

# LEADERS PIVOTAL TO GROWTH

Abhijit Pati CEO and Director, Bharat Aluminium Company Limited (BALCO)

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## **EDITOR'S NOTE**

What many entrepreneurs and successful business owners realise is that many times the market doesn't exist but has to be created. The business owners covered in this issue have taken heed of the advancements in technology, need of the people and developments abroad or in big cities and taken the risk to start their ventures in Central India. Thanks to their business acumen and strategic moves, they are transforming the lives and livelihood of smaller urban and rural areas. Their tech-driven solutions make their businesses more sustainable and cost-effective and has resulted in their companies flourishing and putting them on the larger Indian map.

By having an integrated manufacturing to finishing process, Real Ispat & Power Ltd, co-founded and directed by Umesh Agrawal, has been able to control quality across all parameters and also introduce innovations to deliver products like its GK TMT (thermos-mechanically-treated) rebars. Jubin Shah, Founder and Director, Ecorex, has revived interest in Central India for autoclaved aerated concrete (AAC) blocks in construction—a more ecofriendly, sound-and-fire-resistant alternative to traditional red clay bricks.

Bharat Aluminium Company Ltd (BALCO) has been single-handedly spearheading aluminium production

and consumption in India. Under the leadership of its current CEO and Director, Abhijit Pati, BALCO has positioned aluminium as the "metal of the future" and also emerged as an inclusive workplace for the younger generation. The family-run Hira Group has today diversified into seven verticals of steel, ferro alloys, cement, mining, real estate, technology and renewable energy. It's all-round development is a result of its holistic growth and green practices. Sarda Energy & Minerals Ltd is making electrifying progress through its waste to wealth concept. Narendra Goel, Managing Director, Shri Bajrang Power and Ispat Ltd (SBPIL) of Goel Group, has earned a respectable name in the steel and power industry with his strategic prowess and execution capabilities. Anil Nachrani laid the foundation for Sunil Group of Industries and drove it to a leading position in the iron and steel industry. Aranya Paridhi, founded by Narayan Bathwal, is a start-up using IoT to develop automatic solar photovoltaic-based security fences for protecting villages and farms from marauding wildlife. Mahendra Sponge and Power Private Ltd, the flagship company of Mahendra Group, is quenching the growing iron and steel demand in the country, ably lead by Managing Directors Manoj Kumar Agrawal and Mahendra Agrawal.

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and Forbes India journalists were not involved in producing this supplement.



Jubin Shah Founder and Director, Ecorex



Abhijit Pati CEO and Director, Bharat Aluminium Company Limited (BALCO)



Dinesh Agrawal Executive Director, Godawari Power and Ispat Ltd.



Manoj Kumar Agrawal Managing Director, Mahendra Group



Pankaj Sarda Jt. Managing Director, Sarda Energy & Minerals Limited



Mahendra Agrawal Managing Director, Mahendra Group



Anil Nachrani Founder, Sunil Group of Industries

Narayan Bathwal

Aranya Paridhi

Founder.

## **Raising the Bar in Steel Products**

Real Group's Flagship Company Real Ispat & Power Ltd (RIPL) is setting the benchmark for the steel industry through integrated manufacturing from ore to finished steel and continued innovation.



#### **Umesh Agrawal,** Co-founder and Director, Real Ispat & Power Ltd (RIPL)

ince Real Group's inception in 1991 in Raipur, Chhattisgarh, when it forayed into the cement and steel trading market, Real Ispat & Power Ltd. (RIPL) has been striving for excellence. It has carved a niche for itself in the steel industry through quality and innovation. Its unique focus on having an inclusive culture has also allowed it to build good relationship with its clients, providing them not just quality products but unparalleled service and growth. The Group first stepped into manufacturing in 2001, following the acquisition of Gaurav Krishna Ispat (India) Private Limited. Its flagship company came to life in 2006 as Real Ispat & Power Limited, which was its first integrated steel and power unit. From ore to finished steel, it procures high quality raw materials and creates best in class products of highest standards.

To keep its expansion momentum, RIPL acquired some sick and underperforming units and successfully turned them around into profit making units under the able leadership of Mr. Umesh Agrawal. He has been the State Chairman of CII in the past, and is actively associated with Industry Associations like CGSIMA, CGPPA etc. This apart, he is also spiritually well accomplished and is an adrent follower of ISKCON.

#### Focus on setting quality benchmarks

The Group does not shy away from spending on R&D in technological advancements so that it can continue to churn out quality products. This has brought it many firsts in the industry in India, such as its direct hot charging of wire rods and TMT steel products. Real Group has been felicitated by the Ministry of Steel, Government of India, and the United Nations Development Programme, for the same. Its group companies have also won the Gold and Silver Awards in Secondary Steel Sector from the Ministry of Steel, for quality products, sustainable development, energy efficiency and a host of CSR activities.

#### **Flagship products**

GK TMT (thermo-mechanically-treated) Rebar and Real Wire are the Flagship products of Real Group. Both the products are manufactured at the Integrated Steel Plants of the Group wherein high-grade iron ore and pellets, are processed into sponge iron and then converted into Billets before being finally rolled into TMT Bars and Wire Products using direct hot charging mechanism. The company is able to provide the best quality products due to total quality management (TQM) in the manufacturing process, coupled with its strict lab testing and effective control measures. Thanks to its quality, less steel is required in construction, making the company's products cost-effective for the client and environment-friendly for the community at large.

