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Iron Ore, Iron and Steel

Steel demand to grow by 70% by 2016-17: Steel Ministry Panel

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Displaced families at Gopalpur demand more compensation

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CISA to publish weekly iron ore index to reflect domestic market

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Bauxite, Alumina and Aluminium

Guinea asks China's CPI to build 340 MW power plant

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Copper, Zinc, Nickel and Lead

China base metals demand growing 10% more than GDP

http://www.miningweekly.com/article/china-base-metals-demand-growing-10-pct-more-than-gdp-2011-09-21

Nuclear Power

Survey at Kaiga to set site for 2 new reactors

http://ibnlive.in.com/news/survey-at-kaiga-to-set-site-for-2-new-reactors/185880-60-115.html

Land Grab – The Indian Reality

System of green clearances not working for environment and people and clearances not the impediment to growth, says CSE's new study

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World Energy Forecast

IEO 2011: a misleadingly optimistic energy forecast by the EIA

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Coal, Lignite and Thermal Power

DNA investigations: Coal worth millions plundered in eastern and central India

Published: Monday, Sep 19, 2011, 9:15 IST

By DNA Investigations Bureau | Place: Mumbai | Agency: DNA

Mining coal was once a livelihood for villagers in coal-rich states. Now, it is a multi-crore business for the coal mafia.

While the mafia pockets crores, villagers get a few hundreds for mining coal illegally while the government gets nothing.

Though there has been no official study on the amount of loss to the exchequer, XLRI Jamshedpur carried out a survey on the request of the Jharkhand government. The XLRI report pegs the annual loss of coal companies in the state to Rs 106 crore and that of the state government to Rs 34 crore.

DNA correspondents visited the coal belt in central and eastern India to assess the magnitude of the scam and find out how the mafia works.

Documents with DNA point to illegal mining in at least 450 sites in the Jharkhand-Bengal belt alone. Copies of 176 FIRs and complaints obtained under the Right to Information Act show illegal mining has been going on in several districts of Jharkhand, West Bengal, Maharashtra and Orissa since 1995.

An official report with DNA says at least 616 FIRs on illegal mining were lodged in various police stations over the past four years. The report, however, does not specify the number of people convicted.

The mining is illegal but a meticulously planned distribution system sees to it that the mafia escapes the law while earning fat bucks. At least a million villagers in Jharkhand are involved in illegal mining, say the police.

Once coal is mined, villagers burn it and turn it into soft coal, free of ash, a senior officer said. The coal is then ferried to nearby factories on bicycles at Rs 60 a bag. "A manager from one of the factories gave me this bicycle to carry coal," a villager in Ramgarh district, Jharkhand, said. His cycle was laden with bags full of coal. A couple of the FIR copies confirm that villagers sell coal to nearby factories.

The mafia owns several such factories. They usually enter into fuel supply agreements (FSA) with subsidiaries of Coal India Ltd (CIL) to use it as a garb to store tonnes of illegal coal in the factory premises and eventually sell it in the black markets of Uttar Pradesh and Bihar.

DNA correspondents found villagers carrying bags of coal on bicycles on the main roads and highways in Jharkhand and West Bengal. Each bicycle can ferry up to 400kg of coal.

The question is, if everyone is aware of the illegal mining and the role of the mafia, why do the police not do anything? The answer is simple: there is a nexus between the police, coal company officials, and the mafia. All of them are involved in mining, carrying, transporting and distributing illegally mined coal, a CBI officer in Jharkhand said. He has investigated several mining-related cases.

Just three months ago, the CBI had raided some such factories in Uttar Pradesh for buying illegally mined coal and later selling it in the black market at a huge profit. One of the factory owners is a relative of coal mafioso Brajesh Singh. The CBI officer said at least 600 trucks carry illegal coal out of Jharkhand daily on the Grand Trunk Road between two and four in the morning.

Cases have been registered in Jharkhand and West Bengal against Dhumal Singh, Brajesh Singh, Anil Sharma, Pradeep Beltharia, KP Handa, Sambhu Singh, Manager Rai and Nirmal Jain for mining coal illegally.

Most of the illegal mining happens in abandoned mines in Raniganj, West Bengal. DNA found out through the RTI Act that Eastern Coalfields Ltd (ECL) with its headquarter in Raniganj has 64 abandoned mines.

In Jharkhand, illegal mining also happens on fresh land. In Argada, Ramgarh district, Jharkhand, DNA correspondents found an illegal mine right next to a Central Coalfields Ltd (CCL) mine. The miners admitted that they supplied coal to a nearby factory run by a "big businessman". But none of them was willing to come on record for fear of the mafia.

The miners (villagers) often burst explosives — stolen from colliery magazines — after the first entry point, called the foxhole. A majority of the rich coal mines are in isolated places — often in hilly terrain, forests and tribal areas.

Since illegal mining has been happening in these regions for several years now, the mafia has become more organised and powerful. It uses the illegal money to rope in others like the police and coal company officials. In some areas, the mafia is hand-in-glove with the underworld and even Maoists — everyone works to each other's benefit.

At a meeting in October 2010, the parliamentary standing committee on coal highlighted this nexus terming the situation "grave". The committee said in its report that it was strange that law enforcement agency had failed to prevent illegal coal mining.

http://www.dnaindia.com/india/report dna-investigations-coal-worth-millions-plundered-in-eastern-and-central-india 1588894

MoEF grants forest clearance, but FRA, PESA compliance still needed

This wedding season, anxious grooms from Parsa and Ghatburra, two villages in Chhattisgarh's Surguja district, were offered financial assistance from an unlikely source. Adani Mining Pvt. Ltd, a subsidiary of Adani Enterprises Ltd, was handing out loans to all those who could prove that the money would be spent on marriage arrangements.

