

World Wide Consumption

1970
27 billion

2015
87 billion

2017
92.1 billion

with the rate of extraction
accelerating every year
since 2000.

RIGHT TO REPAIR

A Recipe for Sustainable Development

The world is looking forward to economic growth to eradicate poverty and to bring prosperity to each individual living on this earth. The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and for the planet now and also the future. At the same time, depleting natural resources have raised serious alarm to sustain our lifestyle and prosperity. In 2017, worldwide material consumption reached 92.1 billion tons, up from 87 billion in 2015 a 254 per cent increase from 27 billion in 1970, with the rate of extraction accelerating every year since 2000. This reflects the increased demand for natural resources that has defined the past decades, resulting in undue burden on environmental resources.

The Goal 12 of the Sustainable Development Goals has aimed to ensure sustainable consumption and production patterns. It has also mooted for urgent action to ensure that current material needs do not lead to the over extraction of resources or to the degradation of environmental resources, and should include policies that improve resource efficiency, reduce waste and mainstream sustainability practices across all sectors of the economy. Therefore, the world is looking forward to a shift of the economy model from the linear economy model to circular economy.

However, for the circular economy model to succeed and to achieve the goal 12 of SDGs, perhaps the jurisprudence of “Right to Repair” can be adopted as one of the solutions to reduce the consumption of the materials and promotion of circular economy. In layman language, the **Right to Repair** refers to government legislation that is intended to allow consumers to repair and modify their own consumer devices, otherwise the manufacturer of such devices requires the consumer to use only their offered services and products or nullify the product’s warranty.

WHY RIGHT TO REPAIR

The concept of monopolization on the products and services was started in the US. With the new economic model adopted by the manufacturers, the focus was shifted to monopolize the products as well as the repairing system to garner maximum profit. Though, initially, it was started with computers gradually other manufacturers like those of automobiles, medical equipment, cell phones, ATMs, TVs, major appliances, and small appliances also tried to monopolise on their products so that it is the manufacturers who had monopoly on the products as well services. This resulted in undue economic burden on the consumers as they had to depend upon the manufacturers for their services and the manufacturers could charge at their will. Moreover, apart from the economic cost, there is also significant environmental cost associated with it if the consumers are denied the right to repair. Most importantly, denying the right to repair will have huge burden on the depleted natural resources upon which the automobile and electronic industries are largely depending.

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The philosophy and concept of product designing has evolved significantly over the last two decades and currently most manufacturers design products for obsolescence to boost revenue. We are increasingly realising that contemporary products have relatively shorter life spans mostly necessitating product replacement rather than repairs and extension of its life. Manufacturers create such monopolistic practices and barriers for customers so that they are unable to take their product to neighbourhood repair shops due to non-availability of original spares and closely guarded repair technology. This evolving business strategy has resulted in near extinction of the neighbourhood repair shops for electronics or high value consumer durables. The spin off effect of this trend has killed other repair trades too such as tailoring, shoe repair, darning and metal craft all of which seem to be gradually fading away and eventually headed towards final closure.

Environmentally and socially, this practice is unsustainable as it fuels increased consumption patterns resulting in increased pressure on natural resources along with reduced opportunities for such relatively skilled jobs. While it can be argued that growth and development would require increased consumption at another level there is also an issue of sustainability and resource conservation. This fine balance between growth and sustainability requires enabling regulatory frameworks to maintain it. Hard to acknowledge that Indians as a society were so accustomed and comfortable with the culture of repair, which they are relinquishing today perhaps on account of a generational shift which is required to be checked and restrained.

Citizens in several countries are seeking and pushing governments to protect the Right to repair through enabling legislations. In India too, there is a need to start the conversation on "Right to repair" with an objective to protect the environment by extending the life of products. Availability

of original spare parts can be ensured through enactment of regulation and there have been a few cases where the courts have ruled against monopolising the sale of spares through the service centres alone. In a second hand or repaired product the critical aspect is quality and if the repair agencies assign adequate warranty with their products then it would perhaps change the market dynamics and it won't be very distant to see markets and streets spring up with chains of retail network exclusively dealing with repaired and refurbished products.

We are also witnessing some tough executive decisions by the National Green Tribunal especially towards waste management leading to a flurry of activities at the state level. Guess the message is clear that business as usual is not the new normal and things will progressively change at the ground level.

Satish Sinha
Associate Director

There are many positive aspects if the products are repairable. Some of the immediate benefits of the right to repair are:

- Immense benefit to the consumers
- Reduction in waste
- Resource efficiency
- Creation of livelihood opportunities
- Sustainable consumption
- Reduction in green house gas emissions

GLOBAL MOVEMENT ON RIGHT TO REPAIR

USA

With the passing of time the Right to Repair has gained momentum. In the USA, the first Right to Repair regulations have been passed for the automobile industries. Massachusetts passed the United States' first Motor Vehicle Owners Right to Repair Act in 2012, which required automobile manufacturers to provide the necessary documents and information to allow anyone to repair their vehicles. As of now, eighteen states in the US have adopted the Right to Repair regulations and attempts have been made to extend the regulations to the electronic products as well. Though there is stiff opposition from the electronic industries on the Right to Repair Act, the way momentum

and pressure has been built across all the countries, the US may sooner or later witness the Right to Repair regulation.

Europe

Over the years, the Right to Repair gained significant momentum in Europe. The new ecodesign directives have stricter provisions for the manufacturers to make goods that last longer and are easier to repair. Initially the directives will be applicable to lighting, displays, washing machines, dishwashers and fridges from April 2021. The proposals are part of the EU's laws aimed at reducing the environmental impacts of products, an aberration of the previous eco-design policies to ensure that products are designed to last longer, and are easier to repair and recycle apart from being energy-efficient.

Other parts of the world

The movement of the Right to Repair has made huge strides all across the world. In Canada, a campaign has been built for the Right to Repair Bill and a private member bill has been tabled in parliament. Though the bill could not be passed in the parliament, there is a huge public outcry mostly for the tech industry to adopt the Right to Repair Act and extend it to the automobile as well as electronics industries. The Right to Repair

movement has also gained momentum in countries like Australia.

India

Article 19 (g) of the Constitution has guaranteed the right to practice any profession or to carry on any occupation, trade or business. However, at the same time, the consumers' rights have been protected under the Consumer Protection Act -1986. It is to be noted that in India, there is no such Right to Repair Act in place although the E-waste rules have laid emphasis on the refurbishing of the products. However, the Competition Commission of India (CCI) in *Shri. Shamsheer Kataria v. Honda Sael Car India Ltd.* in August 2014, announced a path-breaking judgment, holding 14 automobile manufacturing companies liable for anti-competitive practices and abusing their dominant position, by not making the spare parts available in the independent repair shops. Thus, the customers have no other option but to use the services of the authorized dealers. The CCI ordered Original Equipment Suppliers (OESs) to formulate an effective system to sell genuine spare auto parts in the open market and to formulate an effective system to ensure availability of aftermarket spare parts, diagnostic tools and other relevant information in the public domain. The CCI order, enabled

GUEST ARTICLE

consumers to make a choice between independent mechanics and authorized dealers' independent mechanics to provide aftermarket services and ensure healthy competition in the market. The judgment has created ground for the Right to Repair Act which can be extended to electronics, consumer durables as well as automobile industries.

RIGHT TO REPAIR ACT AND SUSTAINABLE DEVELOPMENT

Though the Right to Repair Act was initiated to safeguard the consumers, in the present scenario the Right to Repair Act can be a medium of safeguarding the environment and promoting sustainable development. The phenomena of the Right to Repair, as of now, is largely in developed countries whereas countries like India and China are crippled with the waste problem with increase in economic growth. Most importantly, the culture of use and throw is fast becoming a part of the cultural set up resulting in the dwindling concept of repair in a country like India.

