

# Voice of the Wilderness

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## Alcoa and Brazil's Latest Dam Project - They're Doing it Again!

SOUTH BRAZIL - Brazilian environmental activists are charging that Brazilian environmental authorities and an Alcoa lead consortium planning construction of Barra Grande dam conspired to commit fraud in the awarding of an environmental license for the project. Members of Brazil's Movement of Dam-Affected People (MAB) and environmentalists blocked the access road to a stand of virgin forest slated for clearing before the filling of the reservoir. In all, 6,000 hectares of primary forests, including araucaria pines, in one of the richest remaining expanses of the threatened Atlantic Coast rainforest, would be flooded by the dam on the Pelotas river in Southern Brazil.

A 2,000 hectare stand of virgin araucaria forests was somehow "omitted" in the project's environmental studies.

Local groups have filed a lawsuit asking a federal court to annul the license awarded to Barra Grande, to require the consortium to carry out new studies evaluating the possibility of operating the reservoir at a lower level to avoid drowning the araucaria forests, and if this is deemed impossible, to order the demolition of the dam structure. Heavily-armed riot police have reportedly been sent to the area to disperse protestors. The consortium building Barra Grande includes the Pittsburgh-based Alcoa aluminum company (which contains Kathy Fuller, President of WWF-USA as a Board Member). Soli da Silva (MAB) says the mobilization will continue indefinitely. "We cannot permit that fraud and a 'done deal' become the rule on environmental licensing for hydroelectric projects in our country."

Continued on page 8:  
"The Dam that Forgot the Forest"

## Hnattrænar afleiðingar stóriðju og stórstíflna

Ráðstefna Saving Iceland 2007  
Laugardaginn & sunnudaginn  
7-8 júlí 2007, Hótel Hlíð, Ölfusi

Eftir þriggja ára baráttu gegn stórstíflum og stóriðju mun herferð „Saving Iceland“ tengjast baráttunni um heim allan. Um víða veröld hafa stóriðja og stórstíflur hrakið á brott fólk í milljónatali, að mestu án þess að bætur komi fyrir. Þessi mannvirki hafa eyðilagt vistkerfi á sjóog landi og eytt dýralífi. Þau hafa mengað andrúmsloft okkar og vötn ogbreytt loftslagi á óbætangelgan hátt – í nafni framfara. Fyrirverandi forsætisráðherra Indlands, Jawaharlal Nehru, orðaði það svo:

“Ef þú þarft að þjást, ættirðu að gera það í þágu lands þíns”,

í ræðu yfir þorpsbúum sem átti að hrekja frá heimilum sínum vegna Hírakud-stíflunnar árið 1948.

Ríkisstjórnir Íslands og Indlands telja risaraforkuver enn vera tákni um hugvitsemi, framfarir og þjóðarstolt. Í Trinidad og Tobago, sem og á Íslandi leitar áliðnaðurinn að óþrjótandi orkulindum á tímum vaxandi óvissu í orkumálum.

Samt hefur sagan alltaf sýnt undirstrauma sem ekki eru í samræmi við hin ríkjandi framfaraviðhorf. Fjöldi fólks berst gegn því að vera fórnad í þágu lands síns eða efnahagsins og margir hafa barist gegn því að landi þeirra og óbyggðum sé fórnad. Ráðstefna „Saving Iceland“ 2007 mun auka og dýpka þekkingu þína á baráttunni gegn stóriðjunni, í rúmi og tíma.

Ráðstefnan hefst kl. 11 á laugardaginn og fer fram á Hótel Hlíð, Ölfusi (6 km. frá Hveragerði á leiðinni þaðan til Þorlákshafnar.)





## SPEAKERS

At the conference, there will be speakers from Icelandic Naturewatch, the Icelandic Society for the Protection of Birds, Futureland, Saving Iceland and local Icelandic grassroots groups. In addition, the following international speakers will be attending the Saving Iceland Conference.

**Reverend Billy and Savitri D** are the eloquent ministers of the Church of Stop Shopping and will preside over the Saving Iceland Conference.

**Cirineu da Rocha** for the Dam-Affected People's Movement from the Amazon basin in Brazil, where ALCOA want to build a number of new dams.

**Dr. Eric Duchemin**, adjunct professor at the University of Québec at Montréal Canada and research director of DREXenvironnement, has been a leading author for the UN's Intergovernmental Panel on Climate Change (IPCC) and will be talking on the effect of large dams on climate.

**Lerato Maria Maregele** is involved in the struggle to stop a new ALCAN smelter in South Africa.

**Kailash Awasya**, involved with the Save the Narmada Movement (Narmada Bachao Andolan), the most well known South-Asian social movement, fighting against large dams and for tribal rights in India's Narmada River Valley and beyond.

**Helen B** will join us from the UK. She has been heavily involved with the successful British anti-roads movement. She will give an overview of the fascinating history of direct action.

**Attilah Springer**, Rights Action Group, is fighting a new ALCOA smelter in Trinidad & Tobago.

**Derrick Jensen** is a well known American green anarchist writer and dam-expert.

**Till Seidensticker** has been involved in the recent mobilization against the G8 in Germany.

**Jaap Krater**, is involved in Groen-Front! - Dutch Earth First!, a high-profile direct action movement in the Netherlands.

# Global Consequences of Heavy Industry and Large Dams

## *Saving Iceland Conference July 7th-8th, Hótel Hlíð Olfus*

### SATURDAY JULY 7TH

Breakfast, coffee and tea will be served in the morning on the Saving Iceland campsite.

#### **1100 Conference opening**

Reverend Billy and Savitri D (Church of Stop Shopping)

#### **1130 Blue eyes in a pool of sharks**

An innocent nation in retreat from responsibility - Gudbergur Bergsson

#### **1200 Iceland under threat**

Introduction to how Iceland is threatened by heavy industry - Ómar Ragnarsson

#### **1230 A Smelter in Trinidad?**

People's struggle against a new ALCOA and AluTrint smelter in Trinidad & Tobago - Attilah Springer (Rights Action Group)

#### **1310 The history of civil disobedience and direct action**

From the past to the future - how direct action can change the course of history - Helen B (Road Alert, UK)

#### **1340 Narmada Bachao Andolan**

Most well-known people's movement in India, fighting for adivasi (tribal) rights displaced by megadams. - Kailash Awasya (NBA)

#### **1420 Lunch**

#### **1500 Powering Heavy Industry:**

##### **From Kyoto to Peak Oil**

Heavy industry developing strategies for the climate and energy crises - Jaap Krater (Saving Iceland)

#### **1530 The effects of large dams on climate**

A presentation on the output of greenhouse gases of hydroelectric reservoirs - Dr. Eric Duchemin (University of Québec)

#### **1630 A green or grey future?**

Panel discussion - Visions of progress - Kailash Awasya, Cirineu da Rocha, Eric Duchemin, Lerato Maria Maregele, Attilah Springer and speakers of Futureland and Saving Iceland

#### **1730 Saving Iceland press conference**

#### **1800 Ends**

Organic vegetarian supper  
Musical entertainment

### SUNDAY JULY 8TH

Breakfast, coffee and tea will be served in the morning on the Saving Iceland campsite.

#### **1100 The largest wilderness in Europe**

Threatened wildlife and geology in Iceland Einar Thorleifson (Natturvaktin / Naturewatch; Icelandic Society for Protection of Birds)

#### **1140 Strategies to save Iceland**

Discussion from the grassroots for the struggle against heavy industry in Iceland.

#### **1240 In the Shadow of Power**

Abuse of power as a rural fishing community is turned into a corporate heavy industry zone - Gudmundur Beck (farmer displaced by ALCOA in E-Iceland)

#### **1320 Struggle in South Africa**

Experiences of the fight against ALCAN in South Africa. - Lerato Maria Maregele

#### **1400 Lunch**

#### **1440 Genetic Modification**

On transnational companies way of manipulating countries and Iceland's genetic experiments with barley.

#### **1520 Damning the Amazon**

Aluminium threatening the Amazon basin and it's people. - Cirineu da Rocha (Movement of Dam-Affected People)

#### **1600 How heavy industry is connected to the big picture of 'civilization'**

What will it take for us to stop the horrors that characterize our way of being?

Videoconference with green anarchist author Derrick Jensen in the US.

#### **1640 Momentum against the megamachine**

Sharing experiences of people's movements against heavy industry, large dams, the anti-roads movement and globalisation. Discussion on how to bring the global movement for ecological harmony and justice and against overdevelopment forward. Panel with Till Seidenstecker (Mobilisation against the G8), Kailash Awasya, Cirineu da Rocha, Attilah Springer, Lerato Maria Maregele, Helen B, and audience discussion.

#### **1740 Closure and declaration- Reverend Billy and Savitri D**

#### **1800 Ends**

Organic vegetarian supper

*This is a provisional program. The final timetable will be available during the conference.*



# The Meek Shall Inherit the Earth

A Sermon by Reverend Billy

"The meek shall inherit the Earth." Who said that? Emma Goldman? Or was it Sub-commandante Marcos?

Here's another question. Who is the meek party in question? Who has been genocided and holocausted more than another victim in history? It's a trick question. The Earth. The answer is the Earth.

The Earth shall inherit the Earth. We are all the Earth ourselves, of course, but we're a rogue species that may now be rejected by our fellows in creation, like the many once-dominating life-forms who have been returned to the dust. If we eventually get through this climate crisis and extinction epidemic and our rash of wars – it will be because we knew that we got really really MEEK.

Reverend, are you asking for me to be powerless? – I'm supposed to be powerless on purpose? Yes children -- try meekness like this. Walk from where you are toward the greatest amount of nature – even if it's just a tree on an exhausted traffic island. Go to the natural world and make no demand, have no statement. Let's call it Radical Humility. Face the rest of life, leave your human power behind, and have no pre-emptive belief. Not even – "I want to save you!"

Listen, see, and wait – without conditions. Take the non-human into us, in a way that we haven't before. Let strange life systems come to us with our new instructions. The intelligence which flows in the rocks and grass and wind and birds is not hearable by 200 foot cell phone towers and does not register on picture-window size home entertainment screens. But you and I can hear it.

What the Earth says to us is not vague at all. It is specific. It comes in subjects ob-

ject and verbs set to a heartbeat. Officially, our governments regard nature as without language. Our scientists and – our culture generally – doesn't think speech can come from rocks, or even chimps. But global warming, for instance, is coming to us as dramatic screaming monologues. Much of our population is spending some time every day translating the waves, fires, floods and droughts into the King's English. It is so astonishing to us that nature talks. Nature is shouting with a whisper that can flood a continent.

The End of the World is very exciting. It is like a gathering of Guernicas. So much drama. And so many swashbuckling celebrities and suddenly GREEN! corporations are finding the spotlight at the End. The increased compassion for nature by the famous is astounding, but Hollywood's heavy-breathing love of the drama of the climate crisis leaves the impression that they love the apocalypse as much as their right-wing Christians, their opponents in the well-known cultural war. But very few commercial personalities seem to have the meekness to be in the other media – communications of wilderness, from the wild.

With Reverend Billy, I mimic the least meek of our American iconic characters, the televangelist. I'm an Elvis impersonator with a secret. Somehow the transcendent moments of our "Fabulous Worship" come when I am "beside myself" -- stuttering haltingly toward a truth that comes from an unknown source, falling back into the wave of gospel. In our last show the whole lot of us whispered "Change-a-lujah!" again and again.

If I judge anyone, I want to do it more carefully then I have in the past. We are all sinners doing the best we can and we are all forgiven. But – a commercial celebrity who is Green as hell will insist that it is best

that the system of the present economy remain as it is. You can't get these people to talk about globalization, sweatshops, or the Orwellian bleaching of our minds by the product monoculture. No – they have 2 movies a year to sell, with the flotilla of pixilated spin-offs. So, if the Celebs can't look inward, they swashbuckle outward, flying into the old colonies and picking up orphans for the cover of *People*.

The Devil here is not the celebrities, who are just people doing their best – it is a system where share-holders of their corporations demand ever-expanding returns for the money they move around. That cancerous per-share expansion is the thing that is not meek. And you don't hear the public voices in the United States ever talk about this fetishistic love of growth. Hasn't it been proven long ago that the GNP does not indicate real prosperity? Stop buying that! The gambling casino of the Dow Jones is still recited as received wisdom by our pretty TV anchors, yet another layer of celebrity.

Each of us is a celebrity, down in our own world. Each of us should resist going to the horizon, away from where we are, to flashily show off our love. Each of us has to strip down to simple nature, get THAT radical. The Earth that inherits itself will do so by turning culture upside down and inside out. Commercial celebrities don't have that option. They are the modern old priests that frowned on Rachel Carson and Wangari Maathi and Jesus and Malcolm... They must resist real change. Our new earth-inheriting leaders will instruct us radically - with a whisper, and then a long pause for the crickets and singing leaves to come through.

Photo: Fred Askew  
<http://www.revilly.com>



# Alþjóðleg mótmæli Saving Iceland

## Hvað er Saving Iceland?

Nafnið Saving Iceland (Björgum Íslandi) stendur fyrir hóp af fólki sem er staðráðið í að standa gegn því að íslensk náttúra sé eyðilögð fyrir hagsmuni stórfyrirtækja í áliðnaði. Í samræmi við það að stórfyrirtækin eru í rekstri um allan heim er baráttan gegn þeim alþjóðleg og fólk frá mörgum löndum er hluti af Saving Iceland.

Saving Iceland var fyrst og fremst stofnað sem hópur sem beitir sér í upplýsingaveitu og beinum aðgerðum. Það þýðir ekki að við lítum niður á önnur passifari form mótmæla heldur geta hverskonar mótmæli, verkefni eða hlutverk innan baráttunnar átt sér stað í nafni Saving Iceland. Samt sem áður hallast hópurinn að aðgerðum í róttækari kantinum. Þetta aðgreinir okkur frá hópum sem beita sér t.d. sem pólitískir þrýstihópar.

Upplýsingar um hvernig hægt er að taka þátt má finna á heimasíðunni [www.savingiceland.org](http://www.savingiceland.org). Þar er einnig að finna síðu með sæg af greinum og upplýsingum á íslensku.

