

CSR TODAY

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From Wildlife to Education:
Supriya Lifescience's
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companies to buy renewables
in Southeast Asia?



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Project SAIM: A Milestone in Goa's Waste Management

Project SAIM represents a vision for a circular economy where waste can be recycled and co-processed to become a usable resource. WWF-India and Saahas Zero Waste are working jointly to enhance Goa's existing waste management infrastructure by establishing a Material Recovery Facility (MRF) at GIDC.



Rajesh Tiwari
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Project SAIM is an important contribution to conserving Goa's biodiversity and combating plastic pollution in sensitive ecosystems like rivers and oceans.

Goa has taken a significant step towards sustainable waste management with the inauguration of Project SAIM.

The Sustainable Approach to Integrated Waste Management can be replicated elsewhere.

This initiative—a collaboration between WWF-India and Saahas Zero Waste—aims to revolutionize the way Goa handles its waste, addressing long-standing challenges with innovative solutions and community involvement.

At the heart of Project SAIM is the newly established Material Recovery Facility (MRF) located in GIDC, Nessai near Margao. Spanning 7,000 square feet and equipped with state-of-the-art machinery including trommels, conveyors, and balers, the MRF has a daily capacity of processing up to 7.5 tonnes of dry waste. Operated with full compliance to environmental and social regulations, the facility will serve as a cornerstone for effective waste segregation, collection, and processing.


Aleixo Sequeira, Minister of Law & Judiciary, Environment, Ports & Legislative Affairs, Government of Goa, said: "I am confident that this initiative will be a success. I assure them Government of Goa's full cooperation and support in whatever capacity they require."

The initiative focuses on decentralizing waste management efforts across 30 village panchayats in South Goa, catering to a diverse range of stakeholders including hotels, resorts, corporate campuses, educational institutions and communities at large. Through comprehensive

services for segregation, collection, sorting, and processing of dry waste, Project SAIM aims to divert materials from landfills and promote recycling and co-processing practices.

Speaking about the project, Dr. Sejal Worah, Programme Director, WWF-India highlighted its significance to conservation: "Project SAIM is an important contribution to conserving Goa's biodiversity and combating plastic pollution in sensitive ecosystems like rivers and oceans. By fostering collaboration and innovation, we aim to set a new standard for waste management in coastal regions."

Beyond dry waste, Project SAIM places a strong emphasis on managing organic waste sustainably, promoting practices such as home composting, onsite composting, and local mulching of garden litter. This holistic approach will ensure that both biodegradable and non-biodegradable waste streams are handled responsibly, minimizing Goa's environmental footprint. By engaging local communities and adhering to stringent environmental standards, the initiative aims to position Goa at the forefront of sustainable waste management practices in India.

Wilma Rodrigues, Chief Transformation Officer at Saahas Zero Waste, emphasized the project's broader impact: "Through Project SAIM, we are pioneering a model that integrates environmental stewardship with social responsibility. Our efforts are focused on achieving operational excellence while creating meaningful employment opportunities under safe and compliant conditions." 

Contents



30 | Cover Story

Greenply Industries: Championing Sustainability Through Pioneering Eco-Conscious Practices



CSR CONCERN

21 Thawing ice worsens Arctic plastic pollution



CSR EXAMPLE

32 Mahavir International: Grand Golden Jubilee Celebrations Focussing on Future



CSR INITIATIVE

34 From Wildlife to Education: Supriya Lifescience's Diverse CSR Initiatives



CSR ISSUE

36 Why is it so hard for companies to buy renewables in Southeast Asia?



CSR FUTURE

46 From race to road: Is Formula E fuelling the future of green transport?

AND MORE...

REGULARS:

- 03** Publisher's note
- 05** CSR News
- 18** CSR India United

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CSR NEWS



BPCL Launches Aerial Seeding through Drones to Reforest Hills in Bihar

Bharat Petroleum Corporation Limited (BPCL), a leading Maharatna PSU, proudly announces a major afforestation initiative in Bihar, aimed at enhancing greenery across key forest areas in the state. In collaboration with the Department of Environment, Forest, and Climate Change, Government of Bihar, and our NGO partner, BPCL will be deploying 100,000 seedballs

across three significant forest regions provided by the Forest Department.

The "Aranya" project in Bihar will cover 50 hectares across three key forest areas, focus on Umga Pahadi in the Madanpur Forest of Aurangabad, the Rajauli Forest Area in Nawada, and the Brahmyoni, Dungeshwari, Pretshila, and Barabar Hills in Gaya. This large-scale effort is part of BPCL's ongoing commitment to environmental sustainability and the betterment of the communities where we operate.

The event will be inaugurated by Dr. Prem Kumar, Hon'ble Minister of Environment, Forest, and Climate Change, Government

of Bihar, on August 20, 2024, at the Umga Reserve Forest in Aurangabad. The use of aerial seeding technology through drone deployment will allow for efficient and effective reforestation in areas that are otherwise difficult to reach.

"Planting trees is one of the most impactful ways to contribute to environmental sustainability and support local communities. By engaging in afforestation projects like Aranya, we not only enhance the green cover but also foster a sense of responsibility towards nature. Together, we can create a lasting positive impact for future generations," said Mr. Raman Malik, Head CSR, BPCL.

This initiative not only aims to restore forest cover but also to involve local communities, promoting environmental awareness and creating economic opportunities. BPCL's dedication to environmental sustainability is at the heart of our Corporate Social Responsibility (CSR) initiatives, and this project exemplifies our commitment to making a lasting and positive impact on society.

Together, with the support of the Government of Bihar, local communities, and our NGO partner, BPCL is working towards a greener and more sustainable future for the state of Bihar.

BPCL strives to restore the environment while empowering local communities by providing training and employment in sustainable practices. Combining research, technology, and community involvement, BPCL's reforestation model can be applied elsewhere. This project supports BPCL's commitment to environmental sustainability, benefiting both the ecosystem and local communities through their CSR efforts.



Himalaya Wellness Company Celebrates Milestone of Planting One Million Trees across India

Himalaya's Commitment to Sustainability Reaches New Heights with their 2030 Vision

Himalaya Wellness Company, one of India's leading wellness brands, has recently announced the achievement of planting over one million trees across India. This significant accomplishment was celebrated in a special event where the one millionth tree was planted by dedicated Himalaya employees, marking a step in the company's commitment to environmental sustainability.

Forests are vital for the health of the planet, serving multiple essential functions such as sequestering carbon, regulating temperatures, managing freshwater, and preventing erosion. They host 80% of terrestrial biodiversity and support around 350 million people with food and resources. However, their degradation is severely threatening these essential ecological functions and the biodiversity they sustain.

Recognizing the urgency of preserving these invaluable ecosystems, especially in areas of high ecological significance, Himalaya Wellness Company has taken proactive steps to protect and restore forested regions. In alignment with UNESCO's recognition of the Western Ghats as a biodiversity hotspot in 2012, Himalaya pledged to preserve this ecological treasure alongside visionary NGOs and local communities. They have undertaken an extensive tree planting

initiative across the Western Ghats, planting over nine lakh trees to restore and preserve the region's rich biodiversity. In Maharashtra alone, the company has planted over eight lakh trees in regions including Lanja, Zapade, Salpe, Majal, and Gavane in Ratnagiri, extending their efforts to Kolhapur, Solapur, and Pune. In Karnataka, more than one lakh trees have been planted in areas including Dharwad, Belagavi, Chikkaballapur, Bengaluru, and Sirsi. Additionally, the company has expanded their environmental conservation efforts to Meghalaya, planting over 30,000 indigenous species in the terrains of Kyrdemkhla, Perkseh, and Mawphlang.

The tree planting efforts contribute significantly to the region's biodiversity, providing habitats for various species and helping to sequester carbon. According to environmental experts, the reforestation of these areas plays a crucial role in mitigating climate change and enhancing local ecosystems' resilience. These initiatives also help prevent soil erosion, which is vital for maintaining the health of the Western Ghats.

Commenting on the achievement, KG Umesh, Director-Human Resources, Himalaya Wellness Company, shares, "The Company's efforts are supported by strong collaborations with NGOs, government agencies, and other organizations. These partnerships have enhanced the impact of the projects, allowing for the sharing of resources and expertise. Community involvement has also been a crucial factor towards the success of these initiatives. Local community members

and NGOs have actively participated, bringing invaluable local knowledge, and fostering a sense of ownership. The initiative is rooted in the Company's core philosophy of 'Care for Life,' which encapsulates the vision of 'Wellness in every Home and Happiness in every Heart.' At Himalaya, we believe that products beneficial for people should also be beneficial for the planet."

India hosts three of the world's 34 "global biodiversity hotspots"—the Western Ghats, the Eastern Himalayas, and the Indo-Burma region—each rich in unique species but facing severe conservation threats. The rapid degradation of these areas necessitates immediate and vigorous conservation efforts to protect their unique biota and halt biodiversity loss. The immense value of this biodiversity lies in its role in sustaining and nourishing human communities, providing essential resources and ecosystem services.

Lt. Cdr. Deokant Payasi (Retd.), CEO and Trustee - SayTrees Environmental Trust, shares, "The profound ecological benefits visible from our collaboration with Himalaya over the past four years have been remarkable. This initiative, strategically focused on village commons, has not only augmented the availability of tree-based resources for local communities but also mitigated the pressure on deep forest ecosystems. By fostering sustainable land use and enhancing community resilience, this partnership exemplifies our commitment to nurturing a harmonious balance between human needs and nature's vitality." Padmanabha Hegde, a farmer from Bekematha (Sirsi),

shares, "We have witnessed the planting of over 1.7 lakh trees in our region in 2024. There are more than 100 species, which provide fruit, timber, medicine, fodder, dry leaf, pollen, and nectar for honeybees. It is likely to help resolve the human wildlife conflict in the near future, apart from conserving the local biodiversity. Thanks to Himalaya Wellness Company for supporting this noble cause. We, the farmers, and various local community organizations surely benefited

from this initiative, and we commit to the long-term protection of the planted seedlings."

As part of their ambitious 2030 vision, Himalaya Wellness Company aims to plant five million trees and source 95% of herbs from farms employing regenerative practices. This commitment reflects the company's dedication to sustainable development and community welfare, focusing on long-term positive impact rather than short-term gains. Himalaya's efforts extend beyond

environmental conservation. The company supports 600 farmers from 70 villages, fostering economic upliftment and sustainability. In Meghalaya, Himalaya collaborates with the Khasi tribe to build eco-villages and promote sustainable farming practices. Additionally, the company equips marginalized farmers with skills in vermicomposting, beekeeping, and mushroom cultivation, enabling them to achieve sustainable farming practices and generate additional income.

ITDC Organizes Free Medical Camp in Collaboration with Delhi Heart and Lung Institute, New Delhi

A Partnership Reflecting Commitment to Community Welfare and Quality Healthcare Services

The India Tourism Development Corporation (ITDC), in collaboration with the Delhi Heart and Lung Institute, New Delhi, successfully organized a free medical camp at its flagship hotel The Ashok, New Delhi. This significant initiative aimed to provide essential healthcare services to its employees, showcasing ITDC's commitment to community well-being and its collaboration with esteemed medical institutions. The medical camp featured a team of 15-20 skilled doctors, including paramedical staff and support staff, from the Delhi Heart and Lung Institute, New Delhi. These professionals, including specialists and allopathy experts, offered consultations, screenings, and free Blood Sugar and Blood Pressure tests for all attendees.

Lokesh K. Aggarwal, Director of ITDC, expressed his enthusiasm for



the initiative, stating, "This camp was specially undertaken to benefit the ITDC employees offering them essential medical screening and consultations. Corporate administration and The Ashok played a crucial

role in facilitating the medical camp, ensuring smooth and efficient operations at the venue." He further added, "This partnership between ITDC and the Delhi Heart and Lung Institute exemplifies our efforts to promote health and wellness, aligning with the goal of positioning India as a premier destination for medical and wellness tourism."

This medical camp underscores ITDC's commitment to community health; plans are already underway to conduct similar camp shortly, ensuring continued health support to ITDC employees.

India's Women Climate Collective announces new cohort to expedite leadership in climate action



The 2023 report ‘Feminist climate justice: A framework for action,’ by the UN Women points out that by 2050, climate change may push up to 158 million more women and girls into poverty and see 236 million more face food insecurity. Though climate change significantly affects those working in the natural resource sectors, such as agriculture, its impact is not the same on men and women. Women happen to be more vulnerable due to various socioeconomic and cultural factors. Climate change also compounds the issues faced by underserved women and girls by deepening existing inequalities, disrupting education, health services, mobility and curtail employment opportunities.

In India, where the effects are particularly pronounced, these

challenges are compounded by regional vulnerabilities impacting underserved women and girls the most. This will deepen existing inequalities and disrupt education, health services, mobility, and even employment opportunities. Recognising the pivotal role that women can play in driving effective climate action, the Women Climate Collective (WCC) is strategically consolidating its efforts to amplify women-led initiatives. Their cohort highlights the unique challenges faced by women while also underscoring their contributions to the global climate discourse.

In 2023, the WCC programme built the capacities of 16 women climate leaders, some of whom represented India on key global platforms including COP28, and were recognised through prestigious awards

including Nidhi Pant who won the Earthshot Prize, Elsie Gabriel who received the face of India Achievers Award, and more.

K.G. Sreeja, who was part of the 2023 cohort, said, “Being part of the WCC cohort has helped in gaining a more granular gendered perspective of our work on co-creating community resilience to tidal flooding. It has helped in thinking and acting in gender specific ways over and beyond gender inclusive strategy and planning. Gender specific action has helped us identify the singular strength of women in the climate action space. It has become the natural progression from gender inclusive work and I strongly believe it is due to the work and networking I have been doing with WCC.”

Following the success in 2023, and to further amplify women's voices in climate action and ensure their equitable participation in designing and implementing sustainable solutions, WCC, a platform created by Fondation L'Oréal with the support of Purpose Climate Lab has launched its next cohort focused on nurturing 20 young women leaders in climate action. These women leaders work in pertinent and diverse issues, including climate justice, nature-based solutions, climate technology, public engagement for climate, and climate-related health and food security, spanning regions from the Himalayas to Bengaluru, and from Maharashtra to West Bengal, as well as many other states and areas of expertise.

These leaders will be provided tailored leadership training, communication, and access to international and national events, enabling them to participate in global climate

discussions and showcase their work on an international platform. By elevating their groundbreaking work, the WCC platform aims to foster collaboration, networking, and knowledge sharing among the leaders, ultimately promoting gender-inclusive climate solutions in India. They will also have access to industry experts in the form of WCC Ambassadors, that will further support the climate leaders to grow and scale their efforts; Mamta Borgoyary, Executive Director, SHE Changes Climate and Shloka Nath, CEO, India Climate Collaborative, both prominent women leaders in nurturing climate action in India, will be supporting the new cohort of WCC women leaders.

Reflecting on the impact of the program, Mamta Borgoyary, Executive Director, SHE Changes Climate, shared her thoughts: “The WCC programme's unwavering commitment

to fostering women's leadership in climate action is truly inspiring. The new cohort is composed of exceptional women dedicated to addressing critical climate issues, and I am thrilled to support them. I have witnessed firsthand the transformative impact of WCC's programs, and I am confident that these emerging women leaders will drive meaningful change and amplify their voices within India's climate ecosystem.”

“As India faces repercussions of climate change - from floods, landslides to severe heatwaves, the urgency for a just climate transition is undeniable. Women, who are disproportionately impacted by climate change, facing higher risks of displacement, water scarcity and food insecurity must have equal opportunity to lead mitigation and adaptation strategies. That's why, for the second year running, the

Fondation L'Oréal welcomes 20 inspiring women to our Climate Collective. Because supporting women leadership in climate action isn't just the right thing to do – it's the only way forward.” says Rachel Barré, Fondation L'Oréal Women and Climate program Director.