#### **Real Care Foundation**

Real Group has taken significant steps to dispel the distrust being held against the steel industry by the environmentalists for long. The Group established Real Care Foundation to take forward its CSR initiatives in an organized and focussed way. It opened the Chitvan Old Age Home in Raipur, where senior citizens can continue living a quality life with enough activities that keep them a thriving part of society. It established Real Skill Academy, a vocational training centre that offers free training to 500 students annually, from 12 nearby villages, and also helps them with job placement. It has also given the city of Raipur, an Auditorium and Library "Vrindavan", and also renovated government schools and other establishments in the nearby areas of Raipur. The Group also takes care of the educational needs of poor students from more than 10 villages through scholarships and by providing school supplies to 200-250 schools in Chhattisgarh and Madhya Pradesh. It also provides financial support to persons in need of medical assistance. This apart, it also organizes regular health checkup and medicine distribution camps in the areas surrounding its Plant at Raipur. The Group also works towards providing safe drinking water, environment sustainability and overall development of many nearby villages of Raipur.

The Group's flagship company aims to enjoy complete customer satisfaction by adopting a zero-tolerance policy in its product quality and service. It also aims for its products to be as cost-effective and processes to be as efficient as can be. The Group's future goal is to maintain its status as the leader in the industry through continuous improvement in manufacturing technologies and focus on sustainable development.

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### **Paving the Way for Eco-Friendly Future**

Jubin Shah, Founder and Director, Ecorex, is changing the landscape of the construction sector in India by introducing AAC blocks, an eco-friendly and sustainable alternative in construction materials.



t was in conversation with a renowned architect from India that Jubin Shah was informed about the importance of building materials in construction, which really resonated with him. This spurred him to research new technologies in the market, and he happened upon autoclaved aerated concrete (AAC), a 100-yearold technology that has only recently stared gaining traction in India but was still pretty much restricted to metro cities. Jubin realised about the properties of AAC blocks and its potential to disrupt the traditional construction material market, and so decided to make it his company's first flagship product.

#### **Carving a mark**

Recognising the eco-friendly and durable nature of AAC blocks and wanting to introduce this more superior and nature-friendly construction material in tier-II cities, in 2012, Jubin Shah incorporated Ecorex in Chhattisgarh, where he started the first and the largest manufacturing plant of AAC blocks.

Since inception, Ecorex has spread its wings across the country, carving a niche for itself by changing the way walls are being built in India.

#### Initial challenges

The journey to getting builders to adopt AAC blocks as the norm was a challenging one. As with all new technology, the first barrier is to change the mindset. Taking it one step at a time, the company started off by approaching housing development projects. It took numerous meetings, demonstrations and perseverance to gain momentum for AAC blocks to be integrated into the construction ecosystem. Over the years, Ecorex has been at the helm of

the R&D, manufacturing and development of AAC block systems across Chhattisgarh and India as a whole.

#### **Creating an Impact**

Ecorex has made an impact on homes, educational establishments, commercial buildings, and government establishments as well. Some iconic projects in Ecorex's portfolio include Institutions like IIM Raipur, IIT Bhilai, AIIMS, IIIT, 8 Medical Colleges, 3 Cancer institutes and 30 Premium residential projects in India. It has also played a significant role in the development of Naya Raipur, where most of the buildings have used modern building material like AAC, serving nearly 40 percent of the overall construction of the new city.

The company has also made its impact felt with its technology in rural areas. It has helped build around 3 lakh toilets under the Swachh Bharat Mission across Central India. To date, Ecorex has built around 30 million square feet of construction using AAC blocks and has also helped build around 10,000 homes as part of the Pradhan Mantri Awas Yojana affordable housing scheme.

#### **Construction sector in India**

Valued at over USD 126 billion, the construction industry in India contributes to 9% of the GDP in India and employs 51 million people. It is for this reason that the finance ministry is providing funding to many infrastructure projects to kickstart India's economy post-Covid-19. This includes the National Bank for Financing Infrastructure and Development (NaBFID) Bill 2021, to set up its own development finance institution that will help fund over 7,000 infrastructure projects in the National Infrastructure Pipeline (NIP). Under NIP, investments are expected to reach USD 1 trillion by 2030. This includes a spending of 16% on urban infrastructure. Already Rs.62,009 crores have been earmarked for the government's Swachh Bharat Mission in urban places. Under the Smart Cities Mission, 5,956 projects are planned, of which 2,734 have been completed as of June 2021. The net office space across the six largest cities in India stood at 31.9 million sq.ft in 2020.

#### Advantages of AAC blocks in construction

The term AAC stands for Autoclaved Aerated Concrete blocks and they are replacing clay bricks

in a big way. The manufacturing of AAC blocks is carried out with great expertise. They are formed as a reaction of aluminium metal with blended proportions of lime, cement, gypsum and fly-ash. It's then heated with steam at 210 degrees centigrade to accelerate the strength gain process where it attains a strength to weight ratio greater than M-150 concrete while also being lightweight. The aeration effect makes AAC blocks so light that they float on water. Typical density of AAC blocks is around 650 kg/m3. Lightweight means lower reinforcement steel and economical construction. Walls constructed with AAC blocks maintain distinct internal and external temperatures, providing superior thermal insulation and reducing the cooling loads of a building. The blocks also provide higher sound-resistant properties with a sound transmission class rating of 44. This makes them suitable for use in 8-inch-thick sound barrier walls along busy roads. No water is required to cure AAC blocks, another great environment-friendly feature. Water is only used when curing the mortar joints, and this too can be prevented by using Ecorex block jointing mortar, that does not require any water. The material used in AAC blocks is inorganic and not combustible. Depending on the thickness of a wall, the blocks are fire-resistant for 2-6 hours, which makes them suitable for areas where fire safety is recommended.

#### Lightweight Concrete is the way ahead

The world is changing rapidly, and for the larger populace to adopt any change, there are three stages they go through.

The first is Resistance. We remember how moving from QWERTY to touch screens was a drastic and long-drawn change. Moving from clay bricks to AAC blocks poses similar challenges. We have been using clay bricks since past 5000 years. you will be surprised that the bricks found in the archaeological excavation sites of Mohen-jo-daro and Harappa look quite similar to what is still being used in India. It won't be an exaggeration to say that the clay bricks run in the genes (as well as jeans) of our masons.