Í júlí 2007 ætla hópur Íslendinga og Íslandsvina víða að úr heiminum að koma saman og sýna andstöðu sína í verki gegn því að gullæði þungaiðnaðarins komist upp með að eyðileggja og menga náttúru Íslands. Mótmælin eru hluti af hreyfingunni gegn því að eitt síðasta stóra náttúrusvæði Evrópu verði, eins og fyrrum iðnaðarráðherra orðaði það; „best geymda leyndarmál alþjóðlegra áliðnaðarins.“

Ásókn nokkurra stærstu álframleiðslufyrirtækja heimsins í íslenska orku er vístræðileg glæpastarfsemi á heimsmælikvarða. Allir sem geta lagt hönd á plóginn verða að hjálpast að við að stöðva þessa innrás.

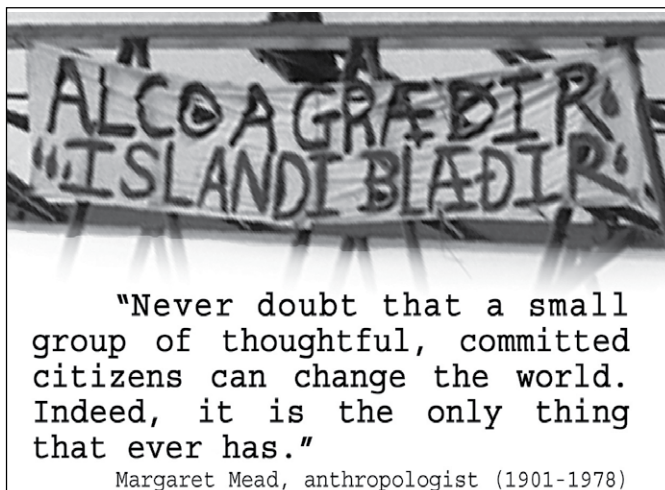
Mótmælabúðir Saving Iceland eru einstakt tækifæri til að bæði upplifa náttúru Íslands og leggja sitt á vogarnar í baráttunni. Þátttakendur geta reiknað með að geta tekið þátt í líflegum umræðum, menningarlegum uppákomum, þjálfun og beinum aðgerðum.

## Fyrir hverju berjumst við?

Hversvegna skyldum við leyfa nokkrum misvitrum stjórnmálamönnum að láta sína

einstrengingslegu framtíðarsýn bitna á og móta arfleifið allra íbúa landsins? Þau sem nú eru tímabundið við völd eru að taka ákvarðanir sem munu verða fordæmdar af komandi kynslóðum.

Hálendið, háhitasvæðin víða um land og strandlengja Íslands eru einstök landsvæði á heimsvísu. Í mörgum Evrópulöndum erva lengur um það að ræða að ferðast um án þess að vera stöðugt innan mannabyggða. Í þessum mannlausu undraheimum Íslands hafa nokkur stórfyrirtæki í álframleiðslu þegar komið sér fyrir og enn fleiri hafa augastað á möguleikum íslenskrar náttúru til rafmagnsframleiðslu og ætla sér að koma upp þungaiðnaði í stórum stíl þar sem nú er nánast ósnert náttúra. Þessir alþjóðlegu hvítflíbbabófar hafa hrint af stað skaðræðislegum hamförum í umhverfi okkar með dyggri aðstoð ríkisstjórnar Íslands og orkugeirans.



Þeirri röð risavirkjana sem þegar hafa verið reistar við Kárahnjúka og Eyjabakkka er einungis ætlað að skapa raforku fyrir álver Alcoa sem reist er af stríðsgróðafyrirtækinu Bechtel. Verksmiðjan, sem var þröngvað niður í tigna náttúruvegur Reyðarfjarðar, fór í gang nú í vor, 2007. Ekki eitt einasta kílóvatt á að nýtast Íslendingum þó að framleiðsla rafmagnsins útheimti að gríðastað sjaldsgæfs gróðurs og búsvæðum fágætra dýra sé sökk.

Þó að ótrúlegt sé til frásagnar eru mörg þeirra svæða sem stimpluð hafa verið hæf til eyðileggingar, eins og Kringilsárrani og Þjórsárver, undir vernd bæði íslenskra og

alþjóðlegra laga. Svæðið sem fer undir Hálslón er stærsta samfellda gróðursvæði norðan Vatnajökuls. Þessi svæði eru vegna jarðfræði sinnar og einstaks plöntu- og dýralífs ómetanleg náttúruvísindunum. Sem slík kunna þau um leið að verða lífsspursmál fyrir kynslóðir seinni tíma.

## Hvernig vaðið er yfir fólk

Hingað til hefur ríkisstjórn Íslands og aðilar frá orkugeiranum ekki hikað við að beita ófrægingum, hótunum, fjársektum og öðrum ofsóknum á hendur einstaklingum sem standa gegn orkustefnu hennar og íslenskir umhverfisverndarsinnar eiga í erfiðri baráttu sem víst er að verður ekki unnin í einu vefangi.

Grandvarir vísindamenn eiga undir högg að sækja og hafa oft þurft að verja sig og bjarga starfsheiðri sínum gagnvart ósvífnum fólksnum stjórnmálamanna og orkufyrirtækja á vísindalegum niðurstöðum þeirra. (Skemmst er að minnast hvernig Grímur Björnsson jarðeðlisfræðingur var rændur tjáningarfrelsi sínu sumarið 2007).

Vegna ofkeyrslu hagkerfisins eykst verðbólga. Þetta er nákvæmlega það sem hagfræðingar spáðu fyrir um ef anað væri út í óhefta stóriðju, en á þá var ekki hlustað eða þá að ríkisstjórnin þaggaði niður í þeim og skýrslum þeirra var stungið undir stólinn og hentugri tölfræði tranað fram.

Taprekstur á Kárahnjúkavirkjun, sem nú hefur verið staðfestur, mun

koma niður á heimilum landsmanna. Vandamál vegna stóriðjustefnunnar eru í fréttum í hverri viku og um leið verður fólki ljósara umfang eyðileggingarinnar. Skoðanakönnun Gallup frá því í apríl 2007 sýnir að meira en helmingur þjóðarinnar telur rétt að leyfa enga frekari stóriðjuuppbyggingu næstu fimm árin.

## Hver eru rökinn?

Ein af meginröksemdunum fyrir byggingu vatnsaflsvirkjana fyrir álver er að vatnsorka sé umhverfisvæn. En uppistöðulón kaffæra gróður sem síðan rotnar og leysir gróðurhúsalofttegundir úr læðingi. Uppistöðulón framleiða einnig umfangsmikið magn af Co2 og metangasi, í

sumum tilfellum framleiða þau jafnvel meira af gróðurhúsalofttegundum en orkuver sem knúin eru með olíu. Uppistöðulón almennt virka heldur ekki sem endurnýjanleg orka því þau fyllast af framburði aurugra jökulána jafnvel á 40 árum. Síðbreytileg vatnsborð lónanna valda sandfoki og landrofi sem hefur skelfileg áhrif á gróður umhverfis langt út fyrir stíflustæðið. Næringarríkur framburður jökulána skilar sér ekki lengur út á fiskimiðin, sem hefur afar neikvæð áhrif á lífríki sjávar og fiskimiða undan ströndinni. Framburður jökuláa heftir gróðurhúsalofttegundir þegar hann kemst í sjó. Með því að stöðva þetta volduga viðnám náttúrunnar við að sporna við gróðurhúsaáhrifum í andrúmsloftinu eru Íslendingar að auka enn við gróðurhúsavanda jarðarinnar á þeim tíma sem síst skyldi.

Nú þegar rökin um „umhverfisvænar“ og „sjálfbærar“ vatnsaflsvirkjanir hafa verið hrakin er byrjað að ljúga því beinlínis að gufuafsvirkjanir séu umhverfisvænn möguleiki til rafmagnsframleiðslu. En heitt vatn er einungis gott til að halda hita á húsunum okkar og sundlaugum, nýting þess til rafmagnsframleiðslu er afar léleg. Borholur endast ekki nema í 40 ár. Eftir það þarf að hvíla svæðið í jafnlangan tíma. Hver tilraunaborun gerir ruslakistu úr fallegu landi. Gufluafsvirkjanir kalla á mikið jarðrask, fleiri rafhlínur og rörleiðslur og hver þessara virkjana skilar ekki nema litlum hluta af þeirri orku sem álver þarf á að halda. Eitt stykki álver kallar á mörg orkuver. Vísindamenn hafa bent á að í raun séu háhitasvæði á landinu ekki mörg, eða aðeins um tuttugu talsins. Vitneskja okkar um lífríki jarðhitasvæðanna sé afar takmörkuð og því sé afar varhugavert að rasa um ráð fram í að virkja þessi svæði því náttúrufar á þeim og lífríki sé einstætt og mjög merkilegt.

Sumir réttnefndir „atvinnumeðmælendur“ stóriðjustefnunnar halda því fram að vegna baráttunnar gegn hækkanði hitastigi jarðar, sé það hnattræn skylda Íslendinga að útvega fyrirtækjum í álíðnaði „græna“ orku, annars „neyðist“ þau til að nota orku frá olíu og kolum. Þetta er ekki rétt. Flest álver í heiminum eru knúin af vatnsorku eða gasi.

Þessir sömu aðilar gera enga kröfu um að álfyrirtækin láti af að framleiða einnotavöru og snúi sér að endurvinnslu áls í stað frumvinnslu, sem myndi hafa í för með sér miklu minni orkuþörf, miklu minni mengun og minna af álrusli sem fleygt er á ári hverju.

Þess er heldur ekki krafist að álrísarnir einskorði framleiðslu sína við nauðsynjavörur, hvað þá að þeir hætti að framleiða ál í morðvopn, eins og Alcoa gerir.

Hinsvegar eiga Íslendingar að fórna náttúru sinni til að þessi starfsemi verði fjárhagslega hagkvæmari fyrir hergagnaframleiðendur!

Við skulum ekki gleyma því að ekkert þessara álvera er í eigu Íslendinga og að fyrirtækin sem eiga þau sækja hingað einungis vegna undirlægjuháttar stjórnvalda og orkuverðsins, sem er svo skammarlega lágt að því er haldið leyndu fyrir almenningi. - Orka sem á eftir að margfaldast í gildi á næstu áratugum.

Þessi fyrirtæki hafa á engan hátt til þess unnið að viðfæðm náttúrusvæði séu eyðilögð og vistkerfi menguð til þess eins að þau geti bætt hag sinn.

## Hversu djúpt ristir metnaður stjórnvalda fyrir hönd íslensks almennings?

Saving Iceland stendur gegn þeirri þriðjaheimsstefnu að einblínt sé á frumframleiðslu, með einhliða atvinnutækifæri og óheilbrigð atvinnu umhverfi, sem eina möguleikann til uppbyggingar í atvinnulífi á Íslandi.

Þegar Hafnirðingar höfnuðu stækkun álvers Alcan með lýðræðiskosningu, var það mikill sigur, þó mjótt hafi verið á mununum, enda afar ójafn leikur í aðdraganda kosningana. Um leið heyrðist hljóð úr koppi forystumanna atvinnulífsins sem böluðu lýðræðinu þar sem það stæði í vegi fyrir að fyrirtækin gætu farið sínu fram. Við spyrjum tilbaka; er íbúum Íslands

Íslendinga. Atvinnuleysi á Íslandi er alls ekki það mikið að grípa þurfi til örþrifaráða. Stuðningur við margbreytilegan minni rekstur skapar störf og fjölbreytt mannlíf. Við byggingu Kárahnjúkavirkjunar og verksmiðu Alcoa komu um 90% verkamanna við stíflubygginguna og verksmiðu Alcoa erlendis frá og fréttir af ömurlegum aðstæðum þeirra eru enn tíðar! Þetta gengur þvert á fyrri röksemdir fyrir brýnni nauðsyn þessa verkefnis til uppbyggingar atvinnulífs á landinu. Auk þess sýna mannfjöldarannsóknir að burtfluttur Austfirðingar hafa ekki flust tilbaka þrátt fyrir allt umstangið. Þrátt fyrir þessar staðreyndir hamast stjórnvöld við að sannfæra þjóðina um að það besta fyrir landsbyggðina sé að íbúar hennar gerist áttahagabundin þý í verksmiðjuviti.

Þetta helst í hendur við niðurborgað orkuverð til stóriðu í skiptum fyrir skemmdarverk á dýrmætustu auðlind Íslands, óspilltri náttúru. Hraesni ríkisstjórnar Íslands og stóriðjurisanna sýnir sig best í þeirri undanþágu frá Kyoto samningnum sem ríkisstjórnin kreiði út til að mögulegt væri að halda úti stefnu sinni um aukinn þungaiðnað. Um leið stæra Íslendingar sig af því að búa í óspilltu landi og kynna landið þannig. Verði markmið ríkisstjórnarinnar um aukinn þungaiðnað ekki stöðvuð verður slík landkynning marklaus og fáránleg.

## Hvað er í húfi?

Alcoa hafa þegar lagt fram áætlanir um að reisa næsta álver sitt á Bakka við Húsavík. Century Aluminum (Norðurál) hefur fengið í gegn gríðarlega stækkun á sínu álveri í Hvalfirði á kostnað eyðileggingar Hengilssvæðisins. Þar sem Hafnirðingar kusu gegn stækkun Alcan skoðar fyrirtækið áform um að reisa stækkunina á landfyllingu, í sömu fjarlægð við bæinn, þvert ofan í vilja bæjarbúa. Þvílík dæmigerð ósvífni! Ef Alcan velur Keilisnes fyrir enn aðra álbræðslu og sleppir Þorlákshöfn er varhugaverður hópur verktaka sem vill reisa þar álbræðslu með því hlálega nafni „álvinnslugarður“ eins og um væri að ræða yldrækt, en ekki krabbameinsvaldandi þungaiðnað. Norsk Hydro bíður færiss úti í

„Kárahnjúkaskammarkróknum“ með risaálbræðslu handa Þorlákshafnarbúum. Century vill reisa aðra álbræðslu í Helguvík og að auki hafa R&D Carbon (Kapla hf) tryggt sér byggingarleyfi fyrir olíudrífinni rafskautaverksmiðu við Katanes í Hvalfirði, sem mun valda gifurlegri mengun, fái hún að risa. Þannig verksmiðja byggist á því að nógu mörg álver verði til að þjónusta á Íslandi. Og gleymum ekki hinni einu sönnu eiturspúandi Járnblendisverksmiðu.

Náttúruvísindamenn hafa varað íbúa höfuðborgarsvæðisins við hrikalegum afleiðingum þess að þessar áætlanir fái að verða að veruleika. Faxaflói, segja þeir, yrði þá að einu „mengaðasta svæði



einungis ætlað að vera viljalaus leikföng pólitíkusa, verktaka, atvinnurekenda og erlendra stórfyrirtækja? Kemur það almenningi ekki við hvernig farið er með vistkerfi, land og samfélag?

