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Climate Action: Nature Bio Foods promises to become Carbon Neutral by 2045

Nature Bio Foods (NBF), a leading organic food and farming company, has announced its roadmap to reach carbon neutrality by 2045. As the one of the pioneers of organic food and farming, the company have the size, scale and reach to influence others and to inspire collective action. The company, which is committed to reducing its greenhouse gas (GHG) emissions and using renewable energy, has set ambitious targets to eliminate carbon emissions from its operations by 2030 and reach net zero emissions across its value chain by 2045.

To achieve its goals, NBF is investing in new technologies, switching to renewable sources, and innovating its factory operations. In 2023, the company will integrate sustainability into its business strategy, initiate zero-carbon farming projects, and align with the UN Development Sustainable



Goals, ESG, and science-based targets. In 2026, the company will aim to be 100% single-use plastic-free and work with its customers to reduce emissions.By 2025, NBF plans to improve its warehouse operations, reduce transport miles by 25%, and work with like-

minded organizations in the field of sustainability.

By 2028, NBF plans to achieve 50% of its sustainability targets and strengthen social programs in the communities where it operates. The company aims to eliminate carbon emissions from its operations by 2030 and generate carbon offsets by investing in natural and sustainable solutions.



"Tackling climate change can't wait and neither can we. It is crucial to the longterm success of our organic business. We will work together with farmers, industry partners, governments, non-governmental organizations and our consumers to reduce our environmental footprint."

Rohan Grover, Managing Director of Nature Bio Foods



Holistic development of villages

"We believe improving livelihoods and developing thriving communities starts with education. In the endeavours to facilitate the same and remove what is considered to be the major cause of the dropout among girl students, we have built toilets in each village school. We firmly believe in supporting women and girls to be economically and socially active, so they can be individually successful and independently contribute to the betterment of society."

Mr. Amit Singh, Sustainability Lead

Transforming Villages: Nature Bio Foods bringing "Parivartan" through village adoption in India

Correspondent: Strengthening its commitment towards building a healthier society, Nature Bio Foods has adopted ten villages in Madhya Pradesh under the flagship Project 'Parivartan'. The initiative focuses on supporting the rural community in education, health care, hygiene, economic empowerment, farmer livelihood enhancement, and water stewardship. The compay has organised a detailed survey and identified Nandlalpura, Richhai, Dhanupura, Tapriyan, Khairi, Manpasar, Mudibijaebara, Awadhpura, Jatapahadi, and Tapariyan villages in this regard. The works to create a sustainable integrated village development model to support marginalised classes to achieve longlasting positive social, economic, and environmental change in rural India.

Commenting on the launch of the project, Amit Singh, Sustainability Lead said, "We are intrinsically linked to the health and resilience of the society in which we operate. That's why we work from the ground up to equip marginalized families deprived of essential life needs such as safe drinking water, pucca (Metalled) roads,

in-house lavatory, waste management and village sanitation. We have also worked to improve the infrastructure and, education in 15 schools in these villages. Our work will not just have a significant positive impact on the future of children but also on the overall health of the community."

Nature Bio Foods teams worked on the ground to understand the nuanced necessities of the village to provide them with sewing machines, stationerymaking units, Bio Gas plants, dairy animals, and farming equipment. The company investment in the villages has raised the family income improving the quality of life and overall prosperity of the village.

The company efforts have played a significant role to enable healthier lives for over 8000 families in the village adopted. The project trained the villagers to grow organic vegetables to meet the family's dietary nutrient needs, which improved their overall health. The organization has also provided the school children with school uniforms, a computer lab, and rooftop solar panels for uninterrupted electricity.



The project covers the holistic development of the village including the construction of streetlights, kids' playgrounds, community halls and water harvesting sources like lakes and well. The farm management training in the villages has benefited farmers through reduced input costs, more secure market access and improved livelihoods. Mr Singh concluded, "More than CSR policy, our work is focused on developing thriving, resilient societies, which are self-sustainable in the long-term and carry positive impact in the societies."

Building capacities: Nature Bio Foods, Europe expanding organic production and cleaning facilities in the Netherlands





Rachitha Ravishankar

the front page of organic ingredients, has embarked on a journey to expand its organic production

Nature Bio

Foods Europe,

and cleaning facilities. This mission is driven by the need to keep up with the ever-growing demand for organic produce, and to maintain its promise of Just-in-Time delivery in any quantity across the EU, which

throughout the years has established itself as a leading producer of authentic organic products.