"A company official took us to the bank, opened accounts in our names, and gave us cheques of Rs. 20,000 each. He then took us to the tehsildar and made us sign an agreement," said Mohar Sai, a resident of Parsa, who said he knew of about 20 villagers who had taken such loans.

Mr. Sai said that in loan agreements, made out on stamp paper in the presence of the tehsildar, villagers promised to repay the company from money received when their lands in Parsa East and Kente Basan were acquired by the district administration and turned into a coalmine operated by Adani Mining.

"The company came to us and said the villagers needed the money. We told them to approach villagers through the Gram Sabha," said Surguja Upper Collector H.L. Nayak.

But what if the project proposal was rejected? Would the company forfeit the money?

"The government would acquire the land anyway," said Mr. Nayak. "The company would have to deal directly with the villagers for the money."

When the Adanis began handing out marriage loans in March this year, the future of their coalmine was far from certain, as the Ministry of Environment and Forests (MoEF) had already rejected proposals to mine in the area on three separate occasions in 2010.

Finally, in June 2011, then-Environment Minister Jairam Ramesh lost his long-running battle with the Coal and Power Ministries and was forced to open up the coal-rich, heavily forested region of Hasdeo Arand in Chhattisgarh to mining for the first time. Stage I forest clearance was granted to three blocks "on the fringe" of the area: Parsa East and Kante Basan – both of which will be operated by the Adani group – and Tara.

While that initial battle might have been decided in New Delhi, many uncertainties still remain on the ground in Chhattisgarh. Under the law, tribals and forest dwellers in the area also have rights to the forest land, which must be settled before mining can begin. The local gram sabhas must be consulted — and their consent might be needed — before land acquisition and compensation can be finalised. Hence, the Adanis effort to smooth their way by spreading around some cash in wedding season.

Private or public sector?

Given that the public sector use of the coal was one of the key reasons that Mr. Ramesh gave for clearing the blocks in defiance of his own Forest Advisory, it is interesting to explore the role of Adani, a private sector player.

In 2008, Rajasthan Vidyut Utpadan Nigam Ltd (RVUNL), a public sector company, and Adani Enterprises formed a company called Parsa Kente Collieries Ltd (PKCL) and applied for the Parsa East and Kente Basan coal blocks to feed RVUNL's thermal power plants in Rajasthan. According to the Adani group website, Adani Mining Pvt Ltd signed an agreement with the newly formed PKCL for "obtaining approvals (including approval of mining plan), acquisition of land, setting up washery and construction of railway siding at the mine."

Over 2009, 2010 and 2011, the Forest Advisory Committee repeatedly advised against granting mining leases in the area, saying that it would destroy dense forests that sustained a rich ecosystem inhabited by elephants, leopards and sloth bears. The MoEF upheld the committee's recommendations thrice, but then overturned its earlier decision this June.

In his approval order, Mr. Ramesh noted that the Rajasthan Chief Minister Ashok Gehlot had persistently lobbied for clearance for Parsa East and Kente Basan as the coal was needed for a state-owned project. This despite the privately-held Adani group owning 74 percent equity in PKCL, the company tasked with operating the mine. Coal washery rejects from Parsa will also be used to set up a 1080 MW thermal power plant in Surguja that will be wholly owned and operated by Adani Mining Pvt Ltd.

Preparations for mining are underway in Surguja – survey teams can be seen across the area, boring for mineral cores and verifying land ownership records before the process of land acquisition formally begins, but several land issues are yet to be resolved.

Forest rights incomplete

Before final clearance, the state must prove full compliance with the Forest Rights Act (FRA) 2006 which grants tenancy rights to tribes who can prove residence on forest land prior to December 13, 2005. As per the Act, a tribesperson must fill out a form staking his/her claims and no one can be evicted from such land until the verification of claims is complete. Both the FAC report and interviews with village officials reveal that the verification process is far from complete.

"Only 34 of 302 applications [to the Forest Department] have been settled in Ghatburra panchayat," said Amresh Markam, the Sarpanch of Ghatbarra, in a recent interview, "All 302 applications are for lands that shall be taken by the coalfield."

"So far only 77 out of 193 applications for forest land in Salhi and Hariharpur have been processed," said Satish Agarwal, who served on the village level forest committee for both villages.

According to officials, the district administration is yet to ascertain the exact number of unprocessed applications for forest land. "We are still tabulating the number of applications. But all applications shall be dealt with before the land is handed over for coal mining," said Mr. T.R. Agrawal, the officer in charge of land acquisition.

It may be pertinent to note that in other high-profile cases such as the Posco integrated steel project and Vedanta's bauxite mine, both in Orissa, protests over the lack of FRA compliance stalled projects even after the Stage I clearance had been granted.

PESA: Gram sabha consent?

Apart from FRA clearance, the state government must also prove that the land was acquired in compliance with the Panchayat Extension to Scheduled Areas Act (PESA) of 1996, which is applicable in tribal areas like Surguja. In its 2009 report, 'Development Challenges in Extremist Affected Areas', the Planning Commission notes that "Schedule V and PESA are powerful legislation...but implementation of this law is weak and ineffective." Of particular contention is a provision that states that tribal lands can be acquired only in consultation with the gram sabha.

But is 'consultation' the same as 'consent'?

In an interview last month Vivek Dhand, Principal Secretary for Rural Development, disagreed. "As per our reading, the PESA simply mandates that the gram sabha be consulted

before any decision is taken," he said, a stand at odds with that of Jairam Ramesh, now Union Minister for Rural Development.

"In my reading of PESA, it is 'consent', not simply consultation, but the [Chhattisgarh] State government thinks otherwise.