As the 2024 cohort begins their journey, they embody the immense promise of empowering women to take the lead in combating climate change. Their efforts not only aim to address today's challenges but also pave the way for a more sustainable and fair future for everyone. In India, where the impacts of climate change are deeply felt, the involvement of women leaders is more important than ever. These women bring fresh perspectives and a steadfast dedication that can drive real progress, motivating communities and shaping policies at every level.

Automated External Defibrillator machines being provided at 20 stations of Western Railway

The Mumbai Central Division of Western Railway has planned to make Automated External Defibrillator (AED) machines available at 20 of its railway stations.

This facility is being made in collaboration with Rotary Club of Bombay Airport under Corporate Social Responsibility (CSR).

According to the press release issued by Shri Vineet Abhishek, Chief Public Relations Officer of Western Railway, Automated External Defibrillator (AED) is a handy device used to treat sudden cardiac arrests and will prove helpful for emergency treatment in case of heart attacks to passengers at station. AED is designed in such way that it can be used by common people.



These Automated External Defibrillator (AED) machines are being provided at 20 stations viz, Churchgate, Marine Lines, Charni Road, Grant Road, Mahalaxmi, Lower

Parel, Prabhadevi, Dadar, Bandra, Jogeshwari, Malad, Kandivali, Borivali, Mira Road, Bhayander, Vasai Road, Nallasopara, Virar, Boisar and Vapi stations.

A Year of Transformative Rehabilitation Services in Bengaluru

Rehab on Wheels (RoW), a pioneering initiative by The Association of People with Disability (APD), in collaboration with ABB India, has completed one year of delivering critical rehabilitation services to underserved communities in Bengaluru. Since its launch in 2023, RoW has served over 1600 beneficiaries empowering them to achieve greater independence and improve their overall well-being at their doorstep.

It is a first-of-its-kind rehabilitation project for people with disabilities, which started with an aim to provide accessible and affordable care through its mobile unit, free of cost. The project, codified and replicated in multiple locations where there is a need for rehabilitation, has been funded by ABB India, as part of corporate social responsibility (CSR).

The mobile unit has reached 23 service points across the most underserved communities in Bengaluru's Urban and Rural districts to empower people with disabilities through mobility aids and assistive devices.

The project has successfully also provided high-quality therapy services, improving the individuals' functional abilities and overall well-being through the distribution of disability aids, assistive services, and community camps.

RoW's commitment to quality shines through, with 67% of



In the last year, the RoW initiative has touched 1,600 across Bengaluru



The RoW initiative offers comprehensive support through therapies including physiotherapy, occupational therapy, speech therapy, and counselling

beneficiaries feeling genuinely satisfied with their care. The project has successfully engaged local stakeholders, including community leaders, ASHA, ANM, and Anganwadi workers, to mobilise beneficiaries and raise awareness about its services. These strategic partnerships have been instrumental in identifying areas with the highest demand for rehabilitation services.

Talking about the initiative, Dr. Senthil N S Kumar (PhD Rehab), CEO, The Association of People with Disability (APD), mentioned, "We are

incredibly proud of the impact Rehab on Wheels has made in its first year. Bringing crucial rehabilitation services directly to communities has empowered over 1,600 individuals to lead more independent and fulfilling lives. We are grateful for ABB India's partnership in making this initiative a reality, and we look forward to expanding our reach and impact in the coming months."

G.N.V Subba Rao, Global Head of Operation Centers & ABB Innovation Center, India, said, "ABB India is committed to sustainable and inclusive development of the community's social capital through active engagement. Rehab on Wheels perfectly aligns with this vision, providing vital rehabilitation services that positively improve the lives of people with disabilities. We are proud to be partners in

this impactful program and it gives us immense pride to see Rehab on Wheels touch so many lives. We look forward to its continued success."

In the months ahead, APD aims to expand RoW's reach and impact further. Plans include increasing the number of service points, enhancing community engagement, and collaborating with additional local health centers and NGOs. The goal is to ensure comprehensive rehabilitation services are available to all individuals in need, regardless of location.

Adani Foundation at ACC Chanda site boosts agricultural sustainability in Dhakori with Cement Nala Bund



ACC Limited, the cement and building material company of the diversified Adani Portfolio, along with the Adani Foundation are committed to sustainable water resource development and management. Through CSR efforts, the Company has recently completed the construction of a Cement Nala Bund (CNB) in Dhakori village near its ACC Chanda plant. This significant project aims to address water scarcity and promote sustainable agricultural practices in the region.

Dhakori village, located in the Wani Block of Yavatmal, Maharashtra, has historically faced water availability challenges, impacting agricultural productivity and the overall life of locals. The newly constructed CNB in Dhakori boasts an impressive percolation capacity of up to 24,000 cubic metres during

a single overflow event, significantly enhancing the village's water storage capacity. The CNB provides regular water supply to approximately 220 acres of irrigation area, benefiting around 100 farmers.

This initiative contributes to increasing groundwater levels, supporting agricultural productivity, and fostering socio-economic development within the communities of the region. Furthermore, a more secure water source enables farmers to diversify their crops and increase yields, thereby improving food security and livelihoods.

ACC and the Adani Foundation are dedicated to achieving sustainable development and inclusive growth in the communities where they operate, by supporting the conservation and efficient use of precious resources such as water.

Hexaware DRHM 2024 Wraps Up Successfully, Celebrating Community and Fitness

The 13th edition of the Hexaware Dream Runners Half Marathon (DRHM) concluded with over 5,500 participants. Hexaware continued as the title sponsor for the fifth consecutive year, promoting fitness and community welfare.

The Hexaware DRHM sought to inspire participants to integrate fitness into their daily routines. To support this, the event provided free, structured training programs four months before the run, along with health advice from experts to improve participants' well-being. In alignment with its environmental responsibility, Hexaware organized a team of ploggers to ensure the route and all holding areas were kept clean and free of trash.

The marathon featured 1,500 runners in the 21.1 km category and 4,000 in the 10 km category. The event included around 1,100 women runners, 11 super senior runners aged above 70, several runners over the age of 60, runners with visual impairment, and amputees who received prosthetic limbs. Participants also included members of the Indian Army, Navy, Coastal Guards, Tamil Nadu Police, Chennai Metro Rail Limited, and the National Intelligence Agency.

Air India SATS pioneers initiative to Train and Employ 14 Orphan Youths for their Cargo Terminal at Noida International Airport

Air India SATS Airport Services Pvt Ltd (AISATS), a leading airport services management company in India, has pioneered an innovative skill development program for orphaned youth. This ground-breaking initiative, an industry first, establishes a new benchmark in the sector. The initiative saw 14 candidates from the Jagshanti Udayan Care NGO's After Care Unit in Greater Noida graduate from a comprehensive 40-day vocational training program. These talented individuals are now set to begin their careers at the AISATS Cargo Terminal at Noida International Airport, marking a significant milestone in their lives and for the industry.

This free-of-cost program underscores AISATS's commitment to empowering underprivileged youth and represents a paradigm shift in the aviation sector's approach to community development and workforce preparation. By aligning corporate social responsibility with the industry's growing need for skilled workers, AISATS has created a mutually beneficial model. AISATS has signed a MoU with Invest UP for Know How Training during the Global UP Investor Summit and already conducted a job fair at Maharajganj District, UP, and selected more than 500 candidates for its various airports across India with the help of Invest UP. The UP Government officials have also helped AISATS in organizing this initiative and selecting candidates from the orphanages.

The program's success paves the way for future expansions, with AISATS planning to extend similar



opportunities to more underprivileged youth across its stations. This innovative approach not only addresses the immediate needs of orphaned youth but also contributes to the long-term development of a skilled aviation workforce.

Sanjay Gupta, CEO at AISATS, stated, "This initiative embodies our core values of inclusivity, empowerment, and community support. By equipping these young individuals

with valuable skills and job opportunities, we're not just providing employment – we're cultivating hope, dignity, and self-reliance. Our program bridges the gap between underprivileged youth and meaningful career opportunities in aviation. We plan to expand this initiative across all our airports and upcoming projects, ensuring our growth aligns with community betterment and building an ecosystem conducive to

creating skilled employment opportunities within the aviation sector."

The program, offered entirely free of cost, demonstrates AISATS's commitment to empowering underprivileged youth. During the graduation ceremony, participants were

awarded certificates and gifts, celebrating their newly acquired expertise and marking the start of their careers in the aviation industry.

As these 14 graduates prepare to join the workforce at AISATS' integrated cargo terminal (ICT) at

Noida by its Commercial Operation Date (COD), their success sets a new benchmark for sustainable and impactful corporate social responsibility in the industry, potentially inspiring similar initiatives across the sector.

Muthoottu Mini facilitates education access to 22,000 underprivileged children in South India through school supplies

Muthoottu Mini Financiers, one of India's leading gold loan NBFCs, popularly known as 'Yellow Muthoottu', has reaffirmed its commitment to community welfare by undertaking an extensive distribution of school supplies, including notebooks, umbrellas, school bags, and kits, benefiting approximately 22,000 underprivileged children across different locations in India. Additionally, Muthoottu Mini gifted a wheelchair to a deserving law college student. This initiative reflects the company's dedication to enhancing educational opportunities for students in need.

Recognising the challenges faced by economically disadvantaged farmers, Muthoottu Mini has also distributed fertilisers and milk containers to around 1,000 farmers, empowering them to improve their agricultural productivity. Furthermore, more than 1,000 individuals have received sewing machines and bicycles, providing them with essential tools to pursue self-employment and enhance their livelihoods. This initiative, with a budget of 1 crore, was carried across regions including Bangalore, Tamil Nadu, Delhi, and Mumbai.

On the occasion, Mathew Muthoottu, Managing Director, Muthoottu Mini Financiers, said, "At Muthoottu Mini Financiers, we firmly believe that corporate social responsibility is not just a legal obligation, but a moral imperative. As we



expand our footprint across the country, we are deeply committed to making a tangible difference in the lives of underprivileged communities. By distributing essential school supplies to students, we aim to empower the youth and contribute to their holistic development. Education is the foundation for personal growth and nation-building, and we are proud to play a role in nurturing the dreams and aspirations of these young minds. Our CSR initiatives are an integral part of our long-term sustainability strategy. By investing in the communities we serve, we are building strong relationships with the people, and ensuring that our business remains relevant and impactful in the years to come." Through this CSR activity,

Muthoottu Mini Financiers believes in fulfilling its social commitment to society, supporting the community through its welfare programmes. Muthoottu Mini Financiers has a strong history of impactful CSR initiatives, including the launch of the 'Snehalaya Silver25 Nutricap Program' for children with special needs and the donation of 1,000 raincoats to Kochi Municipal Corporation's sanitation workers. With over 900 branches across India, the company integrates corporate social responsibility into its core mission, believing it to be a moral imperative. By doing so, the company aims to make a positive impact on the lives of those who need it most, empowering them to dream big and achieve their goals.



FUJIFILM India Rooting for a Greener Tomorrow

FUJIFILM India, leading company in Healthcare, Imaging, Electronics & Business Innovation, embarked on the "Rooting for a Greener Tomorrow" Tree Plantation Initiative to combat the adverse effect of climate change and doing its bit for the society with their recent CSR initiative. The initiative towards the environment is deep rooted in pursuing its Group Purpose of "Giving Our World More Smiles." This initiative is instrumental in marching towards the Sustainable Value Plan 2030 of FUJIFILM Group wherein the activity took place at Government School, Jajru covering approximately 44,000 sq. feet of land. Backed by a delegation of 50 volunteers from FUJIFILM India head office, the activity witnessed an enthusiastic participation from the school staff and the students.

The initiative aims to preserve the environment, create awareness

among citizens, and emphasize the importance of planting native trees to curb the rising pollution in urban areas. Fueled by the enthusiasm of employees, a total of 100 diverse trees were planted including Harsingar, Alba Champa, Jamun, Kadamb, Mohgani, Kathal, and Moringa with a commitment of 0% mortality of the trees and helping them grow under the monitoring responsibility of the students.

Koji Wada, Managing Director of FUJIFILM India, commented, The group purpose of FUJIFILM India "Giving our World More Smiles," is about bringing diverse ideas, unique capabilities, and extraordinary people together to change the world. Here our effort is to bring the bring employees of FUJIFILM India together and make them realize the social aspects of our environment and the rainy season in India is an excellent time to plant the trees and

do our bit for the environment. I had great fun attending the plantation event and planted various trees with students of the school.

Abhi Shekhar Singh, Vertical Head, Corporate Communications & CSR, FUJIFILM India added, "At FUJIFILM India, we concentrate on public health as far as our Corporate Social Responsibility is concerned and we are leading the way through our TB Screening Campaign in three districts of Gujarat. However, the environment is an inalienable part of our Sustainable Value Plan 2030 which outlines our aim to develop into a company that can make a greater contribution to creating a sustainable society. This activity is a little effort from our side to sensitize employees about the environment and contribute to the social infrastructure of FUJIFILM Model School program in Jajru which we have been supporting since 2023."

“Middle-Income Trap” Hinders Progress in 108 Developing Countries

More than 100 countries—including China, India, Brazil, and South Africa—face serious obstacles that could hinder their efforts to become high-income countries in the next few decades, according to a new World Bank study that provides the first comprehensive roadmap to enable developing countries to escape the “middle-income trap.”

Drawing on lessons of the past 50 years, the World Development Report 2024 finds that as countries grow wealthier, they usually hit a “trap” at about 10% of annual U.S. GDP per person—the equivalent of \$8,000 today. That’s in the middle of the range of what the World Bank classifies as “middle-income” countries. Since 1990, only 34 middle-income economies have managed to shift to high-income status—and more than a third of them were either beneficiaries of integration into the European Union, or of previously undiscovered oil.

At the end of 2023, 108 countries were classified as middle-income, each with annual GDP per capita in the range of \$1,136 to \$13,845. These countries are home to six billion people—75% of the global population—and two out of every three people living in extreme poverty. They generate more than 40% of global GDP and more than 60% of carbon emissions. And they face far bigger challenges than their predecessors in escaping the middle-income trap: rapidly aging populations, rising protectionism in advanced economies, and the need to speed up the energy transition.

“The battle for global economic prosperity will largely be won or lost in middle-income countries,” said Indermit Gill, Chief Economist of the World Bank Group and Senior

Vice President for Development Economics. “But too many of these countries rely on outmoded strategies to become advanced economies. They depend just on investment for too long—or they switch prematurely to innovation. A fresh approach is needed: first focus on investment; then add an emphasis on infusion of new technologies from abroad; and, finally, adopt a three-pronged strategy that balances investment, infusion, and innovation. With growing demographic, ecological and geopolitical pressures, there is no room for error.”

The report proposes a “3i strategy” for countries to reach high-income status. Depending on their stage of development, all countries need to adopt a sequenced and progressively more sophisticated mix of policies. Low-income countries can focus solely on policies designed to increase investment—the 1i phase. But once they attain lower-middle-income status, they need to shift gears and expand the policy mix to the 2i phase: investment and infusion, which consists of adopting technologies from abroad and spreading them across the economy. At the upper-middle-income level, countries should shift gears again to the final 3i phase: investment, infusion, and innovation. In the innovation phase, countries no longer merely borrow ideas from the global frontiers of technology—they push the frontier.

“The road ahead won’t be easy, but it’s possible for countries to make progress even in today’s challenging conditions,” said Somik V. Lall, Director of the 2024 World Development Report. “Success will depend on how well societies balance the forces of creation, preservation, and destruction. Countries that

try to spare their citizenry the pains associated with reforms and openness will miss out on the gains that come from sustained growth.”

South Korea is a standout example in all three phases of the 3i strategy, the report says. In 1960, its per capita income stood at just \$1,200. By end of 2023, that number had climbed to \$33,000. South Korea began with a simple policy mix to increase public investment and encourage private investment. That morphed in the 1970s to an industrial policy that encouraged domestic firms to adopt foreign technology and more sophisticated production methods.

Korean companies responded. Samsung, once a noodle-maker, began manufacturing TV sets for domestic and regional markets. To do so, it licensed technologies from Japanese companies—Sanyo and NEC. Samsung’s success fueled demand for engineers, managers, and other skilled professionals. The South Korean government responded in turn. The Ministry of Education set targets—and increased budgets—for public universities to help develop the new skill sets demanded by domestic firms. Today, Samsung is a global innovator in its own right—one of the world’s two largest smartphone manufacturers.