The second stage is Evaluation. Why should we replace clay bricks? Well, nature takes 500 years to convert one inch of rock surface into topsoil. And we remove this topsoil within a



formed as a reaction of aluminium metal with blended proportions of lime, cement, gypsum and fly-ash. It's then heated with steam at 210 degrees centigrade to accelerate the strength gain process where it attains a strength to weight ratio greater than M-150 concrete while also being lightweight."



Due to growing interest in modern, progressive yet sustainable development, engineers and architects are motivated more than ever before to choose materials that are more sustainable"

few minutes and make clay bricks out of it; exposing the barren land, resulting deforestation, surface water runoff and loss of the cultivable land. The open kilns of brick baking also lead to high air pollution. Every cubic meter of clay bricks emits 1.65 tons of CO2 into the atmosphere.

On the other hand, AAC when used in masonry scores high on all points like economy, thermal efficiency and adequate strength for the purpose of masonry. It is highly lightweight and thermally insulating concrete and is being used all over the world since the past 100 years. Today the AAC industry is growing rapidly in Asia due to strong demand in real estate. India, China, Far East and the Middle-East are the booming markets in terms of AAC manufacturing and usage.

This brings us to the final stage – Acceptance, which is where we are today. With the Indian infrastructure space still in its nascent stages—70% of 2030 urban infrastructure still to be built—the real estate sector in India does not need to reverse much damage but can instead reduce its carbon footprint by switching to more sustainable materials, like AAC blocks, during construction.

To date, Ecorex has built around 30 million square feet of construction using AAC blocks. The company has saved around 80 million litres of water and recycled around 1 million tons of fly ash and done its bit to bring down carbon emissions. Ecorex's vision is to transform the construction and infrastructure sector through superior yet sustainable and cost-effective materials, ushering in a new era of sustainable, eco-friendly yet long-lasting infrastructure, buildings and other establishments.

#### http://www.ecorex.in/

### **Spearheading Aluminium Revolution in India**



#### Abhijit Pati CEO and Director, Bharat Aluminium Company Limited (BALCO)

**S**illustrious three decades in the aluminium manufacturing industry, and currently leading Bharat Aluminium Company Limited (BALCO), a group company of Vedanta Resources, as CEO and Director. Pati's position is a result of his resilience and his constant zeal for learning and bringing about a change in society.

#### **Foundation years**

Abhijit Pati is an alumnus of Calcutta University where he completed his bachelor's in chemical engineering with first-class honours and completed his MBA from International Management Institute, New Delhi. After his academic achievements, he went on to hold various roles and profiles in the aluminium sector. His zest to learn more and to implement state-of-the-art technology to augment change and progress catapulted him to higher posts in the aluminium manufacturing arena.

He began his journey as an engineer in Indian Aluminium Company (a subsidiary of Alcan, a major Aluminium Producer in Canada) in 1989. From there, he moved on to the Hirakud Plant of Hindalco, a flagship of the Aditya Birla Group of Industries, where he established himself as a frontline leader. In 2008, while serving the group as Vice President, he was offered the post of CEO of one of the world's largest Greenfield Aluminium cum Power complexes in Jharsuguda, Odisha, by Vedanta Group, a global natural resources giant and conglomerate. In 2015, he was elevated to the post of President and CEO of Vedanta Ltd.'s aluminium business, where he headed the world's largest single-location aluminium smelter at Jharsuguda for a little over four years. It was under his stalwart leadership that the complex at Jharsuguda entered the 'Million Tonne Club' of global aluminium producing companies.

From 2019 onwards, Pati has been acting as CEO and Director of BALCO, located in Chhattisgarh. Under his leadership, BALCO has achieved significant momentum and continues to deliver excellence. From greenfield projects to investing in innovation and emerging technologies, Pati's contributions have been behind BALCO's growth. Today, BALCO is among India's top producers of aluminium, one of the second-most important metals. BALCO produces

nearly 15% of the country's aluminium, which has helped establish India on a global metal forum. Pati's guidance has helped position aluminium as the "metal of the future," by producing best-in-class value-added products.

#### **Leadership principles**

For Abhijit Pati, "Organisation should nurture the wisdom and not the result alone. If you need sustainability in business, you need to be human first before being a boss." He is of the firm opinion that people are the biggest asset of any organization. A flagbearer for gender parity, he has been keen to appoint women in key leadership roles across functions. He has also implemented a combination of programmes that will recognise and mentor budding leaders, to empower the young workforce in his company. He has ensured successful implementation of Vedanta's various mentorship programmes such as Second Dimension, V Reach, V Lead, V Tech programmes aimed towards facilitating mentoring and leadership. Thanks to Pati's efforts, BALCO has emerged as a supportive work environment for young and women professionals, alike.

### Utilising technology for innovation and safety

Pati's aspirations have always been progressive and his bent towards using advanced technology to bring in a sustainable change is a breath of fresh air. He strongly advocates the need for innovation and technology in all gamut of operations at BALCO. Continuing with this vision, smart automation has been integrated in BALCO's plant operations. To cease any manual intervention, the company has also installed end-to-end Digital Dashboards to collate real-time data and trend monitoring of power plant operations, ensuring digitalization of the entire process. The digital dashboard plays a crucial role in





providing access to historical data and digitised reports, reducing down time and thereby enabling quick decision-making and analysis without the need for manual intervention.

Pati has also left no stone unturned to secure safety of BALCO's employees and assets. He has implemented the integration of various technological advancements into the security operations at their plant, which has been transformational in ensuring safety during the pandemic. Under his leadership, BALCO got its own state-of-the-art automated and highly sophisticated Centralised Security Operations Centre (CSOC), which has several cutting-edge security solutions, from edge-based security analytics for incident detection and response to management of security resources on the ground, besides enablement of intelligence collection. This has enabled security, traffic safety and supply chain security functions to utilise digital intelligence and data insights for better and agile decision-making.

