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PROFIT FOR GOOD

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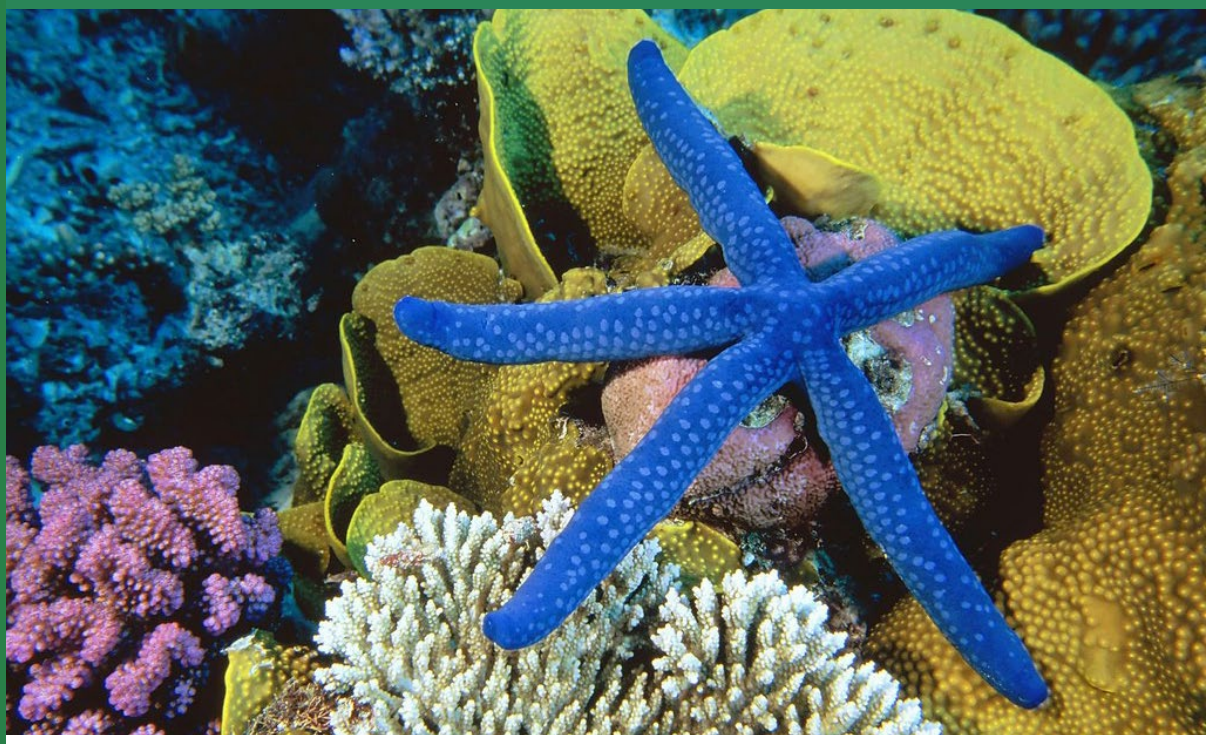
Trends, Analysis Green Products, Green Books, Youth Entrepreneurship

Purpose
To excite entrepreneurs, executives and graduate students about immense opportunities in green business.



8 Good News for the Planet in 2022

Amidst a lot of gloom stories in 2022, there were several that offer hope. Among the many listed by www.humanprogress.org, SustainabilityNext has picked eight – ones that have a wider implication.

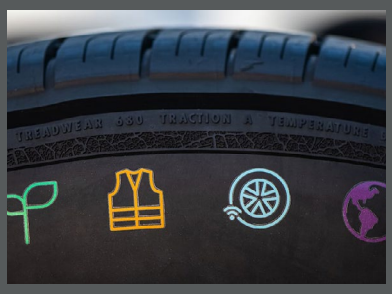
The world has passed peak agricultural land

The world produces more food than ever, but the amount of land we use is now falling. This means we can feed more people while restoring wild habitat.

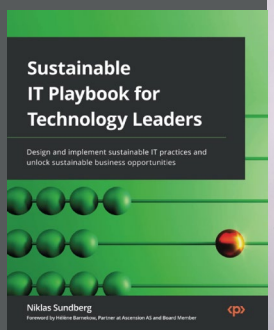
A newly developed perennial rice cut labor and input costs in half

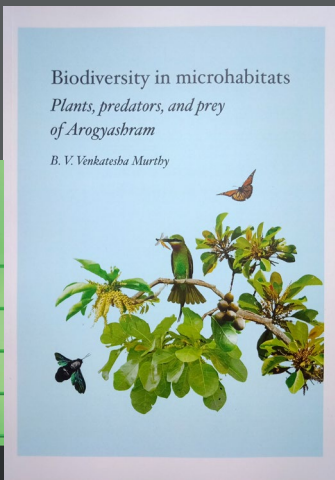
After more than 9,000 years in cultivation, annual paddy rice is now available as a long-lived perennial. The advancement means farmers can

A Radical Strategy for A Greener India – The Story of Kusha



Goodyear Unveils Tire with 90% Green Materials





plant just once and reap up to eight harvests without sacrificing yield.