If required we will seek a legal opinion on the matter," Mr. Ramesh said, but declined to provide a timeframe for when this opinion would be sought.

The distinction is of particular import in the Parsa East and Kente Basan area where gram sabhas have agreed to part with their land only if a broad charter of demands is met. The demands include compensation to the tune of Rs. 50 lakh per acre of land and Rs. 10 lakh per house, Rs. 1 lakh for every fruit-bearing mango tree and Rs. 2 lakh for every fruit-bearing tamarind tree.

Surguja Upper Collector, Mr. Nayak said the land would be acquired at Rs. 12 lakh, Rs. 8 lakh and Rs. 6 lakh per hectare in accordance with State government policy. Thus the gram sabha has certainly been 'consulted', but its 'consent' is yet to be established.

http://www.thehindu.com/news/national/article2465047.ece?homepage=true

Iron Ore, Iron and Steel

Steel demand to grow by 70% by 2016-17: Steel Ministry Panel

PTI Sep 19, 2011, 02.49am IST

NEW DELHI: India's steel demand is likely to jump by over 70% to 113 million tonnes (MT) by the end of the next Five-Year Plan, with the infrastructure sector projected to witness investments worth \$1 trillion.

A panel appointed by the Steel Ministry to assess demand and supply of steel in the 12th Five-Year Plan (2012-17) has estimated that steel demand would grow by 36 MT during the period to touch 113 MT in its final year, a source in the ministry said.

India's total steel demand stood at 65.61 MT last fiscal. The panel chaired by the Steel Ministry's financial advisor S Machendranathan, and comprising representatives of all leading steel-makers and associations, estimated that steel demand would grow by 10.3% annually if the country maintains a 9% GDP growth rate, as projected by the Planning Commission in its Approach Paper for the 12th Plan.

http://economictimes.indiatimes.com/news/news-by-industry/indl-goods-/-svs/steel/steel-demand-to-grow-by-70-by-2016-17-steel-ministry-panel/articleshow/10034393.cms

Displaced families at Gopalpur demand more compensation

BS Reporter / Kolkata/ Berhampur September 20, 2011, 0:16 IST

The people displaced for the Tata Steel's shelved steel project at Gopalpur about 15 years back have demanded compensation as per the Orissa government's Rehabilitation & Resettlement (R&R) policy-2006.

Besides, these displaced persons have demanded a monthly allowance of Rs 2,000 to each family. The demands have been raised on the eve of a public hearing scheduled on Tuesday for the Rs 15,000-crore industrial park to be developed by the steel maker at the same location.

Around 800 families of five villages-Badapur, Patrapur, Sindhigon, Paikapada and some families of Kalipalli were displaced when Tata Steel had acquired 3,000 acres of land in 1994 to set up a steel plant at Gopalpur.

It later shelved the project and decided to build an industrial park there.

Ahead of the public hearing, the Ganjam district administration had convened a meeting at Chhatrapur in which the displaced people aired their grievances.

Officials of the district administration, Tata Steel, the local MLA and MP were presented in the meeting which was presided over by the district collector Krishan Kumar.

"The land acquisition process is still on for the company's Gopalpur project. So, we have demanded that the company should compensate the affected people for the project as it compensated the people for its Kalinganagar project," said Ramesh Mahakuda, one of the displaced persons. "We want that the R&R policy-2006 of the state government should be implemented for this project," he said.

The displaced families also demanded that the mega steel plant be set up on the same land instead of the industrial park. "We had given land with a dream of a steel plant coming up there," said Mahakuda.

The representatives of the displaced families, who were rehabilitated in the company's settlement colony, also demanded the compensation arrears be paid to them at a rate of Rs 15,000 per month per family as they had lost their livelihood after being uprooted from their villages.

"We fully support the displaced persons and the company should come forward to meet their demands," said Gopalpur MLA Pradeep Kumar Panigrahi.

The district collector assured the displaced families to examine the issues and take up the same with the government and the company. The infrastructure problems in the settlement colony would be solved very soon, Kumar said. He also assured that a meeting would be held every three months to solve the problems of the colony.

http://www.business-standard.com/india/news/displaced-families-at-gopalpur-demand-more-compensation/449726/

CISA to publish weekly iron ore index to reflect domestic market

Updated: 2011-09-21 07:48

By Zhang Qi (China Daily)

BEIJING - The China Iron & Steel Association (CISA), the country's steel lobby, will begin publishing its weekly iron ore index "CIOPI" every Monday, starting in October.

The index, released in conjunction with the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters and the Metallurgical Mines' Association of China, is based on calculations of price data collected from 93 percent of domestic ores and 95 percent of imports, said Zhu Jimin, chairman of the CISA, on Sept 20.

In September, Luo Bingsheng, deputy Party secretary of the association, said that the index aims to better reflect the Chinese market and to give the country a greater say in ore prices.

He said Chinese steel makers will not be forced to replace other price indicators with the CISA index, although he was confident that it would be well received by CISA members.

Platts, the Metal Bulletin and the Steel Index currently publish iron ore indices based on figures derived by deducting freight costs from the three-month average of daily iron ore indices and taking a one-month lag into account. The price index released by Platts is widely used by the three major global iron ore producers - Vale SA, Rio Tinto Group and BHP Billiton Ltd.

Chinese industry participants and steel makers argue this indicates that the Platts index works in the miners' favor.

Li Xinchuang, deputy secretary-general of the CISA, said earlier that the Platts index reflects only a small portion of the iron ore trade on the spot market and doesn't reflect the full picture.

Imported ore accounted for 63 percent of China's total consumption in 2010, said Zhu, adding that rising prices have squeezed steel makers' profit.