The expansion project involves several key initiatives that will bring about significant improvements in the production process. First and foremost, the plant capacity is doubled by 100%, which will enable the facility to meet the increasing demand for organic produce. This move is a testament to the company's commitment to providing customers with a consistent supply of certified organic produce just in time across

Europe.

Additionally, the cleaning capacity of the facility has been increased by three times through the use of worldclass cleaning equipment made by Buhler, the premier manufacturer of cleaning equipment in the world. This cutting-edge technology ensures that the produce is thoroughly cleaned and free of any impurities, which is essential in maintaining the high standards of organic produce. With the Buhler Cleaner in place, the facility is now capable of providing customers with the highest quality products available.

In addition to increasing the cleaning capacity, the facility is also expanding its racking capacity. This upgrade will increase the pallet storage volume by 21%, ensuring that the facility has the necessary space to store the increased production. This move will also make it possible for the facility to streamline its operations and reduce the time it takes to transport the produce from the plant to the customer.

Another exciting development is the addition of a new plant line for oil seeds cleaning, which will increase capacity 10x per month. This new line will help the facility to better serve the needs of its customers



and provide them with a more comprehensive range of products.

Finally, the company's Rotterdamlocated facility is doubling its CO2 capacity by 2x, which will lead to an increase in CO2 recovery from 86% to 96%. This upgrade is being made possible by the use of the Reverse CO2 process, which enables the facility to recover and reuse the CO2 from its chambers. This is a major step forward in the facility's quest for sustainability, and it demonstrates the company's commitment to reducing its carbon footprint and making a positive impact on the environment.

We at Nature Bio Foods are at the forefront of organic production and cleaning facilities, and the expansion project is a testament to the company's commitment to providing customers with the finest organic produce from across the globe.

Nature Bio Foods bringing societal change through "Change Makers"

"Nature Bio Foods envisions a world where everything circles back to the planet - Earth and "The Change Makers" is one such initiative in that direction."



Tina De Kloe

Delivering on the pledge of building a better tomorrow- together, Nature Bio Foods once again through its flagship Change Makers program carried out a cleanliness drive to sensitize the rural community on plastic

pollution and the significance of hygiene.

Ensuring that our people feel empowered, every full-time NBF employee may volunteer up to 48 hours a year during their scheduled work time. Camaraderie is a natural byproduct of volunteering with colleagues and when volunteers work together to support the causes they care about, the ripple effect can be profound—for global society and for team culture.

NBF teams are often distributed across regions and time zones. The change makers program



brings far-flung teammates together to do good. And thus many volunteers clock hundreds of hours beyond that in 2022 through the change makers program as well as in their own neighbourhoods by making meaningful contributions to the lives of the rural community. Each and every member display great enthusiasm and compassion to work on the ground in bringing lasting change to the community. The event gave an opportunity for the team to visit the company's organic schools and share learning and practical demonstrations on Bio formulation and organic manure preparations etc.

Volunteers also spent time on the farm, focusing on sharing knowledge and practical demonstrations on kitchen gardens and sustainable agricultural practices. This program not only helps the farmers gain more insights

into best organic practices and experiment with the same in their farms but also connects the volunteers to where food comes from. Nature Bio Foods envisions a world where naturally organic farming practices and sustainable agriculture techniques are not just an aspiration but the norm. By training young people and farmers, the change makers are catalysing the local food economy and building a network of indigenous food advocates and agripreneurs making farming sustainable again.

The natives are very happy to see the facelift of their village with the exemplary work done by the change makers and pledged to continue maintaining the cleanliness. Social change takes time, common cause, inspired action, money, and often sweat. In 2023, NBF looks forward to more diversity, inclusion and impact in action.

NBF introduces first ever Carbon Neutral Organic Rice



"Nature Bio Foods' introduction of the Carbon-Neutral Basmati Rice serves a resounding reminder of the crucial role that businesses play in mitigating the effects of climate change and inspiring collective action towards a more sustainable future."

Rashi Chadha



Nature Bio Foods is at the forefront of a momentous transformation in the rice value chain, with the introduction of the first ever "Carbon-Neutral Orgnaic Rice." As the world strives towards carbon neutrality, Nature Bio Foods is poised to lead the way in this endeavor, with the introduction of the carbon-neural product line which is one step in our endeavor to achieve net-neutrality by 2045. The Bahraich region in Uttar Pradesh, India, serves as a model for the pilot project, with 260 hectares of land and 200 farmers cultivating this revolutionary new variety of rice. The process of achieving carbonneutrality was meticulously executed, with a standard methodology followed to attain this