Með því að ýta undir innflutning á ódýru vinnuafli erlendis frá er ríkisstjórn Íslands leynt og ljóst að reyna að skrúfa til baka réttindabaráttu íslensks verkálýðs á síðustu öld. Samt eru viðbrögð verkálýðsfélaga sama sem engin eða þá að þau bera keim af spillingu og þjónkun við ríkið. Þessi staðreynd afhjúpar einnig fals þeirrar staðhæfingar ríkisstjórnarinnar að virkjanir og álver séu reist til að skapa störf fyrir



Norður Evrópu,” samhliða því að verða mesta álframleiðslusvæði í heiminum. Er þá sýnin um Hreina Ísland (“Pure Iceland”) sölumennskan ein?

Við skulum heldur ekki gleyma því að nærri öll stórfyrirtækin sem minnst hefur verið á eiga sér langa sögu um dóma fyrir umhverfislæpi og eiga enn yfir höfði sér dóma fyrir alvarlegar umhverfisskemmdir og spillingu. Alcoa eitt hefur verið dæmt yfir 50 sinnum á síðasta áratug fyrir glæpi gegn umhverfinu. Það er ansi dæmigert fyrir aðferðir þessara aðila að sumarið 2006 þegar talsmaður Alcoa-Ísland var spurð út í þessa staðreind var það eina sem hún gat látið sér detta í hug sem svar að þetta væri nú ekki mikið mál því fyrirtækið væri svo “gamalt” og því væri eðlilegt að það hefði safnað nokkrum dómum á sig. Alcoa er allmiklu eldra en tíu ára, reyndar er það elsti auðhringur sem til er.

Hvað ætli hið slóttuga lið Landsvirkjunar, verktakafyrirtækin og önnur orkufyrirtæki séu að gæla við að reisa margarvirkjanirfyrirallar þessar óhugnanlegu áætlanir um álver og annan þungaiðnað? Jú, samkvæmt yfirlýsingum þeirra þýddu þær virkjun nánast allra jökuláa og háhitavæða Íslands.

Það eru sem sagt nærri öll víðerni Íslands sem eru í húfi!

Íslenskir umhverfisverndarsinnar sjá fram á að þurfa að eiga í baráttu sem enginn endir er sjáanlegur á. Í raun eigum við í auðlindastríði við okkar eigin stjórnvöld og þá erlendu herra sem þau þjóna af lotningu. Alþjóðleg samstaða og þrýstingur erlendis frá mun vega þungt í þessari baráttu

Árið 2003 keypti Alcoa sig inn í hinn bandaríska arm World Wide Fund For Nature og þannig misstum við mikilvægan alþjóðlegan stuðning í baráttunni gegn Kárahnjúkavirkjun. Það gæti líka verið að nokkru leyti skýring á þöggunarsamsærinu sem gilti um ástand umhverfismála hér á landi, bæði heima fyrir og erlendis, fyrstu smíðaár Kárahnjúkastíflunnar. En með þrotlausri baráttu er okkur loks að takast að brjóta þennan þagnarmúr. Heimsbyggðin er loks að vakna til skilnings um hvað er í húfi.

## Hvers krefjumst við?

Við krefjumst þess að öll áform um stækkanir álvera og áform um ný álver og virkjanir fyrir álframleiðslu og aðra stóriðju verði stöðvuð þegar í stað.

Við krefjumst einnig óháðs endurmats frá grunni á því hvernig niðurstöður vísindamanna hafa verið túlkaðar og að farið verði yfir ferli ákvarðanatöku um öll

verkefni og áætlanir um fórnun íslenskrar náttúru fyrir orkunotkun í þungaiðnaði.

## Mótmælin

Þessi aðför að íslenskri náttúru er ekki einkamálið Íslendinga. Mengun virðir engin landamæri. Ástæða þess að hópar fólks úr ýmsum hornum alþjóðasamfélagsins hafa komið til landsins til að mótmæla síðustu sumur ætti að vera nokkuð augljós sé horft til hnattvæðingarinnar. Ríkisstjórn Íslands er búin að bjóða hingað fjölþjóðlegum fyrirtækjasamsteypum til að taka þátt í einskonar þungaiðnaðarkapphlaupi sem hefur tekið náttúru Íslands og íslenskt lýðræði kverkataki. Við berjumst gegn umhverfislæpum sem koma öllum heiminum við, því að náttúra og vistkerfi



heimsins er hluti af lífi og arfleifð okkar allra.

Íslensk lögregla hefur litla reynslu af skipulögðum mótmælum og engar vinnureglur um rétt almennings til að hafa bein og róttæk mótmæli í frammi. Það sem fólk er dæmt fyrir hérlandis hefur Evrópuþómsstóllinn margoft kallað „pólitíska tjáningu.“ Síðasta sumar flæmdi lögreglan mótmælendur burt frá Lindum að ósk Landsvirkjunar, en ekki af því að mótmælendur væru að brjóta lög á staðnum. Lögreglan hefti ferðir um hálendisvegi ef fólk var grunað um að hafa „rangar“ skoðanir á Kárahnjúkavirkjun og reyndi að svelta búðir mótmælenda í einskonar herkví. Lögreglan „lagaði“ einnig til eigin myndbönd og notaði Stöð 2 til að senda út „sönnunargögnin“.

Þegaræsinguroghamagangurlögreglunnar fer út í beinar ofsóknir og líkamlegt ofbeldi gagnvart mótmælendum, sem allir eru friðarsinnar af djúpri sannfæringu, blása fjölmiðlar stundum út mótmælin sem ofbeldisfull. Þetta segir meira um hið sanna eðli þeirra sem rembast við og þykjast fullir vandlætingar yfir þeim sem eru tilbúnir til þess að stofna sjálfum sér í hættu til að áorka einhverju fyrir málstað sinn, frekar en að sitja döpur og aðgerðalaus gagnvart stórfelldum skemmdarverkum. Virðingur fyrir tjáningarfrelsi og réttindum borgara til

að mótmæla kerfisbundinni valdniðslu er svo sannarlega ábatavant í þessu landi.

Stuðningur og þátttaka hundraða alþjóðlegra umhverfisverndarsinna í mótmælum síðustu ára var mikil lyftistöng og þátttaka þeirra í mótmælum sumarsins 2007 verður afar mikilvæg. Eins og sjá má af stórauðinni umfjöllun erlendra fjölmiðla um umhverfismál á Íslandi síðasta vetur þá er umheimurinn að vakna til vitundar. Þetta er beinn afrakstur baráttu okkar.

Sumarsólstöður 2005 mörkuðu upphaf einstakra atburða í sögu mótmælaaðgerða á Íslandi. Alþjóðlegu mótmælabúðirnar við Kárahnjúka löðuðu að sér fólk allsstaðar að úr heiminum, fólk frá Bretlandi, Spáni, Austurríki, Baskalandi, Þýskalandi, Frakklandi, Ítalíu, Póllandi, Lúxemborg, Belgíu, Danmörku, Svíþjóð, Japan, Kanada og Bandaríkjunum. Margir Íslendingar hristu af sér slenið og tóku þátt í búðunum í fyrra.

Strax eftir fyrsta sumarið mátti finna fyrir því að búðirnar og beinar aðgerðir út frá þeim hafa haft afgerandi áhrif á íslenskt samfélag með því að hleypa í fólk meira hugrekki til að láta heyra til sín eftir áralanga þögn undir pólitísku oki og skoðanakúgun. Ungir Íslendingar eru að ganga

til liðs við baráttuna. Vonin hefur verið endurvakin.

Meðal þeirra áhrifa sem mótmæli síðustu ára höfðu á Íslendinga er að fólk þorir nú að skipta um skoðun á virkjanafarmkvæmdum og stóriðju grillunni. Mótmælin beindu kastljósinu aftur að stóriðjunni og umhverfisáhrifum hennar og ekki síst félagslegum afleiðingum hennar. Fólk í fjármálageiranum fór að láta stöðugt í ljós andúð sína á stóriðju og benda á að áliðnaðurinn mundi ekki verða til bóta fyrir íslenskan efnahag.

Í sumar mun aðgerðafólk viðsvegar að úr heiminum koma til þess að sýna samtöðu sína með okkur. Sumarið 2007 verður úrslitatími í baráttunni við að stöðva það stórfellda náttúrumorð sem blasir við.

Ísland er eitt síðasta stóra landsvæðið innan Evrópu sem hefur að geyma villta og töfrandi náttúru. Við ættum að gleðjast og fagna hversu ótamin og lifandi þessi eyja er ennþá. Veröldinni er ekki stætt á því að láta græðgi stórfyrirtækja og skammsýni þeirra sem ættu að vernda hana eyðileggja náttúrufegurð Íslands.

## SÝNUM SAMSTÖÐU Í VERKI MEÐ OKKAR EIGIN UMHVERFI!

**ENGASTÓRIÐJU!**

# Hydroelectric Reservoirs as Anthropogenic Sources of Greenhouse Gases

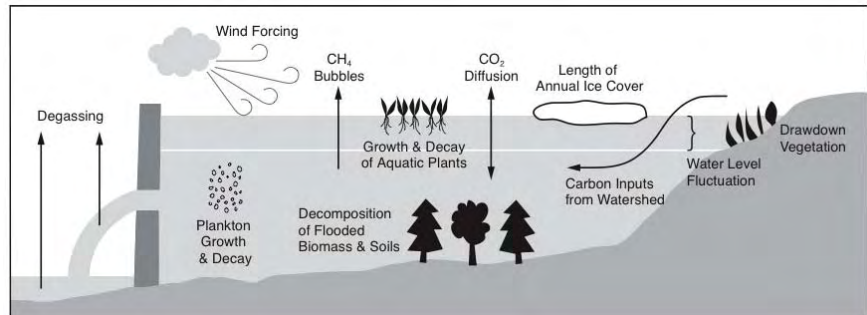
By Eric Duchemin, Scientific Director of DREXenvironment and Adjunct professor at the Institute of environmental sciences, University of Québec at Montréal.

Apart from the benefits they provide, hydroelectric reservoirs are known to entail several social and environmental drawbacks such as loss of lands and displacement of peoples, downstream hydrological alterations, elevated methylmercury burdens in fish and human consumers as well as loss of biodiversity.

Lately, Duchemin et al. from the University of Québec at Montréal also proved that hydroelectric reservoirs are non negligible sources of greenhouse gases (GHG) like carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). This discovery is supported by other research conducted in Canada, Finland, Brazil, United States and French Guyana.

Owing to their implication with climate change, hydroelectric reservoirs have raised a sustained interest among both scientific and political communities. Research since 1993 allowed for valuable insights into the biogeochemical impacts stemming from their creation and operation. Despite the recognition that such phenomena lead to the disappearance of a GHG sink and the creation of a new GHG source, aspects regarding the duration of anthropogenic GHG emissions from these water bodies remain the matter of current debates.

Generally speaking, tropical hydroelectric reservoirs possess the highest mean GHG fluxes, while the lowest mean fluxes are observed in temperate ones. A striking characteristic is the presence of CO<sub>2</sub> influxes in some



temperate hydroelectric reservoirs from arid and semi-arid regions.

Recently, Ivan Tavares de Lima of the National Institute for Space Research in Brazil estimated that global large dams might annually release about  $104 \pm 7.2$  Tg CH<sub>4</sub> to the atmosphere through reservoir surfaces, turbines and spillways. The initially estimation made by St-Louis et al. of the University of Canada was an emission of 70 TgCH<sub>4</sub> per year, or approximately 15% of other anthropogenic CH<sub>4</sub> emissions. Those estimated confirm a first estimate made in 2000 by Duchemin et al. These large estimated CH<sub>4</sub> fluxes from reservoirs are comparable or exceed estimated emissions from rice paddies ( $60 \pm 40$  TgCH<sub>4</sub> per year) or biomass burning (approximately 50 TgCH<sub>4</sub> per year) worldwide.

Compared to thermal power plant (coal or gas) hydroelectricity remains more efficient in term of GHG emissions, especially in temperate and boreal regions. Hydroelectricity is recognized as an activity under the Clean Development Mechanism of the Kyoto Protocol. However, one needs to assess correctly GHG emissions related to hydro energy production. Between 2001 and 2006, under the National Greenhouse Gas Inventories Programme of the IPCC, researchers develop methods and guidance to evaluate adequately GHG emissions from reservoirs (flooded lands). How-

ever, these methods are still unused by the CDM methodological panel and by project activities submitted to this panel.

On other hand, engineering technologies can be implemented to avoid a large part of CH<sub>4</sub> emissions from hydroelectricity in tropical region, and to recover the non-emitted CH<sub>4</sub> for power generation. The immediate benefit of recovering non-emitted CH<sub>4</sub> from large dams for renewable energy production is the mitigation of anthropogenic impacts like the construction of new large dams, the actual CH<sub>4</sub> emissions from large dams, and the use of unsustainable fossil fuels and natural gas reserves. Under the Clean Development Mechanism of the Kyoto Protocol, such technologies can be recognized as promising alternatives for human adaptations to climate change concerning sustainable power generation, particularly in developing nations owning a considerable number of large dams. In view of novel technologies to extract CH<sub>4</sub> from large dams, Ivan Tavares de Lima estimate that roughly  $23 \pm 2.6$ ,  $2.6 \pm 0.2$  and  $32 \pm 5.1$  Tg CH<sub>4</sub> could be used as an environmentally sound option for power generation in Brazil, China and India, respectively.