China imported 448 million tons of iron ore in the first eight months, up 10.6 percent year-on-year, while imported ore prices surged 37.5 percent during the period, meaning that Chinese buyers had to pay an extra \$20 billion, according to data released by the CISA on Sept 20.

Some domestic media including Xinhua News Agency and the Chinese consultancies Custeel.com, Umetals.com and Mysteel.com already issue indices based on domestic and imported prices, but none of these are acknowledged by the global mining companies.

http://www.chinadaily.com.cn/bizchina/2011-09/21/content 13746093.htm

Beware booming iron ore markets, analysts advise

Oversupply could doom expansion

By ROBERT GIBBENS, Freelance September 24, 2011

Booming global iron ore markets could run into oversupply and a price correction by 2015, with a heavy impact on the three leading producers, Vale, BHP and Rio Tinto, some analysts are saying.

If they are right, expansion projects worth billions of dollars in Australia, Africa, Latin America and in Quebec could be delayed or scaled back. All are based on projections of Chinese and Asian demand continuing to rise steadily through 2020.

Ten analysts surveyed by Bloomberg News said average iron ore prices could decline by 30 per cent from the current \$180 to \$200 U.S. a tonne to around \$125 U.S. by 2015, because global mine supply will surge by 50 per cent by then.

At the same time, Chinese demand, which has driven expansion in Quebec-Labrador since 2005 as well as in Australia and Brazil, will probably slow in the next few years, said Goldman Sachs & Partners in Australia. By 2015, BHP and Vale earnings will be down about 50 per cent from this year's record levels.

"Iron ore is now the largest single contributor to the Big Three's profits and sagging prices would reduce their overall profitability," said Tony Robson, analyst with BMO Capital Markets in Toronto.

The Big Three control two-thirds of the total seaborne trade in iron ore - tonnages moving from producers to big consumer markets mostly on contract - but recent high prices have encouraged the Chinese to consider building new "captive" mines in Australia, Brazil and Africa to sidetrack future price volatility.

BHP is spending \$7.4 billion U.S. to lift annual capacity at its Pilbara mines in Australia to 220 million tonnes. Rio Tinto plans to raise capacity in the same region to 283 million tonnes by 2013 and 333 million tonnes by 2015 - up 50 per cent from 2011.

But the China Iron and Steel Association says annual growth in Chinese steel consumption could ease to 2.4 per cent annually through 2015, down from 2011's 4.6 per cent.

"We see a continuing flattening of Chinese steel production," said Peter Hickson, UBS commodity research director. "The primary issue is significant new iron ore supply ahead."

Ian Henderson, managing \$9 billion U.S. of resource assets at JP Morgan Chase & Co. in London, urged caution in assessing supply additions. New projects may be slated to add 600 million tonnes to global annual supply by 2015, "but in reality very few of them are likely to be up and running on time or produce as much as people thought," he said.

"We forecast a surplus of iron ore in 2014," Citigroup analyst Daniel Hynes told Bloomberg News. "Demand growth is easing while several new projects in the western hemisphere and in Western Australia will be coming on stream concurrently."

http://www.montrealgazette.com/business/Beware+booming+iron+markets+analysts+advise/5452043/story.html

Bauxite, Alumina and Aluminium

Guinea asks China's CPI to build 340 MW power plant

News September 19th, 2011 by IFandP Newsroom

Guinea has asked state-owned China Power Investment (CPI) to build a 340MW coal-fired power plant as part of ongoing negotiations over the US\$5.8bn potential development of a bauxite mine in Boffa and construction of an aluminium refinery and deep water port.

"We have asked China Power Investment to build a 240MW thermal power plant powered by coal to which they will join up another 100MW plant," Mines Minister Mohamed Lamine Fofana said on state television.

The request follows a Guinean visit to a 2000MW power plant in China. "We have visited a 2,000 MW power plant (in China) that doesn't even emit dust. It is only water vapour that we see. We've asked them to do the same thing in Guinea, only in miniature," the minister said.

Guinea is the world's largest exporter of bauxite. CPI has three bauxite exploration permits in the country and said it has located 900Mt of reserves.

http://www.ifandp.com/article/0013815.html

Copper, Nickel, Lead and Zinc

China base metals demand growing 10% more than GDP

By Reuters 21st September 2011

STOCKHOLM – Demand growth for base metals in China is exceeding its GDP growth rate by 10 percent, and will keep growing, Fan Shunke, the president of China Non-ferrous Techno-Economic Research Institute said on Wednesday.

"Base metals demand is about 10% higher than the GDP growth rate," Fan, who is also chairman of state-backed research firm Antaike's board, told Reuters on the sidelines of a China Metal Forum in Stockholm.

Gross domestic product growth was around 9 percent this year, Fan said at the event organised by Antaike and research body Raw Materials Group.

"In the next five-year period the demand for base metals will keep growing," he said, although he acknowledged the global economic slowdown would have an impact on China's economy.

"But with regard to the demand for base metals it will not be affected because most of the base metals are consumed in China, not exported," he added. "In the industrialisation of China, the demand for raw materials is necessary."

China's imports of refined copper surged 21.2% in August compared to the previous month to reach their highest level since January as improved arbitrage spurred spot buying from the world's top consumer of the metal.

As the economy deteriorates in the western world, many metals producers are looking to demand in China to provide a buffer against the downturn.

The International Monetary Fund on Tuesday warned of the risk of the severe repercussions on global growth of Europe's worsening sovereign debt crisis, and a painfully slow US recovery.

It said without action those economies could tip back into recession.

It also trimmed its forecasts of economic growth for China and other Asian economies due partly to slower growth in the rest of the world, although China's economy is still expected to grow a brisk 9.5% this year and 9% in 2012.