Other countries followed similar paths—including Poland and Chile. Poland focused on raising productivity with technologies infused from Western Europe. Chile encouraged technology transfer from abroad—and used it to drive domestic innovation. One of its biggest successes involved adapting Norwegian salmon farming technologies to local conditions, making Chile a top exporter of salmon.

Hyundai Motor India Foundation (HMIF) invests INR 2 Crores towards Sports Development Program under Sports Lab Initiative

Hyundai Motor India Foundation (HMIF), the CSR arm of Hyundai Motor India Limited (HMIL), announced the inauguration of a state-of-the-art 'Sports Lab Fitness Centre' in Hisar, Haryana, as part of the expansion of its flagship Sports Lab project. This underscores HMIF's commitment to nurturing young talent and promoting excellence in sports at the grassroots level.

The newly established Sports Lab Fitness Centre aims to provide budding athletes with top-notch training facilities and expert guidance to enhance their physical fitness and overall performance through specialised therapies and sports injury rehabilitation. Equipped with modern fitness equipment and staffed by certified trainers, the centre is designed to meet the diverse needs of athletes across various sports disciplines.

The fitness centre was inaugurated by Special Guest Saina Nehwal, celebrated badminton player and Olympic medallist, in the presence of Chief Guest Dr. Rajesh Kumar Mohan, Additional Superintendent of Police (IPS) – Hisar, Haryana, Mr. Puneet Anand, Vertical Head - Corporate Communication & Social, HMIL, government officials from education department of Haryana, along with prominent local dignitaries, athletes and representatives of sports federations.

Speaking on the launch of the program, Puneet Anand, Vertical Head - Corporate Communication & Social, HMIL, expressed his enthusiasm, stating, "With HMIF's Sports Lab initiative, we envisaged a holistic sports CSR program that



will create a legacy beyond just winning medals and accolades. We are fostering a generation of healthy, confident, capable and compassionate individuals who will make a difference in the world. Aligned with Hyundai's global vision of 'Progress for Humanity,' we aim to bring about a positive change in the society by giving a platform to budding athletes and providing them right guidance to pursue sports as a viable career option. The implementing agency of the Sports Lab project - Roots Foundation, has been

an able partner in driving the efforts on-ground."

Ms. Nehwal's presence added a touch of inspiration and motivation for the young athletes in attendance.

"HMIF's Sports Lab initiative is a great platform that will help budding athletes in recognizing their potential and realizing their dreams. For any athlete, access to right coaching and resources is critical to their growth and success. I am confident that with this initiative, young and talented athletes of Haryana and Punjab will have

better opportunities to train and represent India at national and international levels. I look forward to athletes shining through this program at various sporting events and earn glory for the nation," she said. The event also marked the

expansion of the Sports Lab project in Jind, Haryana, and Mansa, Panjab. Launched in 2022 in collaboration with Roots Foundation, the Sports Lab project aims to identify and nurture young sports talent at grassroots level through mentorship

and advanced training to promising athletes. By collaborating with local schools, sports clubs, federations, and government bodies, HMIF aims to build a sustainable ecosystem that promotes athletic growth and excellence.

Emcure Pharma teams up with moms to Normalise Breastfeeding in Public

Emcure Pharmaceuticals, an Indian pharma company with a strong focus on women's healthcare segment, initiated a public awareness campaign during World Breastfeeding Week. Through this activity, Emcure aims to normalize breastfeeding in public spaces, dispel related taboos, and spark conversations to support mothers in feeling secure and at ease when nursing their kids in public.

WHO and UNICEF recommend breastfeeding for infants within the first hour of birth and exclusively for the first 6 months of their life. Breastmilk is the ideal food for infants. It is safe, clean and contains antibodies, which help protect against many common childhood illnesses. Breastfeeding is one of the most natural aspects of a woman's life, but many mothers face significant challenges when nursing their children in public. Social stigma and a lack of supportive environment often discourage mothers from breastfeeding outside their homes.

As part of the of World Breastfeeding Week activities, Emcure will collaborate with moms who will share their perspectives



on public breastfeeding and the importance of normalizing it. The campaign will feature videos capturing intimate and loving moments between mothers and their babies while breastfeeding in public spaces such as malls, cafes, parks, and streets. Additionally, it will involve moms holding "Breastfeeding Zone" signs in various public locations,

making a statement that every place should be a safe breastfeeding zone. The activity will be undertaken in 9 different locations across India.

Speaking on the occasion, Namita Thapar, Whole-time Director of Emcure Pharmaceuticals Ltd, said, "Breastfeeding in public places is often frowned upon even in urban areas. The unwanted and constant stare makes women feel unsafe and uncomfortable. We hope to sensitize people to create a comfortable and welcoming environment for mothers to nourish their babies without hesitation. Our goal is to promote a culture of acceptance and support for nursing mothers. We believe that every mother deserves the right to breastfeed whenever and wherever her baby needs,

and we are committed to making this a reality."

This activity highlights Emcure's long-standing commitment to women's healthcare and community well-being. By addressing an important societal issue, Emcure continues to demonstrate its dedication to improving the lives of women and families.

CSR INDIA UNITED

Badshah Masala Inaugurates Revamped Govt School, Aanganwadi Centre in Gujarat



Badshah Masala Pvt Ltd, a leading name in the spices and seasoning category in India, and Ennoble Social Innovation Foundation today inaugurated the refurbished GPS Nargol Mukhya Primary School and Bhata Fadiyu Aanganwadi in Umbergaon Block of Valsad District in Gujarat.

As part of the revamp, Badshah Masala – a leading brand from the House of Dabur – has spiced up the school and aanganwadi centre by upgrading the infrastructure, revamping the classrooms, creation of new and separate sanitation facilities for boys and girls, drinking water facilities, besides improving

the school's overall learning environment through creative BaLA (Building as Learning Aid) Wall Art and Mini STEM Lab. The school premises is now disabled friendly with the creation of ramps for Child with Special Needs (CwSN) toilet.

With this upgrade, the Government School has been converted into a model school that boasts of best-in-class infrastructure and learning facilities for the over 250 students of the school. The entire community, including the school authorities, are delighted with the transformation. There is an increased interest amongst the community to enrol their kids in this school.

“Badshah Masala is committed to the well-being of people in our operational areas. This marks the beginning of our CSR initiatives that have been designed to make a positive impact in the lives of our communities. The students at this school will benefit from the infrastructure improvements, which provide a cleaner, safer, and better overall learning environment,” Badshah Masala CEO Mr. Rehan Hasan said.

Speaking on the occasion, Badshah Masala COO Mr. Amit Bakde said: “Our mission is to make the government schools in the region lovable and the first choice of the community by creating a conducive learning ecosystem. This development initiative at GPS Nargol Mukhya Primary School is a step forward in this direction and aims to create a fully sustainable society of tomorrow. This initiative aligns with our belief that education is a cornerstone for community upliftment. With this, we aspire to leave an indelible mark on the lives of students, fostering a brighter future for the children.”

The infrastructure revamp is part of Badshah's ‘Shikshan Ej Aadhar’ Community Development initiative in Gujarat. The revamped GPS Nargol Mukhya Primary School was handed over to the School Management Committee at a special function organised today.

The school and Aanganwadi centre were selected after a detailed survey of the region. A comprehensive assessment was conducted to identify the key gaps and develop a refurbishment plan to plug these gaps. Dabur joined hands with Ennoble Social Innovation Foundation for this intervention in view of its expertise in upgrading and transforming government schools. The school is transformed into a welcoming and exciting place where basic amenities, comforts and necessities are provided so students can focus on education and create a

powerful future for themselves. The transformation includes establishing sanitation facilities for boys and girls, creating safe drinking water facilities, and upgrading the school infrastructure with BaLA (Building as Learning Aid). Students are provided with experiential education materials including Mini Science Lab equipment and Teaching Learning Materials for an engaging learning experience.

“Access to basic education is the most fundamental right of any child.

But an equally important right is access to basic and hygienic sanitation facilities and a healthy learning environment in schools. Our intent is to empower the young minds of today to become the leaders and innovators of tomorrow. We are confident that this development work will have a long-term impact in bringing children back to schools by making the infrastructure hygienic and attractive,” Hasan added.

After the successful completion of the school revamp project, Badshah

is now planning to expand its CSR footprint to newer areas like women empowerment and water conservation. “A detailed need assessment study has been conducted to identify specific needs of the community and a development plan has been prepared to address these needs. Going forward, Badshah Masala plans to roll out a host of development initiatives aimed at improving the livelihood of rural populace, particularly women and children, in the region,” Hasan said.

M3M Foundation Celebrates Savan by Supporting Migrant Workers in Delhi NCR with 20,000 T-Shirts and 20,000 Pairs of Shoes

In the auspicious month of Savan, a time revered for acts of charity and goodwill, M3M Foundation, the philanthropic arm of M3M Group, reaffirms its commitment to the welfare of Migrant workers through its impactful "Share for Care" initiative.

Since its inception in 2020, this initiative has demonstrated M3M Foundation's unwavering dedication to supporting the backbone of our communities, impacting over 50,000 migrant workers in just four years. This year in the month of Savan, under the "Share for Care" initiative, M3M Foundation has distributed over 20,000 T-shirts and 20,000 pairs of shoes to migrant workers at various sites across the Delhi NCR region. Additionally, the foundation has prioritized the health and well-being of these essential workers by ensuring they receive daily nutritious meals.

Dr. Payal Kanodia, Chairperson and Trustee of M3M Foundation, emphasized the Foundation's mission, stating, "Our 'Share for Care' initiative,

conducted during the holy month of Savan, reflects our deep gratitude towards the migrant workers who tirelessly contribute to our communities. By providing basic necessities and nutritious meals, we aim to support their



well-being and recognize their invaluable role in nation-building. The month of Savan, associated with generosity and compassion, is the perfect time to honor their hard work and dedication."

A local migrant worker expressed gratitude by sharing, "I am grateful for the support provided by M3M

Foundation's 'Share for Care' initiative. The T-shirts, shoes, and nutritious meals they have provided make a significant difference in our daily lives on the construction site. It shows that our hard work is valued and that we are not forgotten, especially during this holy month."

Since its inception in 2020, the initiative has evolved into a cornerstone of our commitment to philanthropy. M3M Foundation believes in holistic support for these workers, ensuring they are not only acknowledged, but also cared for in every aspect. Through these efforts, M3M Foundation reaffirms its unwavering support for the hardworking individuals who significantly contribute to

community development and societal progress. By promoting their well-being and fostering a sense of dignity and appreciation, this initiative exemplifies M3M Foundation's steadfast commitment to social responsibility, particularly during the spiritually significant month of Savan.

Canon India Strengthens Commitment to Skill India: Launches Skill Development Centres to Enhance Youth Employment

Marking a significant step in its CSR outreach to empower communities, Canon India announced the opening of two new Skill Centres in Kapashera, Delhi, and Andheri East, Mumbai. Aligned with the Skill India mission, this project demonstrates Canon India's commitment to contributing to Indian society by creating value-led impact in the community through skill development. The Skill Development & Livelihood Program aims to uplift youth aged 18-25 years, living in urban slums by providing them with essential life and employability skills, preparing them for seamless placement in customer-centric, grey-collar jobs, ensuring a pathway to stable and meaningful employment.

Aiming to reach over 2500 individuals in a period of five years, the program targets youth from Below Poverty Line (BPL) who are currently not in education, employment, or training (NEET). Participants will gain crucial skills in high-demand sectors such as BFSI, Retail, IT/ITeS, E-commerce, and Quick Service Restaurants, positioning them for better employment opportunities with an average minimum salary of INR 12,500.

Commenting on the announcement, Toshiaki Nomura, President & CEO, Canon India, said, "India's young population can contribute immensely to nation building and we at Canon India are committed to nurturing this potential through necessary support and resources. 'Empowerment' is a critical pillar in our CSR policy, through which we have already impacted thousands of lives in our Adopted Villages. The



establishment of new skill centres is a step towards providing market relevant skills and meaningful opportunities that benefit the youth in building successful careers and contributing to the country's economy. This initiative is more than just training; it's about instilling hope, confidence, and the ability to dream bigger. This program represents Canon India's broader mission to drive sustainable development and empower individuals to achieve their fullest potential."

Through a comprehensive 2.5-month training period, participants will engage in a blend of hands-on group and individual activities covering key areas such as English language proficiency, IT proficiency, and essential life skills. This training model promotes peer-to-peer learning, encourages collaboration, enhances communication, and boosts confidence, ensuring that participants are well-prepared to handle job interviews and navigate the job market with ease.

Further elaborating on the details of the new initiative, Mr. C Sukumaran, Senior Director, Product

& Communication, Canon India, add, "At Canon India, we are deeply committed to the holistic and sustainable development of the community. Building on our impactful initiatives in Education, Empowerment, Environment and Eye Care, we are proud to introduce a new pillar in our CSR journey through skill centres that are aimed at empowering the burgeoning youth of India. Through the Skill Development & Livelihood Program, we aim to not only equip individuals with the skills needed for today's job market but also support their path to employment, financial independence, and higher family income. Canon India aims for 70% of the trained individuals to secure job placements post-training, enhancing their employability in multiple sectors."

The initiative not only aims to provide steady income to boost family earnings by double but also strives to make a real difference in the communities by creating sustainable livelihood opportunities. More importantly, the youth will further become ambassadors of change and inspire others in their community.



In the last 10 years, the number of vessels sailing within and across the Arctic has increased by 37 per cent, according to a report released this year by the Arctic Council, an intergovernmental forum.

Image: NOAA Photo Library, CC BY-SA 3.0, viaFlickr.

THAWING ICE WORSENS ARCTIC PLASTIC POLLUTION

More fishing boats are coming to northern waters as sea ice retreats, bringing pollution with them, writes

Anna Napolitano, Dialogue Earth

Viola “Vi” Waghiyi says her people, the Yupik, have long lived in harmony with the lands and

waters around their village on Sivuqaq. On this piece of the United States between Alaska and Russia’s far east, known as St Lawrence Island in English, “the elders called

the Bering Sea our farm”, Waghiyi explains. But the farm has been less productive recently as sea ice diminishes and the Arctic becomes seasonally navigable.

Walrus and seals, which rely on the ice, are critical to the traditional diet of Arctic Indigenous peoples. Waghiyi's village of Savoonga sometimes bills itself as the Walrus Capital of the World.

"If there is no ice, our freezers are empty," she says.

Sea ice in the Arctic waxes and wanes through the year, and is normally at its lowest extent in September, at the end of the summer. Since the first satellite recordings began in 1978, September cover has shrunk at a rate of 12.2 per cent per decade. Amid record-breaking ocean temperatures, last year's September extent of 4.37 million square kilometres was the fifth lowest on record.

As the sea becomes easier to navigate, more ships are coming to the area, and with them pollution, notably plastic.

"We believe krill have to go deeper into the ocean due to the surface warming, and the fish, who depend on krill, are mistaking microplastics for their food, which then biomagnifies up the food chain," says Waghiyi, who is environmental health and justice director at the Alaska Community Action on Toxics (ACAT) group and a member of the White House Environmental Justice Advisory Council.

"These plastics are ending up in our bodies due to our reliance on the walrus and seals for sustenance."

A more open sea

In the last 10 years, the number of vessels sailing within and across the Arctic has increased by 37 per cent, according to a report released this year by the Arctic Council, an inter-governmental forum.

"What we are seeing is not just an increase in the numbers of vessels, but also the amount of time they're spending sailing in the Arctic as they've got access to more of the Arctic Sea resources," says Sian Prior, lead adviser to the Clean Arctic Alliance, a network of NGOs

that campaign for protection of the region.

