Newsletter | April 2024

Green News

West Bengal Pollution Control Board

Salt lake CA Market Makes Shopping Greener with Cloth Bag Vending Machine

The menace of plastic waste pollution has burgeoned into a global as well as localized crisis requiring both immediate and sustainable attention and action. The ill effects of using single-use plastic carry bags are multifaceted. It not only chokes the drainage system leading towards water logging and even flood but also causes environmental degradation, human health hazards, affects aquatic ecosystem due to its non-biodegradable nature. Keeping the adversities in mind, rules have been framed banning single-use Plastic carry bags below 120-micron thickness in our Country. Yet, use of plastic carry bags is very much common in our daily life activities which causes environmental degradation. The Mission LiFE programme decodes some essential lifestyle modification for environmental cause and also emphasizes on public awareness related to rejection of single-use plastic carry bags under the theme- 'Single Use Plastic Reduced'.

In order to fulfil the objective of reducing plastic waste production through providing an eco-friendly alternative of single-use plastic carry bags with a captivating message- 'Use cloth bag for shopping instead of plastic bags' as well as promoting the Mission LiFE theme, the West Bengal Pollution Control Board under the State Environment Department in as-sociation with the Bidhannagar Municipal Corporation took an initiative to install the first ever Cloth Bag Vending Machine of West Bengal at Saltlake CA Market. For this purpose, Shri Rajesh Chirimar, Councillor of Ward no.- 39 and Member, Mayor in-Council, Bidhannagar Municipal Corporation welco- comed all the dignitaries, government officials, students and teachers of Kishore Vidyapith for Boys' High School and Kishore Vidyapith for Girls' High School during the inaugural programme organized on 11 March, 2024 at the Saltlake CA Market complex.

Md. Ghulam Rabbani delivering his speech

Shri Sujit Bose, Hon'ble Minister-in-charge, Dept. of Fire & Emergency Services, Govt. of West Bengal graced the event as Chief guest. Janab Md. ghullam Rabbani, Dept. of Environment, Govt. of West Bengal inaugurated the vending machine. Dr. Kalyan Rudra, Chairman, Dr. Rajesh Kumar, IPS, Member Secretary of the State Board, Shri Sujoy Sarkar, IAS, Commissioner, BMC, Shri Subrata Ghosh, Officer on Special Duty, WBPCB, Dr. Tapas Kr. Gupta, Chief Technical Adviser, WBPCB, SMt. Anita Mondal, Deputy Mayor BMC, Smt. Rahima Bibi Mondal, MMIC, BMC made the event attractive with their gracious presence and motivated the people as well as the students, teachers to use cloth bags using the machine in order to discard single-use plastic carry bags to make our environment clean. They also assured to install similar vending machines at other prominent market places in and around Kolkata. Hon'ble ministers also inaugurated the Plastic Waste Processing Unit during the same event. The event ended with a positive message for everyone. Like earlier, the event was also viewed on Social Media platforms.

Cloth bag for Shopping to replace Single-use Plastic carry bags

Industrial and residential effluents polluting rivers: Dr. Kalyan Rudra

Dr. Kalyan Rudra delivering his speech at St. Alphonsus Higher Secondary School, Kurseong