impressive feat. Measure Carbon Footprints Set Carbon Neutral Goal Reduce GHG emissions. Invest in a carbon-offsetting project Earn the Carbon-neutral certificationNBF has aligned its cultivation practices with the net zero objectives and aim to decarbonize all its product portfolios. To offset any remaining emissions, Nature Bio Foods invested in a verified carbon-offset project, which not only negates the carbon footprint, but also contributes to the achievement of various sustainable development goals. The farmers associated with Nature Bio Foods practice organic cultivation and implement techniques such as alternate wetting and drying and the use of direct seeded rice, which minimizes methane

and CO2 emissions. These efforts serve to align the cultivation practices with the netzero objectives and demonstrate Nature Bio Foods' unwavering commitment to sustainability and decarbonization. The launch of this groundbreaking new product line is a testament to the steadfast dedication of Nature Bio Foods to making a positive impact on the environment and society. The company's commitment to reducing emissions, investing in renewable energy, and fostering sustainable practices is a call to action for other businesses to follow suit and take responsibility for the role they play in combating the pressing issue of climate change.

365 Days audit at Nature Bio Foods





Every day at Nature Bio Foods is a symphony of diligence and precision, one where the magic of nature and the rigour of science come together in perfect harmony. NBF started 27 years back from a single seed of organic paddy sown by our chairperson Vijay Arora and has grown into a

trustworthy organic ingredients supplier. Started as a rice company, today Nature Bio Foods has expanded into several organic verticals such as pulses, millets, grains, flour, and sweeteners among others. From its inception itself, Nature Bio Foods have maintained global standards for organic ingredients. With the capability of supplying from a single pallet to multiple truckloads, our organic ingredients produce pass every organic audit.

On any given day, at NBF, any of our 130 Organic Projects are undergoing constant monitoring and evaluation by one or another organic certification body. All aspects of the operation, from farm to packaging, are being scrutinized and certified for maintaining organic standards. Every day is a celebration of the unwavering commitment to quality and organic integrity, as NBF welcomes the scrutiny of various organic audits to ensure that its practices are in line with the highest standards of organic. This relentless pursuit of excellence has earned NBF a reputation as one of the premier providers of organic products in the world. Whether it be a routine check or a more specialized audit like the one from EU Organic or USDA bodies, NBF embraces and welcomes the auditors to check for our organic commitment.

In all the aforementioned aspects of our organic commitment, the expert field team of Nature Bio Foods ensures that the best organic practices are

followed by organic producer farmers. Our field team works 365 days alongside farmers to make sure we are in line with global organic certification. The field team helps farmers in sowing to harvest, which ensures that they grow quality organic that fetches not just the best price for them but also is certified for the highest standards in organic.

In the 365 days of audits, our single organic project (ICS) undergoes audits for a stretch of four to five days, which stands as a testament to our authenticity commitment. Organic scrutiny of our processes isn't limited to fields and organic produce but extends to our processing facilities, plants, and warehouses. Our five stateof-the-art facilities in India and Netherlands are regularly inspected for organic authenticity. We ensure organic integrity is maintained in each step of the organic supply chain from handling to hygiene.

Africa: an expanding space for organic agriculture



Africa is rapidly expanding its organic farming space, increasing its certified organic acreage. The continent has a favourable climate for growing several premium crops including Soybeans, Sesame, and Chia. Nature Bio Foods identified this high potential for organic & natural production in the



Haike van Hal

continent early on, and has since extended its operations into Uganda, Togo, and Benin. The company will soon be present in Tanzania and Mozambique. NBF support helps small farmers get global organic certification, which helps them get premium prices for their crops. By doing so, small farmers become more professional growers, and NBF is able to create added value for rural communities and improve food security in a sustainable manner. NBF guidance at each stage and training programs have enabled the farmers of the region to meet organic standards while also increasing the quality and quantity of their produce.

Nature Bio Foods develops, finance, process and, export



added value to the organic agricultural products in direct cooperation with small-scale farmers in Uganda, so no middlemen. We now have over 5000 local farmers from Uganda, Benin, and Togo who have joined Nature Bio Foods, up from 2700 farmers last year. Increasingly, local communities of Tanzania and Mozambique are joining the NBF, seeing the benefits of organised organic farming. NBF encourages the concept of 'zero-cost' farming by providing farmers with seeds and training to use various bio-manures, bio-pesticides and composting methods. This

procedure lifts the burden of upfront costs (of seeds and other inputs) off of the farmers and enables them to produce high-quality, certified organic products.

Nature Bio Foods cooperates with the locals of the region for the prosperity and overall welfare of the community. NBF carries out several awareness campaigns educating the African farming community about the importance of organic farming and the growing global demand for organic products. From 4900 acres of organic land under cultivation last year to over 10,000 acres of certified organic land under cultivation at present, NBF organic movement has grown leap and bounds over the years.