India has almost wiped-out extreme poverty

India has almost eradicated extreme poverty and brought down consumption inequality to its lowest levels in 40 years through state-provided food handouts, according to a new working paper published by the International Monetary Fund (IMF).

The Great Barrier Reef had an impressive recovery

Despite the reported conditions, the reef had somehow restored itself, filled with life and color once more. It can be traced to two key factors – The first – half of the corals had not died, as was previously thought. Despite the rise in temperatures, there were enough surviving corals left behind to help reproduce and replenish the reefs.

The second factor was the Kiribati government's decision to fully protect those waters.

Trees are growing larger

Trees are getting bigger because of more carbon dioxide in the atmosphere and are likely to be helping to mitigate global warming more than what climate models suggest.

Wildlife is making a comeback in Europe

Wolves, brown bears and white-tailed eagles are among the top predators making a comeback across Europe, according to a major report that looks at how some wildlife is rebounding.

Researchers analyzed data on 50 wildlife species whose population size and geographical distribution have expanded over the past 40 years to show how effective legal protection, habitat restoration and reintroductions can drive species recovery.

Chinese scientists developed rice that can grow in salty soil

Chinese scientists have developed salt-tolerant strains of rice in a bid to ensure food security as sea levels rise from climate change.

Alternative to Lithium Batteries Four Times More Effective

They rely on chemical reactions between a sulfur cathode and a sodium anode to store and deploy electrical energy, and they use low-cost materials, which can even be easily extracted from saltwater.

https://www.mdpi.com/1420-3049/26/6/1535

Lithium metal batteries have achieved large-scale application, but still have limitations such as poor safety performance and high cost, and limited lithium resources limit the production of lithium batteries. The construction of these devices is also hampered by limited lithium supplies. Regardless of safety performance or energy storage performance, room temperature sodium-sulfur batteries have great potential as next-generation secondary batteries.

A Radical Strategy for A Greener India – The Story of Kusha

By Ram Ramprasad

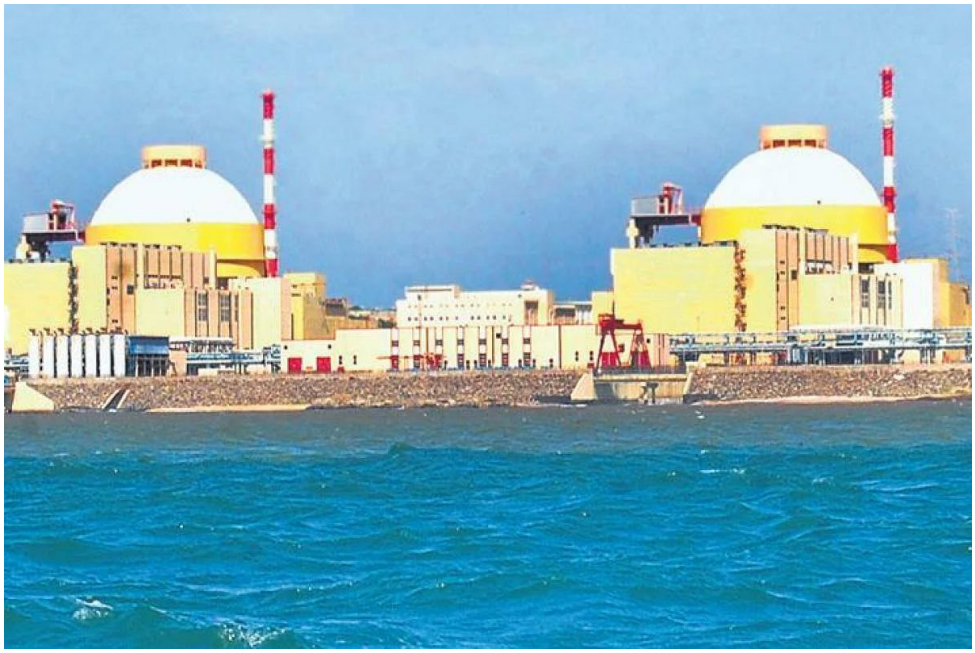
Ram Ramprasad's dream of how India can take a leap in how it reimagines its climate and energy future

Kusha, was born to a farmer couple in a remote village in the State of Telangana, India. Her little baby face was charming with an inquisitive look, so her parents named her Kusha, meaning "talented" in Sanskrit. Kusha was raised in a simple manner. She learned much wisdom from her parents by working on the farm. She excelled in school and earned a scholarship to obtain dual degrees in bioengineering and biophysics from the Indian Institute of Science, Bengaluru. After her graduation, she was recruited by ABC Consulting based in Hyderabad. ABC was considered the best sustainability consulting company in India. Both private and public companies sought its services.

