

Balanced Growth for a Sustainable Tomorrow

Sustainability Report
FY 2022-2023



Balanced Growth for a Sustainable Tomorrow

At Dhampur Bio Organics Limited (DBO), the concept of prospering responsibly has always been a priority. As one of the leading producers of sugar in the country, we ensure that our business goals are aligned with our commitment to safeguarding the environment, supporting our communities, and upholding ethical business practices. By integrating and supporting the elements of ESG across our value chain, we believe we can achieve our goal of sustainable value generation.

In line with this philosophy, our maiden sustainability report is centered around the theme of “Balanced Growth for a Sustainable tomorrow”.

Our approach to sugar production involves finding a harmonious balance between producing quality sugar and conserving essential natural resources. We actively work to minimize waste generation by extracting the full potential of sugarcane by producing sugar, biofuel, molasses, and power from crushed cane. To achieve this, we have co-generation plants located at our sugar mills that reduce our greenhouse gas footprint while fulfilling our internal energy needs.

We are also committed to implementing sustainable farming practices working closely with the grower community thus reducing our carbon footprint, and making conscious and continuous efforts to conserve water, energy, and minimize waste. Through these initiatives, we aim to minimize our environmental impact without compromising on the production of premium, top-quality sugar.

We are proud of our progress so far, and we constantly seek new ways to enrich our approach to sustainability. By working in collaboration with our stakeholders and communities, we have developed initiatives that have enabled us to have a more beneficial and balanced impact on our environment and society. Our strong corporate governance structure and policies ensure that we operate within the bounds of regulations, mitigating risks and effectively managing any challenges that may arise.



Contents

• About the Report	4	• People First	37
• Message from Leadership	5	Management Approach	38
• DBO at a Glance	6	Diversity and Inclusion	41
• Sustainability Performance Highlights FY 2022-23	9	Training and Development	43
Certifications	10	Daksh Program	44
• Stakeholder Engagement	13	Leadership Awareness Series	44
Materiality Assessment	16	AASHA – Accelerated Advice for Section Heads	44
Material Issues aligned with SDGs	18	Samvaad: Our E-learning portal	44
• Our ESG Strategy Construct	19	Employees receiving regular performance and career development reviews	44
• Responsible Governance	24	Human Rights and Labor Standards	45
Organizational Ethics, Values and Governance	25	Health and Safety	46
Corporate Governance	25	Community Contribution	50
Nomination and Remuneration Process	28	Skillfulness and Education	50
Performance Evaluation	28	Save Environment	53
Economic Performance	28	Sports	54
Defined Benefit Plan Obligation and Other Retirement Plans	29	• Purposeful Products	55
Financial Assistance received from the government	29	Management Approach	56
Approach to Tax	29	Sustainable Agriculture	56
ESG Governance	30	Sustainable Supply Chain Management	57
ESG Policies	31	Opportunities in Nutrition and Health	58
Our Risk Management Framework	31	Product Stewardship	60
Risk Management Policy	32	• Resource Efficient Operations	62
Compliance Management	33	Management Approach	63
IT and Cybersecurity	34	Energy & Emission Management	63
Innovation	34	Steam Saving Initiative	65
Tissue Culture Lab	35	Bagasse Yodha Project - Ensuring Sound Economic System of DBOL	66
Usage of Drones	35	Water Stewardship	68
Pest Control	36	Waste Management & Circularity	70
		Biodiversity	72



About the Report

This is our first Sustainability Report, which encapsulates our approach to building and remaining a resilient organization with sustainable business practices embedded into our functioning. As we emerge into the post-pandemic era, it is imperative that we set goals and evaluate our sustainability progress from a global perspective, ensuring alignment with the rest of the world. Being one of India's leading sugar companies with a growing presence in agri-business and bio-energy, we have a unique opportunity to create a substantial impact through our engagement in the rural economy. Through this report, we aim to share our ongoing journey in sustainability, our goals and plans to create a better tomorrow for all our stakeholders.

Scope & Boundary

This report is developed in accordance with the 2021 Global Reporting Initiative (GRI) standards and offers a comprehensive and transparent overview of DBO's sustainability performance. The structure of this report reflects our four ESG strategic pillars focusing on our responsible governance, resource-efficient operations, purposeful products, and people-first approach. Additionally, we cover our governance model, our methods of engaging and supporting our stakeholders, our considerations of the value chain and the environment, and our strategies for environmental, social and governance (ESG) issues.

We have identified the most relevant material topics for our operations by analyzing GRI standards and guidelines and referring to international sectoral guidance such as Sustainability Accounting Standards Board (SASB). These material topics align with the relevant Sustainable Development Goals (SDGs) and are addressed in this report.

The report's scope encompasses our sugar units at Asmoli, Mansurpur and Meerganj, as well as our distillery at Asmoli. By considering the environmental, social and economic impacts of our operations and its influence on stakeholders and local communities, we provide a holistic view of our sustainability efforts. Our aim is to foster transparency, accountability, and dialogue with stakeholders while driving positive change through these disclosures.

Reporting Period

This report contains information and data covering the period spanning from April 1, 2022, to March 31, 2023.

Feedback

Listening to feedback is the only way to grow and take a leap forward. We are always listening to our stakeholders, their thoughts and their opinions. Hence, we encourage your feedback, inquiries, or suggestions related to our sustainability performance as it would help us improve in the future. We appreciate your valuable feedback and kindly encourage you to share it with us either via email or by sending it to the address provided below.

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Message from Leadership

The year 2023 marked an important milestone in DBO's journey towards sustainability and responsible operations. Our very first Sustainability Report bears testament to our unwavering commitment to Environmental, Social and Governance (ESG) principles. Through this letter, I am eager to share our advances and outline our future strategies.

At the heart of DBO's strategy, operations, and management lies our credo of "Sustainability and Balance". This principle guides us as we steer towards a sustainable future. Our goal is crystal clear: we aim to strike a balance between maintaining environment-friendly operations and meeting the diverse needs of our stakeholders.

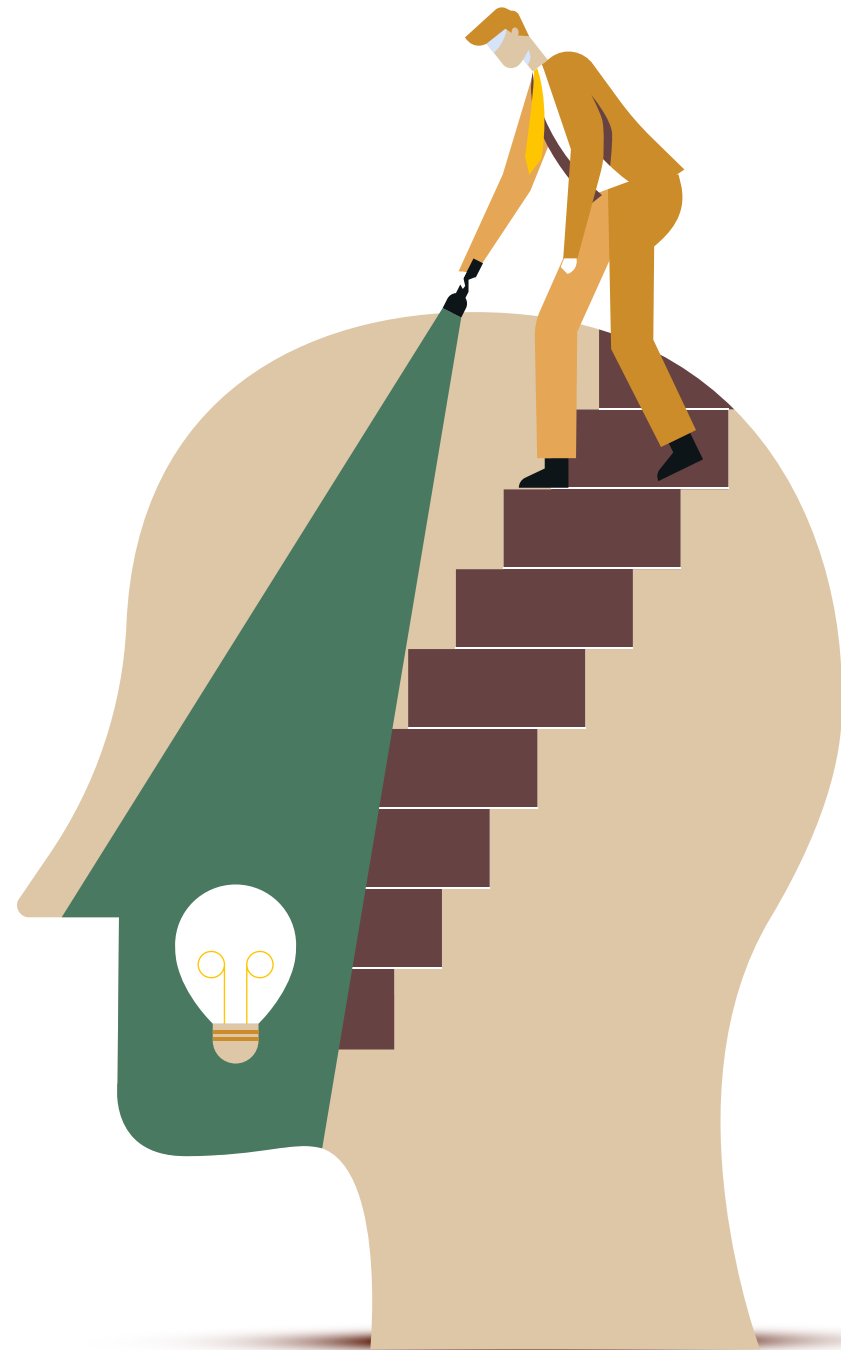
Our strategy is underpinned by three cornerstones of Innovation, Integration, and Value Addition. We capitalize on our heritage, while constantly innovating to improve and develop new strategies and products to bolster sustainability and balance. We are deeply committed to integration, realizing the full potential of sugarcane by producing sugar, biofuels, molasses, and power, while upholding responsible practices throughout our supply chain.

In our sugar mills, we utilize bagasse to power our operations and sell the surplus electricity. Our approach of merging press mud, boiler ash, and ETP sludge to produce organic fertilizers for our farmer partners showcases our commitment to sustainable practices. We continue our proactive community initiatives such as pond rejuvenation, hand pump installations, and promoting efficient plantations. Further, we extend our support to farmers, helping them adopt new methods, machinery, and improving animal husbandry with reduced chemical and fertilizer usage.

Value addition, a key pillar of our strategy, takes us beyond our core sugar and agribusiness. We delve into synergistic areas that contribute to an eco-friendly future.

As you leaf through our Sustainability Report, you will note our progress in aligning operations with these strategic cornerstones. Our dedication to innovation, integration, and value addition permeates every aspect of our business. We keep exploring new avenues for growth, leveraging our strengths, and looking for novel ways to create enduring value for our stakeholders.

We express our sincere gratitude for your faith and support. We send our best wishes for the health and wellbeing of all our esteemed stakeholders. Together, we are catalysing positive change, achieving sustainability, and working towards a balanced future.





DBO at a Glance

Dhampur Bio Organics Ltd. (DBO) is one of the leading integrated sugarcane processing organizations in India. DBO manufactures refined and raw sugar, biofuels, biomass-related renewable energy, and domestic spirits. DBO as an organization owns three manufacturing plants: Asmoli unit, Mansurpur unit, and Meerganj unit. These three facilities are in cane-rich areas and within proximity to each other. This gives us a catchment and logistical advantage for sourcing raw materials. The operations conducted at these facilities and at the company abide by the highest standards of service and compliance.

Dhampur Bio Organics Ltd. (DBO) marks its first independent year since its demerger from Dhampur Sugar Mills Ltd. (DSML). The demerger was carried out through a scheme of arrangement, which was approved by the board of the undivided company on June 7, 2021. Subsequently, the scheme received the approval of the National Company Law Tribunal (NCLT) on April 27, 2022. The effective date of the demerger, as per the scheme and the NCLT order, is May 3, 2022. The appointed date for the demerger is April 1, 2021. This significant milestone signifies the beginning of DBO's journey as an independent entity, enabling it to focus on its core business operations and pursue its strategic objectives with renewed dedication and autonomy.



Our Credo

At the core of our business strategy resides our Credo – 'Sustainability & Balance', which serves as the guiding force not only for our strategic approach but also influences our operational practices and management philosophy. It directs our path of growth and development.



Sustainability

- Strong focus on preserving and nurturing our natural surroundings through environmentally friendly operations
- Sustained investments in eco-friendly business segments, for the benefit of all our stakeholders



Balance

- Endeavors to find the right balance between growth, new initiatives and prudent financial discipline
- Balancing the aspirations and requirements of our large and diverse stakeholders base – farmers, suppliers, employees, lenders, shareholders and regulators, and the community at large.

Our Strategy

We have developed a robust strategy that leverages our existing strengths and enables us to explore new opportunities for growth. Our approach is centered around the three pillars of Innovation, Integration and Value Creation.



Innovation

- Building on our legacy to innovate and improve
- New products and strategies to improve business sustainability & balance



Integration

- Extracting the full potential of sugarcane by producing sugar, biofuel, molasses and power from the crushed cane
- Ensuring backward and forward integration, backed by sustainable practices.



Value Creation

- Going beyond our prime sugar & agri-business to provide value-additions
- Forays into synergistic areas to increase margins



Our Plants

As of March 31, 2023, we have 3 sugar plants, all of which are located in Uttar Pradesh. We operate two sugar refineries (Asmoli and Mansurpur), allowing us to increase the percentage of value-added sugar in our product mix. The raw sugar produced at Meerganj plant is being converted into refined sugar at Asmoli plant. Our plant operations guarantee a consistent cane supply and optimize production efficiency.

In addition, we have a distillery at our Asmoli unit with a licensed capacity of 312,500 LPD. We

have a total of 3 co-generation plants with a combined capacity of 95.5 MW. Total co-generation power generated during the fiscal stood at 34.53 Crore units.

While Asmoli and Mansurpur possess the capability to manufacture 100% refined sugar, the sugar composition in our Meerganj unit is influenced by factors such as global export opportunities and domestic supply factors. In the last fiscal, we exported sugar to countries in Africa, Middle East, and Asia.

Unit	Sugarcane Crushing (TCD)	Sugar Refinery (TPD)	Biofuels & Spirits (LPD) on BH Molasses	Renewable Energy (MW)	Pharma Grade Sugar (TPD)	LQW Sugar (TPD)	Domestic Spirits (Million Cases per year)	CO2 (TPD)
Asmoli (District Sambhal)	9,000	1,100	312,500	43.5	700**	-	4.2@	80#
Mansurpur (District Muzaffanagar)	8,000	900		33	-	-	-	-
Meerganj (District Bareilly)	9,000*	-		19	-	800	-	-
Consolidated	26,000*	2,000	312,500	95.5	700**	800	4.2@	80#

Notes & Updates:

* Meerganj Unit is being expanded to crush 9000 TCD and should be operational by Oct-23

** Pharma grade sugar has been approved by Food Safety & Drug Administration authority for supply of pharma grade sugar to US, EU and India.

@ Domestic spirits capacity increased from 2.8 million cases per year to 4.2 million cases per year.

Carbon Dioxide plant commissioned with the capacity of 80TPD.





Asmoli Unit


9,000 TCD

 Cane Crushing
Capacity

312,500 LPD

 Distillery
Capacity

1,100 TCD

 Refined Sugar
Capacity

700 TCD

 Pharma Grade
Sugar Capacity

43.5 MW

 Renewable
Power Capacity

Mansurpur Unit


8,000 TCD

Cane Crushing Capacity

900 TCD

Refind Sugar Capacity

33 MW

Renewable Power Capacity

Meerganj Unit


9,000* TCD

 Cane Crushing
Capacity

800 TPD

 LQW Sugar
Capacity

19 MW

 Renewable
Power Capacity

Sustainability Performance Highlights FY 2022-23



34.53 Crore units of Renewable Power Generated



1,723+ Total Workforce



INR 3.73 crore CSR Expenditure



ISO 9001:2015 & ISO 14001:2015
Certifications: Mansurpur unit

Green Catagory in SGP Audit:
Mansurpur and Asmoli units

FSSC 22000 Certifications:
Mansurpur and Asmoli units



7,400 hours of training conducted



24,000+ lives impacted through CSR initiatives



Women at Board level - **22.2%**

Certifications

As a responsible business, DBO is committed to manufacturing excellence, sustainable practices and quality management. This is validated by the recognitions received by our plants - our units are ISO 14001:2015 (Mansurpur) ISO 9001:2015 (Mansurpur and Asmoli) and FSSC 22000 (Mansurpur and Asmoli) certified. These certifications serve as independent endorsements of our strict adherence to rigorous standards, showcasing our steadfast dedication to upholding superior quality, ensuring food safety, preserving the environment, and fostering sustainable operations. We take immense pride in these certifications and are determined for continual improvement.

In addition, our Mansurpur and Asmoli plants have also achieved the esteemed “Green Category” status in the Supplier Guiding Principle (SGP) audit. The “Green Category” distinction recognizes our concerted efforts to socially responsible and environmentally friendly practices, which includes upholding human rights, promoting a safe and healthy workplace, ensuring business integrity, having robust management systems, demonstrating environmental stewardship through waste management and responsible chemical usage.

Unit	ISO 14001: 2015	ISO 9001: 2015	FSSC 22000	Supplier Guiding Principle (SGP)	Halal	Kosher
Asmoli (District Sambhal)		✓	✓	✓	✓	✓
Mansurpur (District Muzaffanagar)	✓	✓	✓	✓	✓	✓
Meerganj (District Bareilly)					✓	✓

FSSC 22000 (Food Safety System Certification):

This certification encompasses the entire spectrum of food production, affirming compliance with stringent food safety protocols in line with globally recognized standards.