Nature Bio Foods, Africa works with farmers in the region to grow organic crops like Soybeans, Sesame, and Chia. The aforementioned organic crops are also all relatively drought tolerant and can be grown in areas with low rainfall, but irrigation may be necessary to ensure a good yield. Soybeans, sesame, and chia are all relatively disease-resistant, but farmers may prepare organic antimicrobials to protect their crops from pests. All three crops are also typically planted in the spring, after the last frost. Soybeans, sesame, and chia are all warm-season crops and require similar soil, water, and temperature conditions for optimal growth. Our organically grown crops share a similarity in their nutritional value, making them all popular choices for healthy and sustainable food production.

We are able to extract an organic output of almost 11,000 Metric tonnes from our certified organic lands.

Nature Bio Foods strives to unite farmers, the local community and the region's agro institutions and organizations in growing the organic movement that aims to bring a safe, clean and sustainable future for coming generations. NBF teams of experts are dedicated to promoting and developing organic agriculture in Africa.

Humans of Organic: Extraordinary Stories Of Ordinary Humans



Swati Tomar

The earth is a canvas, and organic farmers are the artists. They paint their fields with love and care, nurturing each seed to grow into a healthy and thriving plant. Through the Humans of Organic initiative, we celebrate these unsung heroes and their unique stories. From the fields to the supply chain, we shed light on the challenges, struggles, and triumphs of those who work tirelessly to bring organic food to our tables.

By sharing these stories, we hope to inspire and educate, fostering a greater appreciation for the individuals behind the organic movement. Through social media and future publications, we aim to bring people closer to the organic community, creating a strong sense of gratitude for their hard work and dedication.

At Nature Bio Foods, we shed the spotlight not just on organic-growing farmers but on the very last stakeholder upholding the organic movement. Through Humans of Organic, we continue to learn about the challenges and triumphs of those who make organic farming possible, gaining a deeper understanding of the industry and its impact on our planet.

Through Humans of Organic, we'll showcase the struggles, successes, and motivations of those who work tirelessly to bring organic food to our tables. From organic farmers and distributors to small organic sellers, these stories will provide a glimpse into the challenges faced



by those in the organic movement and the passion that drives them forward. Let us take you on this journey to discover the ordinary people behind the extraordinary stories behind Humans of Organic. Join us in spreading positivity and gratitude, inspiring others to support and appreciate the hard work of those who bring organic food to our tables.

Tech Advancements to improve effeciency of Organic Production



Nature Bio Foods, a leading organic food ingredients provider, has recently made significant enhancements to its India operations, reducing waste, increasing safety, and boosting efficiency. NBF has also made significant upgrades to its plant suction system to improve safety and reduce waste and installed new solar power grids. These improvements have had a significant impact on plant operations and the overall working environment.



Saurabh Sharma

Installation of New Pressure Treatment

One of the major improvements has been the installation of a CO2 treatment line and a CO2 recovery plant. The CO2 treatment line has eliminated the need for the monthly use of 400 cylinders, improved safety through the use of CO2 valves, and reduced storage requirements. This has resulted in time and manpower savings and a more efficient operation. The installation of a CO2 recovery plant helps in capturing and storing CO2 that would otherwise be released into the atmosphere, this in turn helps in reducing carbon emissions and contribute to a more sustainable future. To monitor and optimize the CO2 treatment line, Nature Bio Foods has also implemented a SCADA system. With the

installation of a SCADA system, Nature Bio Foods continues to strive for operational excellence.

Plant Suction Enhancement

One of the key changes was the installation of a strong general aspiration line, which provides suction for all machines, elevators, and bins. This has reduced the amount of dust in the plant, leading to a cleaner and safer working environment. Additionally, the capacity of the blowers has been increased, with lower-capacity blowers being replaced with higher-capacity models. To further improve plant suction, Nature Bio Foods has also fitted new bag filters for the general aspiration of elevators and bins. These filters provide a channel for the line blower to effectively remove dust and debris from the plant. The installation of these filters has resulted in improved air quality and a safer working environment for employees. These enhancements to the plant suction system at Nature Bio Foods demonstrate the company's commitment to the health and safety of its employees, as well as its commitment to reducing waste and promoting a sustainable working environment.

