

World Sustainable Development Summit 2021



- Prime Minister will inaugurate the World Sustainable Development Summit 2021
- The theme of the summit is 'Redefining Our Common Future: Safe and Secure Environment for All'
- The 20th edition of The Energy and Resources Institute's (TERI) flagship event- the World Sustainable Development Summit, will be held online from 10th to 12th February.
- The summit will bring together a wide number of governments, business leaders, academicians, climate scientists, youth and the civil society in the fight against climate change.
- Energy and industry transition, adaptation and resilience, nature based solutions, climate finance, circular economy, clean oceans and air pollution, are amongst the range of topics to be discussed during the summit
- The Ministry of Environment, Forests and Climate Change, the Ministry of New and Renewable Energy and the Ministry of Earth Sciences are key partners of the summit.

Astro- Tourism



- Ministry of Tourism organised webinar titled "Astro-Tourism: The Next Frontier of Nature-based Tourism" under Dekho Apna Desh campaign
- It focuses on promoting nature-based tourism which is emerging strongly in a post – COVID world, the major thrust of the webinar was sustainable and responsible travel
- The webinar focused on exploring the evolution of Astro-tourism as one of the most authentic and environment-friendly ways of travelling along with its immense potential to bring positive social, economic and conservation benefits to remote communities.
- During the webinar, the participants briefed about Astrostays which is a community-driven astro tourism model that puts communities at the heart and center of the tourism model.

- The program is aimed at empowering and strengthening communities by diversifying economic bases and creating new opportunities for livelihood creation using astro tourism as a key development intervention.
- This model is also an innovative form of experiential and sustainable tourism that generates economic benefits for remote and rural regions of the world that have access to clear night skies while creating unique life-changing experiences for travellers.

Major destinations of Astro-tourism in India

- Pangong Lake (Ladak), Rann of Kutchh (Gujarat), Mandu (Madhya Pradesh), Lahaul & Spiti (Himachal Pradesh) etc.
- It refers to any kind of tourism that involves the night sky or visiting facilities related to astronomy like observatories, and combining that with a broader sense of ecotourism where interaction with nature is what the visitor experience is about

Dhuli-Kalinga Mahotsav



- The 17th Dhuli-Kalinga Mahotsav jointly organised by Department of Tourism, Government of Odisha and Orissa Dance Academy in association with Art Vision
- The main objective for organization of this festival is to preserve, promote and popularize the heritage at the national and international level.
- This festival is organized from 6th to 8th February 2021 at the foothill of Dhuli Shanti Stupa, Bhubaneswar.

Glacial Lake Outburst Floods (GLOFs).



- When glaciers melt, the water in glacial lakes accumulates behind loose, natural “glacial/moraine dams” made of ice, sand, pebbles and ice residue. A GLOF refers to the flooding that occurs when the water dammed by a glacier or a moraine is released suddenly.
- A moraine-dammed lake forms as a glacier retreats, and meltwater fills the space between the proglacial moraine (in front of the glacier) and the retreating glacier.
- As the volume of the glacial lake grows, so does the pressure on the dam containing it. Fragmentation of the source glacier, landslides and other processes can trigger displacement waves in the lake, potentially compromising the stability of the dam and resulting in a GLOF. Failure of the dam can also occur due to internal processes, such as water seeping through the structure.

Improving Covishield efficiency

(Dr. M.S. Seshadri & Dr. T. Jacob John)

- On January 16, large-scale vaccination of healthcare workers began across India.
- Two vaccines are in use — Covishield and Covaxin — both rolled out under emergency use authorisation (EUA) by the Drugs Controller General of India (DCGI), with the condition that all information on adverse reactions following immunisation (AEFI) be collected.
- For Covishield, the responsibility of AEFI monitoring is with the Government of India, since the authorisation for restricted use is at the discretion of the government.
- The critical lesson is that the efficacy after the second dose was only 54.9% when given 4-6 weeks after the first dose but 82.4% when the second dose was delayed to 12 weeks.
- It is an accepted principle in vaccine immunology that the second dose of a vaccine administered after 28 days functions as a booster and the longer the time interval between the two doses — upto six months — the higher the booster response.
- The present COVID-19 vaccination roll-out in India has completed first dose administration of vaccine to 43.9 lakh (47%) out of 92.6 lakh registered healthcare workers from the public and private sectors by February 3, 2021.
- It would be important to start registering the empty slots for the elderly and vulnerable and to administer the first dose of the vaccine to these subjects who are at high risk of serious disease and death from the novel coronavirus infection.