*DREXenvironnement is an independent environmental research and consulting group. DREXenvironnement's expertise is focused primarily on GHG emissions from natural and perturbed environments. DREXenvironnement was founded in 1999 in Montréal, Québec, Canada.*

| CO <sub>2</sub>                  | 2008 | 2009 | 2010 | 2011 | 2012 | Samtals         |
|----------------------------------|------|------|------|------|------|-----------------|
| Sementsverksmiðjan hf.           | 170  | 170  | 170  | 170  | 170  | 850 þús. tonn   |
| Alcoa Fjarðarálf sf. Reyðarfirði | 504  | 504  | 504  | 504  | 504  | 2.520 þús. tonn |
| Alcoa Fjarðarálf sf. að Bakka    |      |      |      | 183  | 183  | 365 þús. tonn   |
| Norðurál ehf. Grundartanga       | 475  | 460  | 530  | 522  | 522  | 2.509 þús. tonn |
| Norðurál Helguvík sf.            |      |      | 103  | 285  | 261  | 649 þús. tonn   |
| Alcan á Íslandi hf. Staumsvík    | 295  | 294  | 435  | 727  | 727  | 2.478 þús. tonn |
| Alcan á Íslandi hf. Þorlákshöfn  |      |      |      | 313  | 627  | 940 þús. tonn   |
| Íslenska járnblendifélagið       | 620  | 620  | 620  | 620  | 620  | 3.100 þús. tonn |

**Umsóknir stóriðju á Íslandi um Co2 mengunar kvóta.**

**Applications for carbon emissions quota for Icelandic Industries.**



Campos Novos Dam in Brazil, the same type as Karahnjúkar in Iceland, cracked.

# The Dam that Forgot the Forest

**Brazil's burgeoning energy needs have led its government to construct several large-scale hydroelectric plants, such as the \$400 million, 695 megawatt, Barra Grande Dam on the Pelotas River in the southern state of Rio Grande do Sul. A consortium called Barra Grande Energetica S/A (or BAESA), which includes the US aluminum giant ALCOA, is building the dam. The participation of ALCOA in this project is not surprising given that the aluminum industry is the world's largest industrial consumer of electrical energy, using about 1% of all the electrical energy generated globally, and about 7% of world industrial consumption. In the case of Brazil, the aluminum industry accounts for roughly 8% of the country's total electricity use.**

Only after 80% of the Barra Grande Dam had been built was it discovered that the original Environmental Impact Assessment (EIA) was fraudulent. According to this initial EIA, the 92,000 sq km of land that was to be flooded consisted basically of degraded land "without significant environmental value". However, as a result of pressure put on it by environmental groups, BAESA conducted a second EIA that discovered that roughly 50% of the land to be flooded was actually primary Atlantic Coastal forest (Mata Atlântica) or secondary forest in recovery. Included in this area were swaths of the native pine tree Araucária, which is a protected species in the country. According to experts, only 1% of Brazil's original Araucária forest survives today. Conservation International lists the Barra Grande dam is located, as one of its 34 global "biodiversity hotspots. Once covering an estimated 1.2 million square kilometers, today less than 10% of the Mata Atlântica remains intact.

Nonetheless, the case was made by BAESA that since the original EIA was

done prior to the consortium assuming control of the project, it should not be held accountable for the erroneous report. Furthermore, given the advanced stage of construction of the dam, BAESA argued that the only option that made sense was for the project to go forward.

After numerous legal injunctions, on July 4th, 2005 BAESA was given the go-ahead by the courts to proceed. The decision was based on the fact that most of the work had already been concluded, and that not finishing the project would result in financial losses for the consortium. Shortly thereafter, the buzz of chainsaws signaled that the demise of the forest had begun. "With this act, IBAMA (the Brazilian Institute of Environment and Renewable Natural Resources) has blessed the extinction of a large part of the Coastal Forest ecosystem and its Araucárias trees," lamented Miriam Pronchow, a Greengrants Advisor.

## Environmental Response

One organization that has responded to the impacts of Barra Grande is the Movement of Dam-Affected Peo-



ple (MAB). MAB was created in the 1980s, uniting struggles in various regions of Brazil. It is the best organized movement of dam-affected people in the world. MAB is demanding that the government halt subsidies to energy-intensive industries, such as aluminum production, and instead provide electricity to rural communities. At the same time, MAB defends the rights of dam-affected populations; demanding fair compensation for their losses and a role in the resettlement process so that it actually improves the quality of life of those relocated.

The need for MAB is great, as the promises of assistance that the Brazilian government has made to families forced to relocate have not always been honored. According to the International River Network, more than one million people have been displaced by the construction of dams in Brazil and at least 30,000 families affected by dams constructed 20 years ago are still awaiting compensation. MAB gives a voice to the 1,200 families being forced to relocate as a result of the Barra Grande dam. Through the organization of numerous community meetings and boisterous protest marches, MAB helped the local communities carve out a role in the decision making process. In addition, MAB funded a public media campaign to denounce the fraudulent EIA that led to the approval of the project.

While the attempt to prevent the completion of the dam itself was not successful, MAB certainly did have a positive impact not only on the families impacted by the project, but also in publicizing the nature of the fraud that took place. Ideally, this will sensitize other environmental groups both in Brazil and abroad about the need to demand a review of EIAs to ensure their integrity prior to projects being started.

As a result of its negotiations with MAB, BAESA set up a fund of six million reais (approximately \$2.5 million) for agriculture and credit programs that the displaced families could tap into as they attempt to restart their lives. This fund would also finance a pilot project for one of the affected communities to create a regional development plan as well as provide technical assistance for the all of the communities impacted by the dam. MAB was able to get an additional 214 families included in the relocation

process, as well as material for the construction of 400 houses.

In addition to these concessions from BAESA, MAB successfully negotiated additional resources and support from the Brazilian government. The government agreed to provide electricity for 600 resettled families (an ironic concession given that the families were relocated to build a hydro-electric dam), basic foodstuffs for 1,400 families as well as technical assistance for the building of 400 houses. MAB requested and received an audience with the Minister of Mines and Energy and with the Chief of Staff of the President to voice the concerns of the families affected by the dam.

MAB hopes that the agreements reached with both BAESA and the

government will be honored. However much remains to be done. In the words of one of MAB's organizers:

"Unfortunately in our country, social concerns and the environment are pushed aside because of our 'development need'. However, what kind of development forces families to leave their home and which doesn't take into account the need to protect the environment. These are questions that aren't asked in our country and we need to fight to change that. It is our challenge, and it isn't easy..."

Jason Coughlin (GreenGrants)

#### **More information**

<http://forests.org/action/brazil/>

## **Suriname's Ecology Threatened by More Bauxite Mining Plans**

Suriname, in the northern part of South America, is known for its huge bauxite mining areas. Around the towns of Paranam, Moengo and Lelydorp whole arrays of forrests and the livelihood of the Maroons are destroyed by activities of mining giants BHP Billiton and Suralco-Alcoa. In 2005, in Suriname's Nassau- and Lely-mountains, scientists discovered as much as 24 yet unknown species of animals. In this barely charted wildlife sanctuary, the mining industry intends to start new activities in the near future.

Now the South African consultancy agency SRK-Consulting is conducting a study on the possibilities for bauxite mining in the Bakhuyts-mountains in western Suriname. There will be four so called 'Environmental and Social Management Plans' which must provide the BHP Billiton company directives for a correct way of mining in the area and the transportation of bauxite in a concession area of 2.800 km<sup>2</sup> in the Bakhuyts-region. In this area, five places have been identified for bauxite mining. The rest of the area is reserved for building roads, bauxite storage facilities, offices and housing. A completely new harbour in the Corantijn-river has been drawn up for shipping bauxite, which will have a strongly negative impact on the river ecosystem.

According to SRK-Consulting, the wildlife area which is not populated

but where maroons do use the area, will be taken into account. Furthermore SRK-Consulting says that after a period of mining, the area will be brought back to its original state, by the growing of new planted trees.

If this were possible at all - as if one could engineer nature back to a 'default', recent history shows that where bauxite mining has taken place, the area is generally a huge red open cast in the beautiful Suriname jungle. An example is the area around the small town of Moengo. The mining corporations have finished their job, left the area and left the local population in a polluted and destroyed area.

None of Suriname's nature conservation organizations, including the WWF, Amazon Conservation Team, Conservation International, NIMOS and Stinasu, are opposing the forementioned new mining plans in East- and West-Suriname. It seems they do not dare to mind the mining activities and the destruction of forrests and wildlife which they are supposed to be protecting.

It seems it is necessary for organizations and individuals outside of Suriname to oppose the new ecocidal plans in this beautiful northern part of South America.

Paul Kraaijer

#### **More information**

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**“The evidence we present goes against the conventional history of aluminium, which tends to portray the industry as central to various countries’ economic power and prosperity, without understanding the financial manipulation and exploitation between and within countries, and the true costs.”**

**Few people understand aluminium’s true form or see its industry as a whole. Hidden from general awareness are its close link with big dams, complex forms of exploitation in the industry’s financial structure, and a destructive impact on indigenous society that amounts to a form of genocide. At the other end of the production line, aluminium’s highest-price forms consist of complex alloys essential to various “aerospace” and “defence” applications.<sup>(1)</sup> The metal’s high “strategic importance” is due to its status as a key material supplying the arms industry. In these four dimensions – environmental, economic, social and military – it has some very destructive effects on human life.**

**By Felix Padel and Samarendra Das**

The Orissa Government is presently trying to set up a State-wide programme of rapid industrialization based on a vastly increased scale of mining projects – primarily bauxite, iron-ore, coal and chromite, along with aluminium refineries and smelters, steel plants, plus coal-fired power stations and hydro-electric dams to power them. The idea is that this will rapidly bring great wealth into the State in the form of Foreign Direct Investment, which will quickly pay off Orissa’s Foreign Debt to the World Bank and other foreign institutions, at the same time as it promotes overall development in a State which has a high level of poverty and records of starvation deaths.

To comprehend the implications, it is instructive to look at back articles in EPW on aluminium. From the 1960s to 1980s, the emphasis was on economics: the huge subsidies in electricity prices and tax-breaks and how these were lobbied for or justified by Government, the decrease in percentage of aluminium reserved for electrical cables to boost rural electrification, problems of labour and power cuts; articles critical of the industry and in its defence (EPW 1967-1980, Kale 1972, Rajagopalam 1981, Subrahmanyam 1982). From Vidhya Das’ first article on Kashipur in 1995, the emphasis shifted to exposing an escalating abuse of human rights in Orissa, which culminated in the police killings of three Adivasis at Maikanch in December 2000, and which is coming to a head again now; against a People’s Movement to try and stop this invasion of their land and resources (Das 1995-2003, Sarangi 2002-5, Bandyopadhyay 2004). The early articles showed little awareness of the human cost to several 100,000 Adivasis uprooted by aluminium plants and the dams which power them. Later articles highlight abuses of power. What is needed is a clear analysis of the political economy

of bauxite and aluminium, to comprehend the deeper causes of abuse being perpetrated now in many parts of Orissa.

In this article we present a preliminary overview of this political economy through analyzing each of the four dimensions named above. The evidence we present goes against the conventional history of aluminium, which tends to portray the industry as central to various countries’ eco-

a succession of other countries, which all show similar patterns of lavish promises followed by extreme exploitation (Graham 1982).

In the US and Canada, big dams built from the 1920s-40s to power aluminium factories displaced numerous indigenous communities, and had dire effects on the environment (McCully 1998), alongside intensive pollution from the factories themselves. In Guyana, Suriname, Jamaica, Brazil, Australia, New Zealand, Guinea, Ghana, Sierra Leone and other countries, these effects on indigenous peoples and nature have generally intensified, often accompanied by a high degree of foreign financial and political control which has completely undermined these countries’ actual economic independence.

Aluminium production has been linked with big dams from the start. From the first wave of big dams built in Europe and north America in the 1900s-1930s to the Three Gorges dams in China, supplying electricity and water to aluminium factories has been a principal reason for their construction (Glittitz 1993, McCully 1996). This is because smelters consume exceptionally large amounts of electricity. To produce a ton of aluminium a smelter consumes at least 13,500 kwh (kilo-watt hours). It also produces very high emissions of Carbon Dioxide: an average of 13.1 tons per ton of aluminium produced.<sup>(2)</sup> This electricity is needed to split aluminium from its strong bonding with oxygen. A refinery, which is often located near a bauxite mine to reduce transport costs, produces alumina

# *Aluminium’s Links*

## *Double*

nomic power and prosperity, without understanding the financial manipulation and exploitation between and within countries, and the true costs.

### **India’s Aluminium History: Impacts on Society and Environment**

When Nalco’s aluminium complex was being set up in Orissa during the early 1980s, Subrahmanyam commented that to understand its effects, one must comprehend “the past, not very pleasant, history of the Indian aluminium industry” (EPW 1982). In fact, to realize what lies in store for Orissa if even a few of the planned bauxite and aluminium projects go ahead, it is necessary to understand aluminium’s history in

(aluminium oxide,  $Al_2O_3$ ) by refining off alumina’s bonding with iron, silica, and about 40 other mineral elements found in substantial quantities in bauxite. A smelter splits off aluminium’s even stronger bonding with oxygen, by passing a high electric current through dissolved alumina.

India’s first major aluminium company was INDAL (INDian ALuminium). It was set up as a subsidiary of ALCAN (ALuminium CANada), a principal supplier to the UK arms industry as well as to the US, and originally a subsidiary of ALCOA (AL. CO. of America).<sup>(3)</sup> Alcan’s set-up was designed in part to facilitate US control of aluminium cartels centred in Europe (Graham 1982, Holloway 1988). Since the 1990s at least, the aluminium cartel has been directly con-



trolled by the US administration (Stiglitz 2002).

The foundation-stone for the Hirakund dam was laid by Orissa's last British Governor, and then again by Nehru in 1948. By 1959 it was supplying Alcan/Indal's Hirakund smelter, whose bauxite was mined and refined in present-day Jharkhand to the north. Irrigation, flood control and hydro-power were given as the dam's main purposes. This dam displaced at least 160,000 people, over 50% of them Adivasis, as well as a lot of forest and rich cultivated land – almost as much land as has been irrigated from the reservoir (Viegas 1992). As for flood-control, flash floods caused by sudden release of the water in Hirakud Reservoir during exceptional rain, in 1980 and during the Cyclone of 1999, killed more people than died in many years of flooding before the dam's existence.

So hydro-power was the main reason, aimed primarily to supplying factories, both during the 1950s-60s, and in a massive new, DFID-financed expansion about to be implemented right now. Supplying the Hirakud smelter, as a prime customer for a large supply of hydro-power, was almost certainly among the main reasons for its construction, though as in most other cases, this purpose was not made explicit.