New Solar System Installation

The NBF has recently installed a 188.68 KWp Solar System, a significant step towards reducing household carbon emissions and promoting the use of green energy. The use of this new solar system is expected to provide multiple benefits. First, the solar system will help to reduce the carbon footprint, and emissions, and also contribute to a



greener environment as well as a more sustainable future. NBF's investment in a new solar system is a smart and forward-thinking step towards a more sustainable future.

Installed AI-based CCTV System

We have also recently enhanced our operations with the installation of an AI-based surveillance system. The new system has been designed to provide deep monitoring and tracking of incidents, accidents, and fires. With 185 CCTV cameras installed across the warehouses, paddy plinths, and plant, NBF has achieved 100% coverage and efficient monitoring.

The AI-based surveillancew system comes with advanced features such as line crossing detection, intrusion detection, perimeter intrusion detection system, object detection (both fixed and moving objects, including human movement), advanced motion detection with timing movement alerts, person detection in restricted areas, video incident detection, scene change detection, unattended

object detection, and heavy sound detection. The installation of this AI-based surveillance system will improve the overall efficiency and security of the operations.

New Ecopure Pressure Treatment Machinery

To ensure the chain of infestation-free material supply, Ecopure has installed a disinfestation system. This system treats material at high pressure, creating anaerobic conditions to eliminate any potential contamination. To achieve this goal, Ecopure has installed a special liquid CO2 vertical tank with a 20 KL storage capacity. Additionally, the facility has installed a horizontal CO2 treatment chamber with a 10 MT capacity for 10 jumbo bags. The chamber operates at a pressure of 18 Kg/cm2 for four hours, ensuring 100% zero infestation. By implementing this innovative technology, Ecopure is leading the way in organic production.

NBF modernising its infrastructure and campuses in India



Nature Bio Foods is taking steps to enhance its operations with the recent campus up-gradation. The company has made several improvements to its infrastructure and facilities, including the development of a road and drainage system, an in-house warehousing complex, an increase in paddy storage capacity, and an improved infrastructure of plants.

The developed drainage system has improved the ease of movement, reduced water logging in the periphery, and reduced infestation in warehouses and plants. This has led to a reduction in maintenance costs for vehicles and an increased focus on Food Safety Management Systems (FSMS).

The in-house warehousing complex has decreased the internal movement of vehicles and developed a 3000 MT paddy storage area at the NBFL campus. The increased paddy storage capacity, with the development of a 16000 MT paddy

storage capacity at the paddy plinth, ensures that Nature Bio Foods can meet the growing demands of its customers.

The improved infrastructure of plants has been a significant factor in ensuring the quality of the company's products and maintaining FSMS. The old shed has been replaced with a new shed and ventilation inside the plants has been improved with the installation of fresher pressurized units. Floor



Rajesh Jaswal

treatment of finished good rice storage warehouses has been done and lighting facilities in the entire plants, warehouses, and periphery have been improved.

Nature Bio Foods is committed to providing its customers with high-quality products, and the recent campus up-gradation is a testament to this commitment.



Nature Bio Foods made a breakthrough in lowering HCN levels in Flax seeds



Manisha Mann

Nature Bio Foods, a leading producer of organic ingredients, has made a major breakthrough in the world of flax seeds. The company has successfully reduced the levels of hydrogen cyanide (HCN) in flax seeds, which was a major concern due to the presence of a substance called cyanogenic glycoside.

The average HCN content in raw flaxseeds was found to be 200-198.42 mg/kg, which was non-compliant with EU

standards. However, with the skilled team of food technologists after long research and intreations with fellow bio-food tech community at Nature Bio Foods developed process that would reduce this level to 150 mg/kg. This is a major achievement for the company and a significant milestone in the world of organic food ingredients.

Hydrogen cyanide is a toxic substance that can have harmful effects on human health when consumed in large amounts. This is why the presence of cyanogenic glycoside in flax seeds was a major concern for health authorities and food safety organizations. However, with the innovative approach of Nature Bio Foods, customer scan now buy organic certified flaxseeds with confidence.

This breakthrough has opened up new opportunities for the company and solidify the company's reputation as a leader in the authentic organic food ingredients industry. The company has received recognition and praise from food safety organizations, health authorities, and scientific community. This recognition has helped to solidify the company's reputation as a leader in the natural and organic food industry.