Advocates for Arctic shipping expansion say that the northern passages between Atlantic and Pacific can cut transport distances between Europe and East Asia by 40 per cent, allowing a reduction in fuel consumption and so greenhouse gas emissions. But sailing what has been called the polar Silk Road "is not a straightforward equation with a 40 per cent shorter route meaning 40 per cent less emissions" as Arctic waters can be difficult to navigate, requiring more fuel, says Prior.

Another problem is that soot from ships' engines – known as 'black carbon' – settles to create a dark layer over the white snow and ice, reducing the already-depleted ice's ability to reflect sunlight, and so increasing warming. A ban on using or carrying the heavy fuel oil burned by much Arctic shipping is set to come into effect in July 2024 to try and reduce this problem.



Our farm, the Arctic Ocean, has the most microplastics of all the oceans on the planet, threatening our existence as Arctic Sivuqaq Yupik People and our future generations. Most people worldwide want a ban on plastic production.

–VIOLA "VI" WAGHIY
Indigenous leader,
Sivuqaq Yupik

Black carbon is just one piece of the Arctic pollution puzzle though.

The Arctic Council says most ships venturing into Arctic waters are fishing vessels attracted to newly ice-free fishing spots. International NGO Global Fishing Watch has been tracking them and says that in recent decades there has been an increase in trawlers venturing north during the summer season, close to the boundaries of the Arctic high seas where fishing is restricted.

"With the warming of the ocean, the schools are moving further north, and the fishermen go where the fish are," says David Kroodsma, leader of the Global Fishing Watch research and innovation team.

This brings more underwater noise pollution, affecting marine species that rely on sound to communicate, navigate and hunt. It increases the risk of oil spills, which are not easy to clean in the far north and have health impacts on local communities. And it brings more plastic debris.

The plastic toll of fishing

In his over 15 years of work with NGOs on plastic pollution, Arctic researcher Eelco Leemans has seen plenty of waste from fishing boats. "One of the top five items we always find on beaches are pieces of fishing net," he says. Plastic packaging used to store fish on boats is another frequent find, he adds.

Leemans, who works as a marine consultant, told Dialogue Earth that the problem with litter and fishing boats is twofold.

First, there are problems with waste management. On board, boats do not always have good facilities and may just throw things over the side. On land, the remote setting makes it difficult to provide adequate infrastructure. When entering port, fishers can face high fees to dispose of waste, incentivising disposal at sea. Secondly, there are cultural issues with some fishing communi-

ties, which often poorly understand the environmental consequences of their actions, says Leemans.

Evidence on the source of Arctic plastic is difficult to come by as it can be hard to identify the origin of waste, but many experts told Dialogue Earth that discards from fishing boats are a problem.

There are regulations in place to prevent dumping, and educational programmes discouraging it. However, the complex legal status of the region and its marine environment often mitigates against their effectiveness. “We still see tons of

fragments. Ice crystals store these particles and this frozen waste reservoir is then released annually in spring and summer as temperatures rise and wildlife blossoms.

Marine ecologist Rachel Coppock fears this annual release might accelerate in the future as sea ice further diminishes, releasing past plastic pollution.

Her team at the University of Plymouth studied waste distribution in the Arctic region’s water column and “found the greatest concentrations of microplastics nearest the sea-ice edge or landmass”, says Coppock.


of ships, including by filming and analysing their fishing, has also been shown to change behaviour.

Plastic pollution has emerged as one of the most pervasive problems affecting the marine environment in recent years. Global efforts on a treaty to put an end to it made only slow progress at the last negotiation meeting in Canada, amid increased industry lobbying. Vast amounts of plastic continue to make their way into the ocean every year.

“Our Arctic Indigenous Peoples Delegation travelled two days to be the conscience of the last treaty negotiations. Our farm, the Arctic Ocean, has the most microplastics of all the oceans on the planet, threatening our existence as Arctic Sivuaq Yupik People and our future generations,” says Waghiyi. “Most people worldwide want a ban on plastic production. Still, the goal of the petrol-chemical industries to weaken the treaty speaks volumes.”

Waghiyi draws parallels with other global problems such as persistent organic pollutants that were created far away but ended up in the Arctic and have been blamed for increasing health problems in her community.

“The increasing rates of cancer and miscarriage experienced by our communities in the last 50 years are linked with a legacy of toxic contamination and persistent organic pollutants from throughout the globe,” she says. “Now there is a higher concern with microplastics and increasing shipping due to the fast melting of the ice.”

As the Arctic continues to warm, solutions to the linked problems of shipping and pollution are increasingly urgent for local people, their environment and the wider world. 

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(Source: <https://www.eco-business.com/news/thawing-ice-worsens-arctic-plastic-pollution/>)

“The increasing rates of cancer and miscarriage experienced by our communities in the last 50 years are linked with a legacy of toxic contamination and persistent organic pollutants from throughout the globe. Now there is a higher concern with microplastics and increasing shipping due to the fast melting of the ice.”

fishing gear and waste washing up on our shores. It’s a huge problem that is not properly addressed and enforced,” says Pamela Miller, executive director and senior scientist at Alaska Community Action on Toxics (ACAT) and co-chair of the International Pollutants Elimination Network (IPEN).

IPEN recently reported that the Arctic contains more plastics than any other ocean basin. “The Arctic is effectively an oceanic gyre and a hemispheric sink for both chemicals and plastics,” says Miller.

Large pieces of plastic trapped in this system gradually degrade into millions of micro- and nano-plastic

She thinks that, once freed, some of this ocean of microplastics travels back to lower latitudes. But much will remain in the Arctic where it can be eaten by marine organisms already under pressure from climate change.

Indigenous voices call for change

Several voices, many from the Indigenous communities, are pushing to use technology to deal with the plastic problem. Given the difficulty of identifying the source of debris found on beaches, discussions are taking place about labelling fishing gear with boat identities so authorities can punish offenders. Onboard monitoring

The lake is integral to Manipur's economy, with a 2017 study estimating that 12 per cent of the state's population depends on it for their livelihood. However, for those newly turning to fishing – referred to as 'new fishers' – there are multiple challenges

Image: Water Alternatives Photos, CC-BY-SA 3.0, via Flickr.



ETHNIC CONFLICT PUTS INDIA'S LOKTAK LAKE UNDER STRESS

Ethnic conflict, mismanaged development projects and climate change are pushing a major Indian lake to the brink, states **Donald Takhell & Ningthoujam Victor**, Dialogue Earth

Loktak Lake, in the north-eastern state of Manipur, spanning 287 sq km, is one of the largest freshwater lakes in India. Over

100,000 people live in villages along its shores, relying on its fish for their livelihoods.

Embedded deeply in Manipuri culture and folklore, the lake has

served as a vital lifeline to many as conflict between the Meitei and Kuki-Zo ethnic groups has consumed the state since May 2023.

Laishram Shanta, 50, from the village of Thinungei on the lake's shore, used to earn a living as a wood-cutter, travelling to remote hill villages for work. However, the ethnic violence in Manipur has made such travel perilous. In the past 14 months, more than 226 people have been killed and at least 67,000 displaced, dividing the state between Meitei areas and Kuki-Zo areas.

"Earlier, most of our villagers used to work at the Churachandpur district [about 50 km away] but because of the war, we are left with no choice but to seek refuge from Loktak Ema," Shanta said, referring to the lake as a goddess, a provider for the community.

The lake is integral to Manipur's economy, with a 2017 study estimating that 12 per cent of the state's population depends on it for their livelihood. However, for those newly turning to fishing – referred to as 'new fishers' – there are multiple challenges. "We need equipment such as nets, canoes and traps and one also needs to have the basic skills of fishing and rowing canoes," Shanta said.

To mitigate costs, these 'new fishers' wait for established fishers to return to shore to rest and borrow their canoes and equipment, such as the long, a locally made fishing spear.

Additional pressure on a strained lake

The influx of new people on the lake has been substantial. While there are no official figures, Shanta estimates that in Thinungei, about 100-150 people used to fish for their livelihoods before the conflict. Now, that number has tripled, putting significant strain on the ecosystem.

"Loktak Ema used to rest," said Khoirom Kiranbala, a resident of

Champu Khangpok, a village that floats on phumdis (a heterogenous floating biomass or 'islands') inside the lake. Since the conflict, however, "Loktak has seen no rest, as many people fish in the day and night." She added: "Since the new fishers are also our brothers and relatives and in grave need, we cannot oust them from the lake despite our own earnings falling significantly due to more competition."

Unusual weather patterns have exacerbated the problem, with high-intensity hailstorms and floods in May 2024. As an after-effect of the flood, "Loktak has been filled with silt, sewage, plastic, debris and all sort of pollutants. Hence, fishing has been at a standstill due to the pollution and foul-smelling water. Many fish have also died," Kiranbala said.

A long history of neglect

This is only the latest of a long series of issues that have plagued Loktak Lake. It is one of two Indian lakes listed under the Montreux Record, a registry of important wetland systems that are facing environmental degradation. The problems date back to 1983, when the Ithai Barrage was constructed as part of the Loktak hydroelectric project.

The barrage blocked the migration of fish coming upstream to breed from the Irrawaddy River, leading to the extinction of local fish varieties. In response, common carps and other non-native fish were introduced into the lake to bolster fish stocks and support the fishers dependent on their catches for their livelihood.

"However, despite spawn being released every year by the fisheries department, the catch has been on a decline, causing severe stress among the fishers," said Oinam Rajen, secretary of the All Loktak Lake Areas Fishermen's Union, Manipur. The economic uncertainty due to the



If not for the benevolent Loktak Ema, I would not have known what to do for a living during these hard times.

– LAISHRAM SHANTA
Resident, Thinungei

declining catch discouraged fishers, and, "many had migrated elsewhere for work" Rajen added.

In 2017, the chief minister of Manipur suggested decommissioning the hydropower project, marking the first time that a party in power had proposed such action.

Despite this, when the project's official productivity ended in 2018, its life was extended for another five years until 2023. Now the NHPC, which runs the plant, is seeking to extend its life by another 25 years, leading to criticism from local communities and even by the Loktak Development Authority (LDA) – the main executive body in charge of the lake.

Ignoring laws and the impact of climate change


The Ithai Barrage is not the only issue plaguing Loktak Lake, but it is indicative of how long it takes for local concerns to be taken seriously by policymakers. Another example involves an ongoing legal case dating back to August 2017, when

the Manipur High Court took responsibility for monitoring the state's wetlands, with a particular focus on Loktak Lake, a Ramsar wetland site of international importance.

There have been nearly 80 hearings since then; some of the court orders make for grim reading. For example, one detailed order in 2020 bluntly stated that it seemed the Manipur State Wetlands Authority was unaware of a project being undertaken by the LDA.

In a February 2022 order, the court reiterated that, as per its earlier ruling in 2020, the LDA should not undertake any development projects until proper plans had been formalised. The Environmental Support Group, a civil society group, provided a scathing commentary on how the main institutions of Manipur had repeatedly tried to pursue projects at the cost of local people, ignoring environmental legislation.

All of this is happening as climate change poses additional challenges. A recent paper on hydrology highlights that the larger northeastern Indian region will face wetter and warmer weather in the coming years, with streamflows into Loktak Lake spiking significantly during the monsoons. This will increase the risk of flooding.

Until now, Loktak has offered refuge during times of crisis. As Shanta put it: "If not for the benevolent Loktak Ema, I would not have known what to do for a living during these hard times." But the lake is under increasing pressure from a combination of official neglect and climate change. For how much longer it can continue to provide safe harbour is unclear. 

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(Source: <https://www.eco-business.com/news/ethnic-conflict-puts-indias-loktak-lake-under-stress/>)

MANOJ TULSIAN

Joint Managing Director &
Chief Executive Officer,
Greenply Industries Ltd.

RAJESH MITTAL

Chairman Cum Managing Director,
Greenply Industries Ltd

GREENPLY INDUSTRIES

**CHAMPIONING SUSTAINABILITY
THROUGH PIONEERING
ECO-CONSCIOUS PRACTICES**

In an era where the world is grappling with the grave consequences of environmental degradation, businesses across industries are being called upon to reevaluate their practices and embrace a more sustainable approach. At the forefront of this transformative shift stands Greenply Industries Ltd., a company that has woven sustainability into the very fabric of its operations and ethos. As one of India's leading players in the wood panel industry, Greenply has shown an unwavering commitment to inclusive growth, environmental stewardship, and the preservation of natural resources.

Since 1984, Greenply has been guided by a philosophy that places the well-being of the environment at the forefront of its endeavors. It is a belief in the need for the preservation of the ecology that provides resources which has led to Greenply creating a value chain network that is sustainable. This not only minimizes the environmental impact but also actively participates in the conservation of nature's gifts. Greenply's sustainability initiatives have at their core a full approach to responsible sourcing and manufacturing practices. Because timber is one of its main raw materials, the company has put into place strict measures to guarantee that all wood comes from agroforestry plantations. The Green Rise project is a proactive measure that protects against deforestation and illegal logging, while also building relationships with local farming communities. The responsible sourcing practices of Greenply incorporate various aspects such as

sustainable forest management and community engagement.

“Since the inception of the company, Greenply has strived towards creating a harmonious relationship with the environment of our operations. The Green Rise program is the crown jewel in our multi-decade journey to sustainability. This is not just tree planting; it's about raising a sustainable ecosystem that works for our business, our communities, and our environment. We have always believed that the path to long-term success is paved by responsible choice, and Green Rise is our way of making sure we leave a legacy of positive impact for generations yet to come. This program represents our full commitment to matching sustainability with all our operations, from sourcing through manufacturing to community engagement. We prove a holistic approach to sustainability isn't just possible but essential for any business to thrive in the 21st century,”

Mr. Rajesh Mittal – Chairman Cum Managing Director, Greenply Industries Ltd.

“For us at Greenply, real innovation is not merely a new product but in reframing the way of doing our business. Our E0 range is not only a high-performance product but is also a testimony to the fact that we really care about the health of our customers and the planet alike. We are selling not just plywood but a responsible, healthy lifestyle. The initiative evidences our belief that the growth of business and the protection of the environment are compatible. We are challenging the status quo in industry norms and putting a focus on sustainability to have a secure future and lead our way into a greener and healthier world for everyone,” Mr. Manoj Tulsian, Joint Managing Director & Chief Executive Officer, Greenply Industries Ltd.

One of the prominent elements within the responsible sourcing policy adopted by Greenply hap-

pens to be its quality assurance system. In the factories of the company, they carry quality inspection of raw materials at the peeling time by closely examining factors such as water content, and age of the wood used. Through assurance that only timber aged five years, or more is used, Greenply not only keeps up with the highest product quality standard but also takes part in discouraging uncontrolled logging, making it an eco-friendly company. This very strict quality control process is performed by skilled staff which guarantees excellent final products as well as non-exploitation of young timbers resources. Through rejecting old immature logs that don't reach the minimum age requirement, Greenply powerfully advocates sustainable harvesting practices, conservation of biodiversity and long-term forestry industry development.

Greenply does not limit its contribution to a certain level of timber use when it comes to eco-friendly forest management. Its mission is to care for the earth, one seedling at a time. Through its extensive tree-planting drives, the company's forestation policy goes far beyond merely increasing the country's forest cover; it also promotes biodiversity. Greenply advocates for a comprehensive approach to forest restoration. So far, Greenply has planted around 44 million saplings, covering approximately 52,983 acres, and is committed to reaching nearly 50 million saplings by 2025, covering almost 60,000 acres as a new green lung. This massive reforestation project involves various sustainability strategies. One such strategy is agroforestry, which allows farmers to grow trees alongside their main crops, creating a sustainable and productive agricultural system. The firm also guarantees quality seedlings for better tree survival rates during implementation. Additionally, Greenply actively

disseminates technical expertise to local farmers, fostering a culture of responsible forest management within communities. Through its extensive plantations, Greenply not only secures its long-term supply of raw materials but also catalyzes the socio-economic development of rural communities by generating substantial employment opportunities. This initiative creates a ripple effect, fostering a future where envi-



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Chairman Cum Managing Director,
Greenply Industries Ltd

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ronmental well-being and economic prosperity go hand-in-hand.