DOWNTURN

Swedish copper and zinc miner and smelter Boliden's Chief Executive Lennart Evrell voiced concern about the demand for metals with "a downturn inevitable in Europe and the United States".

He told the China Metal Forum it was likely China's high growth rate would moderate, "but we should keep in mind that the share of the world demand in China is at the same time bigger. So if you model that in, we see that there is still a very favourable impact on the global demand."

"I think the bottom line is clear - the western world will keep a constant consumption year after year at best, and be exposed to the normal business cycles. Whereas the fast growing countries...will be very very fundamental for the metal demand in the world."

China's copper raw materials imports rose almost 50% between 2006 and 2010, despite the financial crisis, Li Yusheng, a senior analyst at Antaike, said.

In China's 12th five-year economic plan, from 2011 to 2015, copper mining capacity will continue to expand, he said, but the country will still have to import the metal to make up a shortfall.

China's daily apparent demand for refined copper surged 18.8% month on month in August and 14.4% from a year earlier on a 23% rise in net imports and record output, after a 4.3% fall in July, Reuters calculations based on official Chinese data showed on Wednesday.

http://www.miningweekly.com/article/china-base-metals-demand-growing-10-pct-more-than-gdp-2011-09-21

Nuclear Power

Survey at Kaiga to set site for 2 new reactors

Updated Sep 21, 2011 at 12:01pm IST, Express News Service, The New Indian Express

KARWAR: Nuclear Power Corporation of India Limited and the Forest Department are carrying out a survey at Kaiga project to locate the site for reactor number five and six, said sources.

In fact an area of 120 hectares of forest land had been cleared while establishing Kaiga Nuclear Power Station in 1989.

Presently there are four units with a generating capacity of 235 MW each, covering an area of 60 hectares.

The two new units coming up now at the station will have generating capacity of 700 MW each.

According to sources, these two units may need nearly 70 hectares of space. It means the land required is 10 hectares more than the area already allotted. Obviously, that part of the forest needs to be cleared. Thus, the survey is being done to allocate suitable land, sources said.

They clarified that no new transmission corridor would be built for power transmission from the two new units. Instead, the existing high-tension line would be further augmented.

Therefore there is no question of acquiring additional forest land for power transmission.

It may be noted that the Union Cabinet had cleared the establishment of two more units at Kaiga in August. With the construction of these new units, the generating capacity of the project would reach 2,340 MW.

http://ibnlive.in.com/news/survey-at-kaiga-to-set-site-for-2-new-reactors/185880-60-115.html

<u>Land Grab – The Indian Reality</u>

System of green clearances not working for environment and people and clearances not the impediment to growth, says CSE's new study

New assessment by Centre for Science and Environment (CSE) finds unprecedented scale of clearances being given by the ministry of environment to industrial projects in the last five years

- Findings trash the allegation that environmental considerations are proving to be an impediment in India's growth
- "Are forest and environmental clearances the problems for growth? Or is it the other way around—are these a problem for environmental protection?" asks CSE director general Sunita Narain
- Says present system of granting clearances clearly not working. Calls for better regulations and more effective monitoring

New Delhi, September 22, 2011: For some time now, industry, government and regulatory agencies have been persistently talking about how environmental regulations have throttled the country's growth. They have raged on about how the system of forest and environment clearances has forced India's credit ratings to its nadir. And they have bitterly complained about how environmentalists were holding the country and its people to ransom.

All of which is unadulterated hogwash, says a new assessment by Centre for Science and Environment (CSE).

CSE has done a comprehensive analysis of environment and forest clearances granted by the Indian government in the period of the 11th Five Year Plan – from 2007 till August 2011. The study looks at five key sectors – thermal power, hydropower, cement, iron and steel and mining – and comes out with hard data to prove that the scale of clearances has been nothing less than "unprecedented".

"Environmental regulations are seen as impeding growth, but where is the impediment? We are finding that despite all the browbeating, almost every project is getting cleared with frightening consistency, making a complete mockery of our regulatory systems," said Sunita Narain, CSE director general, while releasing the assessment report here today.

What the assessment has found

- In the period between 2007 and August 2011, 8,284 projects were granted forest clearance and 2,03,576 hectare (ha) of forest land was diverted.
- This diversion is about 25 per cent of all forest land diverted for development projects since 1981. The pace of forest land diversion, therefore, has doubled in the last five years.
- In one single year 2009 as much as 87,883.67 ha of forest land was granted clearance.
- The area of forest land diverted is equal to the average area of two tiger reserves, and about four times the area of a Panna or a Tadoba tiger reserve.

- A large proportion of this forest land (50,000 ha) has been diverted for mining and power projects. The maximum amount of forest land diverted for mining in any single year happened in 2010 about 14,500 ha.
- Coal mining accounted for more than half of all the forest land diverted for mining. As many as 113 coal mining projects were granted forest clearance -- the highest number cleared in any five year plan since 1981.
- 181 coal mines, 267 thermal power plants, 200 coal-based thermal power plants, 188 steel plants and 106 cement units have been accorded clearance. This enormous splurge has led to a doubling of capacity in almost all sectors. However, almost all of this capacity remains unutilized.

Makings of a scam – do we really need all this capacity?

The 11th Five Year Plan projects a target of 50,000 megawatt (MW) of additional thermal power capacity; the 12th plan asks for 100,000 MW. In the past five years, till August 2011, the Union ministry of environment and forests (MoEF) has granted environmental clearance to an astounding 210,000 MW of thermal power capacity -- in other words, 60,000 MW more than what has been proposed till 2017! Worse, the capacity actually added is a mere 32,394 MW.