#### Passion for community welfare

Pati is passionate about evaluating new ideas, safety, sustainability and conceptualization and execution of innovative technology solutions across verticals. His policies have made him a changemaker in the areas of corporate social responsibility, diversity and inclusion, and gender equality. Pati says, "The three Cs of life are Courage, Conviction and Commitment; without these, life is meaningless." Always passionate about working for the welfare of the community, during the COVID-19 pandemic, Pati helped steer BALCO's community development programs to focus their efforts on the health and safety of the resident communities around their plant, while ensuring their socio-economic status remained unfazed during this critical period.

As the pandemic raged globally and within the country, it was under Pati's able guidance from the onset of the pandemic that BALCO was able to provide excellent medical assistance to not just BALCO's workforce and their families but also to their retired workers, business partners and stakeholders, and community members in the entire region. Pati has ensured that BALCO emerges as a strong partner of growth and success for the community members.

#### Family man and businessman

Being a family man at heart, Abhijit Pati has strong morals to keep him grounded. He was always excellent in academics but ambitious enough to venture into the field of business. He is of the opinion that one must make time for both family and business. He believes that women in a family are the biggest contributors to a family's growth and success, and hence, we all must ensure that the women in our families, communities, and around the world are given an important chair at the decision-making table.

#### Awards and accomplishments

Pati has been lauded by various national and international bodies for his contribution to the aluminium manufacturing industry. He was felicitated with the Technological Excellence Award 2016 at the 20th National Conference on Non Ferrous Minerals & Metals for his significant contribution as a frontline leader in the turnaround and growth of several aluminium production centres in India.

In 2017, Abhijit Pati was named the Best CEO of the Year for his efforts to bring about the aluminium revolution in India as CEO of Vedanta Ltd., Jharsuguda. He was again named Best CEO of the Year in 2019 as CEO of BALCO. He has been recognised as the Most Promising Business Leaders of Asia '20–'21 by The Economic Times.

It has always been Abhijit Pati's dream to live a meaningful life. His advice to young entrepreneurs is: "Life is a journey of continuous learning and experiences that provide a meaningful window and fresh perspective towards the everyday life that we lead. It is crucial to not just exist but to live life in a way that is useful and meaningful and to serve a higher purpose of being the change that we want to see in the world."





### **Capitlising Natural Resources While Maintaining Green Practices**

Hira Group a steel and mining conglomerate based out of Raipur, Chhattisgarh, is carving a niche for itself as an admired power generation and mining company.



**Dinesh Agrawal,** Executive Director, Godawari Power and Ispat Ltd.

hat began as a family trading business, and made its foray into the cement sector in 1985, made a successful entry into the ferro alloys domain in 1987. Since then Hira Group has diversified into steel, sponge iron, mining, crushing, beneficiation, pelletization and technology, real estate, water conservation technology, power, steel, ferro alloys, etc. From 2013 onwards, the Group also entered the renewable energy industry and commissioned a first of its kind 50MW solar thermal power plant that will provide electricity to 2 lakh Indian homes. Another 70MW power plant is also in the pipeline. Today Hira Group holds ISO:9001:2008 certification for Quality Management System, ISO:14001:2004 certification for Environment Management System and OHSAS ISO:18001:2007 certification for Occupational Health & Safety.

#### **Respecting the environment**

One of the regular activities performed by the Group is the systematic plantation of around 20,000 plants each year. In partnership with the Government of Chhattisgarh, Hira Group has supported many plantation and greenery drives in Raipur district. Even its products are designed with a view to ensuring optimal and efficient use of natural resources. This includes its air-cooled condensing power generation system, which turns waste industrial gases into power. Its power plant, based on waste heat recovery, is the first plant in the world to be registered with the CDM Board, Germany, under the Kyoto Protocol. Also, Hira Groups' GPIL company is the first company in Chhattisgarh to receive Integrated Management System Certification by UKAS of UK and Swiss Accreditation of Switzerland and SGS India Pvt. Ltd.

#### A jewel of Raipur

Promoted by the Agrawal family of Raipur, where it is based, Hira Group is among the largest industrial houses in Central India. It was founded by JP Agrawal, its current Chairman, and is today under the leadership of BL Agrawal, its present Managing Director. Generation wise members of the family are also being trained to take on the leadership mantle. The Group is grateful to its home state to which it credits its success. Chhattisgarh has been a torchbearer for implementing new policies concerning biotechnology, solar, biodiesel, IT & ITES among others, which the Group gamefully and humbly adhered to. The state being rich in natural resources, including land, water and minerals, both the government and Group strive to make these resources available to all.

#### **Commitment to community activities**

One of its foremost principles has been to ensure that its business impacts the community in a positive way. It ensures considering the social value behind its day-to-day decision-making so as to achieve positive and sustainable outcomes in both business and society/environment. In 2004, the Group began its CSR activities, which have increased multifold with time. Through its CSR program, Hira Group has improved the quality of life in villages within its nearby vicinity through the construction of an approach road, organisation of medical camps, creation of drinking water provisions, and building of a temple.

#### Improving the quality of life

Apart from undertaking new initiatives to better the life of villagers surrounding the Group's base, the Group has also undertaken beautification projects like deep cleaning several ponds. Around 100 acre approx 50000 trees with 3 big ponds and few small pond created dense plantation being done with tree species suited for birds habitat. The Group's Udaan project sponsors the education of tribal children. To ensure long-term and future support for the youth of the region, the Group runs an ITI course on the steel and mining industry, wherein village students pursuing it can successfully enter this industry and thus, get gainful employment. One of the major initiatives shouldered by the Group has been its Akanksha project, which cares for mentally and physically handicapped children with the aim to improve their quality of life through shelter and bringing awareness in the society regarding their plight. Hira Group also invested big to bring up the country's seventh largest eye care institute, the MGM Eye Hospital. The hospital ensures treatment of BPL populace. Since its inception, it has treated approximately 2 lakh patients and conducted 25,000 eye operations.