One of the hallmarks of Greenply's sustainability efforts is its unwavering dedication to achieving raw material self-sufficiency. The company's investments in plantations are guided by a long-term vision that extends far beyond simply securing an uninterrupted supply of wood. Greenply recognizes that true sustainability is a holistic endeavor. By establishing and nurturing these plantations, they are not only ensuring a steady flow of resources but also actively steering the all-encompassing development of their farmer community. This commitment is realized through initiatives that provide education and training in sustainable farming practices, helping these partner communities thrive. Greenply's holistic approach not only ensures environmental protection by reducing pressure on natural forests but also maintains the long-term sustainability and financial viability of the entire ecosystem. By creating a network of empowered and knowledgeable



farmers, Greenply fosters a future where responsible forestry practices and economic prosperity go hand-in-hand. This commitment also generates substantial employment opportunities for local inhabitants, further strengthening the social fabric of the communities in which they operate.

Greenply's steadfast commitment has led the company to become the pioneer in the Indian interior infrastructure segment to attain the FSC®-FM (Forest Management) Certification from the Forest Stewardship Council (FSC®). This prestigious certification, awarded for Greenply's sustainable plantation unit in Tizit, Nagaland, serves as a resounding endorsement of the company's dedication to achieving ecological harmony. The FSC®-FM certification signifies that Greenply's forestry practices are meticulously evaluated and verified to meet the highest environmental and social standards. This not only ensures responsible sourcing but also guarantees that the company's operations respect the rights of indigenous communities and contribute to their well-being. By achieving FSC®-FM certification, Greenply empowers consumers to make informed choices. The FSC®

label acts as a trusted mark, providing assurance that their product selections are not only aesthetically pleasing but also contribute to the preservation of valuable forests for future generations.

Complementing its efforts in responsible sourcing and forest management, Greenply has also

taken proactive steps to reduce its environmental footprint across its manufacturing operations. Rooftop solar panels have been installed at all of the company's facilities, harnessing the power of renewable energy to drive its production processes. This strategic move not only reduces Greenply's reliance on fossil fuels but also contributes to global efforts to mitigate climate change by reducing greenhouse gas emissions. Moreover, Greenply has successfully replaced steam coal with in-house waste for its boilers, resulting in significant natural fuel savings and a substantial reduction in its overall energy consumption. This innovative approach not only reduces the company's carbon footprint but also aligns with the principles of a circular economy, where waste is transformed into a valuable resource, thereby minimizing the strain on natural resources.

Integrating sustainability into day-to-day business operations implies making sensible judgments that reduce the negative bearing on the environment and society. This methodology recognizes that ecological practices are not a sheer marketing stunt but a cardinal involvement in managing a responsible and produc-



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tive business. Greenply Industries has taken substantial steps in this direction, executing several sustainability programs in its operations and is the pioneer among the wood panel companies to release the Environmental, Social, and Governance (ESG) report of the company. Greenply Industries is already very much inclined towards sustainable processes being adopted in the wooden panel industry. By being a first mover in releasing the company's ESG report, Greenply has raised the bar in the levels of disclosure. This report is not only a manifestation of the devotion but also a review of how far and wide they have gone in implementing sustainability in all our functioning. Greenply knows that sustainability is not just regulatory in nature. It demands the use of new technologies and the development of new processes that reduce our carbon emissions and improve the usage of resources. This challenge has not been a daunting task Greenply as they have always been on the lookout for ways of minimizing the environmental impact without any compromise to the quality and performance of the Greenply products. This can also be evidenced by their restoration of forests as part of fulfilling the requirements for environmental stewardship. In reforestation cases, they wish to be involved in regenerative processes and put the ecosystems back into order through a cycle of prosperity. Such efforts are not limited to mere reduction in their corporate environmental footprint, they seek to have a positive footprint on the communities and environments where they are.

In a groundbreaking move that exemplifies its commitment to consumer well-being and environmental stewardship, Greenply became the first company in the wood and panel industry to introduce a range of Zero Emission (E-0) products. Designed with the consumer's health

and indoor air quality in mind, these innovative products ensure that formaldehyde emissions are minimized to negligible or non-detectable levels, providing an assurance of eco-friendly living spaces. Greenply's E-0 range has already made its way into over 1 million households across the nation, and the company continues to raise awareness about the importance of sustainable building materials through multiple touchpoints. By offering this pioneering product line, Greenply not only caters to the growing consumer demand for eco-conscious solutions but also sets a new benchmark for the industry, inspiring others to prioritize environmental considerations in product development.

The organization's dedication to sustainability goes further than its main activities as can be seen in its attempts to minimize plastic footprints all over India. Greenply has been discouraging the manufacture, purchase, and usage of plastic national flags through its #Plastic-FreeTiranga awareness campaign which encourages more environmentally friendly ways of celebrating national pride. In addition to being in line with the company's sustainable philosophy, this step also urges people and businesses to reconsider their plastic consumption patterns and adopt alternatives that are kinder to the earth. Moreover, single-use plastics have been banned completely within Greenply where they are neither used nor disposed of as a way of taking control over their environmental impact. This bold move underscores the company's commitment to reducing its environmental impact and sets an example for others to follow suit, ultimately contributing to global efforts to combat plastic pollution and promote a circular economy.

Recognizing the importance of responsible water management, Greenply has undertaken comprehensive initiatives to address

wastewater treatment across all its manufacturing facilities. By putting in place robust strategies for keeping contaminants out of the ground, Greenply confirms its dedication to saving valuable natural resources. The company utilizes modern plants that incorporate cutting-edge technology necessary for separating pollutants from water before releasing them back into the environment; this goes beyond what other companies in the same industry do. Moreover, Greenply has employed stringent waste management practices across its facilities. The company has adopted a zero-waste policy, intending to reduce, reuse, and recycle waste produced during the manufacturing process. The Kriparampur Vadodara MDF plant utilizes solar power and wind energy for regular operations, with fully functional solar panels, significantly reducing our carbon footprint and reliance on fossil fuels. Furthermore, the Sandila plant features an EV forklift to cut down on emissions. Currently, 50% of our MDF plant is running on renewable energy, and 100% of boilers are running on biofuel and agricultural waste. We are constantly seeking innovative ways to integrate renewable energy into our operations. Moreover, we are committed to achieving zero-waste discharge by minimizing waste generation and implementing creative methods to recycle or reuse unavoidable waste. This ensures efficient resource utilization and minimizes environmental impact. By optimizing material usage and recycling waste, the company minimizes its environmental footprint while also cutting costs and improving operational efficiency. Energy efficacy is another key attribute of Greenply's sustainability initiatives. The company has made considerable investments in energy-efficient technologies and equipment across its production units. By lowering energy consumption and optimizing processes, Greenply In-

dustries not only reduces its carbon emissions but also better its bottom line through cost savings. Additionally, the company has been actively exploring renewable energy sources, such as solar power and wind energy, to further reduce its reliance on fossil fuels and also deployed electric vehicles and EV forklifts to reduce energy consumption further.

Greenply's sustainability journey is not a solitary pursuit; it is a collaborative effort that involves strategic partnerships and knowledge-sharing with various stakeholders. Moreover, Greenply has emerged as a pioneer in promoting the use of Okoume, a natural timber harvested under the Sustainable Forest Management plan. By embracing this eco-friendly alternative, the company reinforces its commitment to responsible sourcing and sets an example for others in the industry to follow, paving the way for a more sustainable future in the wood panel sector.

Greenply has launched the 'Green Rise' program at its Tizit plant in Nagaland, aimed at improving the environment and fostering self-reliance among local communities. This initiative, rooted in the Forest Stewardship Council (FSC) forest management model, involves planting a sapling in honor of each architect associated with the initiative. This initiative not only symbolizes Greenply's commitment to sustainability but also encourages architects to actively engage in environmental stewardship. By nurturing these partnerships and promoting eco-conscious practices, Greenply aims to create a more sustainable future while contributing to local biodiversity and community empowerment.

The Green Rise project's opening phase involved planting over 780 saplings in honour of architects from Odisha, Uttar Pradesh, Maharashtra, and Tamil Nadu. Later, architects from Bihar, West Bengal, Jharkhand, and Madhya Pradesh and across India will be similarly honored.

Each tree planted under this scheme is labeled with a board containing pertinent information such as the architect's name, address, plantation date and time, tree species, and contact number. These trees will mature over 7 to 8 years, and upon harvesting, proceeds will be bestowed to charitable organizations or schools in the architects' names. To elaborate on the economic aspects of the initiative in Nagaland, it is important to note that normally an acre of land can accommodate around 455 saplings. Each tree yields 12 to 15 cubic feet of stem, with a circumference ranging from 80 mm to 100 cm. One cubic foot of stem produces approximately 16 square meters of 1.8 mm thick veneer. The cost of one cubic foot of stem ranges from Rs 250 to Rs 400, enabling farmers to earn between Rs 3000 to Rs 6000 per tree. The company has also established its nursery to cultivate saplings of various species, including Safeda, Millia Dubia, Duabanga (Khokhan), Canarium, and Terminalia, ensuring a sustainable supply chain for future endeavors. The company aims to achieve raw material self-sufficiency while promoting its sustainability and inclusive growth efforts. Besides environmental protection, this helps maintain the sustainability and financial viability of the ecosystem and also generates employment for the local inhabitants. With 200 man-days of employment created on each acre, the employment potential is significant. Sharing of technical know-how with the farmers and providing them with subsidized or free-of-cost inputs for cultivation further contribute to the progress of the local farmers. The Company's vision is to maintain its plantations effectively to promote the Company's growth and ensure long-term sustainability for the nation, enabling it to meet its sustainable development goals and targets.

Greenply has always held the view that good fortunes of any business organization are informed

by the goodwill created with stakeholders. Sustainability' cannot be achieved in isolation, it involves partnering with all stakeholders like industry partners, customers and the communities whose relations must be based on trust, cooperation and comprehensive mutual respect. The desire to foster good relations with members of the community is one of the reasons why we consistently work hard to ensure that the company come up with new products and services that are not only competent to the requirements of our customers with respect to the changing market, but which also are environmentally friendly. This commitment runs through the length and breadth of their value chain and where the company espouses sustainable business principles.

Greenply has also remained steadfast to date in their commitments, promises, and corporate values to stakeholders. With the aim to create a positive shift to recognize 'sustainability' as the environmental and socially responsible solution where all, businesses, communities and the environment can 'Grow Together

At the heart of Greenply's success lies a fundamental belief – that the secret to sustainable business achievements resides in the goodwill an organization earns from its stakeholders, including the industry, customers, and the communities it serves. Greenply understands that true sustainability cannot be achieved in isolation; it requires a collaborative effort that fosters trust, transparency, and mutual respect among all stakeholders. By prioritizing inclusive growth, cultivating strong community relationships, offering innovative eco-friendly products, and embracing sustainable practices throughout its value chain, the company has positioned itself as an industry leader, earning the trust and loyalty of its stakeholders while creating a compelling model for others to emulate. 🌱

MAHAVIR INTERNATIONAL GRAND GOLDEN JUBILEE CELEBRATIONS FOCUSING ON FUTURE

“Very few organizations in the field of social service reaches the 50th year milestone and achieve this big a status” remarks by Former President of India Shri Ram Nath Kovind at the launch of Golden Jubilee year on July 7 at the Manekshaw Centre, New Delhi in the presence of 600 MI leaders, Donors, Associates and other prominent personalities. The distinguished guests included Dr. Ashok Agarwal, President of the International Vaish Federation and Member of the Central Pollution Control Board, Government of India, Padam Shri Dr. Balram Bhargava, Director General (Retd.), ICMR and Mr. Mahendra Singhi Director & Advisor, Dalmia Cement Bharat Ltd.

He further emphasized that your organization is absolutely driven by the pure spirit of service to humanity and not influenced by any political, social, or religious environment around. It is religiously contributing towards Nation Building. He spoke at length covering various dimensions of the organization and at last remarked by saying “अंत में सवेच्छा से कह रहा हूँ कि आप अपने कार्यक्रमों में मुझे भी साझेदार बनाएंगे तो मुझे बहुत खुशी होगी।”



International President CA Vir Anil Jain while addressing the luminaries, categorically said that Mahavir International is one of the



few public NGOs of india having complete democratic structure, has reached the milestone of 50 years' service to humanity. “Over the past 49 years, this NGO has been dedicated to “पराणमित्र की सेवा” with a moto “सबको प्यार, सबकी सेवा and proud to have impacted the lives of millions of individuals, by providing services in the field of Health, Education, Skill Development, Environment, Women hygiene and women empowerment. He paid respect to all those great visionaries and leaders who conceived and nurtured the evolution of MI throughout.

Talking about the various initiatives taken by the organization in the recent past, he mentioned about दोस्ती से सेवा की ओर i.e. From friendship to service, which is expected to bring a qualitative change in delivery of service to the target audience both in terms of its speed and scale. In line with this, a new concept called 'e-CHOUPAL, every day between a defined time (video conferencing on Microsoft Teams), a complete transparent platform for all members, donors and other stakeholders, finding resolution to their queries on a singular platform. This has resulted in a complete transparency and Zero pendency. It has emerged as a beautiful governance model for a large-scale NGO.

Briefing about the india social sector, which is undergoing the rapid changes specially in the light of "India moving from developing to developed" he touched upon the increased expectation of the people due to better standard of living, their needs, problems and thought process. There is a clear signal to NGO's of the sector that "This is the time and this is the only right time" they need to change and adapt faster and innovative ways of delivery of services economically and efficiently to the target audiences.

To mark the Golden Jubilee celebration, a ceremonial cake was presented, a virtual centre 'MISRI' and the Golden Jubilee "Logo" were launched by the former President.

The launch of Virtual Centre *MISRI*.- Mindfulness*Innovation*Sustainability*Replicable*Impactful* where members can join from any part of the universe, was a unique and unprecedented one.

The organization unveiled its first ever published book "The Essence Within: Decoding the Purpose of Existence," authored by Vir Sapan Kumar Vardhan.

Another attraction of the event was a panel discussion on "The



Future of NGOs in India's Social Sector" which was very successful with insights from prominent Panellists of Social sector. Participants in this panel discussion included Mr. Rajesh Tiwari (Moderator of the panel), Director General of the Indian CSR Centre, Mr. Amod Kumar Kanth, Founder Secretary-General of Prayas JAC Society, Mr. Uday Shankar Singh, CEO of World Youth Centre, Ms. Anupama Datta, Head of Policy Research and Advocacy, HelpAge India, Dr. Harish Vashishth, ED, Credibility

Alliance, CA Anjani K. Sharma, Co-Founder and Director of SAGA, Mr. Harsh Jaitley, CEO of VANI, and Mr. Devendra Gupta, Founder of the Ladli Foundation.

Awards were also presented to prominent NGO's and certificates to MIDP & MIGF members of MI recognizing their contribution.

The event was a grand success and provided a very good impetus to MI in taking forward its vision and mission. It was a great morale booster for the entire MI membership and India's social sector in general. 🇮🇳



DR SATISH WAGH
Chairman & MD,
Supriya Lifescience Ltd.

FROM WILDLIFE TO EDUCATION:

SUPRIYA LIFESCIENCE'S DIVERSE CSR INITIATIVES

In today's business world, the link between commercial success and societal welfare is more important than ever. Supriya Lifescience Limited, under the thoughtful leadership of Dr. Satish Wagh, exemplifies this synergy through its unwavering commitment to Corporate Social Responsibility. Supriya Lifescience's initiatives, particularly through the Satish Wagh Foundation, set a high standard for corporate philanthropy

due to their deep commitment to societal and environmental causes.

The Satish Wagh Foundation: A Catalyst for Change

Central to Supriya Lifescience's CSR efforts is the Satish Wagh Foundation, an embodiment of the company's values and mission to give back to the community. The foundation's recent donation of a 14-seater, air-conditioned Urbania vehicle, valued at ₹35 Lacs, to the Sanjay Gandhi

National Park Tiger Safari, stands as a testament to its commitment to enhancing visitor experiences and promoting sustainable tourism. This significant contribution not only facilitates better access for visitors but also underscores the foundation's support for wildlife conservation.

