

Prelim Bits 03-01-2023| UPSC Daily Current Affairs

Vibrant Village Programme

Union Home Minister urged the border guarding forces to make use of the Vibrant Village Programme for permanent security in border villages.

- Vibrant Villages Programme (VVP) was announced in the Finance Minister's Budget Speech 2022.
- The programme envisages coverage of border villages on the Northern border in states like Himachal Pradesh, Uttarakhand, and Arunachal Pradesh.
- These villages along India's border with China have a sparse population, limited connectivity and infrastructure.
- The programme is meant to improve infrastructure in villages which often get left out of the development gains.
- **Advantages** - It could increase tourism in border villages.
- It can make villages self-sufficient and equipped with all facilities.
- This could help to stem the trend of out-migration from border areas on the Indian side and possibly reverse it in the future.
- The borders can be permanently secured with patriotic citizens populated border villages.

Since 2017, China has undertaken large-scale construction activity along the border with India, building hundreds of border villages in Tibet to strengthen their presence along the frontier.

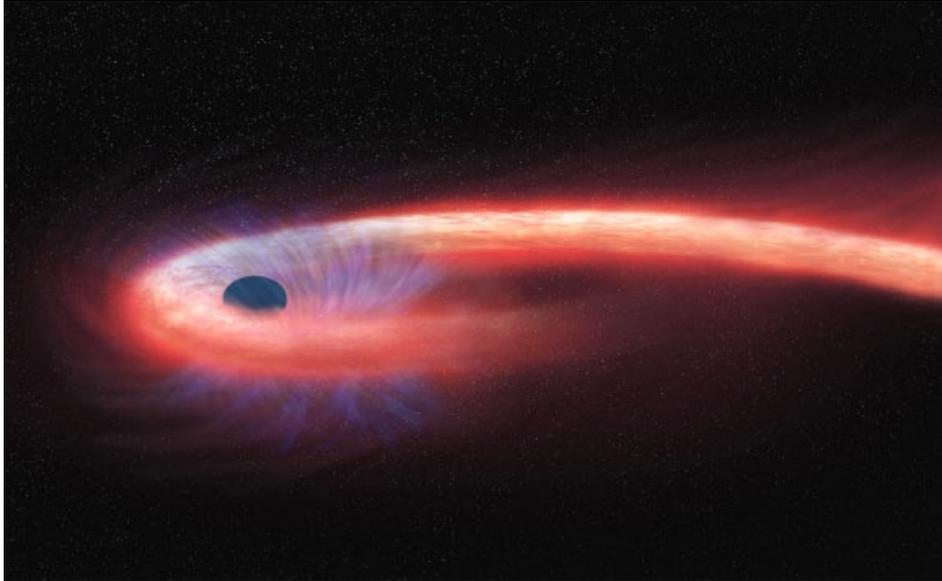
References

1. [The Hindu - Border guarding forces to use the Vibrant Village Programme](#)
2. [PIB - Vibrant Villages Programme](#)

Tidal Disruption Event

NASA operated Telescopes observed a massive black hole devouring a star.

- A tidal force is the difference in the strength of gravity between two points.
- If the tidal force exerted on a body is greater than the intermolecular force that keeps it together, the body will get disrupted.
- The astronomical phenomenon of the destruction of a star by a black hole is *formally* called a tidal disruption event (TDE).



Tidal Disruption Event

- Tidal disruption occurs when a passing star gets too close to a black hole and is torn apart into a stream of gas.
- Some of the gas eventually settles into a structure around the black hole called an accretion disk.
- The gradual growth of this material bound to the black hole produces a short-lived flare of emission, known as a tidal disruption event.
- TDE helps astronomers to study the impact of black hole's gravity on materials around it.