ABC assigned Kusha to the energy department. Her first project was to transform the energy sector in Telangana. She noticed that Telangana mimicked the energy pattern of entire India – about 60 percent dependence on coal, 3 percent on nuclear power, and the remaining spread equally between hydro, solar, and wind. She was appalled that the share of nuclear power in Telangana and India was only three percent since 1998. She developed a strategy to increase the share of nuclear power from 3 to 25 percent, wind, solar and hydro power from 47 percent to 50 percent, and reduced the share of coal from 60 to 25 percent by 2030. In addition, her plan had the potential of making Telangana a net-zero emission State by 2040. Although her strategy was aggressive, she outlined her plan as stated below.

Nuclear Power is Safer

Develop a collaborative joint venture with X-Energy, (a fourth generation private nuclear reactor and fuel design engineering company in USA, one of the only two companies along with Terra Power to win the 2021 grant for advanced nuclear technology by the Department of Energy (USA) to establish a few small nuclear power plants all over Telangana. Each of its 80



MW reactor is easily transportable by rail or road; could be made with commercially available materials. Each plant in a pack of four reactors would serve the electricity needs of 4 million people (equivalent to serving 250,000 American sized homes).

Each plant would use about 20 acres of land. All scientific data showed X-Energy's advanced technology was very safe. Even in a worst-case scenario, the radioactive release would be contained within the plant. The technology has demonstrated several advantages over conventional nuclear reactors. Plus, nuclear power has zero carbon emissions unlike coal, uses less land compared to solar, and uses 17 times less material than solar. Unlike wind turbines, nuclear plants do not kill birds, bats, and owls. Kusha believed that in the name of addressing climate change one should not destroy the environment and biodiversity. France gets about three quarters of its power from nuclear, despite an older technology its safety record is quite impressive.

Carbon Gas-eating Algae

Emulate the algae technology (HTB-1 non genetically modified strain) developed by University of Maryland and commercialized by HY-TEK Bio, a startup also based in Maryland, USA. After more than a thousand experiments, the University isolated a specific algal strain that consumed 100 percent of greenhouse gas (GHG) emissions produced during industrial manufacturing and power generation processes. HY-TEK Bio tags its thin and inexpensive Mylar bioreactors to the tail end of the process where flue gases are produced without interfering with any of the manufacturing equipment.

The algal byproducts are rich in lutein/zeaxanthin, lipid oils and several other substances. The byproducts can be used as a replacement for palm oil, and service many other industries such as pharmaceuticals, nutraceuticals, biofuels, cosmetics, etc. Kusha felt in her heart that if the entire coal industry in India used this type of technology, India could more rapidly reach its goal of net zero carbon emission. This was a practical circular economy approach. Plus, the return on investment of converting pollution to a valuable byproduct was a no-brainer.

Bladeless Windmill

For households in almost all cities including villages Kusha recommended the use of several types of materials that would deflect the hot rays of the sun such as the ultra-white paint developed by Purdue University, USA. Purdue claimed that its product when painted on a house would not need any air conditioner. She recommended households to install a blade-less windmill such as the one developed by Aero-MINE Technologies in collaboration with Sandia National Laboratories, USA Kusha liked the technology because this windmill had a

modular design, making it easy for the average man to install the same on his roof, it occupied only ten percent of the rooftop space, provided 50 percent more power than rooftop solar, and saved money due to an easy installation process including less use of rare earth metals.

Further, it complemented the energy needs if the house owner already had solar panels on his roof. Kusha believed India eventually needed to switch to flexible organic photovoltaics that depended less on precious resources. Use of blade-less windmills was also encouraged for use by corporations. She wanted the government to slowly dismantle the old style wind turbines that were contributing to the loss of biodiversity, especially the birds, owls, and bats. Alternatively, she suggested micro windmill technologies to replace the big blades or painting the blades with different glow-type colors that flying animals could detect.

For apartment complexes, Kusha also recommended emulating the Home Biogas technology from Israel that converted organic waste into cooking gas. Her plan came with money back guarantees if households did not see a 40-50 reduction in their monthly energy bills. Kusha wanted the Telangana government to market the strategy via household visits.

The government of Telangana and the public was deeply impressed with her integrated plan of lowering energy use and driving Telangana towards a net zero economy. When the government of India approached her for her views on foreign direct investment, she advised them to create an ecosystem for research and innovation in biology/microbiology, incentivizing academia to work closely with industry, importing the right intellectual property from academic institutions or startups all across the world. She felt this approach was cost effective and more impactful until a full-fledged ecosystem developed within India.