ISO 14001:2015 certification : This globally recognized certification focuses on environmental management. Obtaining ISO 14000 certification demonstrates that a facility has implemented effective environmental management systems and practices -attesting to the proactive measures taken in minimizing the ecological footprint of operations, conserving resources, and mitigating potential environmental risks.



ISO 9001:2015 certification : This certification serves as a testament to our steadfast commitment to maintaining stringent quality management systems. It underscores relentless pursuit of delivering products of unparalleled quality, consistently meeting customer expectations, and continuously improving processes.





Product Portfolio

In India, DBO is one of the leading producers of ethanol and sugarcane derivative products. Our product portfolio stands as below:



Sugar

We have manufacturing capacities in both refined and raw sugar. We sell our sugar across both consumer and industrial segments. Additionally, we also produce pharma grade sugar for export purposes. Our pharma grade sugar has been assessed and certified as meeting the requirements of Food Safety System Certification FSSC 22000. The undivided company were the first in India to produce Sulphur less sugar under the brand name "Dhampure", compliant with EU standards.



Bio-Fuels

We produce ethanol, using sugarcane juice or molasses as the raw material in our distillery located in Asmoli unit. Our plant which has a capacity of 312,500 LPD on B-Heavy and 250,000 LPD on C-Heavy adheres to the latest environmental standards and produces Fuel Ethanol (Anhydrous Alcohol)

The fuel ethanol so produced is as per BIS specification (IS 15464:2004) and is used by Oil Marketing Companies (OMCs) for blending with motor spirit (Petrol). We are one of the largest suppliers of fuel ethanol to OMCs across India.



Renewable Energy

The undivided company was one of the first in the industry to foray into renewable energy production. With a much lower capital outlay than power plants of a similar vintage, power turbines from steam extracted from bagasse, a by-product of the sugar manufacturing process. Our co-gen plants enable us to meet our captive energy requirements. Additionally, the Company exports surplus power generated to Uttar Pradesh Power Corporation Ltd. (UPPCL).



Domestic Spirits

Indian Made Indian Liquor (IMIL) or erstwhile 'country liquor' is an alcoholic beverage with 25% to 36% alcohol content. We bottle IMIL at our Asmoli unit to facilitate forward integration of our distillery operations. Our products are available in tetra pack and packed bottles.



Organic Manure

We manufacture organic manure by composting press mud and blending potash-rich spent-wash ash. This organic manure is then distributed at minimum cost to our farmer community, to facilitate sustainable agricultural practices.



Extra Neutral Alcohol (ENA)

We also have capacity to produce ENA, which is a food-grade alcohol that is extracted by brewing sugarcane molasses or grain with the help of yeast and distilling it multiple times. The ENA produced at our distillery is used to manufacture domestic spirits or country liquor. Further, it also serves as an important ingredient in the distilleries that produce alcoholic beverages like whiskey, gin, vodka, liquors and alcoholic fruit beverages.



Carbon Dioxide (CO2)

DBO offers 99.9++% pure, colorless, and odorless liquid carbon dioxide (CO2) and dry ice. Sourced from the Asmoli plant, this product is specifically designed for the beverage industry and industrial use.

We have dedicated liquid CO2 storage facilities and a fleet of delivery tankers across the country. DBO ensures cost-effective, reliable, and a customer-focused service, meeting the requirements of major players in the carbonated beverage production sector.





Sugar



Bio-Fuels



Bagasse



Renewable Energy



Organic Fertilizer



ENA

Initiatives and Membership

Indian Sugar Mills
Association (ISMA)

Uttar Pradesh Sugar Mills
Association (UPSMA)

UP Co-gen
Association

The Sugar Technologists'
Association of India (STAI)

All India Distillers'
Association (AIDA)

Our Approach to Sustainability

Stakeholder Engagement





Stakeholder engagement is a core practice at DBO as it allows us to work towards a more collaborative and prosperous future. We believe growth is only possible through balanced relationships and the sustained support of our stakeholders. Hence, feedback and perspectives shared by our stakeholders for the betterment of the business and continued enrichment for the communities around us is critical to the progress of the Company. We believe that consistent and active engagement with stakeholders is an essential tool for value creation and this has helped us identify key areas of improvement and growth in our ESG journey as well.

We have identified our stakeholders by conducting a thorough and comprehensive analysis of individuals that could be affected by the company's operations or have an interest in its success. Potential stakeholders, including investors, customers, suppliers, employees, regulatory bodies, and local communities, were identified and their level of interest, power, and influence over the Company's operations were assessed. Stakeholders were then prioritized based on their level of impact on the company and its operations. Stakeholder engagement and communication strategies were developed, comprising consultation and surveys to ensure that stakeholders were appropriately involved and informed throughout the materiality assessment process.

The most valuable aspect of our engagement with the stakeholders is learning and identifying which topics are material to them as well to the business. Through the identification process, together we devised strategies to tackle material topics that create vulnerabilities for the business.





Stakeholder Category	Mode of Engagement	Frequency of Engagement	Topics of Interest
 Farmers Farmers are essential for ensuring sugarcane supply and thus sustainable business operations.	<ul style="list-style-type: none"> Through dedicated field staff Regular farmers meets and discussions (Goshtis) Training Programs 	<ul style="list-style-type: none"> Continuous Daily 	<ul style="list-style-type: none"> Sustainable agricultural practices Cane yield Timely Payments and Settlements Innovation
 Employees Our employees contribute their skills and labor to ensure efficient operations and customer satisfaction.	<ul style="list-style-type: none"> Internal communication Surveys Regular Townhalls and meetings Training and skill upgradation programs Employee Recognition Programs Employee wellness sessions 	<ul style="list-style-type: none"> Continuous Half-yearly 	<ul style="list-style-type: none"> Employment stability Providing competitive incentives, benefits, and compensation structures Nurturing management skills and promoting career advancement opportunities Health and safety
 Shareholders/Investors Shareholders provide capital and influence strategic decisions to drive company's growth and profitability.	<ul style="list-style-type: none"> Interactive meetings and discussions Annual general meetings Corporate disclosures Website 	<ul style="list-style-type: none"> Annual Half-yearly Quarterly 	<ul style="list-style-type: none"> ESG Strategy Sustainable roadmap for growth Economic growth Profitability Ethics, transparency, and governance
 Customers/Consumers Customers' preferences and satisfaction are crucial for our market success and brand loyalty.	<ul style="list-style-type: none"> Regular feedback from customers Customer satisfaction survey 	<ul style="list-style-type: none"> Continuous Need-based 	<ul style="list-style-type: none"> Quality and affordability Consistent supply of products Product feedback Health and nutrition



Stakeholder Category

Mode of Engagement

Frequency of Engagement

Topics of Interest

**Suppliers**

Our suppliers play a vital role in providing necessary inputs for meeting customer demands, ensuring business continuity.

- Regular suppliers meet
- Vendor assessment and review

- Annual
- Half-yearly
- Quarterly

- Timely Payments and Settlements
- Communication on expectations and service levels
- Supply chain practices and compliance

**Communities**

We prioritize building positive relationships with local communities and supporting their well-being.

- Need assessment
- CSR Programs

- Continuous
- Half-yearly

- Economic opportunities and upliftment
- Community well being
- Environmental Impact

**Government/
Regulatory Bodies**

Compliance with regulations and engagement with government agencies are crucial for our business sustainability.

- Industry Representations
- Periodic compliance reports
- Disclosures as required

- Continuous
- Need-based

- Regulatory Compliance
- Social and environmental operational impacts



Materiality Assessment

Determining Focus Areas

In today's highly interconnected world, organizations encounter numerous economic, environmental, and social challenges that warrant taking action. Given the complexity and unpredictability of the business environment, performing a materiality assessment is crucial for identifying the sustainability issues that are significant to both the organization and its stakeholders. By recognizing material topics, organizations can chart a course for strategy and communication that aligns with their priorities.

Materiality Process

As an organization, we understand that exploring and identifying our material issues surrounding our business is vital to our growth as well as maintaining balance throughout the organization. In this regard, we conducted a detailed materiality assessment over the course of foregone financial year.

We initiated the process by identifying a broad range of material topics that hold significance to both our internal operations and external stakeholders. Subsequently, we identified stakeholders involved in our business activities and relationships and engaged with them through surveys and discussions to determine the potential positive and negative impacts of material topics relevant to our business. Drawing from the feedback received from these stakeholders, we were able to ascertain which material topics are most important to address in its sustainability strategy.

To ensure optimal outcomes, we thoroughly consulted international standards, frameworks, and best practices while designing and conducting our materiality assessment. This approach adhered to the principles of GRI standards and SASB, with a specific emphasis on the principles of materiality. Throughout the process, we considered national, regional, and global challenges, trends, and approaches to maintain a comprehensive and strategic perspective.

Key Steps of the Materiality Process:



Materiality Matrix

The materiality assessment yielded a crucial result: our materiality matrix, which presents a prioritization of the identified sustainability topics. This matrix is an indispensable resource for both risk mitigation and opportunity recognition. Additionally, it is a vital input in formulating our ESG strategy, essential for long term value creation for our stakeholders.



● Environmental
 ● Social
 ● Governance
 ● Low
 ● Medium
 ● High



Material Issues aligned with SDGs

At DBO, we are deeply dedicated to conducting our business in a manner that actively supports the global community in achieving the Sustainable Development Goals (SDGs) set forth by the United Nations. We firmly believe in the importance of sustainable value creation for all our stakeholders, and as such, we continually evaluate our actions and their influence on the SDGs to ensure that we are making a meaningful and positive impact on

the social, economic, and environmental aspects of our world. The table provided below offers a comprehensive representation of how our identified material issues align with and contribute to the United Nations' Sustainable Development Goals (UN SDGs), further solidifying our commitment to driving sustainable development and addressing pressing global challenges.

Biodiversity and Conservation



Health, Safety and Well-being



Waste Management/ Circular Economy



Training and Development



Sustainable Agriculture



IT and Cybersecurity



Diversity and Inclusion



Water Stewardship



Opportunities in Nutrition and Health



Innovation



Organizational Ethics, Values and Governance



Sustainable Supply Chain Management



Energy and Emissions Management



Human Rights and Labor Standards



Product Stewardship



Community Contribution



Compliance Management



Our ESG Strategy Construct

DBO's ESG strategy construct is designed to ensure sustainable and responsible practices across all aspects of the business. This framework consists of four pillars: Responsible Governance, Resource Efficient Operations, People First, and Purposeful Products. Each pillar plays a crucial role in promoting long-term value creation, mitigating risks, and fostering positive impacts on the environment, society, and the company's stakeholders.



01



Responsible Governance

Our governance focuses on compliance management, ensuring we meet regulatory standards and strive to go beyond. We prioritize IT and cybersecurity to protect data and foster a culture of ethics and innovation, driving technological advancements in the industry.



Organizational Ethics, Values & Governance

Upholding strong organizational ethics, values, and governance is the foundation of DBO's integrity and reputation. By adhering to business ethics, anti-corruption measures, and maintaining a positive market presence, we establish trust with stakeholders, ensure accountability, and promote responsible decision-making throughout our operations.



Compliance Management

Ensuring compliance with regulations is crucial for DBO as it demonstrates our commitment to food safety, environmental protection, and social responsibility. By upholding these standards, we prioritize the well-being of our customers, minimize environmental impact, and build trust with stakeholders.



IT & Cybersecurity

Cyber threats can disrupt operations and compromise stakeholder trust. By prioritizing data privacy, responsible technology use, and operational continuity, we maintain the trust and confidence of our stakeholders in an increasingly digital world.



Innovation

Investing in R&D and embracing innovation is a key strategic focus of DBO as it allows us to stay competitive and meet evolving stakeholder preferences and market trends. Through innovation in advancing agricultural practices, optimizing plant operations and enhancing product quality, we address sustainability challenges and respond to the needs and expectations of stakeholders throughout our value chain.

DBO's Goals and Targets

- Implement an ESG governance structure
- Have specific targets linked to divisions/sectors
- Carry out periodic audits of progress on targets as well data in line with overall sustainability strategy
- No action needed
- Invest in R&D and specific technologies to improve the environmental and social impacts of product and processes



02



People First

Our focus is on putting People First, prioritizing the well-being and empowerment of our employees, customers, and communities. We are dedicated to fostering diversity, inclusion, and equal opportunities for all. By providing a safe and supportive work environment, promoting continuous learning and development, and actively engaging with our stakeholders, we nurture a people-centric culture that drives success and sustainable growth.



Diversity & Inclusion

At DBO, fostering diversity and inclusion is essential because we believe that a diverse workforce drives innovation, creativity, and better decision-making. By embracing individuals from diverse backgrounds, we create an inclusive environment that values and respects differences, promotes equality, and enhances our organizational culture.



Training & Development

Providing training and development opportunities is crucial for DBO because we recognize that our people are our greatest asset. By investing in their upskilling, reskilling, and cross-skilling, we empower our employees to adapt to evolving demands, contribute to their professional growth, and enhance their job satisfaction.



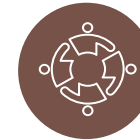
Human Rights & Labor Standards

Upholding human rights and labor standards is at the core of DBO's values. We are committed to respecting the inherent dignity, freedom, and equality of all individuals. By adhering to fair labor practices, promoting human rights, and maintaining ethical conduct, we create an inclusive and responsible workplace where everyone is treated with respect and fairness.



Health & Safety

Ensuring the health, safety, and well-being of our employees, contracted workers, and on-site vendors is paramount at DBO. By prioritizing their safety, we create a positive work environment, enhance productivity, and nurture a culture of well-being. We believe that everyone deserves a safe and healthy workplace.



Community Contribution

Creating sustainable economic value and fostering positive relationships with local communities are integral to DBO's purpose. By addressing social and environmental challenges in the regions where we operate, we aim to be a responsible corporate citizen. We believe in contributing to the well-being of communities, promoting sustainable development, and leaving a positive and long lasting impact.

DBO's Goals and Targets

- Develop an Equal Opportunity policy
- Specific target to hire differently abled employees/workers
- Specific target for expenditure on Full Time Employee on Training and Development programs
- Publicly report on human rights commitments
- Develop HR due diligence process to identify risks
- Publicly available Health & Safety policy
- Develop an OHS system for company operations
- Undertake Social Impact Assessment to measure the impact of CSR initiatives



03



Purposeful Products

Our commitment lies in offering Purposeful Products that align with the changing needs and preferences of our customers. We strive to develop and introduce innovative solutions that not only meet market trends but also prioritize environmental sustainability and social responsibility. By focusing on product quality, value, and impact, we aim to create meaningful and purposeful experiences for our customers while contributing to a more sustainable future.



Sustainable Agriculture

Sustainable agriculture is vital for DBO as it allows us to support farmers and promote environmentally friendly practices. By developing skills, sharing knowledge, and implementing sustainable agricultural methods with the help of our farmer community, we contribute to the welfare of our growers and minimize the environmental impact of our operations.



Sustainable Supply Chain Management

Sustainable supply chain management is integral to DBO's commitment to minimizing negative environmental impacts, promoting social well-being, and enhancing economic viability. By integrating environmental, social, and economic considerations into our supply chain processes, we work towards a responsible and sustainable value chain, ensuring transparency, ethical practices, and environmental stewardship throughout.



Opportunities in Health & Nutrition

DBO recognizes the importance of health and nutrition in consumers' lives. By developing and introducing new products and processes that align with changing preferences and market trends, we address the growing demand for healthy and sustainable options.



Product Stewardship

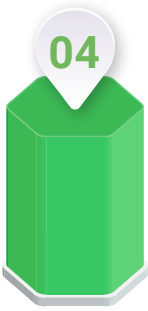
Product stewardship is essential for DBO as it demonstrates our commitment to reducing the health, safety, environmental, and social impacts of our products throughout their entire lifecycle. We aim to ensure that our products have a minimal impact while promoting a sustainable and circular economy.

DBO's Goals and Targets

- Agricultural raw materials assessed/certified as sustainable (Vive Claim, Bonsucro)
- 100% Traceability
- Suppliers screened and audited for sustainability
- Continue to provide transparent product information through food labels, as well as educate our consumers about health and well-being
- To achieve Vive Claim certification for all units
- To achieve Bonsucro certification for all units
- To use sustainable packaging



04



Resource Efficient Operations

Our goal is to promote environmental stewardship by taking proactive measures to bring about meaningful transformations in our local environment. We are committed to promoting efficient resource utilization to manage the consumption of precious resources effectively.



Energy & Emission Management

Managing energy usage and minimizing greenhouse gas emissions are vital for DBO as we recognize our responsibility in mitigating climate change. By quantifying and reducing our energy consumption and emissions, we contribute to a sustainable future, minimize our environmental impact, and align our operations with global climate goals.



Water

As a precious resource, water conservation is crucial for DBO. By mindfully utilizing water in our operations through recycling, treatment, responsible discharge, and responsible sourcing, we ensure its sustainable use. Our commitment to water management supports ecosystem health, safeguards water availability, and demonstrates our dedication to responsible resource stewardship.



Waste

Effective waste management is essential for DBO as we strive for resource efficiency and circularity. Categorizing and disposing of waste responsibly, as well as recycling waste to generate value-added goods, reduces environmental impact. By minimizing waste generation and embracing recycling, we promote a more sustainable and efficient use of resources.