Therefore, it is high time that the Indian government comes out with a policy to promote Right to Repair culture in the country. It will have significant environmental and economic implications for the country and will be a recipe for sustainable development in India.

Some of the suggestions that can be integrated with Right to Repair are:

- Promoting sustainable technological designs, e.g. modular concepts, refurbishment industries
- Introducing repair in the waste hierarchy
- Promoting repair products via public procurement policy
- Accessibility to repair information-manufacturers introducing repair information kits with their products

Piyush Mohapatra
piyush@toxicslink.org

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A GREEN MANIFESTO

Manu Bhatnagar, Principal Director, NHD,INTACH



Manu Bhatnagar is an urban and environmental planner with over two decades of experience in the environment sector. He currently heads the Natural Heritage Division at INTACH as Principal Director.

It is beyond the shadow of a doubt that a healthy environment is the crucible in which human life and activity blossoms. Yet we all know that human activity is mauling and mutilating this crucible just like the woodcutter who is cutting the branch on which he is perched.

THE UNFCCC HAS ASSESSED THAT INDIA IS THE WORLD'S 6TH MOST VULNERABLE COUNTRY TO CLIMATE CHANGE.

It was election season in India few months back and the manifestoes of political parties reflected their perceptions of the concerns of society at large. The manifestoes were drawn up carefully after large scale feedback. Yet in spite of the looming environmental crisis, this critical concern was all but absent from manifestoes.

Just for the record, Germany is a nation which is most *avant-garde* when it comes to environmental issues. Germany is on the verge of phasing out coal fired power plants, it already generates 27% of its energy from renewables, it has cleaned the Rhine River, and its water harvesting and conservation policies have been outstanding. These initiatives are in no small measure due to Alliance 90/The Greens, often simply Greens, the green political party in Germany that was formed in 1993. From 1998 to 2005, they were the coalition partner of the Social Democrats in the government. The party focuses on ecological, economic, and social sustainability. Germany's recent state elections in Bavaria and Hesse revealed a surge in support for the Greens. In national polls, they are ranked second, chasing the Christian Democrats and well ahead of the Social Democrats. The Greens have seats in 14 of Germany's 16 state legislatures and in 9 of those they form part of the governing coalition.

Iceland has elected Ms. Katrin Jakobsdottir, a 41 year old environmentalist who is committed to clean energy, as Prime Minister. "As Chairwoman of the Left-Green Movement, a grass-roots organization that focuses on democratic socialist values, feminism, and environmentalism, Katrin has already taken big steps to move towards clean energy in Iceland."

In India, there is no political representation of the greens. Neither has any political party raised green issues nor has a public political representative entered the legislature having fought on an environmental plank. **To expect a green manifesto is a cry in the wilderness. But if a political party were to devote a section of its manifesto to a green action plan then they could draw upon the following draft.**

"On coming to power our party promises to the people of India that

- 1. The budgetary allocation of the Ministry of Environment would be raised from current 7% to 15% of the annual budget of the Central Government.** The enhanced budgets would not only increase the scope and depth of work undertaken but also vastly increase the monitoring and knowledge gathering and knowledge creation activity of the Ministry and its agencies
- 2. The legal and institutional framework for environmental protection and regulation would be strengthened.** Specifically :
 - The Government would withdraw notifications increasing its say in **appointment and terms of service of members/Chairman** of the National Green Tribunal leaving the original rules of appointment undisturbed
 - The number of **benches of the National Green Tribunal** would be doubled progressively over five years
 - The **dilution of EIA notifications** would be withdrawn. The quality of EIAs would be raised by rigorous scrutiny, rejection of shoddy EIAs, blacklisting of conniving EIA consultants



- The **Forest Rights Act** would be enforced without dilution and the pace of implementation of forest dweller rights would be quickened while ensuring sympathetic hearing to their claims – strengthening the law – new laws – forest rights act, wetland rules, coastal zone management, rigorous implementation of existing rules
 - **Dilutions to the Coastal Regulation Zone** would be examined afresh as also the development-oriented approach of the Island Development Agency which appears to have overridden environmental concerns of the several island territories.
 - The Government would work to **strengthen the independence of institutions** such as NBWL, FAC, WII and all regulatory and advisory agencies under the MoEF
 - The **implementation of existing rules would be done with greater rigour** than ever before. E.g. the capacities and performance of CPCB and State Pollution Control Boards would be greatly strengthened
3. **Carbon neutrality:** The government would aim to achieve carbon neutrality by progressively reducing carbon intensity of the economy. The govt. would aim to outdo its Intended Nationally Determined Contributions (INDCs) and attain carbon neutrality by 2050
 4. India is blessed with abundant **solar energy and wind energy potential.**

Government would promote research in storage technologies so that thermal power and even hydropower are phased out by 2050. **Coal fired plants will be gradually phased out** so that our virgin forests can be protected as no go areas

5. CAMPA funds will be used to increase a **dispersed green cover**. The spatial dimensions of this cover would follow earlier distribution of forests so as to maintain a continuity in climatic and weather patterns
6. The Government would work out a policy of encouraging and incentivizing long term **tree cover** on private lands. Presently, other than commercial tree plantations, there are several disincentives to grow a diverse tree cover on private lands. This would also include emphasis on promoting agro-forestry.
7. **Rain** is the only source of water on the subcontinent. The winter monsoon has almost disappeared whereas the reliability of the summer monsoon does not have the same certainty as before with more frequent El Nino events. The government will promote urgent research on the monsoon phenomena, not merely about forecasting, but also about increasing its reliability
8. **Rivers** are the life-giving arteries of the country. Yet they are becoming anemic before our very eyes. The present focus on pollution is a comparatively smaller problem which has a technological fix and can be resolved by appropriate capital expenditures. The revival of

flows in rivers and streams is a far more complex issue amenable to appropriate stern remedies and only in the long term. Here the Government would :

- **Promote basin management at all orders of streams.** The basin approach would optimize the use of intra basin resources such as rainfall, surface and subsurface resources, recycled waters on the supply side while the demand side management would enhance efficiencies in water use in agriculture, industry and domestic sectors
- From the viewpoint of **floodplain protection the Ganga Authorities Notification, 2016** would be extended to all rivers up to 2nd order streams
- All relevant social statistics, economic statistics, scientific data, natural resource data would be collected at least at the level of 3rd and perhaps 2nd order streams
- **Irrigation is the sector where 80% of India's water is used.** If this can be significantly curtailed, water diversion from rivers can be substantially reduced as also ground water extraction. Several technological and agronomic practices can increase crop productivity while reducing water input. The government will take up this thrust on a war footing
- The government will go all out to promote **free flowing rivers** and, as efficiencies increase, would examine decommissioning of various dams and barrages
- **Urban water efficiencies would be enhanced** and the individual water supply norm per capita would be brought down progressively to below 100 lpcd over next five years. Recycling and demand management practices would be given preference over fresh water supply side solutions. Ultimately smart cities would sustain themselves on an almost closed loop of local water resources
- Research would be promoted to incorporate dry toilet systems to almost eliminate the requirement of flushing water and eliminate sewage and centralized sewage treatment plants. Decentralized

sewage treatment plants having nature based solutions would be promoted

9. Wetlands provide several critical eco-system services. Yet the loss of wetlands to encroachments and reclamation continues unabated. The countries network of wetlands will be protected by :