Coal India Limited (CIL) produces over 90 per cent of India's coal; it has under its control over 200,000 ha of mine lease, including 55,000 ha of forest area. The estimated coal reserves with CIL are 64 billion tonnes, and the company produces 500 million tonnes per annum. Who is then responsible for the shortage of coal in the country?

Or are coal mining clearances just another way to facilitate access to captive coal mining by private companies? Today, many private companies have got coal mines, but have not started production. While the coal ministry has warned some companies to immediately develop their mines or face de-allocation, the minister of coal is on record demanding that environmental clearances be removed so that coal production is not jeopardised – something that the B K Chaturvedi committee has recommended (see attached Extracts from the committee's report).

Asks Chandra Bhushan, CSE's deputy director general and the lead author of this assessment: "Why is the ministry giving so many clearances? Why projects that are already are cleared not being implemented first before more clearances can be given?

Is this some kind of a new scam to take over the land and water of the people?"

Cumulative impact: is anyone bothered?

No -- many projects have been granted clearances in already critically polluted areas such as Singrauli, Korba, Raigadh and Hazaribagh. Says Bhushan: "Currently, all projects are

cleared individually, without once assessing the cumulative impact on the region or district. It is clear that once operational, these projects will make life hell for the people and the environment."

Take the case of coal mining. All coal mining areas are heavily polluted, and most coal mining companies have very poor environment management record: many of these places fall under the category of critically polluted areas (CPA). Monitoring by pollution control authorities shows about one-third of operating coal mines are violating all environmental norms. Despite this, coal mining projects in CPAs are being given the go-ahead quite regularly (see Factsheet 1 on Overview). It is the same story in the case of coal-based thermal power projects. Of the top 10 districts where environmental clearance has been granted to these projects, six were declared as already critically polluted.

The MoEF has recently issued guidelines for monitoring of projects. Says Narain: "Nobody knows how this monitoring system works. In the case of forests, there is some compiled information. But this only proves that monitoring is poor and worse, what little is monitored is found not to meet conditions."

As per statistics compiled by the CSE study, of the 22,264 cases granted forest clearance, only 12,225 were monitored (90 per cent of which were in only two states); 5,091 of these were found to be non-compliant. There is no information on what action was taken against them.

What needs to be done: the CSE agenda

Forest clearances: Stop this process until a transparent and effective system is put into place.

Environmental clearances

- 1. No further clearances in cases where clearances exceed targets and capacity.
- 2. In the case of thermal power and coal projects, ministry of power should assess why so much of the cleared capacity is awaiting commissioning. Cancel those projects which have got clearance but have not yet been commissioned. The MoEF can then consider granting the same capacity as a swap.
- 3. MoEF must use this moratorium period to strengthen and improve its regulatory procedures as per the recommendations of the Supreme Court in the recent Lafarge judgement (see attached printout of the judgement).
- 4. Strengthen the public hearing process, which is critical to 'listen and hear' people affected by the projects.
- 5. MoEF must revise its Environmental Impact Assessment Notification to stipulate that it will only clear projects after considering the cumulative impact.
- 6. Strengthen, not dismantle, the Comprehensive Environmental Pollution Index (CEPI), which allows scrutiny of projects based on cumulative impact.

7. Strengthen monitoring procedures so that affected people can scrutinise the compliance conditions.

http://www.cseindia.org/content/system-green-clearances-not-working-environment-and-people-and-clearances-not-impediment-gro

World Energy Scenario

IEO 2011: a misleadingly optimistic energy forecast by the EIA

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by Gail Tverberg

The EIA published International Energy Outlook 2011 (IEO 2011) on September 19, showing energy projections to 2035. One summary stated, "Global Energy Use to Jump 53%, largely driven by strong demand from places like India and China." (International Energy Outlook 2011 report).

It seems to me that this estimate is misleadingly high. The EIA is placing too much emphasis on what demand would be, if the price were low enough. In fact, oil, natural gas, and coal are all getting more difficult (and expensive) to extract. Prices will need to be much higher than today to cover the cost of extraction plus taxes countries choose to levy on energy extraction. The required high energy prices are likely to lead to recessionary impacts, which in turn will cut back demand for energy products of all types.

We live in a finite world. While it is true that huge resources of oil, natural gas, and coal are still theoretically available, we are starting to reach practical limits regarding extraction at prices that do not lead to economic contraction.

An IEO 2011 summary exhibit shows that world energy consumption will more than double, between 1990 and 2035:

It is only by drilling down into the report that we can see what the problems with the forecast really are.

Liquids Projections

Clearly oil and other "liquids" (used to extend oil) are one of the potential problem areas, since the price of oil has been rising rapidly since 2000. EIA's liquid fuels projection is shown as follows:

The first thing a person notices when looking at the graphs is how poorly the forecasts of future production match up with recent past actual production. Non-OPEC production has recently been declining, after reaching a peak of 48.1 quadrillion Btu in 2004. Somehow, miraculously, the EIA expects that Non-OPEC production will start increasing, rising from

46.8 quadrillion Btu in 2009 to 53.9 quadrillion Btu in 2035. The text suggests this will come from ultra deep wells, from the arctic, and from enhanced oil recovery.

Oil production from individual wells naturally declines over time, by about 5% per year, so new fields must constantly be added, to keep production level. The graph indicates that since 2004, non-OPEC countries have not been able to add enough new production to keep conventional production level. What makes the EIA think that this problem can be turned around, with very high cost, risky new investments?

The forecast for OPEC conventional is even more of an enigma, because it shows even larger increases. OPEC countries claim very large reserves, but these have not been audited, and when it comes to what should be a simple task–replacing the lost oil output of Libya–they seem to have difficulty. Recently, King Abdulla of Saudi Arabia has been quoted (for example, in a WSJ an article titled, "The Next Crisis: Prepare for Peak Oil,") as saying that new oil finds should be left in the ground for their children.