Biodiversity Conservation

DBO recognizes the importance of preserving and rehabilitating plant and animal species affected by our activities. Biodiversity conservation is crucial for ecosystem health and resilience. By implementing measures to protect and restore habitats, we contribute to the preservation of biodiversity, foster ecological balance, and demonstrate our commitment to environmental sustainability.

DBO's Goals and Targets

- Set a Net Zero target for Absolute Scope 1 + 2 emissions
- Account for Scope 3 emissions (relevant categories)
- Achieve ZLD across all units
- Target to reduce specific Water Intensity
- Achieve Zero Waste to Landfill across all units
- Plant saplings
- Set target for carbon sequestration





Responsible Governance

Linkage with UN SDG



Material Topics

Organizational Ethics,
Values & Governance

Compliance Management

IT & Cybersecurity

Innovation



At DBO, we understand the critical role of governance in achieving both our ESG goals and the sustainable business growth of our Company. Its significance lies in its ability to generate enduring value for the organization and all those involved. As a leading integrated sugar processing company in India, we are committed to continuously enhancing our position in the industry through strong governance. Our corporate governance model includes a comprehensive framework in line with domestic and global best practices. Ethical corporate policies, an independent board of directors, compliance management, transparent accounting, and reporting structures are key elements of our governance framework. Our Board Committees are dedicatedly involved across its various functions and ESG parameters, with strategic checks and controls that prioritize ethical business practices.

Organizational Ethics, Values & Governance

DBO places a strong emphasis on ethics and values in all its operations. The company is committed to conducting its business ethically and transparently, ensuring that all stakeholders are treated fairly and respectfully. DBO follows a strict code of conduct that governs its relationships with customers, employees, suppliers, and the wider community.

The Company also upholds the highest corporate governance and accountability standards and is dedicated to creating sustainable value for all stakeholders. DBO's values include a commitment to innovation and excellence, sustainability social responsibility. These values are reflected in all the company's operations, from research and development to production and distribution, and are integral to its long-term success.

Our Code of Conduct for Directors and Senior Management Personnel is available on the Company's website under the head 'Policies' at <https://www.dhampur.com/investor/other-disclosures>

Corporate Governance

Ensuring a suitable governance structure, controls, and oversight for our business is crucial to protect the interests of all our stakeholders. We also understand the significance of a diverse Board, consisting of Directors who possess the right balance of skills, knowledge, experience, and diverse perspectives. They play a vital role in contributing effectively to the Company's strategy and growth.

Our Board comprises 9 (nine) Directors. Besides Chairman, and Managing Director who are Executive Promoter Directors, the Board has 1 (one) Whole Time Director, 1 (one) Non-Executive Promoter Director, and 5 (five) Non- Executive Independent Directors including 1 (one) Non-Executive Independent Woman Director.

To enhance the effectiveness and efficiency of the board's operations, we have established various committees and subcommittees. When assigning committee memberships, we consider our board members' specialization, expertise, and competence.

For more information about our corporate governance framework, practices, and Directors' profiles, please refer to pages 59 and 20 respectively of our Annual Report 2023.





Vijay Kumar Goel
Chairman



Ashwani Kumar Gupta
Vice Chairman

Stakeholders Relationship Committee (C)
Risk Management Committee (C)
Audit Committee (M)
Nomination and Remuneration Committee (M)



Gautam Goel
Managing Director

Audit Committee (M)
Risk Management Committee (M)



Sandeep Kumar Sharma
Whole-time Director

Corporate Social Responsibility Committee (C)
Risk Management Committee (M)



Bindu Vashist Goel
Non-Executive Director

Stakeholders Relationship Committee (M)
Corporate Social Responsibility Committee (M)



Ruchika Mehra Kothari
Independent Director

Nomination and Remuneration Committee (M)
Stakeholders Relationship Committee (M)
Corporate Social Responsibility Committee (M)



Vishal Saluja
Independent Director

Audit Committee (M)
Risk Management Committee (M)



Samir Thukral
Independent Director

Nomination and Remuneration Committee (C)
Audit Committee (M)



Kishor Shah
Independent Director

Audit Committee (C)
Nomination and Remuneration Committee (M)
Stakeholders Relationship Committee (M)





Board Committees

The Board has established multiple committees to guarantee smooth and effective business operations. We currently have four mandatory committees and two non-mandatory committees under the direct supervision of the Board. Each committee is led by a chairman who is responsible for promptly communicating the committee's activities and any significant decisions made by the Board.

Audit Committee

- Oversees financial reporting, controls, and audits.
- Recommends auditors.
- Reviews Whistle Blower Mechanism.
- Approves transactions with related parties.
- Ensures accurate financial statements.

Nomination & Remuneration Committee

- Formulates Director qualification criteria.
- Recommends remuneration policy for directors and employees.
- Identifies qualified individuals for management.
- Develops criteria for evaluating Directors and the Board.

Stakeholder Relationships Committee

- Resolves security holders' grievances.
- Reviews adherence to service standards by RTA.
- Assesses initiatives for timely receipt of dividends, reports, and notices by shareholders.

Corporate Social Responsibility Committee

- Formulates CSR Policy and recommends activities as per Schedule VII.
- Creates an Annual Action Plan for CSR.
- Monitors Company's CSR Policy periodically.

Risk Management Committee

- Formulates and reviews risk management policy.
- Establishes systems to monitor and evaluate business risks.

Management Committee

- Borrows funds from banks/financial institutions.
- Enters private placement agreements.
- Authorizes representatives for statutory matters.
- Manages Company bank accounts.
- Handles securities allotment, listing, and business facilitation.



Nomination and Remuneration Process

The Company has formulated a Nomination and Remuneration Policy in accordance with Section 178 of the Act and Regulation 19 read with Schedule II of the Listing Regulations. This policy lays down the framework for selecting and nominating Directors, Key Managerial Personnel (KMPs), Senior Management, and other employees of the Company and payment of remuneration to them. Selection criteria for directors include various factors such as academic qualification, sectoral and functional expertise, etc.

Details of the said policy have been disclosed in the Annual Report, on Page 64. The said policy is also available on the website of the Company under the head Policies at <https://www.dhampur.com/investor/other-disclosures>

The Company also conducts a familiarization program for the Independent Directors in order to enable them to familiarize themselves with the Company, its management, and its mode of operations so as to gain a clear understanding of their roles, rights, and responsibilities for the purpose of contributing significantly towards the growth of the Company.

Performance Evaluation

The Nomination and Remuneration Committee of the Board specifies the manner in which the annual evaluation of the Board as a whole, its committees, and individual directors is required to be conducted. Accordingly, the Board makes the annual evaluation of the Board as a whole, its committees, and individual directors in accordance with the manner specified by the Nomination and Remuneration Committee after seeking inputs from all the Directors on the basis of various criteria.

Economic Performance

Economic growth plays a crucial role in shaping the performance and prospects of DBO. In FY 2022-23, our company experienced a significant boost in both revenues and profits, showcasing a positive correlation with broader economic growth.

Driven by favourable market conditions, our revenues from operations witnessed an surge to Rs. 2,654.44 Crore, reflecting a 70% year-on-year increase. This growth can be attributed to various factors, including increased sales of sugar, a rise in ethanol sales, and the successful addition of our new country liquor production.

By capitalizing on the expanding market opportunities and leveraging our core competencies, we aim to further propel our growth trajectory. We remain committed to

optimizing operational efficiency, monitoring expenses diligently, and maximizing revenue streams to ensure sustained profitability.

Consolidated Financial Results (in Rs Cr.)

Economic Value Generated	FY 2022-23	FY 2021-22
Revenue from operations	2654.44	1564.09
Net Profit	111.10	102.33
Total Income	109.97	102.76
Economic Value Distributed	FY 2022-23	FY 2021-22
Operating cost (includes the cost of raw materials, depreciation, & other expenses)	2526.37	1437.57
Employee wages and benefits	108.02	73.63
Interest payment to providers of credit	40.74	29.66
Payment to government (taxes)	23.76	25.69
Community investments	4.11	-
Retained earnings	215.89	103.87





Defined Benefit Plan Obligation and Other Retirement Plans

We currently offer our employees a defined contribution plan and perks to ensure their long-term financial well-being. As a responsible employer, we provide a range of employee benefits that include medical insurance, life insurance, health care services, maternity leave, and paternity leave, in addition to the defined contribution plan.

Details of contribution to defined benefit schemes (In Rs. Cr)	FY 2022-23	FY 2021-22
Contribution to Provident Fund (Cr INR)	6.83	5.60

Financial Assistance received from the government

In FY 2022-23, DBO received assistance from the government in the form of subsidies, tax reliefs, and investment grants.

Particulars (In Rs. Cr)	FY 2021-22
Subsidies accrued*	4.89

*The interest subvention accrued till March 31, 2023.

Approach to Tax

DBO's tax strategy aligns with our commitment to compliance with relevant regulations and our intention to contribute to the fair distribution of wealth. In this regard, it is the responsibility of the CFO to develop an effective tax strategy that not only ensures adherence to tax laws but also enables the company to leverage opportunities for tax savings.

We prioritize the proper training of internal stakeholders on both national and international tax regulations to ensure their understanding and compliance. By doing so, we aim to achieve tax transparency in all our operations, promoting a clear and open approach to taxation.

ESG Governance

DBOL has established a comprehensive ESG governance framework to employ proactive measures to ensure the accomplishment of its sustainability goals.

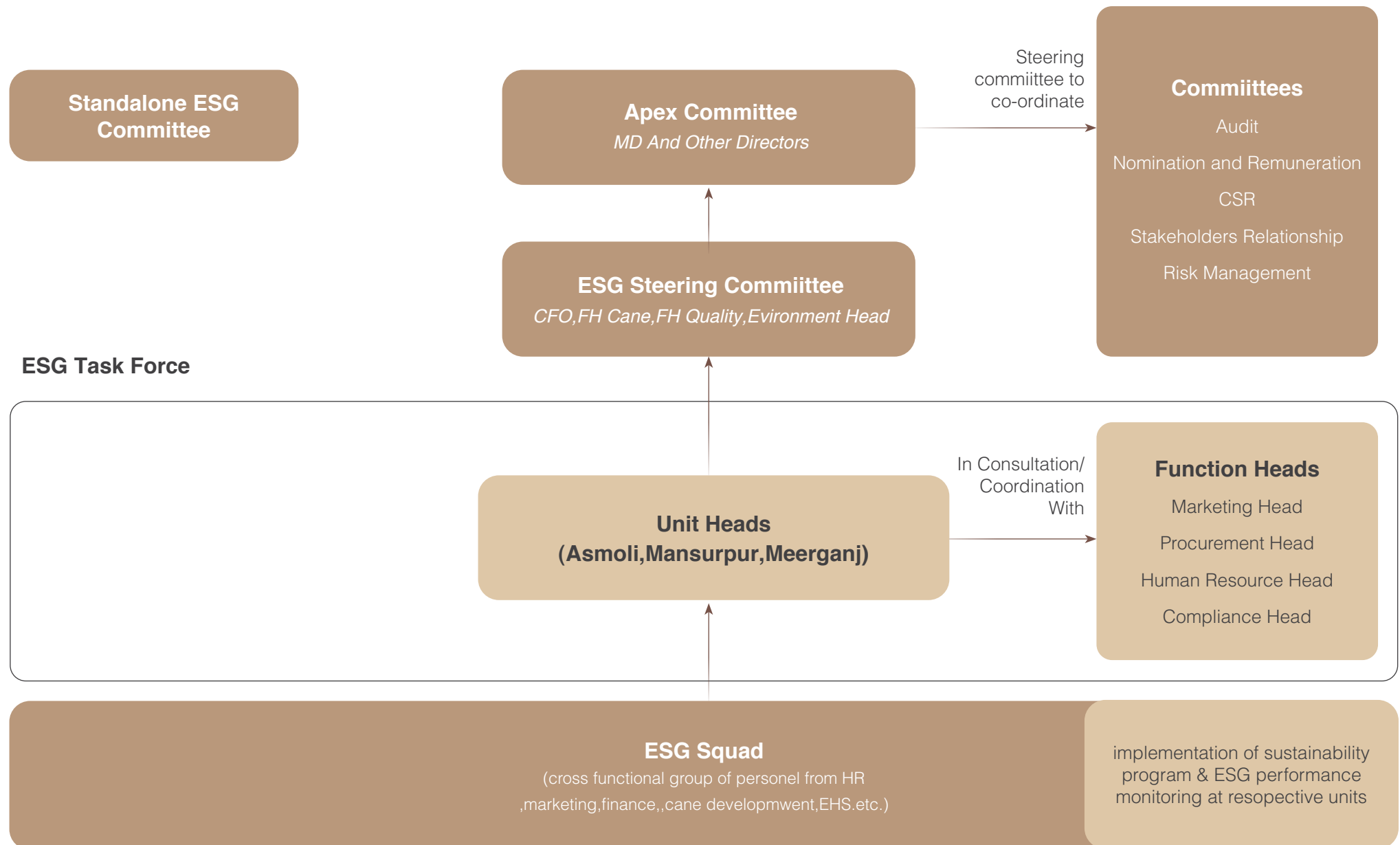
At the topmost level, the Apex Committee comprising the Managing Director, Independent Directors, Chairman, and the Whole-time Director provide guidance on the organization's sustainability agenda and future goals. The Committee will review and approve public disclosures on ESG, allocate resources required by the ESG Steering Committee, and oversee the ESG strategy and roadmap.

The ESG Steering Committee comprises of the CFO, FH-Cane, FH-Quality, Environmental Head and is responsible for sustainability goal setting and steering the sustainability agenda of the organization. It will coordinate with the Apex Committee and appoint an ESG mentor for each strategic pillar to implement the ESG strategy and roadmap.

The ESG Task Force comprises the unit and function heads and they will be responsible for implementing the Company's specific ESG initiatives, closely monitoring their processes, tracking relevant data and KPIs, and leading projects of each focus area identified in the ESG strategy with a cross-functional team called the ESG Squad which comprises cross-functional representatives from HR, Marketing, Finance, EHS team and the Cane Development Team. The ESG Task Force will also appoint sustainability champions at each unit who will be part of the ESG Squad, coordinate monthly team meetings for progress on respective ESG focus areas, and report progress on a quarterly basis to the ESG Steering Committee.

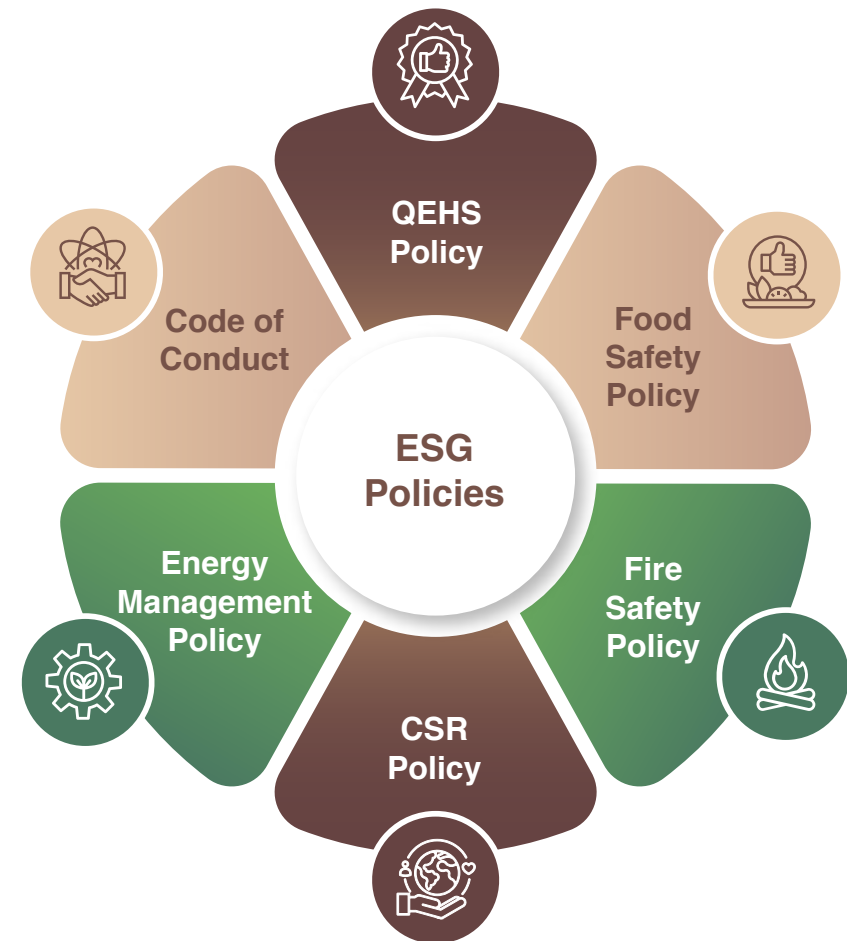


ESG Governance Structure



ESG Policies

Effective ESG policies form the backbone of DBO's sustainable business strategy, empowering the company to align its operations with environmental, social, and governance considerations. These policies provide a framework that guides decision-making and ensures responsible practices throughout the organization. By setting clear guidelines and standards, ESG policies enable DBO to integrate sustainability into its core business activities, mitigate risks, and seize opportunities for long-term value creation. They foster a culture of transparency, accountability, and continuous improvement, allowing DBO to proactively address emerging ESG issues, meet stakeholder expectations, and drive positive impact. Through these policies, DBO embraces sustainability as an integral part of its strategy, driving sustainable growth and enhancing resilience in an ever-evolving business landscape.



Our Risk Management Framework

India is the world's second-largest sugar producer and consumer, facing challenges like price volatility, low productivity, and high costs. Government regulations and social/environmental issues also impact the industry. Effective risk management is crucial for success, requiring strategic focus, proactive measures, cost-benefit balance, and contingency planning.

