



# Sensible people, responsible acts.



GRI G3 compliant Application level A+

Sustainability Report 2010

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# Managing Director's Statement



#### Dear Stakeholder,

With the testing times of the global financial crisis of 2008 behind us, the year 2009-10 proved to be heartening as the year progressed with positive signals emerging especially from rapidly growing markets of India and China.

For us, two factors helped us consolidate our position. One was our belief in the growth potential of the emerging markets combined with the vision of becoming a major global enterprise based largely on leveraging opportunities emerging from demand growth in these markets. The other was the company's internal ability to deliver value and sustain long term growth.

We had to work on higher production and sales volumes to maintain revenues at last year's levels for existing businesses. We also focused on cost control and productivity to generate better profits. In addition, the Company gained from the strategic acquisition of Dempo.

#### The Dempo Factor

The Dempo acquisition is a logical and strategic fit with Sesa's existing iron ore business. While integration is continuing, the Company has already started leveraging synergies to create significant long term value for all shareholders. Some areas where work is in progress are:

- Utilising Sesa Goa's mining and project management skills to develop and optimise Dempo's operations
- Exploring Dempo's longer life mining assets
- Synergising Dempo's operations with Sesa Goa's to create mining and logistics efficiencies

Dempo has been the first major acquisition by the Company. And the success of the post-merger fit has given us confidence to pursue the acquisition route for growth in the coming years.

#### Growth and its challenges

The goal is to be the fourth largest iron ore producer in the world (at current level of production by others) by 2012-13 with an annual production of 50 million tonnes. With a total consolidated production of 21.4 million tonnes in the 2009-10, Sesa Goa has become the 13th largest iron ore producing company in the world. But in our quest for significant strategic growth, we face several challenges.

In the near future, the organisation will need aggressive investments and concerted efforts not only at the mines but also in developing the associated logistics infrastructure. The Company intends to invest around US\$ 500 million to support this plan. The investments would be in machinery including improved processing plants and higher capacity heavy earth moving equipment (HEMM). On the logistics front, this includes developing access roads, port handling facilities, railway siding and the barge fleet. It is an aggressive goal but given the focused approach we are confident of achieving the same.

#### Sustainability

At Sesa Goa, Sustainability is just a new terminology for the process of an economically progressive organisation aligning its key stakeholder expectations with business aspirations. The company remains committed to sustainable development, which focuses on maintaining a pre-eminent position in Health, Safety and Environment (HSE) practices, and contributing to the development of communities that it operates whilst doing responsible mining.

Sesa takes proactive role in providing the employees a safe working environment through imperative training, monitoring and implementing best safety practices all across the group. With the continued thrust on safety, Lost Time Injury Frequency Rate (LTIFR) in 2009-10 was 1.21, and our Met Coke plant achieving zero injury incidents. There was a 32% reduction in the Frequency Severity Incidence (FSI) due to decrease in severity rate in 2009-10 compared to previous year 2008-09.

#### **Responsible mining**

Mining is portrayed much negatively and various stakeholders are interested in the effects and future of iron ore mining. No wonder, the onus on mining industry is very high when it comes to minimising the negative impact on our environment. Whilst some of this can be achieved by following best practices in mines restoration, the other can be scientific excavation and processing. Investment in the appropriate technology can help us maximise efficiency ensuring that all economically viable ore is extracted from existing mines. Conservation of resources at Sesa starts with scientific mine planning based on world class exploration and followed by investment for world standard recovery in process plants, optimised blending of lowest grades of ore, water harvesting and recirculation of water and so on and so forth. Optimum use of land by doing sequential mining and compacting the mining dumps is also one of the focus areas.

#### Society / Community

It is in our DNA to undertake activities for societal progress. We believe that the approach to CSR cannot be akin to an extra-curricular activity. It involves a focussed and more importantly, a passionate approach. And if development activities' budget becomes a constraint for the enterprise, such business should not be ventured into at all.

We strive to nurture leaders for a better future. The focus of our activities is education with a clear aim of increasing employability. It is heartening to see that some of our activities, such as the Sesa Technical School, are achieving success and excellent results in overall youth development. This year alone, all 57 students were absorbed by crème-de-la-crème companies.

#### Way forward

As we follow our dream to be amongst the top four iron ore companies in the world, we endeavour to continue our sustainability initiatives as well as set higher benchmarks for ourselves in developing the society and further minimizing impact on ecology. We strive to be more responsible in our impact on the environment and the society.

I am presenting to you our fifth Sustainability Report prepared as per the principles and methodology of the GRI-G3 Guidelines and adhering to UN Global Compact Principles. The report fulfils the A+ application level criteria of GRI. An assurance statement has been provided by KPMG after carefully auditing the report which also a part of this report.

I thank you for all the support and encouragement in our sustainability efforts, and would earnestly look forward to your suggestions to improve our efforts further.

P.K. Mukherjee Managing Director

"It isn't sound business for an enterprise to venture into an economic activity at the cost of sacrificing community development initiative."

Mr. P. K. Mukherjee Managing Director Sesa Goa Limited



# Sensible people Responsible acts

Meet India's largest exporter of iron ore in the private sector - Sesa Goa Limited, the flagship company of Sesa Group. The Group started its operations five decades ago and ever since there has been no looking back, in the journey earning respect of both – Goans and the global iron ore industry. The Group has been involved in iron ore mining, beneficiation and exports, with a group turnover of around Rs. 6284 crore. Sesa Goa Limited now has mining operations in Goa, Karnataka and Orissa. Over the last decade, it has even diversified into the manufacture of pig iron and metallurgical coke. The Group operates a 322,000 TPY metallurgical coke plant and a 292,000 TPY pig iron plant.

For our organisation, success is the feeling of contentment that results from good deeds; those that bring happiness to people, those that add life to the environment. With this belief, we continue our sustainability efforts with utmost dedication.

# Vision

To be one of the top four iron ore mining companies in the world.

# Mission

- To maximise stakeholder wealth by exploiting core skills of iron ore mining, coke and iron making
- To constantly seek high levels of productivity and technical efficiency; to maintain technological superiority over competitors
- To aggressively seek additional resources
- To maintain costs in the lowest quartile globally
- To be an organisation with best-in-class people and a performance driven culture by attracting and retaining quality manpower
- To continue to maintain pre-eminent position in safety, environment and quality control management in the respective industry sectors
- To contribute to the development of the communities that the Company operates in or has influence on its business activities

# Values



### Entrepreneurship

We foster an entrepreneurial spirit throughout our businesses and value the ability to foresee business opportunities early in the cycle and act on them swiftly. Whether it is developing organic growth projects, making strategic acquisitions or creating entrepreneurs from within, we ensure an entrepreneurial spirit at the heart of our workplace.



### Growth

We continue to deliver growth and generate significant value for our shareholders. Moreover, our organic growth pipeline is strong as we seek to continue to deliver significant growth for shareholders in the future. We have pursued growth across all our businesses and into new areas; always on the basis that value must be delivered.



### Excellence

Achieving excellence in all that we do is our way of life. We strive to consistently deliver projects ahead of time at industry leading costs of construction and within budget. We are constantly focused on it while aspiring to achieve top deciles cost of production in each of our businesses. To achieve this, we follow a culture of best benchmarking practice.



### Trust

The trust that our stakeholders place in us is key to our success. We recognise that we must responsibly deliver on the promises we make to retain that trust. We constantly strive to meet stakeholder expectations and deliver ahead of expectations without compromising our other values.



### Sustainability

We practice sustainability within the framework of well-defined governance structures and policies, and with the demonstrated commitment of our management and employees. We aim not only to minimise damage to the environment from our projects but to make a net positive impact on the environment wherever we work.

# **Company history/milestones**

#### One step at a time: We set and achieve new goals

The company started operations in 1954 in Goa, with iron ore being the core business. Today, the company has emerged as India's largest producer, seller and exporter of iron ore in the private sector. We now carry out mining operations in Karnataka and Orissa as well.

Sesa is part of Vedanta Resources Plc, a diversified and integrated FTSE 100 metals and mining company. Vedanta group has principal operations in India, Zambia and Australia, producing Aluminium, Copper, Zinc, Lead, Iron Ore and Commercial Energy.



Our objective is to raise our share of the world trade in iron ore and most importantly to do that by maintaining a profitable position as one of the world's most cost-effective iron ore producers. In all our activities, it is our objective to maintain a pre-eminent performance with respect to Safety, Environment, Quality and Community Affairs without compromising on either.



Sesa Goa Ltd. Management Structure				
Name	Designation			
Mr. Sudhakar D Kulkarni	Chairman			
Mr. Pandurang G Kakodkar	Director			
Mr. Kuldip K Kaura	Director			
Mr. Gurudas D Kamat	Director			
Mr. Amit Pradhan	Wholetime Director			
Mr. Arun K Rai	Wholetime Director			
Mr. Prasun K Mukherjee	Managing Director			

Sesa Industries Ltd. Management Structure				
Name Designation				
Mr. Pandurang G Kakodkar	Chairman			
Mr. Gurudas D Kamat	Director			
Mr. Amit Pradhan	Director			
Mr. Prasun K Mukherjee	Managing Director			

### **Growth-oriented Strategy**

We have chalked out a long-term growth-oriented strategy, maintaining our goal to be a low-cost producer of metals and minerals, without compromising on quality. We strive hard to constantly improve our operational efficiency, deliver value to our stakeholders and build capabilities and capacities to foster growth in the long term. To achieve this, we rely on our following key strengths:

**Position the** company strategically to maximize opportunities

Understand dynamics of the business environment

**KEY** STRENGTHS

in execution

Excellence

Financial prudence and investment in right capacities

## Acquisition - Contributing to the growth

An important aspect of the strategy is acquisition of quality assets that aligns with the company's low cost production vision, for which we maintain healthy levels of cash and cash equivalents in our balance sheet.

Sesa Goa took a major leap in June 2009 by signing a definitive share purchase agreement under which the Company acquired all the outstanding common shares of VS Dempo and Company Private Limited (VSD or Dempo), which in turn, also held 100% equity shares of Dempo Mining Corporation Private Limited and 50% equity shares of Goa Maritime Private Limited. The deal was signed for a total consideration of Rs. 1,750 crore (equivalent to US\$368 million), on a debt-free and cash-free basis, and included net normative working capital of

Rs. 145 crore (equivalent to US\$31 million). The acquisition was wholly financed by Sesa Goa's cash resources.

With this acquisition, the company has access to VSD's mining assets in Goa. At the time of the acquisition, VSD was one of the largest exporters of iron ore from Goa with exports of around 4 million tonnes. VSD either owns or has the rights to mineable reserves and resources estimated at 70 million tonnes of iron ore in Goa. In addition, VSD's mining assets in Goa include processing plants, barges, jetties, transhippers and loading capacities at Mormugao port. Not only has the acquisition added to Sesa Goa's resources, but it has also given us access to VSD's customer base. We have succeeded in optimising the Dempo business in 2009-10.

### **Shareholding Pattern**

The Central / State Government do not have any share holding in the company, as shown in the share holding pattern.



# Our products and services: Meeting demands and expectations

## **IRON ORE**

We are engaged in the business of prospecting, mining, processing and exporting iron ore. We are also involved in support activities like shipping and shipbuilding.

The river transportation system in Goa has been advantageous for us considering the competitive international market. Traditionally we have exported low and medium grade products, but with the development of operations in Karnataka and Orissa, we have started shipping +64% & 63% Fe high-grade ore. Also, to meet the rising domestic demand, lump ore from these states is being sold to domestic pig iron/steel producers.

In all our activities, our objective is to maintain a pre-eminent performance with respect to Safety, Environment, Quality and Community Affairs.

# **PIG IRON**

Sesa Industries Limited, the subsidiary of Sesa Goa Limited, manufactures pig iron and it is an independent operation. The Pig Iron business – Sesa Goa's strategy to move up the value chain, focuses on the domestic Indian market, especially in western and southern India. It has two blast furnaces with a capacity of 292,000 tonnes per year, manufacturing foundry and SG grades of pig iron. Located in the village of Amona, in Bicholim Taluka, North Goa, it caters to the steel mills and foundries. It also produces slag, which is dried to 2% moisture and sold to the cement industry.

Sesa is also going for expansion of its pig iron capacity (0.45 MTPA) by setting up of additional blast furnace of 450 cubic metres working volume



# METALLURGICAL COKE

Sesa Goa's MetCoke Division manufactures high-grade metallurgical coke. It has 84 coke ovens with capacity of 322,000 tonnes. The metallurgical coke division is operated independently. The business was primarily a backward integration initiative to support the pig iron operations. 65% of the MetCoke division's output was consumed internally in 2009-10. In line with proposed expansion in pig iron capacity, the Company is also setting up additional non recovery coke ovens to produce 0.3mtpa met coke plant based on its own patented coke-making technology.

The met coke plant at Navelim produces a range of coke fractions from +70 mm for foundries, 20 mm to 60 mm for blast furnaces, and 6 mm

to 25 mm for the Ferro alloy industries. The product is mainly of low ash coke and the principal input, low ash coking coal, is imported from Australia. To ensure a stable coking coal supply, the Company enters into long-term procurement contracts with reputed coal mining companies in Australia. The cost of the input coal blend is the most important component in the production of coke. The coking coal is carefully blended with an aim to optimise the coal blend cost and the coke ovens operated with accurate process controls to produce the desired high quality low ash metallurgical coke. The technology used is the cost-effective Sesa Energy Recovery Coke Making Technology.

## COKE MAKING TECHNOLOGY

Sesa Goa's Metallurgical Coke Division develops, markets and supports technologies for the coke making technology. This technology was originally developed for use in our own operations and is now being marketed for use by third parties worldwide. Sesa Goa developed an innovative and eco-friendly technology for energy recovery in coke making. Characterised by low capital and operating costs, it has the potential of high levels of energy recovery and capability of producing high quality metallurgical coke with the process of coke making compliant to global emission norms. The met coke division has also set up a state-of-the art coal carbonization laboratory with pilot coke ovens for coal characterisation and evaluation of coals for blend optimisation to achieve the desired coke quality.

The Sesa Coke Making Technology offered in standard modules of 300,000 tonnes per annum has a potential to generate 21 MW of electrical energy from a coal charge of 24% volatile matter; the project merits substantial carbon credits. The Sesa Energy Recovery Coke Making Technology is a leading coke making technology with the lowest capital and operating costs with a potential of exporting to the world. It has a distinction of being a major technological innovation in the metallurgical field.

## **RISKS AND OPPORTUNITIES**

With a focus on exports to China, Sesa Goa is aggressively implementing a strategy to evolve into a company with global scales. While the Company pursues its business, it faces the following headline risks:

Market risks: Sesa Goa exports over 90% of its iron ore production, with over 80-85% being exported to China. While Chinese steel production continues to grow rapidly, any adversities in the Chinese economy will severely affect the Company's business. However, the Chinese steel sector is very large and Sesa Goa still does not have a major share in China's imports. There continues to be several opportunities in China for Sesa Goa to leverage its low operations cost and capture a greater share of the market. However, Sesa Goa is continuously on the lookout for new and existing markets' (excl. China) for enhancing share.

**Production risks:** Iron ore is an exhaustible mineral product. For any company to expand rapidly, it needs to secure its reserves. As of 31st March 2010, Sesa Goa has total reserves and resources at 353 million tonnes spread over mines in Goa, Karnataka and Orissa including Dempos. However, if the Company rapidly expands production, as it has been doing in the last few years, the reserves may not last that

long. Sesa Goa continues to aggressively promote its exploration activities. While the acquisition of Dempo gave the Company access to around 70 million tonnes of reserves through brown field exploration activities, the Company added 43 million tonnes of reserves (net of depletions) during 2009-10. While these are positive steps, the allocation of mines in India is under the jurisdiction of the Government of India (GoI) and respective State Governments. Any potential delay by the GoI in the allocation of mines or the adoption of a favourable policy towards allocation of captive iron ore mines to steel manufacturers could affect the mining and production plans of Sesa Goa.

**Industry risks:** These arise from the fact that while iron production sites are fragmented, much of the sea-borne iron ore trade is concentrated in a few hands. The three top producers namely Vale, Rio Tinto and BHP Billiton – together account for over 73% of the global sea-borne iron ore trade. Their scale allows them to affect competition; and they can be threats to Sesa Goa's exports to China. Recognising this, the Company is focusing on building relationships with Chinese importers and on leveraging the flexibilities of a smaller enterprise to attend to the needs of a loyally served, niche clientele.