A Deep Commitment to Wildlife Conservation

Dr. Satish Wagh's passion for wildlife protection and conservation

is deeply ingrained in the foundation's ethos. This commitment is reflected in several notable initiatives. For instance, the foundation adopted three animals at the Sanjay Gandhi National Park at a cost of Rs. 9.10 Lakhs for both FY 22-23 and FY 23-24. Additionally, in FY 22-23, the foundation donated two Mahindra Bolero Neo vehicles worth Rs. 21 Lakhs to the park for animal welfare.

The foundation's efforts extend beyond these donations. An ongoing project involves installing an information display board at the park's entrance, aimed at educating visitors about wildlife and conservation practices. This initiative is part of a broader strategy to foster greater public awareness and engagement with environmental stewardship.

A Holistic Approach to Societal Betterment

Supriya Lifescience's CSR initiatives are not confined to wildlife conservation alone. Over the past three years, the Satish Wagh Foundation has invested more than Rs. 11.50 crores towards various societal betterment projects. These investments span education, sports promotion, digitisation efforts in schools, and support for higher education, reflecting a holistic approach to community welfare.

Empowering Through Education

Education is a cornerstone of the foundation's CSR activities. Recognising the transformative power of education, the foundation has launched several initiatives aimed at enhancing educational opportunities for underprivileged students. By promoting digitisation in schools, the foundation seeks to bridge the digital divide and provide students with the necessary tools to thrive in an increasingly digital world. Support for higher education ensures that talented individuals, regardless



Supriya Lifescience through Satish Wagh Foundation donates 14-seater force air-conditioned Urbania vehicle to Sanjay Gandhi National Park

of their socio-economic background, can pursue their academic aspirations and contribute meaningfully to society.

Promoting Sports and Physical Well-being

The foundation also places a strong emphasis on sports promotion. By investing in sports infrastructure and supporting young athletes, the foundation aims to foster a culture of physical fitness and well-being. These efforts not only promote a healthy lifestyle but also encourage the development of discipline, teamwork, and perseverance among the youth.

Environmental Stewardship: A Core Value


At the heart of Supriya Lifescience's CSR strategy is a steadfast commitment to environmental stewardship. The company's initiatives to promote environmental conservation are comprehensive and multifaceted. Beyond wildlife conservation, the foundation engages in activities that ensure the preservation of natural heritage for future generations.

Dr. Wagh's vision for the Satish Wagh Foundation is to create a sustainable impact on wildlife preservation and community

welfare. By leveraging the foundation's resources, Supriya Lifescience aims to foster positive change and contribute significantly to societal betterment. This vision aligns seamlessly with the company's core values and long-term strategic goals.

A Legacy of Corporate Citizenship

The establishment and ongoing activities of the Satish Wagh Foundation highlight Supriya Lifescience's enduring legacy of corporate citizenship. The foundation is more than just a vehicle for philanthropic activities; it is a symbol of the company's commitment to fostering positive change and safeguarding the environment. Through its diverse initiatives, the foundation aims to create a sustainable future where business success and societal welfare go hand in hand.

In conclusion, Supriya Lifescience Limited, under the visionary leadership of Dr. Satish Wagh, serves as an exemplary model of how businesses can integrate CSR into their core operations. As the company continues to grow, its commitment to CSR remains unwavering, ensuring that its legacy of positive change endures for generations to come. 



A 1-megawatt rooftop project in Vietnam.
Image: Constant Energy.

WHY IS IT SO HARD FOR COMPANIES TO BUY RENEWABLES IN SOUTHEAST ASIA?

Vietnam's recent opening up of its green power market won industry plaudits, but such reforms have been slow to materialise in the region.

Eco-Business' Liang Lei examines where firms may find procuring renewables easy, tricky, or nigh on impossible.

As the planet heats up dangerously, businesses are facing mounting public pressure to use more renewable electricity to reduce their carbon footprint.

Companies can do so in a few ways. Small shops can install a few solar panels on their rooftops to keep the lights on. Some firms may be content to buy renewable energy credits. But a growing number of corporations – the likes of Apple, Microsoft and Nike – want to enter long-term contracts directly with large-scale solar or wind farms, to secure a reliable supply of green electricity for decades to come.

Such corporate power purchase agreements (PPAs), as they are known, are held up by businesses as a key market-based enabler of renewable energy growth. Industry groups, such as the Asia Clean Energy Coalition, have been formed to lobby governments to reform power market rules and allow for corporate PPA deals.

Companies cheered this month when Vietnam, a regional manufacturing powerhouse, granted a high-level approval for corporate renewable energy PPAs, seven years after it first signalled the intention to do so.

“This is a hugely welcome step in Vietnam as the country looks to position itself as a leader in renewables in the region,” said Ollie Wilson, head of the RE100 campaign, whose members have committed to support 100 per cent renewable electricity. But the ability to forge such deals in fossil fuel-reliant Southeast Asia remains mosaicked, owing to both regulatory and technical roadblocks. Some countries only allow for deals via state-owned utility monopolies. Several also lack regulatory sweeteners, for instance permitting the sale of excess green power to the national grid.

What are the constraints in Southeast Asia?

Generally, restrictions around

WHAT ARE PPAS?

In short, they are long-term power supply contracts that can be signed for over 20 years at a go. Renewable energy PPAs help buyers lock in the green electricity they need to meet their sustainability goals, while providing power producers a guarantee for future income as they go about developing or fund-raising for large facilities such as solar and wind farms.

PPAs also generally involve fixed power pricing, which helps participants buffer against energy price volatility. In the common “contract for differences” deal structure, buyers top up the income of power producers in periods of low wholesale electricity prices. In return, generators provide discounts for buyers when the market electricity rates rise too high.

corporate renewable PPAs apply in instances where the renewable energy facility is located away from the end-user, requiring electricity to be sent through national or private grids.

Unfortunately, this scenario is also the one that represents the highest renewables potential, as it allows, for example, solar and wind facilities to be sited where weather is good and land is abundant, instead of where the electricity buyers are.

Off-site corporate PPAs cannot be forged in five of the 10 countries making up the Association of South-east Asian Nations (Asean) bloc:

Direct deals between green energy generators and end-users are most frequently hampered by the system of electricity monopoly in place in several Southeast Asian countries, where major state-owned utility companies manage the national electricity grid and supply power to residents and businesses.

Only the Philippines and Singapore have liberalised power markets. In Malaysia, Thailand and Vietnam, off-site corporate PPAs are enabled by exceptions the governments make to accelerate renewables development. Before Vietnam’s recent green-light, Thailand had

Country	Off-site corporate PPAs
Brunei	Not allowed
Cambodia	Not allowed
Indonesia	Not allowed
Laos	Not allowed
Malaysia	Allowed (virtual only)
Myanmar	Not allowed
Philippines	Allowed
Singapore	Allowed (virtual only)
Thailand	Allowed, pilot
Vietnam	Newly allowed

Graphic: Liang Lei/ Eco-Business

last month approved a 2-gigawatt corporate PPA pilot (Thailand's total power capacity is over 56 gigawatts). Malaysia's scheme has an 800-megawatt quota.

"[The issue of corporate PPAs] is really quite a complex issue for regulated markets, or partially regulated markets as we see them in Southeast Asia, as compared to a free market position," said Peter Godfrey, Asia Pacific managing director of think tank Energy Institute.

State-owned utilities have historically taken on a social agenda, Godfrey noted, pointing to their mandates for subsidies and rural grid development that often do not generate the best financial returns. The ability for these utilities to "engineer development" could be hampered by the power market liberalisation needed to enable corporate PPAs, he added. But there could also be an element of large monopolies reluctant to relinquish the level of control they have had for decades.

"[State utilities] do not want to see the dollars, or ringgit, or rupiah, going out of their cash flow. They see corporate PPAs as potentially losing their best customers," said Grant Hauber, analyst at the Institute for Energy Economics and Financial Analysis (IEEFA), referring to large factories and manufacturing plants that have very large power needs.

"There are legitimate concerns over cash flow and losing big customers. But [the reluctance to change] shouldn't be at the expense of advancing the overall energy mix and satisfying the demands of industrial customers with very strong mandates for green energy," added Hauber, Asia strategic energy finance advisor at the think tank.

To be clear, PPAs can be signed with state utility monopolies. Indonesia's Perusahaan Listrik Negara (PLN) uses such deals to both source power from independent green power producers and sell the output to large firms such as Amazon – in

this instance via a 210-megawatt solar power deal signed in 2022. But without competition, buyers have limited negotiating power to push for PPAs that best suit their needs.

Laos, one of the region's biggest hydropower producers, is unique in allowing independent power producers to sign electricity export PPAs, though buyers have tended to be the nationalised utilities of neighbouring states, such as Vietnam Electricity or the Electricity Generating Authority of Thailand.

Corporate PPA dealmaking has been gaining momentum where regulations permit. Malaysia's virtual corporate PPA programme was fully subscribed last year, with participants including Australian data centre firm Airtrunk (contracting 30 megawatts) and Japanese food oils manufacturer ISF (capacity undisclosed).

In Singapore, American data centre firm Equinix signed an 18-year, 75-megawatt solar deal with local utility Sembcorp in April. Facebook has had a 100-megawatt deal with solar provider Sunseap in place

since 2022. Corporate renewable PPA capacity rose to 26.3 gigawatts across Asia Pacific in the first half of 2023, consultancy Wood Mackenzie reported. But this is still a small fraction of the 175.6 gigawatts worldwide by that time.

Off-site corporate PPAs usually take two forms. Parties can install new private cables to transfer electricity, an arrangement typically reserved for the largest and most expensive of deals, or otherwise trade only via renewable energy certificates. In the more common latter arrangement, termed "synthetic" or "virtual" PPAs, renewable power is fed into the national grid to be shared with all users, but the buyer will own rights to claim all the resultant carbon savings.

The injection of intermittent renewables into the national grid could cause dangerous load imbalances, and may be a factor holding both regulators and the private sector back from more corporate PPA deals. In past years, countries such as China and Vietnam had to disconnect solar and wind farms from the power grid to curtail excess supply, leading to financial losses.

Hauber said such issues will eventually need to be addressed, but not immediately, as renewables penetration is still very low in Southeast Asia. Solar and wind power – the main intermittent green power sources – currently make up 9 per cent of the region's total capacity, according to nonprofit Global Energy Monitor.

Things are easier for on-site PPAs. Generally, no governments would oppose commercial facilities leasing out rooftop space for developers to build solar panels, especially if the power produced is only used on the same premises. But such projects tend to be smaller – whereas the largest wind and ground-level solar farms can reach gigawatts in capacity, rooftop solar installations are typically counted in the single-digit mega-

There are legitimate concerns over cash flow and losing big customers. But [the reluctance to change] shouldn't be at the expense of advancing the overall energy mix and satisfying the demands of industrial customers with very strong mandates for green energy.

Country	Selling of excess green power to grid (from commercial & industrial facilities)
Brunei	Allowed, pilot
Cambodia	Not allowed
Indonesia	Not allowed
Laos	Not allowed
Malaysia	Allowed
Myanmar	Not allowed
Philippines	Allowed
Singapore	Allowed
Thailand	Not allowed
Vietnam	Newly allowed

watt range. Still, government policies can whet or blunt investor appetite for on-site corporate PPAs.

Where excess power goes matters

A rooftop solar installation would be hard-pressed to provide all the electricity its building needs, especially at night and in cloudy weather. But there would also be regular instances of excess power, say on weekends at a quiet factory or office block.

The ability to sell excess solar power back to the grid would provide additional income for power producers, thus making them more amenable to develop more projects or sign more deals. All else being equal, rooftop solar would likely face higher generation costs than large solar farms due to the economies of scale.

“The fundamental issue is that you’ve got to create sufficient return on investment,” said Godfrey. But the sale of rooftop power to the grid is not possible in many key South-east Asian power markets.

Indonesia, the largest Asean economy, had allowed the sale of

excess green power from rooftops since 2018, but revoked it earlier this year – a move that observers had said would dent interest for future small-scale solar adoption.


Authorities had in parallel removed other fees for commercial users, so the brunt of the negative impacts would be felt instead by households, who never had to pay the business fees in the first place.

Other jurisdictions are trying to permit the sellback of rooftop solar power, but are facing difficulties doing so. Brunei had started trialling a “net metering” scheme since 2021, but does not appear to have moved past that stage, according to information on its energy department website. Cambodia hinted at similar measures last year. Under net metering, businesses use advanced power meters to track how much solar power they send back to the grid, and accordingly receive discounts on their electricity bills.

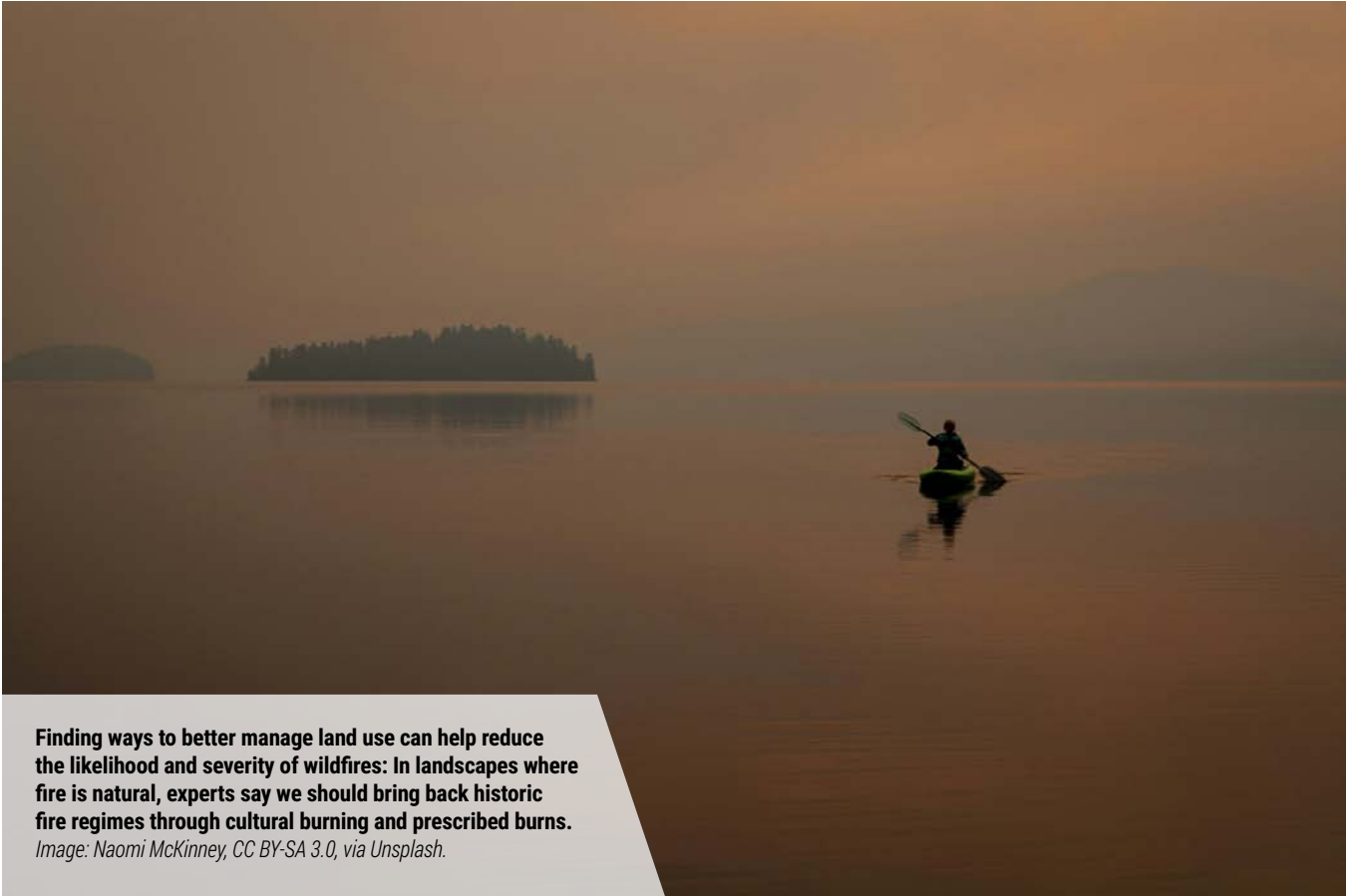
Corporate PPA and net metering regulations are not the only factors dictating the pace of renewables uptake in Southeast Asia. The region is also contending with generous

fossil fuel subsidies and overcapacity, high infrastructure lending rates, and the lack of a regional grid that can support more intermittent energy sources.