At DBO, we prioritize planning, identification, assessment, corrective actions, and continuous monitoring. We have established a strong and comprehensive risk management framework that involves multiple teams working together to ensure smooth and efficient operations. Our risk management process includes the identification of potential risks, a thorough review of identified risks, and reporting them to the Risk Management Committee. The Committee then takes charge of planning and devising strategies to mitigate the identified risks. The implementation of these strategies is closely monitored and reviewed by the Board.

At DBO, we adopt a holistic and proactive approach to risk management, addressing various dimensions such as:

Demand Risk

A situation where supply exceeds demand could have an adverse impact on the Company.

Government Policy Framework

Government policies might impact the revenues and earnings of the Company.

Operational Risk

The inability of the management to carry out operations efficiently.

Raw Material Risk

The unavailability of adequate raw materials can adversely impact production, thereby, impacting the revenue of the Company.

Geographical Risk

The Company's operations could be impacted by the distance between mills and cane fields.

IT Risk

The use of obsolete technology can impact the business.

Climate Risk

Untimely rains, adverse climate conditions, and infestation of pests can impact cane production, thereby, impacting the sugar production of the Company.

Environment Regulatory Risk

Business operations might be impacted due to changes in environmental policies etc.

Financial Risk

Sugar Industry is a capital-intensive industry and higher indebtedness may put the Company at risk.

Risk Management Policy

The Policy oversees, review and monitor the Risk Management process, including the critical risks, on regular basis. The Policy facilitates in identification of risks (internal and external) at appropriate time and ensures necessary steps to be taken to mitigate the risks.

The Risk Management Policy as approved by the Board is uploaded on the Company's website under the head 'Policies' at <https://www.dhampur.com/investor/other-disclosures>.





Compliance Management

Compliance management is a critical component of DBO's operations. The Company has established a comprehensive Compliance Program that includes policies and procedures designed to ensure compliance with applicable laws, regulations, and industry standards. The Program is overseen by a dedicated compliance officer who is responsible for monitoring and reporting on the effectiveness of the program.

The Company takes a proactive approach to compliance management and has implemented a robust system that incorporates both technology and human oversight. TeamLease is a software solution that DBO uses for compliance management. This software has helped the Company streamline its compliance operations and improve its overall efficiency. With TeamLease, DBO has been able to centralize its compliance

management processes, automate compliance checks, and track compliance activities in real time. The software provides a comprehensive range of compliance services, including regulatory updates, employee training, and risk management, and enables the company to identify potential compliance risks and take corrective action proactively.

DBO regularly conducts training and awareness programs to ensure that all employees understand their compliance obligations and the consequences of non-compliance. The Company has also implemented a system of internal controls and audits to monitor and detect any potential compliance issues. In the event of non-compliance, DBO takes prompt corrective action and implements measures to prevent future occurrences. DBO plans to carry out periodic audits of progress on targets as well data in line with overall sustainability strategy.





IT and Cybersecurity

Given the nature of our operations, we handle sensitive information concerning trade, business strategy, and our customers' related information. Our utmost priority is to maintain rigorous confidentiality and discretion in the handling of such data and information.

DBO has implemented a comprehensive policy to govern the use and management of IT assets, including cybersecurity measures. This policy ensures that employees have the necessary tools and resources for their work, provides guidelines for acquiring and disposing of IT assets, and establishes standards for secure usage. The company follows standardized procedures for regular maintenance and servicing of its IT assets.

To ensure the adequate protection of information assets and data, DBO has established an Information Security Management System (ISMS) along with Endpoint security controls. These measures ensure that the respective policies are diligently followed in a consistent and impartial manner. By implementing these safeguards, DBO strives to maintain the integrity and security of its IT infrastructure and mitigate the risks associated with cybersecurity.

To support its IT infrastructure, DBO relies on Microsoft Azure for Microsoft Infrastructure Services and AWS services for data analytics. In addition, the company employs an external firewall and collaborates with third-party consultants to conduct vulnerability checks. Annual audits are conducted to assess the effectiveness of the company's IT security measures. To further enhance data protection, DBO has partnered with data centers that maintain the highest standards of security protocols. These data centers prioritize the protection of data on the cloud through state-of-the-art technology, processes, and encryption.

DBO maintains a well-defined IT organizational structure at the corporate and site levels and conducts regular training programs to keep employees updated on IT security threats. Daily reports are generated to monitor the company's IT security status, demonstrating a commitment to secure and responsible IT asset management.

Throughout the present fiscal year, the Company has not encountered any instances of data breaches, leaks, thefts, or losses concerning customer data. Additionally, no substantiated complaints have been identified by the Company.



Innovation

At DBO, research and innovation serve as the bedrock of our commitment to excellence and sustainability. The Company continues to make investments in new products that can be derived from existing resources, thereby enhancing the product mix and overall value obtained from cane. We also actively seek areas of improvement across various stages of production, from cultivating sugar cane at the farmers' level to refining it into high-quality sugar.

DBO focuses on optimizing the growth and harvest of sugar cane by implementing innovative techniques and practices. Through our cutting-edge tissue culture lab, we are pushing the boundaries of agricultural practices to scale the production of superior, disease-resistant sugarcane varieties. Our revolutionary pest control measures strike a balance between protecting our crops and preserving the environment. Finally, the integration of drones into our operations enhances efficiency, reduces waste, and supports our broader sustainability goals.



Tissue Culture Lab

DBO has established a Tissue Culture Lab at its Meerganj unit with the main objective of rapidly multiplying desired cane varieties for distribution to farmers and conducting research and trials on new sugarcane varieties. Currently, farmers in DBO's value chain are cultivating the CO238 variety, which is susceptible to pest attacks, particularly from the sugarcane aphid. Our goal is to consistently evaluate and enhance our sugarcane varieties to ensure the cultivation of crops that are high-yielding, resistant to diseases, and tolerant to drought conditions.

The process of sugarcane seed multiplication involves the use of sugarcane buds provided by the government, which are then developed into nucleus seeds. These seeds are initially planted on demo fields, and the first generation of produce is utilized for the multiplication of sugarcane seeds. This process is conducted at the following three levels:

- Factory research farms located in Asmoli and Meerganj units
- Collaboration with 32 Self Help Groups (SHGs) in the Asmoli unit, and 18 SHGs each at the Meerganj and Mansurpur units.



- Seeds are also allocated to progressive farmers who are chosen based on their innovativeness, resource availability, and risk appetite.

By closely collaborating with SHGs and progressive farmers, DBO ensures that new sugarcane varieties are widely distributed and that the benefits of innovation are shared across the farming community. This approach ensures that farmers have access to the latest varieties of sugarcane, which are high-yielding, disease-resistant, and drought-tolerant. It also enables the farming community to remain up to date with the latest trends and developments in the field of sugarcane cultivation, thereby improving their overall agricultural practices.

Usage of Drones

In FY 2022-23, DBO started utilizing drones for pesticide and fertilizer spraying, taking advantage of the benefits of this technology. Using drones for spraying is a cost-efficient method compared to traditional methods of spraying, which require manual labor and machinery. Through drones, it can be ensured that the exact amount of pesticide or fertilizer is sprayed, minimizing excess usage and reducing the risk of pollution. Additionally, the use of drones ensures that the soil remains untouched, reducing soil compaction and preserving soil structure. It also reduces the risk of human exposure to harmful chemicals, as well as the risk of soil compaction from heavy machinery. The company is currently experimenting with the utilization of drones equipped with high-resolution cameras to assess crop health and measure acreage.

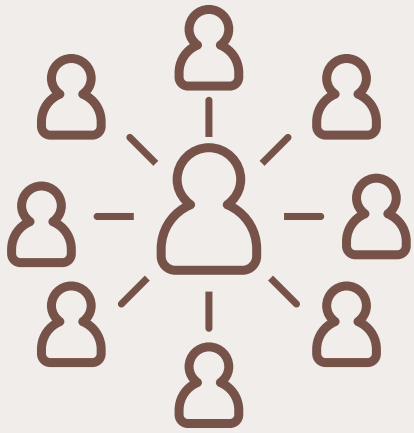


Pest Control

The reliance on chemical pesticides to protect crops has led to significant losses due to insect pests, while it is also resulting in negative side effects such as the resurgence of pests, pesticide resistance, and environmental pollution. In response to these issues, Integrated Pest Management (IPM) technology has been widely adopted as a more effective approach to pest control worldwide. One important tool in IPM is the use of light traps, which are visual traps commonly utilized to control agricultural pests.

DBO prioritizes the development of cost-efficient and farmer-friendly technologies. An innovative approach was undertaken to design and introduce a simplistic version of light traps that could be cost-efficient to farmers. The Company designed light traps at much cheaper than traditional ones, costing only one-tenth of the price and provided over a thousand of these traps to farmers at further subsidized rates. This helps farmers save money while also promoting sustainable farming practices by using non-chemical methods to control pests.





People First

Linkage with UN SDG



Material Topics

Diversity & Inclusion

Training & Development

Human Rights & Labor
Standards

Health & Safety

Community Contribution



In today's rapidly changing and interconnected world, organizations are increasingly recognizing the significance of adopting a "people first" approach. Prioritizing the well-being and development of individuals within and outside the company is crucial for sustainable growth and success. At DBO, we firmly believe in placing people at the heart of our operations. We understand that the success of our business relies on the collective efforts and abilities of our employees, suppliers, customers, and communities, and we place utmost importance on establishing strong relationships with our internal and external stakeholders. By nurturing a culture that values and respects individuals, we aim to create an environment where people can thrive and contribute to the Company's long-term success.

Our commitment to a people-first approach harmoniously resonates with our core values of innovation, integration, and value addition. By prioritizing the well-being and development of our employees and communities, we aim to foster a culture of innovation that encourages creativity, adaptability, and continuous improvement. Additionally, we understand the importance of integrating the diverse perspectives and talents of our workforce to drive growth and deliver value to our stakeholders.

Management Approach

At DBO, our employees are the cornerstone of our success. We deeply value their skills, experience, and unwavering commitment, as they propel us towards our strategic goals. We are committed to providing a fair, safe, inclusive, and holistic workplace to all employees. Our primary focus is to build high-performing teams by attracting talented individuals, providing them with the necessary tools and resources for success, offering on-the-job training opportunities, and cultivating a supportive and cohesive work environment. We strongly believe that prioritizing the well-being and satisfaction of our employees leads to a positive atmosphere that fosters excellence.

Embedded in our core values is the principle of "Sustainability & Balance" which drives our commitment to ensuring our employees achieve a sustainable work-life balance in the long run. The Company prioritizes employee health and safety through rigorous protocols and training. Our focus on training and development extends to ensuring comprehensive health and safety training for our employees. We embrace diversity and inclusion, promoting equal opportunities and celebrating individual contributions.

We strongly emphasize on giving back to the communities as a part of our corporate ethos. The Company embraces the principles of Corporate and Social Responsibility and is dedicated to establishing a sustainable business that holds significant social relevance. We are committed to fostering inclusive growth and making a positive impact on society by actively supporting various causes such as healthcare, environmental sustainability,

education promotion, sports promotion, and skill development activities. Through these efforts, we strive to be a responsible corporate citizen and thereby contribute to the socio-economic development of the nation.



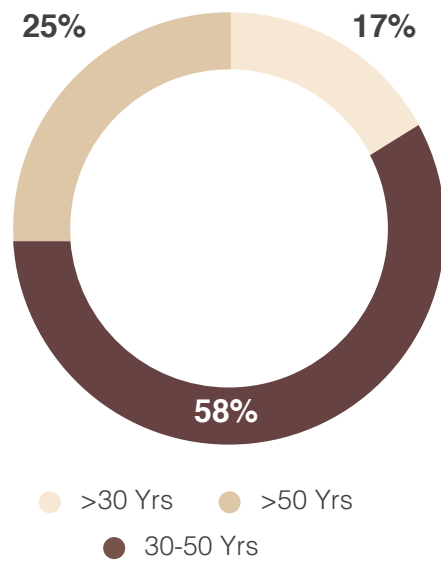
Our Workforce in FY 2022-23

In FY 2022-23, our workforce at DBO exemplified a rich tapestry of diversity, with a harmonious blend of experienced professionals and enthusiastic young talents. We take immense pride in our employees, who hail from various backgrounds and bring unique perspectives to the table.

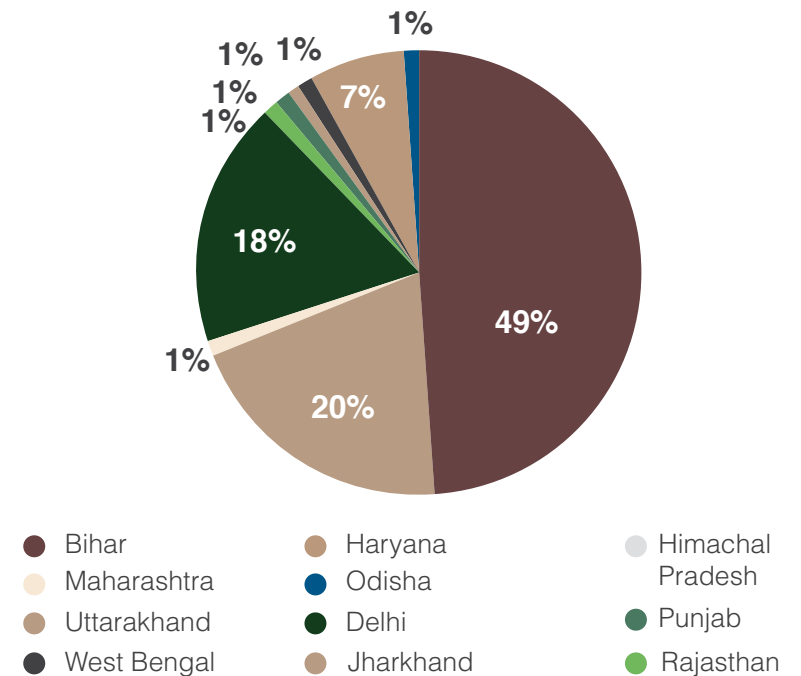
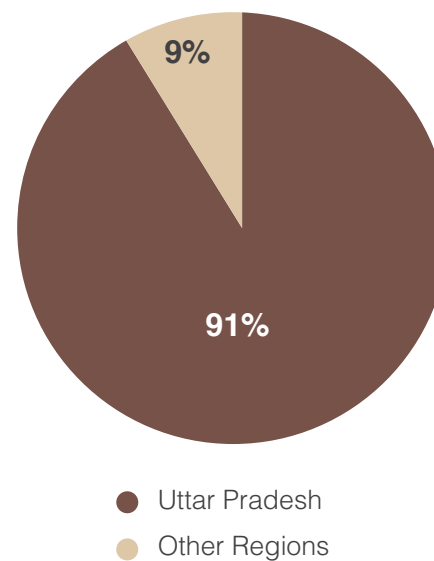
Employee category	Total Number	Age Group (no.)			Gender (no.)	
		<30 yrs	30-50 yrs	>50 yrs	Male	Female
Permanent Employees	1723	167	884	672	1689	34
Contractual Workers	1467	356	973	138	1463	4
Total	3190	523	1857	810	3152	38



Age Diversity



Region-wise workforce





Hiring and Turnover

DBO is an Equal Opportunity Employer and utilizes multiple modes of hiring, including social media, dedicated hiring portal, and internal references. The Company welcomes experienced professionals who bring expertise to the team and also invests in young professionals through comprehensive campus hiring programs.

Category	Unit	Total number of employees	Age Group (no.)			Gender (no.)	
			<30	30-50	>50	Male	Female
New employees hired in reporting year	Nos.	239	87	141	11	228	11
Rate of new employee hire	%	7.50	16.63	7.60	1.36	7.24	28.94
Employee attrition in reporting year	Nos.	396	70	172	154	378	18
Rate of employee turnover	%	12.43	13.38	9.27	19.10	12.01	47.36

Employee Benefits

DBO recognizes the importance of fostering a supportive and fulfilling work environment and offers a wide range of employee benefits to enhance well-being. We understand that our employees are vital to our success and have implemented various policies and practices to enhance their well-being and engagement. In addition to fair compensation, the company provides a range of benefits to eligible employees such as health care facilities, parental and maternity leave, and transition assistance. Our goal is to provide a comprehensive and strengthened human resource management system that addresses all the needs of our employees.

Our workspaces are vibrant hubs of activity, equipped with various amenities such as accommodation, educational facilities, sports activities, and opportunities for celebration. These provisions help to keep our employees connected and engaged, even beyond regular working hours.

Employee Benefits	Coverage	
	Full-time Employees	Part-time Employees
Personal Accidental Policy	Yes	Yes
Health care <i>OHC facility in all units for unit employees and their family members; association with medical advisor for consultation</i>	Yes	Yes
Workmen compensation Policy	Yes	Yes
Parental leave	Yes	Yes
Retirement provision	Retirement Policy	No
Stock ownership	Role based variable pay mechanism	No
Vehicle Purchase Policy	Provision of commute of official travel purposes	No
Driver Hire Guidelines	Role based provision for full-time employees	No
Extra work Reward for Shift In charges	Role based provision for full-time employees	No
Housing Policy	Provision for all permanent female employees and Role based provision for permanent male employees	No

All our employees are eligible for paid parental leaves in accordance with prevailing national regulations. During the reporting year, zero employees availed parental leave.

HR@floor walk

The HR@floor walk at DBO showcases the approachability of the HR department, as they actively engage with employees and make themselves accessible. Their proactive mindset is evident through their initiative to collaborate with employees, working hand in hand to achieve shared business objectives. This approach fosters a positive work environment and strengthens the relationship between HR and employees, ultimately leading to greater productivity and success.