Microbes Replace Chemical Dyes

ABC bagged another contract from one of the biggest textile and leather manufacturers in India. The government was very upset that their chemical dyeing and tanning process was polluting the river and ground water. ABC assigned this project to Kusha. She studied several companies. She was impressed how Huue, Colorifix, Vienna Textile Labs, etc., were using microbes to create natural dyes. She identified a local entrepreneur, Mitra, working in this area, he had sent his samples and protocols to Culture Biosciences, USA, since he did not have the capital to do the bio manufacturing on his own.

Culture Biosciences provided bio manufacturing as a service. Mitra, had also worked with Ginkgo Bioworks, Boston, USA, who offered a platform where they programmed cells to make everything from food to materials to therapeutics. However, Mitra, along with a

local top notch microbiologist, succeeded in isolating a natural microbe that accomplished the job. Kusha was impressed that Mitra was able to produce natural dyes with non-genetically modified microbes despite the lack of an ecosystem in India. The textile and leather manufacturer soon contracted with Mitra to buy his natural dyes. It also dismantled its entire leather business and emulated the business model of making leather in the lab similar to what Modern Meadow was doing in the USA through the use of microbes.

After having worked at ABC Consulting for about ten years, Kusha resigned to start, The Microbiology Training Center. The mission and goal of the center was to train microbiologists at all levels in a practical manner. She felt biology and microbiology was going to be the next industrial revolution as it offered several solutions to create new food products, materials, and create hundreds of startups that could combat climate change. After all, it is microbes in soil, wind, and our oceans that regulate the chemical cycles of our planet. Microbes have learned to survive in the hot springs of Yellowstone National Park, USA. Without microbes, all life would not exist. Kusha felt the secret is to find the right microbes to accomplish the right task.

Kusha attended several conferences and worked collaboratively with Association of Microbiologists of India (AMI) and the American Society for Microbiology (ASM). Most of the scientists working in these institutions were passionate and committed to addressing the climate crisis. Kusha established close relationships with Nikhil Malvankar who had set up the prestigious Malvankar Labs at Yale University in USA. Nikhil and his team were doing cutting edge research on microbes – discovered deep under the ground and on ocean floors. These microbes had the potential to produce biofuels, eat up toxic waste, and even generate electricity. Kusha was deeply impressed with his work, she saw immense possibilities and wondered how she could create an ecosystem within India to benefit and capitalize on such research.

One of Kusha's students at the training center collaborated with MINT Innovations in Australia to create India's first microbe company that extracted precious metals from all types of electronic gadgets. This student proved to the Government that **India did not need lithium ion batteries for electric vehicles** since several natural solutions existed such as the metal free, polypeptide and biodegradable battery that was developed by a University in Texas, USA.

Similarly, he recommended **brick manufacturing shift to the lab** by use of microbes as India's top soil was being depleted by brick manufacturers. Biomason in USA, was using sand and naturally occurring microbes to produce bricks and cement in a laboratory at room temperature levels. The student also knew great advancements existed in the production of cotton, coffee, diamonds, etc., in a lab through the use of microbes.

Green Composites to Replace Steel and Plastics

Once Kusha was almost in tears when she read a report in the newspaper that only five percent of the children of farmers wanted to take up farming. She knew in her heart the immense potential of farming. Iron, steel, aluminum, plastics, and several other materials could be completely replaced by green composites that only came from a variety of trees. Anil N Netravali at Cornell University, USA, had written several books on bio composites. Anil even dreamed of a day when airplanes would be made with bio composites. Kusha knew this could be implementable in India if high resource intensive products such as meat for food, cotton, coffee, etc., moved to the lab. Biologically, these lab grown products were no different from the real stuff, these lab grown products reduced both land and water footprint significantly. Plus **lab grown meat** could be titrated for less fat, zero pesticide, and be grown in a complete organic fashion.

With several ideas brimming in her mind, Kusha wrote a policy paper on how biology and microbiology could create a green India. Her policy paper included several ideas for integration into the National Education Policy, NEP 2020. Her tireless work brought her much praise and recognition from several organizations. Kusha was a firm believer in integrating the wisdom of the East with true and sustainable developments occurring all across the world. The secret for India she felt was identifying and working with the right parties. Her philosophy was to address, discover and implement new technologies to combat climate change without destroying the environment in a highly cost-effective manner.

Author's Note: This story is fictional including names such as Kusha, ABC Consulting, and Mitra. All other information is factual. This story is meant to inspire policy changes including encouraging a new generation of entrepreneurs. The author has no affiliation with any of the names mentioned in this article.