Dr. Kalyan Rudra, the chairman of the West Bengal Pollution Control Board, in his exhilarating speech at the workshop cum model exhibition held at Kurseong, on 1 March, 2024, spoke about how last 200 years have seen a flourishing boost in the quality of life but on the other hand it has also seen a disturbing decline in the quality of environment. Humans have always turned a blind eye when it came towards nature where on one hand people living in a society are consistently dependent on nature for almost everything, yet deny to return the favor it truly deserves. Dr. Rudra also stated about the four critical pillars of the environment namely Lithosphere, Hydrosphere, Atmosphere and Biosphere. He described how throughout the late 60's or the Green revolution period with the introduction of "chemical agriculture" has boosted agricultural productivity but simultaneously it has also weakened crust and decreased soil quality. He showed his concern on over more than 300 rivers in India that has been declared polluted or partially polluted by the Government of India, Ganga being no exception. He mentioned about Adi ganga in Kalighat region and Mahananda in North Bengal as some of the most polluted rivers in India. These rivers are geting polluted due to industrial and residential effluents that has been carelessly dumped into the rivers. Even our seas have been infested with stray plastics that are destroying our water bodies and the organisms that live in them. Dr. Kalyan Rudra talks about how these microplastics are making their way from rivers to our bodies on a daily basis. Another aspect of nature that has bore the brunt of so-called modernization of man is the harm that we cause towards the atmosphere. Alongside Delhi , cities like Kolkata, Howrah, Haldia, Barrackpore, Asansol and Durgapur in West Bengal performs worst in the air quality index and has been deemed "non-attainment" for breathing by the Government of India. Particulate matter present in air like $PM_{2.5}$ is extremely harmful for the human respiratory system. $PM_{2.5}$ is a particle so fine that it easily mixes up with blood and can act as a carcinogenic agent. Dr. Rudra also showed his concern on how with all the damage mankind has brought upon Nature, the most brutal effects it has on other organisms. The degraded soil no longer harbours earthworms and insecticide infested flowers no longer host bees and butterflies. Dr. Rudra urged everyone to come forward and to raise concern and act united in adopting an eco-friendly lifestyle. Mission LiFE will be a front runner in delivering the message to every corner of the State and will help to reverse the damage that has been done.

Dr. Kalyan Rudra giving away the 1st prize to Tindharia High School

Mr. Taranjeet Singh and Dr. Kalyan Rudra giving away the 2nd prize to Kurseong Adarsha Vidyalaya

Dr. Kalyan Rudra and Mr. Taranjeet Singh giving away the 3rd prize to Sanaullah High School

Dr. Kalyan Rudra and Mr. Taranjeet Singh giving away the 4th prize to the students of Shaktigarh Vidyapith H S School

Taranjeet Singh, MoEF&CC, Govt. of India, encourages reducing Single-Use Plastics, Water Conservation and Energy Efficiency

Mr. Taranjeet Singh delivering his speech

Mr. Taranjeet Singh, ASO, EEP, MoEF & CC, Government of India was the guest of honor at the workshop cum model exhibition held at St. Alphonsus School, Kurseong. During his interaction with the students, he said "changing basic day-to-day behaviours holds immense potential to mitigate environmental degradation and foster sustainability. From reducing waste and conserving resources to adopting eco-friendly habits, individuals can make a significant impact on the health of the planet. Students, in particular, play a pivotal role in this endeavour, as they represent the future stewards of the environment." He spoke about simple actions like reducing single-use plastics, conserving water and energy, and opting for sustainable transportation choices which can collectively lead to substantial environmental benefits. By embracing practices such as recycling, composting, and supporting local and organic products, individuals can minimize their ecological footprint and contribute to a healthier planet. Education which also plays a crucial role in shaping environmentally conscious behaviors. Schools and universities have a unique opportunity to instill values of environmental stewardship in students and empower them with knowledge and skills to address pressing environmental challenges. workshop cum model exhibition, hands-on experiences, and involvement in sustainability initiatives can inspire students to become active agents of change in their communities. Moreover, students are often at the forefront of advocating for environmental action and driving positive change. Through student-led organizations, initiatives, and campaigns, young people worldwide are raising awareness, promoting sustainable practices, and advocating for policy changes to protect the environment.

EDITORIAL

Here is the newest edition of the newsletter- GREEN NEWS for the month of April, which focusses on different multifaceted activities, events and programmes based on Mission LiFE themes in order to observe environmentally significant days conducted by the WBPCB in a befitting manner. Like previous, the current issue also promotes all the seven aspects comprising some prominent lifestyle modification actions under the Mission LiFE programme.

It highlights the menace of plastic waste pollution, which is increasing day by day and hence affects human health, harms biodiversity, causes natural disaster and above all degrades the environment as a whole. Therefore, its high time to provide a desirable, affordable and most importantly ecofriendly alternative for the people in order to replace the use of harmful Single-use Plastic (SUP) carry bags. The first ever Cloth Bag Vending machine of West Bengal is one such milestone initiative of the State Board towards the goal of making our State free from SUP pollution. This initiative not only promotes the Mission LiFE theme- 'Single Use Plastic Reduced' but also creates awareness about the harmful effects of using SUP and hence encourages people to say 'NO' to SUP instead use eco-friendly bags made of cloth, jute etc.

