



Centre for Environmental Law Newsletter

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Monthly Newsletter – January & February 2020

1. SC allows double sided printing for court filings

Every year, over 60,000 cases are presented before the Supreme Court of India. Each document in each case has to be filed in a specific format. For example, each document can only be typed in a 13-14 font size. They must also have a 3cm margin and be double-spaced. A colonial legacy which stated that material can only be printed on ONE side of the paper has been abrogated by the SC.

According to an estimate by IndiaSpend, each case requires 8 sets of files, and each file has about 100 pieces of paper. So the paper used JUST by the the Supreme Court and the high courts, is **861 MILLION PAPERS A YEAR**. It is estimated that **Indian Judiciary uses 11 billion sheets annually**. According to a

paper titled ‘Conserving the Canvas: Reducing the Environmental Footprint of Legal Briefs by Re-imagining Court Rules and Documents Design strategies’ by Ruth Anne, one tree can be chopped and pulped to give us 8,333 sheets of virgin paper. And, it requires approximately 10 litres of water to produce one sheet of paper.

Documents which would be filed after 13 February 2020 can now have material printed on both sides of A4 sheets. A petition was filed regarding same in 2017. The petition illustrated that if Indian Judicial system practiced double sided printing then water requirement for Mumbai can be fulfilled for 14 days. The water saved from Supreme Court itself can run Bangalore for a day. This was decided after a meeting between the judges of the committee of rationalisation of use of papers, the SCAORA and SSCBA.

2. **Solar-powered water desalination will be our Stormbreaker against water crisis**

A completely passive solar-powered desalination system developed by researchers at MIT and in China could provide more than 1.5 gallons of fresh drinking water per hour for every square meter of solar collecting area. Such systems could potentially serve off-grid arid coastal areas to provide an efficient, low-cost water source.

The system uses multiple layers of flat solar evaporators and condensers, lined up in a vertical array and topped with transparent aerogel insulation. It is described in a paper appearing today in the journal *Energy and Environmental Science*, authored by MIT doctoral students Lenan Zhang and Lin Zhao, postdoc Zhenyuan Xu, professor of mechanical engineering and department head Evelyn Wang, and eight others at MIT and at Shanghai Jiao Tong University in China.

The key to the system's efficiency lies in the way it uses each of the multiple stages to desalinate the water. At each stage, heat released by the previous stage is harnessed instead of wasted. In this way, the team's demonstration device can achieve an overall efficiency of 385 percent in converting the energy of sunlight into the energy of water evaporation.

Theoretically, with more desalination stages and further optimization, such systems could reach overall efficiency levels as high as 700 or 800 percent, Zhang says.

Unlike some desalination systems, there is no accumulation of salt or concentrated brines to be disposed of. In a free-floating configuration, any salt that accumulates during the day would simply be carried back out at night through the wicking material and back into the seawater, according to the researchers.

Their demonstration unit was built mostly from inexpensive, readily available materials such as a commercial black solar absorber and paper towels for a capillary wick to carry the water into contact with the solar absorber. In most other attempts to make passive solar desalination systems, the solar absorber material and the wicking material have been a single component, which requires specialized and expensive materials, Wang says. "We've been able to decouple these two."

The most expensive component of the prototype is a layer of transparent aerogel used as an insulator at the top of the stack, but the team suggests other less expensive insulators could be used as an alternative. (The aerogel itself is made from dirt-cheap silica but requires

specialized drying equipment for its manufacture.)

Wang emphasizes that the team's key contribution is a framework for understanding how to optimize such multistage passive systems, which they call thermally localized multistage desalination. The formulas they developed could likely be applied to a variety of materials and device architectures, allowing for further optimization of systems based on different scales of operation or local conditions and materials.

3. **Union Budget 2020-21 spares little for climate mitigation**

Mitigation and adaptation to climate change was largely ignored in this year's budget. While the Union finance minister, Nirmala Sitharaman, made a series of announcements about agriculture and allied activities, she did not mention the risks farmers face due to extreme weather events. This is surprising since rains and floods affected more than six million hectares and caused the loss of crops on 4.9 million hectares in 2017, according to the latest government figures. Global warming is expected to reduce Indian wheat and rice production by up to 23 percent and six percent respectively by 2050. The Minister of Finance of the Union, in her speech on

the budget, reiterated the launch of the Coalition for Disaster Resilient Infrastructure (CDRI), which was first announced by Prime Minister Narendra Modi during the Climate Action Summit of the UN in September 2019. It did not even provide new information. in CDRI. Similarly, Sitharaman spoke about the Center's plan to gradually eliminate old coal-fired thermal power plants without giving details. The Center has also somewhat reduced the funds allocated for adaptation and climate action. The estimated budget for the National Adaptation Fund has remained at Rs 80 Rs. There were Rs 100 million in the estimated budget for 2019-20, which was then revised to Rs 40 million.

4. **Bhopal gas tragedy**

The victims of the 1984 massacre still suffer as a result of inadequate compensation. The then govt of India and the Indian Judiciary, specifically the supreme court failed the victims. The court agreed and went on to justify the in-chambers settlement of 471 million USD, whereas the original claim in the civil court of the govt against Union Carbide was 3 Billion USD. The SC not only justified this

settlement, but overlooked principles of natural justice and failed to do complete justice when it rejected the review petition in 1989. Both the settlement judgment and review rejection judgment is bad at law and perverse! Govt. filed curative petition in 2010 seeking assistance compensation of ₹7413 crores which was heard only in Jan.2020 that too lead to recusal by Bhat J. from the constitution bench. Let's see when is the new bench constituted and that does SC choose to revisit the horrific overlooking it did, and if not the mortal victims will still be floating somewhere like the deadly methyl isocyanate fumes!