Nature Bio Foods sign MOU to establish 100 FPOs to scale up Organic Agriculture in India



Nature Bio Foods (NBF) and the Small Farmers' Agri-Business Consortium of the Government of India have signed a memorandum of understanding to form and promote 100 specialized farmer-producer organizations (FPOs) across 12 states in India. The FPOs will focus on the agri-value chain and will be a part of the Central Sector Scheme for Formation and Promotion of 10,000 Farmer Producer Organizations. NBF intends to promote the formation and promotion of these 100 FPOs, covering NBF production clusters across the 12 states in India. The company aims to connect with the FPOs and farmers in the catchment area to provide various services such as input supply, customized crop advisory, credit linkages, market linkages, and other relevant rural services through its network platform. The tentative list of proposed clusters for the formation of 100 specialized FPOs of cereals, pulses, oilseeds, and superfoods commodities is in the 12 states. The formation of these FPOs is expected to have a significant impact on the rural economy and the livelihoods of farmers in the region. With NBF's expertise in the agri-value chain and the government's commitment to promoting farmer-producer organizations, this partnership is expected to bring about positive change and progress in the agricultural sector.

MOSH/MOAH reduction

In recent years, there has been a growing concern over the presence of mineral oil saturated hydrocarbons (MOSH) and mineral oil aromatic hydrocarbons (MOAH) in organic food supply chain. These substances can be introduced into food through various sources, including diesel forklifts, inks used in the production of bags, and more. At Nature Bio Foods, we are dedicated to providing our customers with the highest quality organic food products, free from harmful contaminants. That's why we have taken proactive measures to eliminate MOSH and MOAH from our supply chain.

One of the first steps we took was to switch from diesel forklifts to electric ones. This has greatly reduced the risk of MOSH and MOAH contamination from vehicle emissions. We have also implemented stricter Good Manufacturing Practices (GMPs) to ensure that our food products are kept in clean and controlled environments. Another important step we have taken is to immediately dry the purchased paddy after it arrives at our facility. This helps to prevent the growth of mold and other contaminants that can lead to the presence of MOSH and MOAH. At Nature Bio Foods, we believe that by making small changes, we can make a big difference in ensuring that our organic food products are safe, authentic, and of the highest quality.

Modified atmospheric treatment

Nature Bio Foods, a leading provider of organic food products, is proud to announce that they have adopted Modified Atmospheric treatment in their business. This innovative approach to preserving food products ensures that they are free of any harmful chemicals and infestations, while also maintaining their freshness and quality.

Modified Atmospheric treatment involves exposing food products to a controlled environment of CO2, which eliminates any pests or insects that might otherwise damage the food. This process is essential for organic businesses, as it ensures that the food products are free of any harmful chemicals that might otherwise contaminate the food.

As a NPPO certified company, Nature Bio Foods has undergone rigorous audits and inspections by the government authorities to ensure that their processes are in line with the best practices in the industry. The company has been awarded the certificate for the third time in a row, which is a testament to their commitment to providing high-quality organic food products.

This innovative approach to preserving food products has enabled Nature Bio Foods to expand their exports to Australia, one of the world's most demanding markets for organic food products. With the Modified Atmospheric treatment, they are confident that their food products will maintain their freshness and quality throughout the shipping process, ensuring that their customers receive the best possible product.

In conclusion, Nature Bio Foods is proud to adopt Modified Atmospheric treatment in their business, and they are committed to providing the best quality organic food products to their customers. With the help of this innovative technology, they are confident that their food products will be free of any harmful chemicals and infestations, ensuring that their customers receive only the best possible product.

Climate Change and Regenerative Organic Agriculture



Sagar Pralhad Mirajgave

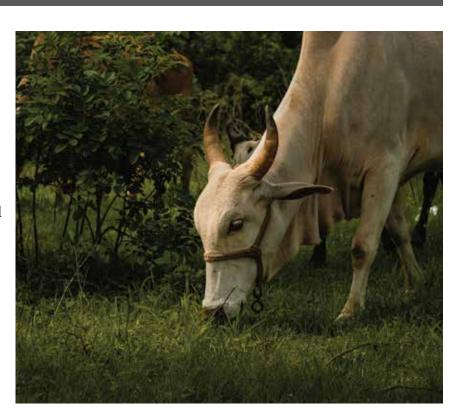
As the world's population continues to grow, so does the demand for food. At the same time, climate change is making it more difficult to produce food in traditional ways. This has led to a growing

interest in regenerative agriculture, which aims to not only meet the world's food needs but also mitigate climate change. Regenerative agriculture practices can help in improving soil health and sequestering CO2, which can help to slow down climate change. This blog will explore regenerative agriculture and how it can help farmers around the world to produce food without contributing to climate change. We will also explore how Nature Bio Foods (NBF) is contributing to expand its regenerative organic agriculture practices in India and discuss how you can incorporate more regenerative agricultural practices into your daily life. Let's get started!