- Strengthening the Wetland [Conservation and Management] Rules 2010 enhancing their applicability to all wetlands noted in National Wetland Atlas as required by Supreme Court ruling of February, 2017
 - Wetlands not included in the National Wetland Atlas would also be given legal protection
 - A sub-continent sized country can have thousands of Ramsar sites. India has only 27. Work in identifying and notifying more sites would be expedited. Pragmatic management plans would be drawn up for these sites which would have Lake Management Authorities with overriding powers on the lines of Chilika Lake Development Authority.
- 10. Wetlands** – aquifers, sanctuaries–traditional water management, openness of data on wetlands

11. Groundwater meets a majority of irrigation and domestic consumption needs. India has the dubious distinction of being the largest user of groundwater in the world racing to exhaust its aquifers. Management and sustainability of aquifers and springs would now be considered in conjunction with surface water as advised in the Mihir Shah report. Groundwater sanctuaries and good recharge zones would be protected from contrarian land use especially in the course of urbanization and infrastructure development. The budget for groundwater monitoring and management would be stepped up

12. Agriculture Sector – Here it is proposed to shift MSP support towards the lesser grains and millets which consume less water. Water saving technology and agronomic practices would be supported vigorously. The use of traditional

seeds, crop diversity, organic inputs, improvement of exhausted soils, enhancement of pollinator diversity and populations, increased acreage under agro-forestry, elimination of chemical inputs would be thrust areas. Sikkim's success in becoming 100% organic would be a bench mark for other states.

13. Wildlife – Improvement of habitat and prey base in existing Protected Areas would be stressed. The growing man-animal conflict would have to be addressed even as humans and wildlife adapt to being at closer quarters. More protected areas and corridor connectivity would be given priority in the landscape as well as the urban landscape

14. Government policies for urban areas would stress on more humane character with greater play of natural elements such as habitats, urban forests, urban agriculture, groundwater recharge, conservation of waterbodies, macro-water harvesting, larger percentage of area under green cover.

15. Building Material – Current building technologies are consuming hill sides such as Aravallis and other uplands for limestone. Recycling of C&D waste, fly-ash blocks would be assisted on a larger scale. Moreover the use of local earth, bamboo as building materials would be rapidly pushed by setting pilot examples in the govt. sector and initiative to early bird activity. At

the same time restrictions in the use of stone crushed material would be brought into play

16. Tree Cover – Current norms allow tree cutting by replacement with larger numbers of trees. In actual practice this encourages small canopy trees in order to meet the number requirement. This would be revised to replace the canopy cover lost by a greater extent of canopy cover. In Himalayas the tree cover would be densified to promote cooler temperatures especially close to the tree line

17. Achievement of Indian National Biodiversity Targets, SDGs, Aichi Targets which would be biodiversity targets would be pushed vigorously. Towards this end ecologists would be attached to various decision making bodies on a regular basis such as in Ministries, Departments, Boards, PSUs, Planning Departments, District Planning Committees, urban development authorities, local bodies and panchayats

18. Quality of air emissions is already being addressed by a variety of techniques and technologies including promoting mass transport, NMVs, electrical vehicles. The Government would energize these efforts

If political parties could include the above statement of intentions in their manifestoes they would emerge as being truly sensitive to the well being of India.



DENTALLY TOXIC SMART WORLD

Dr Sabin Syed

sabin@toxicslink.org

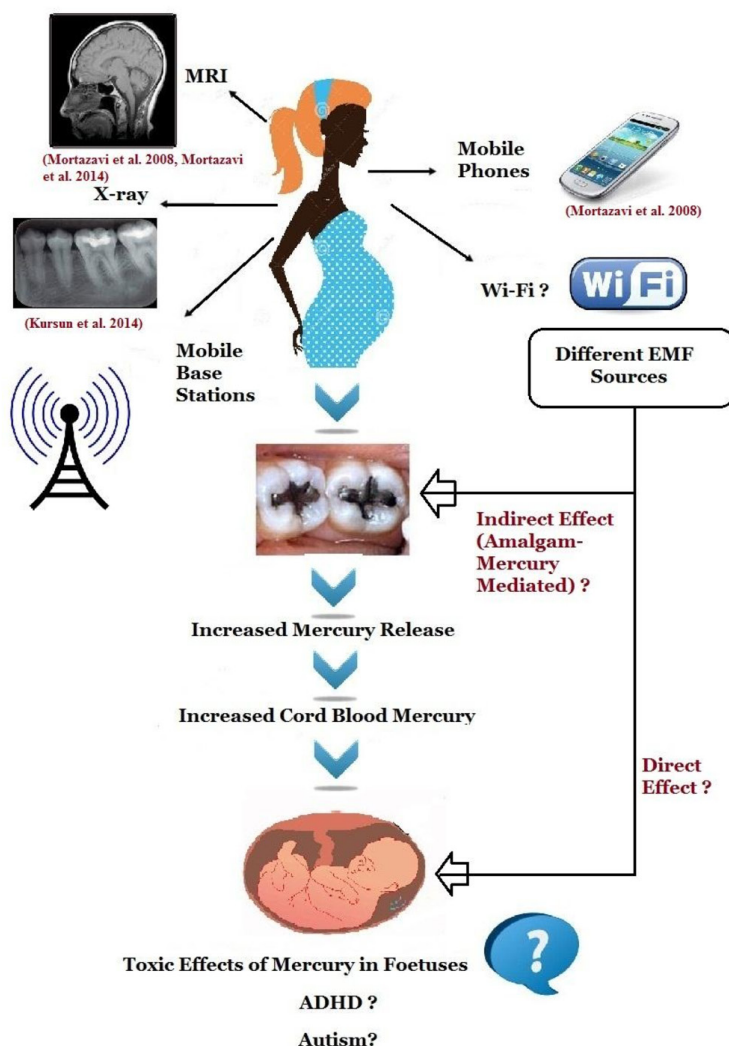
Electric and magnetic fields (EMFs) are formed when electromagnetic radiations originating from a source enter the surroundings. EMF is a physical field formed by electrically charged matter. Over the past decades, the use of well-known sources of EMFs like wifi routers, mobile phones, microwaves has been increased greatly all over the world. There is continued anxiety regarding the effects of EMF exposure on health. It affects the activities of the objects within the area of the field; this includes amalgam fillings used in restorative dentistry.

It has been publicized that even low doses of mercury are capable of causing toxicity. Therefore, efforts are made to phase down and eventually ban the use of mercury amalgam in dental restorations.

It has been reported that increase in mercury release following exposure to EMFs can be hazardous for pregnant women. It is important to note that a strong relationship linking maternal and cord blood mercury has been observed in multiple studies.

Researchers have conveyed that amalgam fillings can function as an antenna for transmission of any radiation in close range. Discharge of mercury and its existence in saliva possess serious burden in humans.

Latest learning have revealed an association between dental amalgams and health issues like Alzheimer and Parkinson's disease. Numerous genes used as bio markers respond to mercury exposure. Many pathological conditions have been credited to mercury toxicity. Infants, children and expecting women are more susceptible to mercury exposures. To conclude, as the majority of the individuals are consistently exposed to multiple sources of EMFs, we perhaps require a paradigm shift in assessing the harmful health effects of amalgam fillings arising from the mercury present in them.



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DICOFOL:

A POP under Elimination

Bikash Chetry

Dicofol is classified as an organo-chlorine miticide and it was introduced for commercial use in 1955 as that is considered effective against mites. However, WHO in 1996 declared Dicofol as an environmental pollutant (WHO, 1996). Dicofol is generally volatile and it has potential for long-range atmospheric transport. The chemical met all the characteristics of Persistent Organic Pollutants (POPs) and therefore, it has been listed in the Stockholm convention.