5. Kerela bans single-use plastics

The Kerala state government has banned the production, sale, storage and transportation of disposable plastic products, such as carrying bags, disposable cups, straws, PET bottles, etc. from 1st January 2020. This key decision was made at a cabinet meeting chaired by Prime Minister Pinarayi Vijayan on November 21, 2019, after taking into account the environmental and health problems the state faces, since it generates around 45,000 tons of plastic waste per year. Kerala had already imposed

restrictions on the use and sale of plastic at less than 50 microns in 2018 and facilitated its correct collection, segregation and recycling. However, the solid implementation of this decision and the availability of affordable alternatives remained a challenge. The notification also reiterated that the government will impose a fine of Rs 10,000 (Rs 25,000 for the second time and Rs 50,000 for subsequent violations, together with the cancellation of the unitary license) to producers, wholesalers and retailers if they do not respect the guidelines

6. Turtle rehabilitation centre opens in Bihar

A first freshwater turtle rehabilitation center was inaugurated in Bihar Bhagalpur Forestry Division in January 2020. The rehabilitation center, spreads over half an acre and will be able to protect 500 turtles simultaneously. The district officials said the need to build such a center was felt after several turtles were seriously injured and sick when rescued by smuggling rescue teams. He added that the department was shocked when he saw the atrocity triggered by smuggled turtles. Officials said earlier that he saved Turtles earlier on the rivers, without too much

treatment and contamination of a facility like the city center.

According to environmentalists, turtles play a significant role in the river by purifying dead organic materials and sick fish, controlling the fish population as predators and controlling aquatic plants and weeds. They are also described as indicators of healthy aquatic ecosystems.

However, these species are now in serious danger due to habitat fragmentation and loss through dams and barriers, pollution, illegal shrubs, accidental drowning by fishing nets and threats to their nesting habitats, a report prepared by the National Mission for Clean Ganges and Wildlife was. The Institute of India said.

7. **NGT seeks information on Solid waste management and air pollution in the country.**

National green tribunal seeking the report on solid waste management, air quality and restoration of water quality said that the nature and extent of information submitted by the CPCB is not complete and available information show huge gap. The grading made by the CPCB into 'Good, Average, Poor, and No information' is not based on qualitative analysis but on the extent of information furnished.

The tribunal said- For solid waste management, information regarding the generation, segregation and treatment is required. For restoration of 351 polluted river stretches, information about the compliance of directions, including in-situ and ex-situ remediation by the way of artificial wetlands, bio-diversity parks to reduce load on Rivers. For improving the air quality the information on the execution of action plans for containment of air pollution and quantifiable progress must be furnished. Municipal solid waste management rules were framed in 2016 still their implementation remains a problem. The NGT earlier noted that there were 4,000 waste dump sites which needs immediate remediation and this will unlock the land occupied by such waste sites which is urgently required for setting up of integrated waste management and processing facilities for afforestation, green belts, biodiversity parks, etc in accordance with the environmental law.

8. **Need of complying with Environmental norms.**

NGT has directed the Central Pollution Control Board (CPCB) to carry out a study

within four months with the National Environmental Engineering Research Institute and Institute of Technology (IIT) Delhi, to ascertain whether advance batch automated plants can address pollution caused due to burning of waste tyre in pyrolysis industries.

Pyrolysis is a method in which old tyres are recycled through a thermochemical treatment under high temperature to produce industrial oil and other matters.

The direction followed the reports from state pollution control boards that currently there are 678 tyre pyrolysis units in 19 states. Out of which 270 were compliant with environmental norms. The CPCB said that this increase in number of compliance units is mainly due to monitoring by CPCB and SPCBs. SPCBs on the direction of CPCB has started the process of shutting down the non-compliance units. The tribunal was hearing a plea moved by NGO Social Action for Forest and Environment (SAFE) which sought a ban on end-of-life tyres in Pyrolysis industries citing non-implementation of environmental laws.

The plea was to direct all the responsible authorities of keeping a check on pollution along with other scientific

agencies to develop a monitoring mechanism to ensure that waste tyres imported are verified through scientific means.

9. **Supreme court reprimands the Government officials**

The Supreme Court has suggested a unique solution to stop felling of trees in the name of development. The Supreme Court said - "We want environmentalists, economists and scientists across the country to see how much oxygen a tree gives throughout its lifetime." The price of the tree should be estimated on the same basis. This price should be included in the price of the project which requires cutting of trees.

A bench headed by Chief Justice SA Bobde made this remark in the case of 5 railway overbridges in West Bengal. At the same time, reprimanding the government officials said - 'We know that you do not have enough mind to take right decisions to save the environment. So at least do not cut the remaining trees. Can there be a way to make way without cutting down trees? It may be a little more expensive, but if you value the property, then this solution would be best. 'The court gave the committee constituted in the case an

additional time to file its report, hearing the case for 4 weeks.

In fact, due to 800 deaths near these railway lines, the government decided to build an overbridge here. For this, 356 trees were required to be cut. A petition was filed in the Calcutta High Court by the Association for Protection of Democratic Rights against this project. The High Court, while giving a ruling in favor of the West Bengal government, allowed them to cut trees. This decision was challenged by the NGO in the Supreme Court.

In the last hearing in this case, the CJI had said - "Now the time has come to assess the oxygen given by the trees." The authority anticipates cutting of trees in any project, but now the price of trees should be based on the price of oxygen they provide for life.