In addition to the HR@floor walk during regular shifts, we have also implemented the deployment of HR during night shifts to ensure timely resolution of issues.



Diversity and Inclusion

We incorporate our emphasis on Diversity and Inclusivity into various aspects of our organization, including recruitment, training, staffing, and employee development. Our manufacturing units consist of diverse workforces, which are further supported by capable corporate teams.

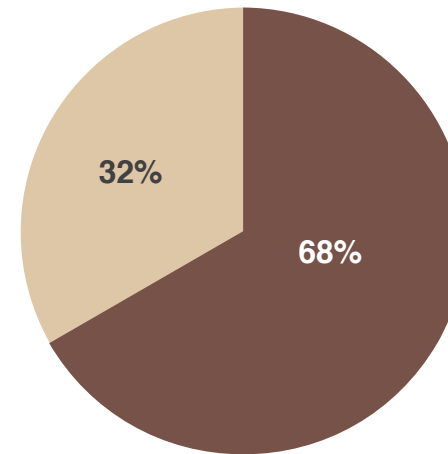
One of our key commitments is to enhance the representation of women across all areas of our operations. As an agribusiness with a presence in rural areas, we recognize the significance of empowered, working women as role models who contribute to the overall development of our communities. To demonstrate our dedication to a diverse and fair workforce, we have implemented a practice of employing female apprentices in core manufacturing areas. Through targeted initiatives focused on the recruitment, retention, and training of women, we have witnessed a remarkable five-fold increase in the number of female employees since 2020.

Diversity in Governance Bodies

Governance Bodies	Total Members	Age Group (years)			Gender	
		<30	30-50	>50	Male	Female
Audit Committee	5	-	2	3	5	0
Nomination & Remuneration Committee	4	-	2	2	3	1
Stakeholder Relationship Committee	4	-	2	2	2	2
CSR Committee	3	-	2	1	2	1
Risk Management Committee	4	-	1	3	4	0
POSH ICC Committee *	5	-	2	3	1	4

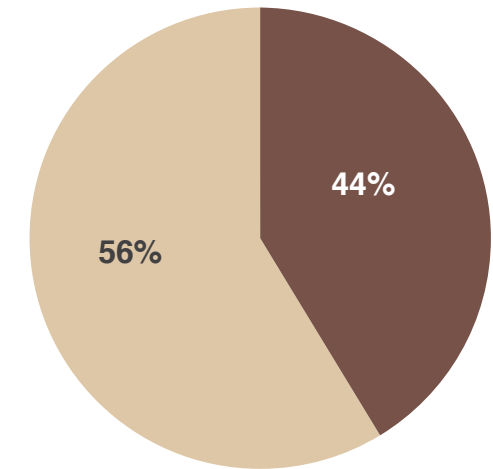
*Comprises of members other than the Board of Directors.

Gender Diversity



● Male
● Female

Age Diversity



● 30-50 Yrs
● >50 Yrs

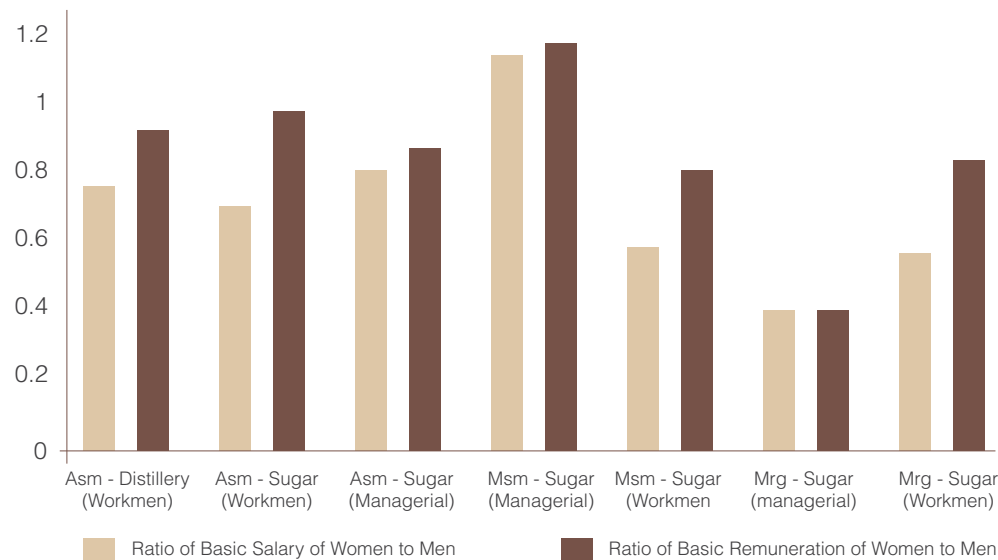
Non-Discrimination

DBO places great importance on creating a work environment that is free from any form of discrimination. The Company strives to foster a respectful and inclusive workplace, enabling employees to thrive without fear of discrimination, harassment, or bullying.

DBO strictly prohibits the initiation or tolerance of any form of discrimination or harassment, including racial, sexual, or any other type. The Company is committed to fostering a gender-friendly workplace and endeavors to prevent, stop, and address sexual harassment by implementing good employment practices. Employees are expected to comply with the policy against the 'Prevention of Sexual Harassment at Workplace' (POSH). During the reporting period, no cases were reported to the POSH Committee.



Ratio of basic salary and remuneration of women to men



VMentors

DBO's 'VMentors' initiative is a powerful endeavor aimed at empowering women within and beyond our organization. Through this program, we provide mentorship and support to women, enabling them to develop their professional skills, gain confidence, and unlock their full potential. VMentors connects experienced mentors with mentees, fostering a supportive environment where knowledge and experiences are shared, and meaningful connections are built. This initiative focuses on empowering women to break barriers, overcome challenges, and achieve their career goals. VMentors serves as a platform for growth, collaboration, and inspiration, enabling women to thrive in their careers and contribute to a more inclusive and diverse workplace. Through VMentors, DBO is committed to fostering a culture that promotes gender equality, empowers women leaders, and creates a pathway for success.

Our efforts to promote gender diversity have yielded positive outcomes. We have observed an 18% increase in women campus hires, demonstrating our commitment to fostering a more inclusive workforce. Additionally, our focus on creating an enabling environment for women has resulted in an impressive 80% retention rate among women employees. This accomplishment reflects our dedication to providing opportunities for women to thrive, grow, and succeed within our organization.

Case Study: Avsar

Avsar, the employability programme for women family members of employees, aims to address the historically low participation of women in the sugar industry, particularly on the factory shop floor. It recognizes the importance of building a diverse workforce and promoting women as role models in the community. Unlike traditional trainee or apprentice programmes, Avsar is designed with a focus on women's intent and inclination to learn, rather than their educational background. Since its inception, the Avsar programme has made a significant impact on women's employment in the sugar industry and on the organization itself. By providing opportunities to women who may have faced career breaks or other obstacles, the programme has helped build a diverse and inclusive workforce, bringing in fresh talent and diverse capabilities. Moreover, the promotion of diversity and inclusion has created a more caring, progressive, and safe work environment, leading to increased employee continuity of service. Additionally, it has contributed to social

development by promoting women as role models in the community. The early success of the Avsar programme fills us with pride, and we remain committed to driving even better employment opportunities for women in the future.

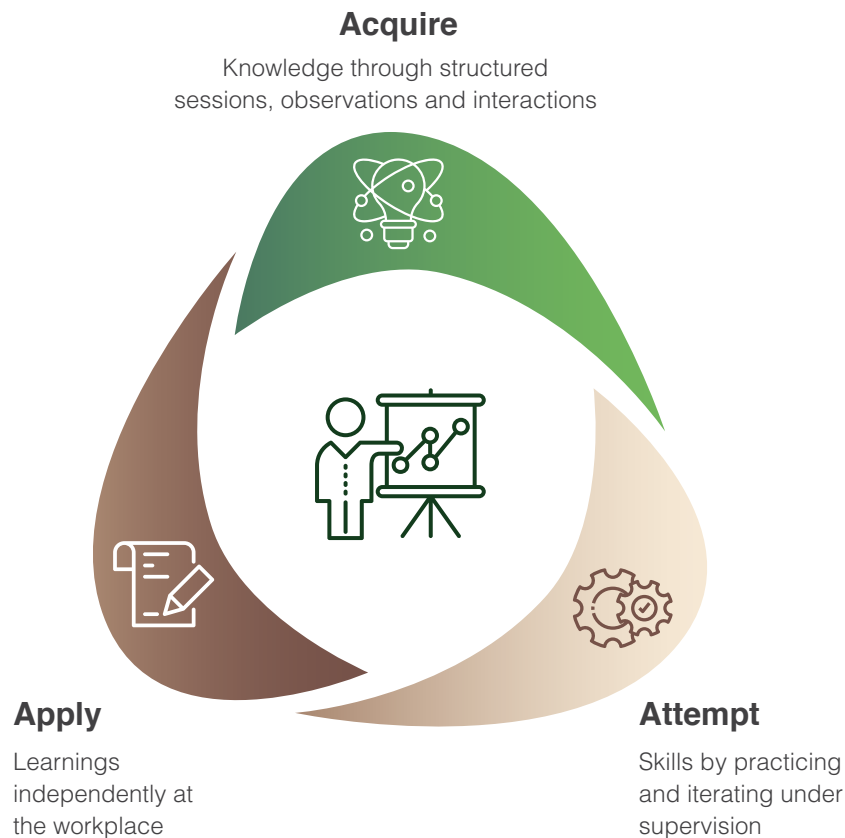
In our leadership ranks, we value a balanced blend of individuals who have been promoted internally and those who have been recruited externally. This approach brings together diverse experiences, leading to the generation of better ideas and more effective implementation. It fosters a culture of excellence and acceptance throughout the organization.

Furthermore, our training initiatives are specifically designed to nurture the development of women in leadership roles.



Training and Development

In today's competitive business landscape, we recognize the importance of investing in training and development for our employees and workers. These programs enhance skills, foster a culture of continuous learning, and contribute to overall organizational success. At DBO, our learning framework is built around three pillars to ensure continuous upskilling and learning, cultivating motivated and productive teams, and establishing a virtuous cycle where employees consistently enhance and expand their skill sets.



Average hours of training per employee (hours)

Category	FY 2022-23	
	Male	Female
HODs and above	36.18	36.00
Section Heads	6.08	10.50
Supervisors	9.82	9.59
Workmen	3.15	0.00

Some of our training programs include:

Guru Shishya Program

The Guru Shishya Program, our esteemed mentorship initiative, plays a crucial role in cultivating a robust talent pool of upcoming leaders for our organization's mission-critical positions. This program harnesses the expertise of seasoned employees who possess exceptional skills in specific roles, as they take on the responsibility of guiding and nurturing selected individuals through a meticulously designed framework.

Within this structured program, the transfer of knowledge and expertise is carried out systematically, ensuring that the mentees gain a comprehensive understanding of their respective roles. Through a hands-on and experiential approach, the program facilitates the seamless transmission of technical nuances across the organization, enabling individuals to develop a deep understanding of the intricacies associated with their field of expertise.

Moreover, one of the distinctive aspects of this program is its ability to expose participants to leadership responsibilities at an early stage in their careers. By engaging in this mentorship program, individuals have the opportunity to work closely with experienced professionals, acquiring valuable insights and skills that are typically associated with higher-level positions. This exposure not only accelerates their professional growth but also instils a sense of confidence and proficiency, preparing them to take on leadership roles in the future.





Daksh Program

Daksh, an acronym for 'Developing Additional Knowledge and Skills for Holistic progress', is a distinctive initiative that fosters a collaborative learning environment among experienced professionals. In this program, experts in specific fields come together to share their expertise and skills with peers who possess a comparable level of seniority. Through this sharing and exchange of best practices, a unified and cohesive "one team" culture is cultivated among our senior leaders, promoting continuous growth and development.

Leadership Awareness Series

Every fortnight, learning sessions are held to promote knowledge and awareness on a variety of topics related to our business. Topics vary from technical topics, changes to important laws and regulations, and management training, to name a few. Sessions are led by a combination of external industry experts, advisors and our own employees.

AASHA – Accelerated Advice for Section Heads

DBO conducted a comprehensive, week-long managerial development programme for Section Heads on topics such as leadership expectations, labor laws for managers, DMR, data orientation, presentation skills, people management and general management. This programme was conducted with the aim to enhance leadership capabilities and equip Section Heads with essential skills in their new roles.

Samvaad: Our E-learning portal

DBO provides a convenient and accessible platform for continuous learning and development for all employees through Samvaad, an e-learning portal. This platform caters to various areas of professional development, including process and engineering training sessions, HR training sessions, SAP training, general training, Cane training and sales training. The Samvaad portal also hosts NSI study materials.

Transition Assistance

At DBO, we are currently implementing a Transition Assistance program that involves the rehiring of retired employees as consultants and advisors based on their expertise. We recognize the immense value that these experienced individuals bring to the table, and we are actively leveraging their knowledge and skills to drive our organization forward. By engaging retired employees as consultants and advisors, we are tapping into their wealth of industry-specific insights and deep understanding of our company's operations. They are playing a crucial role in guiding us through transitions, offering valuable advice, and helping us make informed decisions.

The Company has re-hired six employees under the transition assistance program.

Employees Receiving Regular Performance and Career Development Reviews

Our employees undergo regular performance and career development reviews, allowing them to evaluate how well they align with their long-term objectives. All of our full-time employees are eligible for a performance appraisal, and the percentage of employees receiving these reviews shall be tabulated by July 2023.

Percentage of employees receiving regular performance and career development reviews





Human Rights and Labor Standards

DBO has formulated a Code of Conduct that outlines that Company's approach to upholding and safeguarding fundamental human rights in alignment with international principles and standards such as the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the Organization for Economic Co-operation and Development's guidelines for multinational enterprises, the UN Convention on the Rights of the Child, the ILO Declaration on Fundamental Principles and Rights at Work, as well as the central and state legislations.

DBO strictly prohibits the engagement of children in any form of labor within its factories or other establishments. We have outlined this commitment in our Code of Conduct and have formulated Restriction and Remediation Of Child Labor Policy, to ensure the protection and well-being of children, guaranteeing that they are not exploited or subjected to any form of labor. We further ensure training and sensitization of our security personnel to regularly assess our operational facilities for the presence of child labor and have displayed appropriate measures for remediation of any such instance.

DBO also firmly rejects any form of forced labor within the company. Whether it occurs within the factory premises or extends to external locations, any instances of forced labor are addressed in strict compliance with the laws of the respective jurisdiction. Our employees undergo comprehensive training on human rights policies and procedures, equipping them with the necessary knowledge and understanding to uphold and promote a respectful and inclusive work environment. Regular internal audits are conducted to monitor and maintain compliance.

Freedom of association and Collective bargaining agreements

We recognize and respect the rights of our workforce to form and join trade unions and uphold collective bargaining agreements towards maintaining a harmonious relationship with our workforce. We follow the guidelines set by the wage board and provide timely notice on wage revisions for employees covered under the wage board. It is worth noting that due to our consistent adherence to the wage board notice and fair compensation practices, there have been no instances of collective bargaining initiated by unions in the past three years.

Minimum notice period regarding operational changes

In accordance with the established Standing Order, it is mandatory for employers to provide a minimum notice period of two weeks to seasonal workers regarding the commencement of the upcoming season. This notice serves as an essential requirement, ensuring that the seasonal workers are adequately informed and prepared to commence their work. We adhere to this policy and provide the necessary two weeks' notice to our seasonal workforce, allowing them ample time to make the necessary arrangements and join us for the designated season.





Health and Safety

Employee health and safety are of paramount importance at our organization. We believe in promoting a holistic well-being approach, which is why we organize various initiatives to support our employees' physical and mental health. Our annual sports meet encourages friendly competition and physical activity, fostering a sense of camaraderie among colleagues. Additionally, we conduct regular yoga sessions to help employees de-stress, improve flexibility, and enhance overall well-being. Moreover, we provide comprehensive medical guidance, including regular check-ups, health awareness campaigns, and resources for maintaining a healthy lifestyle.

DBO consistently prioritizes the establishment of a safety-oriented culture throughout our entire organization. Our aim is to safeguard the health, safety, and overall welfare of our employees, workers, and everyone associated with DBO's activities. This commitment is not only rooted in the fundamental right to a secure environment but also in the recognition that it leads to a workforce that is both robust and motivated. To ensure a safe and productive work environment, we have implemented various programs that support workplace safety, health, and security, while also meeting all compliance requirements.

Occupational Health and Safety Management System

The health and safety of employees, as well as the preservation of the environment, are fundamental components of a responsible and sustainable business operation. DBO recognizes the importance of Occupational Health and Safety (OHS) and has implemented the Total Productive Maintenance (TPM) framework to ensure the well-being of its workforce and stakeholders. This policy covers all our employees and workmen, and serves as a structured and quantifiable methodology for continuous improvement, aligned with the company's business vision. TPM is not only about maintaining machines but also creating a culture of innovation and capability enhancement through continuous training. This approach supports the achievement of Zero Accident, Zero Breakdown, Zero Defect & Zero Loss, and promotes a clean, green, safe, and healthy work environment leading to high employee morale.

DBO Quality Environment, Health & Safety Policy (QEHS) Policy

DBO's QEHS Policy includes a focus on employee health and safety as a critical component of its approach to managing OHS. The policy outlines the Company's commitment to ensuring a safe and healthy work environment for its employees through the upgradation of their competencies and skills, inputs from employees, and effective monitoring of health and safety performance.