If the OPEC countries we are depending on are not planning for the big increases we are hoping for, we have a problem. I am not aware that OPEC has given any indication that their production (conventional oil or otherwise) can reach as a high level as the EIA is forecasting. Even big increases in production from Iraq would not seem to be enough to provide OPEC's hoped-for increase.

I suppose that a person could argue that if oil prices were a lot higher, oil companies might be willing to use more expensive techniques to extract oil. But the EIA shows this graph regarding price expectations:

In the reference case, oil prices do not rise much above today's high level between now and 2035. (The EIA does not indicate what oil benchmark is being used, but the context suggests it would be an average price level, more similar to Brent price than to today's distorted West Texas Intermediate price level. Such prices have recently been in the \$110 to \$120 barrel range.)

Part of the reason that very high oil prices are needed is because governments are becoming more and more "needy," and see oil companies as a potential source of revenue. According to the Economist, next year Russia (the world's second largest oil exporter) will need a price of \$120 barrel to meet its spending obligations. Also, President Obama keeps talking about raising taxes on US oil and gas companies. Higher taxes will mean that higher oil prices will be needed to encourage development of very deep and very risky resources. These issues mean that to have a chance of raising oil production, oil prices really need to be on the "high oil price" trajectory of Figure 3, not the "reference case" scenario.

If oil prices really rose to the high oil price trajectory, there would be huge transfer of funds from importers to exporters, and importers would be in even worse financial trouble than they are today. Food prices would be expected to rise with oil prices, so even oil exporters (who are food importers) could expect to have problems. At such high oil prices, it seems likely that we would see even more revolution and replacement of governments than we saw this spring.

The written analysis in the IEO 2011 report is based on the reference scenario, but schedules are available showing the indications of the high oil price scenario. Amazingly, with EIA's high price scenario, energy production is even higher, and world economic growth is even higher. The world's average annual growth in world GDP is 3.4% per year in the reference scenario (with an unrealistically low oil price), and 4.0% per year in the high oil price scenario. When people are spending a disproportionate share of their paychecks on oil and food, and road repairs are becoming increasingly unaffordable for governments, how are economies possibly going to be growing more rapidly? If a greater share of investment will need to be plowed back into the oil and liquids sector, how can this mean that there can be more growth elsewhere?

Besides OPEC and non-OPEC conventional oil, the third category is unconventional liquids. An explanatory chart gives the following breakdown:

With alternative fuels, high price is again important, because it helps make the big investment required profitable. The Oil Sands / Bitumen projection is perhaps reasonable, if prices can actually follow the high trajectory without sinking economies (a very big if). The biofuels projection depends on the development of biofuels which do not use foods as inputs. So far, technological progress on these has been slow. Even if very high prices can be maintained, the biofuels forecast seems like a "stretch".

Some gas to liquids increase seems likely, perhaps even more than the EIA is forecasting. These plants appear to be profitable now, even without \$150 to \$200 barrel oil prices. Coal to liquid and shale oil would seem to be farther away economically than gas to liquids. However, if the world economy could really withstand \$200 oil prices, perhaps these types of plants could be built.

Part of the issue with very high oil prices is that they imply that it makes economic sense to use very high energy inputs (and water inputs) to produce these liquids. Clearly, at some point, the cost simply becomes unacceptably high because it takes more than one barrel of oil to produce a barrel of oil, or because the pollution issues become unbearable. For example, theoretically, it would be possible to pump water uphill from the Great Lakes to Colorado to be able to produce shale oil, if the price were high enough. But it is hard to see this making sense on any reasonable terms. The assumption that prices can rise arbitrarily high is simply not true.

Natural Gas

Natural gas indications are less clear, because the forecast is a summary of forecasts for different regions, each with different issues. Transport is more difficult for natural gas than oil also.

New techniques are now being used to extract more difficult-to-extract natural gas, but these are controversial in more than one way:

- 1. Long term profitability is difficult to calculate in advance because a huge up-front investment is required and calculation of long-term profitability includes several assumption which can easily be "selected" to produce the desired result. Are natural gas operators claiming profitability at lower prices than is really possible? If prices were high enough to be profitable, would demand stay at high levels?
- 2. What are the environmental consequences of such huge fracking operations? Will it be possible to dispose of all of the polluted water that comes back up in an environmentally friendly way? Are there other environmental issues? Will governments permit wide-scale use of fracking?

The EIA appears to have decided that these controversies will be decided in the direction of allowing big increases in natural gas production. The IEO 2011 shows this estimate of natural gas reserves:

The indication is that North America and Europe have relatively little in reserves. There are huge reserves in locations where it is difficult to verify the accuracy of the reserves, and where transport to North America or Europe would be difficult. While ships carrying liquefied natural gas (LNG) can be used, there would seem to be a practical limit as to how much can be transported in this manner. Pipelines can be built, but it is expensive to build these pipelines, and they need the approval of all of the countries along the pipeline.

In total, the EIA sees a huge increase (52%) in natural gas use between 2008 and 2035, with the majority of increase outside OECD, according to the report.

The countries that are expected to increase production tend to be concentrated in the Middle East and in lesser developed countries around the world, according to the report.

One area which shows an increase in production is the United States. This is controversial, for reasons mentioned above (likely high price needed for profitability; environmental impacts). Europe shows a continuing decline in production. A number of European countries are already finding themselves in financial difficulty. If more natural gas needs to be imported, this can only add to financial difficulties.

Coal

The EIA shows continued growth rapid growth in coal production and consumption.

