NEWSLETTER (FEBRUARY 2021 ISSUE)

Let's Talk About SDGs

- Dean and Director (Dr.) Purvi Pokhariyal

Education is critical for shaping the individual and societies. Higher education is an essential component of a strong and sustainable education system. Historically University is a space where knowledge is disseminated and new knowledge is created promoting critical inquiry on the existing set of knowledge. Recently university is on third mission of engagement. Today we witness university engagement though partnership with civil society groups, industry, government institution and all other stakeholders for holistic development of students. Sustainable development goals aim at paradigm shifts in the global framework for development and provides us fresh opportunities to reorient our efforts for making the world a jut and sustainable place of living. Education is central to achieving all the 17 goals of SDGs. As Higher education institution is nurturing thinking individuals developing skills, attitudes and capabilities to lead the change which is inclusive and sustainable. We are glad to share that institute of law, Nirma University is incorporating each SDG goal in its curriculum and ensuring to sensitise and nurture relevant skills and attitude for realising the 17 goals of SDGs. All the course taught at ILNU has its corresponding SDG goals and rubrics is designed to map the understanding of the students.

NOTE

It is a pleasure to bring to you the February issue of the Centre for Environmental Law at Institute of Law Nirma University, Newsletter!

We hope that all our readers are safe in these times of COVID19 pandemic.

We are elated to share with you some of the relevant recent news in the area of Environmental Law.

We would love your feedback and suggestions, as to how make the newsletter more relevant for you.

THANK YOU!

HAPPY READING!

The honeytrap: honey sold by major brands in India adulterated with sugar syrup

Honey is the most-adulterated substance in the World and this is well known in the food circle, moreover as soon as new regulations are built to check for such adulteration, they are circumvented by the enterprises and this is a cause of many around the world.

In India, the beekeepers are facing major financial crises, the reasons include, decrease in pollination due to use of pesticides and a major issue is the use of sugar syrup or any such sweet syrup manufactured by the companies in China, that can pass the adulteration test.

Centre for Science and Environment (CSE) food researchers selected 13 top as well as smaller brands of processed and raw honey being sold in India to check their purity.

It was found, in its report with Down to Earth, that 77 percent of the samples were adulterated with the addition of sugar syrup. Out of the 22 samples checked, only five passed all the tests. The brands included Dabur, Patanjali, Zandu which claim their honey to be pure. Samples of these brands were first tested by the CSE at the Centre for Analysis and Learning in Livestock and Food (CALF) at the National Dairy Development Board (NDDB) in Gujarat.According to the report, almost all the top brands passed the tests of purity, while a few smaller brands failed the tests to detect C4 sugar, it is the basic adulteration using cane sugar.However, when the same brands were tested using Nuclear Magnetic Resonance (NMR) laboratory tests currently being used globally to check for such modified sugar syrups almost all big and small brands failed. Out of the 13 brands tests, only three passed the NMR test, which was done by a specialised laboratory in Germany.

In India, the Food Safety and Standards Authority of India (FSSAI), has changed the regulation standard many times. First in 2010, when a report by CSE provided that there are antibiotic residues in Honey.After that in 2014, the standards were amended to have tolerance to some limits and beekeepers were to ensure not to use antibiotics for disease control. In 2017 draft notification including standards of tests for isotopes of Special Marker for Rice Syrup (SMR), Trace Marker for Rice Syrup (TMR), and foreign oligosaccharides and these were included in 2018 standard regulation. However, in 2019, the FSSAI issued revised directive on standards of the parameter of pollen count and deletion of SMR, TMR and foreign oligosaccharides. And on 1st July 2020,some of the parameters were restored. There is also a probe done by CSE that shows that chinese traders sell other forms of fructose syrups that are advertised to bypass the standards of test by Indian regulators.

Honey has become one of essential ingredients especially during COVID-19 times where it is essential for healthy consumption. Nonetheless, the industry is not benefiting from growth of its uses due to adulteration practices.Moreover, the brands have assured its consumers that they sell pure honey. Such deception and practices has negatively affected the industry.As of now, Dabur and Patanjali have provided their statements claiming that they have followed the FSSAI standards and this is strategy to malign the company.

Chamoli disaster: a wakeup call for all.

On 7th February 2021, a major disaster struck the Himalayan state of Uttarakhand where a glacier broke after an avalanche in the Joshimath area of the state's Chamoli district. This disaster has destroyed at least two hydro power plant projects and the death toll has risen to 72, and 245 persons are reported missing.

