



1. Connectivity with Central Asian Countries

Topic: International Relations

In News: National Security Adviser (NSA) Ajit Doval said that the connectivity with Central Asian countries remains India's "key priority".

More on the Topic

- India's proximity and convergence on issues of mutual concern with the five Central Asian countries comprising **Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan is growing.**
- It have been reflected in **heightened cooperation in addressing emerging geostrategic challenges** in the wake of the COVID-19 pandemic and the changing world order.
- Concurrently, the two sides have enhanced deliberations and cooperation on areas such as trade and connectivity, economic development, development partnership, energy security, regional issues of mutual interests.
- There is also emerging mutual geopolitical concerns of each side on emerging challenges in Afghanistan.
- Earlier in January this year, Prime Minister hosted the first India-Central Asia Summit in a virtual format.



Significance of Central Asian Countries to India:

- **Connectivity:** Central Asia is strategically positioned as an access point between Europe and Asia and offers extensive potential for trade, investment, and growth.
- Central Asia does not have any direct border with India, hence it is imminent to have access to connectivity to this region.
- **Resource Richness:** All these states are rich in minerals and well-endowed with hydroelectric resources. Kazakhstan has the world's second largest reserves of uranium and is the world's largest producer;
- Uzbekistan has large reserves of gas, uranium and gold; Turkmenistan has fourth largest reserves of natural gas; Tajikistan has huge hydroelectric potential; Kyrgyzstan is rich in gold and hydroelectric power.
- **Security Challenges:** Religious extremism, fundamentalism, drug trafficking pose challenges to these societies and to regional stability.
- Issues relating to water, security, environment, migration have become acute. The region faces **newer threats of narco-terrorism emanating from Afghanistan.**
- The region is said to be an 'arena of great game' being played out between Russia, China, US, Turkey, Iran, Europe, EU, Japan, Pakistan, India, and Afghanistan, all of whom have **substantial security and economic stakes in the region.**
- **The China and Pakistan factor:** India does not share a common land border with any of these states has been a major bottleneck in promoting and expanding ties.
- **Pakistan does not allow direct routes to either Afghanistan or to Central Asia.**
- **China is, therefore, the transit land route for trade** which is time consuming and costly.
- India's Initiatives in the Region:
 - To improve connectivity, India has registered considerable progress in concluding a trilateral agreement for renovation of **Chabahar port**, development of the **International North South Transport Corridor (INSTC)** and becoming a member of the **Ashgabat Agreement.**
 - India's membership of **Shanghai Cooperation Organization (SCO)** as also the **Eurasian Economic Union (EEU)** promises to bridge this gap.
 - India is part of the **Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline.**

Source: Indian Express



2. Legacy Landfill Sites

CPCB guidelines for disposal of Legacy waste

- Guidelines published by CPCB in February 2019
- Treatment & disposal can be done by-
 - Bio-remediation
 - Bio-mining
- Excavation of old dumped waste and make windrow of legacy waste, thereafter stabilization of waste through bio-remediation
- Screening of stabilized waste to recover valuable resources (organic fines, bricks, plastic, metal, cloth etc.)

Topic: Environment and Ecology

In News: Five states account for more than half of the 1,080 “legacy landfill sites” for which authorities are yet to propose remediation plans under the Swachh Bharat Mission-Urban 2.0.

More on the Topic:

- Swachh Bharat Mission-Urban 2.0, which aims to clear all legacy dump sites by 2026.
- Old waste at landfill sites that has **remained dumped for more than three months is considered “legacy” dump sites.**
- More than 3,000 dumpsites in India need to be reclaimed or closed permanently.
- Unscientifically constructed landfills generate leachates, emit greenhouse gases like methane, pollute groundwater, etc.
- Under the SB mission, municipalities are required to submit action plans for **bio-remediation of legacy landfills.**

Categories of Legacy waste:

- Depending on the composition, the waste is divided into **refused derived fuel (RDF)** for waste-to-energy plants, **construction and demolition (C&D) waste** for recycling by C&D plants and **bio-soil that can be used to fill gaps in road construction.**
- After clearing the dump sites, municipalities are required to firm up plans for alternative use of the land, which, according to the dashboard, is over 47,000 acres of urban land.

About Bioremediation?

- Bioremediation is a process that uses mainly microorganisms, plants, or microbial or plant enzymes to detoxify contaminants in the soil and other environments.

- The process of bioremediation can be undertaken **on-site without causing a major disturbance to human activities and environment.**
- Bioremediation is known as a costs effective process compared to conventional treatment methods.
- Bioremediation can take place **anaerobically or aerobically** with the assistance of microorganisms.

