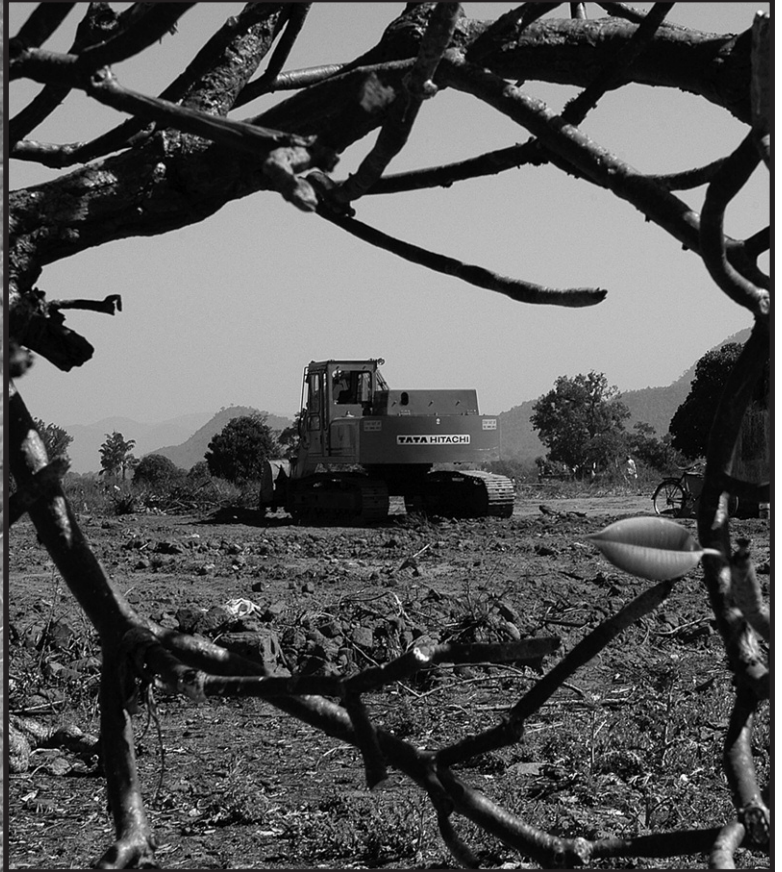


VEDANTA RESOURCES plc COUNTER REPORT 2005

Ravages through India



Lifting the Veil of Silence

Northern Investors, apparently led by a number of UK and US hedge funds, responded with enthusiasm to the launch of Vedanta Resources plc on the London Stock Exchange (LSE) just before Xmas 2003. Behind the scenes, the sordid history of Sterlite Industries—the thirty year old family business of Anil Agarwal—had come under some scrutiny during the previous months. However, the “investigations” were clearly skimped, and some aspects of Sterlite’s murky past undoubtedly concealed from the public. An LSE source told the *London Times* on December 10, 2003 that Vedanta’s listing had gone through “only after a quiet word in many ears.”

Vedanta is now celebrating more than eighteen months trading in “the City.” Although its share price slid dramatically downwards in the first half of this period, of late it has been riding fairly high. There are one or two industry commentators (such

as the *Financial Times*’ ex-mining editor, Ken Gooding) who are willing to question the company’s boardroom strategy. This was the case when both Vedanta’s UK-born chair, Michael Fowle and Jean Pierre Rodier, former head of French aluminium giant, Pechiney, and chair of Vedanta’s Health, Safety and Environment committee, suddenly resigned in April this year.

Nonetheless, despite Agarwal now ruling Vedanta as executive chairman, in flat contravention of UK corporate good governance rules, and despite two ringing condemnations of the company’s operations made by subcommittees of the Indian Supreme Court during the past twelve months, the UK press remains culpably silent about what its newest multinational mining company is getting up to. Nor—with a few notable exceptions—have Indian journalists done much better.

Why this report?

We are a large group of concerned organizations and individuals, including minority shareholders, community representatives, workers, environmental, human rights and worker’s rights campaigners, who are determined that this veil of silence should be lifted.

We have no financial interest in Vedanta itself and any company which might be in competition with Vedanta.

Our prime concern is that the facts be known and that the company’s continued violation of law and human rights be redressed.

Our hope and expectation is that those who brought this dubious company to the market (such as the J P Morgan investment bank, which recently announced an “ethical policy”, and ABNAMro which purports to have one already in place), will revise their assessment of Vedanta as a company with which conscientious investors can continue to do business.

We also want to bring attention to the plight of the communities that have been adversely affected by Vedanta’s operation in order to rectify the wrongs that have been committed.

Ravages through India

Table of Contents

PART ONE: Behind Vedanta	2
Vedanta Background: Listing on the London Stock Exchange, role of Brian Gilbertson.....	2
History of Sterlite Industries	3
Disaster	3
SEBI case.....	4
Balco at Lanjigarh and Nyamgiri	5-6
Volcan and Twin Star	7
PART TWO: Vedanta's Score Card India: 2004-July 2005	8
Tuticorin	8
MALCO in the Shevaroyans	9-12
Hindustan Zinc Ltd at Mansi-Wakal	11
Two Types of Land Grab	12
Vedanta Alumina in Orissa; Indian Peoples' Tribunal on Mettur.....	13-15
Sources (for Part One)	16
Appendix One: Documents Relating to the Tuticorin Smelter.....	17-19
Appendix Two: The CEC Report on Lanjigarh, 2004	20-21
Appendix Three: Some Allegations by Community Members Affected by MACLO at Mettur	22-24

PART ONE

Behind Vedanta

Vedanta Resources plc's December 2003 public float on the London Stock Exchange was Britain's second biggest that year, and a first for any Indian-based company. One or two commentators expressed misgivings.

First, Vedanta is ostensibly controlled by Sterlite Industries, a major Indian conglomerate which is the holding company for Anil Agarwal, an NRI (Non-Resident Indian) based in London. Agarwal had previously tried to de-list his company from the Mumbai (Bombay) stock exchange, then buy back its shares at only half the book value. The Indian authorities firmly told Agarwal he couldn't do so.

Second, a year earlier, Agarwal had been found guilty of unfairly sacking a senior employee, hired to work on Sterlite's mergers and acquisitions. Rajat Bhatia dared express his belief that Sterlite's proposed dilution of equity in an Australian company ran contrary to an existing understanding and would breach Australian rules. Agarwal literally threw his digital diary at Bhatia and threatened to "destroy him"—understandably prompting the startled employee to resign. The British Employment Tribunal awarded Mr. Bhatia £805,000 damages—the highest amount it has ordered to date.

But the majority of London's brokers scarcely blinked at Mr. Bhatia's plight, nor the growing indication that Anil Agarwal might have lots more skeletons in his corporate cupboard.

What London investors did balk at, however, was a nifty trick, pulled at the thirteenth hour: a characteristic Sterlite gambit. Shares had closed on December 5th significantly below their initial price. The *Times* thought the sharp fall "reflected concerns that shareholders would receive a smaller slice of the company than they were previously led to believe." Vedanta then suddenly increased the size of its offering by nearly a fifth. One major finance institution accused the company and its lead bankers, JP Morgan and HSBC, of "straightforward greed." A prominent fund manager called the offering "very badly handled," claiming "it could take months for the share price to recover." One leading shareholder described the company's debut as "the worst floatation of its size since...early 2001," while an analyst at Numis Securities revealed that "a lot of the institutions are very angry at the sheer size of the new issue. It looks as if the investment banks are trying to get extra fee income."

In addition to JP Morgan and HSBC, the other banks

which picked over Vedanta's pearls were Cazenove; Citigroup, the world's biggest financial services company; Australia's Macquarie Bank; and India's homegrown ICICI Securities. Between them, they reaped around thirteen million pounds in fees.

By mid December 2003 the new mining company had already sold more than half a billion pounds worth of new shares, giving it a market capitalisation of well over a billion and ensuring a high position in the FTSE 250 Index. Agarwal and his family now held nearly 54% of Vedanta and Agarwal himself boasted it would soon become the biggest non-ferrous metals producer anywhere. (More modestly the *Financial Times* reckoned Vedanta may fill the investment gap between the Big Global Three—BHPBilliton, Rio Tinto, Anglo American—and smaller companies which exploit a single commodity).

Enter the Big Boy

Brian Gilbertson became the first chair of Vedanta, not long after masterminding the biggest-ever mining merger, between Billiton and BHP in June 2001. Until his sudden resignation from Vedanta in summer 2004 (when he promptly took the helm at Russia's huge aluminium company, Sual), Gilbertson received a "modest" salary of £350,000 a year from the UK company and got shares worth around £7 million at today's prices. (Later he had to sell half these to meet his UK tax and national insurance obligations).

That Agarwal needed Gilbertson, and vice versa, was self-evident. The Indian magnate got exposure on the most generous mining equity market in the world; the South African got to travel to India and elsewhere, surveying the breadth of his new portfolio. It was Agarwal who first approached Gilbertson, but they apparently really got to know each other while cycling between Oxford and London.

Gilbertson had enormous kudos and credibility which, for Agarwal was (indeed, still is) in short supply. He also delivered a verdict on Vedanta's resources that Northern investors eagerly wanted to hear: "[T]o be quite honest, I had never thought of India as a resource country at all," he told Mineweb in November 2003. "I went along and found to my surprise that there is actually a great deal happening ... the country is very rich in resources. For example, it's the sixth-largest reserve in the world of bauxite. And then it also has the fourth—or fifth—largest

reserves of iron ore in the world and those two commodities ... are kind of like the holy grail of mining at this time, because the markets have been so strong for the past two or three years.”

Gilbertson could hardly have rated Sterlite/Vedanta's prospects more highly, nor the pretended pliability of Indian citizens, despite their government's bureaucracy: “[I]t's always easier for people in the country to develop deposits, undertake the challenges. India, I guess, is reputedly a very bureaucratic country and some countries (sic) have battled for a long time to get deposits developed and have been unsuccessful.” But what excited Gilbertson most was the prospect of exploiting a “very highly educated” workforce which “... is paid a fraction of what Westerners would be paid, and I'm very happy (sic) to work with those wages.”

An Indian Summer All-Year Round

Vedanta's portfolio is certainly impressive. It encompasses copper, bauxite, aluminium, zinc, lead, and gold exploits, not just across India, but also in Australia, Armenia (where it operates two mines), Mexico and Russia. (Until 2000, its subsidiary Sterlite Gold Ltd, registered on the Toronto Stock Exchange, also held mineral rights in Burma).