A Budget not for the environment (Ashish Kothari)

- Governments have not put in the substantial new financial resources raised through rapid growth into environmental protection.
- Budgetary allocations for the Ministry of Environment, Forest and Climate Change (MoEFCC) have consistently fallen as a percentage of total allocations.
- Second, even when there are increased allocations, such as for cleaning up the Ganga, their usage is ridden with such design flaws, inefficiencies and corruption that the environment is no better off than before.
- On several significant items relating to the environment, and taking inflation and needs into account, allocations have remained stagnant or fallen.
- This includes the MoEFCC and crucial institutions such as the Wildlife Institute of India and the Indian Council of Forestry Research and Education.
- There are substantial allocations to sectors that have a positive environmental impact.
- For instance, the 2021 Budget has allocated ₹3,500 crore for wind and solar energy, ₹4,000 crore for a 'Deep Ocean Mission', and ₹50,011 crore for urban drinking water.
- India's major push for renewable energy (RE) has earned it global appreciation.

- In principle any scheme for urban drinking water is positive.
- But with the continuation of a highly centralised approach to all such schemes, there is a 'one size fits all' approach, heavily focused on expensive infrastructure like big reservoirs and pipelines
- Instead, a decentralised approach that uses a mix of local rooftop and backyard harvesting, restoration and conservation of urban wetlands, and regenerating groundwater could achieve much better results.
- And as in energy, there is no focus on incentivising responsible consumption, restraining luxury uses, and redistributing water more equitably, without which no amount of infrastructure will be enough.
- The 'Deep Ocean' allocation is intriguing. It is being projected as a programme for conservation of biodiversity in the depths of our marine areas. This would be cause for cheer, given the serious neglect of our oceanic areas.
- Potentially, an allocation of ₹18,000 crore for public transport could have significant benefits for people and the environment if it helps to reduce private vehicle density in cities.
- But if much of this is allocated to the metro rather than to buses and other such earthy alternatives (including last mile connectivity, incentives for walking and cycling), the picture becomes murky.
- There is then the very worrying issue of allocations to non-environmental sectors that have a negative impact on the environment.
- For instance, the Budget proposes 11,000 km more of national highway corridors.
- In the last few years, massive road and dam construction has fragmented fragile ecosystems and disrupted local community life in the Himalaya, Western Ghats, north-east India and elsewhere.

Law and compassion

- It may be that the Governor decided that it is beyond the State's executive power because the Rajiv Gandhi case was tried under a central anti-terrorism law and under CBI probe.
- Further, in a situation arising from the State government's attempt in 2014 to remit their sentences under the Cr.P.C., the apex court had ruled in 2015 that such remission would require the Centre's concurrence.
- One could speculate that the delay reflected the Centre's concern about releasing those involved in the plot to assassinate a former Prime Minister, and its ramifications for its policy of 'zero tolerance' towards terror.
- It is equally a matter of speculation whether the ruling party at the Centre is reserving the issue for appropriate use closer to the Assembly polls.

Troubled mountains

- The staggering collapse of part of a glacier in Uttarakhand's Nanda Devi mountain and the ensuing floods that have claimed many lives come as a deadly reminder that this fragile, geologically dynamic region can never be taken for granted.
- A significant slice of the glacier, dislodged by a landslide, according to some satellite images, produced roaring torrents in the Rishiganga and Dhauliganga rivers in Chamoli district, trapping unsuspecting workers at two hydro power project sites.
- The State's deep gorges and canyons have attracted many hydroelectric projects and dams, with little concern for earthquake risk.
- Red flags have been raised repeatedly, particularly after the moderate quake in 1991 in the region where the Tehri dam was built and the 2013 floods that devastated Kedarnath, pointing to the threat from seismicity, dam-induced microseismicity, landslides and floods from a variety of causes, including unstable glacial lakes and climate change.
- India is heavily invested in dam development and growth of hydropower, largely in the Himalaya region — especially to cut carbon emissions.
- By one estimate, if the national plan to construct dams in 28 river valleys in the hills is realised in a few decades, the Indian Himalayas will have one dam for every 32 km, among the world's highest densities.
- Yet, as researchers say, this may be a miscalculation for reasons, including potential earthquake impacts, monsoonal aberrations that could repeat a Kedarnath-like flood, severe biodiversity loss and, importantly, extreme danger to communities downstream.
- There is also some evidence that the life of dams is often exaggerated, and siltation, which reduces it, is grossly underestimated: in the Bhakra dam in Himachal Pradesh, for instance, siltation was higher by 140% than calculated.