In particular, the Company emphasizes prevention over detection/rectification of deficiencies and nonconformance related to health and safety, through the provision of adequate resources, including training and education programs. The Company also periodically sets objectives and targets for health and safety and continually reviews and updates them as and when necessary.

Through the implementation of this policy, the Company aims to promote a culture of safety and awareness in the workplace, reducing the risk of accidents, injuries, and loss of productivity. The policy reflects the Company's commitment to complying with applicable legislation and standards related to health and safety, ensuring the well-being of its employees, and fostering a safe and healthy work environment for all.

Health and safety hazard identification and risk assessments

Routine Risk Assessments are carried out in compliance with national and ISO Standards as an integral component of the Safety, Health, and Environment (SHE) pillar within the Total Productive Maintenance (TPM) framework. This involves a systematic evaluation of potential risks and hazards to ensure a safe working environment and adhere to established guidelines. These assessments are conducted on a regular basis to identify, analyze, and mitigate risks effectively, ensuring that safety measures are implemented and maintained throughout the organization.

The Company conducted a 30-day drive to identify and address unsafe conditions and unsafe acts, with appropriate measures taken to rectify the situation and ensure a safe working environment. Regular third-party safety audits are also conducted to assess safety practices.



Occupational Health Services

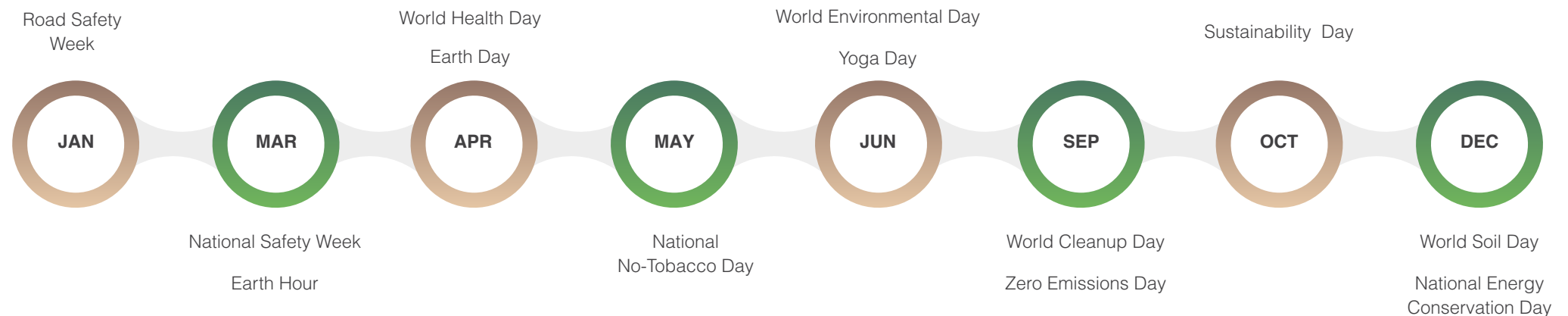
At DBO, all new employees undergo a thorough medical test upon joining the organization to ensure their fitness for the assigned roles. Additionally, annual health check-ups are conducted to ensure that each employee's health status is evaluated regularly, allowing us to identify and address any potential health concerns at an early stage.

DBO employees, workmen and as well as our surrounding communities have access to an Occupational Health Center (OHC) at the units, wherein they can consult with a Medical Advisor for expert guidance and avail basic medicines. In terms of Disability and Invalidity coverage, employees and workmen benefit from a Workmen Compensation policy that is available in all units.

We have established an Occupational Health Matrix that outlines the specific health requirements and recommendations for various job roles within the organization. Furthermore, we conduct role-based health assessments, with regular monitoring of the corresponding reports, to ensure that employees maintain optimal health throughout their employment. We have also established a local crisis team comprising the factory head, factory manager, unit head, journalists, police, fire department, and other relevant stakeholders. This dedicated team is responsible for promptly addressing any crisis situations that may arise in the communities nearby, ensuring effective communication, coordination, and resolution of issues to safeguard the well-being of the local population.

Worker participation, consultation, and communication on occupational health and safety

DBO EHS Events Calendar



Worker Training on Occupational Health and Safety

Chai-Shai

Informal Chai-Shai sessions are conducted to create an environment of worker participation and communication on occupational health and safety. These informal gatherings allow Unit Heads and stakeholders to connect directly with blue-collar workers, fostering open dialogue and active involvement. By incorporating these aspects, Chai-Shai sessions promote the exchange of information, address safety concerns, and prioritize the well-being of workers, contributing to a comprehensive approach to occupational health and safety within the organization.

Safety Committee is established with balanced representation from employees and workmen, who also serve as sectional safety members to enhance safety culture and working conditions, while conducting quarterly meetings to address safety-related matters. Regular refresher trainings are conducted on topics such as usage of fire extinguisher, Good Manufacturing Practices (GMPs), Standard Operating Procedures and chemical safety to ensure worker safety. These sessions reinforce safety awareness, hygiene standards, and best practices. We prominently display safety reminders throughout the site. Our goal is to cultivate a safety culture and protect the well-being of all individuals involved.

We conduct quarterly mock drills, supervised by statutory regulatory authorities, to simulate scenarios like falls from height, fire incidents, and electrical hazards. Additionally, we also conduct toolbox talks and monthly fire drills to ensure preparedness and response readiness in case of an emergency.

Nayi Chetna : Competition to boost concerns on safety

DBO conducted 'Nayi Chetna', an inter-unit quiz competition with the aim of promoting safety awareness among all stakeholders. Over 250 enthusiastic employees from various departments actively participated, elevating this engagement activity to new heights.



Industrial Safety training



Training on Fire Safety



Session on Unsafe Acts and Unsafe Conditions



Mill Hygiene Cleaning Procedure



Nayi Lagan: Quiz on 'Know Your Organisation and Operations'

The Company organized a stimulating two-day QR-based quiz competition called Nayi Lagan. The quiz was held across Corporate office and units, and covered various aspects of the organization's operations, including safety and environment-related questions. The event saw an impressive participation of over 900 individuals, with more than 600 workers actively taking part.

Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

DBO has implemented robust safety norms and practices to prioritize the well-being of our employees and all individuals present on our premises. To maintain a safe working environment, we strictly enforce the requirement of work permits for all personnel involved in our operations. Additionally, we have restricted accessibility to various zones within our facilities for visitors, suppliers, and business partners. These measures are in place to minimize potential hazards and risks, promoting the overall safety and security of everyone associated with our organization.

Work Related Injuries (For employees and workers)

Description	Male	Female
Fatalities (as a result of work-related injury)	0	0
High-consequence work-related injuries (excluding fatalities)	0	0
Recordable work-related injuries	0	0
Non-reportable injuries	100	0
Near miss/work-related hazards	9	0
Manhours worked	3352800	81600

**Rates have been calculated as per 10,00,000 manhours worked*

We have developed mechanisms for reporting work related hazards and ensure timely remediation of the incidents by taking appropriate measures.

Work Related Ill-Health

Category	FY 2021-22		FY 2022-23	
	Male	Female	Male	Female
Employees	39	1	49	0
Workers	77	0	51	0

During the reporting year, we had zero fatalities as a result of work-related ill health.

The work-related hazards that pose a risk of ill health include audiometric loss, bronchitis and lung function issues, bagacilosis, skin allergy, and allergic rhinitis. These hazards have been determined through occupational health metrics and assessments, hazard identification and risk assessment (HIRA), annual health check-ups, periodic health check-ups as defined in certain statutes, and regular testing of potable water every six months.

To eliminate these hazards and minimize risks, actions have been taken or are underway, including the use of personal protective equipment such as protective glasses, masks, shoes, and helmets, as well as raising awareness and implementing administrative controls such as occupational control procedures and other displays.



Safety Week Pledge



Community Contribution

At DBO, we believe that a sustainable future is built on strong relationships with the communities in which we operate. Giving back to these communities is an integral part of our corporate ethos. As a sugar manufacturing company, we recognize that our success is intertwined with the well-being and prosperity of the growers who supply us with the essential raw materials for our products. We firmly believe that by supporting and empowering these communities, we can create a positive impact on the broader society, the environment, and the economy.

The Company has formulated CSR Policy in accordance with the DBO's business ethics, the requirements of Companies Act, 2013 and the Companies (CSR Policy) Rules, 2014 to exhibit its commitment to the communities it works with. Through collaborative partnerships and a people-centric approach, we strive to make a lasting and meaningful difference in the lives of our grower communities, while fostering sustainable development and a brighter future for all. **DBO will also undertake Social Impact Assessment to measure the impact of CSR initiatives.**

Our CSR activities revolve around four key areas:



Skillfulness and Education

Skill Development

DBO has established the Sampurna Training Centre for all tailoring needs at Dev College of Distance Education, Mansurpur unit. The center, jointly operated with Nehru Yuva Kendra and Gram Swaraj Mission Ashram, aims to empower women and stands as a testament to DBO's commitment to corporate social responsibility.

DBO provides complete financial, technical, and operational support to the center. The training program spans a duration of four months and aims to train 120 women trainees in multiple batches of 20 each per year. This state-of-the-art tailoring training center plays a pivotal role in enabling women to achieve self-reliance and move toward self-sustainability. By equipping them with valuable tailoring skills, the center opens up new avenues of income generation and economic empowerment for women in the community. It not only imparts technical training but also fosters confidence, creativity, and entrepreneurial spirit among the trainees.





Education

DBO actively supports educational initiatives aimed at empowering individuals and communities in rural areas. By investing in education, DBO aims to uplift and empower individuals, fostering personal and inclusive societal growth. Through these CSR endeavors, DBO demonstrates its commitment to making a positive impact and contributing to the educational development of the communities it operates in.

The Company has established the Academy of Modern Learning under which it operates 2 English - medium schools in Asmoli and Gannaur, with the mission to provide quality, modern education to children in rural India. The schools are smart-class enabled with the latest technologies, quality infrastructure and up-to-date curriculum to provide seamless and updated education. We strongly believe that children in rural India need to have the same opportunities and education as students in big cities do. The main objective of our learning academy is to equip these children with a holistic, modern education and skills that are on par with what's being offered in the rest of the world. We want our children to be comfortable anywhere in the world and contribute to the country's progress. Special scholarships and extra support is provided to students from economically weaker homes.

Computer Literacy Programme at Meerganj Unit



The Computer Literacy Program at Meerganj Unit is successfully promoting computer literacy among the youth of Meerganj. With a total of 66 students, including 14 females, the program covers a comprehensive curriculum that includes basic computer skills, advanced applications, and digital citizenship. The program is actively run through DBO employee volunteering, and also prioritizes efforts to increase female participation. Through hands-on activities and access to modern computer labs, students gain practical knowledge and develop a sense of digital ethics.

Social Welfare - Delivering Preventive Healthcare to Local Communities



Delivering quality healthcare to rural communities in India remains a significant challenge for the Government of India. Despite progress in medical technologies and services, many rural areas in India remain underserved. At DBO we believe that access to quality healthcare is a basic human right. Therefore, to bridge the gap between demand for healthcare and the existing supply, the Company joined hands with PHDRDF to undertake healthcare activities in its peripheral villages of Asmoli, Meerganj and Mansurpur, during year 2022-2023.

A baseline survey was conducted in the periphery of the factory at these locations. 24 villages were identified for the Project. DBO collaborated with PHD Rural Development Foundation (PHDRDF) to initiate a Mobile Health Services project with the aim of providing regular healthcare services, conducting eye screening camps, and generating awareness on health-related topics.

The following are the highlights of the “Free Mobile Health Services” Program:



Total Targeted
Locations/ villages

> 40



Total Health Camps
(Generic health, eye and
women & children camps)

238



Approximate
Beneficiaries

24,000



Save Environment



Pond Rejuvenation

Pond rejuvenation has a multitude of advantages. Firstly, it enhances local water resources, promoting groundwater recharge and providing a sustainable supply for irrigation and other purposes. Secondly, it fosters biodiversity by creating habitats for aquatic life and attracting various species. Pond rejuvenation activity around Asmoli, encompassing 9 ponds and 2.7 hectares of total area has been conducted by DBO.

Sports

We are committed to promoting sports among children and youth in rural areas by providing them access to top-quality sports infrastructure and equipment. Our focus on sports extends to various disciplines, including squash and basketball. Through our vibrant squash program, we have witnessed several talented individuals representing India at national and international levels, paving their way towards a promising future. By sponsoring these young athletes, we empower them to achieve financial independence and even pursue careers as coaches. Building on this success, we have recently partnered with the Dribble Academy Foundation to introduce basketball as another avenue for rural children to engage in sports. This initiative aims to not only improve their physical well-being but also create opportunities for them to grow and become inspiring figures within their communities. Through our sports programs, we aspire to foster a healthier and more prosperous future for these children, where they can realize their potential and serve as role models for their peers.



Md. Aleem, a seventh-grade student at AML school and the lad of a construction contractor possesses exceptional leadership qualities and pays close attention to detail during practice. He is a fast learner and a passionate basketball player who never misses a practice session. Despite having no prior experience in the sport, Aleem has been practicing for the past year and has shown tremendous potential in various aspects of the game, including his game IQ, speed, passing, shooting, and dribbling. He often spends 2-3 hours per day working on his weak areas

In addition to his basketball skills, Aleem is also a talented singer and in good physical shape for his age. However, he and his teammates have yet to get the chance to showcase their skills and play with other players. Aleem is a big fan of NBA legend Kyrie Irving and hopes to play for Uttar Pradesh someday. His coaches are eager to find better opportunities for him and his teammates to excel.



Purposeful Products

Linkage with UN SDG



Material Topics

Sustainable Agriculture

Sustainable Supply Chain
Management

Opportunities in Health & Nutrition

Product Stewardship



We are dedicated to providing Purposeful Products that match the evolving desires and choices of our customers. Our aim is to create inventive solutions that not only cater to current market trends but also emphasize environmental sustainability and social responsibility. By concentrating on the excellence, worth, and influence of our products, we seek to generate significant and purposeful encounters for our customers, all while contributing to a more sustainable future.

Management Approach

DBO places a high priority on environmental protection through the promotion of sustainable sugarcane production. We recognize the importance of addressing material topics that have a significant impact on our business operations, stakeholders, and the broader environment. As a result, we actively encourage our growers to adopt eco-friendly methods that enhance soil health, conserve water resources, and minimize the usage of pesticides and fertilizers.

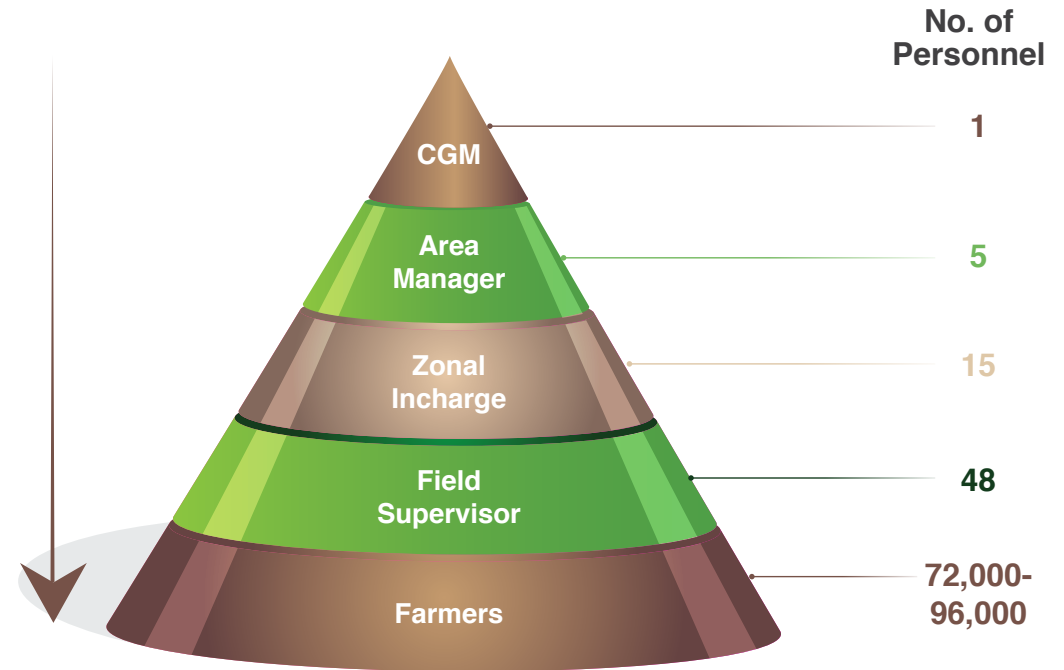
In our commitment to sustainable agriculture, we collaborate with farmers to promote responsible practices such as efficient water management, reduced chemical inputs, and soil conservation. Through training programs and knowledge-sharing initiatives, we aim to enhance the capacity of farmers to implement sustainable agriculture practices, thus mitigating environmental impacts and ensuring the long-term viability of the agricultural sector.



Sustainable Agriculture

Farmer Outreach through Knowledge sharing

We recognize farmers as one of our most crucial stakeholders, and our commitment lies in assisting and empowering farmers by actively participating in endeavors aimed at equipping them with the necessary knowledge and support to cultivate high-quality sugarcane. DBO undertakes extensive efforts to connect with farmers through a comprehensive door-to-door outreach program. By ensuring that our cane development team has visited 75% to 100% of the farmers in our catchment area, we have achieved a remarkable level of coverage, surpassing the industry average of approximately 60%.