In 2002 Sterlite apparently controlled just under half (42%) the Indian market in copper; nearly a quarter (21%) of the country's aluminium output, and a whopping 62% of its trade in zinc. A year later Sterlite also won the bid to “develop” Zambia's Konkola Copper Mines (KCM) which Anglo American relinquished when it couldn't raise the capital to modernise the operations.

Agarwal and Gilbertson quickly set underway their US\$2 billion plan “to expand current operations and drive down unit costs, and to develop a portfolio of attractive greenfield projects.” But the single biggest chunk of cash was reserved for Sterlite's aluminium operations in India; more than tripling capacity at Balco's smelters in Chhattisgarh; boosting output from its Madras Aluminium (MALCO) subsidiary; and—through newly incorporated Vedanta Alumina—constructing a one million tonnes a year refinery in Orissa at Lanjigarh, along with a captive mine across the Nyamgiri hills.

The Sterlite Express

Sterlite started life as a minor business delivering copper cables for telecommunications companies in India. From

1988, as Information Technology became the subcontinent's millennial mantra, so the supremely opportunistic Agarwal followed close behind. But he was also determined to own and control the raw materials on which the boom depended, processing them for striking profit by using cheap contract (casual, non-unionised) labour. He set a course from which he has never deviated except that, as his greed has grown, so have his ambitions and the scandals of his stock play.

In the first quarter of 2003, Sterlite's sales rose 14%. Its export turnover grew threefold (by 201%), while its domestic turnover fell by nearly a quarter. The company's tax provision tumbled by 84%, to a large extent because the increase in exports enabled the company to benefit from tax breaks on export profits.

Disaster

Domestic scrutiny of Agarwal's enterprises started more than a decade ago when Sterlite tried locating a copper smelter in the state of Maharashtra. Many local people (especially fisher folk) vigorously opposed the project and they won the day. In October 1994, and with Tamil Nadu state backing, Sterlite brought the smelter on-stream at Tuticorin, on India's southernmost tip.

Environmentalists accused the company of issuing the Tuticorin Environmental Impact Assessment (EIA), although not all the data was in—then changing its parameters after the event. Greenpeace's Dave Santillo in 1995 described the EIA as “one of the most shoddy pieces of work I have ever seen.” It omitted critical assessment of suspended particulates and heavy metals in the smelter discharges. Coastal protection regulations forbidding the location of industrial plant within 25kms of the Gulf of Mannar biosphere reserve were flagrantly ignored. And the plant emitted large quantities of arsenic, sulphur dioxide, lead, cadmium, antimony and bismuth.

The unions were also incensed that Sterlite repeatedly violated basic safety standards at the Tuticorin plant and exploited ill-trained contract workers. Warnings of a likely disaster were ignored until, in mid 1997, the top of a rotary kiln exploded causing molten metal to shower down upon the workforce, maiming two men and reducing two others to charred bone.

Finally, in 1999, following a short enforced closure, the Tamil Nadu Pollution Control Board allowed the plant to re-open, though Sterlite was instructed it must submit a new environmental management plan. In mid-2001,

despite the plan not being fully implemented, the smelter secured an ISO 14001 classification.

High in the Rigging

Meanwhile, in 1998, the Securities Exchange Board of India (SEBI) had condemned Sterlite, and two other private Indian companies, for insider trading—a decision *Frontline* columnist, Praful Bidwai, called “the greatest indictment by any statutory body yet of corporate malfeasance in the stock market.” Sterlite was banned from accessing the market for two years; thirty four brokers on Bombay’s Stock Exchange (BSE) were also found guilty of collusion in the scam.

Agarwal had allegedly collaborated in the share price rigging with a “promoter” called Harshad Mehta. Six years earlier, in April 1992, Mehta had been found guilty of helping himself to a cool five billion rupees from the

State Bank of India, by making a receipt “vanish.” This hadn’t prevented him from later launching a web site to dispense stock tips and analyse market trends. Nor did it deter various newspapers from publishing his pretended “wisdom.” Mehta also offered his dubious services to companies of precarious financial standing, among them, Sterlite.

Investigations by SEBI showed that, between April and June 1998, Sterlite’s scrip price moved up 41 per cent, just before the company made a failed bid for the Indal Aluminium company, even though the actual conversion price was one the company couldn’t afford. Despite limited access to funds, Mehta had set up a large network of front companies. Known collectively as the Damayanti Group, this soon acquired a hefty chunk of Sterlite’s floating stock, 30,000 shares of which were provided by Sterlite as a loan, through its associate Madras

FOR PEOPLE PRONE TO MISCHIEF, PUNISHMENT WILL BE BOTH SWIFT AND HEAVY

I UNDERSTAND THE INDIAN PSYCHOLOGY. THAT’S MY BIGGEST ADVANTAGE. IN INDIA YOU MUST HAVE PATIENCE; EVERYTHING WILL COME THROUGH



M. DAMODARAN
Chairman, Sebi



ANIL AGARWAL
CEO,
Vedanta Resources

Aluminium (MALCO). Faced with problems in repayment, Damayanti began “rolling over” its positions from one bourse (stock exchange) to another, transferring them among brokers through a system of credit notes.

Since there was little money to call upon, Harshad Mehta inevitably went broke. When SEBI tried to identify the front companies and link them back to him, his cronies fudged their answers and tried covering their tracks. Finally, by tracing telephone bills, payments to lawyers and traffic with various brokers, SEBI managed to lift the corporate veil. The bureau discovered that the companies had lent Harshad funds in order to build up his concentrated position, leading to an artificial market boom and eventual implosion of the investments. In some respects, this was an earlier, Indian, version of the “Enron scam.”

The key to Mehta’s market manipulations were his dealings with three Indian companies, BPL, Videocon and Sterlite. They were barred from accessing the capital market for four, three and two years respectively.

On appeal before the official Securities Appellant Tribunal, Sterlite argued successfully that this order had no legal backing, and the company was given a reprieve from the ban. Purported new evidence provided by SEBI was disallowed by the Tribunal.

The Balco Scandal

“The [Balco] deal is economically irrational, politically deplorable, legally unsustainable and environmentally unsound...it violates a fundamental rights verdict of the [Indian] Supreme Court in the landmark Samatha case, which vests ownership of Adivasi land in tribal people...” (Praful Bidwai, in Frontline May 12–25, 2001)

Sterlite’s 2001 takeover of state-owned Balco (Bharat Aluminium Company) sparked one of the major Indian political controversies of that year. (Sterlite’s further acquisition of a 65.9% controlling stake in Hindustan Zinc was less remarked upon at the time; although it was later challenged in a submission to India’s Supreme Court which questioned the legality of the government’s sale).

His move on Balco was not the first time Agarwal had tried appropriating an Indian aluminium major. As already noted, he bid for Indal by soliciting shares from its investors, but then couldn’t pay up. It took an order from the Delhi High Court, four years later, to force him to produce the money.

Even among the sorry stories of betrayals, caused by privatisation in the mining industry, the abject surrender of Balco—let alone to a dubious outfit like Sterlite—stunk of expediency and under-handedness.

This hasty sale of 51% of India’s third biggest aluminium company (brokered by Jardine Fleming of Hong Kong) was seen by some as a “pre budget maneuver” to balance the government’s shaky books. There were allegations that India’s rightwing central government deliberately prevented Balco from modernising on its own terms and with its own funds. In any event, the company was grossly undervalued; according to some estimates, Sterlite secured assets worth up to ten times what it paid for them.

The most immediate victims of the Balco “fire sale” were members of its workforce, threatened by redundancies and loss of benefits. Seven thousand workers in the newly-formed “indigenous” state of Chhattisgarh came out on a lengthy strike and Mr. A M Ansari, the working president of the Bharat Aluminium Employees Union (a member of CITU), was summarily dismissed by Sterlite’s management on the pretext of his bad behaviour some three years before.

Over the longer term those who stand to suffer worst are the *Adivasi* (tribal) communities of Orissa, whose rights to prevent mining on their scheduled territory under the historic 1997 Samatha ruling, have been flagrantly violated by the Orissa state government, where the Chief Minister, Naveen Patnaik, is a close ally of Vedanta’s progenitor.

Agarwal himself told the *Times of India* in early 2001 that he had “no idea [about the Samatha judgement],” and he has refused to address the issue since.

It is scarcely surprising that, after grabbing Balco, Sterlite lost little time in purloining the bauxite resources in south western Orissa. The proposed million-plus tonnes a year alumina plant in Lanjigarh district will refine bauxite from the Nyamgiri hills (5 kms south of the village) which contain reserves of over 70 million tonnes. The local government in mid-2002 estimated that twelve villages would be negatively impacted by the project, sixty families would need to be “relocated,” and five times as many would be adversely affected by land acquisition. (It is not widely known that before the Lanjigarh/Nyamgiri project was on the drawing board, villagers had already successfully resisted the company’s plans to trespass on another bauxite deposit, in the Sasuobohumali area of

Kashipur. As an example of Gandhian satyagraha, it deserves more than just a footnote to any decent history of non-violent community self-determination).

Invading Orissa

In April 2003, opposition to Balco's (now Vedanta Alumina) plans for Lanjigarh was stepped up. A local leader, Lingaraj Azad, found himself under arrest. According to a report by the Indian civil liberties organisation, Peoples Union for Civil Liberties (PUCL), nearly 250 unarmed people, including 150 women and children, then set out for Lanjigarh Police Station to seek his release. But, before reaching it, they were attacked by around a hundred people with lathis (sticks), cricket bats and stumps. The villagers are sure their attackers belonged to a "youth club" (Yubak Sangha) which is funded by Balco. On trying to flee, the protestors were chased to Basantpada village where their assailants started attacking houses, destroying cooking utensils and food grains, breaking doors and damaging roofs.

The PUCL team visited several villages in the project area and recorded injuries visible on peoples' bodies. The inhabitants admitted that they hadn't lodged any complaint with the police since they were scared they would be beaten again; in any case they considered the police to be "hand in glove" with their attackers.