**Regulatory risks:** There are regulatory risks in India and abroad. In India, given the pressure lobbies, the Government continues to change its stance on duties on iron ore exports. It has also changed royalty rates for ore extraction. In Q2, 2009-10, the GoI changed the basis of royalty-levies on iron ore from specific rates being levied earlier to an ad-valorem basis of 10%. This change in duty was effective from 13th August 2009 and impacted the Company's realisations. The Company is focusing on significantly ramping up on internal efficiencies to offset any such rise in production costs of iron ore.

**Currency risks:** With the high dependency on exports, Sesa Goa is significantly exposed to exchange rate fluctuations.

While there are some positive signs with USA recording two consecutive quarters of positive growth, considerable uncertainties and negative surprises are expected from the developed world. However, the Company believes that China and India are on the recovery path. There are no indications of any sharp reduction in steel production or iron ore imports in China. In the near future iron ore prices are expected to increase and remain firm. In this milieu, there should be opportunities for Sesa Goa to leverage its competitive cost structure to penetrate markets, especially in China, and gain share in its imports. It will have to continue to focus on minimising costs and aggressively pushing volumes to customers and increase its share in the global iron ore trade. The Company remains cautiously optimistic about its prospects in 2010-11.





For the year 2010, the company's overseas iron ore sales itself came to 19.39 mt to countries like China, Taiwan, Japan, South Korea, Pakistan and Europe. While the domestic market sales were 1.14 mt for the current year.

Mid-term market estimates suggest a steady growth in demand for iron ore driven primarily by the emerging economies, especially China. On the supply side, enhanced exploration activities and increased production from mines is already taking place. Supply-side constraints of the past are expected to change by 2014.

An increase in demand is expected from China. Though China has its own source of iron ore, the deposits are of a quality that makes extraction expensive. Importing iron ore from Australia, Brazil and India is often more viable in an economic sense. What this means is that while the world may see an over-supply condition by 2014 at the macro level, it will also witness a rapid growth in sea-borne iron ore trade driven primarily by exports to China.

In fact, seaborne trade has already become dominant, and shapes the market by accounting for 95% of international iron ore trade and 55% of world iron ore consumption. The seaborne share of all iron ore consumed is estimated to rise by almost two-thirds by 2017. Sesa Goa intends to develop its business by increasing its share in this growing market.

### **Management systems**

We are the first iron ore Company in the world to be certified for ISO 14001 in 1996. Presently we have also been certified to the latest versions of OHSAS 18001 -2007, ISO 14001-2004 and ISO 9001-2008

#### **Company operations**

- Mining locations at Goa, Karnataka and Orissa
- Metallurgical Coke (Met Coke) Division at Navelim, Goa
- Sesa Industries Ltd. Pig iron plant at Amona, Goa

#### Mining Land Lease

The mining area lands in hectares are graphically depicted below:

#### Mining Leases: Extent of land - Ha





#### **Goa Operations**

Sesa Goa's main mining operations in Goa are at Codli and Sonshi.

The mine at Codli is a multi pit operation. Mine planning is computerised and the disposal of overburden (either in dump outside the mines or in the mined out pits) is planned to minimise haulage costs. At the Codli Mine, all the ore is beneficiated. The water requirement for mining and beneficiation is met through use of recycled water and rain water that is harvested in exhausted mine pits. Sonshi mine is a single pit operation. The mine is currently 210 meters deep, the bottom being 24 meters below sea level. It will eventually reach 44 meters below sea level.

#### **River Fleet Operation**

In Goa, ore is transported from jetties near the mine sites (bunders) to the port in barges. Sesa Goa has a captive fleet of 16 barges with a total floating capacity of 20,000 DWT. Shipping of fines is restricted to the fair season between September and May while lumps are shipped throughout the year.



#### **Karnataka Operations**

The Karnataka operations is located at Chitradurga and the ore from the mine here is exported through the ports at Goa, Mangalore, Karwar and Krishnapatnam.

#### **Orissa Operations**

The mine is located at Barbil, Orissa and the ore is exported through the ports of Haldia and Paradip. The ore mined has a relatively high Fe content and a high tumbler index. High grade ore (more than 64% Fe) requires Government of India license for export. With the opening up of the economy and the further liberalisation of ore exports, it is expected that exports of ore from Orissa will grow significantly.





#### **Shipping and Chartering**

Sesa has a fully integrated shipping and chartering department that is capable of supplying the ore either on an FOB or CFR basis to customers worldwide. The Company does in-house chartering to meet the requirements of its iron ore exports done on CFR terms as well as cargoes of its subsidiaries. The vessels chartered range from handy size to large capes. The total tonnage covered in a year is over 2 million tons in exports and approximately 0.5 million tons of imports.

Vessels are chartered from reputed companies like A.P. Moller Copenhagen, Grant Shipping USA., MOSK Lines Tokiyo, Tshudi & Eitzen Bulkers DK A/S, Great Eastern Shipping, IMC Australia PT Ltd, Fenwick Shipping, Hongkong, Western Bulk Carriers, Transocean and Grab Bulk Pool Pt Ltd, Shipping Corporation of India, Essar Shipping and Island View Shipping SA.

#### **Transhipper Operations**

Goa's main port is the Mormugao port which has special mechanised ore loading facilities at its Berth 9 with load rate of 45,000 tons/day. The channel has a draft of 13 meters with no restriction in air draft. There is also a system of transhippers that can load or up-top vessels of deeper draft midstream.

Sesa Goa has a transhipper based at Mormugao port, the MV Orissa, which is a large panamax size vessel (82000 DWT) with gear capable of picking up ore from barges alongside and loading into the ocean going vessels at the rate of 25000 tons/day. The MV Orissa has loaded vessels as large as 300,000 DWT midstream. The acquisition of Dempo has resulted in additional stacking capacities and optimum utilisation of Dempo's transhipper MV Priyamvada and the co-ownership of the loading vessel/ transhipper, MV Goan Pride with each having a loading rate of 10,000 tons/day and 40,000 tons/day respectively.



# Approach to Reporting















#### Approach to Management

#### • Economic

All processes are audited internally by the trained internal auditors and periodically by third party external auditors at all the locations. The audit findings are presented and discussed unit wise at respective locations before unit heads/unit appraisal committee. The critical issues are discussed in depth and decision is taken to resolve the issue. Management Reviews are conducted to track effectiveness, the progress of the audit findings of the systems and closure within the time frame agreed by the concerned to resolve the issues and continual improvement of the systems.

#### • Environment

In our consistent efforts to conserve natural resources, our company set ambitious targets in our business to reduce our dependency on these resources. The company's water and energy conservation performance has been promising and has set new targets in some instances.

#### • Labour Practices & Human Rights

Our vision is to build a flexible, agile and flat organisation with world-class capabilities and a high-performance culture. Respect for the individual, valuing diversity, fostering entrepreneurship, ensuring an enabling environment and developing a "can do" attitude is a way of life at Sesa Goa. Sesa Goa is committed to achieving best practice in health and safety at all of our units. All Units of Sesa Group e.g. Mining Division, (Excluding Orissa Mining) Sesa Industries Ltd.(Pig Iron Plant ) and Sesa Goa Ltd (Met Coke Division) have been certified for Integrated Management System (ISO 9001:2008, ISO 14001:2004 & OHSAS 18001:2007) by Bureau Veritas Certification (BVC) Periodically surveillance audits are conducted as per the schedule.

#### Product Responsibility

Sesa Goa's product leadership is based on its product quality, manufacturing technology, competitive cost and timely delivery. The Company has the required core competencies and capabilities to deliver the product as per contractually agreed specifications. Added to this, the effective supply chain management continuously endeavours to provide the product, meeting consumer expectations.

#### Society

We believe we have a responsibility to engage with the communities in which we operate and to foster their social and economic development. These principles are embedded across the organisation and are a key element of our employee training, development and performance at all levels. The Company carries out its community development initiatives through these three channels i.e. Sesa Community Development Foundation, through contribution to Mineral Foundation of Goa, and 'Need based community interventions'.



#### Boundary and scope of Reporting

This Report is for the reporting period of 2009-10 and covers:

- 1. The iron-ore mining units in Goa, Orissa and Karnataka
- 2. The pig iron plant, Amona, Goa
- 3. The Metallurgical Coke division, Navelim, Goa.

There are no other small scale mining operations illegal or individually being carried out in any of our company's mining sites. All the locales and areas of mining have been covered in this report. The process for integration of Dempo and its assets with Sesa Goa Ltd is under progress, and hence we'll be including Dempo's mining activities from the next reporting period – 2010-11.

We have covered indicators as per the GRI G3 Guidelines with information, facts and figures true to our knowledge and daily operations as periodically updated, recorded and reported by our various departments within the organisation. This report has derived its essence of sustainability from our sustainable practices in every department of our company.

#### **Materiality Analysis**

This is the fifth report of the Company in the series prepared according to GRI G3 Guidelines and assured by a third party. This Report provides glimpses of the environmental and community development initiatives undertaken by the Company. The Report has been audited by a third party auditor, KPMG, who have provided the External Assurance Statement.

#### Materiality

Sesa Goa has identified issues material to the organisation through a process of Stakeholder Engagement. Using a materiality matrix, these issues were put through objective assessments, and scores were assigned, depending on how they impact specific factors. The key issues are addressed under various stakeholder categories as per the dedicated sections, such as Economic performance, Environmental performance and Social performance.

The Stakeholder engagement exercise involved key stakeholders like Employees, Communities, Environment, Suppliers, Regulatory Authorities and Customers. The issues identified by the Stakeholders, were further mapped with the issues identified by the top management of the Company.

#### Material Issues identified:

- Talent attraction and retention
- Training and awareness
- Inventory management
- Governance for sustainability
- Green budgeting
- Environmental Pollution (air pollution)
- Strategic CSR
- Clean technology
- Government relationship
- Technical training
- Investment in local community
- Perception Management
- Brand Image

#### Stakeholders

We practice sustainability within the framework of well defined governance structures and policies along with the demonstrated commitment of our management and employees. We aim not only to minimise damage to the environment from our projects but to make a net positive impact on the environment wherever we work. At Sesa Goa, we understand that our business directly and indirectly impacts many lives and livelihoods. Hence, it is our conscious effort to ensure that we take great care as we deal with our stakeholders. We have enlisted some of the activities which have influenced our stakeholders whom we interact with as we continue our businesses with them.

#### Stakeholder and Mode of Engagement Shareholders

- Annual General Meeting
- Written Communication

#### Significance

- Owners
- Providers of capital

#### Key Sustainability Concerns

- Profitability and growth
- Governance for sustainability

#### Initiatives by the Company

- Announcing and publishing quarterly results of the company after the completion of the quarter. Declaring audited annual results within the stipulated time. Posting results on the company's website (www.sesagoa.com)
- Posting information related to shareholding pattern, compliance with corporate governance norms, etc. on the company's website
- Making Sesa's corporate website a comprehensive source of information on its portfolio of business, social responsibility activities and environment, occupational health and safety performance: (a) The entire Report and Accounts, as well as quarterly and half-yearly financial results, are now available in downloadable formats under the section 'Investors Information'; (b) The 'News Corner' section provides press releases from the company and relevant press clippings; (c) Clarifications as and when provided to institutional investors and analysts, including presentations (if any), are also posted on the company's websites

#### Stakeholder and Mode of Engagement Government

- Regular meetings and structured communication on key parameters
  (a) economic;
  (b) environment, occupational health and safety;
- (c) social issues; and (d) regulatory trends

#### Significance

- Regulators
- Policy-makers

#### Key Sustainability Concerns

 Regulatory issues and community interest, Environmental pollution, Clean technology, Green budgeting.

#### Initiatives by the Company

 Proactively and periodically fulfilling all formalities and procedures. Compliance with applicable laws, conditions of clearance/consents/licence/permits etc.

#### Stakeholder and Mode of Engagement Employees

- Regular interaction through elected unions and delegates
- Direct interaction at the workplace
- Implementation of suggestion schemes
- Representation of employees in EHS and Social Committees, and other social initiatives
- Open meetings.

#### Significance

Main resource to undertake sustainable
 development initiatives

#### **Key Sustainability Concerns**

- Health and safety
- Growth prospects
- Employee satisfaction and commitment
- Ethical standards in business
- Attracting and retaining talent
- Career development opportunities

#### Initiatives by the Company

- Organising EHS, behavioural and technical training programmes
- Conducting awareness programmes
- Encouraging systematic innovation
- Discovering and promoting leadership talent
- Creating an organisational culture that combines a warm and caring ambience with a high performance ethic
- Perception management
- Establishing a Code of Conduct
- Publishing Staff Handbook

#### Stakeholder and Mode of Engagement Communities

 Surveys through non-governmental organisations; need-based discussions/written communications; meetings with community representatives

#### Significance

 Impact on the community due to the company's operations

#### **Key Sustainability Concerns**

- Environment quality
- Mine land reclamation
- Education and training
- Health and hygiene
- Overall socio-economic development of villages
- Strategic CSR
- Investment in local communities

#### Initiatives by the Company

- Conducing public awareness programmes on EHS for communities
- Organising water supply to nearby villages if needed
- Conducting health camps, for instance, Anaemia camps and eye camps, as well as cataract operations
- Providing infrastructural support, for example, houses to underprivileged and improving school buildings, community halls, etc
- Actively supporting local non-governmental organisations' initiatives in public health, sewerage and community development
- Improving the quality of life in the community
- Giving educational support such as supply of books, school counsellors and other educational aids
- Creating community medical centres
- Initiating formal stakeholders' processes

#### Stakeholder and Mode of Engagement Non-governmental Organisations

 Structured meetings, Communication through correspondence with NGOs viz.: Mineral Foundation of Goa, Adivasi Vikas Samiti Orissa, Matruchaya and SPEECH

#### Significance

• Watchdog of the community

#### Key Sustainability Concerns

- Socio-economic upliftment of the community
- Trust and confidence

#### Initiatives by the Company

 Undertaking many environmental and social initiatives such as health camps, educational aids, scholarships, agricultural improvements, watershed development, etc.

#### Stakeholder and Mode of Engagement Customers

#### Significance

• Main source of existence of the business

#### **Key Sustainability Concerns**

- Quality
- Price/cost
- Committed delivery
- Customer satisfaction
- Brand image

#### **Initiatives by the Company**

- Personal interaction
- Market/sales
- ISO-9001 certification
- R&D in process improvement

# Stakeholder and Mode of Engagement Suppliers

#### Significance

Partners in progress

#### **Key Sustainability Concerns**

- Material quality
- Cost, Delivery Schedules, Inventory management

#### Initiatives by the Company

- Participating in personal interaction purchase and materials
- Setting up a vendor rating system
- Initiating quality improvement programmes
- Establishing joint partnership programmes

# Corporate Governance



Sesa Goa is committed to executing sustainable business practices and creating long-term value for all its stakeholders. To pursue this objective, the Company remains steadfast in its value systems that incorporate integrity, transparency and fairness across all its business activities. All Directors and Senior Management are committed to the Company's Code of Conduct, the compliance to which is periodically reviewed.

The Board periodically reviews compliance reports of all laws applicable to the Company. Steps are taken by the Company to rectify instances of non-compliance, if any. During 2009-10, the Company did not have any material pecuniary relationship or transactions with Non-Executive Directors. The Board is entrusted with responsibility to take fair decisions related to the organisation's stand on its public policy related to lobbying and contribution to political parties.



### **Board of Directors**

In line with the tenets of corporate governance, Sesa's Non-Executive Directors comprise key personalities and experts in various fields such as finance, law, etc, and other independent technical experts in related fields of operations of the Company. Directors are appointed after the approval of the shareholders and are usually appointed for a duration of three years or less as per Board resolution.

The Company has a Non-Executive, non promoter Chairman and the number of Independent Directors is equivalent to one-third of the total number of Directors. As on 31st March 2010 the Company has seven Directors on its Board, of which three are Executive Directors and four Non-Executive Directors. Three of the Non-Executive Directors are independent.