USAGE OF DICOVOL:

Dicofol was commonly used in a variety of crops including cotton, apples, citrus fruits, mint, strawberries, beans, peppers, tomatoes, walnuts, stone fruits, cucumbers, ornamental plants such as orchids besides other fruits and vegetables. In India, the chemical is being recommended for use on variety of crops like cotton, tea, lady finger, tomatoes, papaya, and grapes etc. (Ministry of Agriculture Report, 2009)

DICOVOL AS PERSISTENT ORGANIC POLLUTANT IN STOCKHOLM CONVENTION:

The risk profile of Dicofol provides adequate information which supports that Dicofol is persistent. The UNECE Task Force concluded that ***“based on persistence, bioaccumulation, toxicity and air monitoring data from the Arctic, there was sufficient information to suggest that the substance was likely to have adverse human health and/or environmental effects as a result of LRAT”***. Therefore, it can be concluded that Dicofol is persistent to substantiate its consideration within the scope of the Stockholm Convention.

PRODUCTION:

Dicofol is manufactured from technical DDT by hydroxylation of DDT (van de Plassche et al., 2003). The global production of Dicofol between 2000 to 2007 was exponentially higher. It was estimated at 5,500 (tons/year).

TABLE 2 Continent-wise Dicofol use in 2012

Name of continent	Quantity of Dicofol used
Asia	619 tons(mainly in China 530 tons and India 43 tons)
North America	33 tons
Europe	1,745 tons
Latin America	38 tons
Africa	36tons
Oceania	1 tons ¹

Though the use of Dicofol has been prohibited in other parts of the world, Asia was one of the principal users from 2000 to 2012 and manufacturers of the chemical and it was the driving force behind the use of Dicofol globally. In 2012 Asian countries used 619 tons of Dicofol out of which China produced 530 tons and India 43 tons. However, in the year 2014 as per China's notification to the Stockholm secretariat, it banned the production line for technical Dicofol. But India continued its use of Dicofol and was known as the only producer of Dicofol until recently in 2019 when it accepted to eradicate the use of this chemical.

GLOBAL REGULATION ON PROHIBITION/BAN ON DICOVOL:

Canada was the first country which banned the use of Dicofol in 2011, followed by the USA and some other countries that started banning the use of the chemical over the years.

In the European Union, Dicofol was used for plant protection; instead of, however, as per the Commission's Decision 2008/764/EC², it has been expired from 2010. As per the Biocidal Products Regulation No (EC) 528/2012³ the use of Dicofol in all non-agricultural products has been banned in the European countries.

TABLE 3 List of Countries where Dicofol use is Banned

Country	Year
Canada : Use not permitted	Since 2011

1 Li et al., 2014a

2 <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008D0764>

3 <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=OJ:L:2012:167:TOC>

USA : Use not permitted	After 2016 ⁴
Benin, Côte d'Ivoire, European Union, Guinea, Iraq, Indonesia, Japan, Mauritania, Oman, Saudi Arabia, Switzerland	Banned since 2015
Brazil	Banned in 2016
China	Use of Dicofol is banned on Tea Plants by Ministry of Agriculture China ⁵
India	Banned the production of Dicofol without any exemption since 2019.

In the recently concluded Stockholm Convention COP9 on 30th April 2019, COP9 has adopted the decision to list Dicofol in Annex A (without any exemption). India supported the inclusion and announced that it will stop the production of Dicofol in the next few months.⁶ India is the only country which has allowed the use of Dicofol and after the inclusion of the chemical in Annexure –A of the Stockholm Convention perhaps the world will witness complete elimination of Dicofol use from the globe in few years.

ALTERNATIVES OF DICOVOL:

Below are a few available alternatives of Dicofol that are listed in the table below.

TABLE 8 Alternatives available in different states

Available alternatives of Dicofol
Tryzofas, Koragen, Karate, Nuvar, Omit, Confider, Megister, Indosulph, Pocklame, Aldcarb, Omite, Confider, Confider, Trajo, Monoseal, Meghi, Blue Copper, Actara, Proclaim, Omite, Koragen, Karate, Benevia, Proclaim, Regent, Dupoint, Hoshi, Fenproximate, Chlorfenapyr and Pyridaben, Emamectin and Clofentezine etc.

4 Li et al. 2014a; Annex E information, USA, 2015

5 As per the Notice No. 11 of 1997 issued by Ministry of Agriculture of China, it has banned the use of Dicofol on tea plants. Also the Ministerial Announcement of Agriculture No. 199 of 2002 restressed the ban of Dicofol on tea plants.<http://chm.pops.int/Portals/0/download.aspx?d=UNEP-POPS-POPRC.12-2.English.docx>

6 The information is retrieved from <http://enb.iisd.org/vol15/enb15259e.html>

THE WAY FORWARD:

Dicofol is one of the highly used miticides across the globe. However, after the health and environmental impacts of the chemical came into the limelight, countries have started phasing it out. India was perhaps the only country in the world which was using Dicofol until recently when it has announced to stop the chemical's production in the Stockholm convention held in 2019. With India's commitment to ban the manufacture of Dicofol, questions about its safe disposal in the country have been raised. Government of India has hitherto neither discussed nor given a roadmap about the safe disposal of the chemical anywhere. Hence, it is vital for the government bodies to lay down an implementation mechanism for the safe disposal of Dicofol in the country. As the time frame committed by the Indian government is less, it might create a deadlock in the country for the disposal of remaining stockpiles if a mechanism is not developed for the disposal of the chemical soon.

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CLIMATE CHANGE ACTIVISM: Youngsters' Edition

Climate change is a widely discussed topic in today's world. The effects of climate change are very real and have been causing disastrous effects. The youth are taking to the streets due to inaction, diversion and loopholes created by countries and organizations seeking to shirk off their responsibilities as per various agreements to offset the effects of climate change by favoring business-as-usual scenarios.

This has been symbolized by Greta Thunberg, the Swedish teenager who sat in front of the Swedish parliament every school day for three weeks, to protest against the lack of climate action. She further refined her protest by continuing the strike every Friday until the Swedish policies provided a safe pathway well under 2° Celsius, i.e., in line with the Paris Agreement.ⁱ She has become a symbol to many and inspired movements across the world such as when students around the world skipped school to protest and demand action on climate change to join her Friday for Future protests. The 16-year-old has been recognized by the TIME magazine as a Next Generation Leaderⁱⁱ and has been nominated by the Swedish Government for the Noble Prize.

A lot of youth involved in leading the movements have faced or are aware of the disastrous consequences of climate change and have thus vowed to bring

about a change to secure their future. There are prominent activists across the world especially girls who are either initiating the movement or controlling the momentum of the movement such as India Logan Riley from New Zealand who is working for climate justice for indigenous people and to get them their right over their land, Nakabuye Hilda F. from Uganda who is raising the issue of plastic pollution and hazards of climate change; Shalvi Sakshi from Fiji who is bringing attention to the fact that the island nation is under the danger of being submerged in the next few years due to rising global sea levels and many more across the globe who are sounding the wake up call to these issues.ⁱⁱⁱ

Today a greater number of women and girls are participating and leading the movement. This is significant as it is not only the effect of Greta Thunberg^{iv} that has helped women in coming out and leading the movements in different parts of the world but also in voicing opinions in an unequal society^v. Climate change is not a gender-neutral issue and is skewed in affecting the vulnerable components of society, i.e., women and children. "Women still have lesser economic, political and legal clout and hence less to cope with and are more exposed to the effects of climate change"^{vi}. This is common in both developed and developing countries and is one of the major reasons why there is a greater visibility of women and young girls in the changing narrative of climate.^{vii} In USA, Green New Deal, a congressional resolution, was brought forth by legislators Alexandria Ocasio-Cortez and Edward J. Markey encouraging the transition of the traditional economy into that of a green economy to tackle the issue of climate change.^{viii}



VOICE FROM THE FIELD

Through the eyes of our researchers and field workers, Toxics Link's 'Voice from the Field' shall present on-the-ground perspectives and first-hand insights of our work for environmental justice and freedom from toxics.