The State Board intended to involve the students of the beautiful hill town, Kurseong in Darjeeling district to create awareness among them by organizing an event of Workshop cum Model exhibition based on Mission LiFE there. The students showcased very impressive models on seven different Mission LiFE themes on that platform.

Apart from this, the State Board tries to make the students and teachers aware about the present water crisis throughout the world and the need to take immediate necessary action in order to conserve the very precious natural resource by reducing its wastage as much as possible for the days to come. Moreover, Bal Urja Chetna Programme inspires a number of students and teachers to get involved in various environmental activities based on all aspects of Mission LiFE throughout the year and even spread awareness among the respective community areas.

I am sure that the WBPCB will keep up the spirit of carrying out more such initiatives in future and make a prominent footprint towards sustainable development.

Dr. Rajesh Kumar, IPS
Member Secretary, WBPCB

Dr. Kalyan Rudra and Mr. Subrata Ghosh watering a sapling at the environment education programme

The Headmaster of St. Alphonsus Higher Secondary School, Kurseong delivering his speech

Dr. Kalyan Rudra interacting with the students of St. Xavier's School

Forests Get Smart: Motion Sensors to Protect Wildlife

Students of Sanaullah High School with their model

In forest regions where railway lines intersect with wildlife habitats, collisions between trains and animals pose a grave threat to both wildlife and human safety. However, innovative technologies such as motion sensors and CCTV cameras offer promising solutions to mitigate these risks and protect vulnerable species. Motion sensors strategically placed along railway tracks can detect the movement of animals approaching the tracks. Once activated, these sensors trigger warning signals that alert train operators about the presence of wildlife nearby. This early warning system provides crucial time for trains to slow down or stop, reducing the likelihood of collisions with animals. Complementing motion sensors, CCTV cameras installed at key locations along railway lines enable real-time monitoring of wildlife activity. These cameras capture footage of animals crossing or lingering near the tracks, allowing authorities to assess the frequency and patterns of wildlife interactions with trains. By analyzing this data, railway operators can identify high-risk areas and implement targeted measures to mitigate potential collisions. The integration of motion sensors and CCTV cameras near railway lines in forest regions represents a proactive approach to wildlife conservation and railway safety. By leveraging technology to detect and respond to wildlife presence, these systems help safeguard biodiversity and prevent unnecessary harm to animals. Through collaborative efforts between railway authorities, wildlife conservation organizations, and local communities, a safer environment for both wildlife and humans can be created.

Unlock a Greener Future: Start with Dry & Wet Waste Segregation

Students of Saktigarh Bidyapith HS School with their model on Mission LiFE

Dry waste and wet waste segregation is a critical aspect of waste management that involves separating different types of waste materials to facilitate their proper disposal or recycling. Dry waste typically includes items such as paper, plastic, glass, and metal, while wet waste consists of organic materials like food scraps, yard waste, and biodegradable items. Segregating dry and wet waste offers several benefits. Firstly, it enables more efficient recycling processes. This, reduces the amount of waste sent to landfills. Segregating wet waste allows for the implementation of composting systems, where organic waste is transformed into nutrient-rich compost for use in gardens or agriculture.

The 7 Rs of sustainability are a set of principles aimed at promoting responsible consumption and waste management practices:

Reduce: Minimize the generation of waste by using fewer resources and making conscious choices to limit consumption.

Reuse: Extend the lifespan of products by finding alternative uses or repurposing items instead of disposing of them.

Recycle: Process materials to create new products, thereby conserving resources and reducing the need for raw materials.

Repair: Fix or refurbish items that are damaged or broken, rather than replacing them with new ones.

Rethink: Evaluate consumption habits and make changes to reduce environmental impact.

Refuse: Decline unnecessary or excessive packaging, single-use items, or products with high environmental costs.