Soon after, in the early 1960s, the Rihand dam was built to supply Hindalco's refinery-smelter complex at Renukoot (Shaktinagar) on the UP-MP border, displacing a comparable population. None of India's dam projects has kept proper statistics of the people displaced, and none has reset-

a range of economic arguments against setting up Nalco – in particular the low price for bauxite enforced by external pressures (i.e. the aluminium cartel), plus excessive consumption of electricity, water, etc., and excessive pollution. Damanjodi refinery and the Upper Kolab dam displaced over 50,000 people, Adivasis the majority (Jojo 2002). The rail link between Koraput and Rayagada, built to facilitate Nalco and future aluminium firms, had negative effects on the forest and interior Adivasi villages over a wide area. And Nalco's smelter at Angul has inflicted serious pollution on thousands of people, killing all the fish in a long stretch of the Nandira and Brahmani rivers, as well as killing people and damaging extensive areas of cultivated land when its toxic waste fly-ash ponds have flooded. (5)

Tribal villages all around Nalco's bauxite mine on the long summit of Panchpat Mali have suffered pollution and lost their land's former fertility, while over 200 deaths in work accidents at the Damanjodi plant nearby have gone largely unreported and uncompensated, as have deaths from fluoridosis around the Angul smelter, and deaths from industrial pollution among workers in all these plants.<sup>6</sup> So Nalco's high profits come at a huge human and environmental cost that has never been properly calculated – part of the subsidies and "externalities" of aluminium production we examine below.

When Nalco's example was emulated by BALCO (Bharat AL.CO), wanting to mine the summit of Gandhamardan, a movement arose to prevent this, representing

an alliance of local Adivasis, Dalits, Hindu activists and many others. They came together to save the Gandhamardan Mountain range, which has an exceptional wealth of forest cover, as well as mythical and medieval temple heritage. Balco built a colony for several thousand workers, which is now

derelict. The planned bauxite mine on the ridge was finally declared illegal on environmental grounds in 1987, after hundreds of protestors had endured police beatings and arrest, and women had stopped the passage of mining vehicles by laying their children in front of them to maintain the blockade, saying: "What future do they have if you destroy our Mountain?"

A movement to try and stop construction of the Upper Indravati dam project was less successful – crushed by lathi-charges and mass arrests in April 1992. This project involved building 7 dams, financed through loans from the World Bank. When a WB official was visiting villages nearby in 1993, tribal women told her, "If we starve, you also bear a responsibility", and indeed, the

worsening poverty in the area surrounding the reservoir now is notorious.<sup>(7)</sup> The cost of construction rose even more than usual during construction, which was also marred by an accident in August 1991 when a tunnel suddenly flooded killing an estimated 200 (mostly tribal) workers. At least 40,000 people from 99 villages were displaced. The reservoir has caused mass deforestation and impoverishment of surrounding communities, which are still without the electricity they were promised (despite hydro-power the project supplies to distant factories), and where people have to cut and sell the remaining forest in order to stave off starvation. Again, this project's purpose was almost certainly to supply power and water to the aluminium factories presently being planned or implemented.<sup>(8)</sup>

### Orissa's Bauxite Plans

So already, two of India's six working smelters, and one of its six refineries, are located in Orissa, as well as a string of big dams to give electricity and water to these factories. The present plans for intensive mining of Orissa's bauxite alongside a complex of big dams, aluminium factories and rail links actually date back to the 1920s. The British geologist Cyril Fox gave an outline for mining bauxite from Karlapat and the other Bauxite-capped mountains, refining and smelting it using Orissa's hydro-electric sites, transporting it through the Rayagada railway (then under construction), and exporting the product via the harbour being planned at Vishakhapatnam. <sup>9</sup> Fox's outline actually lays out the whole plan for Orissa's aluminium industry, as a colonial undertaking involving factories, dams, railways and port, fed by bauxite mines on the main mountains. If the British Raj understood Orissa's aluminium potential, so too did Hitler, whose airforce used unprecedented quantities of aluminium. Also steel: one of his mineral experts made the highly significant comment (in the light of recent iron/steel projects, particularly that of the Korean giant, Posco) that "You can rule the whole world if you control the iron ore of Keonjhar". Hitler got the Japanese to make Orissa a prime target of attack for this reason, which resulted in a few air-raids on Orissa's ports.<sup>(10)</sup>

But the present plan is as colonial as British and German plans were: foreign-based companies' plans to extract Orissa's minerals at an unprecedented rate receive support from foreign Governments. Most of the profits will inevitably go abroad, leaving behind a trail of disaster for Orissa's environment and cultivators. Briefly, Orissa's new aluminium "master-plan" involves:

1. Utkal Alumina's planned mine on Bapla Mali (west of Kashipur) and refinery below, near Kucheipadar village (Rayagada District). This has now been delayed for 13 years by the People's Movement, centred in Kucheipadar and other villages. Utkal was originally a consortium of Indal, Tata, and Norsk Hydro. Tata withdrew after the project faced stiff opposition in the mid-90s. Its place was taken by Alcan, which

## with Genocide

# Death

tled them adequately. Almost every family of each displaced population suffered a tremendous drop in living standards. The bare estimates of numbers cover a horrendous reality of uprooted communities and human lives reduced to a level of destitution and virtual enslavement. Similar stories surround the Koyna dam in Maharashtra, the Mettur dam in Tamil Nadu, and Korba in Chhattisgarh, which is named after the Korva tribe who were displaced en masse by Balco, and whose Census-recorded population shrank from about 84,000 to 27,000 in 1991-2001.<sup>(4)</sup>

Then came NALCO (National AL.CO), "the pride of Orissa", one of India's biggest profit-making PSUs, set up in 1980. An article in EPW in 1981 (Rajagopal et al.) gave

had an interest anyway through its subsidiary Indal, in which it then had a 54.6% stake. In a little-investigated deal, it sold this controlling share to HINDALCO (HINDUSTAN ALCO. of Aditya Birla's group of companies). After the police killings at Maikanch, Norsk withdrew, leaving Alcan and Hindalco. So on the surface, the lineup of companies is completely different now. Yet in effect "the company" is still the same, supported in the same ways by the District authorities. Utkal's high-level foreign backing was evident when the World Bank tried to make it a model scheme of its BPD project (Business Partners for Development), organizing talks in Rayagada in October 2000, which raised the temperature of debate just before the Maikanch police killings. After these killings, Utkal was discreetly withdrawn from the WB's BPD website without explanation. The Inquiry into Maikanch further delayed Utkal, which is trying to implement its project now. Hence the present campaign of police intimidation.

2. Hindalco's plan for mining Kodinga Mali (on the SW rim of Kashiapur), with a refinery at Kansariguda village, and an expansion of the Hirakud smelter.

3. Larsen and Toubro's plans for mining Siji Mali and/or Kuturu Mali (N and NE of Kashiapur) from Sunger (where a movement was active against its plans in the '90s), plus a refinery near Kalyansingpur, in a joint venture with Dubai Al.Co. (Financial Express 16/12/05) L & T is originally a Danish company, which manufactures arms at several factories in India.

4. Sterlite/Vedanta's project near Lanjigarh to mine the northwest ridge of the Niyamgiris. Construction of their refinery below is under way, after evicting Adivasis who had agreed to accept compensation. These evictions took place early in 2004. Adivasis in the Lanjigarh area – including those who refused compensation, whose villages stand just outside the boundary wall – live now under a shadow of tremendous pressure from the company people, contractors and police; as well as a climate of fear, after one leader of their Movement, Sukru Majhi, was run over deliberately on the newly metalled Lanjigarh-Doikal road on 27th March 2005.<sup>(11)</sup> The legality of the Vedanta project, and its impact on the exceptional Forest which covers the lease area, has been questioned on numerous fronts by the Central Empowered Committee of the Supreme Court, who inspected it in Dec.2004 and June 2005 (CEC Report Sept. 2005). The refinery is being constructed by an Australia-based company called Worley, through foreign finance. The Indian company Vedanta Alumina is owned via Sterlite Industries. by Vedanta Resources, which was launched as a UK company on the London Stock Exchange in December 2003, and invested in by several leading European banks (see below).

This investment is also funding a huge new smelter complex at Korba, and plans for another smelter near Hirakud.<sup>(12)</sup>

5. Khandual Mali near Karlapat (west of Lanjigarh) was under threat: initially from a local company, Sulakshmi Mines and Minerals, aiming to make money through selling the mining rights. An attempted sale to BHPBilliton (the world's biggest mining company) was declared illegal in 2004, after BHP had already announced its intentions to set up a bauxite mine and refinery in Kalahandi. This Mountain is the one referred to by Fox in the 1920s. Both

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environmentally and socially it is an area of exceptional importance and sensitivity, and the villagers living on the mountain have made clear their resistance to mining it.

6. Other projects being planned include Gandhamardan again, whose mining rights have been purchased by a Canadian Company called Continental Resources; Mountains in the Kuttia Kond territory, whose bauxite was recently surveyed by Jimpex; and Deo Mali, Koraput's (and Orissa's) highest Mountain, which Nalco has designs on. In Chattisgarh, Balco-Sterlite-Vedanta is setting up a bauxite mine at Bodai-Daldali, on a mountain near Kawardha, bordering MP and Kanha National Park, where Baiga tribals have already been displaced.

**The Exploitative Nature of the Aluminium Industry**

If this account of India's aluminium industry and the plans for Orissa has stressed the negative features, what are the benefits alleged by those promoting this expansion? Huge profits, with prices soaring through demand from China, and foreign exchange which some Govt. sources claim will pay off Orissa's huge debt. Plus employment opportunities, and foreign investment to bring wealth to Orissa's backward districts, and promote all-round development. The profit in the short-term is not in doubt. But profit for whom? Clearly not for the uprooted Adivasis. The lack of respect being shown to them now in Lanjigarh and Kashiapur is an ill omen for their future. They have already met others dispossessed by the Indravati, Kolab and Damanjodi projects, and know that promises of a good "resettlement package", "employment opportunities" and other benefits are basically a

fraud. The employment situation around Damanjodi is very harsh, with fierce competition for work, poor or non-existent compensation for work-related injuries and deaths, etc. It is also highly questionable whether aluminium projects will pay off Orissa's debts or create further debt. Will it make these "backward areas" prosperous, or will it increase their poverty?

Aluminium's history shows that in many ways the industry's whole economy is based in exploitation: getting a valuable resource very cheap, and selling it dear. The main profits do not go to the Indian or Orissa Government, but to a small elite of Indian and foreign executives and bankers, who have streamlined ways of getting their profits out of India. What Anil Agarwal is doing at Lanjigarh and Kawardha to make profits in London represents a new kind of colonialism, on a bigger scale than the East India Company ever dreamed of, if only because the means of extracting India's key resources swiftly and permanently, are now at hand. Vedanta's expansion has been backed by foreign banks, including Barclays, ABNAmro, and Deutsche, as well as ICICI (linked with the US Prudential Bank).

The whole idea of big dams and aluminium factories as a super-boost for a region's economic development is a dangerous myth. Its paradigm is the US, and it is true that aluminium played an important part in this country's rise to pre-eminence from the 1930s, though without benefit to the areas where factories were sited, and at great cost to the environment. Aluminium has been at the centre of what Chomsky characterizes as US industrial management by military spending to stave off economic decline (2003 p.39). The history of how other countries were induced to make the aluminium industry central to their economies shows a highly contrasting pattern: after an initial investment phase, of fine promises and intensive construction, the industry promotes external control and economic dependence, which ends up stifling a region's prosperity altogether.<sup>(13)</sup>

The British started large-scale coal and iron-ore mining in north Orissa. But the escalating displacement since Independence – at least 3 million indigenous cultivators thrown off their land in Orissa alone, by mines, dams and metal factories – is unprecedented. Yet there are certain significant precedents in colonial history: "the enclosures", when public land was privatized all over Britain in the 17-19th centuries, Scotland's "Highland Clearances" in the 19th century when huge estates were cleared of "the clans" of crofters (subsistence farmers), and the genocide of native Americans and Australians by European colonists. In other words, Orissa is repeating the very pattern of genocide which confronts Europeans and Americans with the most shameful parts of their history. But mining and the metals industry are the central issue now.



Plans for Orissa's rapid industrialization also involve a huge increase in coal and iron-ore extraction. Posco's steel project is just one out of 37 current plans for steel plants. "Kalinganagar" (Jajpur District), where recent protests by Adivasis unwilling to be displaced were met with ferocious police suppression, involves plans for a vast industrial park. And every day, several thousand trucks carry iron-ore from north Orissa to Paradep for export. The northern districts of Keonjhar, Mayurbhanj, Sundargarh, Jharsaguda and Jajpur have already faced mass displacement and deforestation, as well as pollution, from iron and coal mining. Over 40 sponge-iron factories (which process iron-ore into iron for the steel plants) in Keonjhar alone are particularly polluting.(14)

### Cost-Benefit Analysis

The main conventional costs of aluminium production include electricity, water, coal, caustic soda, transportation and labour. Everywhere an aluminium industry sets up, it receives hefty subsidies in these areas. In Orissa, the al.cos are getting each one cheap through direct and indirect subsidies, and legislation safeguarding the environment and labour rights has recently been weakened.

It has long been recognized that al.cos can only make a profit by being heavily subsidized. This is rarely spelt out publicly, though well documented in Government and academic studies of the industry. What this means is that the aluminium

prices that fluctuate every day in the London Metal Exchange are actually considerably lower than the real cost of producing the metal – and far lower than the real cost when the actual effects, or "externalities", of production are taken into account.

It seems that the last published Govt. document that was reasonably open about aluminium finance was Dewey Anderson's *Aluminium for Defence and Prosperity* published by the US Administration in 1951. This was during the Korean war, when the military demand for aluminium was soaring. Anderson argued that the US must stockpile much more aluminium for war, particularly for its air-force; that the cost to the US economy and environment was too high to produce more within the country; and that more should be imported from Alcan, which was then constructing a huge new smelter on Canada's west coast, fed by bauxite/alumina from third world sources. This document is thus a blueprint for exploitation of third world resources.