Members of the Khond tribes had first become aware of Balco's specific plans when the Kalahandi district collector served notice for acquisition of land on June 6 2002 and "invited" them to register their opinions (or complaints) about the project. Despite a woeful lack of notice (by comparison those affected by World Bank and International Finance Corporation projects are given an initial 90 days breathing space), nearly one thousand people reportedly assembled at the Revenue Office on June 22nd and submitted a memorandum opposing the project, for forwarding to Orissa's Chief Minister, Naveen Patnaik. Close to two hundred individual protest petitions were also filed. Four days later, another gathering in Batelima was dominated by villagers calling for complete cancellation of the project.

From mid-2002, Indian government officials reportedly paid many visits to dissident villages in a largely fruitless attempt to persuade inhabitants to quit their land on promise of compensation. Towards the end of March 2003, seven residents of Turigada, arrested by police, were freed when women gheraoed (blockaded) the vehicle. Soon afterwards villagers at Basantpada were said to have

snatched instruments used by a company-commissioned survey team and issued threats against its members.

On April 1st, Lingaraj Azad went to Lanjigarh in an attempt to persuade pro-company residents that they should also fight the project. Instead, the villagers took him to the police station where—based on the surveyors' complaints—he was arrested, sent to court and bailed the following day. Disturbingly Lingaraj later told the PUCL that, while in police lock-up, he overheard the officer in charge telephoning instructions to pro-Sterlite "youth club" members in Lanjigarh to "beat up men and women..." And, indeed, this is what occurred the following day.

PUCL concluded that the police and the administration were, at best, dismissive of local peoples' fears and, at worst, complicit in attacks made upon them. "It is hard to believe that [the area] is a part of the same India that the elite continuously brags about having catapulted into twenty-first century. [It is] a tribal-dominated area, but very few welfare-schemes meant for their development, seem to have reached them. The level of awareness, particularly about their fundamental rights, is distressingly low. The condition of these people is a great reflection on the 'developmental' priorities of our government...The people are terrorised, and believe (perhaps rightly) that their attackers enjoy the support of the police. This apprehension of the people is reinforced by the fact that the attackers admit in public that they have attacked the agitating villagers."

The investigators conceded that "[t]here is a division within the local people about the Sterlite Project. [It] seems to have caught the imagination of some people, particularly non-tribal youths and the local elites, that it would be the harbinger for development, growth and employment in this backward region. (Kalahandi district has almost become a metaphor for backwardness and starvation deaths).....The government, instead of displacing people....in the name of development, should take measures to augment the local resource base-like constructing irrigation projects in the area to supplement peoples' livelihood."

Over succeeding months, some of PUCL's fears were borne out. In June 2003, thirty protestors belonging to a local Khond-led organisation set up in 2002, called Nyamgiri Surakshya Samiti, damaged the project's foundation stone soon after it was laid by the Chief Minister, Patnaik. Three hundred *Adivasis* (tribals), wanting to

submit a memorandum to the Chief Minister, condemning the planned destruction of the Nyamgiri hills, were prevented from doing so by the police.

Shortly afterwards, Anil Agarwal—accompanied by representatives of BHP Billiton and the JP Morgan bank—urged Patnaik to “speed up” Orissa’s mineral development. A representative of the Lokshakti Abhiyan movement, Prafula Samantara, declared that the project was a direct violation of the *Samatha* judgment, prohibiting the alienation of tribal lands.

Corporate Governance: Probing Vedanta’s Underbelly

In early December 2003, the *Financial Times*’ enigmatic columnist, Lex, had acknowledged that “[Sterlite] has a complicated structure and a chequered corporate governance history.” Whether or not the structure was designed specifically to conceal Anil Agarwal’s dubious connections with even more shadowy figures from India’s financial underworld, it is certainly far from transparent.

Until the London listing, at the root of Sterlite’s “complicated structure” was an outfit called Twin Star Holdings, located in the tax haven of Mauritius, widely assumed to have majority ownership of Sterlite Industries. Twin Star had made its first major move towards an offshore company in 1998, when it agreed to a major equity investment in Canada’s First Dynasty Mines, founded by the highly controversial mining financier, Robert “Toxic Bob” Friedland.

Through Twin Star, Sterlite agreed to invest US\$7.5 million in First Dynasty, entitling the Indian company to appoint three of its own directors and eventually ending up with about 43% of the Canadian-based company. Agarwal’s main objective was to ease Sterlite into First Dynasty’s Zod gold project in Armenia. He and two of his colleagues did indeed join First Dynasty’s board and soon afterwards, Twin Star’s investment in First Dynasty was completed.

Little was then heard about Twin Star until 2003, when the

company confirmed it held 55% of Sterlite stock, with another 7.13% owned by Sterlite’s Madras Aluminium Company which, it claimed, was owned 80% by Twin Star. Then, in October—just after Vedanta was being paraded for its first UK public inspection—Twin Star announced it wanted to raise its stake in Sterlite to 75%. The Indian authorities feared that Balco and Hindustan Zinc might now pass to a new foreign owner; such a transfer had been specifically proscribed when Sterlite took over the companies.

As the Indian authorities tried coping with this dilemma, the Finance ministry’s foreign investment unit revealed that the real owner of Twin Star wasn’t Agarwal after all, but a Mr. Vinod Shah. Yet another Non-Resident Indian based in London, Shah had apparently acquired a 100% stake in Twin Star through his holding company, Volcan Investments Ltd. It wasn’t clear then whether the provisions of SEBI’s “Substantial Acquisition of Shares and Takeovers (SAST)” regulations had been violated. What did seem obvious, however, was that by the time of Vedanta’s listing, Volcan Investments Ltd, had passed (back?) into the hands of Agarwal.

An agreement with the UK’s Financial Services Authority (FSA), at the time of Vedanta’s listing, provided for a “Relationship Agreement” to “ensure that the Group will at all times comprise a majority of Directors who are independent of Volcan and the Agarwal family.” Moreover, “the Board and Nominations committee will at all times comprise a majority of Directors who are independent of Volcan and the Agarwal Family and the Remuneration and Audit Committees shall at all times consist only of Non-Executive Directors.”

As of June 1st 2005 (when the company published its Annual Report 2005) these conditions had, strictly speaking, been observed. However, with the loss of Sir David Gore-Booth (who died earlier in the year) and the sudden resignations of Michael Fowle and Jean Pierre Rodier, the number of directors who do not have a close relationship with the Agarwal family has dropped to a precarious six among a board of eleven members. Indeed only two of the directors are now non-Indian.

PART TWO

Vedanta's Score Card India: 2004 – July 2005**The Hills are Dead from the Impacts of Mining**

No one today would seriously propose mining Snowdon, the highest mountain in England and Wales. When Britain's second biggest mining company, Rio Tinto, threatened to do so in 1972, public outrage led to the founding of Friends of the Earth and its first campaign success.

But, a recent five month study of Vedanta's Indian operations (*undertaken by contributors to this report*) reveals that Britain's newest mining multinational is carrying out mountain-top desecration on a huge scale. The company's MALCO subsidiary has already shaved the tops off several of the country's richest *ghats* (hills); its BALCO subsidiary has opened a new strip—mine adjacent to a world—renowned tiger reserve; and Vedanta Alumina plans to rip the summit from a mountain sacred to indigenous people.

In the Smelting Pot

But, in the immediate future, it is Vedanta's expansion of its Tuticorin copper smelter which may prove most threatening to people and ecology. Imported from Australia in 1994 as a second-hand, decommissioned plant (Agarwal freely boasts he got it on the cheap), the smelter was rejected by the state of Maharashtra as too dangerous, and finally constructed nine kms from the Gulf of Mannar special biosphere reserve, in violation of marine protection rules.

Within its first year's operation the smelter was closed three times by state government order, after thousands of fisherpeople, backed by inhabitants of Tuticorin, took to the streets in protest. But it was allowed to re-open, though manifestly unsafe (unauthorised discharges of waste had already been made into streams outside the plant) and brimming with toxic materials. Last September, the Supreme Court Monitoring Committee on Hazardous Wastes (SCMC), set up by India's Supreme Court, was horrified to discover a "mountain" of phospho-gypsum dumped at one end of the site, and "several thousand tonnes of arsenic bearing slag" at the other, all open to the wind and rain.

Not only was an urgent order to remove these wastes ignored by Vedanta, but an expert team, reporting to the Supreme Court the following month, found that the company had nearly doubled its design capacity, illegally bringing new facilities on-stream and thus contributing further to the over-load (*see APPENDIX ONE*). Our own visits to Tuticorin in April confirmed that Vedanta had done nothing to reduce the volume of these hazardous wastes.

Exasperated by these procrastinations and Vedanta's illegal actions, in late July 2005 the SCMC drafted an order to shut down the smelter for "fully violating the Hazardous Waste Rules 1989 and the order of the Apex court dated 14-10-2003 and the consent of the Tamil Nadu Pollution Control Board (TNPCB)."



A Vedanta truck leaves the Balmadies coffee plantation, uncovered and spraying silica-laden bauxite dust on children returning from school.



PHOTOS: Roger Moody

Peak Pressures

Meanwhile, Agarwal has been speeding up Vedanta's ambitious bauxite mining operations, along with new alumina refining and smelting capacity. India possesses around an eighth of the world's untapped, higher-grade, bauxite—the raw material for the so-called “green metal.” However, these reserves are found only on peaks above 1,000 metres, inaccessible except by narrow roads and tracks that cling precariously to the hill sides. Despite widespread deforestation over the past twenty years, as tourism, mining and plantations have taken their toll, these remain some of the richest areas of biodiversity in the subcontinent. They are home to thousands of India's indigenous people, tigers, elephants, bison, deer and rare medicinal plants, as well as the unique shola forests which mount up from deep ravines.

The authors of this report inspected virtually all of Vedanta's major bauxite mining sites, spread across the states of Chhattisgarh and Tamil Nadu. Without exception, we discovered that the company has been violating basic environmental standards, while exploiting its work-



ers to a degree that would be unacceptable to many home grown Indian companies. At Mainpat, the biggest single bauxite mining complex in Chhattisgarh, we met around thirty tribal workers, un-helmeted, clad in shirts and sarees under a blazing sun, as the lateritic overburden was blasted. They then moved in with a few iron pikes and hammers, to break and sort the ore before loading it by hand onto waiting trucks.