Hira Group's vision is to become the most competitive integrated steel plants with diversified products, specialising particularly in the wire segment, all while upholding its green and environment friendly practices.

# **Of Electrifying Progress**

One of the Leading players in the Indian steel & ferro industry, Sarda Energy & Minerals Limited is geared to conquer newer territories.

**S**arda Energy & Minerals Limited (SEML) is a flagship company of Sarda Group Listed on NSE & BSE. Group has interests in Mining,Steel, Ferro Alloys,Thermal &Hydro-Power, Agriculture, Dairy, Investments,IT & Education. SEML is among the top 1,000 companies in the country. Incorporated in 1973, Sarda Energy& Minerals Limited is headquartered at Raipur.

The company was taken over as a sick unit with a meagre Steel Ingot making capacity in year 1978. Since then, it has continuously modernized, expanded, provided backward & forward integration from Coal & Iron Ore Mines to Rolled Products in its production facilities to become a leading steel & ferro alloys producer & exporter. Captive iron ore mine of the company boasts a reserve of 20 million tons. Recently, it also acquired two commercial coal mines, one of which is expected to be up and running in the current financial year.

One of the group companies is engaged in developing residential projects catering to lower and upper middle class. It has taken a prestigious commercial project in 75 acres in the heart of Raipur City by the name of Shri Ram Business Park.

The Group undertakes social engineering through its substantial work in the field of tribal education, health, dairy & agriculture. It believes in imparting fundamentally strong base & good value system in the young children, with this vision the group has donated two schools having more than 2200 students and is supporting more than 50 tribal schools in Chhattisgarh. Sarda Dairy, promoted by the group, has created rural infra to collect milk from more than 2000 farmers & procure cattle feed from more than 1000 farmers impacting more than 10,000 lives directly and indirectly. One of the groups vertical, is investing into Research & development of agriculture seeds & its manufacturing.

SEML is the first and only organization in the country to have exchanged forest land with a fully developed forest by planting more than million trees.

Sarda Group has ventured into the hydropower and currently operating three At the heart of Sarda Group is the belief that industry is our dharma. Through this philosophy, we touch thousands of lives and are responsible for their livelihood. Group attributes all its success to its people who have great sense of belongingness & responsibility."

Pankaj Sarda Jt. Managing Director, Sarda Energy & Minerals Limited

hydropower projects across Chhattisgarh, Uttarakhand, and Sikkim with capacity of about 165 mw as green power and about 50 mw in pipeline. Group has offices in Hong Kong and Dubai for international trade & to explore new business opportunities.

The IT company, GESCHAFT FORMULAE (SAP partner), is a profit center on its own, serving and managing the group SAP requirements as well as has esteemed external customers such as L&T metro, Essel Mining etc.

Sarda Group through its family funding invests in to emerging startups, late-stage growth companies & manages a large, diversified portfolio of publicly listed companies. Assets under management (AUM) of the fund is above 150 Million USD.

"Waste to wealth" is a concept adopted by the Group, which means that they responsibly utilize every piece of waste that they generate. At the heart of Sarda Group is the belief that industry is their dharma; through this philosophy, they touch thousands of lives and are responsible for their livelihood. Group attributes all its success to its people who have great sense of belongingness & responsibility.

We faced the worst ever global pandemic challenging people's livelihoods while severely impacting businesses, big and small. 'Unprecedented' became a part of our daily conversation. Thanks to the untiring efforts exemplified by thousands of frontline workers, first responders and medical professionals who battled the virus and put up a brave fight to contain the pandemic, round the clock.

At Sarda, our Priority was at fore to navigate safely and securely through the pandemic taking care of financial and safe wellbeing of our people.

-Kamal Kishore Sarda (Chairman & Managing Director)

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### **Strengthening the Nation One Steel Bar at a Time**

An exceptionally experienced businessman, Narendra Goel, Managing Director, Shri Bajrang Power and Ispat Limited (SBPIL) of Goel Group, has earned a respectable name in the steel and power industry with his strategic prowess and execution capabilities...

C Our vision is to make quality steel available to all sectors at affordable cost with a mission to make it a profitable business that serves its customer through efficient servicing, understanding, and cuttingedge products and value for business excellence, reliability, integrity, friendliness."

Narendra Goel, Managing Director, Shri Bajrang Power and Ispat Limited (SBPIL)

**N** arendra Goel noble actions speak louder than his words, his contribution to the nation's economic growth story is absolutely remarkable. Mr Goel has always thought ahead of the times and envisioned a better India. Along with manufacturing a host of steel products, he also owns captive power plants that utilize waste heat for the generation of electricity thereby reducing carbon footprints as well as the cost of power and fuel. Mr Goel has acted as Vice Chairman of ClI Chhattisgarh State Council, 2018-19 and Chairman, 2019-20, at an industry spokesperson level. Under Mr Goel's exemplary leadership, ClI has achieved great success with the collective efforts and support of the team members.

Established in 2002, SBPIL is one of the leading names in the integrated steel companies market situated in central India—Raipur, Chhattisgarh— dealing in iron ore pallets and beneficiation, and sponge iron production. The Goel Group has however established its noteworthy presence in several other sectors education, media, and frozen foods apart from mining and power (hydro and thermal).

