fever is threatened by the emergence of resistant strains.

More on the Topic:

- The genome analysis has revealed that resistant strains – almost all originating in South Asia – have spread to other countries 197 times since 1990.
- Strains were classified as Multi Drug Resistant if they had genes giving resistance to antibiotics ampicillin, chloramphenicol, and trimethoprim/ sulfamethoxazole.

About Typhoid fever:

- Typhoid fever is a bacterial infection that can spread throughout the body, affecting many organs.
- Without prompt treatment, it can cause serious complications and can be fatal. It's caused by a bacterium called *Salmonella typhi*.
- It is usually contracted by ingestion of food or water that is contaminated with the excrements of people.
- Typhoid fever causes 11 million infections and more than 100,000 deaths per year. South Asia accounts for 70% of the global disease burden.

Source: Indian Express

5. Banda Singh Bahadur

Topic: Personalities in News



In News: The National Monuments Authority has observed the great warrior Banda Singh Bahadur's martyrdom on 25 June, 2022.

More on the Topic:

- Baba Banda Singh Bahadur was a great Sikh warrior and a commander of the Khalsa army who defeated the Mughals and freed a large part of North India.
- It was Guru Gobind Singh who sent Banda Singh to Punjab in 1708 and advised him to put an end to the cruelty of Punjab rulers.
- After establishing the Khalsa rule in Punjab, he abolished the zamindari system and granted property rights to the tillers of the land.
- He introduced the Nanak Shahi coins.

Source: Business Standard

6. Partners in the Blue Pacific' initiative

Topic: International Relations

Statement by Australia, Japan,
New Zealand, the United
Kingdom, and the United States on
the Establishment of the Partners
in the Blue Pacific (PBP)



In News: Amid China's aggressive push to increase its Pacific sphere of influence, the US and its allies, Australia, New Zealand, Japan and the United Kingdom have launched a new initiative called 'Partners in the Blue Pacific'.

More on the Topic:

- The PBP is a five-nation "informal mechanism" to support Pacific islands and to boost diplomatic, economic ties in the region.
- It simply means that through the PBP, these countries together and individually will direct more resources here to counter China's aggressive outreach.
- The areas where PBP aims to enhance cooperation include "climate crisis, connectivity and transportation, maritime security and protection, health, prosperity, and education".

US and China's Strategies In the Pacific:

- The US has long maintained a balance of power in the region with its **hub-and-spoke system** where America is the hub and its allies are spokes whose security is guaranteed by the US military power.
- **China is also believed to be trying to make its own version of the same system**, even as it insists the sole aim of the US policy of having overwhelming influence in the region is to contain Beijing's rise.

Why is the Pacific region strategically important?

- Among the 10 **largest standing armies** in the world, 7 reside in the Indo-Pacific; **and 6 countries in the region possess nuclear weapons.**
- **Nine of the world's 10 busiest seaports** are in the region, and **60 percent of global maritime trade transits** through Asia, with roughly one-third of global shipping passing through the South China Sea alone.

Source: Hindu