Virtually all Vedanta's bauxite miners are contract labourers. Those we met at Mainpat informed us that, on a good day they can earn just over 60 rupees (less for women), or roughly eighty pence, for delivering one tonne of ore. Their habitations are small thatched hovels, perched over the quarry, deprived of electricity and adequate water. “There's only one hand pump to serve 150 families,” a young tribal woman worker, Mati Shahu, told us. “The company provides no medical facilities and if someone's injured we have to take them ourselves by taxi down to the plains.” Villagers at another, slightly better-appointed settlement close by, complained that, day and night, the silica-laden dust from the mining blew into their windows, covering walls and floors.

Little wonder that, last month, Vedanta's contract labourers at Mainpat went on strike against the “appalling conditions” to which they are subjected.

And, on July 18 2005, another 2,500 contract workers at the Balco Korba expansion project 200 kms further north, went on strike to protest a worker's death on duty. They reportedly smashed the windows of three vehicles and set a company ambulance on fire, accusing the management of being “casual in their demand for security equipment.”

A Centre of Indian Trade Unions (CITU) leader claimed that eight workers have died at the Balco expansion work site during the previous 12 months. “Yesterday (July 19th), police baton-charged the striking workers, injuring seven, instead of consoling the family of the deceased that has four children.” (*IANS report*, July 20 2005)

Further to the south, up in the breathtaking Shevaroyan hills of Tamil Nadu, labour conditions are marginally better (and a daily wage can rise to 80 rupees or around £1). Here we found a couple of JCB earth-movers breaking the ore before its dressing by the manual workers—“semi-mechanisation” (as it's euphemistically called). But the environmental impacts are worse. At least in Mainpat there has been a token effort at reclamation, albeit using fast growing exotic trees rather than hardier native species,

and haphazardly mixing topsoil with overburden before chucking it in the pits. No such pretence is made by Vedanta in the Shevaroyans, where the peaks have methodically been haemorrhaged, vast raw-red gashes standing out against the clouds. The workings descend in large steps, almost vertically down the mountain sides; wastes and top soil are simply pushed over the edge. The consequences were vividly described to us by Pastor Arulanandam, who manages the Balmadies coffee plantation at Manjakuttai, operated largely by tribal women.

“One of our hills has been sliced off two hundred feet by Vedanta,” he said. “Now Balco has started a new mine, number six, on the opposite peak. Wild bison have charged through the trees, frightened by the blasting. The company did plant some seedlings but they’ve mostly died. Worst of all, when it rains, water floods uncontrollably through our land. During the dry season, it’s the opposite: perennial streams have simply been drying up.”

Time and again villagers—trying to till their fields below Vedanta’s operations—made the same point. Since bauxite mining has accelerated in the hills of Tamil Nadu, formerly abundant springs have failed. The explanation is not hard to find. These high-plateau bauxite deposits

have a unique ability to store and release rainwater throughout the lower slopes, feeding the plains below. Vedanta seems woefully ignorant about this basic hydrology. In a recent statement of “corporate social responsibility,” MALCO boldly states that “bauxite does not support vegetation (while) mining helps improve forestation.” Dr. Marimuthu, a naturalist who for many years has studied the Kolli hills (where Vedanta has several other bauxite mines) vehemently denies the claim. “These plateaus used to be home to India’s mystical medicine men, the Siddhars, and the country’s largest known reserves of medicinal plants. Remove the topsoil, dig beneath, and these resources will never return.”

Clear and Present Dangers

The mines we visited have a limited life. In order to fulfill his dream of becoming India’s “aluminium czar,” Anil Agarwal must strike further afield. Balco has now started test drilling a new prospect in Chhattisgarh, at Bodai-Daldali. In typical fashion, Baigha inhabitants from the first of four tribal settlements in the project’s pathway have been ejected from their homes, without due legal process, and dumped on the plains in the heart of a non-tribal community. They had to leave behind their crops



An un-reclaimed pit and waste rock dump belonging to Vedanta just above farm land in the Kolli Hills, Tamil Nadu
PHOTOS: Roger Moody

That Zincing Feeling

It all seems pretty innocuous. Indeed Hindustan Zinc Ltd (HZL) boasts that it is an example of “corporate social responsibility.” Who could oppose the bringing of water to people in one of the most parched areas of India?

But, in fact, the company’s scheme to lift water from the Mansi-Wakal dam to Udaipur in Rajasthan—and for which it is contributing 30% of the finance as well as managing the construction—is manifestly self-serving. Worse, it will have been carried out (completion is expected this year) in the teeth of a sixteen year struggle by local people to prevent it.

While it’s true that attempts to construct the dam were first undertaken when HZL was publicly owned, moves to seize village land for the project moved up several gears after Sterlite took over HZL in 2002.

The dam is being completed on the Joi and Wakal rivers in a Scheduled Area, supposedly governed by the provisions of the 5th Schedule of the Constitution and the Panchayati Raj (Extension to Scheduled Areas) Act 1996. This legislation clearly states that each village administration (gram sabha) shall be competent to safeguard and “preserve the traditions and customs of its people, their cultural identity, community resources and customary mode of conflict resolution.” They must also be “consulted before ...acquisition of land in the scheduled areas for development projects and before resetting or rehabilitating persons affected by such projects in the scheduled areas.”

More than 80% of the traditional population, local to Mansi-Wakal, is *Adivasi* (tribal), dependent on forests and farming for its subsistence. Back in 1989 it was already known that 6,500 people from six villages (Chandwas, Gayariyawas, Talai, Mundawali, Dewas and Gorana) would be directly impacted by the first phase of the project, since their homes and land would be inundated. The construction phase would threaten an additional 17 villages, making a total population of around 13,500 project-affected persons (PAPs).

When the state government failed to inform the people what the project would entail, they organised themselves under an NGO called Chandreshwara Kisan Sangharsh Samiti (CKSS), to oppose construction of the dam.

After the government reneged on its promise to provide CKSS with a copy of the drilling report, the organisation then wrote hundreds of letters to government officials and ministers—all to no avail.

In 1999, local people held a peaceful demonstration to protest against construction of a road to the site. Police opened fire on the demonstrators, severely injuring 16 people. Instead of consulting affected villages separately, the District Collector (administrator) called just one meeting at Chandwas panchayat (village) in June 2000, arriving there with a large police force. After the DC left, villagers were incensed to find that they were recorded as agreeing that the project should proceed. Although they immediately passed a resolution to the contrary, shortly afterwards HZL announced it would, in part, finance Mansi-Wakal.

Another public hearing was held on 22 February, 2001; again none of the villagers spoke in favour of the dam. Despite this, a press release issued by the government declared that “an equal number of people” had spoken in favour of the project as against it. Four months later, more than 1,000 armed policemen were deployed to the area to ensure completion of the drilling. There were numerous instances of beatings and other intimidations.

Finally, the head of one village (Talai) succumbed. Last year (by which time HZL was firmly under Vedanta’s control) the company, with strong backing from the government and assisted by armed police, took over the disputed land, and it was cleared.

Sources: www.struggleindia.com, April 8 2004, and information from Arun Kumar Singh, author of “The Privatisation of Rivers in India”, Vikas Andhyayan Kendra, Delhi 2004; see also “Dams, displacement, policy and law in India” in “Dams and Development”, published for the World Commission on Dams by Earthscan, London, November 2000.

of maize, oil seed, gram and mustard, abandoning their cows, buffalos and goats and are now trying to survive on half the acreage they once possessed. Balco's largesse, according to the project manager, has so far consisted of 25,000 rupees (around £300) for new houses, a recently surfaced approach road, and a hand pump. There had been some compensation but, he admitted, it was too low. "If the government tells us to pay more, we'll do so." Clearly discomfited by the injustices we exposed, the manager agreed that no more removals should take place, at least for the time being.

In July, the Chhattisgarh Chief Minister belatedly conceded that these families had been abused and promised

some redress. At the same time yet another serious allegation was made against Balco—this time for stealing government land [see BOX].

Bodai-Daldali lies adjacent to the world-renowned Kanha National Park, the forests immortalised in Rudyard Kipling's *Jungle Book*. According to Vedanta, India's wildlife commission had recently concluded the area was not a tiger corridor but this may simply be a self-fulfilling prophecy. When full scale bauxite extraction commences, accompanied by regular heavy blasting and the pounding of eighty trucks a day bearing ten tonnes of ore down narrow roads, Sher Khan and his clan will disappear even further into the dwindling forests.

Two Types of Land Grab

- Balco was accused in June 2005 of "grab[bing] about 1,000 acres of government land, besides cutting down 20,000 trees without taking permission from the agencies concerned," allegedly in order to embark on its nearly threefold expansion of the Korba refining and smelting complex.
- The accusation was leveled by Chhattisgarh's Revenue Minister, Mr. Kanwar—who was promptly shifted by Anil Agarwal's friend, Chhattisgarh Chief Minister, Ramon Singh, to the agriculture ministry with additional charge of forests. In his new capacity, Kanwar then demanded that "BALCO.....free the land. I want to take the battle with BALCO to a logical end without consuming too much time."
- Villagers from the area had first lodged a complaint about the encroachment six months earlier. According to Balco's chief of corporate communications, Deepak Pachpore, the land was legally allotted to Balco between 1968 and 1975. But, after a "high-level inquiry," under supervision of the commissioner of land records, on July 13th, the new state Revenue and Law Minister, Brijmohan Agrawal, confirmed Vedanta's

delinquency. "The Chhattisgarh government will not allow Balco to continue with its illegal possession of the land. The company has to surrender all the encroached land with massive penalty."

- At the time this counter-report was published, Vedanta had not replied to the government's notice but instead obtained a stay order from the High Court.
- Meanwhile, Raman Singh finally addressed the plight of some twenty families, thrown off their land to make way for Balco's newest bauxite mine at Bodai-Daldali in Kawardha district. Following a meeting with members of the Baigha people—who declared that the new mine had "totally devastated" their houses and agriculture—Singh reportedly ordered the district administration to ensure early and proper rehabilitation of all the relocated families, as well as providing "sufficient and safe agriculture and housing land to compensate the loss due to mining."

Sources: "Land grab mud on Balco" *The Telegraph, Calcutta, June 18 2005*; *NewIndpress, June 24 2005*; *Indo-Asian News Service (IANS), July 13 2005*; *IANS, July 25 2005*

Orissa: Where the Sacred is Not Sacrosanct

Tigers certainly inhabit the lush Nyamgiri ranges of Orissa, sacred to the Dongaria Khonds, and site of Vedanta's most important target mine. (Ironically, the British geologist who "discovered" these rich deposits nearly a century ago, dubbed them "khondalite" in a back-handed tribute to the people who guided him there). If the project is allowed to advance to full design capacity, some 660 hectares of prime forest will be destroyed—more than 90% of the total reserve—and up to a hundred streams could dry up, threatening the vital rivers to which they are tributary—in particular, the Vansadhara, that waters much of the plains.