Ram Ramprasad is a strategic thinker on sustainability. He has contributed articles for environmental magazines in India. He holds graduate degrees from Yale University, USA, and Madras University. He is legally blind.

Goodyear Unveils Tire with 90% Green Materials

The Goodyear Tire & Rubber Company has unveiled a demonstration tire comprised of 90% sustainable materials, 20% higher than it did last year. A company note said this demonstration tire has passed all applicable regulatory testing as well as Goodyear's internal testing.

This tire was tested to have lower rolling resistance when compared to the reference tire, made with traditional materials offering better fuel savings and carbon footprint reduction.

In addition, after announcing the capability to demonstrate a 70% sustainable-material tire in January 2022, Goodyear, working with its supply base, plans to sell a tire with up to 70% sustainable-material content in 2023.

Consumers interested in purchasing this tire can register for updates at **Goodyear.com/SustainableMaterialTire**

Bringing a 90% sustainable-material tire to market will require further collaboration with the company's supply base to identify the scale necessary for these innovative materials to produce that specific tire at high volumes.

"We continue to make progress toward our goal of introducing the first 100% sustainable-material tire in the industry by 2030," said Chris Helsel, senior vice president, Global Operations and Chief Technology Officer.

17 Ingredients Across 12 Different Tire Components

- Carbon black – Goodyear's 90% sustainable-material demonstration tire features four different types of carbon black that are produced from methane, carbon dioxide, plant-based oil and end-of-life tire pyrolysis oil feedstocks. These carbon black technologies target reduced carbon emissions, circularity and the use of bio-based carbons, while still delivering on performance.
- The use of soybean oil in this demonstration tire helps keep the tire's rubber compound pliable in changing temperatures. Soybean oil is a bio-based resource that helps to reduce Goodyear's use of petroleum-based products. While nearly 100% of soy protein is used in food/animal feed applications, a significant surplus of oil is left over and available for use in industrial applications.
- Silica is an ingredient often used in tires to help improve grip and reduce fuel consumption. This demonstration tire includes a high-quality silica produced from rice husk waste residue (RHA silica), a byproduct of rice processing that is often discarded and put into landfills.
- Polyester is recycled from post-consumer bottles by reverting the polyester into base chemicals and reforming them into technical grade polyester used in tire cords.
- Resins are used to help improve and enhance tire traction performance. In this demonstration tire, traditional petroleum-based resins are replaced with bio-renewable pine tree resins.
- Bead wire and steel cords provide reinforcement in the structure of a radial tire. This demonstration tire uses bead wire and steel cord from steel with high-recycledcontent, which is produced using the electric arc furnace (EAF) process. The utilization of the EAF process allows for steel to be produced with reduced energy use and higher recycled content. The EAF process has the potential for lower greenhouse gas emissions in comparison with steel produced using a blast furnace.
- ISCC certified mass balance polymers from bio- and bio-circular feedstock are also included in this tire.

The shift to sustainable materials is evident in some of Goodyear's current product lines. Today, eight product lines, and some racing tires, include soybean oil. In addition, Goodyear has more than doubled its use of RHA silica in its product lines since 2018.

Goodyear employs about 72,000 people and manufactures in 57 facilities in 23 countries.

Green Trucking Revolution Begins

JK Lakshmi Cement Flags Blue Energy Motors LNG Trucks

Blue Energy Motors flagged off India's first Liquified Natural Gas (LNG) fueled green trucks for J K Lakshmi Cement recently. The first fleet of trucks left its Sirohi plant in Rajasthan to its clinker grinding unit in Surat.

Anirudh Bhuwalka, *Chief Executive Officer, Blue Energy Motors commented said "Our trucks have been designed and conceptualized, keeping in mind the Indian conditions and climate requirements. It's the best immediate solution to pollution caused by the heavy duty-vehicle sector.*

Arun Shukla, *President & Director, JK Lakshmi Cement Limited, said, "Our country is aiming to reduce the carbon intensity of the nation's economy by less than 45% by the end of the decade, and achieve net-zero carbon emissions by 2070. Deploying LNG trucks of Blue Energy Motors is our first step towards sustainable transportation as LNG is an excellent green alternative for fossil fuel. This initiative will act as a game-changer for the country's cement transportation industry and help facilitate the eventual transition towards a more circular economy."*

Green trucks have been designed to deliver TCO with unmatched reliability and next generation telematics system for safe and comfortable long-haul drives. BE5528 uses FPT Industrial multipoint stoichiometric combustion engine to ensure best-in-class fuel consumption and lower noise than diesel engines. With 280hp power and 1000Nm torque, it is one of the most powerful natural gas trucks on the Indian market.

The BE5528 truck has the industry's first 990-lt fuel tank which provides the range of up to 1400 km in a single fill. Given this long range, issues pertaining to range anxiety are well taken care of and with the upcoming LNG dispensing network, sufficient coverage across key routes in the country will be available without need of frequent refilling.