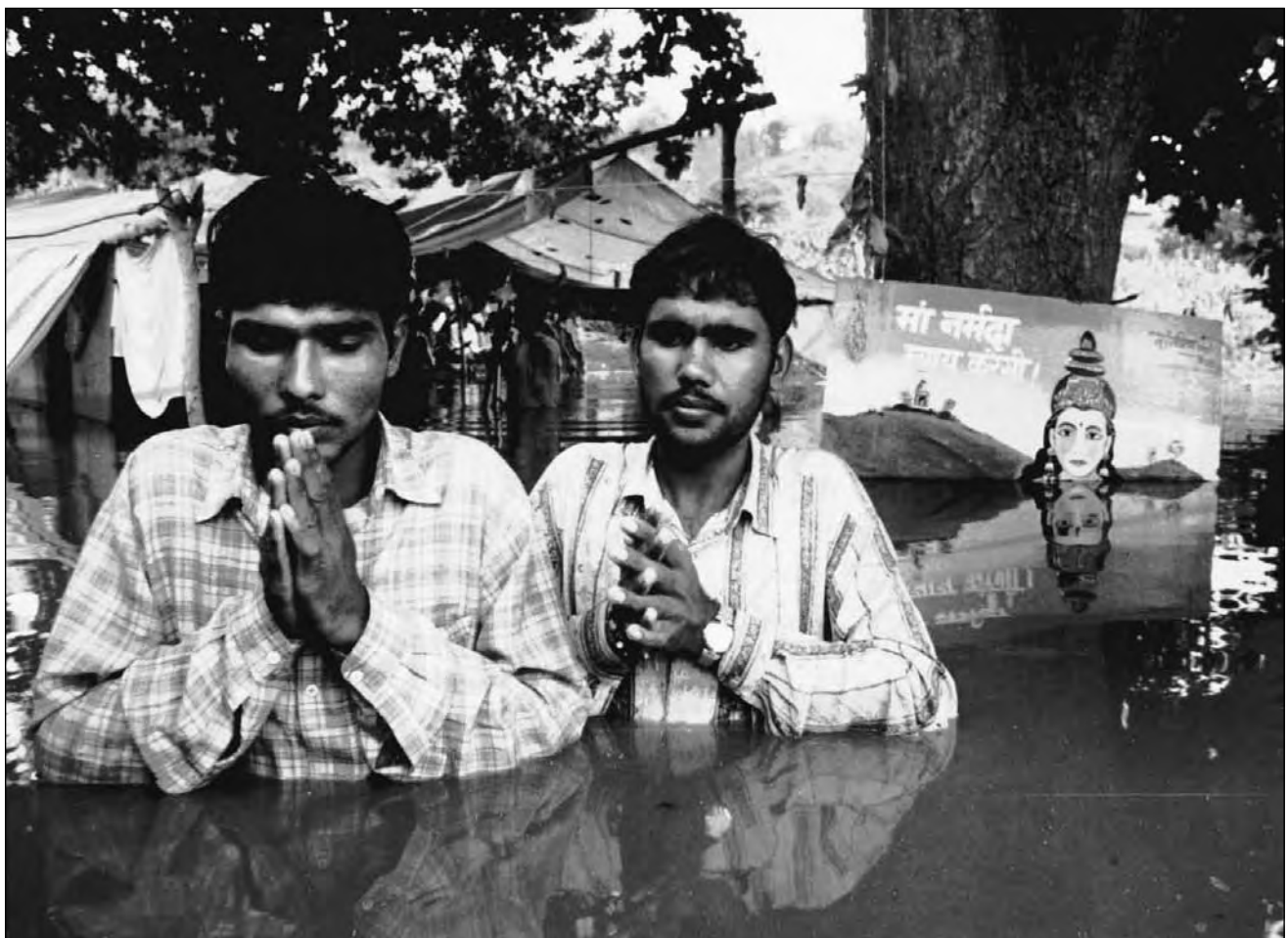
Anderson's comments apply as much to Orissa today as they did in the US 50 years: "Aluminum reduction is no great maker of employment, uses little skilled labor, and adds little to the independent development of an area." Electricity should be used more wisely "than allowing aluminum metal manufacture to consume it all with such relatively small return in community advancement." And the nation's natural resources should not be wasted: "the US cannot any longer afford to make aluminum if it can be obtained in large enough quan-

ties and on favourable price terms from other sources."(15)

In other words, since the second world war, a key strategic aim of the US has been to acquire a large and regular supply of bauxite/aluminium as cheaply as possible from 3rd world countries. US aluminium production more than tripled between 1948 and 1958, ushering in a "golden new age" for America's al.co.s.(16)

If the al.cos (aluminium companies) get electricity, water and labour super-cheap in Orissa, even more so the basic raw material itself. Bauxite has no fixed price. The current trend is to pay a royalty for its extraction to the Indian Government, which is fixed at approximately 0.35% of the LME price per ton of finished metal. The IBA (International Bauxite Association), a producers' cartel of bauxite-exporting countries, managed to double the price they were getting for bauxite in the early 1970s, under the leadership of Michael Manley in Jamaica, whose Government faced a campaign of severe destabilisation by CIA operations as a result (Blum 2003 p. 263), and this success has never been repeated.

As the al.cos themselves put this, getting a cheap source of bauxite is their "starting point of value creation".(17) As it is refined, smelted, and fabricated, each stage of production ups the profit margin. But the highest profits are made further along the line, in the sophisticated alloys and Metal Matrix Composites demanded by Defence. This



“strategic importance” is a key reason Abdul Kalam gives for expanding India’s aluminium industry, outlined in his book with Y.S.Rajan, *India 2020: a vision for the new millennium* (1998).

Aluminium’s history in the 3rd world needs to be understood in this context. Alcos come into a region advertising huge economic benefits in employment and for boosting the local economy. As Anderson says frankly in 1951, and subsequent analysis confirms (e.g. Graham 1982), these benefits do not materialize. This is clear from examining the extent of subsidy in materials alone; but also from the economic cost which Govt. institutions are beginning to attach to pollution. A recent British Govt. report costs carbon emissions at \$56-223 per ton of CO<sub>2</sub>. At an average of 13 tons of CO<sub>2</sub> emissions per ton of aluminium (above) this should add at least \$700 to the cost of aluminium. But of all sectors of the economy, metal production has by far the highest ratio of carbon emissions to profits, because of markets’ historic inability to internalize pollution costs in commodity prices.(18)

So carbon emissions are factored out of the Cost-Benefit analysis, as an “externality”. The same with other emissions and effluents, including sulphur dioxide, fluoride and HFCs, Spent Pot Lining, and Toxic Red Mud, which invariably pollutes the ground-water near a refinery. In the Lanjigarh case the Red Mud Pond is actually planned right beside the source of the Bamsadhara River, below Niyamgiri.(19)

Since these damaging effects are classed as “externalities”, they are not included in the cost of production, and it is not the companies that pay these costs: they fall on the host country and the local people. The high cost of subsidising India’s aluminium industry was recognized in India’s Bureau of Industrial Costs and Prices Report in 1988, especially in terms of the highly subsidies for their electricity. The BICP actually recommended trying to reduce aluminium consumption – a recommendation aggressively reversed by the New Mineral Policy introduced in 1993.

As for aluminium’s supposed status as a “green metal” because of its high rate of recycling: it is actually a very small proportion that is recycled, and recycling has no discernible dampening effect on bauxite mining and the huge rise in output of new aluminium. Raising the proportion of aluminium used in cars in India from 10 to 20 kg may (or may not) save 20% of fuel costs, but the high cost of greenhouse gases emitted in smelting aluminium alone destroys any environmental benefit.(20) So contrary to al.co propaganda, aluminium is the ungreenest of materials, and its present expansion is a model of unsustainability.

### **FDI and the Corporate Takeover of Orissa**

The new wave of mining projects planned for Orissa, starting with Utkal, Vedanta

and Posco, represent huge injections of Foreign Direct Investment. Since the new National Mineral Policy brought in while Manmohan Singh was Finance Minister in 1993, the share of mining ventures that can be owned by foreign companies has risen from 26% to 74%, and lobbyists are trying to get this raised to 100%. This is one way that profits from these projects are streamlined now for taking out of India. Foreign Banks which have invested in Vedanta and other joint ventures, are becoming right now the effective owners of some of Orissa’s richest mineral deposits, with a view to rapid extraction, and minimal checks on the consequences for the

***“Today’s companies merge into each other through complex patterns of mutual share-ownership etc. Their mandate subordinates every other value to one main aim: creating maximum profit for their investors, and in effect, for their top executives. Companies’ expert ‘caring’ image is a carefully manipulated mask.”***

environment and local people.

It is well known that the main profits from FDI really go abroad (Woodward 2001), and in mining, the foreign companies are actually gaining control of India’s most precious resources: its mineral deposits and flowing water. In other sectors such as electricity and telecommunications, foreign companies such as Enron have pulled off notorious scams in India, and the evasion of responsibility for the Bhopal disaster by Union Carbide/Dow Chemicals shows the kind of dangers which foreign companies pose. But with mining companies the danger and exploitation is at an altogether different level, since minerals are a finite, non-renewable resource as well as, in effect, “the starting point of value-creation” in world finance. From bauxite’s natural placing in the earth it ensures the land’s fertility. Damage from mining the bauxite cappings on south Orissa’s greatest mountains is irreversible, both for nature and for indigenous communities.

The role of the World Bank needs close examination here. Orissa’s foreign debt is one of the largest, with the highest Debt to GSDP ratio of any State. 46% of GSDP goes in interest payments alone. For the financial year of 1999-2000 the Orissa Govt.’s loan receipt was Rs.3,690.40 crore [550 mill EUR - Ed.], while its debt repayment totalled Rs.3,068.43 crore. These are basic facts behind current plans for Orissa’s Fiscal Reforms.(21)

But loans from the WB come with a hidden list of “conditionalities”, which typically involve the removal of legislation that restricts foreign companies’ entry into the Indian

market. The market reforms that started in Orissa with privatizing the power sector in the mid-90s, were basically orchestrated through the WB. Those reforms paved the way for the current series of deals that puts Orissa’s best mineral deposits under the financial control, and in effect the ownership, of foreign companies and banks.(22)

This explains why the World Bank rejected key conclusions of its own Extractive Industries Review in 2004, which had shown that WB involvement in mining was having disastrous effects and should be phased out.(23) Hence the significance of the WB’s hushed-up involvement at Rayagada in October 2000.

Looking at Orissa’s foreign loans as a whole, the WB has been the main lender, and played a key role in arranging loans from other Banks too. These loans financed the first phase of Orissa’s industrialisation, including the Upper Indravati reservoir. This has already silted up so badly that two of the project’s four turbines are not working – a design fault whose cost has to be borne by Orissa, not the Japanese engineers of Mitsubishi who constructed it. By getting Orissa so deeply in debt, the WB has effectively put it in a position where the Government has no choice but to open its doors to foreign companies and sell them its mineral assets (or has been persuaded of this by its foreign creditors). Getting Orissa into such un-repayable debt, while financing projects like Upper Indravati that will assist future mining projects, has functioned as part of an over-all plan for foreign companies to get hold of Orissa’s minerals at the cheapest cost.

George Monbiot’s *Captive state: the corporate takeover of Britain* (2000) shows how Corporations have gained huge power and wealth at the expense of local Government throughout the UK. Similar studies have analyzed this situation in the US, including the series of scams which Enron practised to make huge profits in the power sector, tripling costs for consumers in California etc. The way this corporate takeover is being orchestrated in Orissa follows the same pattern.

But in India it has another significance too. In certain precise ways, it is very similar to the manipulations of finance and law through which the East India Company swiftly assumed the attributes of India’s Government in the 18th century. The villagers in Kucheipadar, surrounded by police and company intimidation, have a clear understanding of this. “The company” which has invaded their land and lives so destructively is repeating history. It behaves in the same colonial, even genocidal manner which brought the East India Company to power: a Government of India dedicated to the aim of making quick profits, whose greater part goes abroad, by exploiting India’s resources as swiftly and fully as possible. Collecting revenue gave today’s District Collector his title. Given



the repressive implementation of these projects through mass police deployment and alleged harassment, the corporate nature of the GoI which British rule established is apparently being reasserted.

The EIC was one of the world's first Companies. Today's companies merge into each other through complex patterns of mutual share-ownership etc. Their mandate subordinates every other value to one main aim: creating maximum profit for their investors, and in effect, for their top executives. Companies' expert "caring" image is a carefully manipulated mask (Bakan 2004). They merge into Banks, and into Government too via "revolving doors". Company Directors control the present US administration – and most other Governments – as never before. So when Adivasis in Orissa oppose "the Company", they are opposing a takeover of India's soil by foreign capital, in a form that in many ways is a direct reincarnation of "the Company" that forced India under British rule.

The aluminium companies form a cartel, controlled by key financial institutions, particularly from Washington and London.(24) As with mining enclaves all over the third world, the Orissa Govt. has been made lavish promises of rapid wealth creation by foreign companies and Govts. Will the promises be believed yet again, and the people's interests sold out? Or will the Government listen to the people and debate the merits of its policy and deals openly?

India's mineral deposits are starting to come under a kind of foreign control that will not be easy to limit. This is the significance of the wave of protest currently sweeping across Orissa: You're our Government! Don't let this happen! An increasing number of people are now aware that Indian companies have the backing of foreign companies and banks as well as foreign Govts. (whose arms manufacturers depend on a constant supply of metals at the cheapest possible rate), and that these institutions have been manipulating the rules and technologies to ensure that the main profit leaves Orissa. As for what remains behind in Orissa, the people it brings most affluence to can be seen as a professional elite who serve company interests.

### Aluminium for Arms

The world's most lucrative and powerful companies are those producing arms in "defence" or "aerospace", and these are the al.cos' highest-paying customers. The whole history of mining and metal technology is connected closely with the history of weaponry, which has motivated and funded inventions since the Bronze and Iron Ages. The industrial revolution led to a huge arms build up during the first half of the 20th century, which was among the causes of the two world wars.

"War was good to Alcoa", and all the al.cos flourished during the two world wars, when about 90% of aluminium went into military uses.(25) In the 1920s, lobbyists for arms companies scuppered a League of Nations motion to ban the selling of arms for private (company) profit. At that time there was a widespread understanding that arms com-

panies were a prime cause of wars (Sampson 1977). Where is this understanding now?

Aluminium's "strategic" value to the arms companies – to America's "permanent war industry" in particular, which Eisenhower called its "military-industrial complex" – is obviously a key reason that the real costs of producing aluminium are hidden and transferred as we have indicated. Britain too, while closing down most of its manufacturing industries during the Thatcher era, kept "aerospace" or "defence" as a cornerstone of its economy, as the most lucrative and "strategic" sector.(26)

One reason for aluminium's strategic value is thermite, a little-known invention at the dawn of the 20th century in 1901, that virtually defined the violent course of the 20th century. While smelters require huge supplies of electricity in order to split aluminium from its bonding with oxygen in molecules of aluminium oxide, thermite reverses this process: a bomb is packed with iron oxide and aluminium powder. When the fuse ignites, the aluminium leaps to the high temperature of its "heat of formation" to re-bond with oxygen, making the explosion huge. This was the basis of the first world war hand grenades, second world war incendiary bombs and napalm, and the "daisy cutters" used by American planes for "carpet bombing" from the Korean and Vietnam wars to Iraq. Aluminium is also basic to the technology of nuclear missiles.