The Vansadhara skirts Vedanta's refinery; indeed, the company's current plans include dumping toxic "red mud" (caustic soda wastes) actually on to the banks of the river.

So convinced was Agarwal that the project would clear all legal hurdles that, in 2003, he commissioned Worley Parsons, the big Australian engineering conglomerate, to fast track the building of an alumina refinery at Lanjigarh,

in order to process the Nyamgiri bauxite. Construction started without clearance from the central government's Ministry of Environment and Forests. In 2004, two Majhi Khond villages were razed to the ground, their inhabitants brutally and illegally removed to a concrete resettlement camp. Since then another two villages have been "cleared," as the refinery rapidly sequesters indigenous and forest land.

As confirmed in a July 2005 study by The Environment Protection Group Orissa (EPGO), the entire Nyamgiri deposit lies atop of a protected forest area which is home to a variety of rare and threatened fauna and flora. Their diversity is scarcely equaled in the rest of south Asia and includes thirty medicinal plants, at least fifteen kinds of epiphytic orchid, twenty wild ornamental plants, more than ten kinds of wild relatives of crop plants (including some protected under an international undertaking), tigers, leopards, elephants, sloth bears, palm civet, and other animals, many of which are listed as endangered by the International Union for the Conservation of Nature (IUCN). There are also rare birds, the unique Golden Gecko lizard and wild snakes including a rare type of viper.*



Not so long ago there were people in Kinari. Now it is part of Vedanta's Lanjigarh refinery

PHOTO: Simon Williams

Had it not been for the zeal of Indian environmentalists and tribal rights advocates, the company might already be plundering these hills. In September 2004, geologist Dr. Sreedhar Ramamurty (director of the Academy for Mountain Environics), joined by well-known Orissa environmental activist, Biswajit Mohanty, and human rights campaigner, Prafulla Samantara, petitioned a Supreme Court sub-committee set up to investigate and prevent encroachments on India's protected forests, to halt the company's operations.

In response, two experts were sent to Lanjigarh in December 2004, under the auspices of the Supreme Court's Central Empowered Committee (CEC), to register the true situation. Their key conclusions were that Vedanta, with the complicity of the Orissa state government, had illegally destroyed protected forests and embarked upon the refinery construction without proper permits, while local inhabitants had been removed from their homes and land without the due process of a public hearing (*see APPENDIX TWO*).

The fourth CEC hearing into "the Vedanta case" took place in Delhi on April 28, 2005 where the company—through its chief lawyer, C. A. Sundarem—tried to argue that its work on the Lanjigarh refinery was minimal. It was a transparent falsehood confirmed not only by the first CEC visit in late 2004, but by statements and photographs in Vedanta's own Annual Reports for 2004 and 2005, and a statement on its website by the Australian construction company, Worley Parsons, that the project is proceeding on "a very tight schedule."

Vedanta at this point said it would relinquish that part of its refinery site which falls on forest land, while claiming it had no designs on the Nyamgiri hills. According to Sundarem, it was now up to the Orissa State Mining Corporation (OMC) whether or not to proceed with the application for a mine permit. This is highly disingenuous, to say the least. Not only had the CEC already pointed to the impropriety of the state government indelibly linking the mine with the refinery and accepting just one environmental impact statement to cover both projects. But Sterlite also has a Memorandum of Understanding (MOU) with the Orissa Mining Corporation, dating back to 1997 (updated in June 2003). The lease granted last year enables the UK company to provide the majority of the capital and management expertise for a putative Nyamgiri mine and have first call on its output.

A Litany of Disease and Pain

MALCO's integrated aluminium facilities at Mettur, in northern Tamil Nadu, display the worst health and environmental impacts of a notoriously polluting industrial sector, as well as toxic effects from an unsafe coal-fired captive power plant. Vedanta claims it is disposing of its vast residues of "red mud" (caustic soda wastes) and fly ash, by using them in bricks. In itself, this is a highly questionable "solution" and would, in all probability, take years to fully implement. Meanwhile, the red mud oozes onto agricultural land, contaminates water resources and kills animals. Emissions from the refinery and power plant blight the lives of numerous local residents, in particular Dalits (belonging to the so-called Scheduled Castes).

In April this year, many of those affected by MALCO testified before an "Investigation into the Environmental and Human Rights Violations of Chemplast Sanmar and MALCO Ltd," organised by the Indian People's Tribunal on Environment & Human Rights in May 2005.

The people—some of them workers—spoke of suffering from a range of ailments, including serious respiratory, skin and eye diseases, stomach disorders, chest and limb pains.

(Summaries of some of these graphic testimonies are in APPENDIX THREE)

Coinciding with the July 2005 EPGO revelation of Nyamgiri's extraordinary biodiversity, another investigative team was to underscore the parlous situation in which tribal communities around the Lanjigarh project now find themselves. From May 30 to June 2, 2005, the Human Rights Forum-Andhra Pradesh (HRF) visited three aluminium projects in Orissa, including Vedanta's. The seven-member team was led by HRF General Secretary, K. Balgopal, joined by Dr. Burra Ramulu, President of HRF; V. S. Krishna, the Secretary; K. Murali, Convenor of Hyderabad City Committee; Sathyam, Executive Committee member of Warangal

District Committee; Dr. Jagdishwar and Jaisingh Rathod. It consulted with “hundreds of people” in the villages, as well as “such representatives...[of] Vedanta as were present at the work site and were willing to talk to us.”

The team affirmed that “the mining lease given to Vedanta Alumina Limited in Lanjigarh block of Kalahandi district [is] illegal, in fact unconstitutional. The area where the lease has been given is Scheduled Area, that is to say territory governed by the Fifth Schedule to the Constitution of India. The Supreme Court in *Samatha vs State of Andhra Pradesh (AP)*, 1997, categorically held that transfer of land by any means including lease by the Government to a non-tribal is impermissible under the Fifth Schedule.

“It appears that the Government of Orissa is arguing that the judgment applies only to Andhra Pradesh and not to Orissa. That is not so. The Supreme Court took this view based on the A.P. Scheduled Areas Land Transfer Regulation, 1959 as amended by Regulation 1 of 1970, and Sec. 11(5) of the Mines (Development & Regulation) Act as amended by A.P., but it also categorically held that the conclusion follows from the Fifth Schedule to the Constitution itself. As such, it applies to all the Scheduled areas so declared under the Fifth Schedule any where in India.”

The HRF investigators also asserted that police intimidation of project opponents was continuing, and the procedure on Public Hearings had not been followed. “...Without answering a single one of the questions posed by the people, the Government is employing the police to terrorise them and coerce them into giving up their opposition... It is evident that the police are following the instructions of the Government in this regard. Even the public hearings that are mandatory under the environment rules have been reduced to an ugly joke by the coer-

There is nothing that may be called development

cive methods employed by the Government functionaries.”

Except for “the handful of jobs that the highly mechanized mining and refining may provide,” the team concluded that “there is nothing that may be called development that the State will see.

As for the local people, they

may not get more than a fraction of even those few jobs. The companies have... promise[d] jobs only to one member of each family whose house site is acquired. They are being given training in various trades, but [have] been careful not to put it down in writing anywhere that, at the end of the training, they will get jobs as a matter of right... There are any number of projects in the country where promise of employment to displaced persons has been made, and they have been given training in various trades ostensibly to prepare them for receiving the bounty, but at the end were told that the training itself is the bounty... [E]ven this applies to only 123 [persons] in Vedanta.”

The HRF went on to address the likely impacts of the Lanjigarh refinery. “Red mud and other polluting matter from the mines and the refineries... will be let into the local streams, rivers and the slurry ponds built for this purpose. The streams provide irrigation to *Adivasi* (tribal) lands in the forests and also form part of the catchments of the Nagavali, Jhanjhavati and Vamsadhara rivers that are the lifeline of agriculture in this part of Orissa, as well as Srikakulam and Vizianagaram districts of A.P. This water resource will be polluted seriously. In fact, it is argued by environmentalists that the mining will drastically reduce the water retention capacity of the hills, and so the very catchments of these rivers will be affected.”

** The illustrated, downloadable, report of the Environment Protection Group Orissa can be obtained by contacting: epgorissa@gmail.com*

Sources (for Part One)