Is this kind of coal projection realistic? As with oil and gas, there is an issue of needing to extract ever lower-quality resources, from greater depths. Many of the seams that are left in easily accessible locations are thinner and more expensive to extract. IEO 2011 indicates that an increasing portion of the coal will be imported. Thus, the cost of shipping will add to the cost to the final customer. All of these factors mean that we can expect the cost to produce a Btu of delivered coal to rise over time. We can think of this as lower Energy Return on Energy Investment (EROEI), or as higher cost of production.

If the price of coal rises, a person would expect coal demand to fall, if coal demand is at all elastic. Because of this relationship, it will be difficult for long-term consumption to rise as much as the EIA forecasts suggest. This expected slowdown in coal production due to higher price is not very different from peak coal indications arrived at through curve fitting techniques, such as this analysis by Dr. Minqi Li.

With coal, there are also environmental issues, both from a CO2 point of view, and from the point of view of other pollutants. Will the world really be willing to put up with such high coal use, over the long-term?

Note that the issues with any of the fossil fuels are not that the resources are not there. The issue is that the cost of extracting them keeps escalating, making it increasingly difficult for society to afford these high costs. There are also environmental costs that must be considered.

Renewables

Renewables are not shown in a separate section in IEO 2011. Instead, the biofuel portion is included with liquids and other renewables are shown as a subsection of Electricity. The Electricity subsection says:

Although renewable energy sources have positive environmental and energy security attributes, most renewable technologies other than hydroelectricity are not able to compete economically with fossil fuels during the projection period except in a few regions or in niche markets. Solar power, for instance, is currently a "niche" source of renewable energy, but it can be economical where electricity prices are especially high, where peak load pricing occurs, or where government incentives are available. Government policies or incentives often provide the primary economic motivation for construction of renewable generation facilities.

Renewables are mentioned in the summary. There, one of the key findings is

Renewables are the world's fastest-growing energy source, at 2.8% per year; renewables share of world energy grows to roughly 15% in 2035.

A backup exhibit shows that hydroelectric amounted to 85% of renewables in 2008, so the 10% of energy consumption is split roughly 8.5% to hydroelectric, and 1.5% to other

renewables. In 2035, hydroelectric amounts to only 68% of the renewable subtotal, so the 14% in 2035 is roughly 9.5% hydroelectric and 4.5% other renewables. Thus, "other" renewables used in electricity production are expected to roughly triple as a percentage, from 1.5% to 4.5% of the total, by 2035.

Concluding Thoughts

The EIA estimates of future fuel consumption seem to be optimistic throughout. It is hard to see what benefit such a bias would have, other than to protect the careers of political leaders and to keep people from understanding that there is a real possibility of energy limits affecting the economic system in the not too distant future.

There is widespread misunderstanding of our fossil fuel problems. The belief is that the fuels will somehow "run out." In fact, the issue is that they will become too expensive to afford, or, if you think in terms of "peak oilers," the Energy Return on Energy Investment (EROEI) will drop too low. High energy prices will likely lead to reduced energy consumption, which in turn will lead to recession, reduced economic growth, and eventually lower energy prices (as we saw in late 2008).

At these lower prices, the high cost (low EROEI) resources will no longer be profitable to extract, and the extraction of these high cost resources will disappear.

Thus, the issue is really that high price / low EROEI is the limiting factor on resource extraction. That is what the EIA missed in their forecasts.

http://energybulletin.net/stories/2011-09-21/ieo-2011-misleadingly-optimistic-energy-forecast-eia

Sustainable Energy for All

September 23, 2011 Penelope Chester

With all the high-level meetings, heads of state speeches and commitments during a busy UN week in New York City, one announcement by UN Secretary-General Ban Ki-moon stands out: the creation of the Sustainable Energy for All initiative, which has three broad objectives to be achieved by 2030:

- ensuring universal access to modern energy services
- doubling the rate of improvement in energy efficiency;
- doubling the share of renewable energy in the global energy mix.

Leaders from global corporations, financial institutions, and foundations will join with UN agencies and member states to produce a comprehensive and concrete sustainable energy action agenda leading up to the Rio+20 conference next year.

During a media briefing earlier today, Kandeh Yumkella, Chair of UN-Energy and Director General of UNIDO, said that the impetus behind the Secretary-General's new initiative comes from "recognizing the linkages between climate change, poverty reduction and MDG achievement." Indeed, Yumkella noted that there is an understanding that all of the urgent global challenges the international community is seeking to address – for example, women and girls' empowerment, food security – are inextricably linked to the need for sustainable, clean energy.

The ambitious goal of universal access to clean energy by 2030 will require significant financial investments. Yumkella emphasized that the billions of dollars needed to implement this agenda "are in the hands of the private sector." With its prestigious, high-level advisory committee, the Sustainable Energy for All initiative will be encouraging investments in research & development and in proven technologies to help meet this goal.

"The right time [to launch this initiative] is now because we feel there is already a clean energy revolution." Yumkella pointed to the dramatic increases in investment in clean energy technology in recent years (from \$50 to \$240 billion between 2004 and today), the major decline in solar energy costs and the introduction of new battery types. And with the participation of actors such as Chad Holliday, Chairman of the Board, Bank of America and former President of Dupont and the UN Foundation's Tim Wirth, the initiative will be able to mobilize the good will and participation of key institutions: governments, UN agencies, the private sector and civil society.

- To listen to today's media briefing with Kandeh Yumkella, Chair of UN-Energy and Director General of UNIDO, Reid Detchon, Vice President, Energy and Climate, UN Foundation, and Richenda Van Leeuwen, Senior Director, Energy and Climate, UN Foundation, please click here.
- To read the UN Foundation's press release, click here.
- To read Sustainable Energy for All's press release, click here

http://www.undispatch.com/sustainable-energy-for-all