Anderson's words in 1951 (p.1-5) remain true today: the aluminium industry is "at the very core of the military-industry complex... Aluminum has become the most important single bulk material of modern warfare. No fighting is possible, and no war can be carried to a successful conclusion today, without using and destroying

***"Aluminum has become the most important single bulk material of modern warfare."***

vast quantities of aluminum... Aluminum makes fighter and transport planes possible. Aluminum is needed in atomic weapons, both in their manufacture and in their delivery... Aluminum, and great quantities of it, spell the difference between victory and defeat..."

Although the aluminium percentage in war-planes has diminished, the complexity of aluminium alloys used has increased, alongside a new range of composite fabrics blending oil or plastics with aluminium. These alloys and composites are crucial for aircraft, missile technology, and satellites, as well as war-ships and tanks.(27) Kalam and Rajan base their argument for India expanding its aluminium industry on the strategic importance and the high cost of this technology (1998). In other words, military might is a driving force and key source of profit behind aluminium production, now as much as before.

Balco supplied aluminium to India's nuclear weapons program.(28) Alcan has long supplied the UK weapons industry.

(29) Vedanta has received clear financial and British Govt. backing from London.(30) One wonders whether the supply it offers of cheap aluminium from Orissa may have been planned for years?

Graham gave the percentage of aluminium used in the arms industry at around 30% (1982 p.250). Lists of aluminium consumption by sector miss out arms manufacture now, and when "defence" or "aerospace" is given it does not rise above 4%. If this is correct, it is still substantial, since it represents aluminium's most complex and highly-priced alloys. However, we believe the figures have been considerably "massaged" through listing many defence applications under "auto", "construction" etc., and not taking account of stockpiling. The US started its aluminium stockpile in 1950, and the Defence Production Act of 1959 prioritized this and classed aluminium as one of 4 "controlled metals" for defence. The stockpile reached nearly 2 million tons in 1963, and was again prioritized in the first year of Reagan's administration in 1980, and since.

How much aluminium is being consumed and destroyed in the Iraq and Afghanistan wars? What kinds of profits are these wars bringing to the al.cos as well as arms companies? The faster the military hardware is consumed, the bigger their trade. War is still probably the al.cos' best business, although the contracts and statistics proving this have long been hard to access.

But alongside these military uses, and in effect subsidized by them, is the increasing "consumption" of aluminium in other industries: especially in building construction, car manufacture, and packaging. India is portrayed as backward because its average annual aluminium consumption per head is less than 1 kilo, while "developed" countries average at least 20 kilos – an unsustainable wasting of precious natural resources which we have all unwittingly become part of.

### The Human Cost

The biggest "externality" kept out of aluminium's price is the human cost. Mining history in third world countries has always involved a tussle between foreign-controlled companies and the national Governments whose resources are being extracted – a tussle the foreign companies have always won, because they have the close backing of their foreign Governments, each promoting its own economy, and foreign Banks. When Cheddi Jagan in Guyana, Nkruma in Ghana and Michael Manley in Jamaica tried for a little more Government control over the foreign-controlled aluminium industry which dominated their finances, the WB immediately withdrew loans, or threatened to, and their Governments went back to servicing US and British economic interests (Graham 1982).

But in this tussle for profits out of mining, what gets left completely out of the picture is the interests of the indigenous people. They get virtually nothing. Only the tiniest percentage of outlay or profits goes on

even attempting to compensate them for their dislocation. At first, the company and Govt. authorities say the indigenous people will benefit and raise their standard of living by "getting developed". When the people concerned point out their standard of living and quality of life has fallen drastically, a different justification is given: these "backward" people must pay "the price of progress" – a "sacrifice" for the nation's development as a whole.

This is why Adivasis, and those who know them, say these projects are not development at all, but its opposite – a destruction of everything their culture values: land, forest, mountains, flowing water, and the freedom to make their own decisions. Protestors against these projects are often labelled "anti-development". But for local communities the industrial projects themselves are anti-development, in the sense of lowering their standard of living.<sup>(31)</sup>

Government officials in the areas of Orissa affected by rapid industrialization plans, when asked why they don't give Adivasis proper development in the form of schools, hospitals etc, now often reply: "the company will give this to you": "Utkal debo", "Vedanta debo". This puts people's vital services at the whim of unelected officials of the very companies that are disposing them, which then advertise their "charity" through claims of "Corporate Social Responsibility".

The human cost behind the bland bureaucratic term "development-induced displacement" is beyond calculation. All the big "development" projects mentioned have displaced thousands of Adivasis, and invariably lowered their standard of living, to an extreme degree. As Kishen Pattanayak put this: "The first step of mining is displacement. In Orissa there is not a single successful story of rehabilitation by the government of displaced families, who otherwise have been surviving on the natural resources of the area by living peacefully since hundreds of years on their own land."<sup>(32)</sup>

The social structure of tribal society is inevitably fractured by displacement, as numerous studies have shown. Adivasis know that what is at stake is nothing less than their continued existence as a culture. They live in close-knit communities. Their social values are centred on their relationship with their land and natural environment, and in being self-sufficient for most of their needs by their own labour: for food, building their own houses, etc. To call them "poor" is correct only when the system of exploitation imposed on them by trader-moneylenders is already taking away a large part of the food they grow. Where they are still largely self-sufficient and control their own land – as in Kucheipadar, and in villages displaced by the Narmada dams – they do not see themselves as poor. <sup>(33)</sup>

The same with moral values: "We're all saints here" as an elder said to us in a Kond village in Kandhamal District, mean-

ing that everyone in a tribal community lives without excess or wastage, and without trying to accumulate surplus wealth: without the cruel "competition" that non-tribal society promotes at every level. As true Gandhians, in other words! They see outside society as degenerate and corrupt in the extreme. In particular, they see that projects for their own "tribal development" have been riddled with corruption, in the hands of non-tribal contractors and officials whose main concern is creaming off their own "PerCent" (P.Sainath 1996).

***"This is why 'genocide' is an appropriate term for what is happening to Adivasis: a slow death. Not literally the physical death of every individual, as happened in the paradigm case of most of America's or Australia's tribes. But a psychic death: technically, 'ethnocide' - the killing-off of cultures."***

What has been imposed on them already "in the name of development" is cultural genocide. What right has non-tribal society to speak of "developing them"? Shouldn't they be developing us, and teaching us the principles of how to live sustainably?

Yet instead of giving tribal culture the respect it deserves, mainstream society still tends to denigrate it, perceiving it through negative stereotypes – "primitive", "backward", "ignorant", "uneducated", "superstitious", "lazy" etc – which actually turn the truth on its head.

The word "sustainable" sustains considerable abuse nowadays. Almost the only lifestyle that could be defined as really sustainable – over a period of over 2,000 years since Ashoka's time for instance – is one based on communities sustaining themselves through growing their own food, and a strong social structure. Sustainability, in this strict sense, is the essence of Adivasi society. It has sustained itself for centuries through knowledge of appropriate techniques of cultivation and collecting forest produce, not taking too much from nature, and wasting virtually nothing. Present use of terms such as "sustainable development" and "sustainable mining" are basically a lie. "Sustainable" has been narrowed to mean basically "profitable" over a period of up to about 20 years. What about the next 2,000?

This phrase "sustainable mining" began to be used from 1999, when the world's 10 biggest mining companies met to launch a project they called "Mining, Minerals and Sustainable Development" (MMSD, part of their Global Mining Initiative), to see how the mining industry could "contribute to the global transition to sustainable development". The long-term vision – how to plan to live sustainably in the long term – is completely absent from the corporate perspective. There is a pervasive blindness to the fact that our limited resources are

being permanently destroyed for the sake of short-term gain – that "current forms of extraction, and the trend for ever-increasing extraction and consumption of mineral products is totally unsustainable..." (Evans 2002)

The main tribe involved in the Orissa Movement, living all around Orissa's bauxite mountains, are the Kond. Their name for themselves is Kuwinga, and they are almost certainly the same people as the Kalinga who fought so hard for their in-

dependence against Ashoka's conquest, over 2,000 years ago.

The bauxite lies in a layer about a hundred feet thick on top of these 4,000 foot mountains, whose parent rock was named Khondalite by British geologists, since these mountains form the heartland of "Khond" territory. They also happen to be central to Kond

religion and identity. Gopinath Mohanty, in his autobiography, gives a revealing account of a Census official describing to him how some Konds, when asked their religion, replied simply, "Pahar" (Mountains). The official found this answer absurd, but it actually shows a profound understanding: these bauxite-capped Mountains support abundant plant-life over a wide area, through hundreds of stream that form on their sides. The forest cover, especially when it exists all over a mountain, as with Niyamgiri and Gandhamardan, but also when it is reduced to a small curtain around the rim of the summit, as on Bapla Mali and the other "deforested" mountains, holds the soil together for these streams to form. The bauxite itself acts as a sponge. It formed here over a period of at least 3 million years, through an annual weathering pattern of alternate rain and sun. Its porous quality makes bauxite ideal for holding the monsoon rain-water over the coming months of the hot season, releasing it slowly through the streams throughout the year, enriched with life-giving trace elements of all the minerals which bauxite is rich in. This is why an abundance of bauxite is probably the main factor in the growth of the world's best tropical and sub-tropical forests, from Orissa to Brazil, north and west Australia, and many other areas.

In other words, Orissa's mineral wealth, certainly in the case of bauxite, is its famed fertility in cultivated land and forest life. Take away the bauxite cappings of these mountains, and Orissa starts to become a desert – a process already visible around Panchpat Mali in Koraput district. For when bauxite is mined out, the mud that is left exposed laterizes and hardens: its previous life-giving properties of storing water etc go into reverse.

So the human cost is not only the sacrifice of Adivasi society: it's the sacrifice of future generations of countless Oriyas yet to



be born. What kind of planning destroys all of this for ever for a few years' profit riding the world's currency markets?

By contrast, Konds viewing their mountains as Devata – what could be more realistic and logical? They understand that the mountains give life, in a way that company engineers and certain politicians apparently do not. Even referring to the minerals in these mountains as “resources” to be “utilized” brings an ideological distortion. For those living near these mountains, they are not “resources” but quite simply the sources of life.

This is why “genocide” is an appropriate term for what is happening to Adivasis: a slow death. Not literally the physical death of every individual, as happened in the paradigm case of most of America's or Australia's tribes. But a psychic death: technically, “ethnocide” – the killing-off of cultures. Without their culture, seeing the sudden confiscation of the land where their ancestors lived and the collapse of their communities, no longer able to grow their own food and forced to eke a living through exhausting and degrading coolie work for the very projects which destroyed their homes, Orissa's displaced Adivasis exist in a living death, witnessing the extermination of all they have valued.

In terms of social anthropology, industrial projects imposed on a tribal area destroy the cohesive social structure of tribal society. They are dispossessed of the land that is central to their self-sufficient economy and production of food, as well as to their identity, and many shift closer towards a class of landless labourers. The factories, from the moment their construction starts, generally cause a considerable degrading of their remaining cultivated land through pollution and desiccation. Their religion and moral values receive a shock at the disrespect shown by company and Govt. people towards their mountains, forest and water-sources – as well as to themselves. In terms of kinship and the structure of social relations through kin groups, communities are torn apart when they are resettled, as well as from the variable, divisive treatment they receive from “the company”. Mining companies have a strong tendency to divide people against each other. They bring a new spirit of competitiveness, and hierarchy into what have been markedly egalitarian societies. Those who hold out against company interests tend to get poorer, while those who serve its interests get chances for quick wealth. In other words, a corruption of values sets in, which goes hand in hand with mass poverty, prostitution and the break up of families, and an assault on everything in their social as well as natural environment which traditionally they valued.(34)

This is why the 5th Schedule of India's Constitution made it a duty of the Indian Govt. to uphold tribal people's rights to their land, and even when a “development project of national importance” has been determined upon, to consult with communities and compensate them properly.(35) This has

not happened, as Kishen Pattnayak pointed out, in even a single case.

The movement to stop mining companies invading and taking over large tracts of Orissa should be understood therefore as a vital expression of civil society against forced dispossession. Like similar movements against excessive industrialization throughout central India, it remains basically non-violent, despite facing extensive violence from police and company thugs. While the majority of those active in the movement are Adivasis, because they have the most to lose, and the very roots of their culture and way of life are threatened, large numbers of Dalits and other non-tribals are with them. It is instructive to witness how this broad coalition has been misrepresented by propaganda from certain elements in the Government and media, which at times even implies that the activists are Naxalites.

Adivasis live under a system of habitual exploitation. Legal redress

is limited, since many police and lawyers collude in this system and cream off a major share. Naxalites or Maoists offer an attractive alternative to people who have suffered years of exploitation and humiliation, even though Naxalite/Maoist power structures are sometimes as hierarchical and disrespectful of people's sustainable lifestyle and traditional values as mainstream society. Like companies, they represent an arbitrary, unaccountable power. They also invite police retaliation. In a sense, if violent repression of the non-violent movements against industrial projects drives displaced people to follow the Naxalite-Maoist path, this makes it easier for repressive elements in the State Govts. to attack them with violence. Even now they sometimes label supporters of this movement as Naxalites to justify attacking them. Police brutality can even be seen as a strategy to drive what are essentially non-violent movements into a more violent path.

One of the harshest effects on society whenever a mining company enters an indigenous area is to split it into those for and against the enterprise. This is abundantly clear in Orissa now, where promising towns-people have turned violently against villagers who still live from the land, non-tribals against tribals: a splitting tendency that reaches into tribal society too. It is also evident in the Movement itself, where the role of NGOs is a particularly divisive issue – evident in the articles by Vidhya Das and Deboranjan Sarangi, whose differences on this issue, and the question of NGOs' funding from foreign Governments and institutions with corporate links, have divided people who are essentially on the same side. Questions of foreign funding and accountability of NGOs are vital issues for discussion.

Yet what makes this Movement so strong is that people from many different walks of life and interest have come together and taken great risks to defend Orissa's tribal culture and environment. Dividing the opposition is a classic tactic of corporate power, especially when the present Orissa Government has issued stern warnings

that opposition to its programme of rapid industrialisation will not be tolerated – even though, as we have seen, for Adivasis and their standard of living, this programme is itself anti-development. In the Orissa Assembly on 4th Dec. 2004 Naveen Pattnaik stated (as shown on TV News):

“No-one – I repeat no-one – will be allowed to stand in the way of Orissa's industrial development and the people's progress.” But who defines the people's progress?