Regenerative organic agriculture as a solution to climate change

There are a number of reasons why regenerative organic agriculture is seen as a promising solution to climate change. First, it helps to rebuild soil health, which is essential for mitigating the effects of climate change. Second, it improves water retention, which is important in regions that are experiencing drought due to climate change. Finally, it increases biodiversity, which helps to make ecosystems more resilient in the face of changes brought about by climate change.

The United Nations Food and Agriculture Organization (FAO) has also stressed the importance of agroecology—a farming system that relies on traditional knowledge and practices, as well as modern science—in mitigating climate change.



NBF advancing regenerative organic agriculture practices in India

Regenerative organic agriculture is a type of farming that focuses on rebuilding the soil.

There are many benefits to adopting regenerative agricultural practices, including improved water

retention, higher crop yields, reduced erosion, and increased organic matter in the soil. In order to reap the same benefits in India, Nature Bio Foods farms over 2800 acres of organic land certified by Regenerative Organic Alliance. We provide resources, training, soil testing and mentorship directly to farmer partners through its field experts, webinars and community events.

We know if our food system continues with current conventional practices, using synthetic pesticides, artificial fertilizers, fossil fuels and producing food waste, the carrying capacity of the planet is likely to be surpassed. Therefore, adopting regenerative organic farming will not only lead to a healthier ecosystem for the planet's flora and fauna but also make agriculture environmentally sustainable. We recognize its importance as a farmer's reduced reliance on fertilizers and pesticides can also save them money and increase yields per acre. NBF's over 998 farmer partners who grow organic crops as per ROA laid standards are not just contributing to soil and land health but also getting paid fairer prices for the crop yields.

NBF encourages regenerative agriculture practices that improve the food security of local communities by withdrawing their reliance on synthetic chemicals and reducing the costs of



production. Moreover, regenerative agriculture also improves the resiliency of agricultural systems by reducing their vulnerability to climate fluctuations and other disasters.

Regenerative food system

Like anything else, the food we consume is only as good as the ingredients used to make it. And those ingredients are only as good as the soil in which they are grown. That's why regenerative farming is so important. Regenerative farming improves the food we consume by using organic methods to restore nutrients to the soil. This results in food that is significantly more nutritious than food grown using traditional methods. Not only is regenerative-farmed food more nutritious, it is also healthier overall. This is because regenerative farming practices help to rebuild the soil's microbiology, which has a direct impact on human health.

The way forward

Though still in its early stages of development, regenerative organic agriculture has already shown promise as a more sustainable way of producing food. We find regenerative farming a mini-revolution in not only in organic farming but also climate change. Because in addition to being

better for the environment, regenerative agriculture has the potential to produce high-quality food that is richer in nutrients. As we learn more about regenerative agriculture and its benefits, it is likely that this type of farming will become increasingly adopted by farmers around the world. Therefore, it is important to continue to support regenerative agriculture so that we can help reduce the effects of climate change and create a more sustainable future for our planet.

Nature Bio Foods proliferating Demeter Bio-Dynamic Farming practice



Anshu Goel

Demeter-certified Bio Dynamic farming is a holistic and regenerative approach to agriculture that has been embraced by Nature Bio Foods. The company's 1500 farmers across several states in the country follow the Demeter-proliferated organic farming practice. This method of farming recognizes the interconnectedness of the earth and all its inhabitants, and seeks to create a harmonious balance within the ecosystem.

The principles of Bio Dynamic farming were first outlined by Dr Rudolf Steiner in the 1920s. Steiner believed that the health and vitality of the soil are the foundation of agriculture, and that a farm should be viewed as a living organism. To this end, Bio Dynamic farming emphasizes the use of preparations made from herbal and mineral substances to enhance the life force of the soil and the plants grown in it.

One of the key features of Bio Dynamic farming is the use of compost and compost preparations. For its part, Nature Bio Foods Organic Farming Schools experts train its farmers in preparing organic compost and green manure to enhance soil quality. These preparations are made from various herbs, minerals, and animal products, and are used to enrich the soil and stimulate the growth of beneficial microbes. The use of these preparations helps to build the soil's fertility and structure, and can also help to control pests and diseases.

Another important aspect of Bio Dynamic farming is the use of crop rotation and intercropping. By rotating the crops grown in a particular field from year to year, farmers can help to prevent the depletion of soil nutrients and maintain soil health.
Intercropping, or planting multiple crops in the same field, can also help to improve soil health and increase crop yields. In addition to these practices, NBF's Bio Dynamic farmers also pay close attention to the rhythms of the natural world. They may plant and harvest crops according to



the phases of the moon, for example, or use astrological calendars to guide their farming activities. Moreover, the nuances of the Bio Dynamic farming practices are being taught to our field teams and farmers by Mrs Binita Shah, NBF-appointed expert consultant in Bio Dynamic farming methods. Ms Shah supervises and oversees NBF's projects in multiple regions, including Chhatarpur, Balrampur, and Nanpara, among others.