The Board is responsible for the overall direction for all business operations and has holistic control over activities. The Managing Director, through the powers delegated by the Board of Directors, is responsible for the regular business of the Company. The Executive Directors formulate policies on quality, environment, occupational health and safety. They also provide guidance for policies and assessment or audit systems.

#### Code of conduct

The Company has adopted the Sesa Goa Code of Conduct for Executive and Non-Executive Directors, Senior Management Personnel and other executives of the Company. The Company has received confirmations from the Executive and Non-Executive Directors, as well as Senior Management Personnel regarding compliance of the Code during the year under review. The Code of Conduct is posted on the website of the Company www.sesagoa.com.

#### Audit Committee

The Audit Committee of the Company is constituted in line with the provisions of Clause 49 of the Listing Agreements with the Stock Exchanges read with Section 292A of the Companies Act, 1956. The committee oversees the Company's financial reporting process and the disclosure of its financial information to ensure that the financial statements are correct, sufficient and credible. The functions of the Audit Committee of the Company include the following:

- Recommending to the Board, the appointment, re-appointment and, if required, the replacement or removal of the statutory auditors and fixation of audit fees.
- Approval of payment to statutory auditors for any other services rendered by the statutory auditors.
- Reviewing with management, performance of statutory and internal auditors, and adequacy of the internal control systems.
- Reviewing the adequacy of internal audit function, including structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit.
- Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board.
- Discussion with statutory auditors before the audit commences; nature and scope of audit as well as have post audit discussion to ascertain any area of concern.
- To look into the reasons for substantial defaults in payment to the depositors, debenture holders, shareholders (in case of non payment of declared dividends) and creditors. Reviewing with management, the quarterly financial statements before submission to the Board for approval.
- To review the functioning of the Whistle Blower mechanism.
- Carrying out any other function as is mentioned in the terms of reference of the Audit Committee.

#### **Remuneration Committee & Policy**

The Company has constituted a remuneration committee of Directors in September 2000. The broad terms of reference of the Committee are to appraise the performance of Managing/Executive Directors, determine and recommend to the Board, compensation payable to them.

Remuneration of the Non-Executive Directors of the Company by way of sitting fees and commission is decided by the Board of Directors. Payment of commission to any individual Non-Executive Director is determined by the Board and is broadly based on attendance, contribution at the Board Meetings and various Committee Meetings as well as time spent on various issues other than at these meetings.

#### **Managing and Executive Directors**

The Company pays remuneration to its Managing Director by way of salary, commission and perquisites and to its Executive Directors by way of salary, executive allowance, performance linked pay and perquisites. The remuneration is approved by the Board of Directors and is within the overall limits approved by shareholders of the Company.

#### Shareholders/Investor Grievance Committee

The Company has constituted a Shareholders/Investor Grievance Committee of Directors to look into the redressal of complaints of investor such as transfer or credit of shares, non-receipt of dividend/notices/annual reports, etc. The Committee reviews investor related issues and recommends measures to improve investor services. Minutes of the Shareholders/Investors Grievance Committee Meetings are circulated to the members of the Board. Details of investor complaints received and redressed:

Nature of Complaint	Opening Balance	Received	Disposed off	Pending
Non receipt securities	0	1	1	0
Non receipt of dividend	0	2	2	0
Total	0	3	3	0

#### Share Transfer Committee

The transfer of equity shares of the Company is approved by the Share Transfer Committee, which meets fortnightly to approve share transfers. As on 31st March 2010, one instrument of transfer for 160 equity shares was lying with share transfer agents. These have all since been processed and sent.

#### **Banking and Authorisation Committee**

The Board has constituted the Banking and Authorisation Committee to consider banking, investment and other related issues on a case to case basis.

#### **Preferential Allotment Committee**

The Board has constituted Preferential Allotment Committee to consider issues on allotment of preferential issue of 33,274,000 Equity Shares of Re. 1/- each to promoter's entity Twin Star Holdings Limited.

#### Disclosure

#### i. Materially Significant Related Party Transactions

The Board has received disclosures from Key Managerial Personnel relating to material financial and commercial transactions where they and or their relatives have personal interest. Transactions with related parties are disclosed in note no. 25 of Schedule 19 to the Accounts in the Annual Report. In the opinion of the Board, the transactions during 2009-10 between Sesa Goa and its subsidiaries Viz Sesa Industries Limited, V.S. Dempo & Co Limited and Dempo Mining Corporation Limited have been done at arm's length. As per this definition none of the subsidiaries of Sesa Goa Limited viz. Sesa Industries Limited, V.S. Dempo & Co Limited are material non-listed Indian subsidiaries.

#### ii. Non compliance

The Company has complied with all the requirements of regulatory authorities. No penalties or strictures were imposed on it by the stock exchanges or SEBI or any statutory authority on any matter related to capital market during the last three years.

The Company is subjected to investigation by Serious Fraud Investigation Office (SFIO), Ministry of Corporate Affairs, New Delhi and the investigation is in progress. The Company is providing all information to SFIO and extended co-operation. The Company understands from the order that this investigation has been initiated pursuant to a report of the Registrar of Companies that recommended such an investigation and the order directs inquiry into allegations made in certain complaints. The investigation originates from the complaint filed by one of the shareholders of Sesa Industries Limited (SIL) against SIL, the Company and their directors in 2003 prior to the acquisition of the Company by Vedanta in April 2007.

#### iii. Whistle Blower Policy

The Company has a Whistle Blower Policy to deal with any complaint relating to fraud and other financial irregularities.

#### iv. Adoption of Non-Mandatory Requirements

The Company has fulfilled the following non-mandatory requirements as prescribed in Annexure 1D to Clause 49 of the Listing Agreement with the stock exchanges. The Company has set up a Remuneration Committee which complies with the requirements laid down in the Code of Corporate Governance. The quarterly and half-yearly results of the Company are posted on the Company's website. The Company has adopted and implemented Whistle Blower Policy.

#### **Means of Communication**

All financial disclosures are available on the Company's website www.sesagoa.com. The Company has had informal meetings with media and institutional investors. Authorised persons of Sesa Goa also respond to queries telephonically and by letters. The quarterly, half-yearly and annual results are published in the Economic Times, Mumbai edition and an English and Konkani/Marathi Daily in Goa. The results, along with official news releases, are also posted on the Company's website www.sesagoa.com

SESA GHOR

# 🗩 Economic Sustainability



Sesa Goa, over the years has created 'Sesa' brand of iron ore which speaks of assured quality and timely supply, and caters primarily to the rapidly growing emerging economies of India and China. Sesa's growth is dependent on its positioning as a world class 'low cost' producer. Hence the management is fully focused on cost reduction by increasing the scale of operations, asset optimisation and developing the resource base.

The strategic approach of Sesa in executing business in the mining sector and dealing with market cycles has helped in delivering relatively good results even in adverse business conditions. As a part of this, the company has pursued an aggressive policy of enhancing production from all its operations by exploiting core skills of iron ore mining, adding additional resources through exploration & acquisition of other iron ore businesses and contributing to the development of the communities we operate among, and the Indian economy at large.

#### Highlights

- Highest ever annual iron ore dispatches of 20.50 million tons(MT), up 36%
- Highest ever annual revenue of Rs. 6,284 crores, up 21%
- Highest ever annual Profit After Tax of Rs. 2,639 crores, up 32%
- Highest ever annual Earnings Per Share of Rs. 32 per share (of Re. 1 each), up 25%
- Dividend of 325% /Rs. 3.25 per equity share (post bonus/post split) of Re. 1 each
- Strong balance sheet with cash and cash equivalents of Rs. 6,952 crores
- Net addition of 113 MT to reserves and resources consisting of 43 MT through successful exploration activities and 70 MT from acquisition of Dempo's Iron ore business.

# **Direct Economic Value Generated and Distributed**

Direct economic value generated (A)	2007-08	2008-09	2009-10			
Net turnover (net of ocean freight and duties) (Rs in Crores)						
- Iron ore	3208.80	4235.47	5,169.69			
- Metallurgical coke	114.83	142.47	143.82			
- Pig iron*	582.70	655.91	596.03			
- Other income**	69.77	222.45	419.06			
TOTAL(Rs in crore)	3976.10	5256.30	6,328.60			
Economic value distribute	ed (B) (Rs in Crores)					
Cost of materials, goods and services	1275.69	2071.35	2208.97			
Personnel expenses	68.46	99.93	169.06			
Interest Charges	0.03	0.99	51.72			
Taxes and royalties	1055.96	1055.77	1,212.96			
Dividends	177.13	177.13	270.06			
Community contributions ***	7.17	11.81	18.25			
TOTAL	2584.44	3416.98	3931.02			
Economic value added (A-B) (Rs in Crores)	1391.66	1839.32	2397.58			
Production by princip	al commodities					
Iron ore (million tons)	7.75	10.69	21.41			
Metallurgical coke (tons)	258805	224216	263000			
Pig iron (tons)	271493	217114	280000			
CSR Expenditure (I	Rs in Crores)					
Sesa Community Development Foundation	1.00	5.12	3.53			
Community contributions	6.17	6.69	14.72			
Employee Pay Roll and Contribution	to Benefit Plan [Rs in	Crores]				
Salaries, Wages, Bonus and Allowances	57.34	83.40	147.07			
Contributions to Provident and Other Funds	3.06	3.72	6.03			
Contributions to Gratuity and Annuity Funds	3.34	6.76	5.36			
Staff Welfare Expenses	4.72	6.05	10.60			
Total	68.46	99.93	169.06			

\*Includes amount of excise duty.

\*\*Includes income from investment and profit/loss on sales of investment.

\*\*\*Excludes Donation to Political Parties.

# Subsidies from the Government

- The company availed of a custom duty credit of Rs 7.90 crores on import of capital goods and spares.
- Excise duty savings of Rs 1.16 crores on indigenous purchases under the continuing Export Promotion Capital Goods scheme during the year.
- The company has not received any other government subsidy, tax break, duty drawback, government benefits, etc. during the reporting period.

Mine closure plan for all the mines has been prepared and the same have been listed below with the investment involved in their closure:

Mines with p	lans for closure	Amount(Rs.)	Mines with pla	ans for closure	Amount(Rs.)
	South Mines			North Mines	
Codli	Gurmel	28,81,650	Sanquelim	Macarxendo	7,57,850
	Maindvolicho sodo	21,08,000		Chirachea Ambeacodil Dongurli	16,62,500
	Gadia sodo	25,00,000		Cancagalle Tolop	2,00,000
	Gaotona Dusrifal(TPL)	6,75,000		Sonshi	15,50,000
	Bondra Advona(PTI)	13,02,000		Mareta Sodo	6,67,000
Daucona	Millem Dongor	4,38,250		Botvadeacho Dongor	2,72,000
	Xirvol Culna	2,21,875		Cudnem	8,70,000
	Cajumol	2,84,675		Orasso Dongor	12,90,000

# **Brand Management**

Sesa Goa does not manufacture any consumer goods or any products which require advertising. However, the Company follows all applicable laws for exporting its product (iron ore) to external customers. Brand visibility is maintained by Company logo display with traffic-signage's, traffic island and other sponsored locations and also through sponsoring to events on media. Advertisements are released in newspapers/magazines, on various events like World Environment Day, Earth Day etc.

Sesa Goa's product leadership is based on its product quality, manufacturing technology, competitive cost and timely delivery. The Company has the required core competencies and capabilities to deliver the product as per contractually agreed specifications. Added to this, the effective supply chain management continuously endeavours to provide the product, meeting consumer expectations.

# **Customer Satisfaction**

Periodic customer satisfaction survey is conducted every year with focus on Product, Services & Customers. Efforts are made to capture customer perception on what they liked and disliked basis our contract performance. Feedback received on the scale of 1 to 10 points for Product, Services & Customer focus is evaluated vis-à-vis the intensity percentage, to calculate the customer satisfaction index. Minimum % age to be achieved for any Customer satisfaction index to be called as acceptable is 90%. If this percentage comes below the target of 90% or if customers have given average or poor ratings, Chief Marketing Officer internally investigates the cause for such performance and initiate suitable corrective action. Customer satisfaction and other details are discussed in the monthly operational review meetings and management review meetings. Below is the Customer Satisfaction Index for the past 3 years for all divisions.



#### **Memberships and Associations**

Sesa Goa is an active member of trade associations at local and national level like:

- The Confederation of Indian Industries (CII)
- United Nations Global Compact (UNGC)
- Global Compact Society of India (GCSI)
- Sustainable Mining Initiative (SMI) The Federation of Indian Mineral Industry (FIMI)
- The Goa Mineral Ore Exporters Association (GMOEA)
- Mineral Foundation of Goa (MFG)
- Goa Chamber of Commerce and Industry (GCCI)

# J Human Resources



# Our feeling of contentment: A smile on our employee's face



The organisation believes that happy employees lead to a happy and prosperous company. Investing in our key assets, our people, is an investment in making Sesa Goa amongst the top companies of the world. The welfare and safety of our employees are integral to our vision of building a flexible, agile and flat organisation with world-class capabilities and a high-performance culture.

# Ensuring an attractive, safe and healthy working environment

With an ambitious target of doubling our production capacity to 50 million tonnes of iron ore per annum by 2012, the HR department is gearing up to match the ambitions with a massive drive to attract and retain the best talent along with strengthening existing policies. As a concrete step towards achieving the target, the organisation was restructured with major SBUs placed under the charge of a business manager, with independent responsibility given to achieve business goals and be held accountable for results. Each business unit is internally supported with decentralised logistics, commercial, projects and other support functions; and centrally by a marketing and chartering function.

Through a flat organisation structure, we ensure delegation of authority and quick access to information, bringing about timely and quality decisions and ensuring a safe and healthy environment for our employees.

Number of	2007-08	2008-09	2009-10
Employees (Self)	1808	2228	2691

# Developing leaders within



Individuals groom into Leaders by being continuously exposed to challenging environment that provides ample scope for learning and elevation in career. Sesa Goa provides the best learning ground and unlimited growth opportunities to high performers. To achieve the status of a world-class employer, the company focuses on key strategic initiatives like:

- Identifying and nurturing the right talent
- Encouraging and motivating future leaders
- Individual development
- Providing a stimulating and challenging workplace

# Our leadership development initiatives

#### ACT UP (Accelerated Competency Tracking & Upgradation Program):

ACT UP is the process of identifying high potential employees with a spark of leadership who can be groomed to take up leadership positions. The process aims to identify high potential employees based on Vedanta competencies, which are depicted below:



Employees are tested on the above through a series of evaluation cycles and the best performers are designated as Stars of Business. These 'Stars' are considered as Group Resource and are put on Fast Track Growth with the aim of grooming them to take up higher responsibilities and eventually take up key positions across the Group.

# **Individual Development Plans (IDP)**

Individual Development Plans (IDP) was formulated to ensure career progression with challenging roles and assignments. A special leadership development initiative – GOLD (Gen-Next Operational Leadership Development) programme – was launched to groom high potential talent to take up next-level leadership positions.

Equity-based award plans in the form of long-term incentive plans (LTIP) are offered to recognised employees of the Company through its parent company, Vedanta Resources Plc. The LTIP facilitates reasonable alignment of the interests of the wider management group, including younger high potential future leaders, with those of the shareholders, and is considered a strong motivational and retention tool for high calibre people.

With an objective to understand and learn global best practices in iron ore mining and associated functions, teams were sent to the world-class iron-ore mines in Australia and Sweden to observe their processes and practices. On returning, they shared their learning with larger groups in the Company.

# **Employee Benefit Plans**

We believe that our employees deserve the best and we ensure that they enjoy several benefits. We offer our employees benefits under defined contribution plans in the form of covering regular employees under provident fund, family pension fund and annuity fund. During the year, contributions are made into separate funds under certain statutory / fiduciary type arrangements. While both employees and Company pay predetermined contributions into the provident fund and pension fund, contributions to the annuity fund are made only by the Company. Contributions are normally a certain proportion of the employee's salary. Further to regular benefits, with a view to ensuring employees' future well-being, the Company also has various benefit and retirement schemes. These funds are administered by the Company through duly constituted and approved trusts, except for family pension where contributions are made to the Provident Fund Commissioner.