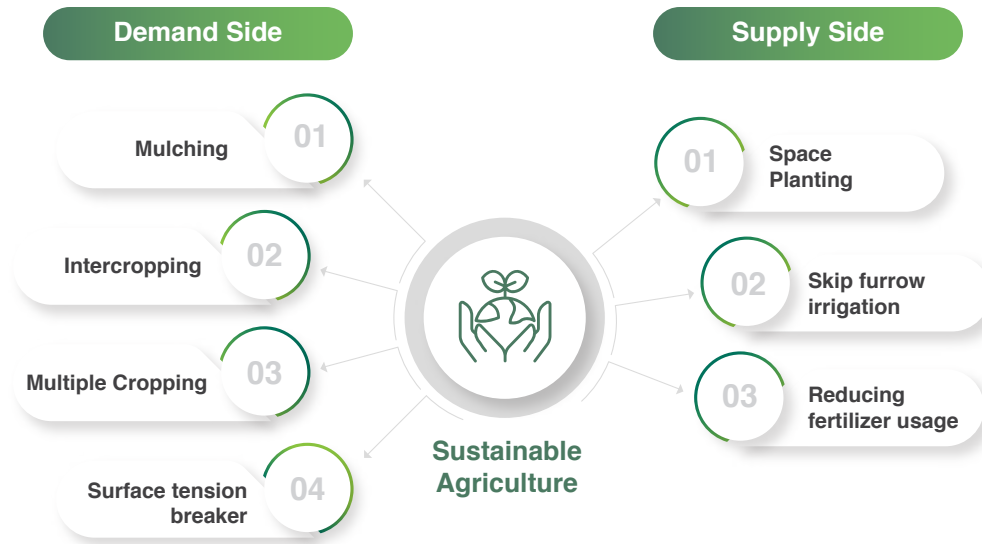
The Company has successfully conducted more than 1,500 village meetings and regularly organized goshtis, enabling large groups of farmers from different villages in Asmoli, Mansurpur, and Meerganj to come together. Through these platforms, farmers have been able to exchange their experiences and learn from one another. Additionally, we have dedicated 900 man-hours to provide training sessions, led by Subject Matter Experts (SMEs) such as Dr. Bakshi Ram, an esteemed agro scientist known for developing the widely adopted sugarcane variety CO-0238, which covers over 70% of the sugarcane cultivation in Northern India. We have also enlisted the expertise of Dr. S. N. Tiwari and Dr. A. K. Agnihotri, both accomplished agro scientists, to enhance the knowledge and skills of farmers.





Promoting Sustainable Sugarcane Production

DBO quality and lab teams collaborate closely with agricultural experts to ensure that the crop remains economically viable for farmers. We facilitate farmer capacity building initiatives and conduct pilot demonstration programs to encourage the adoption of improved techniques. Moreover, we offer training and facilitate access to modern agricultural technologies, thereby supporting farmers in implementing sustainable practices.



Our primary focus revolves around several key techniques, including optimizing planting geometry, promoting efficient irrigation methods, minimizing the negative impact of pesticides, and encouraging the utilization of sugarcane waste as organic manure. Through these concerted efforts, we aim to establish sustainable and environmentally responsible sugarcane production systems.

On the demand side, we encourage farmers to implement practices that reduce water usage and loss. One such practice is mulching, which involves covering the soil around the sugarcane crop with a layer of organic material. This helps to reduce evaporation and improves soil health by retaining moisture and nutrients. Another practice encouraged among farmers is the cultivation of a second crop, such as pulses or vegetables, in the inter-row space between sugarcane rows. This not only increases farmer income but also improves soil health by reducing soil erosion and enhancing soil fertility.

The Company recommends the use of surface tension breaker, such as shampoo, on sugarcane foliage. This helps to reduce the surface tension of water droplets, allowing them to spread out and stick to the foliage rather than be lost through evaporation. Farmers are

advised to monitor transpiration loss from water and adjust irrigation, accordingly, thereby reducing overall water usage.

On the supply side, DBO has implemented various measures including space planting, which involves planting sugarcane in rows with sufficient space between them. This not only allows for better air circulation and sunlight penetration but also reduces water usage and improves the efficiency of fertiliser application. Skip furrow irrigation is another practice which involves applying water only to alternate furrows. This reduces water usage and prevents waterlogging, which can lead to soil erosion and nutrient depletion. In addition to this, DBO emphasises the importance of irrigating sugarcane during critical stages, such as the active formative phase, when the crop requires the most water.

Maintaining the status quo of soil microorganisms and promoting soil health is critical to protecting the soil and hence the crop. This is achieved through practices such as reducing the use of blue fertilisers, which are known to have a negative impact on soil health, and promoting the use of green fertilisers, such as compost and manure, which improve soil fertility and structure. DBO restricts the use of red fertilisers, which are highly concentrated and can cause nutrient imbalances in the soil.



Sustainable Supply Chain Management

In line with its commitment to sustainability, DBO recognizes the importance of promoting local suppliers in its value chain. The Company actively practices and encourages the use of local suppliers within the state.



DBO works towards sustainable supply chain management by taking a holistic approach to operations, from sourcing raw materials to delivering the final product.



Sourcing sustainable raw materials

DBO sources sugarcane from sustainable farms and promotes responsible farming practices, such as crop rotation and minimal use of pesticides and fertilizers. This is an attempt towards reducing the environmental impact of sugarcane farming, protecting natural resources such as water and soil, and ensuring the long-term viability of sugarcane production.

Transportation

The Company utilised bulk transportation, reducing the need for multiple trips, minimizing fuel consumption, and reducing transportation costs. Bulk transportation also reduced packaging and handling requirements, hence reducing the use of plastics in its operations, from the factory to the supply chain.



Opportunities in Nutrition and Health

At DBO, we have always been committed to staying ahead of the curve when it comes to health and nutrition. Recognizing the growing awareness and demand for healthier alternatives, we have embraced the opportunity to provide consumers with a more

wholesome sugar option. As pioneers in the industry, we take great pride in being one of the first companies to introduce sulphurless sugar in India.

Our approach to health and nutrition is rooted in our belief that individuals should not have to compromise on taste while making healthier choices. By eliminating sulfur from our sugar manufacturing process, we have created a product that retains its natural sweetness and flavor, while also addressing concerns regarding potential health risks associated with sulfur additives. DBO will continue to provide transparent product information through food labels, as well as educate our consumers about health and well-being.

Moreover, we understand that health and nutrition extend beyond the absence of additives. That's why we also focus on sustainable and responsible sourcing of raw materials. We work closely with local farmers, promoting ethical farming practices and ensuring that our sugar is derived from the finest quality sugarcane. Our commitment to health and nutrition goes beyond just providing a product; it's about empowering individuals to make informed choices for their well-being. We continuously strive to innovate and bring new solutions to the market, enabling our customers to enjoy the sweet moments in life while prioritizing their health and nutritional needs.

Our sulphurless sugar meets EU standards for sulphur content. It is free of impurities, non-acidic, and hygienically packaged. We have also expanded product offerings with alternate and healthier choices for our consumers.



Our Product Offerings and Health Benefits

Jaggery Powder

- Healthier alternative to refined sugar as it retains more nutrients. It is rich in iron, which helps in the production of red blood cells and prevents iron deficiency anemia.
- Good source of calcium, promoting healthy bones and teeth.
- Jaggery powder contains various antioxidants and minerals like potassium, magnesium, and phosphorus, which support overall health and help maintain electrolyte balance in the body.
- Due to its natural properties, jaggery powder is believed to have air-purifying effects and is often recommended to combat air pollution and respiratory problems

Natural Brown Sugar

- less processed than white sugar and contains a small amount of molasses, which gives it its characteristic color and flavor.
- Retains some trace minerals like calcium, iron, and potassium that are usually removed during the refining process of white sugar.
- Brown sugar has a slightly lower glycemic index compared to white sugar, meaning it causes a slower and more gradual rise in blood sugar levels.
- It is non-acidic, making it a gentler option for those with sensitive stomachs or acid reflux.

Mineral Brown Sugar

- Mineral Brown Sugar is a natural form of sugar packed with essential minerals like calcium, iron, magnesium, potassium, and phosphorus.
- It is non-acidic, making it a gentle option

Gur

- Gur, also known as jaggery, has natural properties that are believed to combat air pollution.
- Gur is a good source of calcium, which is essential for maintaining strong bones and teeth.
- It is packed with iron, an important mineral for the production of red blood cells and for preventing iron deficiency anemia.



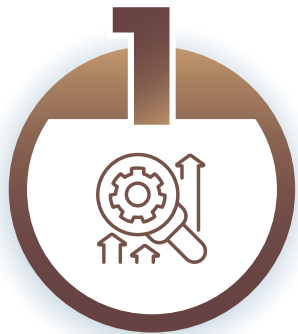
For more information about our products, please visit <https://dhampur.com/>



Product Stewardship

Management of the environmental impact of products has become a significant concern for various stakeholders, including consumers, investors, regulators, and communities. The integration of sustainable practices into the development and lifecycle of new products is crucial for addressing sustainability challenges and showcasing a commitment to environmental responsibility. Incorporating sustainability as a core element of product development strategy entails conducting thorough assessments of the environmental impacts associated with different stages of the product lifecycle, including raw material sourcing, manufacturing processes, packaging, transportation, product use, and end-of-life disposal. At DBO, we have been aiming to identify and prioritize sustainable practices at each stage, ensuring that our products are developed responsibly.

We take a holistic approach to product stewardship, ensuring that our products are not only safe and effective but also produced in an environmentally responsible and sustainable manner. We work closely with our growers to source sustainable materials and strive to reduce waste in our production processes. Product stewardship is deeply ingrained in our operations across three key aspects:



Research and Development



Manufacturing



Packaging and Transportation

Research and Development

In our efforts to strive for product excellence, we primarily work on the availability and distribution of high-quality sugarcane variety through our Tissue Culture Lab. We also invest in new products derived from existing resources, improving our product mix and overall value from cane. We continuously seek ways to enhance various stages of production, from cultivating sugar cane to refining it into high-quality sugar.

Manufacturing

The Company implements sustainable practices by storing residual bagasse and generating power during off-seasons. Rather than disposing of this fibrous residue left after sugarcane processing, DBO recognizes its value and utilizes it as a valuable resource. By storing bagasse in dedicated facilities, the company prevents environmental pollution and maximizes its potential. Through innovative processes like combustion or anaerobic digestion, DBO converts bagasse into bioenergy, generating renewable and sustainable power. This approach not only minimizes waste but also demonstrates DBO's commitment to product stewardship and our dedication to harnessing renewable energy sources.

Furthermore, the Company places great emphasis on optimizing energy consumption to achieve the utmost efficiency in utilizing available energy resources. This objective is accomplished through the implementation of diverse strategies, such as enhancing equipment efficiency, harnessing alternative energy sources whenever feasible, recovering waste heat, and adopting measures that conserve steam and power.



Packaging and Transportation

DBO is also planning to incorporate the principles of Extended Producer Responsibility as part of our engagement with prospective customers in our efforts toward product stewardship. By planning to embrace EPR, we are committed to taking responsibility for the entire lifecycle of our products, going beyond the manufacturing and distribution stages. This means ensuring proper waste management, including recycling and disposal, to minimize the environmental impact of our products.





Resource Efficient Operations

Linkage with UN SDG



Material Topics

Energy & Emission Management
Water Stewardship
Waste Management & Circularity
Biodiversity



As a country's leading producer of ethanol and sugarcane-derived products, our operations can significantly impact the environment. Given the energy-intensive nature of sugarcane processing, we prioritize enhancing operational efficiency and investigating alternative energy sources. Considering the substantial groundwater consumption associated with sugarcane cultivation and processing, preserving water resources is also a significant area of concern. Furthermore, we are dedicated to embracing circular economy principles by reusing and recycling the waste generated in our processes. Lastly, we endeavor to reduce our impact on biodiversity by implementing sustainable farming practices and actively participating in its conservation.

Management Approach

DBO's approach to environmental management is rooted in its unwavering commitment to responsible and sustainable operations. The Company's policies and procedures are designed to minimize its impact on the environment while promoting efficient resource management.

The QEHS policy serves as a core foundation of DBO's dedication to sustainable practices. It encompasses various aspects of operations, including product quality, employee well-being, and environmental and resource management. The policy ensures effective monitoring and allocation of resources required to uphold these standards.

Furthermore, DBO implements an Energy Management policy that serves as a guiding principle in our pursuit of sustainability. This policy actively drives our efforts to enhance operational sustainability. It focuses on optimizing energy consumption across all aspects of our operations by reducing fuel usage, implementing improved process control measures, conducting regular maintenance, and conducting periodic audits. Additionally, DBO is dedicated to promoting environmentally friendly energy practices and incorporating modern, energy-efficient design concepts into all our new projects.

To this end, DBO conducts regular HSE audits and independent reviews of its environmental performance to ensure compliance with globally benchmarked standards.

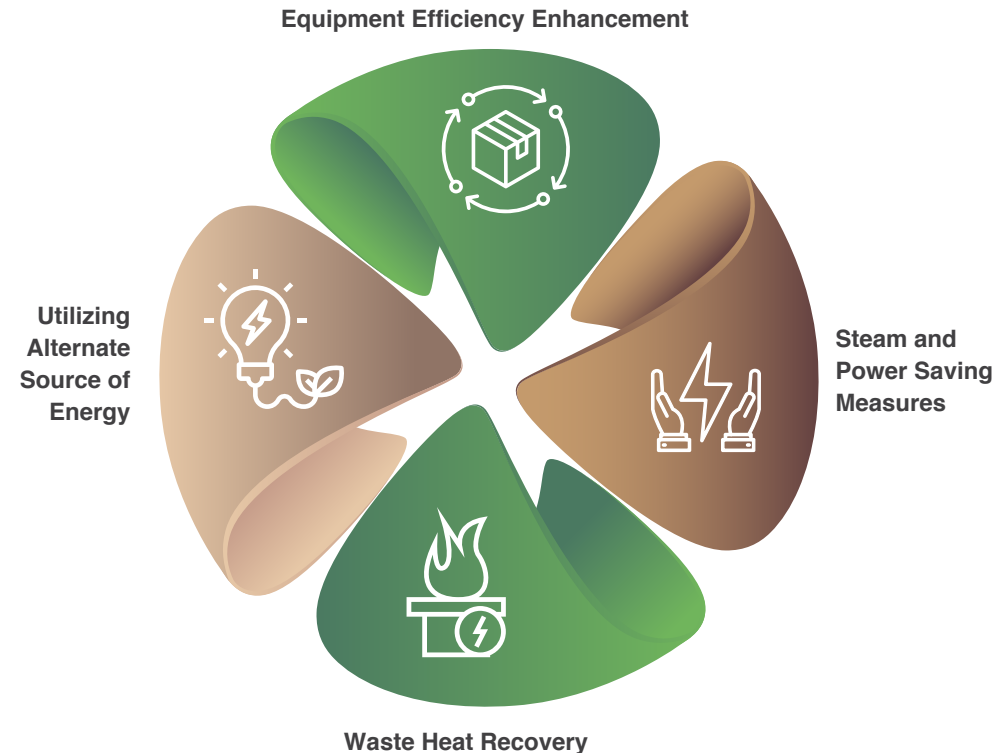


Energy & Emission Management

Energy Management

At DBO, we prioritize efficient energy usage to enhance the agility, resilience, and competitiveness of our operations. Besides, effective utilization of energy resources helps us drive sustainable growth and success thereby maximizing value for our stakeholders.

During the reporting period, we made significant strides in our pursuit of this objective by implementing various measures to enhance efficiency and conserve energy.





I. Equipment Efficiency Enhancement:

Under this category, we focused on improving the efficiency of our equipment by replacing old and inefficient components. The measures implemented include:

1. Replacement of motors, panels, transformers, and auxiliaries: We identified and replaced outdated and inefficient motors, panels, transformers, and auxiliaries with newer and more efficient alternatives. This upgrade has resulted in improved equipment performance and reduced energy consumption.
2. Installation of efficient turbine systems: We installed a new efficient turbine system to optimize power generation. Additionally, we converted an existing Condensing turbine into a Back Pressure turbine, enabling us to maximize energy conversion and efficiency.



II. Steam and Power Saving Measures:

To conserve steam and power, we implemented the following measures:

1. Installation of steam and power saving equipment: We installed equipment such as Robert type body, mechanical circulators, and melt concentrators for Brix Concentration. These additions enable us to save steam and power during our processes, resulting in reduced energy wastage.
2. Use of Variable Frequency Drive (VFD) on AC motors: By implementing VFDs on AC motors, we can optimize energy consumption by adjusting the motor speed according to the load requirements. This measure has led to energy savings and improved operational efficiency.



III. Waste Heat Recovery:

To utilize waste heat energy effectively, we focused on waste heat recovery through the following initiatives:

1. Installation of energy-saving equipment: We installed energy-saving equipment, including Vapour Line Juice Heater, Falling Film Evaporator, and Cigar System. These systems capture and utilize waste heat energy generated during our processes, thereby reducing energy losses and enhancing overall efficiency.
2. Boiling by 3rd effect vapour in Raw Pan: By utilizing the 3rd effect vapour in the Raw Pan instead of the 2nd vapour, we maximize the utilization of waste heat energy. This adjustment optimizes our boiling process and minimizes energy wastage.



IV. Utilizing Alternate Sources of Energy:

To reduce our reliance on conventional energy sources, we implemented the following initiatives:

1. Replacement of sodium and mercury lights with LED lights: We replaced traditional sodium and mercury lights with energy-efficient LED lights. This transition has led to significant energy savings and reduced maintenance costs.
2. Installation of solar lights: We installed solar lights in appropriate areas, harnessing the power of renewable energy sources. These lights operate independently of the main power grid, contributing to our overall energy conservation efforts.