- Kenneth Gooding on resignations of Fowle and Rodier: *Mining Journal* 1/4/2005;
- Launch of Vedanta IPO: *Financial Times* (FT) 5/12/2003;
- Hedge funds buying Vedanta: *FT* 6-7/12/2003;
- Anger at share issue: *The Times* (London) 6/12/2003;
- Background to Sterlite: Vedanta brochure 5/11/1003; *Mineweb* 6/11/2003;
- Vedanta's share of the Indian market: *Mining Journal* 14/11/2003;
- Chequered corporate governance history of Sterlite: *FT* 2/12/2003;
- Vedanta position in market: *FT* 5/11/2003;
- Unfair dismissal of Rajat Bhatia: *Independent* 4/12/2003;
- Public Concern at Work (PCaW)—Whistleblowing Case Summaries: <http://www.pcaw.co.uk/>, 30/4/2003;
- Shareholders concerns: *London Times* 12/12/2003;
- Vedanta's future Indian play: *Mineweb* 10/12/2003;
- Gilbertson joins Sterlite: *Mining News* 28/8/2003;
- Gilbertson's role in Vedanta: *FT* 6/11/03;
- Gilbertson's "tax nightmare", *Mineweb* 11/12/2003;
- Gilbertson interview with *Mineweb*: 5/12/2003;
- Sterlite Gold in Burma: SGL corporate information 7/12/2003;
- Agarwal's export record: <http://www.domain-b.com/> (India) 20/10/2003;
- Sterlite's profits from export orientation: *Capital Market News* (<http://www.sharekhan.com/>) 5/5/2003;
- Tuticorin smelter: EIA violations: *Frontline* 17–30/3/2001;
- Poisonous smelter emissions: *Frontline* 12–26/5/2001;
- Explosion at smelter: *Frontline* 3/10/1997;
- Re-opening of the smelter: *Indian Express* 24/2/1999;
- ISO "award": <http://www.indiainfo.com/> 30/8/2003;
- 1998 share price manipulation: *eStart* news site 2001;
- Links between Harshad Mehta, the Damayanti group and Sterlite: <http://www.rediff.com/> India Ltd 2001;
- Attempted takeover of Indal and refusal to pay shareholders: *Economic Times*, India, 30/6/2002; Securities Appellate Decision in SEBI case, Appeal No 20/2001, Mumbai, October 22 2001;
- Challenge to Sterlite's control over Hindustan Zinc: *MiningNews*, 5/1/2004;
- Balco as profit maker: Macroscan website—www.macroscan.org/, New Delhi, 2/2/2001;
- Jardine Fleming's role in privatisation of Balco and Samatha judgment: *Frontline* 12–25/5/200, see also *Frontline* 21–7–3/8/2001;
- Agarwal on the Samatha judgment: *Times of India* 25/2/2001;
- Dismissal of Bharat Aluminium trade union leader: *People's Democracy* (Weekly Organ of the Communist Party of India (Marxist) Vol. XXV No.18 6/5/2001;
- "The sale of KCM to Sterlite": *Zambia Advocacy Network* 11/11/2003;
- Bauxite resources/reserves in India: *FT* 5/11/2003;
- Balco's plans in Orissa: *Projects Monitor* (India) 14/12/2003, *Financial Times*, 5/11/2003;
- Report on resistance to Balco at Lanjigarh: People's Union for Civil Liberties—Rayagada & Bhubaneswar Units "A Fact-finding Report on physical attack on the villagers agitating against their displacement due to the proposed Sterlite Alumina Project in Lanjigarh Block of Kalahandi district" April 2003; see also "The Samaj" 9/4/2003;
- Destruction of Sterlite foundation stone, *Hindustan Times* 13/6/2003, *Statesman News Service*, Calcutta (Kolkata) 13/6/2003;
- Tribals prevented from attending foundation ceremony and Agarwal/BHPBilliton/JP Morgan meeting with Patnaik: *Statesman News Service* 8/6/2003;
- Statement on illegality of Sterlite's Lanjigarh project, *Statesman News Service* 16/7/2003;
- Twin Star and Friedland: *Mining Journal* 27/11/1998;
- Twin Star inside First Dynasty: Sterlite Gold Ltd web site news; 3/2/1999; 8/2/1999;
- Vinod Shah and Sterlite: *The Telegraph*, Calcutta, 29/1/0/2003;
- Relationship Agreement between Vedanta and Volcan Investments: Vedanta Annual Report 2005, page 49

APPENDIX ONE:

Documents Relating to the Tuticorin Smelter

In September 2004 the Indian Supreme Court released a report by its Hazardous Waste Monitoring Committee (SCMC), following an investigation of Vedanta's Tuticorin copper smelter in Tamil Nadu. The SCMC team discovered "several thousands of tonnes...a mountain, of arsenic-bearing slag [and] phospho-gypsum" stored on the smelter site in an inadequate waste landfill. The plant, said the SCMC "is also emitting sulphur dioxide far in excess of the permissible standards." Vedanta was also accused of embarking on a threefold expansion of the plant's output, despite not having permits to do so.

Shareholders attending Vedanta's first annual general meeting, held in London in July 2004, demanded to know whether the company had secured all necessary permits for its Orissa venture and the expansion of the copper smelter in Tamil Nadu. Chairman Michael Fowl replied that most permits had been given and the final one was expected soon. In fact, while the Ministry of Environment and Forests (MOEF) may have wrongfully granted some clearances at the time, the most important of these—from the Tamil Nadu Pollution Control Board (TNPCB) was not obtained until nearly one year later—in summer 2005. By that time—and as freely admitted in Vedanta's 2005 Annual Report—the Tuticorin smelter had expanded its capacity to 300,000 tonnes per year, and was running at least some of the plant which the SCMC ordered should not have come on stream.

A month after its first visit to the smelter site, the SCMC sent an Expert Committee to Tuticorin. Its investigations indicated that production levels at the plant, for the year September 2003–August 2004, reached 164,236 tonnes of copper anode, while several components had been installed or were actually commissioned, even though the SCMC had no knowledge of permits being granted.*

Two co-authors of this Counter Report also visited the smelter site in April this year, where they observed that, far from reducing the piles of arsenic-laden slag and phospho-gypsum wastes, Vedanta had increased them in volume and extent.

The following month, the SCMC fired off a letter to the TNPCB pointing out that, to the knowledge of SCMC, consents already granted had restricted production to 40,000 tpa of blister copper only (for which the environment clearance was issued in 1995).

"It can be seen....[from the Expert Committee Report] that the Company has expanded the plant without con-

sent from the Board and without environment clearance and that it has openly violated the provisions of the EIA Notification and the Environment Protection Act, 1986," concluded the SCMC. The MoEF environment clearance letter of 16.1.1995 had in fact imposed the condition that "any expansion of the plant either with the existing product or new products can be taken up only with the prior approval of this authority." Despite this specific condition imposed, "the MoEF has gone ahead and considered the issue of a second environment clearance for expanded capacity at the plant. The environment clearance (2004) was sought to be issued post-facto, after the company had already erected a sulphuric acid plant, ISA smelter, rotary holding furnace, slag coolant, anode furnace, converter, refinery and CCR."

Worse, "significant portions of the expanded plant are being used without consent from the Board and despite the fact that the environment clearance for the expanded capacity has been put on hold by the SCMC. The quantities of hazardous wastes generated would naturally be far in excess of those for which authorisation has been granted to the plant."

The Expert Committee Report observed that "the method of theoretical estimation [by the company] of the wastes generated involves several simplistic approximations and does not fulfill the requirements of mass balance for some of the major constituents in the waste stream."

Considering this "the TNPCB is hereby directed by the SCMC to issue show cause notice to Sterlite Industries, Tuticorin, under the Environment Protection Act, 1986 and Rules, the provisions of the Water Act 1974, and the Air Act 1981, as to why prosecution should not be launched against it for large-scale violations of the provisions of these environment laws. The copy of the show cause notice and the reply given by the company are to be placed before the SCMC when it decides to take up the matter pursuant to its own recommendations given earlier and after production of the National Environment Engineering Research Institute (NEERI) and NML Reports."

"The second issue of which the TNPCB has to enlighten the Committee is whether the units shown to be 'under construction' when the unit visited by the SCMC and the Expert Committee are in the same state (as they ought to be) or whether they have in fact been completed in open disregard of norms. If work is going on in these segments

as recorded in the Expert Committee Report, stay orders should be issued forthwith. Show cause notice be issued in this respect as well and status report in this connection may also be placed before the SCMC.”

“The TNPCB is to take this matter extremely seriously, as the SCMC had recommended very clearly that the environment clearance should be placed on hold since existing practices in connection with the management of hazardous wastes were clearly not satisfactory. In this connection, we draw your attention to para 41 of the order of the apex court dated 14.10.2003 directs:

“HPC has recommended “the concerned SPCB should evolve a mechanism or checklist to ensure that an authorization to any unit generating or handling hazardous waste is granted only where it is justified by the availability of adequate treatment and disposal facilities and of adequately trained manpower. The authorization should be renewed only when, additionally (a) the conditions prescribed by the SPCB have been duly observed by the occupier; (b) proper measures for the protection of health of workers have been taken; and (c) a sound record of compliance with regulatory requirements imposed earlier has been maintained. The SPCBs should insist that any hazardous waste previously dumped by a unit be cleared before authorization is issued or renewed to a unit. Citizens may be consulted by public notice in this respect.””

“The TNPCB is therefore requested to advise the SCMC on whether the company has complied with the earlier directions given by both the MoEF and the TNPCB in respect of large quantities of hazardous wastes generated by the plant. It appears that several conditions laid down both in the order of environment clearance issued in 1995 and the consent orders have not been complied with at all. The gypsum stack heights are beyond the permissible level. SCMC found that the gypsum storage pond was overfilled without side containment with potential risk of fluoride contamination to surrounding areas through rain water produced run-offs. There is a real risk of gypsum scattered by winds causing disturbance to driving along the national highway adjoining the plant.”

“One of the primary prohibitions was not to locate the industry within 25 kms of ecologically sensitive area. Even when the TNPCB issued a relaxation for the area of green belt requirement in the company’s premises, it refused to waive the condition of 25 kms. However, Sterlite went

ahead and deliberately violated the condition.”

“The NEERI Report of 17 November 1998, “Evaluation of Pollution Control and Environment Protection Systems at M/s Sterlite Industries (India)” (submitted to the High Court of Madras) indicates there has been contamination of ground water aquifers with arsenic and other heavy metals. The NEERI Report also comments adversely on the location of the industry within 25 kms of Gulf of Munnar. NEERI had also indicated in the report that no expansion should be permitted in the circumstances.”

“We therefore feel that Tuticorin is a fit case for a Local Area Environment Committee since there are ecological assets that need to be conserved within 25 kilometres of the plant and since there have been serious and continuing allegations of air pollution from the citizens including several government officials who have their offices in the town not just from emissions but from the huge mountains of slag and phospho-gypsum exposed on the unit’s premises. In addition, the SCMC would like to see progress on the formation of a green belt to attenuate air pollution and other socio-economic works required by the letter of environment clearance (1995).”

“The necessity to involve local groups is not only endorsed by the apex court order dated 14.10.2003 (including para 41 above), but also by the TNPCB’s NOC order for project expansion dated 21.4.2004 which records at para No.29:

“A monitoring group comprising the representatives of District Collector, PCB, NGOs, academicians and the nearby public shall be constituted. The sampling of the effluent, emission and solid waste should be done in the presence of the above group once in a month and analysed through TNPCB labs. The reports thereon shall be furnished to the Board periodically.”