# Knowledge Shared is Knowledge Gained

#### Learning and Training Programs

We encourage and support our employees in enhancing their knowledge and skills. Learning and development continued to be a major area of focus. Some initiatives in the last year included:

- i. Management Development Programmes for Graduate Engineer Trainees (GETs): The Company tied up with a reputed management institute in Goa, to equip its young engineers with necessary tools and techniques to make them effective frontline managers. Various areas such as communication, team building and project management were covered.
- ii. Training on Structured Problem Solving Approach: Sesa Goa started an initiative through which it seeks to equip employees with the tools and techniques of Structured Problem Solving, which apart from helping to solve chronic problems in work areas, is expected to help in identifying improvement opportunities.
- iii. Proactive Work Ethos and Attitudinal Change Programme: The programme was targeted at workmen and aimed to motivate them to align their personal values to that of the organisations. Inputs were provided on behaviours and attitudes in both personal and professional contexts. Over 300 employees of Dempo were covered under this initiative, along with workmen from other Sesa Goa units.
- iv. Communities of Practice: The Company has created a Community of Practice in Mining for its employees as an effort towards shared learning, specifically for employees who have an educational background in mining and are involved in mining operations including exploration, mine planning and logistics. The forum is used to share experiences and knowledge, discuss new trends, solve work-related problems, learn and share best practices and develop additional technical skills. This concept will soon be extended to logistics.
- v. Technical Training: To accelerate the learning and derive maximum synergies from young professionals, Sesa Goa started an initiative to provide modular training on the various technical aspects of the business to professionals with less than five years of experience. The training covers the basics of Sesa Goa's mining, pig iron and met coke business, and is delivered by in-house technical experts. All new recruits hired as fresher from various campuses are given this training as a part of their induction programme.
- vi. Self Nomination: To ensure that employees are given a chance to direct their own learning and development, Sesa Goa has started an initiative where each staff member can nominate himself for various training programmes by sending an e-mail directly to Corporate HR. This has allowed employees to plan their training in advance keeping in mind their work schedules, thus also improving participation and overall effectiveness of the programmes. The Company had no loss of man days due to industrial relations problems.

# The Dempo factor

In 2009, there was an addition of about 1,200 employees of Dempo. Various initiatives were taken to ensure smooth integration of the new workforce into the Sesa Goa fold, such as:

- Forming cross-unit teams in visioning workshops and improvement projects
- Organising communication workshops at units
- Central and common training including the erstwhile Dempo employees
- Rolling out common HR policies

### Our workforce



The Human Resources department is responsible for implementing the HR policies and achieving the outlined HR objectives. The department has a central team at the Corporate Office, along with teams at various other units of the Company.

As of 31st March 2010, Sesa Goa had a total permanent workforce of 2691, employed on its rolls in all its units and operations excluding VS Dempo and Dempo Mining Corporation.





All the non-executive employees of Sesa Goa are represented by independent trade unions as given below (refer to graph). Minimum notice period regarding operational changes, including whether it is specified in collective agreements: As per Section 9A of the Industrial Disputes Act, 1947, a minimum notice period of 21 days is required before any such change comes into effect.

#### Independent trade unions & collective



There have been no incidents of strikes and lock-outs during the reporting period.

#### Imbibing ethical practices, policies and issues

All employees are expressly briefed on the company's anti-corruption and Whistleblowers policies at the time of joining and their signatures are obtained on a form declaring they have understood these and agree to abide by them. Moreover, the legal department conducted a drive by way of posters etc. to ensure that all employees are aware of the Whistleblower policy.

Employee	No. of	Percentage of employees
Category	employees (nos)	trained in the organisation's
		anti-corruption policies
Board /Senior	3	100%
Management		
Executive	776	100%
Non executives	1866	100%
Trainees	46	100%

Sesa Goa values the rights of individuals and it is demonstrated in our policies and code of conduct for management staff, executives and non-executives. Although the company does not have a formal policy on human rights; the Staff Handbook underlines respect for human rights and no discrimination between persons on any grounds. The Human Resources teams at various locations ensure implementation of the policy as laid down in the Staff Handbook.

The terms of contract for services availed from contractors and other suppliers for the Company requires adherence to all labour laws. The contract binds them to our standards and ethical practices as well. During the reporting period, no incidence of corruption has occurred or has been reported.

### Diversity and Equal Opportunity Employer



As a progressive company, Sesa Goa is an equal opportunity employer and does not discriminate on grounds of race, colour, sex, religion, political opinion or social origin involving internal / external stakeholders. The organisation does not employ nor encourages forced, bonded or child labour and conducts proper checks and audits to ensure that our contractors follow our example. No incidence of discrimination has occurred for the reporting period.

### **Recruitment Policy**

The recruitment policy of the Company ensures attraction of the right mix of attitude, aptitude, knowledge and skills, experience and demographics. For this, the policy lays down specific guidelines on qualifications, academic performance, background, job specifications, etc. Guidelines on selection processes and procedures ensure fairness in the recruitment process, equal opportunity to all aspirants and the selection of meritorious and deserving candidates. Though the policy does not lay any emphasis on local hiring, the Company focuses on ensuring preference to adequately capable, qualified and meritorious candidates from the local and surrounding areas. The locally hired workforce data has been highlighted in the table below.

Site name	Total workforce	Total workforce from the state in which site is located	% of locally hired workforce
Goa	2269	2072	91.3
Karnataka	361	325	90.0
Orissa	53	49	92.5
Others	8	1	12.5

Such candidates are equipped with the requisite skills and knowledge to be capable of succeeding in such recruitment efforts of various organisations, including those of the Company. Various community development efforts undertaken by the Company are aimed at providing local youth with requisite skills and capabilities. The Company operates in more than one geographical location and the management team comprises individuals from different backgrounds, cultures and regions, ensuring the right mix of strategic talent, operational leadership and requisite experience.

# Women Empowerment

The organisation is a firm believer that women are the change makers in society and encourages a healthy work culture to include women workforce. Sesa Goa offer equal roles and responsibilities to our women employees and do not discriminate on the basis of gender. Our HR department is working towards 20% women diversity employee strength. Below is the gender distribution rate for 2009-10.



Composition of governance bodies and breakdown of employees per category according to gender, minority group membership, and other indicators of diversity:

Net employment turnover	FY 2009-10							
	Age Group		Gender		Region			
Breakup of personnel leaving the organisation	<30	30-50	>50	М	F	Within the state	Others	Total
Board / Senior Management	0	О	2	2	0	1	1	2
Executive	26	10	6	41	1	14	28	42
Non executives	48	27	22	96	1	97	0	97
Trainees	20	0	0	13	7	5	15	20

The ratio of basic salary of men to women in all staff categories is 1:1.

#### Grade Wise Break up of Workforce

Category	FY 2009-10				
	Within the State	From Other States	Total		
Board / Senior Management	3	0	3		
Executive	553	223	776		
Non executives	1836	30	1866		
Trainees	36	10	46		

# The number of hours of training imparted to various categories of employees at Sesa Goa

Employee Category (Hours)	FY 2009-10
Board / Senior Management	3.4
Executive	22.1
Non executives	3.3

# Safety and Health of Employees Comes First



Sesa Goa believes a world-class working environment cannot be achieved at the cost of compromising on the health and safety of our employees. With a clear safety mission that starts at the top of the organisation and guiding actions right down to the operational level. With its whole hearted commitment to safety, the top management of Sesa guides the Company's sustainable development endeavours, sets annual targets and benchmarks progress in line with the HSE and social policies – with a focus on integrating HSE in decision making process. Through these endeavours and initiatives, the company strives hard to prove that mining can be a safe haven for work conditions.



Safety for us is a prerequisite for sustainable business. We aim for zero accidents and ensure safe working environments. This is achieved through maintaining a well-established system of reporting accidents and incidents including the near-misses and competent investigation of accidents and incidents

identifying systematic safety deficiencies to put preventative measures in place and sharing safety lessons learned and best practices through the exchange of safety information. The organisation encourages employee participation in safety committees and safety promotional programmes. New initiatives are introduced regularly for continual improvement in safety performance.

Despite the company's best efforts to achieve zero accidents, a fatality occurred under the most unusual circumstances. A company workman, who entered the Pig Iron Plant premises to attend the first shift on his 2 wheeler, fell down and suffered head injury. He died in the hospital while under the medical treatment. Improper and inadequate usage of the crash helmet and over-speeding was the cause of the accident and death. Following the accident, we have now enforcing proper use and quality of crash helmet by the two-wheeler riders through inspection and awareness. Security guards at the main gate are also being trained and empowered to check and stop anyone not following the instructions.

# **Safety Performance**



Even as the company envisions a zero-accident mindset and create a safe working environment, we do not want to remain complacent and hence diligently monitor our safety performance. Through the disciplined application of best safety management practices, the frequency and severity of accidents declined significantly. Our Lost Time Injury Frequency Rate (LTIFR) in 2009-10 was 1.21, with our Met Coke plant achieving zero injury incidents. There was a 32% reduction in the Frequency Severity Incidence (FSI) due to decrease in severity rate in 2009-10 compared to previous year 2008-09.This progress would not have been possible without parallel achievements in the control and reduction of work place safety hazards.



To achieve the zero mindset for a safe workplace, the company has initiated few activities like:

- Compulsory use of Personal Protective Equipments (PPEs) like Helmet, Safety Shoes, Goggles, Dust Mask, Earplugs, etc.
- Training for the employees on behavioural and job safety on a regular basis.
- Safety Department monitors the worksites regularly: a. Regular Risk Assessment of activity being undertaken
  - b. Periodic checks and audits are conducted
  - c. Near-miss reporting, unsafe conditions and practices are reported to the concerned departments for corrective measures
- Safety Committee Meetings & Implementation of Safety Suggestion Scheme: Safety suggestions are encouraged at all the unit levels and best suggestions are rewarded
- Each location/site has safety committee represented well by the people of all the rank. Safety meetings are conducted on monthly basis and suggestions are implemented for improvement.
- Celebration of safety week/day with competition and rewards
- 'One Day Safety Officer' Programme : Every employee can inspect for the safety aspect of the plant/locations and make suggestion for its improvement
- Issue of Safety Violation Cards to employees to identify the nature & frequency of safety violations and the area of work concerned
- Regular safety awareness programs and mock drills are carried out for all the employees
- Safety posters and boards are displayed at various locations at the sites
- Weekly safety con-call is held to discuss/communicate safety issues.
- Night vigilance employee does the inspection of the site during night shifts.

10 MP 100

#### SAFETY VIGILANCE

Safety and precaution are not measures which can be just enforced upon people. Since safety at work starts with people, it needs to be recognised as a behavioural management issue also. At Codli mines, we have initiated an innovative safety measure, aimed at improving the attitudes of workers towards safety. The senior staff visit the families of the workers and explains the necessity of precautions to be followed to ensure their safety.

An interesting observation - most incidents and accidents occur during night shifts, as most of us are less vigilant during the night as it is against the human biological clock - led to an innovative idea for safety measure at Codli mines. All the night shift workers are provided with wet tissue papers, so that they can use it to mop their face. This helps to infuse freshness in the worker and help eliminate feeling of tiredness, which otherwise could have made him less vigilant.

# **Occupational Health**



Health is wealth is not just an age-old saying but at workplaces, a healthy employee ensures a productive and prosperous company. The organisation aims to provide a workplace that is free from any hazards by eliminating occupational illness. In compliance with statutory requirements, the health of all employees is checked annually, across the group, according to Company policy. In-house facilities for occupational health monitoring are available in the mines and industry sites in Goa. Dust, noise and lighting levels are regularly monitored to ensure workplace hygiene. The ongoing evaluation of processes and operations continuously monitors the potential hazards, whenever a risk is identified; we take steps to quantify, control and prevent it through proactive measures.

Our doctors impart awareness about health education and related issues to the employees and local communities including schoolchildren around its mining establishments, emphasising the need for maintaining health and hygiene and preventing communicable diseases. Food handlers from canteens undergo regular health and hygiene checks. For the reporting period of 2009-10, there were no occupational illnesses reported in Sesa Goa.



The company has education, training, counselling, risk-control and prevention programs in place to assist workforce members, their families

and community members on serious diseases like HIV/AIDS, Diabetes, Hypertension, etc. In cases wherever applicable, treatment was also given.

Program recipients	Education/Training (yes/no)	Counselling (yes/no)			Disease
Employees	Yes	Yes	No	No	AIDS/HIV
Employees' families	No	Yes	No	No	Assistance
Community members	Yes	Yes	No	No	Programs
Employees	Yes	Yes	Yes	Yes	Diabetes
Employees' families	Yes	Yes	Yes	Yes	]
Community members	Yes	Yes	Yes	Yes	
Employees	Yes	Yes	Yes	Yes	Hypertension
Employees' families	Yes	Yes	Yes	Yes	
Community members	Yes	Yes	Yes	Yes	]
Employees	Yes	Yes	Yes	Yes	Awareness on
Employees' families	Cancer Awareness/Anaemia Detection/Nutrition	Yes	Yes	Yes	Cancer and Nutrition
Community members	Cancer Awareness/Anaemia Detection/Nutrition	Yes	Yes	Yes	





# Safety and Health First









NAEMIA

TECT

# Our definition of a good life: A better life for those associated with us



The organisation's values and corporate lifestyle calls for us to be Socially Responsible Citizens as each one of us and our families are also a part of the same society. This belief is the backbone of our commitment towards working for the society consistently. Hence, when our team embarks upon influencing the society we know for sure that it reflects the same dedication as we show in our business.

The organisation constantly works towards creating and implementing programmes aimed at development of community aimed enterprises. Furthermore, we ensure that such enterprises are sustainable and self-reliant.



#### **Our Approach:**

Working towards community development makes sense only when the approach is right and the efforts are dedicated. Our approach to community development is holistic and long-term. Our stakeholder engagement and consultation process, coupled with base line studies and need-assessments help us develop and shape our programs for better tomorrow. Public Private Partnerships (PPP) and community consultation are the core drivers of our work with communities. The company strategically partner with like-minded organisations, including government agencies, NGOs, local communities, and Panchayats in most of our projects. Our mining operations have not affected any of the indigenous communities residing in and around the mines and hence there are no incidents of any dispute over natural resources noted during the reporting period.

# The Corporate Philosophy is disseminated by three dedicated channels:

#### Sesa Community Development Foundation

A registered entity under the Societies Registration Act, the Sesa Community Development Foundation was established by Sesa Goa in 1998, to focus on development of the community in and around the operations of the company.

#### Need-based interventions through Community Development Programmes

At the core of these programmes is a very structured and process driven strategic approach for the upliftment and benefit of the key stakeholders of the Company – the community. The programmes are customised and developed to the needs of the community, arrived after a thorough understanding of the requirements through stakeholder dialogue and engagement.

The communities in the following mining areas have been covered by our community interventions and programmes;



#### Contribution to Mineral Foundation of Goa

Sesa Goa is a majority stakeholder of the NGO formed by the Goan Mining Industry to address social and environmental issues in the mining belt of Goa. Every year, Sesa Goa contributes Rs. 4 per ton produced to the foundation for smooth functioning of their operations.

The organisation has made the following contributions towards CSR

initiatives:

**Community Development Expenses** 



Let's take a look at our initiatives for 2009-10 in detail:

#### I - SESA COMMUNITY DEVELOPMENT FOUNDATION

The Sesa Community Development Foundation, initiated by the Company, is a registered entity under the Societies Act. The Foundation's core focus is to foster the development of the community and youth around Sesa Goa's areas of operations in Goa through providing technical education and sports training for the interested and eligible youth of Goa, and various community development initiatives. Few of our initiatives are listed below:

#### 1. SESA TECHNICAL SCHOOL (STS)



As a part of Sesa Goa's 'post-mine closure plans', Sesa Technical School (STS) was established in 1994 on an old iron ore mine in Sanquelim. STS aims at providing the youth in and around Sesa Goa's mining operations with technical skills and knowledge to enable them earn a living. STS students specialise in the trades of Machinist, Fitter, Electrician or Instrument Mechanic and secure placements by various MNCs.

Results: For the last several years, STS has maintained 100% results in the Industrial Training Institute (ITI) trade examinations. In 2009, all the 54 trainees of the school passed the ITI trade test with flying colours, with three Top Rankers in the state amongst them.