Apart from manufacturing products under the brand name of Goel TMT and Goel Pipes the Company has been progressively expanding across the value chain of Wire Rods, Ferroalloys, SMS, TMT Re-Bars, Rounds, Binding Wire, HB Wire, Angles, Channels and Beams, Pipes, etc. A conglomerate with revenues over INR 3,000 crore, it boasts of manpower driven by experienced professionals and endowed with modern equipment to produce finished steel over 0.6 million tonnes per annum.

Being at the helm of organizational developments and finances of the company, Mr Goel has put his nearly three decades of experience to use in helping the company grow by manifolds. Under his visionary guidance, the company invented a state-of-the-art technology of direct rolling of hot continuous cast billet to produce TMT bars without any intermediated reheating arrangement. Taking pride in their environment friendly products, Mr Goel vouches for a customer-centric approach for making the business successful. "Our vision is to make quality steel available to all sectors at affordable cost with a mission to make it a profitable business that serves its customer through

efficient servicing, understanding, and cuttingedge products and value for business excellence, reliability, integrity, friendliness, and transparency," said Mr Goel.

#### **Renewable Energy Development Programme**

In addition to the 36 MW Hydro Power Project in operation another 45 MW Project is in advance stage of execution. In order to offset drawing of energy from state grid a 50 MW solar PV plant is on verge of completion.

#### **Goeld – The Frozen Foods Division**

In the frozen food segment, the company has introduced ready to eat/ ready to cook – Indian breads, snacks, and desserts.

#### **Deeds for the Society**

The Company's active CSR division focuses on education and health in the areas surrounding their industrial units to promote sustainable growth and development. The Company has extended its wholehearted support in terms of health insurance, medical support to employees and their families, and have also worked tirelessly towards following prevent measures amidst the pandemic.

#### Awards and Honours

- Sustainable Energy Development Award, 2016
- Energy Efficiency Award, 2015 and 2016
- Gold Certificate Secondary Steel Sector Award, 2016-17 from the Ministry of Steel
- Recognised by United Nations Development Programme Global Environmental Finance Unit, 2013
- SBPIL recognised by Ministry of Steel, Government of India in 2014 for inventing of 'direct rolling technology' in 2014, which would eventually help save INR 5,000 crore in foreign currency
- 12th Encon Awards, 2019
- National Energy Conservation Award from the Ministry of Power, Government of India for creating a benchmark in the steel rolling mills sector

# A Group for the Greater Good

The man at the helm of establishing and running a successful business group in the Indian Iron and Steel Industry sector, Mr Anil Nachrani is identified as a visionary par excellence...

**M**<sup>r</sup> Anil Nachrani laid the foundation Sunil Group of Industries and drove it to the position where it came to be identified as a market leader and one of the most successful operating segments in the Iron & Steel Industry. The Group is one of central India's largest conglomerates growing at a rapid rate year-on-year ever since its inception in 2004. Headquartered in Raipur, Chhattisgarh, the industrial plants of the company—pertaining to steel production, integrated steel plants, rolling mills, and captive power generation—are spread across Raipur, Raigarh, and Tamil Nadu

Over the years, Mr Nachrani has accumulated extensive experience in the iron and steel sector and has also served as the President of Chhattisgarh Sponge Iron Manufacturers Association for a significant number of years. Committed to innovative growth through personal passion, reinforced by a professional mindset; his forte lies in the deep understanding of the integrated industry and its commercial aspects.

The dedicated management at Sunil Group of Industries has been pushing the company's growth and has set up modern Captive Power Plants and Bio-mass Power Plant. This reverse integration has enabled it to meet the high-quality material requirements of the steel rolling mill, add carbon and alloy steel products to its portfolio, and facilitate manufacturing of premium-quality casting. Needless to say, the synergy of the backward integration process has added value in terms of quality and customer satisfaction.

#### **Moving Ahead**

Pivotal to the exponential growth of the Group, its management philosophy, and the vision to strive for excellence in every aspect—quality, cost, customer satisfaction, and setting benchmarks in industrial safety with zero accident status—gives it a strategic advantage in the industry.

The vision of building a unified brand to compete with international names of the industry pushes the Group to continuously invest in technological advancements and process integration in order to add value, produce better products, and foray into the international markets with planned exports of ferromanganese, structure products, angles, channels, etc. Our economy largely depends on natural resources, agriculture, and abundant manpower. Thus, I believe that if these sectors work in close integration with the Government's help, they can help elevate the nation from the clutches of poverty and unemployment to build a sustainable market and infrastructure for the common man."

> Mr Anil Nachrani, Founder, Sunil Group of Industries

Expanding its horizon for the better, the Group intends to venture into Green Power and Energy, which would help in reducing overall carbon footprint and pave the way for energy efficiency in this industry.

"We, as an industry, need to create and add value to all the lives we touch and our success depends on our customers' faith in us. Our strength lies in working closely with them to create value and trust, together with superior products and services. The philosophy of quality and commitment has enabled us to build a long-term sustainable relationship and rapport with our esteemed customers. We are dedicated to strategically expanding further in the steel sector, captive power, and green energy to grow in cohesion with our customers," said Mr Nachrani.

#### In the Present Day

Being rich in natural resources and minerals such as iron ore and coal, Chhattisgarh is one of the fastest-growing states in India. The development of the state in terms of employment, economy, infrastructure, and revenue all depend on the extraction and efficient utilization of natural resources.

In the current scenario, the industrial sector can be said to be in a state of recovery coping with the adverse effects of the pandemic with the due help of a loyal customer base and the government.

#### What a patriot in Mr Nachrani envisions for India...

Mr Nachrani wishes to see India become a developed country and he personally wants to be a significant contributor to the dream. "Today, India is world number 3 in iron and steel, and that itself speaks volumes about the importance of this industry in the growth of the nation. In the next few years, I wish to see it advance to the number 2 spot," said Mr Nachrani.