Signed: Dr D.B. Boralkar, Claude Alvares

Cc: Dr G Thyagarajan, Chairman, SCMC; Dr S. Devotta

* “On the specific query regarding whether the unit had expanded its production capacity as well, the Expert Committee Report records at Annexure 2 of its report various details pursuant to its inspection of the plant:

1. It records, for example, that ISA Furnace unit 2 (including waste heat recovery boiler) was completed by September 2004.
2. Rotary Holding Furnace unit 2 and Rotary Holding

- Furnace unit 3 were also completed in September 2004.
3. The Report further records that the Slag Cleaning Furnace unit 1 was completed by January 2001 and the Slag Cleaning Furnace unit 2 was set up in September 2004. While unit 1 was already in operation, unit 2 was ready for commissioning.
 4. Similarly, Converter unit 3 was installed in January 2001 and in operation since that date. Converter unit 4 was completed in September 2004.
 5. Additionally, Anode Furnace unit 3 was completed in September 2004.
 6. Additionally, Castor unit 2 was completed in January 2004 and commissioned in September 2004.
 7. The Expert Committee Report also states that an Oxygen Plant was constructed in October 1997. The second Oxygen Plant was put up in January 2004. The Sub-Committee would like to be informed whether the two plants have consents from the Board.
 8. Regarding the Sulphuric Acid Plant: The Gas Cleaning Plant and the Sulphuric Acid Plant unit 1 were put up in 1995. However, Sulphuric Acid Plant unit 2 was put up in August 2004 and commissioned in October 2004 after the visit of the Supreme Court Managing Committee, though it is a part of the expansion of the plant.
 9. Regarding the Phosphoric Acid Plant: Two reactors and one filter were being constructed when the Supreme Court Managing Committee visited the plant and were in varying stages of completion. Both were set up without consent of the Board. From the Report, it also appears that the earlier reactors were also erected without consent of the Board.
 10. Finally, a Copper Refinery and Continuous Cast Rod Plant were under construction at the time of the visit of the Supreme Court Managing Committee.

From: Show Cause Notice to Sterlite Industries, Tuticorin, April 2005



Thousands of tonnes of arsenic-laden slag, open to the wind, visible behind scrubland at the Tuticorin smelter (April 2005).
PHOTO: Roger Moody

APPENDIX TWO:

The CEC Report on Lanjigarh, 2004

Summary Site Inspection Report of the Fact Finding Committee Regarding its Visit to Orissa from 18th–23rd December 2004 carried out by Sri S.C. Sharma retired Addl. D.G.F. (Wildlife), Government of India, and Shri S.K. Chadha, A.I.G. Ministry of Environment and Forests.

The Report found that, inter alias,

- Mining Nyamgiri “would affect the water supply of [two] rivers irreversibly”.
- Vedanta had “been clearing the private and government revenue lands, allocated for construction of refinery, in violation of Forest (Conservation) Act and carrying out construction work of refinery after cutting the trees of the area. Thousands of mature trees have been felled by the company in Niyamagiri forests and it has already started digging the bauxite ore in the garb of test mining.
- Construction of the refinery was “going on at a fast pace. Many machines and workers were at work. Boundary wall has been completed around 50% of the periphery of the land handed over to the factory. It was revealed that the area of 102 acres had been given on lease to a contractor of M/s Vedanta Aluminium Ltd. about 6 months back by the local Tehsildar. Transfer of this area to the company is in addition to the area of 701 acre already transferred to the company through the Collector of Kalahandi.
- Private land in the village of Jaganathpur had been cleared by the company for construction of three pillars required for the conveyor belt. Some trees had also been felled from the area. “This action of the authorities is also violative of the prescribed procedure for acquisition of land from tribals in this Schedule V area.”
- Local villagers informed the team that they were not permitted to take their livestock to the forests falling in the proposed campus of the refinery. “The complaint appears to be quite logical because the project authorities cannot keep the refinery area open to villagers in general for security reasons.”
- The team visited the rehabilitation colony and was “stunned to see that the colony is in close vicinity of Reserved Forests of Niyamagiri hills. No land has been given to villagers for growing alternative biomass to meet their domestic needs and to earn sustainable living”

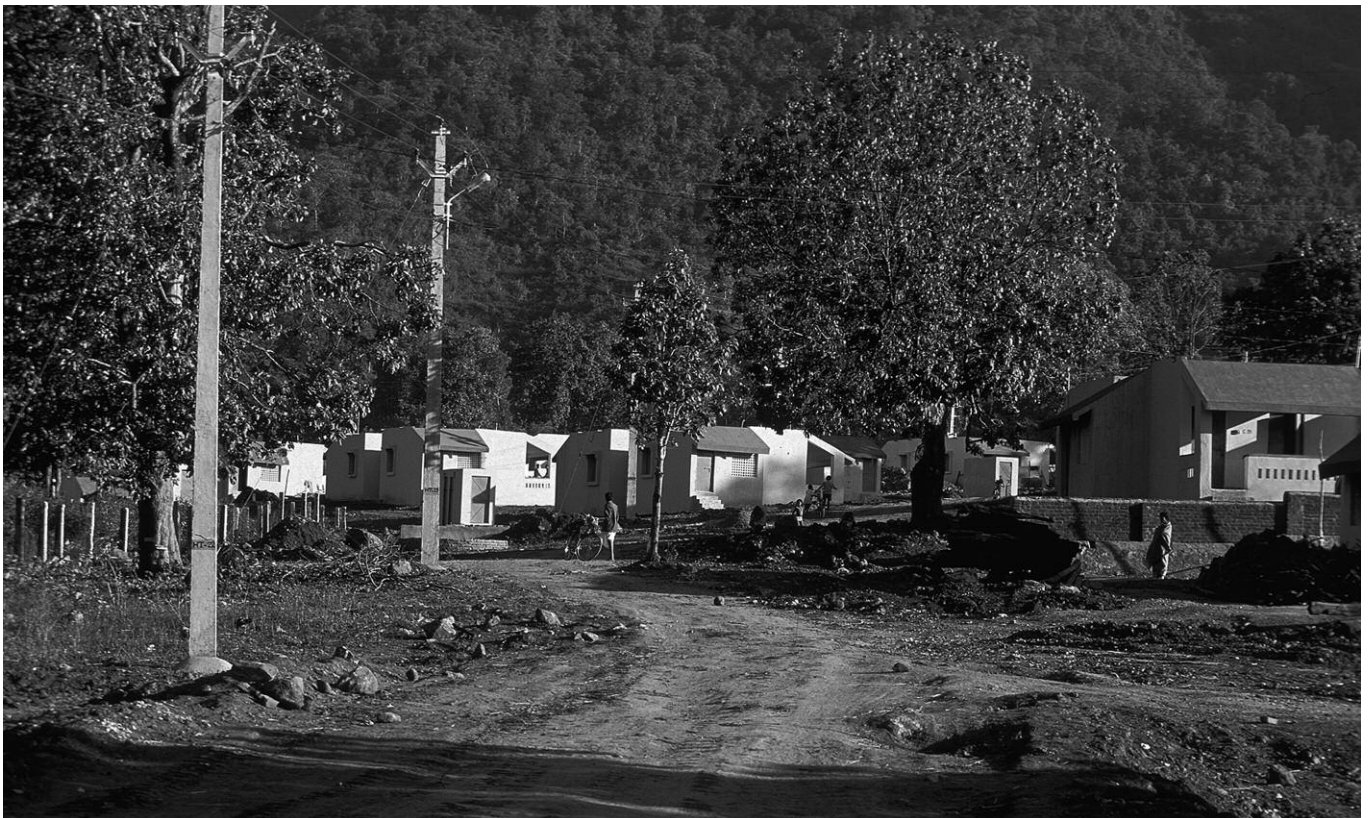
- The Project Authorities have taken up construction work of refinery on non-forest lands without getting clearance under Forest (Conservation) Act, 1980 for 58.93 hectares of forest land which is integral part of the Refinery Project. This is violative of the guidelines of Ministry of Environment and Forests on the subject. In addition, they have cleared parts of village forest land in village Kottadwar and Kinari. No felling of trees has been done by the company / OMC during the process of exploration drilling in the mining area.

The Report concluded that,

- Environmental clearance of the Mining site should either precede or should be linked with clearance of the Refinery site. By granting site clearance without linking the project with an approved mining site an anomalous situation has been created. The Ministry of Environment and Forests in their letter No. J-11011/81/2003-IA-II dated 5.2.2004 had specifically mentioned the linkage between the clearance of the refinery site and the mining site. Why environmental clearance for the refinery site has been granted by the Ministry without clearance of mining site is not understood.
- The Rehabilitation Package for the displaced persons given by the user agency is not in the interest of sustainable livelihood of the local communities as no land has been given for grazing purposes, raising agricultural crops and carrying out other income generating activities, etc. The location of the rehabilitation colony has been decided totally ignoring the interest of conservation of forests. It is just few meters away from the Niyamagiri Reserved Forest. Adverse impact of this colony and the labour force staying near the forest is already visible. The team saw four stumps of freshly cut sal trees in Niyamagiri forests.
- Niyamgiri is a very rich forest from biodiversity point of view. A proposal has already been approved in the working plan to declare this area as a Sanctuary. The relevant abstracts are part of the petition. It was further revealed that the State Government have made a proposal to include this area in the proposed new elephant reserve. Further, the hills form the origin of Bansadhara river. The rivulets coming across these hills are source of water for the local communities. Any mining in this area is bound to destroy the biodiversity and affect the availability of water for local people. The question of pollution of Bansadhara river

is also there. Under these circumstances, alternative sources of ore should be explored for the Project.

- Although village forests extending over 58.93 hectares exist in the Refinery Site these have lost their utility for the villagers. The Project Authorities should acquire equivalent non forest land for carrying out plantations to meet the biomass requirement of the villagers and the area be notified as village forests.
- Appropriate action should be taken against the company for clearing village forest land in violation of Forest Conservation Act and clearing trees in the Project Site without proper sanction of the competent authority.
- The Project Authorities should provide free gas connections/electricity to its rehabilitation colony and labour force working in the project. The heavy parking site for vehicles, particularly trucks, etc. should be made at a place away from Niyamgiri Reserved Forest.
- Project Authorities should provide funding for establishment of a Forest Section Office with the entire infrastructure and the salary of one Forester and four Forest Guards for safeguarding against illicit felling in Niyamgiri hills.
- The team observed lot of natural vegetation in the lands classified as Abad Ajogya Anabadi and Dongers. D.L.C. has not included these areas in the definition of deemed forests. Unregulated felling in these areas is likely to have severe environmental impact. State Government should be asked to consider these areas in list of deemed forests, wherever the extent is more than five Hectares.
- The present practice of OMC getting into agreement for allotment of mining areas, in respect of which clearance under Forest (Conservation) Act, 1980 and Environment (Protection) Act has not been taken, is violative of the spirit of the aforesaid acts. Creation of infrastructure for processing the mineral without firm commitment of the availability of the mineral puts Government in awkward situation.