#### 2. SESA FOOTBALL ACADEMY (SFA)

Goa and football are inseparable, with the people in Goa being very passionate about the game. An Irish priest introduced the sport in the curriculum of Christian education way back in 1883 and since then there has been no looking back. Goa has as many as five major football clubs and over the years, four Goans have captained the national Indian team.

To nurture the talent of Goa's young footballers, SFA was established in the year 1999 to offer junior level training at Sanquelim, Goa. Its senior level academy began operations from June 2008 at Sirsaim, Goa.

Junior Academy: It houses 36 Goan boys. Once in two years, boys in the age group of 14 to 16 years are selected on merit and are provided with professional football training as well as a formal education. The team has won many championships and graduates play for top teams of our country.



Senior Academy: To further nurture the young talent along with rigorous football training within a disciplined regime, new infrastructure at Sirsaim was inaugurated on 14 February 2010. Built at an estimated cost of more than Rs. 4 crore it has a football turf maintained round the year by a professional agency, hostel facility that can accommodate 30 boys, an in-house gymnasium, indoor sports hall, audiovisual room and Sauna Bath facilities.

SFA has plans to add a spectator stand, a swimming pool and a half pitch artificial turf. A tie-up with a top professional club in Europe is also in the pipeline.



For the last two years, Sesa's Senior Academy has been an active participant in the Goa Professional League, besides participating in the 2nd division of the I-League, Governor's Cup and various other

tournaments. Within 2 years of the senior academy coming into being, eminent clubs are chasing at least half a dozen of the boys from senior academy with lucrative offers.

It is interesting to note that, while none of the top-notch clubs in Goa have a single football ground of their own, Sesa has two beautiful turfs in Goa created in restored mining land, proving that mining too can be made sustainable.

# II - NEED BASED INTERVENTION PROGRAMMES

Need Based Intervention Programmes are prepared and implemented based on community requests received during periodic stakeholder meetings and interactions with community leaders. An annual budget is prepared and approved by the management for implementing these activities, which comprise the areas of Health, Education and Agriculture and Women empowerment Programmes are tailor made and are implemented either through NGO partnerships with the help of Government agencies or sometimes independently.

### Infrastructure Development

All the spirit, skill and will in the world can't amount to success without the right infrastructure. Sesa Goa believes that by building the appropriate infrastructure, a community can be truly developed. Facilities are important as they provide a space for social advancement whereas creation of communal spaces increases social well being and helps in the upliftment of the people. Sesa Goa encourages the active participation of community members in creating infrastructural assets that will meet their long-term needs.



At a glance: Our contribution towards infrastructure development

- Constructed village road and water supply system for Dalki village in Orissa
- 2. Constructed bus shelters in Vagure, Amona villages in Goa
- 3. Renovated bus stop in Megalahalli village in Karnataka
- Constructed compound wall for primary schools at Kadleguddu, Mutagaduru and Bommavanagatihalli & for high school at Hirekandawadi village.
- Constructed school buildings at Megalahalli and Thanigehalli villages.
# **EDUCATION**

Education is the cornerstone to any form of social development and progress. Children are the future and learning, their fundamental right. However, in some of the rural areas where Sesa Goa operates, the schools and other institutions require external support to provide the best education. Also, some sections of our society are less fortunate than others. They may have basic sustenance and self-sufficiency but they definitely need help when it comes to getting educated. Sesa CSR Programs lend a helping hand to various educational institutes.

## Knowledge for all



Sesa Goa organised a Science Exhibition at a local school in Tenigehalli. The exhibition was aimed at developing scientific knowledge in students, improving their creativity and enhancing their experimental skills. Also, about 3,000 students and 150 teachers participated in a model building competition. In addition to imparting invaluable scientific information; the event also brought the people of the villages together.

### Envisioning for the less privileged



Sesa Goa together with the 'Tikshna Organisation for Rehabilitation of Visually Impaired,' organised an 'Orientation and Mobility' course for the impoverished visually impaired people. A batch of 20 needy students was taught various skills like negotiating steps, recognizing places and daily living skills like dressing themselves and socializing with people. The focus of the program lay in making the students aware of the need for them to develop their sense of touch, smell and hearing in order to make up for their visual impairment. During the 75-day course, the students were offered free boarding and lodging.

## Improving performance of 10th standard students

In order to improve the educational performance of the students studying in the crucial 10th standard, we provided tutorial coaching during their summer vacations. This was organised in association with the 'Sri Taralabalu Jagadguru Educational Society' Sirigere. Stretched over a period of 45 days, the tutorials were conducted by well-known educationists recognised resource persons in the premises of the local school. The start of the program welcomed a staggering 250 students from some 29 villages. The classes introduced subjects, topics and ideas that the students would go on to learn at regular school later. Teaching was carried out through various activities for 8 hours each day and students were provided with 4 notebooks each and a mid-day meal free of cost. A day long outdoor nature camp was also organised along with various competitions and the winners received attractive prizes.



### At a glance

- Distributed notebooks to 6175 beneficiaries of all schools in the business areas-Amona, Navelim, Pissurlem, Sonshi, Cudnem, Kirlapal-Dabal, Pirna, Nadora, Advalepale and Advoi.
- 2. Distributed notebooks to 5947 beneficiaries of all schools in the business area in karnataka
- 3. Distributed uniforms to 2304 beneficiaries of all schools in the business area in karnataka
- 4. Offered GCET coaching to 90 students of Bicholim & Sattari taluka
- 5. Celebrated Environment Day & Organized various competitions like essay writing, poster making, awareness talks in schools on the eve of National Energy Conservation Day
- 6. Implemented Mid Day Meal Scheme for around 102 students in high schools of Goa
- 7. Conducted aptitude test, environment talks, study skills and English improvement workshop for students of 5th-10th in 10 high schools
- 8. Conducted frequent educational tours for schools to operational and reclaimed mines to create environmental awareness and importance of mining

# **HEALTH INITIATIVES**

Awareness is essential to be able to take precautions and live a healthier life. Sesa Goa noticed that high number of people suffer from malnutrition, anaemia and lack of overall energy in the villages surrounding its operations. The desperate need of the hour was to replace 'food security' with 'nutrition security' in the minds of the people.

### Anaemia Detection & Treatment Campaign



Many Indian women tend to neglect nonspecific symptoms of a feeling of weakness or fatigue, general malaise and sometimes poor concentration, palpitations, etc. which are commonly due to haemoglobin deficiency (Anaemia). It is also a major cause of sufferings of a mother during her antenatal (Pregnancy) and postnatal (Post-delivery) period. In the year 2008-09, Sesa Goa in collaboration with Govt. of Goa Launched the Anaemia Detection & Treatment Campaign for the women in and around our business areas. The objective of the campaign was to create awareness, sensitise, detect and provide access to sustained treatment. The success of the campaign encouraged us to extend it further to Cudnem & Sonshi Villages.



The purpose of the program was to supplement each woman within the age group of 14-49 years, having Hb level below 12gm % with Oral Iron tablets 100mg/day, during the period of 3 months of phase-I and De-worming of all women.

The program was aimed to create awareness about Iron Deficiency anaemia, about its causes, necessity of treatment and to include Iron rich food in daily diet.

- Campaign awareness for villagers was done through printed material/staff from Govt. Health/Sub centers/ Anganwadi
   Workers/Panchayats /CSR volunteers and banners in local language
- Handouts in local language describing the condition, precautions, nutrition facts and pictures of nutrients rich in Iron & Vitamins handed over to all participants of the camp
- Base line data of number of target population suffering from anaemia collected from 11 wards by doing haemoglobin estimation
- IFA supplements distributed to those anaemic and for consequent months through staff of Anganwadi centers (better compliance); de-worming tablets were given to all
- Camps were conducted on quarterly basis to analyse the level of hemoglobin for checking of improvement level

421 women from 12 hamlets located in Cundnem & Sanshi village panchayat attended the camp, out of which 296 were found anaemic. Anaemic women were provided with Oral iron therapy and in the final stage 87% of women showed improvement. The campaign was well appreciated by local Panchayats, Stakeholders and Govt Health Services.



Hb Status Before Oral Iron

Therapy intervention

School Health Campaign



According to the World Health Organisation, about 19 percent of adolescents suffer from poor nutrition that hurts their development and growth. In view of this, a school health campaign launched to include children of Pre-primary schools, Primary and high schools to address nutritional & other health related concerns. A campaign was run in the villages of Sonshi, Pissurlem, Cudnem, Amona & Navelim. Under Anganwadi Nutrition improvement programme, covered 457 children.

A baseline survey was conducted by CSR volunteers/staff, wherein their family history, age, height, weight and nutritional status, was recorded by the Anganwadi teacher on monthly basis. Those found underweight were supplemented with Alprovit (nutritional supplement), with a record maintained of all the children. The key highlights of the ongoing program are:

- The treatment offered is free of cost through the company CMC till the child ends its schooling from the village
- Primary and High School children are examined and necessary supplements and medication including mid day meal is provided to SSC students

### **Results:**

Out of 457 children covered under this program, nearly 50 % children were found undernourished. These children were given nutrition supplement free of cost for a period of six months through Anganwadi centers for improvement.

At School levels, Free Health Check up and Awareness camps were conducted in schools. Registration Numbers were provided to all the children of Anganwadi as well as school to track their status at any given time through our Community Medical centre. Students will get the free medication till they complete their schooling. The Mid Day meal to SSC students was provided on sharing basis. It is shared on 75-25 percent basis between company and PTA respectively.

## Nutrition for children

Sesa and the University of Agricultural Sciences, (Dharwad) are promoting Foxtail Millet to be part of the local diet. Foxtail Millet is a cereal native to the land and highly nutritious. The project began with replacing rice with Foxtail Millet in the mid-day meals of the school children of Tenigehalli for a period of 60 days. Mid Day meals were also provided free of cost to SSC students from various schools who had to stay back in school after hours for extra classes.

Studies conducted showed a marked development in the children's health with overall malnutrition reduced from 90% to 50% and haemoglobin levels raised from 5% to 24%. The improvements in the health of the children is encouraging us to improving the post harvesting technology for Foxtail Millet and convince farmers to start growing this crop again.



#### Pavitra Vana

Sesa Goa working in tandem with 'The University of Agricultural Sciences' (Dharwad) devised the indigenous "Pavitra Vana" Project. A medicinal plant garden was set up in the local schoolyards. Some of medicinal plants cultivated are Lemongrass, White Hibiscus, Stevia, Bajeberu and Vitex. Commonly occurring ailments like fever, joint pains, skin diseases, bad memory, etc. can be treated with these natural medicines. Having learnt everything about these plants at school, the students go on to teach their families the same. The ultimate aim of this initiative is to take these medicinal gardens from village schoolyards to home backyards.



**Cancer Awareness Camps** 



In association with Muskan, an NGO actively involved in cancer awareness and patient relations, Sesa Goa conducted the first cancer awareness campaign at Kirlapale Dabal Village panchayat. On the 14th of November, a congregation of 62 women and 10 men was addressed by Dr. Sharmila Sardessai, sharing information about Oral, Cervical, Prostrate and Breast Cancer. Three such awareness campaigns were held with questionnaires being collected and studied to identify possible patients.

On the 6th of December 2009, a final camp was organized. Here, cancer surgeons and experts in their respective fields were made available to the people shortlisted from the questionnaires. Specialized tests like Mammorgaphy, PEP smears, etc. were also conducted. Fortunately, no one tested positive for these.

Through Muskan, we have trained a few SHG members and an Anganwadi worker to spread awareness and collect grass root information on the subject of breast cancer. Together with the help of local panchayats, schools, SHGs, Anganwadis and churches, SESA Goa proposes to continue such awareness campaigns and effectively widen the reach of this initiative.

#### Paediatric Neuro Rehabilitation Centre

Paediatric Neuro Rehabilitation Centre is one-of-its-kind in the state of Goa. An old structure was completely rebuilt & renovated at a cost of Rs. 70 lakhs by Sesa Goa in association with the Govt. of Goa and Paediatric Neuro Developmental Clinic, Mumbai. Inaugurated on February 2010, this state of the art facility aims to look beyond the special needs of the child and provide skilled services from detection to intervention and management.



The professional services provided include Occupational Therapy, Physiotherapy, Speech and Language Therapy, Psychological services, Special Education and Orthotics. At this specialised facility intervention can begin from as early as infancy with the help of 3 physiotherapists, 2 speech therapists and 2 Occupational therapists. Intervention services include specific remediation for handwriting, fine motor skills remediation, perceptual remediation and therapeutic gym. This facility is one of its kind state-of-art facility in Goa, promoting holistically positive changes by developing highly specific plans for children, reaching out to far and wide districts of Goa. The Center has seen parents with children needing the facilities, come from nearby states of Karnataka and Maharashtra.

Dr. M. P. Siliveira, Professor and Head of Paediatrics at Goa Medical College, believes that the centre has been one of the most wonderful medical facility for children with special needs and has benefited over 400 children as of July, 2010. The Center provides free therapy sessions on 2 days in a week, for children whose parents cannot afford the costs. It also has home programs for parents, where mothers are given guidance on interventions to be done at home for their children.

Sesa Goa is in discussions with the Centre, the Government of Goa and the Goa Medical College, for the maintenance and upkeep of the centre.

## At a glance:

- 1. Cataract Detection Camp in Community medical centre Amona,
- 2. Swine flu awareness in Goa & Karnataka about 100000 people benefited
- 3. Medical camps conducted at Chitradurga 1053 people benefited
- Blood Donation Camp on the eve of World AIDS Day -1st Dec. 2009.
   Over 240 company employees donated blood from all units
- 5. Malaria eradication campaign in progress at Barbil, Orissa
- 6. Another Community Medical Centres started in Goa, together with the existing 2 each in Karnataka & Goa and 1 in Orissa. Over 69836 people benefitted as on 31st March, 2010.



# Sustainable Livelihoods

## Agriculture Livelihood Promotion



Agriculture is the main source of income in rural areas. But today, it is suffering due to various reasons, such as high input costs, low returns, shortage of skilled manpower, lack of interest in farming and inclination towards white-collar jobs. The inability to harness natural resources due to lack of knowledge and funds discourages farming to a large extent. Hence, Sesa's CSR philosophy endeavours to enhance the socio-economic status of the villagers by improving the farming systems in these areas and utilizing time and effort productively. We also explored the scope to develop micro enterprises providing alternative livelihood means.

The success and learnings gained through our 'Back to farming' project initiated in Wagona, Kirlapal Dabal panchayat motivated us to replicate the project and assist farming community in Cudnem and Navelim in all possible manners to enable them to resort back to agriculture.

The project was initiated with lot of assistance packages to the farmers, including:

- Organising awareness programmes/meetings of farmers along with village panchayat members for mobilization
- Providing guidance on best agricultural practices, improved technologies, hybrid seeds, proper application of fertilisers etc.
- Facilitating farmers in availing government subsidy on tractor ploughing of fields and contributing to remaining share
- Distributing free of cost required paddy seeds, organic manure, chemical fertilizers, irrigation facilities, fencing of fields etc.
- Repair work of sluice gates, bandharas, bandhs, etc.

### Results: Following table shows the project outreach.

Village-wise farmers Association	Area in Ha	No. of Farmer beneficiaries
Utkarsha Shetkari Kriti Samiti, Cudnem	46.73	205
Sastacho Akh tenant Association, Navelim	14.24	67
Akhacho Bandh tenant Association, Navelim	13.03	36
Total	73.9	308

## Sustainable Livelihood through Agriculture

At Sesa socio-economic development of the villages around our area of operations is one of the main focus areas of our CSR initiatives. For the effective implementation of community projects, we tied up with Betki Khandola Panlot Sangh (BKPS), a water-shed organisation registered under the Societies Registration Act. Following is a glance of agriculture-cumlivelihood generation projects taken up in the year 2009-10.

#### Repair of Bandh (bund) in Wadiwada:



At Wadiwada farmers cultivate rice and vegetables in the field by the side of the river 'Mandovi'. Over the years, a bandh meant to prevent saline water from entering the fields, got damaged with erosion at many places, resulting in saline river water occasionally flooding the fields and deteriorating the soil's favourability for cultivation.

A group of 15-20 beneficiaries shouldered the task of strengthening the bandh. Consequently, we could now see a well dressed bandh at a length of about 1 km and width of 2.5 metres.