"Our economy largely depends on natural resources, agriculture, and abundant manpower. Thus, I believe that if these sectors work in close integration with the Government's help, they can help elevate the nation from the clutches of poverty and unemployment to build a sustainable market and infrastructure for the common man," added Mr Nachrani.

### **Transforming Agriculture Through IoT-Enabled Innovations**

Aranya Paridhi, founded by Narayan Bathwal, is an up-and-coming agricultural products-related start-up, specialising in producing IoT-enabled automatic solar photovoltaic-based security fences.

he conflict of man and nature becomes even more pronounced in rural pockets of India, which are usually the heartland of our agricultural farms. It is not uncommon for wild elephants and monkeys to wreak havoc on crops and destroy our farmers' often single source of livelihoods. While the government has provided support through the construction of electric fences around forest borders, the efforts have been in vain as elephants break through the fence, resulting in loss of both crops and rise in attacks on humans.

Narayan Bathwal, completed his gradation Economic from Utkal University (SIMAP from XIMB and IIT Delhi ) started Aranya Paridhi, a company that works on safeguarding our rural populace from these marauding wildlife. The company, founded in January 2020, harnesses new technology through Internet of Things (IoT) to provide a better solution to this dilemma. The company created a non-lethal system that incorporates a solar photovoltaic-based security fence that is triggered automatically via light and thermal sensors. While the light sensor activates the fence after sundown, the thermal sensor activates the fence when it detects elephants. Even if the elephant is capable of breaking down the fence, a laser sensor is activated that triggers a siren warning. This alerts the control room officer who is able to guickly attend to the breached location with the help of GPS.

#### Background of founder

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Prior to starting Aranya Paridhi, Narayan held positions in numerous energy and agricultural companies. An inventor at heart, he is always coming up with novel things/products and processes that can improve the existing technology and environment. He recently patented his Nature Active product borne out of his extensive knowledge of organic farming and organic fertilisers. The company created a non-lethal system that incorporates a solar photovoltaic-based security fence that is triggered automatically via light and thermal sensors. While the light sensor activates the fence after sundown, the thermal sensor activates the fence when it detects elephants.

Narayan Bathwal, Founder, Aranya Paridhi

#### **Market operations**

Aranya Paridhi has both a B2B and B2C model. Its B2B market caters to the Government Department (Forest and Agriculture), whereas its B2C market caters to high-value crop farms, managed by either farmers or corporations, that face the menace of crop destruction from animals. Its system is suitable for use at aquaculture and horticulture farms in India. Its products are also suitable for protecting government utilities including grain silos, transport depots, water reservoirs and pumping stations, among others.

Aranya Paridhi's business model consists of preparing definitions, classifications, applications and industry chain structure. Next, a market analysis and marketing and distribution strategy is prepared for the market including development history, competitive landscape analysis, and development planning.

#### **Present and future goals**

Currently, the company is in its pre-revenue start-up phase and employs 9 people in total. It started with a seed funding of Rs.5 million, a grant-in aid of Rs.2.4 million and a PD & monthly assistance of Rs 1.7 million from the Government of Odisha's Startup Odisha. It is currently seeking to raise Rs.80 million in its Series A funding.

The company has buyers in and outside Odisha and is proposing to operate 50% of its installed capacity during its first year of operation in 2021–22. The plan is to increase operations to 60% and 70% in the second and third year, respectively, on a conservative estimation basis. In fact, its installation capacity falls short of the demand in India. Along with its solar

electric fence system, the company also provides end-to-end support service to their clients, including agriculture information support, input support, a market linkage support, etc.

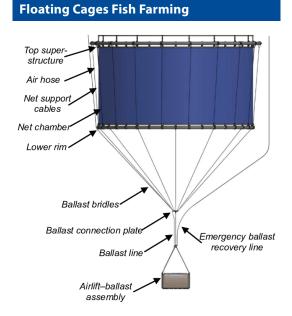
Aranya Paridhi has set a milestone of increasing their EPC capacity to 5000 Ha per annum. Each hectare of its solar photovoltaic fence coverage will provide livelihood to one family in the remote tribal areas that are facing wildlife intrusion.

#### **Products in the pipeline**

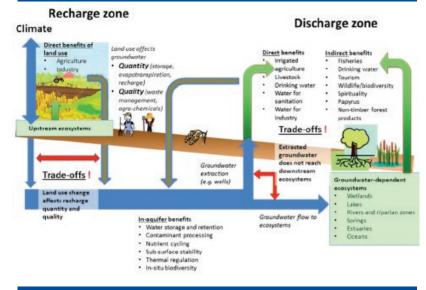
While Aranya Paridhi's main USP is its solar electric fence, it also provides a complete range of farming solutions. One of their main projects is groundwater recharge through its soakaway pit installations made from **high-density polyethylene (HDPE)** plastics that are durable for 20 years. The company is focusing on installing this for community-based projects instead of personal ones, to make it more cost-effective.

Another project in the works is using HDPE pipes for construction of floating cages in fish farming. HDPE is not only highly durable and flexible but also shockproof, resistant to UV rays, and requires less maintenance if installed correctly. The company already has its own marine design engineer and marine survey team for world-class EPC and O&M. It will begin service of selection of site, design, fabrication, mooring calculation and site installation of floating cages systems soon.

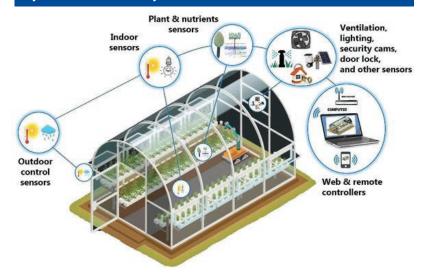
The company is also working on producing poly house materials that can withstand the ever-growing climatic threats like hurricanes or



#### **Rainwater Harvest and Groundwater recharge**



#### **Cyclone Resistant Poly house**



typhoons. Its poly house has already been certified and tested to resist wind loads of up to 250 mph and to protect against giant hailstorms. Aranya Paridhi is also focussing on EPC of vertical farming, soil-based farming and starting a medicinal plant and medicinal hemp production, first in Odisha and then pan-India, using its **cyclone-resistant poly house**.