Respect: Respect the environment and prioritize sustainable practices in daily life.

By following these principles and actively participating in dry waste and wet waste segregation efforts, individuals can contribute to a more sustainable future by reducing waste, conserving resources, and minimizing environmental impact.

Embrace LiFE: Building a Sustainable Future with Rainwater Harvesting

With the vision of a future Siliguri that says making each household energy independent, each street pollution free and each drop of water nectar, Pragati College Of Education came with their model on theme Mission LiFE. According to the students, in Siliguri, the quest for sustainable living is paramount. With a focus on making every household hold energy independent, creating a pollution-free environment, and ensuring access to clean water, Siliguri can lead the way towards a brighter, more sustainable future. Achieving energy independence begins with harnessing renewable energy sources such as solar and wind power. By installing solar panels on rooftops and utilizing wind turbines, households can generate their own clean electricity, reducing dependence on fossil fuels and lowering carbon emissions. Moreover, energy-efficient appliances and building designs play a crucial role in minimizing energy consumption and promoting sustainability. Transitioning to electric vehicles, promoting public transportation, and implementing waste management programs can significantly reduce air pollution levels. Additionally, enforc

Students of Pragati College of Education with their exhibited model

Furthermore, implementing water treatment systems and safeguarding natural water bodies from pollution are vital steps towards ensuring strict environmental regulations and investing in clean technologies can help mitigate industrial pollution and protect natural ecosystems. ing clean water for all. By prioritizingenergy independence, pollution reduction, and clean water access in Siliguri, communities can create healthier and more sustainable living environments for present and future generations. Through collective action and collaboration between government agencies, businesses, and residents, Siliguri can emerge as a shining example of sustainable urban development, where every household is empowered to thrive in harmony with nature.

Kurseong Event Highlights Innovation: Traditional Water Wheel Powers Irrigation

Students and teacher of Kurseong Adarsha Vidyalaya with their model based on Mission LiFE

In the hilly region of Kurseong, where water scarcity is a prevalent issue, innovative solutions such as the water wheel irrigation system can be implemented to address agricultural challenges and ensure water security for farmers. Kurseong Adarsha Vidyalaya exhibited The water wheel irrigati-on system as they are model under Theme Mission LiFE. This is also known as the noria or Persian wheel, which is a traditional method of water lifting that dates back centuries. It consists of a large wooden wheel with buckets attached around its circumference. As the wheel turns, the buckets dip into a water source, such as a river or stream, and carry water to a higher elevation, where it is then distributed to fields through a network of channels or pipes. In Kurseong's hilly terrain, where conventional irrigation methods are often impractical or insufficient, the water wheel irrigation system offers a sustainable solution. By harnessing the natural flow of water, farmers can efficiently lift water from lower-lying sources to irrigate their fields located at higher elevations. This system is particularly well-suited to small-scale farming operations, where access to water for irrigation is limited. The water wheel irrigation system not only addresses water scarcity but also promotes water conservation and energy efficiency.

The students of Margaret's Hope Higher Secondary School with their model on theme Mission LiFE

Dr. Kalyan Rudra giving away the certificate of participation to the Headmaster of St. Alphonsus Higher Secondary School, Kurseong

Dr. Kalyan Rudra interacting with the students at Kurseong.

Grow Your Own Food: Start a Kitchen Garden for Fresher, Healthier Meal

The students of Tindharia Girls High School with their model on Mission LiFE

Tindharia Girls High School exhibited "Kitchen Garden" as their model on Mission LiFE. Kitchen gardens provide a sustainable alternative to commercially grown food, empowering individuals to cultivate their own produce and reduce reliance on external sources. By growing fruits, vegetables, and herbs at home, individuals can enjoy fresh, organic produce while minimizing their carbon footprint. Additionally, kitchen garden waste, such as vegetable peels and fruit scraps, can be composted to create nutrient-rich soil amendments. This closed-loop approach not only reduces household waste but also enriches the soil, promoting healthy plant growth. Furthermore, cow dung serves as an effective natural fertilizer, providing essential nutrients like nitrogen, phosphorus, and potassium to nourish plants. Incorporating cow dung into the garden enhances soil fertility and yields bountiful harvests.