The company has installed capacity to produce 10,000 trucks / annum which can be augmented further as the eco system mature and demand ramps up. It launched the first manufacturing plant at Chakan, Pune in September last year.

Blue Energy Motors, a zero-emission truck technology start up is disrupting the heavy-duty trucking industry by creating a clean alternative to decarbonize the environment by providing an immediate solution and breaking barriers of economic returns. The company's disruptive business model enables customers to introduce next-generation truck technology into their fleets enabling transitioning into green transportation solution.

www.blueenergymotors.com)

YES BANK Gets 'A' for Climate Disclosures

YES BANK announced that it has been awarded an 'A-' rating by Carbon Disclosure Project (CDP) for its 2022 Climate Change disclosures. Attaining this rating makes it the highest rated Indian bank for climate disclosures, reaffirming its position as a climate leader in the sector.

CDP annually rates global organizations across sectors, based on their climate-related performance. YES BANK earned the 'Leadership Band' (A/ A-) in 8 out of 12 climate-related disclosure categories, including climate governance, Scope 1, 2 and 3 emission reporting, emission reduction initiatives, risk management processes, portfolio impact, and climate targets, amongst others. The ratings are reported to be accessed by more than 680 institutional investor signatories of CDP, with assets totaling over USD 130 trillion.

This rating surpasses global average (C), averages for financial services (B-) and Asia Region (C)

The Bank has earned Leadership Band (A/ A-) in 8 out of 12 categories of climate disclosures

Globally, only 21% of organizations in financial services have achieved the Leadership Band under the Climate Change disclosure category

YES BANK was the first Indian banking signatory to CDP and has been making carbon disclosures since 2009. It shares this Leadership Band with 21% of organizations in financial services globally, that reported their performance through CDP's Climate Change 2022 disclosures. The average rating for the financial services and the Asia Region were 'B-'

and 'C', respectively, with the global average at 'C'.

It is interesting that a bank that magically survived going out of business for glaring corporate governance violations barely a year ago, and saved by the government, has such terrific record as a green bank.

Initiatives

- The Bank has strengthened its climate governance by constituting a Board level, Corporate Social Responsibility (CSR) and Environmental Social Governance (ESG) Committee, in addition to a management level Sustainability Council, chaired by the MD & CEO.
- It has instituted domain-specific climate related KPIs into the goal sheets of the top management to ensure that climate action is embedded into the Bank's decision-making process.
- The Bank recognizes the significance of climate risk and was the first Bank in India to enhance its sustainability disclosures in line with the Taskforce on Climate related Financial Disclosures (TCFD) recommendations.
- First Indian Bank to measure and report financed emissions of its electricity generation loan exposure and develop targets to align with The Science Based Targets initiative (SBTi) well-below 2°C scenario
- It is the first Indian Bank to be a Founding Signatory to UN Environment Program Finance Initiative (UNEP FI) Principles for Responsible Banking and to sign the Commitment to Climate Action, striving to align its business strategy with the Paris Climate Agreement.
- It announced a target to achieve net zero emissions from its operations by 2030 and has begun sourcing 100% renewable energy to power its key facilities such as its corporate and registered office in Mumbai.
- It has adopted an Environmental Management Policy and has instituted an ISO 14001:2015 compliant Environment Management System (EMS) designed to conserve the usage of natural resources, improve key resource efficiencies, and reduce its carbon footprint.
- The bank has also developed and brought to market a number of green financial instruments such as India's first Green Bond in 2015 and India's first Green Fixed Deposit in 2018.

India, Sweden Sign Green Transition Partnership

By SN Staff

Sweden launched the India-Sweden Green Transition Partnership (ISGTP) late November 2022 in Mumbai. The partnership is intended to promote exchange of carbon-neutral business practices and solutions, co-create localised innovations and share expertise and knowledge related to the green transition.

Under the partnership, six leading Swedish green thought leader companies – Absortech, Alfa Laval, Alleima, Hitachi Energy, KraftPowercon and SKF will work together with India's leading business houses to enhance pace of green transition across hard to abate industrial sectors including cement, steel and automotive.

Swedish businesses have a significant footprint in India with the operational presence of around 250 companies that are generating over a million jobs directly and indirectly. Several dedicated MoUs spanning across Energy, Environment, Urban Development, amongst other areas of mutual interest have been signed between India and Sweden.

Over the years, Business Sweden along with the Embassy of Sweden, the Consulate General of Sweden and Swedish Energy Agency have established the Sustainability by Sweden ecosystem in India. The ecosystem functions as the overarching umbrella denoting Sweden's

commitment to drive green transition across sectors, which has created a hotbed of opportunities that are transforming entire industries, value chains, and production methods. The ecosystem is also supported by leading agencies in both countries including Vinnova and Stockholm Environment Institute, along with Confederation of Indian Industries.