First steps in the journey to universal health care

(Written by Soham D. Bhaduri)

- For India, the lesson of COVID-19 entails setting forth on a steady and incremental path to universal health coverage; not attempting a sudden and giant leap.
- The Union Ministry of Health and Family Welfare budget for 2021-22, viz. ₹73,932 crore, saw a 10.2% increase over the Budget estimate (BE) of 2020-21 — a modest increase even nominally. Also, a corpus of ₹64,180 crore over six years has been set aside under the PM Atma Nirbhar Swasth Bharat Yojana, (PMANSBY) for strengthening health institutions, and ₹13,192 crore has been allocated as a Finance Commission grant.
- The BE for the Pradhan Mantri Jan Arogya Yojana (PM-JAY), which covers over 50 crore poor Indians for hospital expenses up to ₹5 lakh per annum, has stagnated at ₹6,400 crore for the current and the preceding couple of years.

- Another related issue is the persistent and large discrepancies between official coverage figures and survey figures (for e.g. the National Sample Surveys, or NSS, and National Family Health Survey) across Indian States
- Health and Wellness Centres — 1,50,202 of them — offering a comprehensive range of primary health-care services are to be operationalised until December 2022.

The long and the short of India's Naypyitaw dilemma

(Written by Happymon Jacob)

- The long-lingering power struggle in Naypyitaw has finally ended, and the Myanmar junta, led by General Min Aung Hlaing, has won the struggle, dashing decade-long hopes for a truly democratic Myanmar.
- The future of Myanmar's democracy is uncertain, but the country, sandwiched between two powerful states competing for power and influence, is certain to be a key piece in the region's geopolitics.
- Strong reactions and the threat of sanctions from the United States and the West in the wake of the recent coup could lead to unique political realignments in Myanmar.
- As a result, even though the democratic credentials of the former State Counsellor, Aung San Suu Kyi, remain deeply diminished today, thanks to her shocking justification of the ill-treatment meted out to the Rohingya
- This is a coup that seems to suit no one except the Tatmadaw, the armed forces of Myanmar.
- In the short run, the coup stands to hurt the interests of China, India and even the rest of the international community, all of whom were able to do business with Myanmar
- Even though international sanctions are unlikely to have a major impact on the country's largely inward-looking junta and its Generals with little external interests
- it would still expect Beijing to give them political and diplomatic support both within the region and globally.
- Decisive western sanctions will force the military to get closer to China.
- The dual power centres of the military and the civilian government that existed in Naypyitaw until recently, suited New Delhi quite well as it did not have to worry about hurting the international community's normative concerns or sacrificing its national interests while engaging them both.
- While India's national interests, under the new circumstances, would clearly lie in dealing with whoever is in power in Myanmar, India would find it difficult to openly support the junta given the strong western and American stance.
- On the other hand, it can ill-afford to offend the junta by actively seeking a restoration of democracy there. Being a close neighbour with clear strategic interests in Myanmar, offending the junta would be counter-productive.

- While a friendless Myanmar junta getting closer to China is a real worry for New Delhi, there are other concerns too.
- For one, Myanmar's military played a helpful role in helping New Delhi contain the north-eastern insurgencies by allowing Indian military to pursue insurgents across the border into Myanmar.
- Coordinated action and intelligence sharing between the two forces have in the recent past been instrumental in beating back the insurgent groups in the northeast.
- Unless the military decides to engage in a peace process to gain some brownie points for itself, the Rohingya question is likely to be pushed aside with the campaign against them continuing relentlessly

NPCI PayAuth Challenge



- The National Payments Corporation of India (NPCI) has launched a global hackathon "NPCI PayAuth Challenge" to find alternatives for the authentication of UPI transactions.
- NPCI said the hackathon intends to encourage fintechs, solution providers and developers to submit unique solutions.
- The winner of the hackathon will be awarded \$20,000, whereas the runner-up will be given \$10,000.

Kibber Wildlife Sanctuary



- The Lahaul-Spiti district administration has banned car rallies through the snow leopard landscape of Kibber Wildlife Sanctuary area of Spiti to protect vulnerable wildlife species.
- Kibber Wild Life Sanctuary (Survival) is the largest in Spiti valley.
- Its area is 2200 square kilometers. Pin Valley's Wildlife Sanctuary is 675 square kilometers connecting Kullu with Lahul, while Chandratat Sanctuary is spread over 50 square kilometers.
- Kyiber, commonly known as Kibber or Kibber Khas village, is a high altitude village in Spiti valley and acclaimed as the second highest motorable village in the world.
- With a population of under 400 people, Kibber is home to the magnificent snow leopards. The Himalayan Snow Leopard Research Center at Kibber has been instrumental in the conservation of the animal.
- An ancient trade route between Spiti valley and Ladakh across the Parang La Pass initiates at Kibber. Nomadic tribes of Changthang region in Ladakh and people of Spiti used to trade by barter system, for horses, yaks, and food at the famous La Darcha festival.