Students at the workshop cum model exhibition under theme Mission LiFE

Dr. Kalyan Rudra interacting with the students at the workshop

An unique way of procuring clean drinking water

Procuring clean drinking water naturally and implementing an eco-friendly drainage system are crucial steps towards sustainable living and environmental conservation. The model of Bagdogra Chittaranjan High School was on procurement of clean drinking water under Mission LiFE theme. One effective method of obtaining clean drinking water naturally is rainwater harvesting. This involves collecting rainwater runoff from rooftops or other surfaces and storing it for future use. Rainwater is a free and abundant resource that can be filtered and treated to meet drinking water standards, reducing the reliance on traditional water sources and minimizing the carbon footprint associated with water distribution. Additionally, implementing an eco-friendly drainage system can help mitigate the negative impacts of stormwater runoff on the environment. Instead of channeling rainwater directly into storm drains, which can lead to pollution of water bodies and flooding, eco-friendly drainage systems utilize permeable surfaces, green roofs, rain gardens, and bio swales to capture and filter stormwater naturally. These systems help recharge groundwater, reduce erosion, and improve water qualityremoving pollutants before they enter natural waterways. By procuring clean drinking water naturally through rainwater harvesting and implementing eco-friendly drainage systems, communities can reduce their environmental impact, conserve water resources, and promote sustainable living practices.

Students of Bagdogra Chittaranjan High School with their model under Mission LiFE

Vermicompost, an eco-friendly alternative against chemical fertilizers

The adoption of vermicompost, along with recycling, reusing, and reducing plastic use, coupled with dry and wet waste segregation, represents a holistic approach to sustainable waste management. Vermicompost, a nutrient-rich organic fertilizer produced through the process of composting with the help of earthworms, offers a natural and eco-friendly solution to enrich soil fertility and promote plant growth. By utilizing vermicompost, organic waste materials such as kitchen scraps, yard waste, and agricultural residues are diverted from landfills, where they would otherwise contribute to greenhouse gas emissions and environmental degradation. Instead, these organic materials are transformed into valuable compost, which replenishes soil nutrients, enhances soil structure, and increases water retention. In addition to vermicomposting, recycling, reusing, and reducing plastic use are integral components of sustainable waste management practices. Recycling involves processing waste materials such as paper, plastic, glass, and metal into new products, thereby conserving resources and reducing the need for raw materials extraction. Reusing entails finding alternative uses for items and avoiding single-use products whenever possible, while reducing plastic use involves minimizing the consumption of plastic packaging, bags, and other disposable items. Furthermore, segregating dry and wet waste streams enables more efficient waste management processes.

Students of Tindharia High School with their exhibited model under theme Mission LiFE

Urja Chetna programme on Mission LiFE

The West Bengal Pollution Control Board (WBPCB) collaborated with the Centre for Environment Education (CEE) to promote Mission LiFE themes through the initiative of Bal Urja Chetna Programme- an environmental awareness programme in association with the CESC Ltd. The final day event of the project was organized at Birla Institute of Technological & Industrial Museum, Kolkata on 15 March, 2024. The main objective of the programme was to encourage as well as involve more students in various environmental activities in order to make them aware about various environmental issues and possible way out to mitigate those.

Under this initiative about 300 students from 10 schools in and around Kolkata participated and undertook various activities, like air pollution, waste management, greening the school campus, plastic pollution, water conservation etc. under respective themes of Mission LiFE throughout the year. After successful completion of the projects by each participating school, final reports were submitted to CEE. The performances were evaluated on the basis of certain criteria, i.e., yearly activities, number of participating students and teachers, impact of the activity, community outreach, consistency and quality of the project performed by the participants. A panel of three judges consisting of officials from the WBPCB, CEE and CESC ltd evaluated the reports.