In the fiscal year 2022-23, we made a substantial capital investment of INR 23.09 Crores in energy conservation equipment, aiming to yield significant energy and fuel savings and reduce production costs. We continue to evaluate and explore additional opportunities for further improvement in the future, aligning ourselves with the latest advancements in energy conservation and efficiency-enhancing technologies. To ensure ongoing compliance with global standards and evaluate the effectiveness of our initiatives, we are conducting regular audits.



Steam Saving Initiative

The Meerganj unit has undertaken a significant initiative aimed at reducing steam consumption in the sugar manufacturing process. Steam plays a crucial role in the transformation of cane juice into crystal sugar. However, steam usage accounts for a significant portion of the production cost, primarily derived from bagasse or other fuel sources. By decreasing steam consumption, the cost of sugar production can be effectively reduced.

DBO Meerganj unit has consistently reduced year on year steam consumption, with ~23% over the past 5 years. To achieve further improvements, the unit has set an ambitious target to reduce steam consumption by up to 25%.

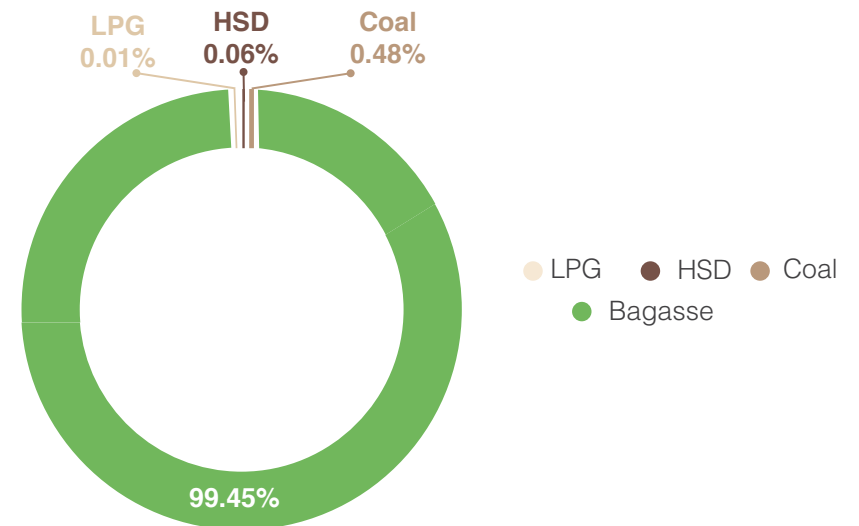
To realize the objectives of the program, various steam saving devices have been installed during the off-season of 2022. Notably, the most prominent device installed is the Falling Film Evaporator, covering an area of 5000 m².



Renewable Energy Consumption

DBO is a pioneer in the generation of renewable energy from sugar by-products, we are energy self-sufficient, producing enough electricity from sugarcane bagasse to power all our facilities. With 3 co-generation plants of a total 95.5 MW installed capacity, we meet our energy requirements and supply surplus power to the grid. Presently, about 40% of the total power generated is supplied to the grid in Uttar Pradesh.

Energy Consumption



Green Data Centers

DBO has undertaken substantial initiatives to enhance the energy and material efficiency of its IT infrastructure and workplace services also. Initially, we decided to outsource our data center operations to environmentally friendly data centers, which has yielded impressive results in reducing our carbon footprint. Additionally, we have introduced a strategy that aligns the operation of our Development and Quality Servers with their actual requirements, leading to significant energy conservation. Through these measures, our primary goal is to maximize resource utilization while minimizing waste, thereby fostering a sustainable and environmentally conscious work environment.



Emission Management

Climate change significantly impacts sugarcane production in India, higher temperatures and altered rainfall patterns adversely affect the growth and development of sugarcane crops. These changing climatic conditions, characterized by increased heat stress and water scarcity, lead to decreased yields and lower sugarcane quality. The shifting rainfall patterns disrupt the phenological stages of sugarcane, resulting in reduced durations of vegetative and reproductive growth phases. Furthermore, irregular, and inadequate rainfall distribution negatively impacts water availability for irrigation, further compromising crop productivity. These climate-induced disturbances present considerable challenges to the sugarcane industry in India, including fluctuating raw material availability and quality, elevated operational expenses, and diminished profitability.

We, at DBO, are committed to addressing the pressing issue of climate change and actively working towards reducing our emissions. As a responsible corporate entity, we recognize our role in contributing towards national and global goals to achieve net zero emissions.

Since the company produces enough energy to meet the in-house energy requirements, primary contributors to direct greenhouse gas (GHG) emissions within our operations consist of the mobile combustion of fossil fuels, specifically diesel and petrol used in vehicles and equipment, as well as residual emissions resulting from stationary combustion sources, such as coal utilized in distilleries and diesel in company-owned equipment. DBO aims to set a Net Zero target for absolute Scope 1 + 2 emissions and will also account for Scope 3 emissions (relevant categories).

Scope 1 Emissions	Unit	2022-23
Coal used for steam and/or power generation	MTCO ₂ e	4,005.45
Diesel used by company-owned vehicles and equip-ment	MTCO ₂ e	409.70
LPG used in stationary combustion equipment	MTCO ₂ e	45.97

Emission factors are used to calculate emissions for all direct emission-related activities as per IPCC guidelines for GHG inventories (2006).

The company strategically leverages the banking provision offered by Uttar Pradesh Power Corporation Limited (UPPCL) to store surplus renewable energy. As a result, we are able to efficiently utilize renewable energy during the inter-harvest period when there is no production of bagasse. As a result, the Company has zero Scope 2 emissions.

Case Study: Bagasse Yodha Project - Ensuring Sound Economic System of DBOL

In an effort to reduce energy losses and bagasse wastage, the Bagasse Yodha Project is currently being initiated with the vision of ensuring a sound economic system for DBOL. The mission of the project is to save bagasse and identify and reduce energy losses. The project is divided into four stages, which are as follows:

Stage 1



Identification of Scopes of Energy Saving

In this stage, the Bagasse Yodha team identifies the areas of energy saving. The team focuses on areas such as the physical loss of bagasse, physical loss of steam and condensate, boiler performance, pumps, and fans. A comprehensive survey is conducted on bagasse spillage, steam leakage, and temperature surveys for radiation and convection losses in all three units: Asmoli, Meerganj, and Mansurpur.

Stage 2



Training

During this stage, the Bagasse Yodha team provides training for performance testing of equipment such as boilers, pumps, and fans. The training is facilitated by an external agency named Energy Audit, which specializes in the major scope areas of equipment, namely boilers, fans, and pumps. Energy audit instruments are utilized to enhance the effectiveness of the training.

Stage 3



Performance Tests and Data Collection

This stage involves organizing a six-hour boiler efficiency test in all three units (Asmoli, Meerganj, and Mansurpur) with the assistance of a flue gas analyzer. The Bagasse Yodha team also collects data on physical loss in bagasse, steam leakage, and insulation surveys. The aim is to gather comprehensive information on the current state of the energy losses and identify areas for improvement.



Stage 4



Rectification of Problem Areas Identified

During this stage, the Bagasse Yodha team conducts a thorough survey to identify the physical loss in bagasse, steam leakage, and insulation issues. Following the survey, the team engages in discussions with officials from different sections. Problems that can be rectified while the plant is running or during scheduled stoppages are addressed accordingly. Several proposals for bagasse saving are currently under discussion with senior authorities, and the implementation of these proposals will take place during the off-season.

Conclusion

The Bagasse Yodha Project has been successful in achieving its vision of ensuring a sound economic system for DBOL. Through its efforts, the project has effectively saved bagasse and reduced energy losses. Moreover, the efficiency of the equipment used in the manufacturing process has been significantly improved. The Bagasse Yodha Project can serve as a model for other sugar manufacturing companies facing similar challenges, offering valuable insights and strategies for management.



Air Emissions

The bulk of DBO's air emissions are generated by its boilers, this process causes the emission of pollutants such as oxides of nitrogen, sulphur, particulate matter, and Volatile Organic Compounds (VOCs). These air emissions could potentially impact our employees and the surrounding communities.

We are committed to keeping these emissions well below the standards set by the Air (Prevention and Control of Pollution) Act, 1981, as well as the Environment Protection Act, 1986. To address this concern, DBO regularly measures and monitors air quality and has implemented various control mechanisms, including wet scrubbers, electrostatic precipitators, and bag filters, within the bagasse-fired/slop-fired boilers in order to mitigate air pollution.

Parameter	Unit	FY 2022-23
TPM	mg/Nm3	55
SOx	mg/Nm3	23
NOx	mg/Nm3	36





Water Stewardship

Water is an essential and rapidly depleting natural resource that holds great importance for our business operations. Recognizing the impact of our activities on this vital resource, water stewardship is a top priority for our company.

Sugar mills have the potential to become net water producers, exporting the water they receive for alternative purposes and possibly reusing it. However, practical limitations hinder the full realization of this concept. Around 70% of sugarcane consists of water, which is extracted during the milling process to obtain sugar water from the fibrous pulp called bagasse. This liquid is then processed to separate sugar and used for steam production and electricity generation. However, additional water from groundwater sources is needed due to the insufficient water density in the cane.

To address this challenge, we allocate a significant portion of our budget to invest in advanced ETP technologies. This investment enables efficient water treatment and reuse in accordance with government regulations.

The water generated from the Sewage Treatment Plant (STP) undergoes thorough treatment and is primarily used for irrigation purposes. All remaining water is released in full adherence to the regulatory standards mandated by the UP-Pollution Control Board (UPPCB).

Through consistent and strategic investment in advanced Effluent Treatment Plant (ETP) technologies, our organization is committed to seeking innovative solutions that can significantly enhance our water stewardship practices. Our focus extends beyond mere adherence to regulatory compliance, as we actively strive to conserve water resources and promote sustainability across all aspects of our operations. As part of our efforts, we have successfully implemented a Bio Anaerobic, Bio Digester at our Effluent Treatment Plant. This technology enables us to efficiently break down organic matter in the wastewater, resulting in improved treatment efficiency and reduced environmental impact. Additionally, we have incorporated a Condensate Polishing Unit (CPU) into our system, which plays a crucial role in maximizing water recycling and minimizing water wastage.

In line with our commitment to sustainable practices, our distillery operates on a zero liquid discharge (ZLD) technology approach. This means that we have implemented measures to ensure that there is no liquid waste discharged from our operations. Instead, we utilize 100% concentrated spent wash as slop in the Incineration Slop Boiler. By doing so, we not only eliminate the need for liquid discharge but also make efficient use of the

waste generated during the distillation process. This integrated system allows us to achieve optimal resource utilization and minimize our environmental footprint, aligning our operations with the principles of circular economy and responsible water management.

To ensure effective water management, we conduct regular water audits to monitor usage and discharge, enabling us to identify areas for conservation and reduce wastewater generation. We prioritize compliance with water-related regulations and guidelines, reflecting our dedication to responsible water management practices.

Parameter	Unit	2022-23
Water Withdrawal	M3	33,54,107*
Water Discharged	M3	6,84,865
Water Consumed	M3	26,69,242
Water Withdrawal Intensity	KL/MT of Cane Crushed	0.78
Water Consumption Intensity	KL/MT of Cane Crushed	0.62

**Includes Produced water from Cane (~70%)*



• Case Study: Anaerobic Biodigester •



In order to optimize our water effluent systems, we have recently undertaken the implementation of a “Upflow Anaerobic Sludge Blanket (UASB) Reactor “ at our Asmoli Unit, with a substantial capacity of 3600 m³. This anaerobic bio-digester augments our capacity to effectively treat the complete range of effluent produced during sugar processing and distillation operations, resulting in effluent levels well below the stipulated guidelines set by the Central Pollution Control Board (CPCB).

We have implemented rainwater harvesting systems across our operations to capture and store rainwater for various uses. This helps conserve water resources and reduces our reliance on groundwater, thereby contributing to our sustainability goals. Moreover, we have established a water recycling and reuse system, which treats and repurposes wastewater generated from our operations. These initiatives significantly reduce our groundwater consumption and promote the reuse of plant water.





Waste Management & Circularity

From DBO's perspective, no by-product generated during our manufacturing process is regarded as "waste." Instead, we are committed to embracing the principles of the circular economy, which involves converting industrial waste into valuable resources like electricity and organic fertilizers. This approach allows us to establish a sustainable industry model that promotes positive outcomes.

Following the extraction of sugarcane juice for the production of sugar and ethanol, a sustainable biofuel, our units effectively harnesses the bagasse byproduct to generate renewable electricity through cogeneration processes.

Furthermore, we ensure zero liquid discharge from our distillery by utilizing spent wash, another byproduct of ethanol production, as a fuel in specially designed slop incinerators.

In our commitment to environmental responsibility, we repurpose press mud, boiler ash, and ETP sludge as organic fertilizers. These fertilizers are made available to farmers at a subsidized price for agricultural purposes. This not only aids in the reduction of greenhouse gas emissions but also significantly diminishes the need for nitrogen fertilizers.

Circularity in Operations



Waste Generated

Parameter	Unit	FY 2022-23
Hazardous Waste	MT	197
Non - Hazardous Waste	MT	24,62,241

Waste Disposed

Parameter	Unit	FY 2022-23
Hazardous Waste (disposed)	MT	3,615
Non-Hazardous Waste (disposed)	MT	1,74,478

The hazardous waste produced at our manufacturing facilities is appropriately managed and disposed in accordance with local legal regulations. As for non-hazardous waste, it primarily comprises of metal scrap, polypropylene bags utilized for packaging purposes and plastic drums. This waste is responsibly disposed of by engaging authorized recyclers.



Case Study: Asmoli Distillery – Zero Liquid Discharge

As part of our water preservation initiatives, we have successfully implemented an advanced Condensate Polishing and Waste water Recycling system with a capacity of 4500 M3 at our Asmoli Unit which is equipped with advanced Anaerobic Digester system ICX (Internal Circulation Reactor). The purpose of this advanced Condensate Polishing and Waste water Recycling system commissioning is to effectively manage and treat the total effluent generated from distillery operations.

The system is designed to encompass anaerobic effluent treatment, featuring high overall biomass levels and concentration, thus optimizing its treatment capabilities. Within this system, the processed water is efficiently recycled for various industrial purposes, significantly reducing the need for groundwater extraction. This sustainable approach aids us in achieving the esteemed Zero Liquid Discharge (ZLD) status.

Moreover, our ICX system is equipped to handle high volumetric loading rates of industrial wastewater, enabling compliance with stringent effluent norms. Concurrently, the system harnesses the generation of biogas, providing an additional environmentally friendly benefit.

In summary, the successful implementation of the 4500 M3/Day Capacity Condensate Polishing Unit (CPU) system at our Asmoli Unit represents a significant step forward in our commitment to water conservation, sustainable practices, and responsible industrial operations.





Biodiversity

DBO recognizes and values the significance of preserving biodiversity. In line with this commitment, the company organizes frequent sensitization sessions for growers, aiming to advocate a range of sustainable agricultural practices that minimize environmental impact during sugarcane production and foster biodiversity.

One aspect of the company's advocacy involves encouraging the adoption of natural fertilizers and pesticides, thereby reducing the utilization of harmful chemicals that pose a risk to ecosystems. Additionally, DBO promotes the implementation of crop rotation, a technique that preserves soil fertility, prevents nutrient depletion, and ultimately nurtures biodiversity within the agricultural environment.

In addition, DBO has taken proactive measures to establish green belts around its sugar factories. These green belts serve as protective buffers and contribute to the growth and development of diverse plant and tree species. By creating these natural habitats, the company actively supports the local ecosystem and encourages the presence of native flora and fauna. DBO plans to set target for carbon sequestration through planting trees.

DBO understands that preserving biodiversity extends beyond its immediate operations, and as a responsible corporate citizen, it actively engages with local communities. Collaborating through partnerships and initiatives, DBO works alongside stakeholders to enhance biodiversity conservation efforts. This collaborative approach includes joint plantation drives and the promotion of sustainable land management practices in the surrounding areas. By involving local communities, DBO seeks to create a positive and lasting impact on the ecosystems beyond its direct influence.

To ensure the selection of appropriate plant species, DBO follows the guidelines set forth by the Central Pollution Control Board (CPCB). In consultation with the local District/ Divisional Forest Officer (DFO), DBO has planted a diverse range of species, including Neem, Mango, Java plum, Orchid, and Chinaberry, among others. These carefully chosen plant species not only contribute to biodiversity conservation but also offer various ecological benefits.

Although our manufacturing sites are not situated in regions of significant biodiversity importance, we remain committed to upholding the highest environmental standards at all of our facilities, regardless of their locations. Furthermore, we consistently strive to comply with all applicable environmental laws to ensure ongoing adherence to environmental regulations.



• Miyawaki Forest •

As a part of the green belt, we have developed approximately 5,000 m² of area by using the Miyawaki forest development model. Altogether, around 10,000 saplings were planted in FY2023, in and around the manufacturing units of Asmoli.

A technique introduced by Akira Miyawaki, a Japanese botanist, to build self-sustaining dense mini forests comprising only native tree species, the Miyawaki method has revolutionized the concept of urban afforestation. The approach ensures 10x increase in growth rate and 30x increase in density than the standard model of plantation.

The Miyawaki model involves planting 2-4 trees per sqm, creating a dense grid that helps lower the temperature in concrete heat islands. After just three years of maintenance, including watering, de-weeding, and mulching, the forest becomes self-sustaining. The model has been proven to increase biodiversity, self-sufficiency within a defined time, and reduce air and noise pollution.





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