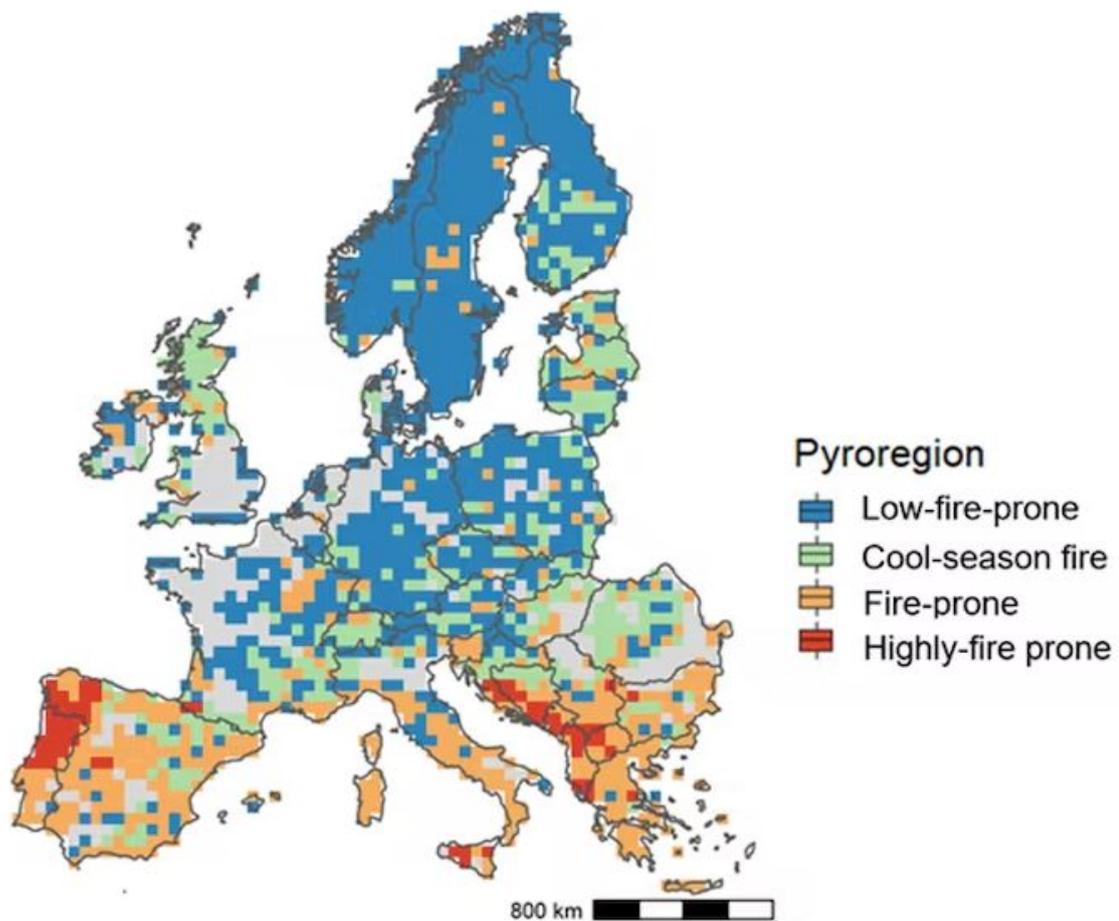
References

1. [The Hindu - What is a tidal disruption event?](#)
2. [NASA - Glimpse of Black Hole Snacking on Star](#)

Pyroregions

Summer 2022 saw 20-year freak fires in Europe's regions historically immune, close to normal in fire prone areas.

- The concept of 'pyroregions' classifies land beyond political classifications, covering areas with specific fire regimes.
- Pyroregions share similar characteristics, such as fire size, frequency, seasonality and intensity, which ultimately determine fire impacts.
- It provides a better lens through which to apprehend fire's spatial heterogeneity.
- These pyroregions do not follow administrative, ecological or climate borders, and can be seen as a practical and straightforward way of describing fire patterns across Europe.
- In a recent study, presented a pan-European pyrogeography featuring four distinctive pyroregions across the continent.



Distribution of 'pyro-regions' representing different fire characteristics across the continent.

Significance of Pyroregions

- Understanding similarities and differences among fire regimes are important to inform fire management and prevention.
- Global warming has been shown to increase the frequency and magnitude of fire weather conditions as observed during 2022.
- Pyroregions also help simulate future changes of fire patterns as the planet warms.