Prize distribution ceremony

Model displayed by the students

The teachers of the participating schools described their yearly activities briefly though powerpoint presentations. The students of Baidyapara High School performed a drama to create awareness about harmful effects on environment, human health as well as biodiversity loss due to use of Single-use plastic carry bags. All the participating students displayed beautiful models on different themes in the exhibition. The event was graced by the officials of CEE, CESC ltd. WBPCB and State Education Department (Sarba Shiksha Abhijaan) and delivered their speeches to motivate the students to be more proactive for environmental cause and encouraged them to follow some lifestyle modification activities under Mission liFE. The programme ended with great enthusiasm and a positive note.

The following schools participated in the programme:

1. Tiljala High School
2. Behala Girls High School
3. Kumar Ashutosh Institution (Boys)
4. Lee Collins High School
5. Mitra Institution (Main)
6. Baidyapara High School
7. Ananda Ashram Balika Vidyapeeth
8. Putiary Brajamohan Tewary Girls High School
9. Jadavpur N. k. pal Adarsha Sikshyatan
10. Jagatpur Rukmini Vidyamandir

Observation of World Water Day- 2024

As per the workshop cum model exhibition curriculum, the West Bengal Pollution Control Board observed World Water Day- 2024 based on the UN theme- 'Water for Peace' on 22 March, 2024 at the conference Room, Paribesh Bhawan, Kolkata in a befitting manner.

Dr. Rajesh Kumar, IPS, Member Secretary, WBPCB cordially welcomed all the students, teachers and Board officials in the programme and briefed about the significance and purpose of observing such an important day. He talked about status of water scarcity in different parts of the country and mentioned about various activities of the State Board regarding checking water pollution and monitoring water quality at a number of stations along major rivers, water bodies, canals, groundwater and coastal area across the State.

Dr. Kalyan Rudra, Chairman, WBPCB beautifully explained the history of river flow and water distribution not only among different countries but also different states of India. He provided relevant data to explain the contrast between water storage and its consumption. He stressed upon prevention of water wastage and sensible usage of the natural resource in order to preserve it and maintain the proper balance of the ecosystem as well as the environment. He also emphasized on the importance of creating awareness about water conservation among all and maintaining the harmony and peaceful utilization of water resource by all the countries and states through which a river passes through. Beside this, he announced about poster competition on the themes of World water Day and upcoming World Environment Day- 2024 under Mission LiFE Programme.

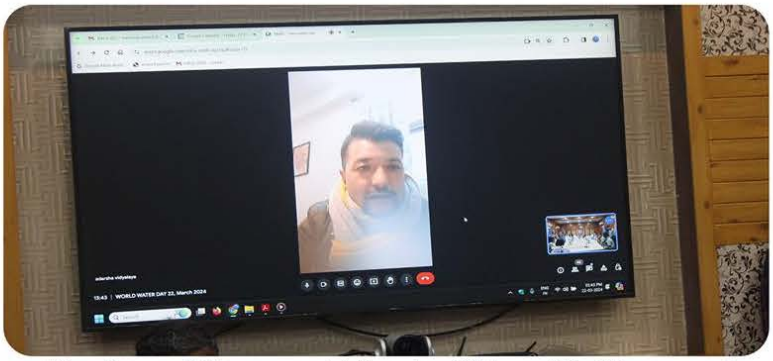
Shri Subrata Ghosh, Officer on Special Duty, WBPCB highlighted the theme- 'Water saved' under Mission LiFE programme in order to encourage the participants to follow or bring some changes in daily life activities to stop water wastage leading towards water conservation. He thanked everybody for participating in the programme physically as well as on digital platform.

Address by the Chairman, Member Secretary and OSD, WBPCB during the event

During the interaction session, teachers and students of different schools and colleges shared their views expressed their wish to organize more awareness programmes on water conservation in collaboration with the State Board.

About 63 students and teachers of Beliaghata Shanti Sangha Vidyatan for Girls, Beliaghata Shanti Sangha Vidyatan for Boys and AIWC Buniadi Vidyapith participated in the programme physically and about 100 schools, colleges joined the event virtually. Apart from this, about 151 viewers watched the same on social media platforms.

Participating students and teachers at the event



Teacher of Kurseong Adarsha Vidyapith, Kurseong participated virtually in the event

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