Nature Bio Foods is committed to following the principles of Demeter-certified Bio Dynamic farming in all of its operations. By embracing this holistic approach to agriculture, we are able to produce high-quality, nutrient-dense food ingredients that are good for both the land and the people who consume them. Our Demeter label products like Lentils, Sesame, Moong, Groundnut, and Mustards generally receive a higher price, which allows us to invest back into the sustainable development of agrarian communities.

At Nature Bio Foods, we believe that the health of the soil is directly linked to the health of the plants, animals, and ultimately, the health of humans. By following Bio Dynamic farming practices, we are able to create a more harmonious and sustainable food system that benefits everyone.

KPMG evaluates NBF's Organic Rice projects to assess the impact on farmer families



Kushmita Kumar

In the current situation of global climate crisis and arising concerns around food security, sustainable agriculture holds very strong relevance. When we talk about sustainability, it takes into account ecological, social and economic aspect of production.

There has been a lot of attention towards encouraging agricultural growth as agriculture projects which focus on increasing farm output and income to alleviate poverty, hunger, and provide environmental sustainability. Sustainable agriculture is based on a set of features that reflect an understanding of both ecological and social reality, as well as a commitment to responding appropriately to that understanding. It focuses on design and management practices that cooperate with natural processes to conserve all resources, reduce waste, and protect the environment while preserving and growing agricultural productivity. It is imperative for agricultural systems to sustain biological productivity, but it must also fulfil other aspects of human wellbeing, such as sustaining lifesupporting services, achieving adequate profitability, and demonstrating social responsibility to rural farming communities. Technology and services appropriate to local needs are enabling factors for any successful agricultural intervention.

The independent evaluation study by KPMG examines the various aspects of the NBF's organic rice project that has developed a value chain for certified organic and Fairtrade 'Basmati' rice in Uttarakhand and Uttar Pradesh, India. The project farmers receive a guaranteed price premium and have access to an international marketing scheme run by Nature Bio-Foods (NBF), Reismuehle Nutrex and COOP. The 'Organic Basmati Rice' is being supplied to international clients, primarily in Europe under the organic and Fair-Trade label. Nature Bio Foods and Partners in Prosperity (PNP) are the two key partners to implement the project in the selected geographies in India. NBF's organic rice project aims to improve livelihoods of rice farmers while improving the environmental sustainability of rice production and providing consumers an attractive product. Transparent, traceable value chains with ecological and social added value according to the multi-year target has been the core value of the project. The findings of this study throw light on overall impacts of the Fair-Trade Project, governance structure at place, operations of the value chain, business management and satisfaction level of the key beneficiaries.

Through scientific methodology for evaluating the project, it has been proven that the project has been pivotal in creating palpable direct and indirect positive impacts on the income enhancement, quality of the soil, reducing the input cost and overall socio-economic development of the communities where it has



been established and running. The NBF project has been successful in establishing a resilient, efficient, and sustainable value chain with proper forward and backward linkages. Through a robust decentralized governance structure, the project has been effectively managing a large pool of farmers, distributing the benefits in the form of premium after consultation with the beneficiaries, creating awareness and providing machine support.

KPMG recommends that the small scale initiatives which have proven to show result should be scaled up across the project area. This will give impetus to the ongoing project and make it more multidimensional. Along with this the prevalent issue of human wildlife conflict has been addressed through certain mitigation practices but it still seems to be a challenge area and a strategic approach in convergence with the local government and community can provide a longterm solution. Overall, it has been observed in the KPMG study that all the partners and stakeholder work in tandem to deliver benefit to the last farmer in line. The study found that the program has been successful in imparting the benefits as planned in the multiyear targets to the project beneficiaries across the project location.





As a citizen of the future, I have a few questions for you.

While building big factories, Are you building bigger forests? The great products that you make in those factories, are they going to improve the world?

What share of your bottom line is dedicated for giving back to the nature? Would you treat the farmers, the same way they treat their crops? Our climate depends on the actions you take, Are you certain about the changes you make?

Does your business goals resonate with helping the less fortunate? Your workforce is hardworking and creative, Is it also diverse and inclusive? Every morning do you just wake up or are you growing the future.

At Nature Bio Foods, we believe questions asked by the citizens of the future will show the way to the businesses of the future.

#GrowingtheFuture