Source: PIB

3. Environmental Impact



Topic: Environment and Ecology

In News: The Global Sustainability Standards Board (GSSB), an independent global organisation, has approved Revised draft of standards for firms to self-report environmental impact.

More on the Topic:

- The exposure draft will be a **response from the companies to its multiple stakeholders who demand to assess more, disclose and curb their biodiversity impacts.**
- GRI is a global entity that **helps businesses take responsibility for their impacts on biodiversity.**
- GRI disclosures on biodiversity were last revised in 2006.
- The exercise will review the GRI 304, a biodiversity-related topic. **It defines reporting requirements on the topic of biodiversity by an organisation.**
- The standards will play major role In **post 2020 Global Biodiversity Framework** which has been adopted by United Nations Convention on Biological Diversity.

The revised proposal of GRI 304 suggested to:



- Reflect **reporting throughout the supply chain**, given many biodiversity impacts are found beyond the scope of a company's own operations.
- Help organisations **prioritise attention on their most significant impacts**, recognising the challenge of scale in addressing biodiversity impacts.
- Add **new disclosures to connect with the drivers of biodiversity loss**, including climate change, pollution and overexploitation of resources.
- Introduce requirements for **biodiversity-related human rights impacts**, such as those on indigenous peoples, local communities and workers.
- **Emphasise location-specific data** to ensure businesses are transparent about the sites where their biodiversity impacts take place.

About Biodiversity:

- Biodiversity is **all the different kinds of life you'll find in one area**—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world.
- Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life.

Human Pressure on the Bio Diversity:

- As humans put increasing pressure on the planet, using and consuming more resources than ever before, we risk upsetting the balance of ecosystems and losing biodiversity.
- WWF's 2022 Living Planet Report found **an average 69% decline in global populations of mammals, fish, birds, reptiles, and amphibians since 1970.**
- The 2019 landmark Global Assessment Report by the Intergovernmental Platform on Biodiversity and Ecosystem Services reported **1 million animal and plant species are now threatened with extinction** the highest number in human history.

Source: Hindu

4. eSanjeevani Telemedicine Service



Topic: Government Schemes

In News: National Telemedicine Service, eSanjeevani, has clocked 8 crore tele-consultations so far.

More on the Topic:

- In less than 3 years, **this initiative has garnered the distinction of being the world's largest government owned telemedicine platform.**
- It consists of two verticals that cater to patients across all states and UTs successfully making its presence felt in the innermost regions of the nation.
- The first vertical **eSanjeevaniAB-HWC endeavors to bridge rural-urban digital health divide** by providing assisted teleconsultations, and ensuring that e beneficiaries of Ayushman Bharat Scheme are able to avail of the benefits they are entitled to.
- This vertical operates on a **Hub-and-Spoke model** wherein the '**Ayushman Bharat-Health and Wellness Centers**' (HWCs) are set up at state level, act as spokes, which are mapped with the hub (comprising MBBS/ Specialty/Super-Specialty doctors) at zonal level.
- **eSanjeevaniOPD is the latter vertical** which caters to citizens in both rural and urban alike.
- It leverages technology via smartphones, tablets, laptops enabling doctor consultations to be accessible from the patient's residence regardless of location.
- **eSanjeevani is a cohesive part Ayushman Bharat Digital Health Mission (ABDM)**, and more than 45,000 ABHA IDs have been generated via eSanjeevani application.

Source: Indian Express

5. Sponge Bleaching Event



Topic: Environment and Ecology

In News: Earlier this year, New Zealand recorded the largest-ever sponge bleaching event off its southern coastline.

More on the Topic:

- While only one species, the cup sponge *Cymbastella lamellata*, was affected, a prolonged marine heatwave turned millions of the normally dark brown sponges bright white.
- **Why Sponge is Important?**
- Sponges are among the **most ancient and abundant animals on rocky reefs across the world.**
- They serve a number of important ecological functions. **They filter large quantities of water**, capturing small food particles and moving carbon from the water column to the seafloor where it can be eaten by bottom-dwelling invertebrates.
- **These invertebrates in turn are consumed by organisms further up the food chain**, including commercially and culturally important fish species.
- Sponges also **add three-dimensional complexity to the sea floor**, which provides habitat for a range of other species such as crabs, shrimps and starfish.

Sponge Bleaching:

- Like corals, **sponges contain symbiotic organisms** thought to be critical to their survival.
- *Cymbastella lamellata* is unusual in that it hosts dense populations of **diatoms, small single-celled photosynthetic plants that give the sponge its brown colour.**
- These diatoms live within the sponge tissue, **exchanging food for protection. When the sponge bleaches, it expels the diatoms**, leaving the sponge skeleton exposed.