There are also calls for governments to step up national renewables procurement schemes, to further add to green power demand. Such schemes were what propelled Vietnam’s renewables scene to Southeast Asia’s fore in 2018, although it has now emerged that the system was not well managed and led to the lengthy regulatory delay between 2021 and 2023. Developers now point to the Philippines, which has pledged annual auctions for new renewables projects, as a new role model. But when it comes to enabling corporate renewable PPAs, all eyes are now back on Vietnam, to see if the country can make things work.

“It’s early days here. I want to see how things start playing out,” Hauber said. 

(Source: <https://www.eco-business.com/news/explainer-why-is-it-so-hard-for-companies-to-buy-renewables-in-south-east-asia/>)



Finding ways to better manage land use can help reduce the likelihood and severity of wildfires: In landscapes where fire is natural, experts say we should bring back historic fire regimes through cultural burning and prescribed burns.

Image: Naomi McKinney, CC BY-SA 3.0, via Unsplash.

ADAPTING TO WILDFIRE HEALTH RISKS IN A BURNING WORLD

Climate change is driving or contributing to increased risk of extreme wildfires in many parts of the world, and experts say urgent action on climate change is needed, state Ruth Kamnitzer, Mongabay.com

As dry brush crackled and smoke curled upward, there was a palpable feeling of satisfaction among firefighters gathered near Cranbrook in the Canadian province of British Columbia.

It was a sunny day in April, and if the weather held, the multi-agency team hoped to quickly finish a prescribed burn on 42 hectares (104 acres) of land adjacent to the tiny Rocky Mountains International Airport — an effort meant to protect the facility in case of a major wildfire event.

Some crew members walked diagonal lines along the firefront, lighting the grass with drip torches. Some stood along the burn's perimeter with water bladders and hoses to douse errant sparks. Another monitored wind speed and direction, alert and ready to warn of changes. Others looked on, glad to be working with fire instead of against it.

"Should've bought marshmallows," one quipped.

Last July, when a downed power line sparked a wildfire here, the mood was far different. The St. Mary's River Fire burned 4,650 hectares (11,490 acres), destroyed homes in the Indigenous ʔaḡam community, and put the airport and nearly 100 properties under evacuation alert. It took what the BC Wildfire Service calls a full response — water bombers, ground crews, back burning — to control it.

But without prescribed burning, things could have been far worse. That spring, three months before the St. Mary's River Fire, the ʔaḡam community, part of the Ktunaxa First Nation, intentionally burned a 1,200-hectare (2,965-acre) portion of their reserve.

This meant that when the St. Mary's River Fire hit the ʔaḡam burn, it was stopped in its tracks, says wildfire ecologist Robert Gray, who helped plan both the airport and

ʔaḡam burns. Firefighters had one less front to deal with, and the airport — essential for launching firefighting aircraft — was safeguarded.

These pragmatic burns, and the way they help prevent bigger, uncontrolled blazes, offer a clear example of how bringing fire back can actually reduce risk, Gray says.

The megafire threat

Extreme wildfires are increasing in many parts of the world, according to a 2022 United Nations Environment Programme report. The potential consequences are worrying: the release of greenhouse gases; the destruction of wildlife and ecosystems; loss of lives and property; and as emerging research shows, significant impacts to human health.

The drivers of this extreme wildfire surge are complex, and include global warming, land-use change, and increased ignition sources (including people). The solutions are just as complex.



Our members are very aware of the changing conditions and the health impacts it has on their lives, particularly when it comes to wildfire smoke. I mean, folks were coughing up black dust, having headaches, just a lot of symptoms.

—IRA CUELLO-MARTINEZ
Climate Policy Associate, Pineros y
Campesinos Unidos del Noroeste

First and foremost, we need to drastically cut emissions to limit climate change as much as possible, says Stefan Doerr, professor of wildlands fire ecology at Swansea University in the US. But we also need to change how we manage land and rethink how we live with the risk of fire.

Fighting fire with fire

Fire is a natural and essential part of many landscapes. It shapes species diversity, helps seeds germinate, and keeps disease in check. In many places, including Canada, Indigenous peoples historically used fire as a tool to create habitat, for ceremony and other purposes.

In the past, lightning caused fires, and intentionally set Indigenous burns created a mosaic of habitats that burned at different rates, so that when wildfires ignited they didn't get too big or spread too far, says Gray.

But the banning of Indigenous cultural burning by colonial governments — in places like the US, Canada, Australia and elsewhere — along with many decades of active fire suppression to protect private property and valuable timber, effectively removed fire from the landscape.

That created a "fire deficit," says Jen Barron, a doctoral candidate at the University of British Columbia. For example, Barron's research shows that in the Rocky Mountain Trench in southeast BC, where the prescribed burn near the Cranbrook airport took place, most areas have now missed from one to 10 usual burn cycles.

"On the historic landscape, a lot of the research we've done [shows] we didn't have big fires like we're seeing today," Gray says. "You take fire out of the system, you homogenise things, that fire frequency lengthens, fuels accumulate, and now we get these big ugly fires ... So going forward, we have to replace that mosaic."

Research also shows that periodic burning improves ecosystem health in fire-adapted landscapes. Indigenous fire stewardship results in greater habitat heterogeneity and biodiversity, according to a 2021 PNAS review study, while a study in Australia showed that Indigenous cultural burning increased soil and ecosystem health, even more so than other types of planned burning.

Today, there's a resurgence in Indigenous and prescribed burns as a way to bring back more natural fire regimes and manage risk (though the two practices have different pragmatic or cultural objectives).

The Firesticks Alliance, for example, is a nonprofit network with a cultural goal, promoting Aboriginal traditional burning in Australia. In British Columbia, the provincial government is working to bring back cultural and prescribed fire as a land stewardship tool, through the Cultural and Prescribed Fire initiative.

Mitigating smoke risks

Many proponents of prescribed or cultural burning point out that these fires can be planned in a way that minimizes health risks from smoke. The idea is that these controlled fires burn at low intensity and under specific weather conditions. That means they produce less smoke, and that the spread of the smoke is more controlled.

But there's a catch: To mitigate extreme fire risk, areas need to be burned frequently. That means nearby communities may be repeatedly exposed to low levels of smoke, says Fay Johnston, a professor at the University of Tasmania in Australia.

Johnston's research in Australia shows that, hectare for hectare, the health impacts of prescribed burning are higher than those of wildfires. That's why it's important that vulnerable groups are adequately protected from smoke during prescribed burns, she says.

"Fuel management is crucial, and deliberate prescribed burning is a crucial part of the mix. But we can do it a lot better, and use alternatives [more often]," she says.

Some of those alternatives have four legs and insatiable appetites: Goats, cattle, sheep and even kangaroos have all been successfully used to reduce fire risk in cities and towns. A study in Oregon, for example, found that targeted grazing by cattle was effective in creating firebreaks.

Learning to live with fire

We can't, and shouldn't, eliminate all fires, at least in places where ecosystems are fire-adapted, says Doerr. Instead, humanity will have to learn how to live with fire and manage risk.

"It will be one of those things ... there'll be storms, there'll be fires, there'll be floods," Doerr says.

Managing the risks includes looking at the way we live, work and build in forested areas to make sure we aren't contributing to the problem, especially as climate change dries out forests and makes them more fire-prone.

Half of the world's population now lives in what's called the wildlands-urban interface, according to a 2023 Nature study. These are places where home sites are nestled among trees or give way to wild olive groves or small farms. These are often desirable places to live, but risky when it comes to wildfire.

On a dry, windy day, a spark from a barbecue, or from burning garden waste, can accidentally set the surrounding forest alight. And when fires do start, neighbouring people and property are directly in harm's way.

One solution is to reduce these accidental ignitions, and many countries have regulations in place to do so. For example, in Portugal, 98 per cent of major wildfires are caused by humans, and the government now has strict controls as to when and

how locals can burn agricultural and garden waste.

Another solution is to create a safe zone of nonflammable materials around homes or communities to reduce wildfire risk. The Canadian Interagency Forest Fire Centre's FireSmart program, for example, runs programs to help communities and individuals reduce wildland fire threats.

Protecting health in a time of megafires

As extreme wildfires become more common, we'll all have to get better at living with the smoke, says Michael Brauer, a professor at the University of British Columbia's School of Population and Public Health. Mounting research shows that wildfire smoke, even at low to moderate levels, has wide-reaching impacts, worsening respiratory and cardiovascular health, affecting pregnancies, and more.

"I think it's sort of a shift in philosophy," Brauer says "People who are living in hurricane-prone regions, they all have plywood to board up their windows. It's all about, how do we actually live with this [intensifying risk]?"

At the government or institutional level, that means protecting the groups most vulnerable to those impacts: the young, elderly, pregnant women, and people with underlying health conditions such as asthma.

This could include programs to distribute air purifiers to vulnerable households, or designing and providing access to clean-air shelters, says Carlos Gould, an assistant professor at the University of California, San Diego. The city of Penticton in British Columbia designates numerous free public spaces, including its community centre, as clean-air spaces — even allowing "well-mannered dogs" on the walking track on smoky days.

But not everyone can afford to go inside, says Ira Cuello-Martinez,

climate policy associate at PCUN, an advocacy group for Latino farm-workers in Oregon.

“Our members are very aware of the changing conditions and the health impacts it has on their lives, particularly when it comes to wildfire smoke. I mean, folks were coughing up black dust, having headaches, just a lot of symptoms” during recent fires, he says. “And at the same time there’s pressure to make ends meet.”

Following successful lobbying, in 2022 Oregon passed legislation that included requirements to protect outdoor workers from smoke and heat, including providing free N95 masks when smoke levels reach a certain concentration. California and Washington (which passed similar legislation this year) are the only other US states that have rules to protect outdoor workers from wildfire smoke.

Changing behaviours and mindset

To better protect people from smoke, we need to be able to predict and monitor air quality.

The Copernicus Atmosphere Monitoring Service, administered by the European Space Agency, tracks the global transportation of air pollution, including wildfire smoke. Its Global Fire Assimilation System uses satellite-based sensors to monitor the location and intensity of wildfires globally, then models how emissions and smoke move around the world, in near real-time.

Numerous air quality apps use the data from Copernicus or other smoke forecasting systems to help predict air quality. For example, the IQAir app publishes global air quality forecasts.

To make the data more user-friendly, some countries use a colour-coded air quality rating system, sometimes using the concentrations of multiple air pollutants including PM2.5s, ground-level ozone, nitrogen

dioxide, carbon monoxide and others. For example, in the USA’s AirNow.gov rating system, the colours from green to maroon signify increasing levels of danger.

Some cities are also incorporating fire and smoke warnings into their hazard warning systems. And in future, these types of 24-hour advance wildfire smoke early-warning systems — carried out over the internet, via news outlets and government — will likely become more essential. And these systems needn’t be expensive.

For example, in Colombia, the Early Warning System of Medellín and the Aburrá Valley (SIATA), a low-cost natural-hazard warning system developed in 2011 in response to catastrophic flooding, now also includes air quality monitoring. As part of the program, local authorities, private companies and volunteers work together to monitor environmental conditions, disseminate information through social media, apps and other channels, and manage risks.

Following successful lobbying, in 2022 Oregon passed legislation that included requirements to protect outdoor workers from smoke and heat, including providing free N95 masks when smoke levels reach a certain concentration.

The hope is that these types of warning systems will lead people to reduce their exposure to smoke by changing their behavior, for example by cutting back on outdoor activities, staying home and turning on air filters.


Some behaviour changes can be seen in the hospital admissions data in the US, says Gould. On heavy smoke days, emergency room visits for respiratory problems like asthma skyrocket, but visits for other reasons decline. That’s because people are staying home; kids aren’t out playing. Gould’s research also shows that people move around less on smoky days, and there are more Google searches for air quality and for air purifiers.

Experts say more research is needed on what types of interventions are most effective, and how to make them accessible.

We also need a change in mindset, so people start taking precautions during wildfire smoke events much as they do for bad weather, Johnston says.

“Extreme cold, extreme UV rays ... we need to get air quality to that level. We’re a long way from that now,” she says.

That means getting educated about smoke. Most public health consequences occur when smoke is at mild to moderate levels, Johnston says, so it’s important to take action before the sky turns orange. And as wildfires increase, and smoke becomes a recurring event for many communities, it’s important that people know how to manage their exposure.

“We really need to give people the everyday tools to manage intermittent smoke, [and] to think about reducing the load through the year,” Johnston says. 

This story was published with permission from Mongabay.com.

(Source: <https://www.eco-business.com/news/adapting-to-wildfire-health-risks-in-a-burning-world/>)



In May, tech behemoth Google completed its fourth data centre in Singapore in May. In the next few years, the country plans to add at least 300 megawatts (MW) of power and an additional 200 (MW) for operators who tap green energy. *Image: Google*

POWER-HUNGRY AI IS DRIVING A SURGE IN TECH GIANT CARBON EMISSIONS. NOBODY KNOWS WHAT TO DO ABOUT IT

Since the release of ChatGPT, the world has seen a surge in investment and use of artificial intelligence. The social and economic impacts of this boom have provoked reactions, but the environmental costs have received far less attention, writes **Gordon Noble** and **Fiona Berry**

Since the release of ChatGPT in November 2022, the world has seen an incredible surge in investment, development and use of artificial intelligence (AI) applications. According to one estimate, the amount of computational power

used for AI is doubling roughly every 100 days.

The social and economic impacts of this boom have provoked reactions around the world. European regulators recently pushed Meta to pause plans to train AI models on users' Facebook and Instagram

data. The Bank of International Settlements, which coordinates the world's central banks, has warned AI adoption may change the way inflation works.

The environmental impacts have so far received less attention. A single query to an AI-powered

chatbot can use up to ten times as much energy as an old-fashioned Google search.

Broadly speaking, a generative AI system may use 33 times more energy to complete a task than it would take with traditional software. This enormous demand for energy translates into surges in carbon emissions and water use, and may place further stress on electricity grids already strained by climate change.

Energy

Most AI applications run on servers in data centres. In 2023, before the AI boom really kicked off, the International Energy Agency estimated data centres already accounted for 1–1.5 per cent of global electricity use and around 1 per cent of the world's energy-related CO₂ emissions. For comparison, in 2022, the aviation sector accounted for 2 per cent of global energy-related CO₂ emissions while the steel sector was responsible for 7–9 per cent. How is the rapid growth in AI use changing these figures? Recent environmental reporting by Microsoft, Meta and Google provides some insight.

Microsoft has significant investments in AI, with a large stake in ChatGPT-maker OpenAI as well as its own Copilot applications for Windows. Between 2020 and 2023, Microsoft's disclosed annual emissions increased by around 40 per cent, from the equivalent of 12.2 million tonnes of CO₂ to 17.1 million tonnes.

These figures include not only direct emissions but also indirect emissions, such as those caused by generating the electricity used to run data centres and those that result from the use of the company's products. (These three categories of emissions are referred to as Scope 1, 2 and 3 emissions, respectively.) Meta too is sinking huge resources into AI. In 2023, the company disclosed its Scope 3 emissions had increased by over 65 per cent in just

two years, from the equivalent of 5 million tonnes of CO₂ in 2020 to 8.4 million tonnes in 2022.

Google's emissions were almost 50 per cent higher in 2023 than in 2019. The tech giant's 2024 environmental report notes that planned emissions reductions will be difficult "due to increasing energy demands from the greater intensity of AI compute".