IS THERE MORE THAN WHAT MEETS THE EYE?

By Dr. Prashant Rajankar

Toxics Link recently conducted a study in five villages of Jaipur and Udaipur, Rajasthan to understand the block printing methods, use of raw materials for block printing, and the possible health and environmental impacts caused by this activity. During the study, it was observed that the artisans in the villages largely indulged in chemical dyes. Most of the artisans are involved in the indigo dyeing and printing process. But the indigo dyes were mostly found to be chemical-based, though artisans claimed that these are natural. Extensive use of chemical pigments and other synthetic dyes were found to be very common in all the places. Very few artisans traditionally use vegetable dye colors such as indigo/dabu (a mixture of mud-resistant dabu and indigo dip-dyeing techniques) and harda (which is a yellow base color). Many vegetable dyes need months of curing for the desired color to develop. However, nowadays in order to fulfill bulk orders in lesser time many artisans were found to be using screen printing where the use of synthetic dyes was quite apparent. Natural indigo procured from states like Tamil Nadu is very expensive and it produces lesser quantities of printed products as compared with the chemical based indigo (German Indigo) in the same quantity, therefore many artisans prefer chemical-based indigo (German Indigo) to meet the demand. Almost all the artisans (except few) are using chemicals like hydro (Sodium Hydro Sulphite) as a substitute to jaggery and lime (dyeing components) to accelerate the process of fermentation which seems a cause of concern as it has been labeled for "industrial use only". The natural



In India, the issue of climate change is well-known and recognized as a problem that needs anthropogenic intervention. Indian students were also part of the global Friday for Future Campaign to raise their voices on the issue of climate change and bringing it to the attention of law makers.^{ix}

One of the most prominent examples in this movement has been that of Ridhima Pandey, from Uttarakhand, India who was a witness to the horrific Uttarakhand 2013 flash floods and decided to file a case in March 2017 with the National Green Tribunal (NGT) of India in a climate change case against the Union of India. She invoked the principles of sustainable development and precautionary principle, as well as inter-generational equity and the Public Trust Doctrine. She wanted the MoEFCC and CPCB to "take effective, science-based action to reduce and minimize the adverse impacts of climate change in the country".^x The tribunal in its judgement did not find it necessary to issue any direction to the agencies and the case was disposed.^{xi} Despite this, the young activist is planning on taking the fight to the Supreme Court.

These are just a few cases in a growing global movement against climate change. The frustration is being felt more by the younger generation that has realized that the consequences of climate change will be inherited by them and their upcoming generations. This has stoked fear and a lot of the youngsters have decided to take the matter unto themselves. The movement that has been started is very important as it serves the purpose of bringing the issue to the attention of the general public. These activists and movements

will enable a greater public discourse on climate change and force the policy and decision makers to change their business-as-usual approach to climate and its issues. These young activists can already be considered as warriors that are armed to fight in the long war against climate change. The youth are the future of our species and they are our inheritors. Now they are fighting for their future and it is time we make changes to the legacy that we are leaving them with.

Sherry Pande
sherry@toxicslink.org

ENDNOTES

- i <https://www.fridaysforfuture.org/about>
- ii <http://time.com/collection-post/5584902/greta-thunberg-next-generation-leaders/>
- iii <https://www.globalcitizen.org/en/content/female-activists-saving-planet/>
- iv <https://www.bbc.com/news/world-48114220>
- v <https://www.buzzfeednews.com/article/lesterfeder/europe-climate-change-protests-teens>
- vi <https://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/PB1-AP-Overview-Gender-and-climate-change.pdf>
- vii <https://unfccc.int/news/5-reasons-why-climate-action-needs-women>
- viii <https://www.nytimes.com/2019/02/21/climate/green-new-deal-questions-answers.html>
- ix <https://www.indianwomenblog.org/indian-students-in-support-of-fridays-for-future-protest-against-climate-change/>
- x http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2017/20170325_Original-Application-No.-___-of-2017_petition-1.pdf
- xi [http://www.greentribunal.gov.in/Writere-addata/Downloads/187-2017\(PB-I\)OA15-1-19.pdf](http://www.greentribunal.gov.in/Writere-addata/Downloads/187-2017(PB-I)OA15-1-19.pdf)

process is time-consuming, there is no easily availability of the natural colors, the process is lengthy and sometimes there may be an immediate demand. So, switching to synthetic pigments seemed to be a practical choice and more feasible. Also, it was found that these natural printing processes consume high amount of water along with the dyes (like indigo, azo, mordant) which might further degrade the environment (like infertility of soil) when discharged untreated to nearby rivers, lands etc.

INTERVIEW



Mr. Arjun Dhakal has more than eighteen years of experience in the environmental and development sector. Throughout his professional career and academic background, he always concentrated in the areas of advocacy and research on green growth and governance, public participation, natural resource conservation, energy, climate change adaptation, environmental health etc. He has been working with interest in interdisciplinary issues of scientific and policy-related territory. Currently, he is working as a senior environmental expert with SEEPOR based in Kathmandu and is also involved in different social and environmental assignments. He is the convener/moderator of Nepal Network for Sustainable Development (NNSD) since 2006, a well-recognized policy forum, where about 4000 people have been engaged in policy discourse from different fields including politicians, policy makers, diplomats, media and academicians. In the past, he has also worked as a consultant with various organizations like UNDP, UNEP, UNESCO, World Bank, IUCN, Asian Development Bank (ADB), SDC/SECO, IIED and Asian Institute of Technology (AIT) Bangkok. He was also the Executive Director of NGO Federation of Nepal and Executive Director of Rural Self-Reliance Development Centre (RSDC). In an e-mail interview with Toxics Link's Ipsita Baishya, he talks about the role of environmental journalism in promoting public awareness and engaging policymakers for a greener tomorrow.

1. HOW RELEVANT IS ENVIRONMENTAL JOURNALISM IN TODAY'S WORLD?

Well, I think the role of environmental journalism or communication has been increasing more now than ever before. The air we breathe is polluted, the water we drink is contaminated, the food that we eat has more pesticides and is toxic, disasters and their vulnerability have been increasing, we produce more waste than Nature's carrying capacity. At this stage of emergency, only media and journalists can help in informing the general public about the environmental degradation and influence policy makers and business communities to work towards protecting the environment before it's too late.

2. WHAT IS THE ROLE OF THE MEDIA IN ENGAGING POLICYMAKERS?

Very important of course! It is only the media that can help build public opinion to influence policy makers and can play a crucial role in pushing for pro-environmental policies. For example, if environmental journalists make evidence-based stories on how our surroundings are getting polluted day in and day out and the ones causing it irreversible damage, that really creates pressure on the policymakers to think about public life and makes it imperative for them to adopt environment-friendly policies. At the same time, the media can act as a link between the policymakers and the conscientious public and facilitate two-way communications too. This kind of vertical and horizontal communication inevitably makes them more responsible and accountable.

3. HOW CAN WE PROMOTE ENVIRONMENTAL AWARENESS?

Providing fact and evidence-based information by all media channels is critical. This is not so easy always; but we need to have regular dialogues and communication with the scientific community and link them with social problems. In another way, regular society-policy-science dialogues helps to develop awareness at all levels. Technologically, we need to use all available mainstream media and social media to engage all

interest groups and communities. Just take an example-conventional media is still effective for policy makers of the older generation and new age media like YouTube, Instagram etc are more efficacious for the younger generation, which are mostly consumers and voter groups. The new challenge for a toxic-free world is that all that we get today as consumers is from the farm to the table and factory to pocket. The issues are multi-dimensional and everywhere nowadays demand and supply cater to wide varieties with high volumes. Therefore, the awareness strategy also should be a multi-pronged one at the global level as well as the local level.