### Inland Canal Desilting in Bagwada



In Bagwada, an inland water canal channelised the river water that inflows from one end of the canal during high tide and outflows again to the river from other end. The canal had not been de-silted for the last three years, so water over-flooded the fields during high tide, making it unfit for cultivation. The project was taken up and around 600 metres canal was de-silted, benefitting about 70 farmers.

In addition to these projects, this year 70 farmers were facilitated with necessary fertilisers and farming machineries like power tiller, weed cutting machine etc. The onus of carrying out the work was put on the beneficiaries, making the farmers commit to work. It provided a means of employment and additional source of income to the beneficiaries and helped to motivate the farmers to continue with their traditional means of livelihood i.e. agriculture.

#### At a glance

- 1. Soybean field day conducted at Medikeripura village, Chitradurga.
- 2. Training program for SHGs on, artificial jewellery making conducted in Amona-Navelim through Amona Panlot Sangh. 20 people were benefited

# Gram Nirman 2010

The concept of village development emerged during this forum. The project Gram Nirman 2010 is initiated for overall development of village. The awareness and mobilisation process was long drawn to ensure that more and more people participated in this program. Sesa Goa in collaboration with the Government of Goa and the Mineral Foundation of Goa implemented the programme of Gram-Nirman. The company initiated a formal process of stakeholder engagement for understanding the community needs strategy for preparing long term community development programme and monitoring the ongoing programmes. It is a process in which the company and community representatives (elected panchayat members, NGOs, teachers, watershed development members, eminent villagers, etc.) meet regularly to discuss the village development programme. In this process, the community participated in planning, implementing and subsequently owning the projects.

The project is implemented over a period of three years benefitting 1162 households and 5407 people. The plan reflects infrastructural, health, education, environmental, livelihood, energy and human resource need of the local people. For effective implementation of the schemes the company initially made a baseline survey of the entire village from a renowned third party organisation to get the actual feel of the needs of the villagers and to make them self sustained in the future. The project also gives focus to revive sustainable agro and animal based enterprise and effective utilisation of natural and human resource. It also instigates people to come together and manage their resources without much dependence on external agencies wherein the asset created will be handed over to local panchayat and user groups by evolving a management and maintenance system. Various projects / Activities under Gram Nirmaan 2010:





- 1. Education:
  - a. Construction of Nursery/Anganwadi schools
  - b. Toilet/Washroom facility for schools
- 2. Infrastructure Development:
  - a. Construction of multipurpose Village Resource Centre (VRC)
  - b. Platform for idol Immersion as Ganesh festival most popularly celebrated in this area
  - c. Formation of Self Help Groups (SHG)
- 3. Health programmes:
  - a. Anaemia / Health camps and its follow-up through Company established Community Medical Centers (CMCs)
- 4. Agriculture Development programmes :
  - a. Water Bandhara / check dams
  - b. Water shed development programmes





Various other projects in the pipeline are in the fields of agriculture, education as well as soil and water conservation. Our conscious endeavour has brought us recognition and has lifted our spirits to enhance our activities in the core CSR areas of our initiatives.



"From planting trees on our mining sites to conserving water, managing solid waste and reducing energy consumption, we take every possible step towards environment conservation"

# Our contribution to environment: Implementation of best practices

Environment challenges are obvious and enormous when it comes to mining. The very nature of the industry creates a negative impression about mining being harmful, in the minds of stakeholder. However, Sesa Goa has always believed in responsible mining and continues to mine in ways that minimise the negative impacts of our operations. Our responsibility does not end with operating the mine - it extends much after the mine site is closed – ensuring the regeneration of the very earth that has been mined, by being able to sustain the biodiversity, the needs of local communities and in the long term being capable to return the land to as close to their original state as possible.

Long before environment consciousness became de rigueur for the corporate world, we at Sesa had commenced initiatives to preserve and protect the environs. Today, we have a full-fledged environment management team to plan, implement and monitor environment management programs, through whom we continuously seek to address the challenges by mining in environmentally responsible and cleaner ways through:

- Pre-planning of mining operations
- Adoption of new and efficient technologies
- Modernisation of equipment
- Implementing new ways of operating to minimise the negative impact on environment
- Conserving natural resources through efficient use



Sesa Goa's corporate Health, Safety, Environment and Community (HSEC) department & the management review committee frame the policy and guidelines on HSE; they also review the effectiveness of the system periodically. Today, we have a well-defined policy in Safety, Health, Environment & Quality ("SHEQ") for all our operating units.

The committee guides our sustainable development endeavour, sets annual targets and monitors progress in line with our HSE and social policies with a clear focus on integrating HSE aspects in the decision-making process. All our locations are certified for ISO 9001, ISO 14001 and OHSAS 18001.

The HSE committee's agenda is taken forward by the senior management at each site and they are supported by HSE professionals who implement this agenda. We have well qualified HSE and CSR teams across all our operations comprising around 50 qualified and experienced professionals.

Sesa's priorities are to use resources such as energy and water efficiently, minimise our impacts on biodiversity and landscape functions, and reduce waste and emissions including greenhouse gases.

There have been no incidents of non compliance or any fines paid to any of the regulatory authorities during the reporting period.

# **Prioritising on Energy Conservation**

To ensure that energy conservation is always a top priority in all Sesa Goa units, we have established and implemented clear objectives under environment management systems. We have set energy conservation targets of 3% to 5% at all locations as part of the business plan. Projects for energy conservation are identified and undertaken in a systematic manner and are reviewed every quarter to ensure the benefits and targets of the projects are actually achieved.

In 2009-10, we have been able to reduce our specific energy consumptions by 3.70%, 5.58% and 1.41% in Mining, PIP and MCD divisions respectively as compared to the previous year. These reductions in energy consumptions were possible through strenuous efforts by implementation of energy conservation measures, increased productions and improvement in operational efficiencies.









# Water Consumption – Making every drop count

Water is vital for sustaining life. Our main focus on the water management is towards reducing fresh water consumption, increasing the use of harvested rain water, reducing specific consumption, and increasing recycling and reuse of treated effluent.

We follow the concept of zero discharge, with a robust system to undertake and monitor our water conservation targets every quarter. Water conservation targets of 5-10% are part of our business plan every year, and accordingly our water managers located at each of our site identify water conservation projects in consultation with the operating team.



Here's how we manage water conservation at all our facilities:

- The Company continues to use recycled water for its mining operations and for beneficiating iron ore, thereby reducing about 70 per cent of freshwater consumption.
- The rainwater accumulated in mine pits is used for beneficiation and spraying. The tailings generated during beneficiation are treated and water

Water Consumption - Mining 0.9 14,000,000-18 0.8 12,000,000 0.7 0.708 10,000,000-0.6 0.561 8,000,000 0.5 842 0.4 6,000,000 0.3 4,000,000 0.2 2,000,000 0.1 n 0 2008-09 2007-08 2009-10 - Total water consumed - KL 🔶 Specific water consumption - KL/MT is then recycled back. The water requirement of the pig iron and met coke plants is met from rainwater harvested in the exhausted Sanquelim mine pit and partly through government supply.

 In case of Karnataka operations, ground water is used to meet dust suppression requirements. This is supplemented by rainwater harvesting in ponds during the monsoon, and used for the nursery plantations as well.





# Effluents

A major effluent of concern from the mines are 'suspended solids' which occur mostly during the monsoons, due to run-off water carrying silt from the overburden dumps. Sesa endeavours to meet standards before the dump run-offs join the natural courses. Monitoring is carried out regularly for specified parameters, as shown below:

## EFFLUENT CHARACTERISTICS FROM MINES - TSS and Fe mg/l

Mine / Year	200	7-08	2008-09		2009-10	
	TSS	Fe	TSS	Fe	TSS	Fe
Codli	21.83	0.14	9.000	0.100	18.000	0.13
Amona Plant	9.58	0.13	15.000	0.100	10.000	0.10
Amona Jetty	17.00	0.10	7.000	0.100	25.000	0.12
Savordem Jetty	17.97	0.10	22.000	0.100	12	0.10
Sonshi	6.08	0.12	5.000	0.100	15.000	0.10
Sanquelim	7.58	0.15	6.000	0.100	15.000	0.13
Cudnem	14.41	0.12	11.000	0.100	17.000	0.10
Mareto Sodo	26.29	0.10	19.250	0.100	14	0.10
PTI	21.25	0.14	0.000	0.000	0.000	0.000



# Spillages

Sesa follows standard practices and prescribed control measures such as impervious flooring, dyke walls, etc. while designing storage facilities for fuels, oils and hazardous substances. Before disposal, used or spent oil is stored in suitable containers, and on an impervious surface to prevent contamination due to leakage or spillage. During system audits, these areas are inspected and observations, if any, are recorded to ensure effectiveness of the measures.

There were no significant spills of chemical, oil, fuel or hazardous substances in any of Sesa's facilities or operations during the reporting period. However, the total number of spillages and the quantity lost due to spillage is reported in the graph.

# Emissions

The critical area of focus in environmental management at our manufacturing divisions of Pig Iron (PIP) and Met Coke (MCD) is control of dust and gaseous emissions. This is done through the state-of-the-art pollution control systems and monitoring facilities installed at all its locations. An in-house environmental laboratory, approved by the Ministry of Environment and Forests, monitors and analyses environmental parameters.

The graph shows the source emission monitoring trend at the Pig iron and Met coke plants for the last three years. Whilst the SPM load from the pig iron plant has reduced drastically to zero, there has been a slight increase in the SPM load from the Met Coke division in comparison with the previous years due to only one source of emission that is, connected to the boiler unit. The installation of energy-efficient hot blast stoves in place of the earlier metallic blast pre-heaters has been exempted from monitoring since they are operated on cleaned BF gas.





SPM LOAD TO ATMOSPHERE

# **Ambient Air Quality**

The Company also regularly monitors the ambient air quality around its mining and manufacturing locations. The annual average values of SPM for

the last three years are displayed below, and it is clear that all the parameters are well within the stipulated limits.





# Green House Gas Emissions (GHG) – Reducing CO<sub>2</sub> emissions

If each one of us contributes and does our bit towards reducing Green House Gas emissions, it will sure make a huge difference to the world in the long run. We at Sesa Goa have taken up several initiatives of formal monitoring of CO<sub>2</sub> emissions. Carbon footprint assessment studies have been conducted across all Sesa Goa units by a third party. A 30 MW power plant based on waste heat of the met coke plant and the flue gas of blast furnaces, which is a CDM project, began operations during 2007-08 under the ownership of a third party on BOO basis. About 93,555 CERs have been accrued during the 2009-10. The installation of hot blast stoves at the pig iron plant has resulted in a significant reduction of coke rate in the blast furnaces which, in turn, has reduced CO<sub>2</sub> emissions. Around 3720 tCO<sub>2</sub>e have been sequestered through mass plantation over the years till date.

CER's accrued	FY 2008-09	FY 2009-10
Apr	4167	7463
May	5223	9971
June	6955	8055
July	7070	7285
Aug	8248	9704
Sept	6548	7782
Oct	8438	8041
Nov	6321	7590
Dec	2254	4620
Jan	2268	3558
Feb	1882	9346
March	3866	10140
Total	63240	93555



## GHG Emissions (in tCO<sub>2</sub>e)

# **Ozone Depleting Substances**

Our country being a signatory to the Montreal Protocol, has formulated rules to phase out ozone depleting substances' (ODS) production and use in India. Our Company has adopted a Policy on ODS which entails purchasing equipments free from CFCs, halons and MCFs. The Company has availed services of a third party for the maintenance of its air conditioners, coolers, etc. with use of substances which do not harm the atmosphere.

# Waste Management – Nothing must go waste

We focus on a '4R' waste strategy - Reduce, Recycle, Reuse and Reclaim. Our focus is on improving material efficiency; reducing waste generation; and enhancing recovery and reuse of discarded material.

Our mining, beneficiation, metal extraction and coke making activities result in the generation of both hazardous and non-hazardous waste. Some of them are mine overburden, tailings, slag, sludge and other waste from plants. Here's how we implement waste management at all our facilities:

 We generate overburden and tailing at our mines from ore excavation and beneficiation process. Overburden waste is properly stacked and subsequently either backfilled into the exhausted mine pits.
 Geo-textiles are used for stabilisation of dumps and preventing erosion.
 We have adequate facilities and trained manpower to handle and manage these wastes effectively. Rehabilitation is done by planting species commonly growing in Western Ghats area, including commercial horticulture crops like cashew.

- Tailings are treated with adequate doses of flocculants and then sent to exhausted mine pits for settling. The supernatant is recycled in the beneficiation plants for the wet processing of ore. Thus, Sesa reduces about 70% of fresh water usage. Once the pits are filled with tailings, they are covered with overburden material and suitably rehabilitated.
- Canteen waste is converted into vermi-compost and used as manure.
   Mild steel (MS) scrap is disposed through sale for recycling. Used or spent
  oil is disposed off to authorised recyclers and rubbish waste is segregated
  and disposed suitably. The major solid wastes generated at the pig iron
  plant are granulated slag, sludge from the thickener and dry dust from gas

cleaning plant. Granulated slag is sold to cement manufacturers.

- We continue to use recycled water for the mining operations and for beneficiating iron ore, thereby reducing about 70% of freshwater consumption. Wash water generated from the vehicle washing ramp is passed through oil separators and reused for spraying or gardening.
- In the pig iron plant, the entire process wastewater is treated and recycled and reused after necessary treatment.
- A similar philosophy is followed in the met coke plant the entire water used for quenching is cooled and recycled.



Wastes Generated and Disposed - Mining Division



Wastes Generated and Disposed - Met Coke Division



# **Reclaimation of dumps by laying Geotextiles**



# Land and Biodiversity – Caring for the environment

Our activities or operations are not situated in bio-diverse or ecologically sensitive zones. The pig iron and met coke manufacturing facilities are located in an industrial area. Also, the mines in Goa do not fall in forest areas. Though the mines in Karnataka and Orissa form part of forest areas, all the necessary Forest Clearances have been obtained from the Ministry of Environment and Forests, Government of India, for operating them.

We have not conducted any specific study to determine the major impacts of our products or services on the biodiversity of the areas around our operations. However, detailed Environment Impact Assessment studies and hydro-geological studies have been conducted for the mining operations, and an Environment Management Plan has been prepared. Reports do not indicate any major impact on biodiversity due to our activities, products or services. However, mitigating measures as suggested by the studies conducted are being implemented:

- A Narrain Mines (ANM), Chitradurga, Karnataka: We have initiated various rehabilitation measures in the 19-hectare wildlife protection area under the watershed and forestry management programmes, including construction of check dams, plantation of agave and fruit-bearing trees, creation of water ponds, provision of watchtower, and watch and ward arrangements with adequate manpower.
- Reclamation and rehabilitation in mines: Sesa Goa initiates 'Green Belt

Development Programme' every year with the onset of monsoon, usually on World Environment Day on June 5. Tree plantation drives are undertaken at all our units; saplings are donated to educational institutions and also to people in the communities located around Sesa's business areas.

- In FY2010, more than 13,5831 saplings were planted covering an area of 14.46 hectares at various mining locations, including pig iron and met coke units.
- Sesa Goa has made significant progress in protecting and sustaining the natural environment around its mine and plant locations. The Plantation Management Plan prepared for the reclaimed Sanquelim mine has been approved by the Department of Forests, Government of Goa. The action plan for implementation is under progress. Accordingly, select trees (which had been planted after the completion of mining activities as part of mine reclamation) would be replaced with native species. This plan would be implemented in a phased manner, over three years, to improve the biodiversity status of the area, as well as to add educational value.
- The ongoing Research Project for identification of fungus for effective mine land reclamation - conducted in association with the Microbiology Department of Goa University, Goa - has now reached the field trial stage. It has been implemented in regular plantation programmes since the year 2009.



# **Rehabilitating Mined Out Land**

We have adopted various mine reclamation practices at our mines. Among them, Sanquelim mine is an exemplary example of comprehensive mine closure plan prepared and implemented successfully.