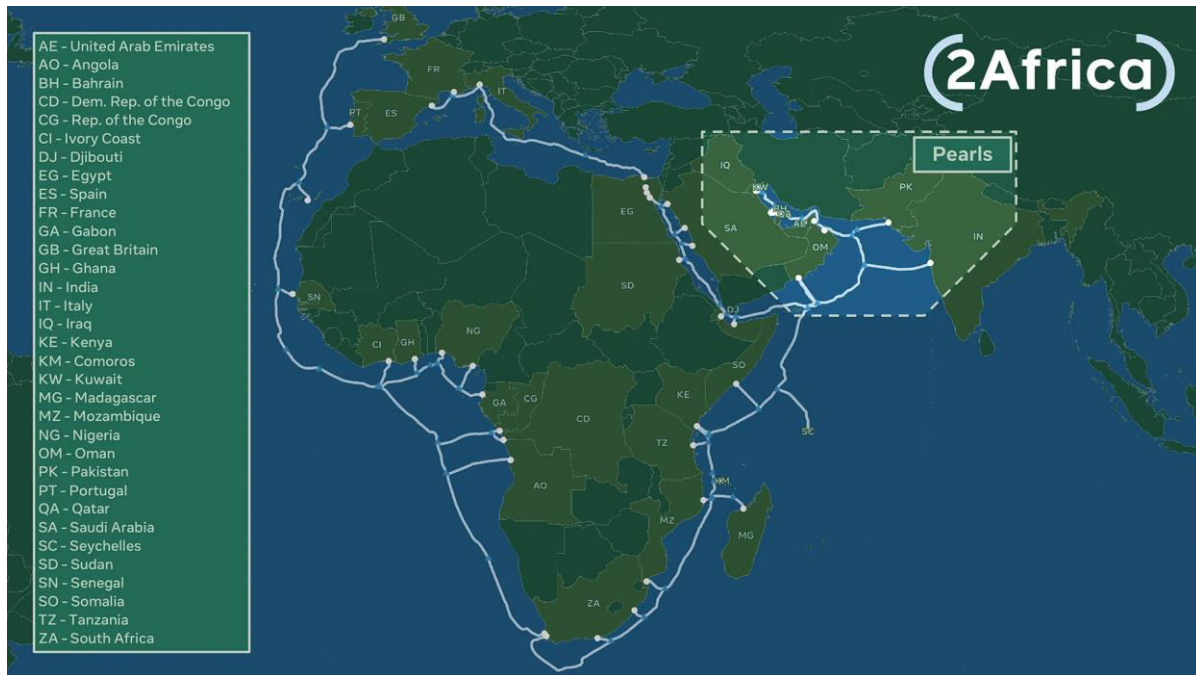


- Tissue loss occurs when sponges are stressed and either have to **invest more energy into cell repair** or when their food source is depleted and they reabsorb their own tissue to reduce body volume and reallocate resources.
- **Tissue decay or necrosis on the other hand is generally associated with changes in the microbial communities living within sponges** and growth of pathogenic bacteria.

Source: Hindu

6. 2Africa Pearls

Topic: Science and Technology



In News: Bharti Airtel would partner Facebook parent Meta to jointly invest in global connectivity infrastructure that would extend a subsea cable the 2Africa Pearls to India.

More on the Topic:

- The landing of 2Africa will improve the connectivity of fixed-line broadband internet in India.
- The 2Africa cable will significantly boost India's cable capacity and empower global hyper-scalers and businesses to build new integrated solutions. They will also provide a high-quality seamless experience to customers.
- It is one of the **world's longest subsea cable systems** that will ultimately interconnect countries in Africa, Asia, and Europe.
- Once completed the system **will provide connectivity to a total of 3 billion people and improve connectivity of fixed-line broadband internet in India.**

Source: Business Standard

7.Jallikkatu

No 18, B.B.M.P Building
Kanakapura road ,
Tata Silk Farm, Jayanagar,
Bengaluru, Karnataka-560028

+91 89710 43904 | rvta@rvei.edu.in

Go, change the world



Topic: Culture

In News: SC is examining the case of Jallikattu.

More on the Topic:

- Jallikattu is a bull taming sport.
- Multiple human participants attempt to grab the large hump on the bull's back with both arms and hang on to it while the bull attempts to escape.
- It is typically practised in the state of Tamil Nadu as a part of Pongal celebrations in January.
- Supporters of the sport claim it to be part of cultural rights under **Article 29(1) of the Constitution**.
- Opposers of the game considers it as cruelty against animals.

Source: Business Standard