4. YOUR TAKE ON IPEN'S VISION OF A TOXICS-FREE FUTURE FOR THE SOUTH ASIAN REGION?

South Asia is the home to half of the world's impoverished people and half of the world's illiterate population reside here too. So we have huge challenges for a toxic-free South Asia now. But for a better future, we have some underlying opportunities and advantages as well in that half of the population is under 25 years of age and this is the largest democratic region of the world. Therefore, we need to work hard to create awareness towards environmental protection amongst politicians; policy makers and the general public together to make the dream come true. Only challenge for us is that we need to be more innovative.

5. WHAT DO YOU THINK ARE THE BIG CHALLENGES FOR ENVIRONMENTAL COVERAGE?

Firstly, lack of data and evidence! We know the science but we need facts and figures to convince people to join the bandwagon. We need powerful stories to share with people. Secondly, the market forces. The producer/polluters are much powerful to control and manipulate the media and often they are hand-in-glove. It is always difficult to get easy coverage in mainstream media on environmental issues which normally reports against indiscriminate profit-making business entities or manufacturers and dealers.

Breathe IN or NOT?



Chhavi Bathla

When we say we are breathing, does anyone wonder what we are inhaling? Yes, this is the question of the hour.

Gazing around through my balcony I can only see the concrete buildings and a tree, yes a lone tree in the whole alley. Looking at that tree I asked a question to myself-is that enough? Is this the only tree which will provide us oxygen and clean air and undergo all the scientific processes that we were taught during the school days? I think the time has come for us to pause and think about the quality of air that we breathe today. At present, most of us are inhaling only polluted air which is especially true for people residing in the metropolitan cities. Due to the increase in construction activities, private vehicles and industries, the environment has become a gas chamber which is slowly but surely taking a toll on the lives of people.

This air pollution is both indoor as well as outdoor with harmful consequences. The outdoor air consists of many particles released from industries, vehicles or any other sources that are not just directly but indirectly detrimental for us. Eye irritation, headaches, cough and dizziness are some of the direct health problems one can feel when outside but there are many indirect consequences that can cause major health ailments such as asthma, lung infection etc. The indoor pollution consists of the smoke released from the cooking fuels, mosquito coils or cigarettes etc. Primarily the passive smoking or the inhalation of smoke from the cigarette by the infants or children can result in serious health maladies. Also, in urban areas where we blame the increase in industrialization as one of the prime factors for the increase in air pollution, in rural areas too, the sources for the increase in air pollution are different but still there. Most of the household chores in rural settlements include the burning of biomass or the fuel wood in order to make food or to keep the houses warm, mostly in winters. This has been a major

cause for the increase in air pollution and hence the problems related to it.

This pollution is not just affecting citizens across the globe but is also upsetting the environment as a whole. The rise in pollution has led to global warming and hence has become one of the major reasons contributing to climate change, which has further damaged the ecosystem. Due to the changing climate, the ice from the glaciers has been melting at a very fast rate, which has increased the sea level. The melting of glaciers has disturbed the whole food chain of many animals living in the colder regions of the world while the increase in sea water level has become a prime reason for natural disasters such as floods and Tsunamis. Over last few decades, India has witnessed many disastrous floods in Bihar, Assam and Kerala.

Such instances are a grim reminder on how fast we are moving towards the destruction of our own selves as well as the future generations. It's high time that we take urgent measures to curb air pollution lest breathing pure air becomes a luxury and people are forced to start living with a gas cylinder of their own.

1. BECAUSE OUR GARBAGE IS GREATER THAN OUR GLORIES: HOW THE DUMP YARD OF GHAZIPUR WILL SOON BE TALLER THAN TAJ MAHAL

Source: *Dailyo.in*, June 12, 2019

Delhi's Ghazipur dump has always inspired awe, fear and wonder, all at the same time, in the heart of the beholder. And it is now set to earn a new accolade — India's tallest rubbish mountain in New Delhi is on course to rise higher than the Taj Mahal by next year, becoming a fetid symbol for what the UN considers the world's most polluted capital, say reports. It is a common sight to see birds of prey hovering around over the towering dump yard that lies on the eastern fringe of Delhi, besides the stray cows, dogs and rats looking for scraps from the expanse of smoking filth. According to reports, East Delhi's superintendent engineer Arun Kumar confirmed that the dump yard is already more than 65 metres (213 feet) high and takes up the area of more than 40 football pitches.

Read more at: <https://www.dailyo.in/variety/ghazipur-dump-yard-taj-mahal-ghazipur-landfill-ghazipur-health-hazards-delhi-waste-management/story/1/31077.html>

2. REIMAGINING THE YAMUNA CAN HELP TRANSFORM IT

Source: *Hindustan Times*, New Delhi, June 27, 2019

Throughout the long Delhi summer, a trickle of the city's sewage and waste run-off feeds the river Yamuna. To re-envision the river, a team of international experts comprising urban ecologists, architects and government experts have worked for six years to devise a workable solution. The result — the Yamuna River Project (YRP) — proposes a synergy between India's capital city and the river. To understand the problem, an analogy with the thermometer seems apt: if the mercury reads 103 degrees Celsius fever on your thermometer, does it mean the thermometer is sick or it's your body? The Yamuna is the barometer of the city's cleanliness; it is simply recording what the city is doing to it. That's why the Yamuna question needs to be reframed.

Read more at: <https://www.hindustantimes.com/analysis/reimagining-the-yamuna-can-help-transform-it/story-7hth5Dox5wXJjkUxf87X6N.html>

3. TATA TO SET UP FIRST STEEL SCRAP RECYCLING PLANT-KOLKATA

Source: *Asian Age, Kolkata, June 27, 2019*

Tata Steel Group, one of the top global steel companies with an annual crude steel capacity of 27.5 million tonne per annum (MTPA) and operations in 26 countries and commercial presence in over 50 countries, has teamed up with Aarti Green Tech, a unit of the Ludhiana-based Aarti Steels, to put up India's first scrap recycling plant in Rohtak, Haryana. The proposed plant with a capacity of 5 lakh tonne per year, will be built on BOO (built, own and operate) model with a total capital outlay of Rs 150 crore. It is expected to commence commercial production in the second half of the current fiscal.

Read more at: <https://www.asianage.com/business/companies/260619/tata-to-set-up-first-steel-scrap-recycling-plant.html>

4. BARCODE BIOMED WASTE DISPOSAL TO DEBUT IN JHARKHAND

Source: *The Times of India, Ranchi, June 24, 2019*

The Jharkhand State Pollution Control Board (JSPCB) is gearing up to launch a barcoded (QR) biomedical waste disposal system, which was mandated by the Centre under the Bio-medical Waste Management Rules, 2016. Jharkhand will become the second state to do so after Haryana, said officials of state pollution watchdog on Saturday, hoping for its proper implementation in the days ahead.

Read more at: <https://timesofindia.indiatimes.com/city/ranchi/barcode-biomed-waste-disposal-to-debut-in-state/articleshow/69908942.cms>

5. G20 LAUNCH NEW FRAMEWORK FOR COMBATING MARINE PLASTIC POLLUTION

Source: *Edie.net, Tokyo, June 17, 2019*

The move, which was made during a meeting of environment and energy ministers from the 20 nations in Japan this week, follows the action plan on marine litter in 2017 which was signed off at the Hamburg Summit. The new framework will see member states promote a lifecycle approach to prevent and reduce plastic waste entering oceans, using international co-operation through the sharing of best practice, innovation and scientific monitoring of waste. Speaking at a news briefing following the summit, Japan's environment minister Yoshiaki Harada said: "I'm glad that we, including emerging countries and developing countries, were able to form a broad international framework."