Other premium offerings include biopesticide plant EPC, biofertilizer plant EPC and plant organic-farming solutions EPC. The company is also making use of indigenous technology and resources to develop educational kits for students, colleges and research institutes engaged in agricultural technology and IoT-based agriculture EPC, in particular.

Aranya Paridhi's team is built up of professionals with extensive knowledge in agriculture production and quality development, consulting, sales and marketing, with a combined experience of two decades in activities related to Agri-business commodity trading, seed production, seed marketing, rural marketing, Agri-consulting, along with skill-set development programmes and entrepreneurship development. Its vision is to offer a complete range of farming solutions, from products and services to innovative agricultural methodology and practices.

### **Mahendra Group: Chasing growth**

Mahendra Group has been successfully making inroads into various spheres of the iron industry. Here's a peak into some of their achievements.





MD, Mahendra Group

#### The Initiation

Mahendra Group is a diversified business that is based in Raipur, Chhattisgarh. The Group's foundation was laid by chairman Mr. Ishwar Prasad Agrawal in the year 1983. The Group is led by its visionary promoters Manoj Kumar Agrawal, who is the president of the Chhattisgarh State Rerollers Association, Mahendra Kumar Agrawal, who is the ex-chairman of the Confederation of Indian Industry, and Deepesh Agrawal.

As Chhattisgarh was developing as a state, its industrial development, too, received a major push in the form of incentivizing industrial units across its territory. The favorable outlook of the first government of the newly formed state, as highlighted in its maiden industrial policy, gave an impetus to domestic manufacturers and its overall industrial development. This, in turn, led to the establishment of Mahendra Sponge and Power Private Limited, the Group's flagship company.

#### The Growth

When Mahendra Group entered the manufacturing sector in 2003, it was already an established business, thanks to its flagship company Mahendra Sponge and Power Limited. With the demand of iron and steel growing in the country, the manufacturing of ingots and structural steel was mainly dependent on the sourcing of the raw material, i.e., sponge iron, which was being acquired from other manufacturers. Furthermore, furnaces required uninterrupted power supply. The power supply from the Chhattisgarh State Power Distribution Company Limited (CSPDCL) was uncertain and had frequent shutdowns, which led to production loss. These difficulties forced the iron and steel manufacturer to set up an integrated steel manufacturing unit in Siltara, an industrial area in Raipur.

Through this company, the Group planned to set up its integrated steel plant and power generation unit in a phased manner. From there on began a journey of rapid expansion and diversification.

However, with the increasing industrial development also came the shortage of available resources. This resulted in various industrial units starting to be crippled and being unable to continue their operations. This is when Mahendra decided to revive the closed industrial units; its members believed that resuming operations of closed units would be a great way to break several industrial bottlenecks.

In 2013, it acquired a sponge iron unit in Tilda, a town on the outskirts of Raipur. The promoters, with the help of their team, were able to enhance the operational efficiency of the closed plant, and have continued with its expansion activities thereon.

With the positive experience of reviving closed units, two more closed/sick industrial units were acquired, which shows that the Group has been able to optimally utilize its blocked financial and technical resources in the state. With the changing business scenarios, the Group began exporting iron ore fines and pellets.

#### **The Society**

During the COVID-19 pandemic, the Group was one of the foremost volunteers who stepped up to support the Government of Chhattisgarh in various fronts such as financial and medical; it also ensured food supplies to those who were disadvantaged due to the imposition of the lockdown.

Mahendra Group will continue to stand with the government in all possible ways to recover the state from the COVID-19 pandemic through the associated steps up to support the Government of Chhattisgarh in various fronts such as financial and medical; it also ensured food supplies to those who were disadvantaged due to the imposition of the lockdown.

The Group has made available various medical equipment such as oxygen concentrators, vaporizers, and oximeters, and also undertaken the establishment of care centers to fight COVID-19. In addition, it distributed hand sanitizers and PPE kits among the citizens and at care centers during the lockdown period. The group has ensured adequate support in various regions such Baloda Bazar, Janjgir-Champa, Khajuri, Sarora, Parsada, Siltara, Sondra, and more.

So far, Mahendra Group has been growing by leaps and bounds. It is focused on growth, keeping in mind its responsibilities towards the environment, people, and stakeholders.





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ARANYA PARIDHI (OPC) Pvt. Ltd. is committed to provide high quality agricultural technology Infrastructure EPC (Engineering Procurement Construction) and solutions for assured sustainable development. The company works extensively on R&D to develop new agriculture infrastructure products and services for the benefit of the common man. Our products and services are backed by fast after-sales support and logistics to ensure trouble-free operations and high-level customer satisfaction. Some of our premium offerings include electric fence EPC, offshore cage-based fish farming EPC, cyclone resistance greenhouses EPC, large scale ground water recharge project EPC, Grain silo EPC, biopesticides plant EPC, biofertilizers plant EPC, plant organic-farming solutions etc.



Team Aranya Paridhi







Ravi, **CPO Fence** 

Prachi, **Full Stack** Developer







Prinshila.

Ecologist

Paras **Public Relation** 

Poulami. Indigenous Farmer Relation Communication

Taniya, Visual

EPC

**R&D** Lead

ASSAM

Sanjay, 3D, 2D Engr. **GIS** Analyst Design.

Debendra, Animation 3D & 2D



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### **ARANYA PARIDHI (OPC) PRIVATE LIMITED**



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WhatsApp: +91 90904 22221

**Contact Details**