The Nanda devi glacier burst led to flash flood in the Rishi Ganga river, a tributary of Alaknanda, was a grim reminder of the tragedy that took place in Kedarnath in 2013.

The scientists have pointed out that this Himalayan region is very sensitive and has a lot of ecology that maintains the balance.The numerous hydropower plants that have been undertaken by the Government in these regions can lead to many earthquakes due to use of concrete and deforestation.

It is high time to rethink the model of development in the Himalayas.A study by University of Potsdam, Germany, which analysed 273 hydropower projects in the Himalayas in India, Nepal and Bhutan, found that about a quarter of them were likely to face severe damage from quake-triggered landslides.

They also found that lack of adequate, thorough scientific planning and shoddy impact-assessment studies were approved by Expert Appraisal Committees. Once clearances are granted, non-compliance of environmental norms and social accountability laws become rampant. There is a lack of safety monitoring and lives of workers and people of affected villages are put at stake.

Chamoli district,Reni village is the birthplace of the Chipko movement that took place in 1974. The residents of this village fear for their lives due to such disaster. Those who participated in the chipko movement, want to relocate as escalation of the development projects have led to natural disasters, The people are regretting and questioning their decisions of selling of lands for developmental projects since their place of living is seriously getting affected.

The Himdhara Collective in 2017 released a report, titled Dried and Dusted,had identified climate-change and glacial melt as an overarching danger to the river basins of Himalaya. It was also suggested that high altitude regions which are ecologically fragile and more at risk should be declared as eco-sensitive zones and not allowed for major construction activity. In Shimla High court, Avay Shukla Committee report submitted recommendations that required restriction of projects that are 7,000 ft. or above, to control the damage to Himalaya.

In the meantime, the Supreme Court on february 15, gave a go-ahead to 605 development projects for the state involving an area of approximately 686 Hectares, that had been not progressing for want of 'Forest Conservation Act (FCA) and Forest Rights Act (FRA) clearances'. It also includes four hydro projects.

Though Hydropower projects are suitable for creation of energy nonetheless they are reliable only where suitable dam capacity exists and in places such as Uttrakhand the existence of big-dams is controversial because of collateral and unquantified damage in terms of lives, livelihood and destruction of ecology. Chipko movement activist, Sunderlal Bahuguna, argues that large dams, that involve deforestation and destruction, massively and permanently alter the character and health of the hills.

Analysing Budget-2021 through the environmental paradigm

Environment was clubbed with health as one of the six pillars of the 2021 budget. FM Sitharaman announced an allocation of Rs 2.87 lakh crore for five years for the government's Jal Jeevan Mission, which aims to provide clean drinking water to households. Ensuring a supply of clean drinking water would not only address environmental concerns such as the management of water bodies, but also reduce health problems linked to consumption of polluted water. Rs 1.41 lakh crore will be allocated for the next five years targeting clean construction in urban areas, bioremediation of waste sites, reduction in single use plastic, source segregation of garbage, wastewater management and faecal sludge management. Significantly, an allocation of Rs 2,217 has been made for improving air quality in 42 urban centres with populations upward of 1 million. Centre has also come up with a voluntary vehicle scrapping policy, under which owners would have to get a fitness test after 20 years in case of private vehicles and 15 years in the case of commercial vehicles. A 'deep ocean mission' has also been announced, with an outlay of Rs 4,000 crore for the next five years, to work on deep sea biodiversity. In terms of clean energy an allocation of Rs 1,000 crore has been done to SECI (the Solar Energy Corporation of India) and Rs 1,500 crore to IREDA (the Indian Renewable Energy Development Authority) to boost the non -conventional energy sector. A national hydrogen mission is also going to be launched in 2021-22, for generating hydrogen from green power sources. This mission will contribute in de-carbonising heavy industries contribute in clean electric mobility. In terms of Ministry related allocation, the budget reduces the total allocation for the five autonomous institutes under Ministry of Environment, Forest and Climate Change (MoEF&CC). Critiques have observed that allocation of Rs. 470 Crores to control pollution is clearly not enough as the funding is to be utilised by 122 cities under the National Clean Air Programme as well as the pollution control boards. The scheme for augmenting public bus transport service is laudable but it is hoped that these buses shall be fuelled by clean energy. The move to support decentralized renewable energy sources is a welcome move. There is a dire need to create a robust framework to tackle climate change and therefore an increased funding to vital environment conservation, monitoring, and research institutes while improving efficiency and funding of the sta tutory organizations is required. A conservation based approach ought to be adopted and investments shall be done in natural assets. After all, a budget by itself cannot do anything if on ground policy framework lacks will and efficient implementation. Therefore, it is hoped that along with GDP, the sustainable and pro-environment development aspect is considered by promoting resilient infrastructure and preserving the natural capital. A long-term and prioritized plan is required to combat the undeclared climate emergency!