The “enemy” exploiting India's resources and oppressing the people now is still in a very real sense foreign financial control, but this is not as visible as when the British ruled India directly. And behind the foreign companies and financial institutions is a foreign system of relating and valuing, which comes down to a single aim: maximizing profit. The company, as it evolved in the US under the “robber barons” such as Rockefeller and J.P.Morgan, exists purely to make a profit. Effects of its actions on people are considered irrelevant. It represents a totally hierarchical, unaccountable form of power, with no long-term safeguards.(36) One significant contrast in the Indian context is the ancient example of the Arthashastra, which emphasized the creation of wealth through mining, but insisted that the State should own and control all important mines and not allow them to get into private hands.

India's aluminium output is increasingly for export, servicing foreign demands. The Environment Secretary T.N.Seshan declared in 1987 that Nalco's mine on Panchpat Mali could provide all of India's aluminium needs for the next 100 years: if India's natural resources are to be used and conserved properly, no more bauxite mines should be opened now. The contrast to this view is represented in Kalam and Rajan's book (1998), and the present lobbies pushing for a new phase of Orissa's rapid industrialization, which view it as a source for India as a nation to become richer and stronger in relation to China and other countries. But stronger in what sense? Is India repeating the colonial powers' history of repression and over-exploitation in treatment of indigenous minorities and over-exploitation of nature? What ends are justified through these means?

As the President of India K.R.Narayanan said on Republic Day 25th January 2001, alluding to the Maikanch police killings 5 weeks before:

“The mining that is taking place in the forest areas is threatening the livelihood and survival of many tribes.... Let it not be said by future generations that the Indian Republic has been built on the destruction of the green earth and the innocent tribals who have been living there for centuries....”

*Notes and references for this article can be found on <http://www.savingiceland.org/doubledeath>*

## More information

[www.kashipur.info](http://www.kashipur.info)

[www.saanet.org/Kashipur](http://www.saanet.org/Kashipur)

# Trinidad's PM Announces Absurd Smelter Plans

**Construction of an aluminium smelting plant in Trinidad and Tobago is set to begin before the end of this year. Furthermore, the nation could expect to see two aluminium smelters in operation by the year 2012.**

These were the two startling announcements made by Prime Minister Patrick Manning, as he addressed the Eighth summit of the African Union (AU) in Ethiopia, even as the debate still rages on in Trinidad and Tobago as to whether any smelters should be constructed. Manning chose to make his announcement in Addis Adaba, nearly 7,000 miles from Trinidad and Tobago.

"We are not ceasing our industrial development, we are going full pace ahead. Therefore, in 2007: an aluminium smelter is expected to start construction this year, and we will have two in operation by 2012," Manning said.

He did not, however, identify whether the smelter that is to be constructed this year would be the US\$1.5 billion smelter proposed by international aluminium giant Alcoa, the smaller majority State-owned Alutrint smelter to be built in La Brea, or some other proposed plant. In his 2006 Christmas Day message delivered on December 24, Manning had announced a Cabinet decision to cancel the proposed construction of a smelter in Cap-deville/Chatham. Instead, he said the Cabinet decided to accelerate development of a new industrial estate offshore Otaheite Bank. Alcoa, the Government and

the National Energy Corporation are set to reenter talks for the relocation of its smelter.

In Addis Adaba yesterday, Manning detailed the Government's other industrialisation plans, which include the construction of an ethylene and polyethylene complex, as well as one for propylene and polypropylene. "By 2012, we should be among the top three per capita users of electricity in the world," he said.

## **Introduction to the situation in Trinidad and Tobago**

Since 2004 rural communities in south-western Trinidad have been in verbal and physical confrontations with the state, demanding clean and sustainable alternatives to the introduction of aluminum smelting.

The communities have echoed national calls for more consultation and

the government and companies Alcoa and Alutrint responded by increasing funding for recreational and cultural activities in these communities, some of which have more than 50 per cent unemployment rates. In Union Village, where over 800 acres of land were cleared, thousands of residents were robbed of a forest area that provided food, recreation and water and exposed to respiratory diseases in the six month long dry season.

Last August police clashed with Chatham residents opposed to soil testing being carried out by Alcoa and their partners in crime Bechtel. By December 2006 Prime Minister Patrick Manning announced that Chatham was no longer being considered as a site for Alcoa's aluminum smelter. Focus instead shifted to a location off the coast of Otaheite, another south western fishing community. Otaheite residents then joined the call for no smelters in Trinidad. In May 2007, the Environmental Management Authority announced that Alutrint had received its Certificate of Environmental Clearance, even as their board members voiced concerns over the loss of land to coastal erosion in the south western peninsula and hosted seminars on global warming. Should plans for the two smelters continue, Trinidad and Tobago will become the number one per capita producer of carbon dioxide in the world.

The smelting industry is now a national concern and has penetrated national discourse in the Carnival, theatre, music and mainstream media. The anti-smelter movement continues to agitate with tree plantings, culture jamming, public awareness drives. Several groups are currently preparing cases against the EMA, the state and Alutrint.

## **More information**

<http://www.nosmeltertnt.com>





# Workshops and Events at the Saving Iceland Camp

## Organizing without leaders

How do you organise in a horizontal way? How can decision making by consensus be effective? Also discussions on strategies and tactics.

## Affinity groups

Working with autonomous small groups to organise and do actions.

## Planning actions

Preparation, research & practical things you can do for making your action successful.

## Creating Visual Materials

Making banners, costumes, leaflets, etcetera. Hands-on.

## Media

Dealing with mainstream media.

## Legal

The Icelandic legal system.

## Practical Direct Action Training

Various forms of direct action, such as blockades, occupations and the subversive humour of the *Rebel Clown Army*. Includes dealing with police, taking care of each other etc.

## Yoga

Sessions most mornings.

## Mobile Action Cooking

Providing healthy food for thought and action. A mobile kitchen is being set up in Iceland - so come and join!

## Security

Organising actions securely. How do authorities gather intelligence, what can you do about it. Safe communication, including when and when not and how to use phone and internet.

## Issues

Aspects of dams, geothermal energy and heavy industry.

## Films, concerts and art.

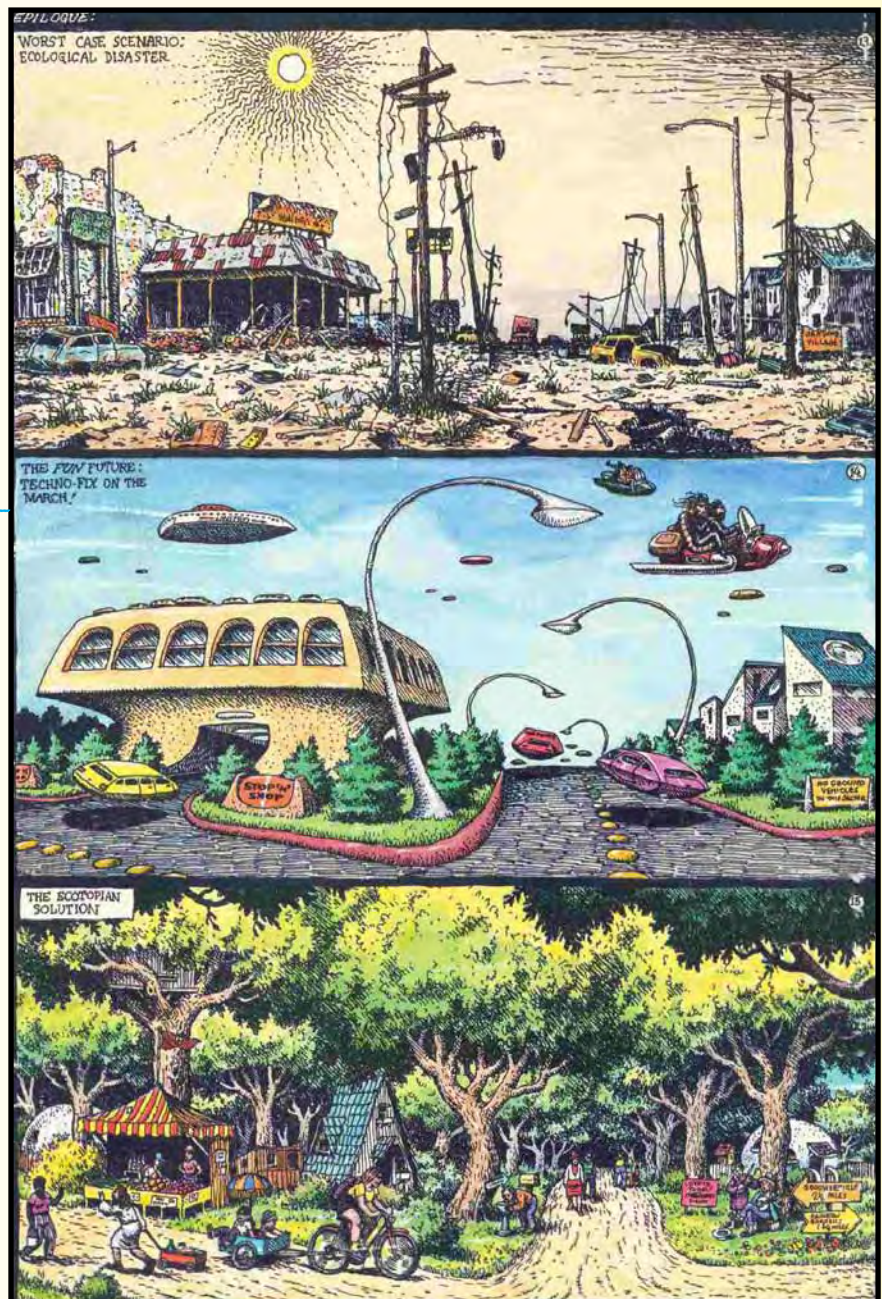
In addition to workshops, there will be film screenings, with direct action around the world, critical documentaries and fun films. We will also welcome musicians and artists.

Come to the camp to check out the timetable for all these events. If you would like to offer a workshop, a concert or want to display art, just come round! Also, there will be daily morning meetings to discuss and divide tasks for the running of the camp and there will be daily introductions for newcomers.

## Íslendingum ber skylda til að vernda og rannsaka háhitasvæði

Jón S. Ólafsson lífræðingur, sem rannsakað hefur lífríki háhitasvæði hér á landi segir að Íslendingum beri alþjóðleg skylda til að sinna rannsóknunum á þeim. Ekki megi rasa um ráð fram í að virkja þessi svæði því náttúrufar á þeim sé mjög merkilegt. Jón bendir á að í raun séu háhitasvæði á landinu ekki mörg, um tuttugu talsins. Hann minnir á að unnið sé að rammaáætlun um virkjanakosti bæði í vatnsafl og háhita hér á landi. Markmið hennar er líka að niðurstaða fái st í það hvaða svæði eigi að vernda, meðal annars háhitasvæði. Það sé erfitt að segja til um áhrif virkjana á þau þegar vitneskja okkar sé jafn takmörkuð og raun ber vitni.

(RUV 18. Júní 2007)





# Velkomin...

Hver sem vill taka þátt í því að verja náttúru Íslands fyrir stóriðju er velkominn í búðir Saving Iceland. Við virkja fólk til að mótmæla á þann hátt sem það kys sjálf, við viljum deila hæfileikum okkar og þekkingu með öðrum til að tengja fólk sem berst fyrir sama málstað.

Þrátt fyrir að það sé ákveðinn hópur af fólki sem vinnur að undirbúningi og skipulagningu búðanna fyrirfram, þá eru allir sem koma, hvattir til að taka þátt í að reka þær. Innan búðanna verða nokkrir vinnuhópar sem hafa yfirsýn yfir mismunandi þætti í rekstri búðanna og hægt er að taka þátt í vinnu í t.d. eldhúsinu, fjölmiðlahópnum, flutningum o. s.frv. Auðvitað þarftu ekki að vera með í einhverjum hópnum en það er góð leið til að kynnst fólki. Á þennan hátt deilist ábyrgðin á marga og það myndast enginn lítil elítuhópur sem segir öllum öðrum hvað á að gera. Um leið og þú ert kominn eru þetta jafn mikið þínar búðir og hvers annars (nema auðvitað þú sért útsendari Alcoa).

Í búðunum verða vinnuhópar (workshops) utan um mörg málefni sem ætlað er að efla færni og sjálfsstraust fólks við að skipuleggja og útfæra sín eigin mótmæli. Ef að þú getur boðið upp á fræðslu í þínum þekkingargeira, t.d. ef þú hefur reynslu í grasrótarstarfi eða ert t.d. sérfræðingur um jarðhitaorku þá þurfum við á þínu innleggi að halda.

Þar sem okkar barátta er fjölþjóðleg og margt fólk mun koma erlendis frá, getur verið að þér komi þetta alltsaman spánskt fyrir sjónir með ólíkum tungumálum og mismunandi menningarhópum. Engar áhyggjur ... við erum ekki jafn skuggaleg og einhverjum gæti virst. Margir eru að hittast í fyrsta sinn og sumir koma án þess að þekkja nokkurn mann. Jafnvel þau okkar sem hafa tekið þátt í síðustu tvö eða þrjú árin getum verið feimín við fullar búðir af nýju fólki. Þannig að ef að þér finnst þú vera feimín og útundan, verður þú ekki sá eini, þessvegna ekki vera feimín við að nálgast okkur. Við bitum ekki.

Við ætlum að vera með félagslegar uppákomur til að brjóta ísinn og til að skemmta þreyttu fólki. Daglega verður líka kynningarspjall til að nýjir gestir átti sig á um hvað málið snýst. Ef þú getur verið með "workshop" til að brjóta ísinn, t.d. leiki eða íslenskunámskeið eða umfjöllun um íslenska menningu, þá gæti það verið afar gagnlegt, endilega láttu okkur vita af því þegar þú kemur eða hafðu samband fyrirfram.

Auðvitað verða einnig tækifæri til þess að hjálpa til við að skipuleggja aðgerðir og taka þátt í þeim. Hverskyns aðgerðirnar verða fer eftir því hverjir koma til búðanna og hvað þeir vilja gera. Komið því með ykkar hugmyndir, áhuga og hæfileika og í sameiningu skulum við stöðva þá sem vilja breyta Íslandi í splundrað iðnaðarsvæði.