Water

Data centres generate a lot of heat, and consume large amounts of water to cool their servers. According to a 2021 study, data centres in the United States use about 7,100 litres of water for each megawatt-hour of energy they consume.

Google's US data centres alone consumed an estimated 12.7 billion litres of fresh water in 2021.

In regions where climate change is increasing water stress, the water use of data centres is becoming a particular concern. The recent drought in California, where many tech companies are based, has led companies including Google, Amazon and Meta to start "water positive" initiatives.

These big tech firms have announced commitments to replenish more water than they consume by 2030. Their plans include projects such as designing ecologically resilient watershed landscapes and improving community water conservation to improve water security.

Climate risk

Where data centres are located in or near cities, they may also end up competing with people for resources in times of scarcity. Extreme heat events are one example.

Globally, the total number of days above 50°C has increased in each decade since 1980. July 2023 was the hottest month ever recorded.

Extreme heat translates to health impacts on local populations. A Lancet 2022 study found that even a 1°C increase in temperature is

positively associated with increased mortality and morbidity.

On days of extreme heat, air conditioning can save lives. Data centres also like to keep cool, so their power use will spike with the temperature, raising the risk of blackouts and instability in electricity grids.


What's next?

So what now? As we have seen, tech companies are increasingly aware of the issue. How is that translating into action?

When we surveyed Australian sustainability professionals in July 2023, we found only 6 per cent believed data centre operators provided detailed sustainability data.

Earlier this year we surveyed IT managers in Australia and New Zealand to ask what they thought about how AI applications are driving increased energy use. We found 72 per cent are already adopting or piloting AI technologies.

More than two-thirds (68 per cent) said they were concerned about increased energy consumption for AI needs. However, there is also significant uncertainty about the size of the increase.

Many IT managers also lack the necessary skills to adequately address these sustainability impacts, regardless of corporate sustainability commitments. Education and training for IT managers to understand and address the sustainability impacts of AI is urgently required. 

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(Source: <https://www.eco-business.com/opinion/power-hungry-ai-is-driving-a-surge-in-tech-giant-carbon-emissions-nobody-knows-what-to-do-about-it/>)



Nearly one in five cars sold globally in 2023 was electric, according to the International Energy Agency (IEA). EVs are set to play a key role in meeting net-zero goals by reducing oil usage and carbon emissions, the IEA said.

Image: chrisUK, CC BY-SA 3.0, viaFlickr.

FROM RACE TO ROAD: IS FORMULA E FUELLING THE FUTURE OF GREEN TRANSPORT?

Electric motorsports are helping drive the electric vehicle market, but EVs alone won't curb transport emissions.

Setting off with just 60 per cent of the power needed to finish the race, drivers at the Formula E World Championship race in London this month relied on their brakes at tight turns to produce enough energy to complete the race's 39 laps.

The latest model of the electric racecar regenerates nearly half of its power from braking in what the

International Automobile Federation (FIA), the motorsport's organiser, describes as the most efficient Formula E car yet.

Since its first championship in 2014, Formula E has helped hasten the development of technology for electric vehicles (EVs), making them easier to sell to consumers.

Tax incentives, price reductions and a greater range of vehicles are also expanding the market.

"What we learn on the racetrack through software enables us to transfer that information to our core engineering teams for our future vehicles," said James Barclay, team principal of Jaguar TCS Formula E racing team.

Nearly one in five cars sold globally in 2023 was electric, according to the International Energy Agency (IEA). EVs are set to play a key role in meeting net-zero goals by reducing

oil usage and carbon emissions, the IEA said. But experts warn there are still barriers to the widespread adoption of EVs, which alone is not enough to tackle emissions from transport that are increasing as economies and populations grow.

“Electric vehicles are a necessary but not sufficient condition for decarbonisation,” said Cecilia Briceño-Garmendia, global lead for transport economics at the World Bank.

Trickle-down tech

Advances in EV technology have helped increase the market share of EVs, according to a study by researchers from Yale University and Carnegie Mellon University.

But it takes four to five years for innovations developed for Formula E racing to trickle down to passenger EVs, said Julia Palle, vice president of sustainability at Formula E.

This year, Formula E teams are working to improve the efficiency of regenerative braking to ensure more energy created from braking is fed back to the battery when the car has the right momentum.

Regenerative braking could also help to improve the range and drivability of passenger EVs, said Tommaso Volpe, team principal of Nissan’s Formula E team.

The battery capacity of the Nissan Leaf, one of the first mass-produced EVs launched in 2010, has increased by 181 per cent since the team joined Formula E in 2014.

Winners of this year’s championship, Jaguar TCS have also boosted the battery range of Jaguar Land Rover’s electric SUVs, based on experience at the Formula E racetrack. The carmaker will use silicon carbide inverter technology, which allows for a faster, lightweight powertrain, developed for its race cars in all future Jaguar Land Rover vehicles.

Teams are also experimenting with artificial intelligence (AI) to learn how energy is deployed during a race. AI would be even more useful



It’s simply impossible to build a charging station for every single person, and it’s even more impossible to do that when you live in highly dense housing, because there just isn’t enough space.

–ASHLEY NUNES

Researcher, Harvard University

in passenger EVs, where an engineer is unavailable to make changes on the spot, according to Volpe.

Though considered environmentally safer than conventional cars, EVs come with their share of unsustainable practices, especially the mining of lithium for batteries. Formula E is looking at ways to extend battery life, reduce tyre waste and develop ultra-fast charging. The batteries used in Formula E cars are recycled, and both minerals and metals are reinserted into battery cells every other season, Palle said.

“The real game changer is the charging infrastructure. There is not enough, and it is not fast enough,” she said.

No charge

At the season finale at London’s ExCeL circuit on July 21, Formula E drivers created plenty of smoke as their tyres gripped the track. The smell of burnt rubber lingered beneath the stands – still far less air pollution than produced by conventional racecars.

In addition to fuelling research into new technology, Formula E

is also credited with popularising electric vehicles, showcasing their drivability and speed to consumers.

EV sales have grown sharply in the last five years, reaching nearly 14 million in 2023, more than six times the number in 2018, according to the IEA. But those sales are concentrated in just three regions, with 95 per cent of cars sold in China, the United States and Europe.

A lack of charging infrastructure and the price premium of EVs, which can cost 70 per cent more than conventional vehicles according to the World Bank, have slowed EV uptake in the Global South.

“The largest problem that we face moving forward is how to deal with transport decarbonisation in developing countries, where emissions are growing,” said Briceño-Garmendia. These countries need to invest in charging infrastructure and electrifying public transport, she said. Public charging points globally grew by 40 per cent in 2023, with the increase in fast chargers outpacing that of slow chargers, according to the IEA. But charging infrastructure is still an issue for lower-income communities living in densely populated areas, according to Ashley Nunes, a researcher at Harvard University.

“It’s simply impossible to build a charging station for every single person, and it’s even more impossible to do that when you live in highly dense housing, because there just isn’t enough space,” said Nunes.

Switching to clean vehicles is the most direct way to tackle transport emissions, especially with demand for vehicles expected to grow.

But governments also need to adapt urban planning to reduce traffic, invest in improving and electrifying public transport and switch road freight to rail and boat, said Briceño-Garmendia. 

(Source: <https://www.eco-business.com/news/from-race-to-road-is-formula-e-fuelling-the-future-of-green-transport/>)



Sustainably growing aquaculture and better managing fisheries are central to the FAO's "Blue Transformation road map," a strategy for meeting the UN's Sustainable Development Goal 14, which seeks to improve the social, economic and environmental sustainability of aquatic food to feed more people more equitably. *Image: WorldFish, CC BY-SA 3.0, via Flickr.*

SEAFOOD FARMING SURPASSES WILD CATCH FOR THE FIRST TIME: FAO

For the first time in history, we now farm more seafood than we catch from the wild. At the same time, overfishing of wild fish stocks continues to increase, and the number of sustainably fished stocks declines, writes **Elizabeth Fitt**

For the first time in history, we now farm more seafood than we catch from the wild. At the same time, overfishing of wild fish stocks continues to increase even as the number of sustainably fished stocks declines.

That's according to the UN Food and Agriculture Organization's (FAO) latest "The State of World Fisheries and Aquaculture" (SOFIA) report.

The 2024 instalment of the report, a biennial collection of data that outlines the FAO's vision for the fishing and aquaculture sectors, was released June 8 at a high-level ocean stakeholder event in Costa Rica. It tempers aquaculture progress with a warning that fisheries management is failing to adequately support sustainable wild fish stocks.

The report summarises the FAO's "Blue Transformation road map" and encourages countries to implement it. In 2021, the FAO launched the road map, a strategy for meeting the UN's Sustainable Development Goal 14 (SDG 14), Life Below Water, by 2030, to improve the social, economic and environmental sustainability of aquatic food and feed more people more equitably. Sustainably growing aquaculture and better managing fisheries are central to the Blue Transformation road map, but progress is "either moving much too slowly or has regressed," the report says.

"The FAO's ambition for a Blue Transformation is necessary, admirable and ambitious," Bryce Stewart, a senior research fellow at the UK-based Marine Biological Association, told Mongabay. "It appears to have resulted in improved data and a higher profile for blue foods from fisheries and aquaculture as a key way to addressing global issues around inadequate nutrition and inequality."

Key takeaways

The SOFIA report has been giving policymakers, scientists and civil society a deep dive into the global fisheries

and aquaculture sectors since 1995. The flagship report, released every two years, reviews FAO and broader UN statistics, including those the FAO has been collecting on 500 fisheries stocks globally since 1974. It provides data, analysis and projections that inform decision-making internationally. The 2024 report brings in data that became available since the last SOFIA report was published, in 2022. An estimated 600 million people still rely, at least partially, on small-scale fisheries and aquaculture for their livelihoods, while people relying on direct employment in the sectors increased by 4 million, to almost 62 million, since the 2022 report.

Women make up 24 per cent of fishers and fish farmers, up 3 per cent on SOFIA 2022, and a stable 62 per cent of processing workers. More than three-quarters of the global fisheries and aquaculture workforce is based in Asia, which continues to dominate both wild fisheries and aquaculture, accounting for 70 per cent of global aquatic animal production and more than 90 per cent of aquaculture. Fisheries and aquaculture production rose by more than 4 per cent to an all-time high of 223 million metric tons, worth a record US\$472 billion, the report finds. Aquaculture drove growth, pulling ahead of capture fisheries in aquatic animal production to 51 per cent of the global

total. Almost 63 per cent of farmed aquatic animals and plants came from inland waters and 37 per cent from marine and coastal areas.

The number of sustainably fished marine fish stocks fell more than 2 per cent, down to 62 per cent, since SOFIA 2022. This continues a striking long-term decline from 90 per cent in the 1970s that is "particularly worrying," Stewart said.

"Given the definition the Food and Agriculture Organization uses to determine sustainability, this decline is likely an underestimate," said Ashley Wilson of the Philadelphia-based public policy group The Pew Charitable Trusts' international fisheries project.

"Sustainably fished" includes stocks that are "maximally sustainably fished," which make up half of the global total, and "underfished," which have rallied from just 7 per cent in the 2022 report to 12 per cent. The remaining 38 per cent of stocks are defined as "overfished," up from 35 per cent in 2022.

When it comes to the 10 fish species we land the most, however, the picture is a little brighter. Around 79 per cent of these were fished within biologically sustainable levels, higher than the global average, which shows these important stocks are better managed than most and that conservation efforts can be effective, according to the report. "Urgent action is needed to replicate successful policies and reverse declining sustainability trends," the report says.

"Good progress" has been made in terms of countries agreeing to monitor and report across biological, social and economic sustainability dimensions, and on agreements to combat harmful fishing practices, according to the report. But actual implementation of these measures is "lagging," it says, and fishery sustainability "continues to drift from its target." Too little investment from the public and private sectors, lackluster political will and insufficient international collabo-



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-PETER THOMSON

Ambassador, Fiji

ration are what's preventing better fisheries management, Stewart says. The good news is that "we have the knowledge and expertise to do what it takes," he said. "We need to highlight, learn from and draw inspiration from those fisheries and aquaculture initiatives that have achieved genuine sustainability and delivered benefits in an equitable way."

Aquaculture and the 'Blue Transformation'

The SOFIA report continues FAO's long-standing promotion of aquaculture as a way to meet SDG 14. Aquaculture production may have hit a record-breaking 130.9 million metric tons, but it still has untapped potential to contribute even more to human nutrition, especially in low-income countries in Africa, Asia, Latin America and the Caribbean, the report says. Aquaculture production grew 6.6 per cent since 2020 and is projected to grow a further 17 per cent by 2032, putting it on track to exceed the 22 per cent increase by 2050 that the report says is required just to keep pace with projected human population increases.

"The report highlights a huge potential for aquaculture to bring economic and food security to countries around the world," Bryton Shang, CEO of San Francisco-based aquaculture tech startup Aquabyte, told Mongabay. When the 2022 SOFIA report came out, Shang said there was a lot of talk but little action around sustainable aquaculture. Mongabay asked whether that was still the case two years down the line.

"There has absolutely been more action from regulators, nonprofits and businesses," Shang said, highlighting new fish welfare and environmental protection policies in Iceland and stricter enforcement in Norway and Chile.

"Conversations around the industry itself are also evolving," he added, and new types of partnership are developing. For example, the

Walmart Foundation and Chilean salmon farmer Blumar Seafoods have partnered with The Nature Conservancy to experiment with co-farming seaweed as a way to improve fish-farm water quality.

This uptick in crucial innovations and regulations has "accelerated the production of sustainably and ethically grown seafood," Shang said. And the impacts have pushed Aquabyte's revenue over US\$10 million, he said, with the business expanding into Iceland and the Faroe Islands.

Aquaculture isn't all a bed of anemones, however. Governments and regulatory bodies aren't forward-thinking enough when it comes to promoting sustainable aquaculture development, Shang said. There's a tendency to focus on the industry's historical flaws rather than where it's headed. "Because the industry's social license to operate has been challenged, so has its regulatory license, and thus the industry as a whole has not kept up with demand," he said.

Ecological and social damage caused by poorly managed aquaculture is well publicised: Farmed salmon is often fed wild fish caught in West Africa, destabilising both fish stocks and the region's food security. Eutrophication and the transfer of toxic chemicals, diseases and parasites to wild fish populations are widespread around fish farms, as summed up in a 2017 reference article published by Elsevier.

Many of the problems are linked to in-demand intensively farmed species such as salmon and shrimp that rely on fish-based diets. Farmed shellfish, on the other hand, can actually improve the surrounding ecosystem, according to research published in Marine Policy. Farming herbivorous fish using indigenous Hawai'ian techniques has also been reported to improve water quality and increase native fish populations.

"Producing food has impacts," Manuel Barange, director of the FAO's fisheries and aquaculture division,

told Mongabay in an emailed statement. "Aquaculture allows us to control and analyze what impacts we are prepared to accept and which ones we do not." In May 2024, FAO members agreed to a set of sustainable aquaculture guidelines to help states navigate these trade-offs.

Climate adaptation and aquatic foods

Aquatic foods will play a key role in mitigating the impacts of climate change, the report says, partly because future terrestrial food production will struggle to deliver food security. At the same time, "As the effects of climate change intensify and global demand for blue food continues to increase, it will become even more difficult, but more important, to manage fisheries sustainably," Stewart said.

"To cope with the changes that will be coming upon us, I have little doubt that we'll be turning increasingly to the ocean for the solutions to our problems," Peter Thomson, ambassador of Fiji and special ocean envoy to the UN, said at the launch of the SOFIA report in Costa Rica.

Adapting both fishing and aquaculture to the instability in marine ecosystems and increasing extreme weather events that climate models predict is "vital," the report says. It recommends dynamic fishing season adjustments and basing access to fishing grounds on near-real-time monitoring systems, together with disaster preparedness and promoting livelihood diversification. We need to do better because our actions today "will lessen the immense trials of those who are inheriting the future," Thomson said. "It is in this context that the FAO's Blue Transformation strategy assumes such importance for what lies ahead." 

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