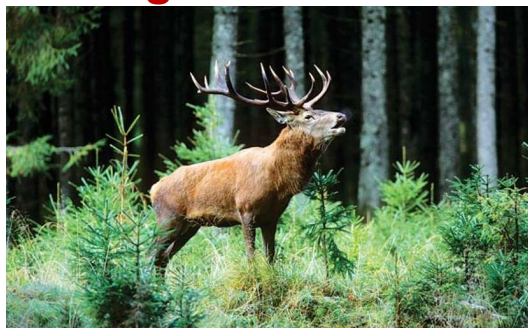
- Though Langza village is most famous in Spiti valley for fossil hunting, the entire region of Spiti valley is fossiliferous, including Kibber. Don't be surprised if you stumble upon an ammonite or marine fossil here, as the whole Himalayan belt rose from the ancient Tethys sea only.
- With an elevation range of 3600-6600 meters and spread across 1400 square kilometers, this is the only sanctuary in India which is situated in a cold desert.
- This Himalayan forest harbors some rare species of flora and fauna.
- The superstar of this sanctuary is obviously the magnificent snow leopard, which is difficult to spot.
- However, their sightings have increased significantly in the past decade and at present, there are around 25-30 snow leopards in Kibber sanctuary. Besides this sanctuary, it can be spotted at Pin Valley National park also in Himachal.
- Also, known as the 'grey ghosts', snow leopards are easier to spot during the winter season in Spiti Valley.
- During winter, their prey 'Himalayan goats' and other animals come down from higher altitudes to the valley for food. Snow leopards come down the trail following their prey and hence become visible.

At 6.5% Navy has more women than Army and IAF, shows govt data



- Indian Navy has the maximum percentage of women in its workforce among the three services at 6.5%, government data showed
- The percentage of women in the Army and the Air Force stood at 0.56% and 1.08% respectively. Around 704 women serve in the Navy as compared to 10,108 men, while 6,807 women serve in Army as compared to 12,18,036 men.

Dachigam National Park.



- Dachigam National Park arranges food for Kashmiri stag after snowfall
- Dachigam National Park was established in 1981 and it is located in the high altitude temperate zone in Jammu & Kashmir which is only 22 km away from the Srinagar.
- The average height of the park is 2990 meters from the sea level.
- The park is spread in 141 kms. Main trees found in the park are; Himalayan moist temperate evergreen, moist deciduous and shrubs, deodar, pine and oak. The term Dachigam stands 'ten villages'.

- Dachigam was initially established to ensure the supply of clean drinking water to Srinagar city.
- The park is best known as the home of the Hangul, or Kashmir stag
- Himalayan Black Bear are visible in the lower reaches from spring to autumn and hibernate in winter.
- Long-Tailed Marmots are very conspicuous during summer in the upper reaches while Mouse Hare are active throughout the year.
- The National Park occupies almost half of the catchment zone of the famous Dal Lake and still plays a crucial role in supplying clean drinking water to the inhabitants of Srinagar.
- Important wildlife species of this park are leopard, snow leopard, black bear, brown bear, jungle cat, Himalayan marmot, musk deer, serow and red fox. Amongst the birds, pheasant's koklas and monal, bulbul, minivet, barred vulture, golden eagles are common.

Dutch airline KLM says it operated world's 1st flight with synthetic kerosene



- A KLM airlines flight powered with synthetic kerosene carried passengers from Amsterdam to Madrid last month in a world first, the Dutch government and the airline said on Monday
- The aircraft used regular fuel mixed with 500 litres of synthetic kerosene produced by Royal Dutch Shell with carbon dioxide, water and renewable energy sources to power the aircraft, it added.

India to make up biggest share of energy demand growth by 2040: IEA



- The International Energy Agency (IEA) has said that India will make up the biggest share of energy demand growth at 25% over the next two decades.
- IEA expects India's oil demand to rise to 8.7 million bpd in 2040 from 5 million bpd in 2019. Rising oil demand could take India's import bill to \$255 billion by 2040, IEA added.