The "resettlement" colony at Lanjigarh with the Niyamgir hills behind.

PHOTO: Simon Williams

APPENDIX THREE:

Some Allegations by Community Members Affected by MACLO at Mettur

T. Dhanam, 27, Male P.N. Patti Panchayat, Malco Nagar: A lot of people experience breathlessness because of the dust pollution caused by Malco. I have a heart problem. When there is a lot of smoke, I suffer a lot. I visit hospitals frequently. Will the MALCO management support by helping out with expenses for the operation?

S. Vasantha, 52, Male PN Patti Panchayat Thengalvadu: We live near Malco. I have four children and none has jobs. We get a lot of soot deposits inside the house. We get cracked feet because of the ash and soot deposits.

P. Manimaran, 35, Male Councillor P.N. Patti Panchayat: [At the Malco Colony] on 18 March 2004, there was heavy rains, and at night the Malco compound wall breached and water from the factory entered Jeeva Nagar and a lot of people's houses were washed away. They promised compensation and underground drainage. I'm submitting a copy of the agreement to the Tribunal. Till date, the company has not delivered on its promise.

A. Gopi, 25, Male, Ajaya Nagar: I work in Malco's Waste plant and Pot room: I get constant headaches and for the past 4 years sometimes I cannot see distant objects clearly. At work I spend a half hour in the waste Pot Room and I get a half hours rest, it is extremely hot inside. Sometimes the Pot Room smells bad. Its gives out yellow smoke and smells of burning flesh. It gives me a headache and dizziness. They give us eye-glasses and masks to wear. My mother got a hysterectomy and my father has fevers.

R. Palaniammal, 35, Female, Karumalai Koodal: We live near the stream, the water came in and destroyed the walls and washed off the pots and pans. My husband Ramaswamy was a mason and he died at the Malco workshop. He was suffering from cough, cold and stomach pain. I am often ill and have chest pain. It sometimes smells of medicines, rotten eggs and papaya stem. When the smell is intense, my stomach burns and I even get rashes. Medical records available.

N. Saroja, 45, Female, Karumalai Koodals: Our house was destroyed by water from the stream. I suffer with dental problems and burning in the stomach. Its like a fire in the stomach. I have an appetite but I cannot eat. My husband died of a heart attack 5 years ago. He worked in Malco at the Red Bauxite loading area. He would often complaint of congestion in the chest. The company gave Rs. 1.5 lakhs in compensation and promised to employ my son but didn't do so.

P. Shakuntala, 40, Female, Karumalai Koodal: Water from the Odai comes to our door step when it rains. It smells like rice and makes me giddy, nauseatic and gives me a chest pain. I have lost appetite. I got my menopause at 36 and I have a swelling in my right breast. Doctor says I have to undergo treatment and has advised bed rest but I cant do that. My husband works at Malco at the loading site and he inhales a lot of dust. The doctor says he has to eat fruits. My daughter is 17 and still looks very young for her age.

M. Madhappan, 63, Male, Ramamoorthy Nagar: Red mud from Malco is dumped near our house which is carried into our house by the wind. The odour is intense and causes lot of breathing problems.

Our lands were taken by the company and no compensation was given. We have no concession from Malco.. Malco water has spoilt our wells. Many people have died because of breathlessness. There is a smell of burning flesh with smoke and there are frequent explosions at the thermal power station which stuns people.

There are no jobs for workers and educated youth. There are about a 100 Dalit (Scheduled Caste) families.

K. P. Chinnasamy, 54, Male, Mettur Vattara Vyavasay Nala Sayam, Secretary, Thengalvarai: There was a lot of smoke and red mud in the air just a while ago. I am suffering from asthma. The coal dust goes across the road on conveyers and causes traffic accidents. The Company has offered no health remedy and it is for the first time that they have announced a health camp.

In Pudu Kadu Odai there are 300 SC families they have no drinking water. MTPS (captive power plant) dumps fly ash nearby and that comes and deposits in our drinking water. Vegetables grown near the Sanmar Plant 3 are tasteless.

MALCO fly ash is also landing on our drinking water. Steam is often released without warning. Animals and people are startled and run. Red mud enters homes and falls on our food while we are eating. There is a stone crusher in the hill side the dynamite there goes off without warning it shakes the hutments. Some huts are damaged. We can cultivate only in the upper ground.

A.Nagendran, 30, Male, Coal coolie at Malco, Thengalvarai: Our home is close to the company and at

night fly ash is released and it enters the village. It causes cough, cold and asthma in children. When bauxite is converted to alumina there is a rotten egg smell. The children are the worst affected due to wheezing and cough. Doctors relate all these problems to the pollution in Mettur.

A.Renuka, 40, Female, Thengalvarai: My eyes burn due to the smoke and I have a chest congestion and breathlessness due to the fumes from Malco. My children are okay.

K. Pattayee, 40, Female (Schedule Caste), N.S.K Nagar: I am suffering from breathlessness, I cannot work hard or bend. The explosions damage our houses and the stones come and fall on our houses.

K. Natarajan, 61, Male, Ramamoorthy Nagar: Malco was set up in 1962 and the adi dravidas (Dalits) have been the worst affected. Lands of 50 farmers were taken without compensation and with the collusion of the government. They have filed false cases against us and we only demand compensation and jobs which they have denied. They offered to relocate us, but refused compensation, so now they are dumping the red mud in our village. 4 cows and 100 goats have died in the red mud dump. Red mud and bauxite gas pollution has claimed many human lives.

For the past 100 years the land was in our control and we have spent 4 generations on it. This management occupied the land illegally and they are accusing us of theft and so they want to erect a compound wall. No action was taken against security officials who were caught stealing in the factory instead they accuse our boys. Even when the cattle die our village cows owners do not get compensation instead they ask us why we let our animals on the dump site. They want us out of here. Our well and drinking water is spoilt: please clean it! We do not want closure because that will affect us again. They might threaten to close but they will never do that. We want compensation and jobs.

K. Mohan, 45, Male, Barathi Nagar: I am a councillor. I have a shop where I sit morning through evening. The smoke and soot from the factory irritates the eyes. Just a month ago I was in the market in R.S and there was a furnace smoke from Malco. They have put a new plant without any information.

B. Sivagami, 41, Female, Rammoorthy Nagar: I live near the red mud dump. Smoke from the factory causes ulcers in the stomach, mouth and throat. Acid smoke causes

burning and it doesn't heal. The hooves of the goats come off and I have lost 28 goats in three different incidents. I got no compensation. They are like white men, our village is not really independent we are still under Malco's rule. We do not even get coolie work. Our water is spoilt and if the goats drink the water they get diarrhoea and we spend Rs. 200–300 on its treatment. We just want jobs and we will take care of our medical expenses.

K. Siddhan, 55, Male, Thengalvarai: I am a tailor my shop is opposite the company. I got a heart attack due to the pollution. I cannot bear my medical expenses. The explosions at the Thermal Power plant startle me. I haven't been working for the past 6 months.

Medical Condition—CAHD Cardiac Heart Disease, Arterial valve 1 Schemia.

S. Rajamani, 45, Male, Thengalvarai: I have been working in the coal unloading unit for the past 6 years. I got no treatment for occupational illness. I have body pain. We have nothing. Even then the company takes Rs. 25 per day from my daily wages of Rs. 162.50.

R. Madheyan, 50, Male, Ramamoorthy Nagar: There is soot, rain, and smell from the Malco thermal power plant. The noise from the explosions is scary. I get stomach upsets when the smell comes. Many goats have died in the red mud dump. We got no compensation. Malco gives us unfiltered water.

A. Mallika, 34, Female: I work in the coal loading unit. I am suffering from intense back pain and hand pain. My 3 year old daughter, Subbulakshmi, has skin diseases.

T. Muniyammal, 50, Female, Barathi Nagar: My husband died vomiting blood. He used to work in the Malco workshop. He died 27 years ago. The company gave us Rs. 30,000. one son was unable to walk. My other son, for 10 years now they have to refused to hire him.

A. Palanisamy H/O Aarayi, 35, Male: I worked as a mason on a contract basis in Malco for 2 years and I quit 6 months ago. I have skin problems, pain in the legs and hands and I get breathless. Now it's a little better since I quit but I am still prone to allergies depending on diet.

J. Dhanalakshmi, 50, Female, N.S.K Nagar: Dust from Malco causes nausea, giddiness, eye burning and headache.

V. Alamelu, 35, Male, Mettur R.S: The sound from the conveyor belt disturbs my children. Their health is affected and we can't afford their medication. We sneeze and

cough as soon as we are out of bed. The children have a persistent cough. I feel breathless.

P. Manvizhi, 25, Female, Mettur R.S: There are no job opportunities not even as contract workers. There are many educated people here. Only outsiders have jobs. We are neither healthy nor do we have jobs. We suffer without any benefits.

Source: www.iptindia.org "The Indian Peoples Tribunal Report on Environment and Human Rights Violations by Chemplast Samnar and MALCO Industries at Mettur, Tamil Nadu", IPTEHR, July 2005



A child observing red mud being dumped near the Stanley Reservoir, at Mettur.

PHOTO: Nityanand Jayaraman

Contributors to this Report

The field trips summarised in the sections of this report on Tuticorin and Vedanta's bauxite operations were undertaken by Roger Moody of Nostromo Research (London, email: partizans@gn.apc.org), Nityanand Jayaraman, Indian environmental activist, Durga George of the Dalit Study Group (Raipur, Chhattisgarh) and researcher/anthropologist, Felix Padel, accompanied by community representatives, workers, journalists and others, with additional information from Praveen Mote. Information from Lanjigarh district, Orissa, was based on several field trips made between 2003 and June 2005, findings of the Indian Supreme Court's Central Empowered Committee, and reports from many local journalists and campaigners including Samarendra Das, Dr Sreedhar Ramamurty, and Ravi Rebbapragada.

The research and writing of this report was also supported by the India Resource Center (email: info@IndiaResource.org web: www.IndiaResource.org) and a grant from the Marmot Trust. Layout and design services were provided by Design Action Collective, www.designaction.org.

This report is a joint project of:

Nostromo Research

41 Thornhill Square
London N1 1BE, UK

and

India Resource Center

Web: www.IndiaResource.org
Email: info@IndiaResource.org