France's new 'sensory heritage' law will protect the sound and smell of its rural area

"Maurice can crow", the judge ruled in his favour! There always has been noise in the countryside and new law on sensory heritage protects the sounds and smell of the rural area of France. While this might not please the neo-rural population, who seem to have expansionist ambitions to encroach the rural community it does protect the French countryside. The tussle between long-time residents and new arrivals in not something unique to France and the basis of this lay in the same. A rooster was put to trail in 2019 for crowing in the morning and a noise complaint was filed. The judge sided with the rooster and said that the countryside must be protected. While the new law has recently come in place, the task of deciding rural heritage and sensory identity is bestowed upon the regional authorities. The law on sensory heritage for the first time explicitly protects what the French Senators think of an integral element of a place; the sounds and smells of the rural countryside. The law makes it instrumental for outsiders or visitors to acknowledge and respect that people in rural communities had a certain way of living with their set of customs and traditions.

Strengthening Action for Nature to Achieve the Sustainable Development Goals

The United Nations Environment Assembly 5 is broadly themed around "Strengthening Action for Nature to Achieve the Sustainable Development Goals." The theme was decided at a joint meeting of the Bureaus of the Assembly and the Committee of Permanent Representatives on 3 December 2019. The theme aims at restoring nature to achieve sustainable development goals in social, environmental and economic dimensions. The fifth session of the UNEA did not only give an impetus to member states to align their concerns to the sustainable development goals but also mark the eradication of poverty and sustainable patterns of consumption and production. The committee therefore resorted to a two-way mechanism to procedurally emulate the same by way of beginning with a virtual meeting and then an in-person meeting. It is explicit that the UNEA keeps in the mind the conditions prevalent due to the COVID-19 pandemic and therefore is functioning accordingly. The President of the UNEA will work in close cooperation with the Committee of Permanent Representatives to ensure a successful and impactful UNEA-5.

Supreme Court to consider banning felling of mature trees for development work

Facts- This consideration has come after taking into account several petitions filed by the Association for Protection of Democratic Rights and advocate Arpit Saha challenging the felling of trees for the Setu Bharatam project. Setu Bharatam programme was launchedto make all National Highways free of railway level crossings in order to prevent the frequent accidents and loss of lives at level crossings. A Court-appointed committee has valued the costs of trees which would be felled for the project at a staggering amount of Rs 2.2 billion. Prashant Bhushan, the petitioner appeared on behalf of the Association for Protection of Democratic Rights while Senior Advocate Abhishek Manu Singhvi and Solicitor General of India Tushar Mehta represented the Bengal government.The main contention of the parties was felling of the trees incidental to the road project.

Arguments raised-

The counsels on behalf of petitioner told the bench comprising of CJI SA Bobde, Justices AS Bopanna and V Ramasubramanian that the government authorities have actually taken permission to cut 4000 trees. The arguments were substantially backed up by the data provided by a court appointed committee which stated-

- The felling of 300 heritage trees to construct five railway overbridges in West Bengal would cost India a staggering ₹2.2 billion (after calculating the products these trees would produce over 100 years of their natural lifetime)
- An individual tree annually parts with "products" worth ₹74,500.
- The loss of 300 trees in West Bengal would be much more than the ₹500 crore sanctioned for the five rail overbridges
- Traffic congestion would see a further widening of the road in a decade or so. This would mean cutting another 4,056 trees. If so, the loss would added up to ₹30.21 billion over a period of 100 years. This would lead to an "environmental and economic catastrophe of horrifying proportions".
- These historical trees have irreplaceable value. Compensatory afforestation cannot replace trees of this value

The government's side rejected the claim that a whopping 4000 trees would be cut for the purpose of this programme. Senior Advocate Singhvi, took objection to the Committee valuation by terming it as "hypothetical" and "highly speculative", adding that the project involved construction of 5 railway overbridges over a stretch of 6 kilometers, therefore the number of trees which would be felled is 306. Singhvi submitted, *"They have computed the cost of cutting 4000 trees over 100 years. The Committee says in the long run 4000 trees will be cut. You cannot run your imagination run wild. In the long run, we all are dead."* He claimed that the concept of tree valuation is one not grounded in reality and that while the Court may do well to look at the higher principles, human cost has to be factored in as well.