Read more at: <https://www.edie.net/news/16/g20-marine-plastic-framework-plan->

6. INDIAN STUDENTS THRIVE AS THEY RECYCLE PLASTIC FOR FREE SCHOOLING

Source: *Business live, June 11, 2019*

Armed with bags full of discarded plastic, students at a school in north-east India are hoping to set a precedent by helping the planet — and getting free tuition. The Akshar Forum school in Pamohi in Assam state in north-east India encourages pupils to bring in at least 20 pieces of plastic waste every week in exchange for free schooling. For despite a ban on single-use plastic across many Indian states, it continues to be widely used with thousands of tonnes of plastic waste generated daily that is dumped in streets, drains or landfill, according to the Central Pollution Control.

Read more at: <https://www.businesslive.co.za/bd/world/asia/2019-06-11-indian-students-thrive-as-they-recycle-plastic-for-free-schooling/>

7. LIFE EXPECTANCY IN INDIA DOWN BY 2.6 YRS DUE TO AIR POLLUTION: STUDY

Source: *Economic Times, New Delhi, June 12, 2019*

Life expectancy in India has gone down by 2.6 years due to deadly diseases caused by air pollution, according to a recent report by an environment think tank. The report by the environment organisation Centre for Science and Environment (CSE) revealed that outdoor and household air pollution together are causing deadly diseases. "Air pollution is now the third highest cause of death among all health risks ranking just above smoking in India. This is a combined effect of outdoor particulate matter (PM) 2.5, ozone and household air pollution.

Read more at: <https://economictimes.indiatimes.com/news/politics-and-nation/life-expectancy-in-india-down-by-2-6-yrs-due-to-air-pollution-study/articleshow/69744180.cms?from=mdr>

8. 1 LAKH KIDS UNDER 5 YRS OF AGE DIE DUE TO AIR POLLUTION EACH YEAR: STUDY

Source: *Live Mint, New Delhi, June 05, 2019*

Air pollution has become a national emergency as it is killing one lakh children under the age of five in India every year and is responsible for 12.5% of all deaths in the country, according to a study released on the World Environment Day. Environment think tank CSE's State of India's Environment (SoE) report said that on an average, 8.5 out of every 10,000 children in India die before they turn five, while the risk was higher for girls as 9.6 out of 10,000 girls die before five years of age due to bad air. "Air pollution is responsible for 12.5% of all deaths in India. Its impact on children is equally worrying. Over 1,00,000 children below the age of five die due to bad air in the country," the CSE report said.

Read more at: <https://www.livemint.com/news/india/1-lakh-kids-under-5-yrs-of-age-die-due-to-air-pollution-each-year-study-1559737894733.html>

9. THIS FISH HAS EVOLVED TO THRIVE IN INTENSELY POLLUTED WATER

Source: *Gizmodo, Washington, May 05, 2019*

A small fish somehow evolved resistance to the heavily polluted water of the Houston Ship Channel by mysteriously acquiring genes from another fish from thousands of miles away, according to a new paper. The Houston Ship Channel's filthy water is the result of 60 years of industrial dumping, contaminating the water out into Galveston Bay. But despite the grime, a population of Gulf killifish have managed to evolve resistance to the otherwise lethal pollution. Genetic sequences revealed that the fish have integrated a small bit of DNA from another species of fish, the Atlantic killifish. These results show the extreme luck and difficulty required for animals to adapt to environments changed quickly by humans.

Read more at: <https://gizmodo.com/this-fish-has-evolved-to-thrive-in-intensely-polluted-w-1834473178>

10. 180 COUNTRIES — EXCEPT US — AGREE TO PLASTIC WASTE AGREEMENT

Source: *dw.com, May 12, 2019*

Almost every country in the world, except the United States, agreed to a deal on Friday that would sharply reduce the amount of plastic being washed into the world's oceans. The legally binding framework for reducing plastic waste means countries will have to monitor and track thousands of types of plastic waste outside their borders. The deal was struck after 1,400 representatives met for 12 days of discussions at a United Nations Environment Program meeting in Geneva. The deal essentially updates the 1989 Basel Convention on the control of hazardous waste to include plastic. "It's sending a very strong political signal to the rest of the world — to the private sector, to the consumer market — that we need to do something," Rolph Payet of the United Nations Environment Program said. "Countries have decided to do something which will translate into real action on the ground."

Read more at: <https://www.dw.com/en/180-countries-except-us-agree-to-plastic-waste-agreement/a-48686333>

11. HOW DIRTY IS YAMUNA? A BOAT RIDE TELLS YOU

Source: *The Times of India, New Delhi, April 2, 2019*

A boat ride down the Yamuna in the capital provides visual proof of how polluted the river is. But a new technology quantifies this presence of pollutant. The "Water-to-Cloud" tech uses sensors attached to the boat. When the system traverses the riverine course, the sensors send real-time readings to a handheld device that allows researchers to analyze the spots along the river where the pollution is highest.

Read more at: <https://timesofindia.indiatimes.com/city/delhi/how-dirty-is-yamuna-a-boat-ride-tells-you/articleshow/68678516.cms>

12. INDIA STARES AT PILE OF SOLAR E-WASTE

Source: *The Hindu, New Delhi, April 12, 2019*

By 2050, India will likely stare at a pile of a new category of electronic waste, namely solar e-waste, says a study made public on Thursday. Currently, India's e-waste rules have no laws mandating solar cell manufacturers to recycle or dispose waste from this sector. "India's PV (photovoltaic) waste volume is estimated to grow to 200,000 tonnes by 2030 and around 1.8 million tonnes by 2050," said the study by Bridge To India (BTI), an energy consultancy firm. India is among the leading markets for solar cells in the world, buoyed by the government's commitment to install 100 GW of solar power by 2022. So far, India has installed solar cells for about 28 GW and this is largely from imported solar PV cells.

Read more at: <https://www.thehindu.com/sci-tech/energy-and-environment/india-stares-at-pile-of-solar-e-waste/article26809672.ece>

13. DUMPING PLASTIC WASTE IN ASIA FOUND DESTROYING CROPS AND HEALTH

Source: *Indian Express, World, April 24, 2019*

The world's recyclable plastic is being shipped to Asia where it is illegally dumped, buried or burned in the country with the lightest regulations, environmentalists warned on Tuesday calling for greater transparency in the global waste trade. A report by Global Alliance for Incinerator Alternatives (GAIA) and Greenpeace East Asia analysed the top 21 exporters and importers of plastic recyclable waste from 2016 until 2018 – before and after China stopped taking such waste last year. It found that plastic waste imports into Thailand, Malaysia and Vietnam jumped from mid-2017 to early 2018, leading to illegal operations dumping and open-burning, contaminating water supplies, killing crops and causing respiratory illnesses.

Read more at: <https://indianexpress.com/article/world/dumping-plastic-waste-in-asia-found-destroying-crops-and-health-5690377/>

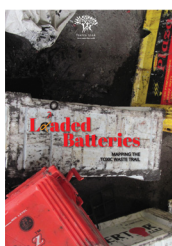
14. AIR POLLUTION IS A BIG KILLER IN INDIA

Source: *Gulf Today, April 24, 2019*

A recent report 'State of Global Air 2019', by the US-based Health Effects Institute, revealed that over 12 lakh deaths in India were caused by air pollution. The burden of Type 2 diabetes contributed by exposure to fine particulate pollution is the highest in India, according to the report. Air pollution lowers insulin sensitivity, contributing to diabetes. Globally, such exposure contributed to about 2.76 lakh deaths and 15.2 million life years lost to disability in 2017. This burden was highest in India, where it accounted for 55,000 deaths and 2.7 million life years lost, according to the report by Health Effects Institute (HEI) and Institute of Health Metrics and Evaluation's Global Burden of Disease project. India was followed by China, Indonesia, Mexico and Brazil.