A press note stated that an exchange of green technologies and expertise formed the basis of this platform while fostering innovation and co-creation and, enhancement of trade and economic collaborations between Indian and Swedish stakeholders.

The event, attended by top Swedish and Indian industry & government delegates, witnessed a host of interesting interactions via panel discussions and special addresses. **Ms. Cecilia Oskarsson**, Trade Commissioner of Sweden to India set the theme for the event, followed by a welcome address by **Ms Anna Lekvall**, Consul General of Sweden in Mumbai.

The panel discussion on Managing Green Transition in a Decarbonized Manner saw representatives from Swedish partner companies Alfa Laval, Alleima and SKF exchange experiences with India's Aditya Birla Group, Tata Power, and Dalmia Cement. It highlighted the Swedish companies' adoption of green sustainable practices and how these translate into gains for both the business and customers in the long run. Another discussion on Building a Carbon Neutral Future Through Sustainable Innovations saw an exchange of ideas on sustainable products and services with a low carbon footprint. Representatives from KraftPowercon, Hitachi Energy, Tata Ficosa, L&T Green Energy, and JSW Foundation were part of the discussion.

The ISGTP will leverage Sweden's global collaboration theme "Pioneer the Possible", which promotes co-creation of innovative sustainable solutions with India and will also synch with activities planned under LeadIT initiative. Another highlight of the partnership is the coming together of industry leaders and experts from India and Sweden for three technical workshops, two of which focussing on cement and iron & steel be hosted in Mumbai on 24th November 2022. The third workshop on automotive sector was held in Pune in December 2022.

The day was also marked with 10-year celebrations of another joint initiative between both countries – India-Sweden Innovations Accelerator (ISIA) program. The Swedish Energy Agency, Business Sweden and CII-Godrej GBC are joint partners in this program which focusses on promoting green energy and energy efficiency collaborations between the two countries. In the last decade, the program has facilitated entry of 60 Swedish SMEs into India which has in turn established 200 projects and has positively impacted eight sustainability goals for the country. To showcase innovative Swedish cleantech companies in an Indian smart city context, a dedicated showroom has been set-up at Business Sweden's office in New Delhi.

Flipkart launches ‘Flipkart Green’

The one-stop destination will make it easy for customers to discover and shop for sustainable products/environmentally conscious products including organic, cruelty-free and environment-friendly products.

Flipkart has launched ‘Flipkart Green’, a dedicated virtual store on its app, bringing together lakhs of sustainable products to cater to customers looking to adopt a sustainable lifestyle.

‘Flipkart Green’ aims to provide access to information and better availability of globally certified sustainable products to customers looking for sustainable brands and products. To begin with, a vast selection of fashion, beauty and makeup, grooming, healthcare, food, home and lifestyle products are being made available from over 40 brands. This will further expand to include products from many other categories including healthcare, food, sports and fitness, toys, stationery, electronics and appliances as well.

In recent years, there has been a sharp rise in customers rethinking the impact of their consumption on the health of the planet as well as their own health. With customers starting to adopt sustainable products such as bamboo toothbrushes, reusable grocery bags, reusable water bottles and dishcloths to name a few, the ‘Flipkart Green’ Store will bring shoppers one step closer to having easy access to such sustainable products.

A company press note states that the platform aspires to bring about a positive impact and

create shared value for the community and the planet. This step will inspire thoughtful purchase decisions while being informative, consumer-first and environment conscious.

‘Flipkart Green’ promises to offer an immersive and engaging experience for truly sustainability-inclined shoppers with multiple product options.

Flipkart has partnered with Canopy Planet, a not-for-profit environmental organization, for responsible sourcing of sustainable packaging and man-made cellulosic fibers.

Started in 2007 the Flipkart Group is one of India’s leading digital commerce entities and includes group companies Flipkart, Myntra, Flipkart Wholesale, Flipkart Health+, and Cleartrip.