Our Sanquelim Group of mines falls in Mauliguem village of Bicholim taluka of North Goa district. In this area, large-scale mining operations were ceased in late eighties. The kind of reclamation measures taken at Sanquelim Mine isconsidered to be a model reclaimed mine project. Total lease area of this mine is around 203 Ha, of which 106 Ha has been reclaimed. Currently, a small portion of the mine is being worked on to recover low grade ore.

#### Plantation:



More than 700,000 saplings have been planted in Sanquelim mine areas. One of the mining pit (Lisboa) has been reclaimed by adopting Horti-Silicultural approach. To disprove the notions that nothing worth can grow on mine waste dump, horticultural crops species, which grow in Goan region, were planted and have grown very well with some extra efforts. Goa's cash crop Cashew was tried in the initial stage with interspacing of acacia. The result of which is a well-developed cashew orchard. Species like Coconut, Arecanut, Mango, Chikoo, Jackfruit, Banana, Pineapple, Lemon, Guava, Kokum and several other species are present. Spice plantations are carried out, which include spices like Cinnamon, Black pepper, Vanilla, and Nutmeg, etc.

All these plantations are irrigated with rainwater harvested in the exhausted mining pit. Rubber plantations are also carried out in some areas. Green covers species Plumeria - leguminous creeper is planted on these waste dump surfaces, which helps to enrich the soil by fixing Nitrogen and also increasing the organic matter in the soil.

Exhausted mining pit is converted to alternate land use by Pisciculture. This experiment was launched in collaboration with National Institute of Oceanography in the year 1990. One of the worked out pits (Lisboa) was terraced with loose soil to facilitate afforestation, and the pit is used for Pisciculture.

The pit receives fresh water from rains and good volume of water remains throughout the year. The fingerlings of Rahu, Mrugal & Carp (around 15000) were released in the open pit and were fed daily with soaked groundnut cakes. The temperature was monitored daily at 1m depth for the adjustment of feed as per feed chart. The results were very encouraging, and now the pond is full of fish and some crocodiles.

We have also created a beautiful example of natural asset creation after exhausting of mining. Exhausted mining pits are utilised for rainwater harvesting. All the dump runoff and surface runoff during monsoon is channelized into these pits and the same is utilised for our plants located 10 Km at Amona.

There hasn't been any resettlement activity in the reporting period as the activities continued in the existing mining lands only and no new land was explored for the said purpose.

## Nakshatra Van (Medicinal Garden)



## MEDICINAL GARDENS:



To conserve the medicinal plants and to improve the biodiversity of the area, medicinal gardens have been developed on one of the dump benches based on two concepts:

- \* Nakshatra Devata Udyan
- \* Charak Devata Udyan

Nakshatra Devata Udyan is based on the 27 Constellations (Nakshatras). The garden consists of two sacred trees to each of the 27 Nakshatras. Also there are sacred plants for Rashis and Planets.

A board depicting the details of each plant species, its botanical name, plant part in use etc is displayed, which adds educational value to the area for the students and visitors. Small area is developed into the Aromatic plants garden from the local area. The table below shows the extent of rehabilitation carried out by our

organisation at various mining sites.

	Land	Area (in Hectares)
А	Total land disturbed and not yet rehabilitated (opening balance)	994.6589
В	Total amount of land newly disturbed within the reporting period	0
С	Total amount of land newly rehabilitated within the reporting period to the agreed end use*	261.1762
D	Total land disturbed and not yet rehabilitated (closing balance) (D=A+B-C)	733.4827

\* 'Agreed use' does not necessarily mean returning land to its prior condition, as post-mining end use may result in a changed state (such as flooded open-cast workings creating wetland habitat)

## Sanquelim Mine Plantation Management Plan - Model concept:



This mine after natural resource exhaustion has been converted into Model reclaimed mine. The Acacia plant which was planted as initial tree cover for soil stabilization and building up of organic matter, has reached to its maturity. Company has prepared Plantation Management plan, to harvest the acacia in a scientific manner. This plan is approved by Forest department, Government of Goa.

This plan will include selectively cutting of mature Acacia plants in phased manner and planting of Species native to Western Ghats. This will help to increase & attract the flora and fauna of the region and improve biodiversity.

Under this plan, the entire area will be utilised for various projects like Butterfly Park, Bamboo & Rattan Arboretum, Bamboo House (which will be a centre for environmental & social programmes), Bird Watching Centre, etc., resulting in converting this mine area into Ecotourism spot. Implementation of this plan is in progress.

Location 2009-10	Area Rehabilitated Ha	Trees Planted Nos.
Codli	4.56	7551
ANML	5.526	110350
Sonshi	1.21	4200
Orasso Dongor	1.62	4200
PIP	0.4345	1147
MCD	0.5	883
Sanquelim	0.31	500
Thakurni Mine	0.3	7000
Total	14.4605	135831

# Biodiversity Management plans for Mines

Biodiversity management plan has been prepared for Sanquelim Group of mines for its lease area. For the Codli group of mines, Mareta sodo mine and Botvadeacho dongor mine we have prepared wildlife management plan as per the environmental clearance norms and is awaiting an approval from the Forest Department. Following the approval, the Forest Department will implement the plan in the wildlife sanctuaries with the financial assistance provided by the company. Narrain Mine Karnataka (163.5 Ha) and Thakurani Mines (228.04 Ha) in Orissa are a part of forest area although they are not declared as protected areas.



■ Codli ■ ANML ■ Sonshi ■ Orasso Dongor ■ PIP ■ MCD ■ Sanguelim ■ Thakurni Mine

## **Our Climate Change Strategy and Action Plan**

Climate change is an important aspect of the Sesa's corporate strategy. As a part of this, the company has undertaken steps to measure its impact on the environment by mapping its carbon footprint periodically through consultants. The company's top management reviews the company's progress and status regarding climate change periodically.

The registration of the 'waste heat recovery based power plant project' with the UNFCCC results in generation of carbon revenue which makes the project sustainable and helps in generation of additional revenue stream for the unit. About 93,555 CER's has been accrued during 2009-10.

Currently there is no predicated risk or opportunity that is posed by climate changes that have potential financial implications for the organization.

Most of Sesa Goa's operations are located on western Coast of India and this location is not envisaged to be vulnerable for any physical risk from climate change like flood and tsunami. Rise in sea level due to climate change may pose a risk in future.

Sesa Goa foresees an opportunity in near future if domestic energy trading markets like PAT (Perform, achieve and trade) mechanism as proposed by BEE are implemented. SESA also participates in the emission trading market through GHG abatement projects and looks forward to convert the carbon liabilities to carbon asset and in turn some revenue through those mechanisms.

# Product responsibility



Sesa's principal products - iron ore, pig iron and metallurgical coke - are either basic raw materials or intermediates for the manufacture of other products and are 100 percent recyclable or usable. These products do not exist in their normal state, because they become part of other products. As such, it is difficult to keep track of the life cycle of these products. Hence, the Company does not monitor the direct environmental impacts of its products. The Company does not require the use of packaging materials for any of its products.

The Test Certificates given to our customers is comprised of information

on physical dimensions and chemical composition of the products while being sold to them. The Company adheres to all the laws applicable for all its exported goods while catering to our overseas customer base. Our products do not require advertising at the scale of any other consumer goods as we do not manufacture any such products that would require such level of marketing or exposure.

There have been no instances of non-compliance with laws related to the use of the Company's products and services and there were no monetary or any other penalties levied upon us during the reporting period.



# **Materials Consumption**

Sesa Goa constantly endeavours to optimise the consumption of materials in all its operations and processes. The major materials used in the process of mining operations are:

- Lubricants for HEMM operations
- Steel for structural fabrication
- Paint
- Explosives for breaking hard strata

Steel and paint are used in the ship-building unit and the support services of the mining division.







At Sesa Industries, the major raw materials used are iron ore, met coke and fluxes. Iron ore is supplied partly from the mining division; the balance is purchased from the open market. Coke is supplied by the met coke division of the Company. Fluxes are purchased from outside. The Company makes continuous efforts to bring down specific coke consumption.

During the reporting period, raw material, fluxes and coke consumption decreased due to installation and effective use of hot blast stoves, due to reduction in the quantity of pig iron production. The graphs below show consumption patterns of raw materials at the pig iron plant during the last three years. The major raw material in coke-making is low ash coal, which is imported. Our company does not have any process which can reuse industrial waste as raw materials.











# Sustainable Logistics



# Ensuring better productivity, lower costs

Except for metallurgical coal (with low ash content) and specialised production machinery, generally all our raw materials, equipment and spares are procured from local Indian manufacturers. Construction and other services for upgrades are carried out by competent Indian contractors.

Besides our own iron ore mines in Goa and Karnataka, we also operate some third party lease mines in Goa and Orissa. The main raw materials used in the manufacture of pig iron are iron ore, coke, limestone and dolomite. Coke and low-grade iron ore are also supplied from within the Sesa Group, while limestone, dolomite and high grade lumpy ore are procured from suppliers in Karnataka.

Our Company is committed to high levels of productivity and technical efficiency with innovative practices, timely delivery of quality products to all its customers, and the best treatment to all its vendors and contractors who are partners in the value chain of Sesa's business. Having been in the iron ore business for several decades, we have had the experience of dealing with different phases of a business cycle. We have always recognised that, being a commodity producer, we will remain a price taker in international markets. We concentrate on streamlining operations to become a highly flexible, low cost producer — one that can cater to an upturn as quickly as it can hedge the risks of a downturn. There are three elements to our business approach:

- Increasing the scale of operations
- Continuously focussing on cost reduction
- Steadily building the ore asset base

This three-pronged approach to executing business in the mining sector and dealing with market cycles has helped Sesa Goa deliver relatively good results even in such adverse business conditions. This is reflected in the financial performance of the Company in 2009-2010. It is generally the basic objective of the purchasing policy to assure continuous supplies of necessary materials, when they are needed, at lowest total cost of ownership, from the best suppliers available However, as an ethical practice, we do encourage that all segments of society have the opportunity to participate by demonstrating support for small, disadvantaged, and minority-owned businesses. The value of imports on CIF basis is listed in the table below:

Particulars	2007-08	2008-09	2009-10
Raw Materials	173.42	151.85	343.78
Components & Spare Parts	14.55	15.69	14.11
Capital Goods	21.12	15.40	9.82
TOTAL	209.09	182.94	367.71





## CORPORATE SOCIAL RESPONSIBILITY

- Sesa Goa has won Overall first prize award for Corporate Social Responsibility (CSR) during the 7th National conference on Occupational Safety, Health and Environment, organized by Inspectorate of Factories and Boilers, Govt. of Goa - February, 2010.
- Sesa Industires has won first prize award for Corporate Social Responsibility (CSR) in environment category during the 7th National conference on Occupational Safety, Health and Environment, organized by Inspectorate of Factories and Boilers, Govt. of Goa -February, 2010.

#### Health, Safety & Environment

- Sesa Goa Ltd, Goa, awarded with the "Certificate of appreciation for Plantation Management for Reclaimed Sanquelim Mine" in the manufacturing (Large) category - During 6th CII WR Safety, Health and Environment (SHE) Award 2009 - on 26th March, 10 at Mumbai
- ANML MEMCA week 2009-2010 from 04.01.2010 to 09.01.2010 GROUP HEAVY MECHANIZED MINES:- 1.Afforestation - 1st Prize. 2.Waste Dump Management - 1st Prize.
   3.Top Soil Management - 2nd Prize.
   4.Systematic Development, Reclamation & Rehabilitation - 2nd Prize. 5.Management of Sub Grade Minerals - 2nd Prize. 6.Installation and use of Mechanical Beneficiation Plant -2nd Prize. 7.Publicity & Propaganda - 1st Prize.
   OVER ALL PERFORMANCE - 1st Prize
- Sesa Industries Ltd & Sesa Goa Ltd Metcoke

division has won the international safety award by british safety council for 2009 in april 2010. The award will be given in May 2010

- Sesa Goa received the "Best Performer" award in the Metals & Mining category at the FE-EVI Green Business Leadership Awards 2009-10 on the occasion of World Environment Day. The award was received by Mr. Mahesh K Patil, GM-HSEC, at the hands of Dr. Farooq Abdullah, Minister for New and Renewable Energy (MNRE) & Mr. RK Pachauri, Director General, TERI.
- Sesa Goa Limited Met Coke Division and Sesa Industries Limited received the 'Gomantak Suraksha Patra' for Safety performance for 2009 during the award function organized by Green Triangle Society of Goa in collaboration with Inspectorate of Factories & Boilers.

#### Others

- During the 47th National Maritime Celebration, SESA GOA was adjusted as the best Barge operator in Goa (2009-10). The award was received by our MD Mr. P.K MUKHERJEE at the hands of His Excellency Dr.S.S.Sidhu ( Governor of Goa) in the presence of Rear Admiral Sudhir Pillay (Flag officer Commanding Goa Naval Area & Flag Officer Naval Aviation) And Sri Praveen Agarwal I.R.S Chairman MPT and other eminent personalities from Maritime industries.
- Sesa Industries has received National Award for Excellence in Water Management 2009 as "Water Efficient Unit" organised by CII in a

function held at CII-Sohrabji Godrej Green Business Centre Hitec City Hyderabad on 10/12/2009

- Other prizes won during the same event: 1) Best Utilisation Of Iron Ore Cess Fund -- First Prize. 2) Maintenance of Equipments (Engineering Aspects) - First Prize 3) Transport - First Prize 4) Material Preparation -- First Prize 5) Implementation of Recommendations of Tripartite Conference on Safety in mines -First Prize 6) Opencast Workings - Second Prize 7) Safety Exhibition stall - First Prize
- Gaval Sonshi Mine:- 1.Overall Performance Mining Aspects : 3rd Prize. 2.Overall Performance Engineering Aspects : 2nd Prize.
   3.Welfare Amenities & Health Protection : 2nd prize. 4.House Keeping & Organisation 2nd Prize. 5.Maintenance of Records : 1st Prize
- Group B: Mechanized Mines. Maretasodo Mine Mining Aspects: Publicity & Propaganda : 2nd Prize. Maintenance of Equipments : 2nd prize
- Sanquelim Mine: Engineering Aspects: Electrical Equipments : 2nd prize. Mining Aspects Pit Dewatering : 2nd prize
- Group C: Mechanized Mines Botvadeacho Dongor Mine: Engineering Aspects: Maintenance of Records : 2nd Prize Mining Aspects: Vocational Training : 2nd prize Mining Aspects: Opencast Workings : 2nd prize

Sesa Industries has received National Award for Excellence in Water Management 2009 as "Water Efficient Unit" organised by CII in a function held at CII-Sohrabji Godrej Green Business Centre Hitec City Hyderabad on 10/12

# Glossary

AAQ	Ambient air quality	MFG	Mineral Foundation of Coa
AAQ AAQM	Ambient Air Quality Monitoring		Mineral Foundation of Goa Milligram
ANML	A Narrain Mines Ltd.	mg	milligram/litre
BF gas	Blast Furnace gas	mg/l mm	Milli metre
BP gas BOO	Build Own Operate	Mn	
			Manganese Multipational Composition
BVD	Botvadeacho Dongor (Mine)	MNCs	Multinational Corporation
BVQI CDGP	Bureau Veritas Quality International	MNRE	Minister for New and Renewable Energy
	Coke Drying and Grinding Plant	MS scrap	Mild Steel scrap
CDM	Clean Development Mechanism	, MTPA	Million tonne per annum
CERs	Certified Emission Reductions Chloro Fluro Carbon	MW	Mega Watt
CFCs		NGO	Non-governmental Association
CFR	Cost and Freight	NOX	Oxides of Nitrogen
CIF basis	Cost Insurance & Freight basis	NRI/OCBs	Non Resident Indian /
CMC	Community Medical Center Carbon di Oxide	,	Overseas Corporate bodies
CO2 CSR		OB	Over burden
DWT	Corporate Social Responsibility	OD	Orasso Dongor (Mine)
	Deadweight tons	ODS	Ozone Depleting Substances
Fe	Iron	OHS	Occupational Health and Safety
FOB FTSE	Free on Board Financial Times Stock Exchange	OHSAS	Occupational Health and Safety Assessment Series
FY	Financial year	PIP	Pig Iron Plant
GDF	Gao tona Dusri fall (Mine)	PME	Periodical Medical Examination
GHG	Green House Gases	РРР	Public Private Partnership
GJ/Ton	Giga joules per ton	PTA	Parent Teachers Association
gm	Gram	QEHS	Quality, Environment, Health and Safety
GRI	Global Reporting Initiative	R&D	Research & Development
Ha	Hectare	RSPM	Respirable Suspended Particulate Matter
Hb	Haemoglobin	SBD	Ship Building Division
HEMM	Heavy Earth Moving Machinery	SCDF	Sesa Community Development Foundation
HR	Human Resource	SEBI	Securities and Exchange Board of India
HSE	Health, Safety and Environment	SFA	Sesa Football Academy
HSEC	Health, Safety,	SHG	Self Help Group
	Environment and Community Development	SIL	Sesa Industries Limited
HUF	Hindu Undivided Family	SO2	Sulphur di Oxide
ISO	International	Sp. Energy/ton	Specific energy per ton
150	Organisation of Standardization	SPEECH	Society for Public Education
Kg/ton	Kilogram per ton		Environment Culture and Health
KL/MT	Kilo litre per metric ton	SPM	Suspended Particulate Matter
KLD	Kilo Litre per Day	STS	Sesa technical school
Ltr.	Litre	TERI	The Energy Resource Institute
MCD	Met Coke Division	TPY	Tons per Year
MCF	Methyl chloroform	TSS	Total Suspended Solids
MEMC	Mines Environment &	VSD	V. S. Dempo and company Ltd.
	Mineral Conservation Council		