References

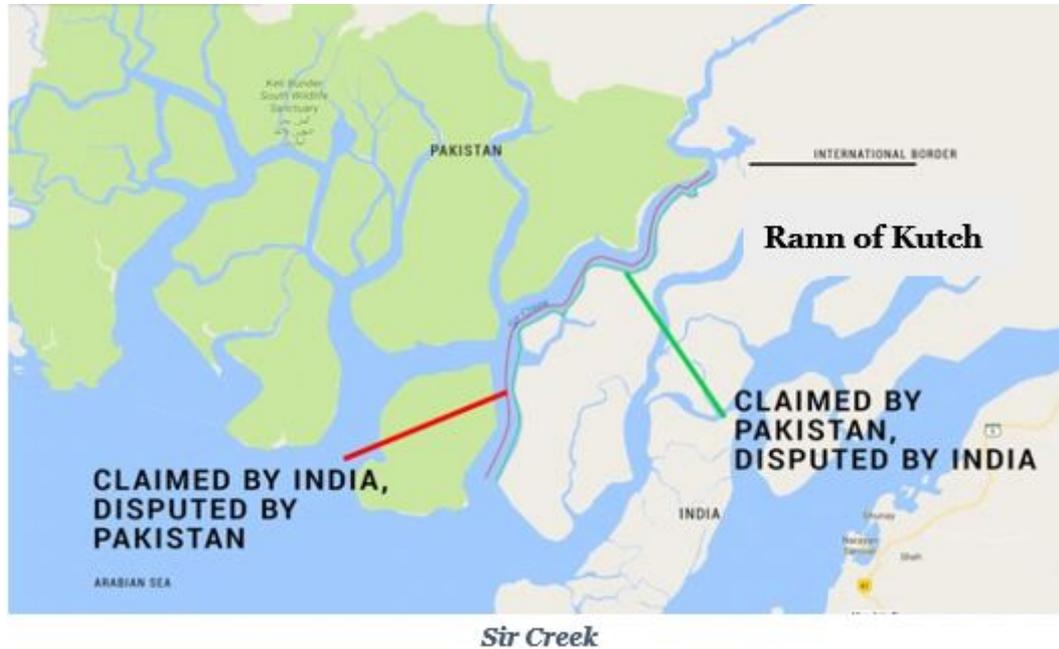
1. [Down To Earth - Europe's 'Pyroregions'](#)
2. [The Conversation - Europe's 'Pyroregions'](#)

Sir Creek

For the first time, India is constructing 'permanent vertical bunkers' to station BSF troops right at the strategically significant Sir Creek and Harami Nala.

- Sir Creek is a 98-km uninhabited tidal estuary between in the Rann of Kutch marshlands, which opens up into the Arabian Sea.
- Originally named Ban Ganga, Sir Creek is named after a British representative.
- It divides the Kutch region of Gujarat and the Sindh province of Pakistan.
- It is a disputed territory between India and Pakistan along the International border.

- The dispute lies in the interpretation of the maritime boundary line between Kutch and Sindh.
- Sir Creek area, a 4,050 sq.km marshy area which has very inhospitable weather and terrain.
- The marshes are home to poisonous snakes and scorpions.
- Harami Nala (22 km) is part of Sir Creek channel.



- **Security** - The Border Security Force (BSF) which guards Indo-Pakistan international border patrols Sir Creek area.
- **Significance** - Strategic location between India and Pakistan.
- Starting point of Maritime boundary between India and Pakistan.
- Sir Creek is considered to be one of the largest fishing grounds in Asia.

References

1. [The Hindu - India building permanent bunkers for BSF](#)
2. [Times Now - In first, permanent bunkers for BSF at Sir Creek](#)

Sammed Sikharji

The Jharkhand government's decision to turn Parasnath hills into eco-tourism spots was protested by the Jain community.

- Sammed Shikharji is located on the Parasnath hill in the Giridih district of Jharkhand.
- The hill is named after Parasnath, the 23rd Tirthankara who attained moksha here.

Parasnath hill is the highest mountain in the state of Jharkhand.

- Sammed Sikharji, or just Sikharji, stands 1,350 metres tall and is one of the most important pilgrimage sites for the Jains.
- The word 'Shikharji' in itself means a 'venerable peak'.

- It is considered to be the biggest pilgrimage site by both the Digambaras and the Svetambaras sects of Jainism.
- Every year thousands of Jain pilgrims from across the world undertake a 27-km-long trek to reach the summit.
- **Svetambara Pancha Tirth** - According to beliefs of the Jain community, Shikharji is ranked as the 'Svetambara Pancha Tirth' or the five principal pilgrimage shrines.
- The Svetambara Pancha Tirth are Ashtapad, Girnar, Dilwara Temples of Mount Abu, Shatrunjaya and Shikharji.

References

1. [The Hindu - Faith vs tourism: Samed Shikharji](#)
2. [Indian Express - Samed Shikharji: The Jain pilgrimage site](#)