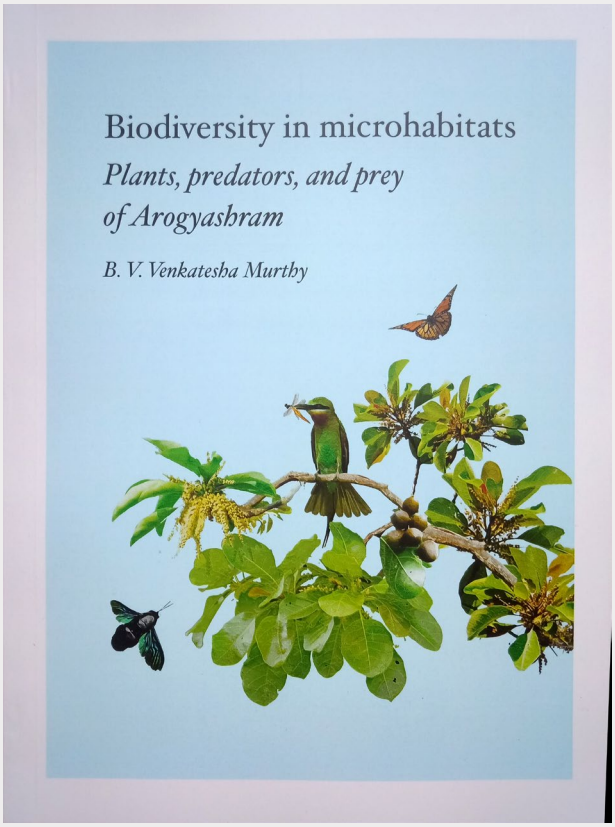
Biodiversity in Microhabitats Plants, Predators and Prey of Arogyashram

Biodiversity, a term used to describe the vast variety of life we see around us. Arogyashram started with the cultivation of linaloe plants for extraction of its oil, over the past six decades several plants were introduced.

However, it was the focused efforts of **Sri B.V. Venkatesha Murthy** in the last fifteen years that introduced many medicinal plant species used in the preparation of Ayurvedic medicines. This not only satisfied his academic pursuits and interest of botany, but also served as a carbon sink for the town of Nanjangud. Planted over approximately 11 acres, unintendedly, as these species of plants developed and started flowering, they attracted a variety of birds, butterflies, and bees.

As each season passed a good amount of leaf fall enriched the soil and increased the humus layer by layer. The soil and vegetation also became a natural haven for worms and a variety of insects. The natural terrain of the land provided for some wet pockets that created a comfortable environment for frogs to breed, we have heard and seen a few varieties including the Mysore frog. Rodents too quickly started finding their homes in the garden as in soil that was easy to burrow and can keep them safe from their predators the reptiles.

At present we have about 350 species of plants with medicinal value growing in Arogyashram, a wide variety of insects (about 299) have been photographed and we are in the process of identifying and categorizing them into, Bees, Wasps, Crickets, Grasshoppers, Spiders amongst others. Over the past 10 years we have seen



an increase in the avian visitors too, avid bird watchers who have visited our premises have noted 60 different species so far.

We are witness to the difference that a small initiative can make to conserving or cultivating biodiversity, just by adding plant species of different habits to the existing Mexican linaloe trees, we created a spectacular environment that displays a magical balance between plant, predator, and prey. It is truly a humbling experience, to understand how tiny insects

build a home, protect themselves with all the engineering and common sense that we thought only we humans understand. Genetic memory may be an easy explanation to it, but somewhere in the past, it must have been developed by punish and reward experience mechanisms.

The Sadvaidyasala Private Limited and Sri Dhanvantari Arogyashram Trust together certainly have started to do our bit to conserve biodiversity and our space hopefully can help not only for providing a healthy environment to people to recover but also serve as a good education tool or model to students of Biodiversity, Ayurveda, and just anyone interested in Nature.

We extend a warm welcome to everyone reading this to visit this small yet unique effort in trying to conserve nature amidst a growing township and providing priceless oxygen to the residents of Nanjangud.

https://arogyashram.co.in/

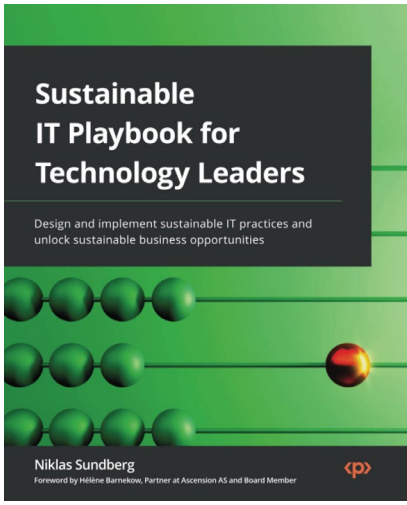
Sustainable IT Playbook for Technology Leaders

At a critical point in human history, this book presents proven ways to gain the skills needed to develop sustainable IT practices and set yourself apart as a progressive technology leader.

We are at a critical point in human history. Humanity is under threat, but all is not lost. We can take action! But how?

Sustainable IT Playbook for Technology Leaders will show you how. It will walk you through the construction and implementation of a sustainable IT strategy and enable you to do your bit for the future of mankind.

This book is for executive IT leaders such as CIOs, CDOs, and CTOs dedicated to influencing, inspiring, and engaging businesses, organizations, and individuals to reduce their carbon footprint through sustainable IT practices.



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