Read more at: <https://www.gulftoday.ae/opinion/2019/04/24/air-pollution-is-a-big-killer-in-india>

RESOURCES



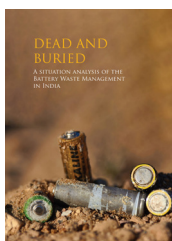
LOADED BATTERIES MAPPING THE TOXIC WASTE TRAIL

The Indian lead acid battery market was valued at \$4.47 billion in 2016 and is expected to grow at a CAGR of 8.36% in terms of value, to reach close to \$8 billion by 2022. Lead acid batteries are rechargeable batteries very commonly used in automobiles for starting lighting and ignition (SLI) and for various other purposes such as inverters and UPS (uninterrupted power supply), in telecommunication and railways. The study evaluates the current status of Used lead acid battery management in the country, based on its extensive research on the value chain and recycling practices in four states-Delhi, Rajasthan, Andhra Pradesh and Jharkhand.



BOTTLES CAN BE TOXIC PART-II

'Bottles can be Toxic Part-II' is an investigative study on migration of Bisphenol A (BPA) in baby feeding bottles and sippy cups in India. Bisphenol-A can leach into food from the protective internal epoxy resin coatings of canned foods and from consumer products such as polycarbonate tableware, food storage containers, water bottles, and baby bottles. BPA present in the lining of baby bottles may seep into the contents of the bottle after constant reheating, mechanical pressure, or exposure to high pH detergents. This BPA is a harmful chemical and is known to mimic a hormone in the body which activates the progression of cancer and interferes with the development of the reproductive system and can also increase the risk of breast cancer, prostate cancer, brain and thyroid abnormalities, heart diseases, early puberty etc.



END-OF-LIFE SMALL BATTERIES BURIED RESOURCE OR HAZARD OR BOTH?

The factsheet 'End-of-life small batteries' states about the management of the batteries and how it affects our environment if not disposed (after use) properly. 90 percent of the batteries consumed in India go to landfills every year amounting to 2.4 billion pieces, impacting the environment and health and wasting huge resources.

EVENTS:

IPEN'S SOUTH ASIA REGIONAL MEETING



To discuss IPEN's (International Pollutants Elimination Network) agenda for a toxics free future for South Asia Region, Toxics Link organized a South Asia Regional Meeting from 17th to 19th April, 2019. It witnessed participation

from India, Nepal, Bangladesh, Sri Lanka and Bhutan. The focus of the meeting was on the cross-cutting issues of chemicals, waste and toxicity in the region in the context of various international developments and policies. Ms Tiffany

Tool Network organizer of IPEN talked about IPEN's 2020 goals and its Toxics-free SDG strategy. The participants discussed various topics such as international chemical safety policies; mobilizing resources for environmental, health and chemical safety; waste and its management practices; sustainable agriculture; media funding and regional priorities; environmental journalism and so on. IPEN (International Pollutants Elimination Network) is a global network of NGOs working together for a common cause of a toxic-free future for all. It is comprised of over 500 Participating Organizations in more than 100 countries, primarily in countries with developing and transitional economies. To know more about IPEN, contact Ms Tripti, IPEN Hub Co-ordinator (tripti@toxicslink.org)

ROUNDTABLE ON THE STATUS OF BIO-MEDICAL WASTE MANAGEMENT IN JHARKHAND

Toxics Link, in collaboration with Lok Swar (Jharkhand), conducted a study to evaluate the current status of bio-medical waste management in five major cities of Jharkhand. In this context, a roundtable was organized on 25th April, 2019 to discuss the findings from the study as well as to engage with the stakeholders on measures required to improve the on-ground situation regarding biomedical waste management. The roundtable was attended by different stakeholders including representatives from the State Government (State Health Department), healthcare facilities – private and government, CBWTF, civil society organizations and the media.

The study was conducted in 31 different categories of bedded healthcare facilities from Ranchi, Jamshedpur, Dhanbad, Deoghar and Bokaro. It looked at the waste management practices, availability of infrastructural and management provisions at the healthcare facilities as well as the waste treatment and disposal scenarios in the five cities in Jharkhand.



PUBLIC LECTURE ON 'IS THE CLIMATE CHANGING?'



Toxics Link in collaboration with India International Centre organized a Public Lecture on 'Is The Climate Changing?' on May 30, 2019. The objective of the public lecture on climate change was to discuss the imminent threat to our planet and to raise awareness amongst the public about the looming danger we all are facing. It also tried to examine the existing policies, initiatives in dealing with climate change and the way forward. The lecture also looked at solutions to combat the problem through civic engagement and the initiatives needed with regard to the issue too. The speakers were Dr Mrutyunjay Mohapatra from the Indian Meteorological Department, Wing Commander Amit Chowdhury from the Indian Mountaineering Foundation and Dr Anubha Aggarwal from TERI.

TRAVELLING FILM FESTIVAL- "QUOTES FROM THE EARTH"

Along with the biennial "Quotes from the Earth", Toxics Link also organises travelling film festival at cities, towns and remote locations of our country. The purpose is to provide a platform for local residents/institutes to connect their surrounding issues with that of larger global environmental concerns, to further enhance awareness and strengthen the policy advocacy initiatives at all levels. The travelling film festival is organised with support of local civil society organisations or schools or any other environment based institution. If you are interested in organising "Quotes from the Earth" in your area, please write to us or call us at our office numbers.



PHASING OUT BPA!

It's almost impossible to find a product that does not have synthetic chemical added into it, and one of them is the commonly used baby feeding bottle containing the chemical BPA in it. BPA or Bisphenol-A found in baby feeding bottles play the role of Endocrine Disruptive Chemicals (EDCs) that are capable of harming infants and newborn babies. Many countries have banned it as a precautionary measure. Toxics Link has been campaigning against the chemical and released a lab tested report titled "Bottles can Be Toxic" that received considerable attention from all stakeholders including the media. The report was also discussed during winter session of the Indian Parliament. Currently, we are having dialogues with Bureau of Indian Standards to completely phase out BPA from India. Join us in our campaign against BPA.

TOXICS LINK LIBRARY-A TREASURE HOUSE OF KNOWLEDGE

The library of Toxics Link houses a variety of books, magazines and reports which are well-stocked, classified and indexed, for the benefit of the readers. One can also get the entire collection of around 520 documentary films from around the world on various issues concerning environment. It has over 4900 books and research based reports; and new books, magazines and periodicals are added from time to time. One can also find media coverage on environment that are updated on a regular basis. Besides, the library also has stock of parliament questions that are raised on the research based studies on environment done by Toxics Link. The readers can find all the studies done by Toxics Link on its website.

TOXICS ALERT (E-NEWS)

An environment news bulletin

Visit: <http://enews.toxicslink.org/>, for our monthly e-newsletter on environment related news, articles, policy interventions, events on toxicity and its management. You can also subscribe to receive its update via e-mail.



Toxics Link
for a toxics-free world

STAY CONNECTED

For more information materials, invitations and updates on environmental issues please write to us at info@toxicslink.org



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EDITED BY

Ipsita Baishya and Ruby Rani

Toxics Link

H-2, (Ground Floor), Jangpura

Extension, New Delhi - 110014

T: +91-11-24328006, 24320711

F: +91-11-24321747

E: info@toxicslink.org

www.toxicslink.org