SC asked the government to explore alternatives before cutting down trees for roads. The CJI observed that, *"The value of the trees must be computed on the basis of its contribution to the environment and not just the timber value. Trees produce oxygen. They bind the soil. Trees of a certain type, which have reached a certain age, should never be cut"*. Deciding not to take an adversarial attitude, the court decided to follow up through guidelines for further projects.

The judiciary in this played an active role towards ensuring sustainable development. Progress should never come at the cost of hampering the environment and the approach of the apex court displays that the re is no development that could compromise with this. The court noted that in case a road project is inevitable, the value of each tree should be "built into the cost of the project" emphasizing on the need for accounting a tree's age and type in order to save the trees and simultaneously devise another way to make progress. The court also discredited all the claims by the government through a circular which said that Environment Impact Assessment need not be done for road projects spanning under 100 km. Addressing the government, the bench said that it was unrealistic to assume that a 100 km road project will not destroy the environment. It added that it will either ask someone to challenge government's circular or take suo motu cognisance of it.

Zero Waste System can create Thousands of jobs across the World

A recent study from Global Alliance for Incinerator Alternatives (GAIA) found that zero waste policies and programmes have the capacity to create good, environment-friendly jobs and help reduce pollution and improve community health.
The findings of the study are as follows:

1. Reuse creates over 200 times as many jobs as using landfills and incinerators
2. Recycling creates around 70 times as many jobs as using landfills and incinerators
3. Remanufacturing creates almost 30 times as many jobs as using landfills and incinerators

Zero waste is an approach to waste management that focuses on the prevention of waste and redesigning the life cycles of the resource so that it can be reused and sending trash to landfills, incinerators or the ocean can be avoided.

Zero waste system is better than disposal-based system because the latter is dependent on incineration and landfills which in turn which results in higher economic costs and environmental consequences.

In the present study each of each city recovered 80 per cent of recyclable and organic material in its waste stream, and uses the recycled material to remanufacture consumer goods. The results indicated that recycling, remanufacturing, and composting alone created thousands of new jobs in the model cities. Rate of job growth was particularly high in cities with low current recycling rates.

As per the analysis for every job lost in disposal, 10-60 jobs were created in composting, recycling, and remanufacturing. This new technique creates jobs and reduce pollution without putting pressure on the banks. It is good for economy and environment both.

Earth's magnetic field broke down 42,000 years ago and caused massive sudden climate change


A recent study done by **Chris Fogwill**, Professor of Glaciology and Palaeoclimatology, Keele University, **Alan Hogg**, Director of the Waikato Radiocarbon Dating laboratory, **Chris Turney**, Director of ARC Centre of Excellence for Australian Biodiversity and Heritage, University of New South Wales, UNSW and **Zoë Thomas**, ARC DECRA Fellow, UNSW, revealed that 42,000 years ago, reversal of the Earth's magnetic poles together with changes in the Sun's behaviour set off a series of dramatic events with far-reaching consequences for earth.

A magnetic north pole is different from geographic north pole, the former wobbles around the later and does not have a permanent location. Magnetic north pole is the one towards which a compass needle point.

Sometimes magnetic pole movements can be much more than a wobble. One such extreme pole migrations took place some 42,000 years ago and is known as the Laschamps Excursion, it has been named after the village where it was discovered in the French Massif Central.

The present study analysed kauri trees of ancient New Zealand that were preserved in peat bogs and other sediments for more than 40,000 years. Looking at annual growth rings in the kauri trees, Researchers have created a detailed timescale of how Earth's atmosphere changed over this time. The trees disclosed an elongated spike in atmospheric radiocarbon levels resulted from the collapse of Earth's magnetic field as the poles and provided a solution to link widely geographically dispersed records.

During the magnetic switch, the strength of the magnetic field dropped to less than 6% of what it is today, due to which earth lost its effective guard against cosmic radiation, and other penetrating particles that could access the top of the atmosphere. Further, the Sun undergo many "grand solar minima" during this time, because of which the overall solar activity was much lower but more unstable, due to that numerous massive solar flares were sent out that allowed more powerful ionising cosmic rays to reach Earth.

The consequences of the above events were as follows: The ozone layer was destroyed, electrical storms raged across the tropics, solar winds generated spectacular light shows (auroras), Arctic air poured across North America, ice sheets and glaciers surged and weather patterns shifted violently. During this time life on earth was bare to intense ultraviolet light, Neanderthals and giant animals got extinct and modern humans looked for protection in caves.

The researchers named this event as "Adams Event" in tribute to the great science fiction writer Douglas Adams, who wrote The Hitchhiker's Guideto the Galaxy and identified "42" as the answer to life, the universe and everything.