# **GRI INDEX**

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410	Memberships in associations	F		<u>4, 49</u> 25
4.13	"List of stakeholder groups engaged by the Organisation"	F F		18-19
4.14		Г		
4.15	"Basis for identification and selection of stakeholders with whom to engage"			17,18
4.16	"Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group"	F		18,19
4.17	Key topics and concerns that have been raised through stakeholder engagement	F		18,19

## Performance Indicators

GRI Code	Description	Coverage	UNGC Principles	Page Nos
ECı	Direct economic value generated and distributed including revenues operating costs, employee. compensation, donations and other community investments, retained earnings and payments to capital providers and governments	F		24
EC2	" Financial implications and other risks and opportunities for the organisation's activities due to climate change"	F	7,8	54
EC3	"Coverage of the organization's defined benefit plan obligations"	F	6	24
EC4	Significant financial assistance received from government	F		24
EC5	"Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation"	F		NA
EC6	"Policy, practices and proportion of spending on locally-based suppliers at significant locations of operation"	F		57
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	F	6	29
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro bono engagement	F		24
EN1	Materials used by weight or volume	F		56
EN2	Percentage of materials used that are recycled input materials	F		56
EN3	Direct energy consumption by primary energy source	F		44, 45
EN4	Indirect energy consumption by primary source	F		44, 45
EN5 EN6	Energy saved due to conservation and efficiency improvements Initiatives to provide energy efficient or renewable energy based products and services,	F		44
	and reductions in energy requirements as a result of these initiatives	F		NA
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	F		NA
EN8	Total water withdrawal by source	F		45, 46
ENg	Water sources significantly affected by withdrawal of water	F		NA
N10	Percentage and total volume of water recycled and reused	F		46
EN11	"Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas"	F		51-54
EN12	"Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas"	F		51
EN13	Habitats protected or restored	F		51, 52
EN14 EN15	Strategies, current actions, and future plans for managing impacts on biodiversity "Number of IUCN Red List species and national conservation list species with habitats	F		53, 54
EN16	in areas affected by operations, by level of extinction risk" Total direct and indirect greenhouse gas emissions by weight	F		51
EN10 EN17	"Other relevant indirect greenhouse gas emissions by weight	F		49
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	F	7,8,9,10	<u>49</u> 49
EN19	Emissions of ozone depleting substances by weight	F		49
EN20	NO, SO, and other significant emissions by type and weight	F		47, 48
N21	Total water discharge by quality and destination	F		46, 47
N22	Total weight of waste by type and disposal method	F		50
EN23	"Total number and volume of significant spills"	F		47
EN24	"Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally"	F		49
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff	P		45
EN26	Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation	F		55
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	F		55
EN28	"Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations"	F		55
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	F		NA
EN30	Total environmental protection expenditures and investments by type	F		NA
Aı	Total workforce by employment type, employment contract and region	F		28, 30
_A2	" Total number and rate of employee turnover by age group gender and region"	F		30
_A3	"Benefits provided to full-time employees that are not provided to temporary or part time employees, by major operations"	F		27
.A4	"Percentage of employees covered by collective bargaining agreements"	F	6	29

Core Indicators Additional Indicators

F - Fully Covered P - Partially Covered

## Performance Indicators

GRI Code	Description	Coverage	UNGC Principles	Page Nos.
_A5	"Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements"	F	3	29
LA6	"Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs"	Ρ		31
_A7	"Rates of injury, occupational diseases, lost days and absenteeism and number of work related fatalities by region"	F		31
_A8	"Education, training, counselling, prevention, and risk control programmes in place to assist workforce members, their families, or community members regarding serious diseases"	F		32, 33
Ag	Health and safety topics covered in formal agreements with trade unions	F		33
A10	Average hours of training per year per employee by employee by category	F		30
A13	"Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity"	F		28, 30
A14	"Ratio of basic salary of men to women by employee category"	F		30
HRı	"Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening"	Р	1,6	29
HR2	"Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken"	Р		29
HR3	"Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained"	Р		29
HR4	Total number of incidents of discrimination and actions taken	F		29
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these right	F		29
HR6	"Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour"	F	_	29
HR7	"Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour"	F	1,2,3,4,5,6	29
501	"Nature, scope, and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting"	F	_	34-42
502	Percentage and total number of business units analysed for risks related to corruption	F		29
503	"Percentage of employees trained in organisation's anticorruption policies and procedures"	F		29
504	Actions taken in response to incidents of corruption	F		29
505	Public policy positions and participation in public policy development and lobbying	F		20
506	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	F		20
508	"Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations"	F		44
PR1	"Life cycle stages in which health and safety impacts of products and services are assessed for improvements and percentage of significant products and services categories subject to procedures"	F	10	55
PR2	"Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their	_		
	life cycle, by type of outcomes"	F		55
PR3	"Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements"	F		55
°R4	"Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes"	F		55
°R5	"Practices related to customer satisfaction, including results of surveys measuring customer satisfaction"	F		25
PR6	"Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship"	F		55
°R7	"Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes"	F		55
PR8	"Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data"	F		55
°Rg	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	F		55

Core Indicators Additional Indicators F - Fully Covered P - Partially Covered

Meta	ls	Я	Μ	in	ing

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Indicator	Commentary	Coverage	Page
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	F	52-54
MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.	F	54
MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks	Р	49-50
MM4	Number of strikes and lock-outs exceeding one week's duration, by country	F	29
MM5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples'communities.	F	35
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples	F	35
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes	F	35
MM8	Number (and percentage) of company operating sites where artisanal and smallscale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risksF	17	
MMg	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process	F	52
MM10	Number and percentage of operations with closure plans	F	25
MM11	Programs and progress relating to materials stewardship	Ν	NA





\*Sector supplement in final version

# PRAISES GALORE

Encouragement always leads to better steps. We would like to thank the dignitaries who visited the Sanquelim mine reclaimed area during the reporting period and appreciated our efforts. A very rewarding visit to the mines at Sonshi and the reclaimed area once the waste dumps at Sanquelim. The plantations, herbs and other natural growth match the natural forest! A truly remarkable achievement by Sesa Goa Environmental Group. Needs larger recognition of the excellent work done here.

Naresh Chandra, Former Cabinet Secretary

Sesa has proved that rehabilitation of mining areas can be done and nature is lush and wonderful. It has been an inspiration and an example all other mining companies should follow. What I saw today convinced me that we can live with mining in Goa, provided every mining company works the way Sesa Goa has been working. Good work Sesa Goa! You have convinced me! But how are we going to convince all the other miners and follow your example?! Thank you for your time and showing me around. Unique reclamation, keep it up

**A.B. Panigrahi,** RCOM - Indian Bureau of Mines, Goa

Carmen Miranda, London

Very interesting, informative tour, enjoyed by all students- very helpful staff and very good use of materials for recycling and good use of trees to help the earth

**Bev King,** European School of Goa, Saligao

Apart from mining, Sesa Goa has done most beautiful job of ecology balancing and environment protection. This is something shifting to nature. Well done, keep it up. Our students really enjoyed the visit

Anil Verneker, Principal- Siddharth Bandodker Higher Secondary School, Goa

Good efforts on reclaiming the depleted natural resources and giving back to the nature. Please keep up the good efforts

**P.D.Shastri,** Bureau Veritas Certification, Mumbai Excellent demonstration of community relations

**Ed Wranski,** Ministry of Afghanistan

This is a very valuable work of eco restoration of mined out area. If properly documented, can serve as an effective data for dispelling the fears of permanency of damage due to mining. Well done!

Mohinder Pal, IFS- Director HFRS (Shimla)

Well hadn't realised the novelty of the concept entertained in this site, before coming here and seeing it for myself. Great!

> Ashwini Sattaru, Indian Foreign Service

Your work is an inspiration and we will spread the story of your endeavour

Hon Grant Woodhams, MLA –Speaker of the Legislative Assembly (Western Australia) Amazing! A wonderful example of reclamation. Example for others to emulate

**Prof. Sumit Bajpai,** Department of Earth Sciences, IIT Roorkee

It is an amazing, extraordinary work done by Sesa Goa under its CSR policy to stabilise the dump with pisciculture, fruit plantation, etc. I feel really fortunate to see such activity

S.C.Krishna, IFS- Orissa Mining Corporation

Good effort by team Sesa Goa. An example which can be imitated by other mine owners

**S. K Adhikari,** Indian Bureau of Mines I'm impressed with the efforts made by a corporate for the interest of earth and humans living in and around mine belt

**S.T. Puttaraju,** Senior Town Planner - Government of Goa Excellent work done for reclamation. Needs to be replicated elsewhere. Local plants would be more suitable for the redevelopment and restoration. Academic and Technical schools are welcome contribution as corporate social responsibility

V.P.Rao, Secretary Government of Goa

> A marvel of a place, really enjoyed being here. The plan has been thought through with a foresight.

Anupam Nidhi, Reliance Communications

We enjoyed the greenery and medicinal garden, Butterfly project is excellent and our children liked the study tour and your hospitality

**G.G. Velgaonkar,** Gananath English High School, Dabhal, Goa The original garden of paradise preserved.

**Tara Narayan,** Goan Observer, Panjim

It is nice to know that apart from mining Sesa Goa is also into social engineering. Inspiring to see reclaiming of the mining land and the forestry work done there. Congratulations to the people behind this effort. Thanks to Sea Goa to the special consideration it has to the environment. Keep it up

> S. S. Nair, Regional Provident Fund Commisioner-Goa

Heartening to see Sesa Goa's efforts in addressing the negatives of mining and bring its effective CSR in action.

**Dean D'Cruz,** Architect, Goa

# Independent assurance report to Sesa Goa Limited's 2009-10 Sustainable Development Report

KPMG was engaged by Sesa Goa Limited ('Sesa') to provide assurance over Sesa's 2009-10 Sustainable Development Report ('the Report').

## Assurance scope and limitations

The assurance is provided for the data and information under the limited assurance scope for the period 01 April 2009 to 31 March 2010. We have covered all performance indicators mentioned in the Global Reporting Initiative's G3 Guidelines for Sustainability Reporting. Site visits were carried out to Sesa's Pig Iron plant, Met Coke division, Mines and Corporate Office in Goa. For the mines and plants that were not visited, we verified the correctness and reliability of the data provided at the Corporate office.

This assurance statement does not provide assurance over any data or information presented in the Report other than that mentioned above. Further, the assurance statement does not include verification of financial performance indicators that were sourced from Sesa's 2009-10 annual report. Data and information outside the reporting period mentioned above was not subject to any verification. Also, any statement indicating intention, opinion, belief and / or aspiration by Sesa was excluded from the scope of assurance.

## Assurance standard and Independence

We conducted our work in accordance with International Federation of Accountants' (IFAC) International Standard for Assurance Engagements [ISAE 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information]. We conducted our engagement in compliance with the requirements of the IFAC Code of Ethics for Professional Accountants, which requires, among other requirements, that the members of the assurance team (practitioners) as well as the assurance firm (assurance provider) be independent of the assurance client, including not being involved in writing the Report. The Code also includes detailed requirements for practitioners regarding integrity, objectivity, professional competence and due care, confidentiality and professional behavior. KPMG has systems and processes in place to monitor compliance with the Code and to prevent conflicts regarding independence.

## Assurance process

We obtained all the evidence, information and explanations that we considered necessary in relation to the assurance scope mentioned above. Our work included a range of evidence-gathering procedures which are further explained below:

- Observations of Sesa stakeholder consultation processes and their methodology for determining the material issues;
- Interviews with the CEO, Senior management, Sustainability core group and staff at site level;
- Checking the Report's contents to ascertain the application level criterion as mentioned in the Global Reporting Initiative's G3 Guidelines for Sustainability Reporting;
- Assessment of systems and procedures used for data collection, collation, and analysis;
- Visits to Sesa's Pig Iron plant, Met Coke division, Mines and Corporate Office in Goa;
- Interaction with data owners from operations in Karnataka and Orissa;
- Review of the Report to ensure that there are no disclosures that are misrepresented or inconsistent with our findings.

## Responsibilities

The Management of Sesa is responsible for preparing the Report and the information and statements within it. Sesa is responsible for identification of material sustainability issues; establishing and maintaining appropriate performance management and internal control systems; and derivation of performance data reported.

Our responsibility is to express our conclusions in relation to the assurance scope. We conducted our engagement with a multidisciplinary team including specialists in ISAE 3000, stakeholder engagement, auditing environmental, social and financial information and with experience in similar engagements in the metal and mining sector.

This report is made solely to the Management of Sesa in accordance with the terms of our engagement. Our work has been undertaken so that we might state to Sesa those matters for which we have been engaged to state in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Sesa for our work, for this report, or for the conclusions we have reached.

# Conclusions

Based on ozur review, nothing has come to our attention to indicate that the information contained in the Report is inconsistent with our findings as described below:

- Vision and strategy
  - o The vision and strategy addressing sustainable development have been articulated in the report. However the same have to be supported by appropriate sustainability goals, targets and action plans.
  - o The report content has been defined using the principles for defining report content as mentioned in the Global Reporting Initiative's G3 Guidelines for Sustainability Reporting and is consistent with the strategy.
- Material issue selection
  - o Sesa Goa has deployed a formal process for identification, prioritization and reporting of material issues. A pilot run of the process was adopted in the Report.
  - o There are clear authorities and responsibilities in relation to aspects of sustainable development material to Sesa.
  - o Since Sesa has 100 percent control over VS Dempo & Co. Ltd, the Company should also consider including the same under its sustainability reporting framework from the year 2010-11, as mentioned in the Report.
- Sustainable development performance indicators
  - o The information systems used for collection, collation, analysis and communication of sustainable development performance indicators are reliable.
  - o During the course of verification, data transcription errors were detected at few places which were subsequently corrected.
  - o The report covers the GRI G3 core indicators and metal & mining supplement indicators in detail. There is scope to expand indicator universe to include additional indicators as well.
  - o The approach and practices adopted by Sesa for rehabilitation of the Sanquelim mine are noteworthy.
- Applicability level assessment
  - o The Report complies with requirements of 'A+' application level criteria as per the Global Reporting Initiative's G3 Guidelines for Sustainability Reporting.

06 October 2010

Arvind Sharma

Director

KPMG

# FEEDBACK FORM FOR SUSTAINABLE DEVELOPMENT REPORT 2009-10

• F	🗌 Hig	h dium	ne issue coverd in t	he Report:	
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• S	Suggest the a	rea, if any, where r	more details should	l be reported:	
Organ	e nation nisation act Address	: : :			
			Ma General Mar Sesa Goa Li 20 EL Patto, Pan	<b>your feedback to:</b> <b>hesh Patil</b> nager Environment, mited, 'Sesa Ghor', DC Complex, jim, Goa 403 001 atil@sesagoa.com	





Sesa Goa Limited, Sesa Ghor, 20 EDC Complex, Patto, Panaji, Goa 403001, India. www.sesagoa.com